LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

ADMINISTRATIVE RECORD

Volume 13

2024

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LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS
ADMINISTRATIVE RECORD – CHRONOLOGICAL INDEX

VOLUME 13

2024

A.	Title:	Report (Cont'd) – Appendix C, File 1 to Draft Final Third Annual Remedial Action Operation Report, LHAAP-16 Landfill, Longhorn Army Ammunition Plant (LHAAP), Karnack, Texas, May 2024
	Author(s):	Department of the Army
	Recipient:	Environmental Protection Agency and Texas Commission on Environmental Quality
	Date:	May 9, 2024
	Bate Stamp:	01234084–01236109

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16EW03-220629
Collection Date: 29-Jun-2022 07:05

ANALYTICAL REPORT
WorkOrder:HS22061645
Lab ID:HS22061645-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	06-Jul-2022 23:14
1,1-Dichloroethene	2.5	U	1.0	2.5	5.0	ug/L	5	06-Jul-2022 23:14
1,2-Dichloroethane	2.5	U	1.0	2.5	5.0	ug/L	5	06-Jul-2022 23:14
cis-1,2-Dichloroethene	**120**		**1.0**	**2.5**	**5.0**	**ug/L**	5	06-Jul-2022 23:14
Methylene chloride	**15**		**2.0**	**10**	**10**	**ug/L**	5	06-Jul-2022 23:14
Trichloroethene	**3.8**	J	**1.0**	**2.5**	**5.0**	**ug/L**	5	06-Jul-2022 23:14
Vinyl chloride	2.5	U	1.0	2.5	5.0	ug/L	5	06-Jul-2022 23:14
Surr: 1,2-Dichloroethane-d4	*105*			**0**	*81-118*	*%REC*	*5*	*06-Jul-2022 23:14*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*5*	*06-Jul-2022 23:14*
Surr: Dibromofluoromethane	*99.3*			**0**	*80-119*	*%REC*	*5*	*06-Jul-2022 23:14*
Surr: Toluene-d8	*108*			**0**	*89-112*	*%REC*	*5*	*06-Jul-2022 23:14*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	11-Jul-2022 09:19
Ethene	**0.783**		**0.0234**	**0.0500**	**0.100**	**mg/L**	100	11-Jul-2022 10:37
Methane	**2.74**		**0.0107**	**0.0500**	**0.0500**	**mg/L**	100	11-Jul-2022 10:37
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: MZD
Organic Carbon, Total	**15.8**		**0.500**	**1.00**	**1.00**	**mg/L**	1	14-Jul-2022 06:01
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Bromide	**5.88**		**0.0600**	**0.200**	**0.200**	**mg/L**	2	30-Jun-2022 16:54
Nitrogen, Nitrate (As N)	**0.0984**	J	**0.0600**	**0.200**	**0.200**	**mg/L**	2	30-Jun-2022 16:54
Sulfate	**1,520**		**10.0**	**25.0**	**25.0**	**mg/L**	50	30-Jun-2022 17:00
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	11-Jul-2022 16:34
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	17-Jul-2022 13:23

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16EW02-220629
Collection Date: 29-Jun-2022 07:50

ANALYTICAL REPORT
WorkOrder:HS22061645
Lab ID:HS22061645-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	25	U	7.5	25	25	ug/L	25	01-Jul-2022 18:10
1,1-Dichloroethene	**99**		**5.0**	**12**	**25**	**ug/L**	25	01-Jul-2022 18:10
1,2-Dichloroethane	**45**		**5.0**	**12**	**25**	**ug/L**	25	01-Jul-2022 18:10
cis-1,2-Dichloroethene	**33,000**		**50**	**120**	**250**	**ug/L**	250	01-Jul-2022 18:31
Methylene chloride	**84**		**10**	**50**	**50**	**ug/L**	25	01-Jul-2022 18:10
Trichloroethene	**35,000**		**50**	**120**	**250**	**ug/L**	250	01-Jul-2022 18:31
Vinyl chloride	**730**		**5.0**	**12**	**25**	**ug/L**	25	01-Jul-2022 18:10
Surr: 1,2-Dichloroethane-d4	*81.1*			**0**	*81-118*	*%REC*	*250*	*01-Jul-2022 18:31*
Surr: 1,2-Dichloroethane-d4	*81.2*			**0**	*81-118*	*%REC*	*25*	*01-Jul-2022 18:10*
Surr: 4-Bromofluorobenzene	*94.3*			**0**	*85-114*	*%REC*	*25*	*01-Jul-2022 18:10*
Surr: 4-Bromofluorobenzene	*94.2*			**0**	*85-114*	*%REC*	*250*	*01-Jul-2022 18:31*
Surr: Dibromofluoromethane	*85.7*			**0**	*80-119*	*%REC*	*25*	*01-Jul-2022 18:10*
Surr: Dibromofluoromethane	*84.3*			**0**	*80-119*	*%REC*	*250*	*01-Jul-2022 18:31*
Surr: Toluene-d8	*98.1*			**0**	*89-112*	*%REC*	*25*	*01-Jul-2022 18:10*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*250*	*01-Jul-2022 18:31*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	11-Jul-2022 09:27
Ethene	**0.467**		**0.00468**	**0.0100**	**0.0200**	**mg/L**	20	11-Jul-2022 10:45
Methane	**0.236**		**0.00214**	**0.0100**	**0.0100**	**mg/L**	20	11-Jul-2022 10:45
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: MZD
Organic Carbon, Total	**10.0**		**0.500**	**1.00**	**1.00**	**mg/L**	1	14-Jul-2022 06:14
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Bromide	**2.32**		**0.0600**	**0.200**	**0.200**	**mg/L**	2	30-Jun-2022 17:05
Nitrogen, Nitrate (As N)	**0.0976**	J	**0.0600**	**0.200**	**0.200**	**mg/L**	2	30-Jun-2022 17:05
Sulfate	**1,820**		**10.0**	**25.0**	**25.0**	**mg/L**	50	30-Jun-2022 17:10
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	11-Jul-2022 16:34
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	17-Jul-2022 13:23

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16EW02-220629-FD
Collection Date: 29-Jun-2022 07:50

ANALYTICAL REPORT
WorkOrder:HS22061645
Lab ID:HS22061645-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	25	U	7.5	25	25	ug/L	25	01-Jul-2022 18:53
1,1-Dichloroethene	**91**		**5.0**	**12**	**25**	**ug/L**	25	01-Jul-2022 18:53
1,2-Dichloroethane	**43**		**5.0**	**12**	**25**	**ug/L**	25	01-Jul-2022 18:53
cis-1,2-Dichloroethene	**34,000**		**50**	**120**	**250**	**ug/L**	250	01-Jul-2022 19:14
Methylene chloride	**66**		**10**	**50**	**50**	**ug/L**	25	01-Jul-2022 18:53
Trichloroethene	**38,000**		**50**	**120**	**250**	**ug/L**	250	01-Jul-2022 19:14
Vinyl chloride	**650**		**5.0**	**12**	**25**	**ug/L**	25	01-Jul-2022 18:53
Surr: 1,2-Dichloroethane-d4	*81.0*			**0**	*81-118*	*%REC*	*25*	*01-Jul-2022 18:53*
Surr: 1,2-Dichloroethane-d4	*82.6*			**0**	*81-118*	*%REC*	*250*	*01-Jul-2022 19:14*
Surr: 4-Bromofluorobenzene	*92.5*			**0**	*85-114*	*%REC*	*25*	*01-Jul-2022 18:53*
Surr: 4-Bromofluorobenzene	*92.6*			**0**	*85-114*	*%REC*	*250*	*01-Jul-2022 19:14*
Surr: Dibromofluoromethane	*84.1*			**0**	*80-119*	*%REC*	*25*	*01-Jul-2022 18:53*
Surr: Dibromofluoromethane	*87.9*			**0**	*80-119*	*%REC*	*250*	*01-Jul-2022 19:14*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*25*	*01-Jul-2022 18:53*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*250*	*01-Jul-2022 19:14*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	11-Jul-2022 09:36
Ethene	**0.428**		**0.00468**	**0.0100**	**0.0200**	**mg/L**	20	11-Jul-2022 10:54
Methane	**0.194**		**0.00214**	**0.0100**	**0.0100**	**mg/L**	20	11-Jul-2022 10:54
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: MZD
Organic Carbon, Total	**9.67**		**0.500**	**1.00**	**1.00**	**mg/L**	1	14-Jul-2022 06:28
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Bromide	**2.39**		**0.0600**	**0.200**	**0.200**	**mg/L**	2	30-Jun-2022 17:16
Nitrogen, Nitrate (As N)	**0.0978**	J	**0.0600**	**0.200**	**0.200**	**mg/L**	2	30-Jun-2022 17:16
Sulfate	**1,770**		**10.0**	**25.0**	**25.0**	**mg/L**	50	30-Jun-2022 17:21
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	11-Jul-2022 16:34
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	17-Jul-2022 13:23

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16IW26-220629
Collection Date: 29-Jun-2022 08:40

ANALYTICAL REPORT
WorkOrder:HS22061645
Lab ID:HS22061645-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	06-Jul-2022 22:53
1,1-Dichloroethene	2.5	U	1.0	2.5	5.0	ug/L	5	06-Jul-2022 22:53
1,2-Dichloroethane	2.5	U	1.0	2.5	5.0	ug/L	5	06-Jul-2022 22:53
cis-1,2-Dichloroethene	2.5	U	1.0	2.5	5.0	ug/L	5	06-Jul-2022 22:53
Methylene chloride	**15**		**2.0**	**10**	**10**	**ug/L**	5	06-Jul-2022 22:53
Trichloroethene	**3.6**	J	**1.0**	**2.5**	**5.0**	**ug/L**	5	06-Jul-2022 22:53
Vinyl chloride	2.5	U	1.0	2.5	5.0	ug/L	5	06-Jul-2022 22:53
Surr: 1,2-Dichloroethane-d4	*106*			**0**	*81-118*	*%REC*	*5*	*06-Jul-2022 22:53*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*5*	*06-Jul-2022 22:53*
Surr: Dibromofluoromethane	*99.9*			**0**	*80-119*	*%REC*	*5*	*06-Jul-2022 22:53*
Surr: Toluene-d8	*108*			**0**	*89-112*	*%REC*	*5*	*06-Jul-2022 22:53*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	11-Jul-2022 09:46
Ethene	**0.0348**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	11-Jul-2022 09:46
Methane	**3.73**		**0.0214**	**0.100**	**0.100**	**mg/L**	200	11-Jul-2022 11:04
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: MZD
Organic Carbon, Total	**85.8**		**5.00**	**10.0**	**10.0**	**mg/L**	10	15-Jul-2022 00:37
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Bromide	**42.4**		**0.300**	**1.00**	**1.00**	**mg/L**	10	30-Jun-2022 16:49
Nitrogen, Nitrate (As N)	**0.0655**	J	**0.0300**	**0.100**	**0.100**	**mg/L**	1	30-Jun-2022 15:24
Sulfate	**1.96**		**0.200**	**0.500**	**0.500**	**mg/L**	1	30-Jun-2022 15:24
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	11-Jul-2022 16:34
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	17-Jul-2022 13:23

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW41-220629
Collection Date: 29-Jun-2022 09:30

ANALYTICAL REPORT
WorkOrder:HS22061645
Lab ID:HS22061645-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	10	U	3.0	10	10	ug/L	10	06-Jul-2022 23:35
1,1-Dichloroethene	**24**		**2.0**	**5.0**	**10**	**ug/L**	10	06-Jul-2022 23:35
1,2-Dichloroethane	**6.6**	J	**2.0**	**5.0**	**10**	**ug/L**	10	06-Jul-2022 23:35
cis-1,2-Dichloroethene	**3,800**		**20**	**50**	**100**	**ug/L**	100	06-Jul-2022 23:56
Methylene chloride	**20**	J	**4.0**	**20**	**20**	**ug/L**	10	06-Jul-2022 23:35
Trichloroethene	**6,200**		**20**	**50**	**100**	**ug/L**	100	06-Jul-2022 23:56
Vinyl chloride	**520**		**2.0**	**5.0**	**10**	**ug/L**	10	06-Jul-2022 23:35
Surr: 1,2-Dichloroethane-d4	*105*			**0**	*81-118*	*%REC*	*100*	*06-Jul-2022 23:56*
Surr: 1,2-Dichloroethane-d4	*105*			**0**	*81-118*	*%REC*	*10*	*06-Jul-2022 23:35*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*10*	*06-Jul-2022 23:35*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*100*	*06-Jul-2022 23:56*
Surr: Dibromofluoromethane	*99.6*			**0**	*80-119*	*%REC*	*10*	*06-Jul-2022 23:35*
Surr: Dibromofluoromethane	*100*			**0**	*80-119*	*%REC*	*100*	*06-Jul-2022 23:56*
Surr: Toluene-d8	*107*			**0**	*89-112*	*%REC*	*10*	*06-Jul-2022 23:35*
Surr: Toluene-d8	*109*			**0**	*89-112*	*%REC*	*100*	*06-Jul-2022 23:56*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	11-Jul-2022 09:56
Ethene	**0.0345**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	11-Jul-2022 09:56
Methane	**0.0235**		**0.000107**	**0.000500**	**0.000500**	**mg/L**	1	11-Jul-2022 09:56
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: MZD
Organic Carbon, Total	**43.8**		**0.500**	**1.00**	**1.00**	**mg/L**	1	15-Jul-2022 00:52
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Bromide	**2.19**		**0.300**	**1.00**	**1.00**	**mg/L**	10	30-Jun-2022 15:45
Nitrogen, Nitrate (As N)	**0.498**	J	**0.300**	**1.00**	**1.00**	**mg/L**	10	30-Jun-2022 15:45
Sulfate	**7,610**		**40.0**	**100**	**100**	**mg/L**	200	30-Jun-2022 17:53
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	11-Jul-2022 16:34
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	17-Jul-2022 13:23

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastructure, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW41-220629-FD
Collection Date: 29-Jun-2022 09:30

ANALYTICAL REPORT
WorkOrder:HS22061645
Lab ID:HS22061645-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	10	U	3.0	10	10	ug/L	10	07-Jul-2022 00:17
1,1-Dichloroethene	**21**		**2.0**	**5.0**	**10**	**ug/L**	10	07-Jul-2022 00:17
1,2-Dichloroethane	**5.9**	J	**2.0**	**5.0**	**10**	**ug/L**	10	07-Jul-2022 00:17
cis-1,2-Dichloroethene	**3,300**		**20**	**50**	**100**	**ug/L**	100	07-Jul-2022 00:39
Methylene chloride	**21**		**4.0**	**20**	**20**	**ug/L**	10	07-Jul-2022 00:17
Trichloroethene	**5,700**		**20**	**50**	**100**	**ug/L**	100	07-Jul-2022 00:39
Vinyl chloride	**440**		**2.0**	**5.0**	**10**	**ug/L**	10	07-Jul-2022 00:17
Surr: 1,2-Dichloroethane-d4	*104*			**0**	*81-118*	*%REC*	*10*	*07-Jul-2022 00:17*
Surr: 1,2-Dichloroethane-d4	*102*			**0**	*81-118*	*%REC*	*100*	*07-Jul-2022 00:39*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*10*	*07-Jul-2022 00:17*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*100*	*07-Jul-2022 00:39*
Surr: Dibromofluoromethane	*98.7*			**0**	*80-119*	*%REC*	*10*	*07-Jul-2022 00:17*
Surr: Dibromofluoromethane	*98.4*			**0**	*80-119*	*%REC*	*100*	*07-Jul-2022 00:39*
Surr: Toluene-d8	*108*			**0**	*89-112*	*%REC*	*10*	*07-Jul-2022 00:17*
Surr: Toluene-d8	*110*			**0**	*89-112*	*%REC*	*100*	*07-Jul-2022 00:39*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	11-Jul-2022 10:05
Ethene	**0.0335**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	11-Jul-2022 10:05
Methane	**0.0233**		**0.000107**	**0.000500**	**0.000500**	**mg/L**	1	11-Jul-2022 10:05
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: MZD
Organic Carbon, Total	**46.3**		**0.500**	**1.00**	**1.00**	**mg/L**	1	15-Jul-2022 01:06
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Bromide	**1.93**		**0.300**	**1.00**	**1.00**	**mg/L**	10	30-Jun-2022 15:51
Nitrogen, Nitrate (As N)	**0.498**	J	**0.300**	**1.00**	**1.00**	**mg/L**	10	30-Jun-2022 15:51
Sulfate	**7,970**		**40.0**	**100**	**100**	**mg/L**	200	30-Jun-2022 17:58
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	11-Jul-2022 16:34
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	17-Jul-2022 13:23

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW22-220629
Collection Date: 29-Jun-2022 10:25

ANALYTICAL REPORT
WorkOrder:HS22061645
Lab ID:HS22061645-07
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	01-Jul-2022 17:49
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	01-Jul-2022 17:49
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	01-Jul-2022 17:49
cis-1,2-Dichloroethene	**0.96**	J	**0.20**	**0.50**	**1.0**	**ug/L**	1	01-Jul-2022 17:49
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	01-Jul-2022 17:49
Trichloroethene	**6.1**		**0.20**	**0.50**	**1.0**	**ug/L**	1	01-Jul-2022 17:49
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	01-Jul-2022 17:49
Surr: 1,2-Dichloroethane-d4	*81.0*			**0**	*81-118*	*%REC*	*1*	*01-Jul-2022 17:49*
Surr: 4-Bromofluorobenzene	*93.9*			**0**	*85-114*	*%REC*	*1*	*01-Jul-2022 17:49*
Surr: Dibromofluoromethane	*83.7*			**0**	*80-119*	*%REC*	*1*	*01-Jul-2022 17:49*
Surr: Toluene-d8	*101*			**0**	*89-112*	*%REC*	*1*	*01-Jul-2022 17:49*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	11-Jul-2022 16:34

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW39-220629
Collection Date: 29-Jun-2022 11:10

ANALYTICAL REPORT
WorkOrder:HS22061645
Lab ID:HS22061645-08
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	06-Jul-2022 19:23
1,1-Dichloroethene	**0.93**	J	**0.20**	**0.50**	**1.0**	**ug/L**	1	06-Jul-2022 19:23
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 19:23
cis-1,2-Dichloroethene	**28**		**0.20**	**0.50**	**1.0**	**ug/L**	1	06-Jul-2022 19:23
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	06-Jul-2022 19:23
Trichloroethene	**230**		**1.0**	**2.5**	**5.0**	**ug/L**	5	07-Jul-2022 16:09
Vinyl chloride	**2.2**		**0.20**	**0.50**	**1.0**	**ug/L**	1	06-Jul-2022 19:23
Surr: 1,2-Dichloroethane-d4	*103*			**0**	*81-118*	*%REC*	*1*	*06-Jul-2022 19:23*
Surr: 1,2-Dichloroethane-d4	*93.9*			**0**	*81-118*	*%REC*	*5*	*07-Jul-2022 16:09*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*1*	*06-Jul-2022 19:23*
Surr: 4-Bromofluorobenzene	*103*			**0**	*85-114*	*%REC*	*5*	*07-Jul-2022 16:09*
Surr: Dibromofluoromethane	*98.3*			**0**	*80-119*	*%REC*	*1*	*06-Jul-2022 19:23*
Surr: Dibromofluoromethane	*95.0*			**0**	*80-119*	*%REC*	*5*	*07-Jul-2022 16:09*
Surr: Toluene-d8	*109*			**0**	*89-112*	*%REC*	*1*	*06-Jul-2022 19:23*
Surr: Toluene-d8	*110*			**0**	*89-112*	*%REC*	*5*	*07-Jul-2022 16:09*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	11-Jul-2022 16:34

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW49-220629
Collection Date: 29-Jun-2022 11:55

ANALYTICAL REPORT
WorkOrder:HS22061645
Lab ID:HS22061645-09
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	06-Jul-2022 19:44
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 19:44
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 19:44
cis-1,2-Dichloroethene	**50**		**0.20**	**0.50**	**1.0**	**ug/L**	1	06-Jul-2022 19:44
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	06-Jul-2022 19:44
Trichloroethene	**46**		**0.20**	**0.50**	**1.0**	**ug/L**	1	06-Jul-2022 19:44
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 19:44
Surr: 1,2-Dichloroethane-d4	*100*			**0**	*81-118*	*%REC*	*1*	*06-Jul-2022 19:44*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*1*	*06-Jul-2022 19:44*
Surr: Dibromofluoromethane	*96.4*			**0**	*80-119*	*%REC*	*1*	*06-Jul-2022 19:44*
Surr: Toluene-d8	*109*			**0**	*89-112*	*%REC*	*1*	*06-Jul-2022 19:44*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	11-Jul-2022 16:34

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16IW03-220629
Collection Date: 29-Jun-2022 12:40

ANALYTICAL REPORT
WorkOrder:HS22061645
Lab ID:HS22061645-10
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	25	U	7.5	25	25	ug/L	25	07-Jul-2022 01:42
1,1-Dichloroethene	**44**		**5.0**	**12**	**25**	**ug/L**	25	07-Jul-2022 01:42
1,2-Dichloroethane	12	U	5.0	12	25	ug/L	25	07-Jul-2022 01:42
cis-1,2-Dichloroethene	**17,000**		**50**	**120**	**250**	**ug/L**	250	07-Jul-2022 02:03
Methylene chloride	**49**	J	**10**	**50**	**50**	**ug/L**	25	07-Jul-2022 01:42
Trichloroethene	**7,300**		**50**	**120**	**250**	**ug/L**	250	07-Jul-2022 02:03
Vinyl chloride	**2,300**		**5.0**	**12**	**25**	**ug/L**	25	07-Jul-2022 01:42
Surr: 1,2-Dichloroethane-d4	*102*			**0**	*81-118*	*%REC*	*25*	*07-Jul-2022 01:42*
Surr: 1,2-Dichloroethane-d4	*101*			**0**	*81-118*	*%REC*	*250*	*07-Jul-2022 02:03*
Surr: 4-Bromofluorobenzene	*104*			**0**	*85-114*	*%REC*	*25*	*07-Jul-2022 01:42*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*250*	*07-Jul-2022 02:03*
Surr: Dibromofluoromethane	*97.2*			**0**	*80-119*	*%REC*	*250*	*07-Jul-2022 02:03*
Surr: Dibromofluoromethane	*96.8*			**0**	*80-119*	*%REC*	*25*	*07-Jul-2022 01:42*
Surr: Toluene-d8	*107*			**0**	*89-112*	*%REC*	*25*	*07-Jul-2022 01:42*
Surr: Toluene-d8	*109*			**0**	*89-112*	*%REC*	*250*	*07-Jul-2022 02:03*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	11-Jul-2022 10:15
Ethene	**1.41**		**0.0936**	**0.200**	**0.400**	**mg/L**	400	11-Jul-2022 11:17
Methane	**6.80**		**0.0428**	**0.200**	**0.200**	**mg/L**	400	11-Jul-2022 11:17
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: MZD
Organic Carbon, Total	**2,230**		**50.0**	**100**	**100**	**mg/L**	100	15-Jul-2022 01:20
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Bromide	**4.44**		**0.0300**	**0.100**	**0.100**	**mg/L**	1	30-Jun-2022 18:03
Nitrogen, Nitrate (As N)	0.100	U	0.0300	0.100	0.100	mg/L	1	30-Jun-2022 18:03
Sulfate	0.500	U	0.200	0.500	0.500	mg/L	1	30-Jun-2022 18:03
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	11-Jul-2022 16:34
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	17-Jul-2022 13:23

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: Trip Blank-220629
Collection Date: 29-Jun-2022 00:00

ANALYTICAL REPORT
WorkOrder:HS22061645
Lab ID:HS22061645-11
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	01-Jul-2022 17:28
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	01-Jul-2022 17:28
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	01-Jul-2022 17:28
cis-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	01-Jul-2022 17:28
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	01-Jul-2022 17:28
Trichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	01-Jul-2022 17:28
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	01-Jul-2022 17:28
Surr: 1,2-Dichloroethane-d4	*81.9*			**0**	*81-118*	*%REC*	*1*	*01-Jul-2022 17:28*
Surr: 4-Bromofluorobenzene	*94.3*			**0**	*85-114*	*%REC*	*1*	*01-Jul-2022 17:28*
Surr: Dibromofluoromethane	*83.9*			**0**	*80-119*	*%REC*	*1*	*01-Jul-2022 17:28*
Surr: Toluene-d8	*108*			**0**	*89-112*	*%REC*	*1*	*01-Jul-2022 17:28*

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22061645

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R411972 (0)	**Test Name :** ANIONS BY SW9056A				**Matrix:** Groundwater	
HS22061645-01	16EW03-220629	29 Jun 2022 07:05			30 Jun 2022 17:00	50
HS22061645-01	16EW03-220629	29 Jun 2022 07:05			30 Jun 2022 16:54	2
HS22061645-02	16EW02-220629	29 Jun 2022 07:50			30 Jun 2022 17:10	50
HS22061645-02	16EW02-220629	29 Jun 2022 07:50			30 Jun 2022 17:05	2
HS22061645-03	16EW02-220629-FD	29 Jun 2022 07:50			30 Jun 2022 17:21	50
HS22061645-03	16EW02-220629-FD	29 Jun 2022 07:50			30 Jun 2022 17:16	2
HS22061645-04	16IW26-220629	29 Jun 2022 08:40			30 Jun 2022 16:49	10
HS22061645-04	16IW26-220629	29 Jun 2022 08:40			30 Jun 2022 15:24	1
HS22061645-05	16WW41-220629	29 Jun 2022 09:30			30 Jun 2022 17:53	200
HS22061645-05	16WW41-220629	29 Jun 2022 09:30			30 Jun 2022 15:45	10
HS22061645-06	16WW41-220629-FD	29 Jun 2022 09:30			30 Jun 2022 17:58	200
HS22061645-06	16WW41-220629-FD	29 Jun 2022 09:30			30 Jun 2022 15:51	10
HS22061645-10	16IW03-220629	29 Jun 2022 12:40			30 Jun 2022 18:03	1
Batch ID: R412107 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS22061645-11	Trip Blank-220629	29 Jun 2022 00:00			01 Jul 2022 17:28	1
Batch ID: R412107 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS22061645-02	16EW02-220629	29 Jun 2022 07:50			01 Jul 2022 18:31	250
HS22061645-02	16EW02-220629	29 Jun 2022 07:50			01 Jul 2022 18:10	25
HS22061645-03	16EW02-220629-FD	29 Jun 2022 07:50			01 Jul 2022 19:14	250
HS22061645-03	16EW02-220629-FD	29 Jun 2022 07:50			01 Jul 2022 18:53	25
HS22061645-07	16WW22-220629	29 Jun 2022 10:25			01 Jul 2022 17:49	1
Batch ID: R412360 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS22061645-01	16EW03-220629	29 Jun 2022 07:05			06 Jul 2022 23:14	5
HS22061645-04	16IW26-220629	29 Jun 2022 08:40			06 Jul 2022 22:53	5
HS22061645-05	16WW41-220629	29 Jun 2022 09:30			06 Jul 2022 23:56	100
HS22061645-05	16WW41-220629	29 Jun 2022 09:30			06 Jul 2022 23:35	10
HS22061645-06	16WW41-220629-FD	29 Jun 2022 09:30			07 Jul 2022 00:39	100
HS22061645-06	16WW41-220629-FD	29 Jun 2022 09:30			07 Jul 2022 00:17	10
HS22061645-08	16WW39-220629	29 Jun 2022 11:10			06 Jul 2022 19:23	1
HS22061645-09	16WW49-220629	29 Jun 2022 11:55			06 Jul 2022 19:44	1
HS22061645-10	16IW03-220629	29 Jun 2022 12:40			07 Jul 2022 02:03	250
HS22061645-10	16IW03-220629	29 Jun 2022 12:40			07 Jul 2022 01:42	25
Batch ID: R412413 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS22061645-08	16WW39-220629	29 Jun 2022 11:10			07 Jul 2022 16:09	5

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022 **DATES REPORT**
WorkOrder: HS22061645

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R412658 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Groundwater	
HS22061645-01	16EW03-220629	29 Jun 2022 07:05			11 Jul 2022 16:34	1
HS22061645-02	16EW02-220629	29 Jun 2022 07:50			11 Jul 2022 16:34	1
HS22061645-03	16EW02-220629-FD	29 Jun 2022 07:50			11 Jul 2022 16:34	1
HS22061645-04	16IW26-220629	29 Jun 2022 08:40			11 Jul 2022 16:34	1
HS22061645-05	16WW41-220629	29 Jun 2022 09:30			11 Jul 2022 16:34	1
HS22061645-06	16WW41-220629-FD	29 Jun 2022 09:30			11 Jul 2022 16:34	1
HS22061645-07	16WW22-220629	29 Jun 2022 10:25			11 Jul 2022 16:34	1
HS22061645-08	16WW39-220629	29 Jun 2022 11:10			11 Jul 2022 16:34	1
HS22061645-09	16WW49-220629	29 Jun 2022 11:55			11 Jul 2022 16:34	1
HS22061645-10	16IW03-220629	29 Jun 2022 12:40			11 Jul 2022 16:34	1
Batch ID: R412754 (0)	**Test Name :** DISSOLVED GASES BY RSK-175				**Matrix:** Groundwater	
HS22061645-01	16EW03-220629	29 Jun 2022 07:05			11 Jul 2022 10:37	100
HS22061645-01	16EW03-220629	29 Jun 2022 07:05			11 Jul 2022 09:19	1
HS22061645-02	16EW02-220629	29 Jun 2022 07:50			11 Jul 2022 10:45	20
HS22061645-02	16EW02-220629	29 Jun 2022 07:50			11 Jul 2022 09:27	1
HS22061645-03	16EW02-220629-FD	29 Jun 2022 07:50			11 Jul 2022 10:54	20
HS22061645-03	16EW02-220629-FD	29 Jun 2022 07:50			11 Jul 2022 09:36	1
HS22061645-04	16IW26-220629	29 Jun 2022 08:40			11 Jul 2022 11:04	200
HS22061645-04	16IW26-220629	29 Jun 2022 08:40			11 Jul 2022 09:46	1
HS22061645-05	16WW41-220629	29 Jun 2022 09:30			11 Jul 2022 09:56	1
HS22061645-06	16WW41-220629-FD	29 Jun 2022 09:30			11 Jul 2022 10:05	1
HS22061645-10	16IW03-220629	29 Jun 2022 12:40			11 Jul 2022 11:17	400
HS22061645-10	16IW03-220629	29 Jun 2022 12:40			11 Jul 2022 10:15	1
Batch ID: R412873 (0)	**Test Name :** TOTAL ORGANIC CARBON - SM5310B-2011				**Matrix:** Groundwater	
HS22061645-01	16EW03-220629	29 Jun 2022 07:05			14 Jul 2022 06:01	1
HS22061645-02	16EW02-220629	29 Jun 2022 07:50			14 Jul 2022 06:14	1
HS22061645-03	16EW02-220629-FD	29 Jun 2022 07:50			14 Jul 2022 06:28	1
Batch ID: R412991 (0)	**Test Name :** TOTAL ORGANIC CARBON - SM5310B-2011				**Matrix:** Groundwater	
HS22061645-04	16IW26-220629	29 Jun 2022 08:40			15 Jul 2022 00:37	10
HS22061645-05	16WW41-220629	29 Jun 2022 09:30			15 Jul 2022 00:52	1
HS22061645-06	16WW41-220629-FD	29 Jun 2022 09:30			15 Jul 2022 01:06	1
HS22061645-10	16IW03-220629	29 Jun 2022 12:40			15 Jul 2022 01:20	100

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22061645

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R413073 (0)	**Test Name :** SUBCONTRACT ANALYSIS - RSK				**Matrix:** Groundwater	
HS22061645-01	16EW03-220629	29 Jun 2022 07:05			17 Jul 2022 13:23	1
HS22061645-02	16EW02-220629	29 Jun 2022 07:50			17 Jul 2022 13:23	1
HS22061645-03	16EW02-220629-FD	29 Jun 2022 07:50			17 Jul 2022 13:23	1
HS22061645-04	16IW26-220629	29 Jun 2022 08:40			17 Jul 2022 13:23	1
HS22061645-05	16WW41-220629	29 Jun 2022 09:30			17 Jul 2022 13:23	1
HS22061645-06	16WW41-220629-FD	29 Jun 2022 09:30			17 Jul 2022 13:23	1
HS22061645-10	16IW03-220629	29 Jun 2022 12:40			17 Jul 2022 13:23	1

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22061645

QC BATCH REPORT

Batch ID: R412754 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MBLK Sample ID: **MBLK-220711** Units: **mg/L** Analysis Date: **11-Jul-2022 09:00**
Client ID: Run ID: **FID-4_412754** SeqNo: **6742107** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.000500	0.00100								U
Ethene	0.000500	0.00100								U
Methane	0.000500	0.000500								U

LCS Sample ID: **LCS-220711** Units: **mg/L** Analysis Date: **11-Jul-2022 09:10**
Client ID: Run ID: **FID-4_412754** SeqNo: **6742108** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0206	0.00100	0.01804	0	114	75 - 125				
Ethene	0.0189	0.00100	0.0168	0	113	75 - 125				
Methane	0.00936	0.000500	0.009647	0	97.1	75 - 125				

MS Sample ID: **HS22070326-07MS** Units: **mg/L** Analysis Date: **11-Jul-2022 13:35**
Client ID: Run ID: **FID-4_412754** SeqNo: **6742134** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0225	0.00100	0.01804	0	125	75 - 125				
Ethene	0.0242	0.00100	0.0168	0	144	75 - 125				S
Methane	0.749	0.000500	0.009647	3.020	-23500	75 - 125				SEO

MS Sample ID: **HS22070020-01MS** Units: **mg/L** Analysis Date: **11-Jul-2022 11:36**
Client ID: Run ID: **FID-4_412754** SeqNo: **6742123** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0255	0.00100	0.01804	0	141	75 - 125				S
Ethene	0.0262	0.00100	0.0168	0.01680	56.2	75 - 125				S
Methane	1.26	0.000500	0.009647	1.330	-729	75 - 125				SEO

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22061645

QC BATCH REPORT

Batch ID: R412754 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MSD Sample ID: **HS22070326-07MSD** Units: **mg/L** Analysis Date: **11-Jul-2022 13:43**
Client ID: Run ID: **FID-4_412754** SeqNo: **6742135** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0203	0.00100	0.01804	0	113	75 - 125	0.02247	10.1	30	
Ethene	0.0233	0.00100	0.0168	0	139	75 - 125	0.02422	3.89	30	S
Methane	0.860	0.000500	0.009647	3.020	-22400	75 - 125	0.7487	13.8	30	SEO

MSD Sample ID: **HS22070020-01MSD** Units: **mg/L** Analysis Date: **11-Jul-2022 11:53**
Client ID: Run ID: **FID-4_412754** SeqNo: **6742124** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0233	0.00100	0.01804	0	129	75 - 125	0.02546	8.71	30	S
Ethene	0.0270	0.00100	0.0168	0.01680	60.6	75 - 125	0.02624	2.73	30	S
Methane	1.28	0.000500	0.009647	1.330	-525	75 - 125	1.260	1.55	30	SEO

The following samples were analyzed in this batch:

HS22061645-01	HS22061645-02	HS22061645-03	HS22061645-04
HS22061645-05	HS22061645-06	HS22061645-10	

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22061645

QC BATCH REPORT

Batch ID: R412107 (0) **Instrument: VOA6** **Method: VOLATILES ORGANICS BY METHOD 8260C**

MBLK Sample ID: **VBLKW-220701** Units: **ug/L** Analysis Date: **01-Jul-2022 11:09**
Client ID: Run ID: **VOA6_412107** SeqNo: **6727215** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1.0	1.0								U
1,1-Dichloroethene	0.50	1.0								U
1,2-Dichloroethane	0.50	1.0								U
cis-1,2-Dichloroethene	0.50	1.0								U
Methylene chloride	2.0	2.0								U
Trichloroethene	0.50	1.0								U
Vinyl chloride	0.50	1.0								U
Surr: 1,2-Dichloroethane-d4	*41.47*	*1.0*	*50*	*0*	*82.9*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*45.23*	*1.0*	*50*	*0*	*90.5*	*85 - 114*				
Surr: Dibromofluoromethane	*43.88*	*1.0*	*50*	*0*	*87.8*	*80 - 119*				
Surr: Toluene-d8	*51.7*	*1.0*	*50*	*0*	*103*	*89 - 112*				

LCS Sample ID: **VLCSW-220701** Units: **ug/L** Analysis Date: **01-Jul-2022 10:27**
Client ID: Run ID: **VOA6_412107** SeqNo: **6727214** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	19.87	1.0	20	0	99.4	80 - 119				
1,1-Dichloroethene	17.25	1.0	20	0	86.2	71 - 131				
1,2-Dichloroethane	20.34	1.0	20	0	102	73 - 128				
cis-1,2-Dichloroethene	20.51	1.0	20	0	103	78 - 123				
Methylene chloride	18.62	2.0	20	0	93.1	74 - 124				
Trichloroethene	21.13	1.0	20	0	106	79 - 123				
Vinyl chloride	15.47	1.0	20	0	77.3	58 - 137				
Surr: 1,2-Dichloroethane-d4	*48.95*	*1.0*	*50*	*0*	*97.9*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*52.88*	*1.0*	*50*	*0*	*106*	*85 - 114*				
Surr: Dibromofluoromethane	*52.2*	*1.0*	*50*	*0*	*104*	*80 - 119*				
Surr: Toluene-d8	*51.97*	*1.0*	*50*	*0*	*104*	*89 - 112*				

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22061645

QC BATCH REPORT

Batch ID: R412107 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS22061671-07MS** Units: **ug/L** Analysis Date: **01-Jul-2022 13:37**
Client ID: Run ID: **VOA6_412107** SeqNo: **6727222** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	19.47	1.0	20	0	97.4	80 - 119				
1,1-Dichloroethene	17.06	1.0	20	0	85.3	71 - 131				
1,2-Dichloroethane	18.82	1.0	20	0	94.1	73 - 128				
cis-1,2-Dichloroethene	19.34	1.0	20	0	96.7	78 - 123				
Methylene chloride	16.11	2.0	20	0	80.6	74 - 124				
Trichloroethene	23.29	1.0	20	0	116	79 - 123				
Vinyl chloride	16.36	1.0	20	0	81.8	58 - 137				
Surr: 1,2-Dichloroethane-d4	*41.65*	*1.0*	*50*	*0*	*83.3*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*47.7*	*1.0*	*50*	*0*	*95.4*	*85 - 114*				
Surr: Dibromofluoromethane	*44.27*	*1.0*	*50*	*0*	*88.5*	*80 - 119*				
Surr: Toluene-d8	*51.45*	*1.0*	*50*	*0*	*103*	*89 - 112*				

MSD Sample ID: **HS22061671-07MSD** Units: **ug/L** Analysis Date: **01-Jul-2022 13:58**
Client ID: Run ID: **VOA6_412107** SeqNo: **6727223** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	19.32	1.0	20	0	96.6	80 - 119	19.47	0.796	20	
1,1-Dichloroethene	15.83	1.0	20	0	79.2	71 - 131	17.06	7.46	20	
1,2-Dichloroethane	18.51	1.0	20	0	92.5	73 - 128	18.82	1.65	20	
cis-1,2-Dichloroethene	18.05	1.0	20	0	90.2	78 - 123	19.34	6.9	20	
Methylene chloride	15.33	2.0	20	0	76.6	74 - 124	16.11	5.01	20	
Trichloroethene	20.55	1.0	20	0	103	79 - 123	23.29	12.5	20	
Vinyl chloride	14.95	1.0	20	0	74.8	58 - 137	16.36	9.02	20	
Surr: 1,2-Dichloroethane-d4	*42.61*	*1.0*	*50*	*0*	*85.2*	*81 - 118*	*41.65*	*2.29*	*20*	
Surr: 4-Bromofluorobenzene	*48.35*	*1.0*	*50*	*0*	*96.7*	*85 - 114*	*47.7*	*1.35*	*20*	
Surr: Dibromofluoromethane	*44.41*	*1.0*	*50*	*0*	*88.8*	*80 - 119*	*44.27*	*0.317*	*20*	
Surr: Toluene-d8	*50.06*	*1.0*	*50*	*0*	*100*	*89 - 112*	*51.45*	*2.74*	*20*	

The following samples were analyzed in this batch: HS22061645-02 HS22061645-03 HS22061645-07 HS22061645-11

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22061645

QC BATCH REPORT

Batch ID: R412360 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-220706** Units: **ug/L** Analysis Date: **06-Jul-2022 18:40**
Client ID: Run ID: **VOA6_412360** SeqNo: **6733260** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1.0	1.0								U
1,1-Dichloroethene	0.50	1.0								U
1,2-Dichloroethane	0.50	1.0								U
cis-1,2-Dichloroethene	0.50	1.0								U
Methylene chloride	2.0	2.0								U
Trichloroethene	0.50	1.0								U
Vinyl chloride	0.50	1.0								U
Surr: 1,2-Dichloroethane-d4	*50.06*	*1.0*	*50*	*0*	*100*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.14*	*1.0*	*50*	*0*	*102*	*85 - 114*				
Surr: Dibromofluoromethane	*48.37*	*1.0*	*50*	*0*	*96.7*	*80 - 119*				
Surr: Toluene-d8	*54.14*	*1.0*	*50*	*0*	*108*	*89 - 112*				

LCS Sample ID: **VLCSW-220706** Units: **ug/L** Analysis Date: **06-Jul-2022 17:37**
Client ID: Run ID: **VOA6_412360** SeqNo: **6733259** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	18.53	1.0	20	0	92.6	80 - 119				
1,1-Dichloroethene	16.37	1.0	20	0	81.9	71 - 131				
1,2-Dichloroethane	20.98	1.0	20	0	105	73 - 128				
cis-1,2-Dichloroethene	18.52	1.0	20	0	92.6	78 - 123				
Methylene chloride	18.23	2.0	20	0	91.2	74 - 124				
Trichloroethene	18.55	1.0	20	0	92.8	79 - 123				
Vinyl chloride	15.59	1.0	20	0	78.0	58 - 137				
Surr: 1,2-Dichloroethane-d4	*56.78*	*1.0*	*50*	*0*	*114*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.6*	*1.0*	*50*	*0*	*103*	*85 - 114*				
Surr: Dibromofluoromethane	*53.1*	*1.0*	*50*	*0*	*106*	*80 - 119*				
Surr: Toluene-d8	*49.37*	*1.0*	*50*	*0*	*98.7*	*89 - 112*				

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22061645

QC BATCH REPORT

Batch ID: R412360 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS22070020-08MS** Units: **ug/L** Analysis Date: **06-Jul-2022 20:26**
Client ID: Run ID: **VOA6_412360** SeqNo: **6733265** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	20.31	1.0	20	0	102	80 - 119				
1,1-Dichloroethene	18.79	1.0	20	0	94.0	71 - 131				
1,2-Dichloroethane	20.44	1.0	20	0	102	73 - 128				
cis-1,2-Dichloroethene	19.71	1.0	20	0	98.6	78 - 123				
Methylene chloride	18.85	2.0	20	0	94.3	74 - 124				
Trichloroethene	21.2	1.0	20	1.313	99.4	79 - 123				
Vinyl chloride	19.12	1.0	20	0	95.6	58 - 137				
Surr: 1,2-Dichloroethane-d4	*53.93*	*1.0*	*50*	*0*	*108*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*55.44*	*1.0*	*50*	*0*	*111*	*85 - 114*				
Surr: Dibromofluoromethane	*49.44*	*1.0*	*50*	*0*	*98.9*	*80 - 119*				
Surr: Toluene-d8	*55.16*	*1.0*	*50*	*0*	*110*	*89 - 112*				

MSD Sample ID: **HS22070020-08MSD** Units: **ug/L** Analysis Date: **06-Jul-2022 20:47**
Client ID: Run ID: **VOA6_412360** SeqNo: **6733266** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	18.16	1.0	20	0	90.8	80 - 119	20.31	11.2	20	
1,1-Dichloroethene	20.46	1.0	20	0	102	71 - 131	18.79	8.52	20	
1,2-Dichloroethane	19.46	1.0	20	0	97.3	73 - 128	20.44	4.9	20	
cis-1,2-Dichloroethene	18.29	1.0	20	0	91.4	78 - 123	19.71	7.49	20	
Methylene chloride	18.8	2.0	20	0	94.0	74 - 124	18.85	0.288	20	
Trichloroethene	20.55	1.0	20	1.313	96.2	79 - 123	21.2	3.11	20	
Vinyl chloride	19.46	1.0	20	0	97.3	58 - 137	19.12	1.76	20	
Surr: 1,2-Dichloroethane-d4	*46.22*	*1.0*	*50*	*0*	*92.4*	*81 - 118*	*53.93*	*15.4*	*20*	
Surr: 4-Bromofluorobenzene	*51.55*	*1.0*	*50*	*0*	*103*	*85 - 114*	*55.44*	*7.26*	*20*	
Surr: Dibromofluoromethane	*46.66*	*1.0*	*50*	*0*	*93.3*	*80 - 119*	*49.44*	*5.8*	*20*	
Surr: Toluene-d8	*47.45*	*1.0*	*50*	*0*	*94.9*	*89 - 112*	*55.16*	*15*	*20*	

The following samples were analyzed in this batch:

HS22061645-01	HS22061645-04	HS22061645-05	HS22061645-06
HS22061645-08	HS22061645-09	HS22061645-10	

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22061645

QC BATCH REPORT

Batch ID: R412413 (0) **Instrument: VOA6** **Method: VOLATILES ORGANICS BY METHOD 8260C**

MBLK Sample ID: **VBLKW-220707** Units: **ug/L** Analysis Date: **07-Jul-2022 12:23**
Client ID: Run ID: **VOA6_412413** SeqNo: **6734426** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Trichloroethene	0.50	1.0								U
Surr: 1,2-Dichloroethane-d4	*51.98*	*1.0*	*50*	*0*	*104*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.74*	*1.0*	*50*	*0*	*101*	*85 - 114*				
Surr: Dibromofluoromethane	*49.85*	*1.0*	*50*	*0*	*99.7*	*80 - 119*				
Surr: Toluene-d8	*54.86*	*1.0*	*50*	*0*	*110*	*89 - 112*				

LCS Sample ID: **VLCSW-220707** Units: **ug/L** Analysis Date: **07-Jul-2022 11:41**
Client ID: Run ID: **VOA6_412413** SeqNo: **6734425** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Trichloroethene	20.29	1.0	20	0	101	79 - 123				
Surr: 1,2-Dichloroethane-d4	*48.36*	*1.0*	*50*	*0*	*96.7*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.37*	*1.0*	*50*	*0*	*103*	*85 - 114*				
Surr: Dibromofluoromethane	*49.57*	*1.0*	*50*	*0*	*99.1*	*80 - 119*				
Surr: Toluene-d8	*50.77*	*1.0*	*50*	*0*	*102*	*89 - 112*				

MS Sample ID: **HS22070020-01MS** Units: **ug/L** Analysis Date: **07-Jul-2022 15:06**
Client ID: Run ID: **VOA6_412413** SeqNo: **6734433** PrepDate: DF: **250**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Trichloroethene	44070	250	5000	40120	79.1	79 - 123				O
Surr: 1,2-Dichloroethane-d4	*12730*	*250*	*12500*	*0*	*102*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*12930*	*250*	*12500*	*0*	*103*	*85 - 114*				
Surr: Dibromofluoromethane	*12030*	*250*	*12500*	*0*	*96.3*	*80 - 119*				
Surr: Toluene-d8	*13560*	*250*	*12500*	*0*	*108*	*89 - 112*				

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22061645

QC BATCH REPORT

Batch ID: R412413 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS22070020-01MSD** Units: **ug/L** Analysis Date: **07-Jul-2022 15:27**
Client ID: Run ID: **VOA6_412413** SeqNo: **6734434** PrepDate: DF: **250**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Trichloroethene	41640	250	5000	40120	30.5	79 - 123	44070	5.67	20	SO
Surr: 1,2-Dichloroethane-d4	*12700*	*250*	*12500*	*0*	*102*	*81 - 118*	*12730*	*0.248*	*20*	
Surr: 4-Bromofluorobenzene	*13070*	*250*	*12500*	*0*	*105*	*85 - 114*	*12930*	*1.11*	*20*	
Surr: Dibromofluoromethane	*12090*	*250*	*12500*	*0*	*96.7*	*80 - 119*	*12030*	*0.438*	*20*	
Surr: Toluene-d8	*13730*	*250*	*12500*	*0*	*110*	*89 - 112*	*13560*	*1.27*	*20*	

The following samples were analyzed in this batch: HS22061645-08

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22061645

QC BATCH REPORT

Batch ID: R411972 (0) **Instrument: ICS-Integrion** **Method: ANIONS BY SW9056A**

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **30-Jun-2022 15:14**
Client ID: Run ID: **ICS-Integrion_411972** SeqNo: **6724505** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	0.100	0.100								U
Nitrogen, Nitrate (As N)	0.100	0.100								U
Sulfate	0.500	0.500								U

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **30-Jun-2022 15:19**
Client ID: Run ID: **ICS-Integrion_411972** SeqNo: **6724506** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	3.716	0.100	4	0	92.9	80 - 120				
Nitrogen, Nitrate (As N)	3.93	0.100	4	0	98.3	80 - 120				
Sulfate	19.23	0.500	20	0	96.2	80 - 120				

MS Sample ID: **HS22061645-04MS** Units: **mg/L** Analysis Date: **30-Jun-2022 16:38**
Client ID: **16IW26-220629** Run ID: **ICS-Integrion_411972** SeqNo: **6724516** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	47.45	0.100	2	46.31	56.7	80 - 120				SEO
Nitrogen, Nitrate (As N)	2.015	0.100	2	0.0655	97.5	80 - 120				
Sulfate	11.59	0.500	10	1.958	96.4	80 - 120				

MSD Sample ID: **HS22061645-04MSD** Units: **mg/L** Analysis Date: **30-Jun-2022 16:44**
Client ID: **16IW26-220629** Run ID: **ICS-Integrion_411972** SeqNo: **6724517** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	47.59	0.100	2	46.31	63.6	80 - 120	47.45	0.292	20	SEO
Nitrogen, Nitrate (As N)	1.984	0.100	2	0.0655	95.9	80 - 120	2.015	1.53	20	
Sulfate	11.55	0.500	10	1.958	95.9	80 - 120	11.59	0.383	20	

The following samples were analyzed in this batch:

HS22061645-01	HS22061645-02	HS22061645-03	HS22061645-04
HS22061645-05	HS22061645-06	HS22061645-10	

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22061645

QC BATCH REPORT

Batch ID: R412873 (0) **Instrument:** TOC_04 **Method:** TOTAL ORGANIC CARBON - SM5310B-2011

MBLK Sample ID: **MBLK-407132022** Units: **mg/L** Analysis Date: **14-Jul-2022 04:25**
Client ID: Run ID: **TOC_04_412873** SeqNo: **6745174** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	1.00	1.00								U

LCS Sample ID: **LCS4-07132022** Units: **mg/L** Analysis Date: **14-Jul-2022 04:38**
Client ID: Run ID: **TOC_04_412873** SeqNo: **6745175** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.951	1.00	10	0	99.5	85 - 115				

LCSD Sample ID: **LCSD4-07132022** Units: **mg/L** Analysis Date: **14-Jul-2022 04:52**
Client ID: Run ID: **TOC_04_412873** SeqNo: **6745176** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.987	1.00	10	0	99.9	85 - 115	9.951	0.361	20	

MS Sample ID: **HS22070287-01MS** Units: **mg/L** Analysis Date: **14-Jul-2022 05:47**
Client ID: Run ID: **TOC_04_412873** SeqNo: **6745180** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	16.21	1.00	10	6.097	101	80 - 120				

The following samples were analyzed in this batch: HS22061645-01 HS22061645-02 HS22061645-03

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22061645

QC BATCH REPORT

Batch ID: R412991 (0) **Instrument:** TOC_04 **Method:** TOTAL ORGANIC CARBON - SM5310B-2011

MBLK Sample ID: **MBLK3-07142022** Units: **mg/L** Analysis Date: **14-Jul-2022 23:56**
Client ID: Run ID: **TOC_04_412991** SeqNo: **6748002** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	1.00	1.00								U

LCS Sample ID: **LCS3-07142022** Units: **mg/L** Analysis Date: **15-Jul-2022 00:10**
Client ID: Run ID: **TOC_04_412991** SeqNo: **6748003** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.559	1.00	10	0	95.6	85 - 115				

LCSD Sample ID: **LCSD3-07142022** Units: **mg/L** Analysis Date: **15-Jul-2022 00:24**
Client ID: Run ID: **TOC_04_412991** SeqNo: **6748004** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.761	1.00	10	0	97.6	85 - 115	9.559	2.09	20	

MS Sample ID: **HS22070379-01MS** Units: **mg/L** Analysis Date: **15-Jul-2022 02:00**
Client ID: Run ID: **TOC_04_412991** SeqNo: **6748011** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	13.28	1.00	10	3.592	96.9	80 - 120				

The following samples were analyzed in this batch: HS22061645-04 HS22061645-05 HS22061645-06 HS22061645-10

ALS Houston, US Date: 17-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: **HS22061645**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
California	2919 2022-2023	30-Apr-2023
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-36	30-Jun-2023
Illinois	2000322022-9	09-May-2023
Kansas	E-10352 2021-2022	31-Jul-2022
Kentucky	123043, 2022-2023	30-Apr-2023
Louisiana	03087, 2022-2023	30-Jun-2023
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2022	31-Dec-2022
North Dakota	R-193 2022-2023	30-Apr-2023
Oklahoma	2021-080	31-Aug-2022
Texas	T104704231-22-29	30-Apr-2023
Utah	TX026932021-12	30-Jul-2022

ALS Houston, US Date: 17-Jul-22

Sample Receipt Checklist

Work Order ID: HS22061645 **Date/Time Received:** 30-Jun-2022 09:40

Client Name: CBI-Houston **Received by:** Nilesh D. Ranchod

Completed By:	/S/ Nilesh D. Ranchod	30-Jun-2022 12:38	**Reviewed by:**	/S/ Dane J. Wacasey	05-Jul-2022 08:28
	eSignature	Date/Time		eSignature	Date/Time

Matrices: **Water** Carrier name: **FedEx Priority Overnight**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	2 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	2.1C/2.6C UC/C	IR #31
Cooler(s)/Kit(s):	47693	
Date/Time sample(s) sent to storage:	06/30/2022 13:00	

Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210 Houston, TX. 77099 (281) 575-2190 ATTN: Dane Wacasey

Page

HS22061645

Aptim Environmental & Infrastucture, Inc.
LHAAP 16 January 2022

Project: APTIM LONGHORN ARMY AMMN. PLANT (LHAAP) GROUNDWATER TREATMENT PLANT (GWTP) KARNACK, TEXAS	Project No. 501032
Job: **LHAAP 16 January 2022**	
Prepared By: Scott Beesinger	P.O. Number

Field Sample I.D. / Time	Sample Matrix	Date /	MS / MSD	No. OF CONTAINERS	Analyses: VOC by SW 8260B	TOC by SM5310C	MEE by RSK 175	Anions sulfate and nitrate by SW9056	CO2 by RSK 175	Perchlorate by SW 6850					Remarks (Preservatives, etc.)
16EW03-220629	WG	6/29/22 0705		13	X	X	X	X	X	X					
16EW02-220629	WG	6/29/22 0750		13	X	X	X	X	X	X					
16EW02-220629-FD	WG	6/29/22 0750		13	X	X	X	X	X	X					
16IW26-220629	WG	6/29/22 0840		13	X	X	X	X	X	X					
16WW41-220629	WG	6/29/22 0930		13	X	X	X	X	X	X					
16WW41-220629-FD	WG	6/29/22 0930		13	X	X	X	X	X	X					
16WW22-220629	WG	6/29/22 1025		4	X					X					
16WW39-220629	WG	6/29/22 1110		4	X					X					

Additional Remarks: Standard TAT on all parameters. Please email results to Vicki.Graves@aptim.com and invoices to fedinvoices@aptim.com

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
Scott Beesinger	6/29/22	1430	NLA	6/30/22	09:40						

For Lab Use Only

Received At Lab By:	Date	Time	Airbill No.	Opened By:	Date	Time	Temp of Container	Seal No.	Condition

Remarks:

47693 — cic 2.1

(Word) S:\I-ces\Forms\Chain of Custody - BiWeekly

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210 Houston, TX. 77099 (281) 575-2190 ATTN: Dane Wacasey

Project: APTIM
LONGHORN ARMY AMMN. PLANT (LHAAP)
GROUNDWATER TREATMENT PLANT (GWTP)
KARNACK, TEXAS

Project No. 501032

Job: LHAAP 16 January 2022

Prepared By: Scott Beesinger

P.O. Number

Field Sample I.D. / Time	Sample Matrix	Date /	MS / MSD	No. OF CONTAINERS	VOC by SW 8260B	TOC by SM5310C	MEE by RSK 175	Anions sulfate and nitrate by SW9056	CO2 by RSK 175	Perchlorate by SW 6850	Remarks (Preservatives, etc.)
16WW49-220629	WG	6/29/22 1155		4	X					X	
16IW03-220629	WG	6/29/22 1240		13	X	X	X	X	X	X	
TRIP BLANK-220629	W	6/29/22		2	X						

Analyses

Additional Remarks: Standard TAT on all parameters. Please email results to Vicki.Graves@aptim.com and invoices to fedinvoices@aptim.com

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
Scott Beesinger	6/29/22	1430									

For Lab Use Only

Received At Lab By:	Date	Time	Airbill No.	Opened By:	Date	Time	Temp of Container	Seal No.	Condition

Remarks:

(Word) S:\I-ces\Forms\Chain of Custody - BiWeekly

Aptim Environmental & Infrastucture, Inc.
LHAAP 16 January 2022

HS22061645

ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

47693

CUSTODY SEAL

Date: 6/24/22 Time: 1430
Name: Scott Beesinger
Company: Battelle

Seal Broken By:
Date: 06/30/22

47693

47693

ORIGIN ID:SGRA (903) 930-8193
SCOTT BEESINGER
APTIM ENVIROMENTAL & INFASTRUCTURE
1203-B EAST GRAND AVE
PMB 202
MARSHALL, TX 75670
UNITED STATES US

SHIP DATE: 13JUN22
ACTWGT: 1.00 LB MAN
CAD: 0221247/CAFE3512
DIMS: 28x14x14 IN

TO SHIPPING DEPT
ALS LABORATORY GROUP
10450 STANCLIFF RD
SUITE 210
HOUSTON TX 77099
(281) 530-5656
REF: LHAAP 18 PHASE 2 - SO 85980 - GW

RMA:

FedEx Express

TRK# 5789 1994 3413

PRIORITY OVERNIGHT

FedEx

AB SGRA

77099
TX-US
IAH

4238674 29Jun2022 GGGA 5606/2741/C868

Pace Analytical®

LELAP CERTIFICATE NUMBER: 01955
DOD-ELAP ACCREDITATION NUMBER: 74960

ANALYTICAL RESULTS

PERFORMED BY

Pace Analytical Gulf Coast
7979 Innovation Park Dr.
Baton Rouge, LA 70820
(225) 769-4900

Report Date 07/15/2022

Report # 222070229

Project HS22061645

Samples Collected 6/29/22

Deliver To	***Additional Recipients***
Dane Wacasey ALS 10450 Stancliff Rd., Ste 210 Houston, TX 770994338	Jumoke Lawal, ALS Houston

PJLA Testing DoD ELAP

ISO 17025

NELAP ACCREDITED TNI LABORATORY

Pace Analytical

Report#: 222070229
Project ID: HS22061645 **Report Date:** 07/15/2022

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with Pace Gulf Coast's Standard Operating Procedures.

Common Abbreviations that may be Utilized in this Report

ND	Indicates the result was Not Detected at the specified reporting limit
NO	Indicates the sample did not ignite when preliminary test performed for EPA Method 1030
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
DL	Detection Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
RE	Re-analysis
CF	HPLC or GC Confirmation
00:01	Reported as a time equivalent to 12:00 AM

Reporting Flags that may be Utilized in this Report

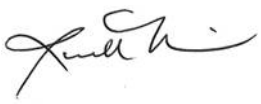
J or I	Indicates the result is between the MDL and LOQ
J	DOD flag on analyte in the parent sample for MS/MSD outside acceptance criteria
U	Indicates the compound was analyzed for but not detected
B or V	Indicates the analyte was detected in the associated Method Blank
Q	Indicates a non-compliant QC Result (See Q Flag Application Report)
*****	Indicates a non-compliant or not applicable QC recovery or RPD – see narrative
E	Organics - The result is estimated because it exceeded the instrument calibration range
E	Metals - % diference for the serial dilution is > 10%
L	Reporting Limits adjusted to meet risk-based limit.
P	RPD between primary and confirmation result is greater than 40
DL	Diluted analysis – when appended to Client Sample ID

Sample receipt at Pace Gulf Coast is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of Pace Gulf Coast. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with The NELAC Institute (TNI) Standard 2009 and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.



Authorized Signature
Pace Gulf Coast Report 222070229

Certifications

Certification	Certification Number
DOD ELAP	74960
Alabama	01955
Arkansas	88-0655
Colorado	01955
Delaware	01955
Florida	E87854
Georgia	01955
Hawaii	01955
Idaho	01955
Illinois	200048
Indiana	01955
Kansas	E-10354
Kentucky	95
Louisiana	01955
Maryland	01955
Massachusetts	01955
Michigan	01955
Mississippi	01955
Missouri	01955
Montana	N/A
Nebraska	01955
New Mexico	01955
North Carolina	618
North Dakota	R-195
Oklahoma	9403
South Carolina	73006001
South Dakota	01955
Tennessee	01955
Texas	T104704178
Vermont	01955
Virginia	460215
Washington	C929
USDA Soil Permit	P330-16-00234

Case Narrative

Client: ALS Environmental - Houston, TX **Report:** 222070229

Pace Analytical Gulf Coast received and analyzed the sample(s) listed
on the Report Sample Summary page of this report. Receipt of the sample(s) is documented
by the attached chain of custody. This applies only to the sample(s) listed in this report.
No sample integrity or quality control exceptions were identified unless noted below.

This report was completed in accordance with DOD QSM 5.3 as specified in the contract.

No anomalies were found for the analyzed sample(s).

Sample Summary

Lab ID	Client ID	Matrix	Collect Date	Receive Date
22207022901	16EW03-220629	Water	6/29/22 07:05	7/01/22 10:00
22207022902	16EW02-220629	Water	6/29/22 07:50	7/01/22 10:00
22207022903	16EW02-220629-FD	Water	6/29/22 07:50	7/01/22 10:00
22207022904	16IW26-20629	Water	6/29/22 08:40	7/01/22 10:00
22207022905	16WW41-220629	Water	6/29/22 09:30	7/01/22 10:00
22207022906	16WW41-220629-FD	Water	6/29/22 09:30	7/01/22 10:00
22207022907	16IW03-220629	Water	6/29/22 12:40	7/01/22 10:00

Pace Analytical

Report#: 222070229
Project ID: HS22061645 **Report Date:** 07/15/2022

Test Summary

EPA RSK-175					
Lab ID	**Client ID**	**Matrix**	**Batch**	**Instru**	**RunDate**
22207022901	16EW03-220629	Water	745070	GCV8B	7/11/22 13:51
22207022902	16EW02-220629	Water	745070	GCV8B	7/11/22 13:57
22207022903	16EW02-220629-FD	Water	745070	GCV8B	7/11/22 14:04
22207022904	16IW26-20629	Water	745070	GCV8B	7/11/22 14:22
22207022905	16WW41-220629	Water	745070	GCV8B	7/11/22 14:47
22207022906	16WW41-220629-FD	Water	745070	GCV8B	7/11/22 15:03
22207022907	16IW03-220629	Water	745070	GCV8B	7/11/22 15:12

Manual Integrations

Manual Integrations for LC and IC (if performed) are documented in the raw data.
No other manual integrations were performed by Pace Gulf Coast.

Q Flag Summary

NO Q FLAGS FOR THIS WORKORDER

Detect Summary

Results and Detection Limits are adjusted for dilution and moisture when applicable

EPA RSK-175

Lab ID	Client ID	Parameter	Units	Result	Dil.	%Moist
22207022901	16EW03-220629	Carbon Dioxide	ug/L	462000	30	NA
22207022902	16EW02-220629	Carbon Dioxide	ug/L	390000	30	NA
22207022903	16EW02-220629-FD	Carbon Dioxide	ug/L	367000	30	NA
22207022904	16IW26-20629	Carbon Dioxide	ug/L	465000	50	NA
22207022905	16WW41-220629	Carbon Dioxide	ug/L	462000	30	NA
22207022906	16WW41-220629-FD	Carbon Dioxide	ug/L	418000	30	NA
22207022907	16IW03-220629	Carbon Dioxide	ug/L	497000	30	NA

Report#: 222070229
Project ID: HS22061645 Report Date: 07/15/2022

Sample Results

16EW03-220629

Collect Date 06/29/2022 07:05 Lab ID 22207022901
Receive Date 07/01/2022 10:00 Matrix Water

EPA RSK-175 *Results and limits are adjusted for dilution.

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	30	07/11/22 13:51	745070	BDP	NA

CAS#	Parameter	Result	DL	LOD	LOQ	Units
124-38-9	Carbon Dioxide	462000	3810	11600	27000	ug/L

16EW02-220629

Collect Date 06/29/2022 07:50 Lab ID 22207022902
Receive Date 07/01/2022 10:00 Matrix Water

EPA RSK-175 *Results and limits are adjusted for dilution.

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	30	07/11/22 13:57	745070	BDP	NA

CAS#	Parameter	Result	DL	LOD	LOQ	Units
124-38-9	Carbon Dioxide	390000	3810	11600	27000	ug/L

16EW02-220629-FD

Collect Date 06/29/2022 07:50 Lab ID 22207022903
Receive Date 07/01/2022 10:00 Matrix Water

EPA RSK-175 *Results and limits are adjusted for dilution.

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	30	07/11/22 14:04	745070	BDP	NA

CAS#	Parameter	Result	DL	LOD	LOQ	Units
124-38-9	Carbon Dioxide	367000	3810	11600	27000	ug/L

16IW26-20629

Collect Date 06/29/2022 08:40 Lab ID 22207022904
Receive Date 07/01/2022 10:00 Matrix Water

EPA RSK-175 *Results and limits are adjusted for dilution.

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	50	07/11/22 14:22	745070	BDP	NA

CAS#	Parameter	Result	DL	LOD	LOQ	Units
124-38-9	Carbon Dioxide	465000	6350	19300	45000	ug/L

Pace Analytical

Report#: 222070229
Project ID: HS22061645 **Report Date:** 07/15/2022

Sample Results

16WW41-220629

Collect Date 06/29/2022 09:30 **Lab ID** 22207022905
Receive Date 07/01/2022 10:00 **Matrix** Water

EPA RSK-175

*Results and limits are adjusted for dilution.

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	30	07/11/22 14:47	745070	BDP	NA

CAS#	Parameter	Result	DL	LOD	LOQ	Units
124-38-9	Carbon Dioxide	462000	3810	11600	27000	ug/L

16WW41-220629-FD

Collect Date 06/29/2022 09:30 **Lab ID** 22207022906
Receive Date 07/01/2022 10:00 **Matrix** Water

EPA RSK-175

*Results and limits are adjusted for dilution.

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	30	07/11/22 15:03	745070	BDP	NA

CAS#	Parameter	Result	DL	LOD	LOQ	Units
124-38-9	Carbon Dioxide	418000	3810	11600	27000	ug/L

16IW03-220629

Collect Date 06/29/2022 12:40 **Lab ID** 22207022907
Receive Date 07/01/2022 10:00 **Matrix** Water

EPA RSK-175

*Results and limits are adjusted for dilution.

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	30	07/11/22 15:12	745070	BDP	NA

CAS#	Parameter	Result	DL	LOD	LOQ	Units
124-38-9	Carbon Dioxide	497000	3810	11600	27000	ug/L

Pace Analytical

Report#: 222070229
Project ID: HS22061645 **Report Date:** 07/15/2022

GC Volatiles QC Summary

Analytical Batch 745070	Client ID	MB745070		LCS745070				LCSD745070				
	Lab ID	2369016		2369017				2369018				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	07/11/22 13:39		07/11/22 13:25				07/11/22 13:31				
	Matrix	Water		Water				Water				
EPA RSK-175		Units Result	ug/L LOD	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Carbon Dioxide	124-38-9	386U	386	8700	9190	106	38 - 147	8700	9360	108	2	40

Client ID: ALS Houston - ALS Environmental - Houston, TX

SDG: 222070229

PM: RWe

Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 19093

SUBCONTRACT TO:

Pace Analytical
7979 Innovation Park Drive
Baton Rouge, LA 70820

Phone: +1 225 769 4900

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	Dane J. Wacasey
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	Dane.Wacasey@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS22061645
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE	
	ANALYSIS REQUESTED			DUE DATE	
1.	**HS22061645-01**	**16EW03-220629**	**Groundwater**	**29 Jun 2022 07:05**	1
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			15 Jul 2022	
2.	**HS22061645-02**	**16EW02-220629**	**Groundwater**	**29 Jun 2022 07:50**	2
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			15 Jul 2022	
3.	**HS22061645-03**	**16EW02-220629-FD**	**Groundwater**	**29 Jun 2022 07:50**	3
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			15 Jul 2022	
4.	**HS22061645-04**	**16IW262-220629**	**Groundwater**	**29 Jun 2022 08:40**	4
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			15 Jul 2022	
5.	**HS22061645-05**	**16WW41-220629**	**Groundwater**	**29 Jun 2022 09:30**	5
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			15 Jul 2022	
6.	**HS22061645-06**	**16WW41-220629-FD**	**Groundwater**	**29 Jun 2022 09:30**	6
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			15 Jul 2022	
7.	**HS22061645-10**	**16IW03-220629**	**Groundwater**	**29 Jun 2022 12:40**	7
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			15 Jul 2022	

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **19093**

QC Level: DOD IV (DoD Data Package)

Client ID: ALS Houston - ALS Environmental - Houston, TX

SDG: 222070229

PM: RWe

5789 5.6 EHR
1995
0893

Relinquished By: _____ Date/Time: 6/30/2022 1800

Received By: ~~Fed Ex~~ _____ Date/Time: _____

Cooler ID(s): _____ Temperature(s): _____

Fed Ex
Brianna Nelson

~~6/30/22~~ 7/1/22 1000
~~6/30/22~~ 7/1/22 1000

Pace Analytical®

SAMPLE RECEIVING CHECKLIST

2220702 29

SAMPLE DELIVERY GROUP 222070229	
Client **PM** RWe ALS Houston - ALS Environmental - Houston, TX	**Transport Method** FEDEX
Profile Number 294458	**Received By** Roberts, George S.
Line Item(s) 1 - CO2	**Receive Date(s)** 07/01/22

CHECKLIST	YES	NO
Samples received with proper thermal preservation?	☑	☐
Radioactivity is <1600 cpm? If no, record cpm value in notes section.	☑	☐
COC relinquished and complete (including sampleIDs, collect times, and sampler)?	☑	☐
All containers received in good condition and within hold time?	☑	☐
All sample labels and containers received match the chain of custody?	☑	☐
Preservative added to any containers?	☐	☑
If received, was headspace for VOC water containers < 6mm?	☑	☐
Samples collected in containers provided by Pace Gulf Coast?	☑	☐

COOLERS

Airbill	Thermometer ID: E42	Temp °C
578919950893		5.6

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

July 11, 2022 Service Request No:E2200638

Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

Laboratory Results for: HS22061645

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory June 30, 2022
For your reference, these analyses have been assigned our service request number **E2200638.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Corey Grandits
Project Manager

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental

Certificate of Analysis

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Environmental

Client:	ALS	**Service Request No.:**	E2200638
Project:	HS22061645	**Date Received:**	06/30/22
Sample Matrix:	GW		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Ten samples were received for analysis at ALS Environmental in Houston on 06/30/22.

The samples were received in good condition and are consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2200276: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in addition to a MS/MSD for this extraction batch. The LCS-DLCS recoveries met acceptance criteria. The MS/MSD was performed on an unrelated sample.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: ALS Environmental - US **Service Request:**E2200638
Project: HS22061645

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2200638-001	16EW03-220629	6/29/2022	0705
E2200638-002	16EW02-220629	6/29/2022	0750
E2200638-003	16EW02-220629-FD	6/29/2022	0750
E2200638-004	16IW26-220629	6/29/2022	0840
E2200638-005	16WW41-220629	6/29/2022	0930
E2200638-006	16WW41-220629-FD	6/29/2022	0930
E2200638-007	16WW22-220629	6/29/2022	1025
E2200638-008	16WW39-220629	6/29/2022	1110
E2200638-009	16WW49-220629	6/29/2022	1155
E2200638-010	16IW03-220629	6/29/2022	1240

Service Request Summary

Folder #: **E2200638**
Client Name: ALS Environmental - US
Project Name: HS22061645
Project Number:

Report To: Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-575-2190
Cell Number:
Fax Number: 281-530-5887
E-mail: dane.wacasey@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 06/30/22
Internal Due Date: 7/15/2022
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS22061645
EDD: EQUIS
EFWEDD_LHAAP

10 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2200638-001	16EW03-220629	Water	06/29/22 0705	**IV**
E2200638-002	16EW02-220629	Water	06/29/22 0750	**IV**
E2200638-003	16EW02-220629-FD	Water	06/29/22 0750	**IV**
E2200638-004	16IW26-220629	Water	06/29/22 0840	**IV**
E2200638-005	16WW41-220629	Water	06/29/22 0930	**IV**
E2200638-006	16WW41-220629-FD	Water	06/29/22 0930	**IV**
E2200638-007	16WW22-220629	Water	06/29/22 1025	**IV**
E2200638-008	16WW39-220629	Water	06/29/22 1110	**IV**
E2200638-009	16WW49-220629	Water	06/29/22 1155	**IV**
E2200638-010	16IW03-220629	Water	06/29/22 1240	**IV**

Service Request Summary

Folder #: **E2200638**
Client Name: ALS Environmental - US
Project Name: HS22061645
Project Number:

Report To: Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-575-2190
Cell Number:
Fax Number: 281-530-5887
E-mail: dane.wacasey@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 06/30/22
Internal Due Date: 7/15/2022
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS22061645
EDD: EQUIS
EFWEDD_LHAAP

10 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Test Comments:

Group	Test/Method	Samples	Comments
Semivoa GCMS	ClO4 DOD/6850	10	IV Due 7/22

Data Qualifiers

Lab Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	Internal standard not within the specified limits. See case narrative.
J	Estimated Value. Concentration found below MRL.
K	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	Analyte was detected above the method reporting limit prior to normalization.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
L1	Laboratory control sample recovery outside the specified limits; results may be biased high.
L2	Laboratory control sample recovery outside the specified limits; results may be biased low.
L3	Laboratory control sample recovery outside the specified limits.
M	Matrix interference; results may be biased high.
M	The duplicate injection precision not met.
M1	Matrix interference due to coelution with a non-target compound; results may be biased high.

Data Qualifiers

Lab Standard

N	Presumptive evidence of a compound for TICs that have been identified based on a mass spectral library search.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
P	Pesticide/Aroclor target analyte > 40% difference for detected concentrations between GC columns
Q	Indicates as estimated value because the P and P + 2 theoretical abundance ratio does not meet method criteria.
R	Duplicate Precision not met.
R1	Duplicate precision not within the specified limits; however, the results are below the MRL and considered estimated.
S	Surrogate recovery not within specified limits.
S	The reported value was determined by the Method of Standard Additions (MSA).
T	Analyte is a tentatively identified compound, result is estimated.
U	Compound was analyzed for, but was not detected (ND).
V1	The continuing calibration verification standard was outside (biased high) the specified limits for this compound.
V2	The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
W	Result quantified, but the corresponding peak was detected outside the generated retention time window.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
X	See case narrative.
Y	Recovery outside limits
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

10450 Stancliff Rd, Houston, TX 77099 | 281-530-5656 | www.alsglobal.com

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793	5/27/2023
California Department of Health Services	2919-2023	4/30/2023
Department of Defense	L22-90	3/31/2024
Florida Department of Health	E87611-35	6/30/2023
Florida Department of Health	E87611-35	6/30/2023
Florida Department of Health	E87611-35	6/30/2023
Florida Department of Health	E87611-35	6/30/2023
Hawaii Department of Health	2022	4/30/2023
Illinois Environmental Protection Agency	2000322022-9	5/9/2023
Kansas Department of Health and Environment	E-10352 2022	7/31/2022
Louisiana Department of Environmental Quality	03087-2022	6/30/2023
Louisiana Department of Health and Hospitals	LA028	12/31/2022
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343	6/30/2023
Michigan Depratment of Environmental Quality	9971-2022	4/30/2023
Minnesota Department of Health	2228443	12/31/2022
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2023
Nevada Department of Concervation and Natural Resources	TX026932022-1	7/31/2022
New Hampshire Environmental Laboratory Accreditation Program	209422	4/24/2023
New Jersey Department of Environmental Protection	TX008-2023	6/30/2023
New York Department of Health	11707	3/31/2023
Oklahoma Department of Environmental Quality	2021-080	8/31/2022
Oregon Environmental Laboratory Accreditation Program	TX200002	5/15/2023
Pennsylvania Department of Environmental Protection	68-03441-016	6/30/2023
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	04016-2022	4/30/2023
Texas Commision on Environmental Quality	T104704231-22-29	4/30/2023
United States Department of Agriculture	P330-19-00299	10/10/2022
Utah Department of Health Environmental Laboratory Certification	TX026932021-12	7/31/2022
Washington Department of Health	C819-2022	11/14/2022

Chain of Custody

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

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F: +1 281 530 5887
www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **19094**

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	Dane J. Wacasey
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	Dane.Wacasey@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS22061645
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS22061645-01**	**16EW03-220629**	**Groundwater**	**29 Jun 2022 07:05**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022
2.	**HS22061645-02**	**16EW02-220629**	**Groundwater**	**29 Jun 2022 07:50**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022
3.	**HS22061645-03**	**16EW02-220629-FD**	**Groundwater**	**29 Jun 2022 07:50**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022
4.	**HS22061645-04**	**16IW262-220629**	**Groundwater**	**29 Jun 2022 08:40**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022
5.	**HS22061645-05**	**16WW41-220629**	**Groundwater**	**29 Jun 2022 09:30**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022
6.	**HS22061645-06**	**16WW41-220629-FD**	**Groundwater**	**29 Jun 2022 09:30**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022
7.	**HS22061645-07**	**16WW22-220629**	**Groundwater**	**29 Jun 2022 10:25**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022
8.	**HS22061645-08**	**16WW39-220629**	**Groundwater**	**29 Jun 2022 11:10**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 19094**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022
9.	**HS22061645-09**	**16WW49-220629**	**Groundwater**	**29 Jun 2022 11:55**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022
10.	**HS22061645-10**	**16IW03-220629**	**Groundwater**	**29 Jun 2022 12:40**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: COREY G Date/Time: 6-30-22 1200

Cooler ID(s): _____ Temperature(s): _____

ALS Environmental

Cooler Receipt Form

Project Chemist CG

Client/Project ALS-H Thermometer ID IR#1

Date/Time Received: 6.30.22 Initials: CG Date/Time Logged in: 6.30.22 Initials CG

1. Method of delivery: ○ US Mail ○ Fed Ex ○ UPS ○ DHL ☒ Courier (ALS) ○ Client

2. Samples received in: ☒ Cooler ○ Box ○ Envelope ○ Other

3. Were custody seals on coolers? ○ Yes ☒ No
   Were they intact? ○ Yes ○ No ☒ N/A
   Were they signed and dated? ○ Yes ○ No ☒ N/A
   If yes, how many and where?

4. Packing Material: ○ Inserts ☒ Baggies ○ Bubble Wrap ○ Gel Packs ☒ Wet Ice ○ Sleeves ○ Other

5. Foreign or Regulated Soil? ○ Yes ○ No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		6.30.22	1200	CG	4.0	☒
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ☒ Yes ○ No
7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ☒ Yes ○ No
8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ☒ Yes ○ No
9. Were appropriate bottles/containers and volumes received for the requested tests? ☒ Yes ○ No
10. Did sample labels and tags agree with custody documents? ☒ Yes ○ No

Notes, Discrepancies, & Resolutions:

Service request Label:

HS-HRMSCoolerReceipt R1.0

ALS Environmental - Houston HRMS

10450 Stancliff Rd., Suite 210
Houston, TX 77099
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F: +1 713 266 1599
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6ºC.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10ºC.
- ✓ Air samples are shipped and stored cold, at 0 to 6ºC
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

Preparation Information Benchsheets

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 402384 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 7/6/22 11:12

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2200635-001	LH18/24-SP650_062822_AIX	.01	6850/ClO4 DOD			Water	10mL	
2	E2200636-001	16WW23-220627	.01	6850/ClO4 DOD			Water	10mL	
3	E2200636-002	16WW24-220627	.01	6850/ClO4 DOD			Water	10mL	
4	E2200636-003	16WW27-220627	.01	6850/ClO4 DOD			Water	10mL	
5	E2200636-004	16WW43-220627	.01	6850/ClO4 DOD			Water	10mL	
6	E2200636-005	16RW05-220627	.01	6850/ClO4 DOD			Water	10mL	
7	E2200636-006	16PM09-220627	.01	6850/ClO4 DOD			Water	10mL	
8	E2200636-007	16PM06-220627	.01	6850/ClO4 DOD			Water	10mL	
9	E2200636-008	16PM14-220627	.01	6850/ClO4 DOD			Water	10mL	
10	E2200638-001	16EW03-220629	.01	6850/ClO4 DOD			Water	10mL	
11	E2200638-002	16EW02-220629	.01	6850/ClO4 DOD			Water	10mL	
12	E2200638-003	16EW02-220629-FD	.01	6850/ClO4 DOD			Water	10mL	
13	E2200638-004	16IW26-220629	.01	6850/ClO4 DOD			Water	10mL	
14	E2200638-005	16WW41-220629	.01	6850/ClO4 DOD			Water	10mL	
15	E2200638-006	16WW41-220629-FD	.01	6850/ClO4 DOD			Water	10mL	
16	E2200638-007	16WW22-220629	.01	6850/ClO4 DOD			Water	10mL	
17	E2200638-008	16WW39-220629	.01	6850/ClO4 DOD			Water	10mL	
18	E2200638-009	16WW49-220629	.01	6850/ClO4 DOD			Water	10mL	
19	E2200638-010	16IW03-220629	.01	6850/ClO4 DOD			Water	10mL	
20	EQ2200276-01	MB		6850/ClO4 DOD			Liquid	10mL	
21	EQ2200276-02	LCS		6850/ClO4 DOD			Liquid	10mL	
22	EQ2200276-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
23	EQ2200276-04	16WW24-220627 MS	.02	6850/ClO4 DOD			Liquid	10mL	
24	EQ2200276-05	16WW24-220627 DMS	.02	6850/ClO4 DOD			Liquid	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 222798 Logbook Ref: Perchlorate (1st Source) Expires On: 10/29/2022

EQ2200276-02	1.00µL	EQ2200276-03	1.00µL	EQ2200276-04	1.00µL	EQ2200276-05	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 223118 Logbook Ref: Perchlorate Internal Standard Expires On: 10/31/2022

E2200635-001	100.00µL	E2200636-001	100.00µL	E2200636-002	100.00µL	E2200636-003	100.00µL	E2200636-004	100.00µL	E2200636-005	100.00µL
E2200636-006	100.00µL	E2200636-007	100.00µL	E2200636-008	100.00µL	E2200638-001	100.00µL	E2200638-002	100.00µL	E2200638-003	100.00µL
E2200638-004	100.00µL	E2200638-005	100.00µL	E2200638-006	100.00µL	E2200638-007	100.00µL	E2200638-008	100.00µL	E2200638-009	100.00µL
E2200638-010	100.00µL	EQ2200276-01	100.00µL	EQ2200276-02	100.00µL	EQ2200276-03	100.00µL	EQ2200276-04	100.00µL	EQ2200276-05	100.00µL

Preparation Information Benchsheet

Prep Run#: 402384 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 7/6/22 11:12

Preparation Materials

Water HPLC Grade	5/12/2022 Water (223055)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	537M Glass Culture Tubes	537M Glass Tubes (218064)
6850 Pipette Tips 50-1000 uL	6850 Pipette Tips (221929)	6850 Luer-Lok Syringes	Luer-Lok Syringes (221305)	6850 0.45um syringe filters	6850 Syringe Filters (222410)

Preparation Steps

Step: Preparation
Started: 7/6/22 11:12
Finished: 7/6/22 11:55
By: GRIVERA
Comments

Comments: _____

Reviewed By: GR Date: 7/6/22

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 0705
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16EW03-220629	**Units:**	µg/L
Lab Code:	E2200638-001	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/ 6/22	7/7/22 14:57	402384	769895	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 0750
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16EW02-220629	**Units:**	µg/L
Lab Code:	E2200638-002	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.240**		0.100	0.0500	0.0250	1	7/ 6/22	7/6/22 19:40	402384	769646	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 0750
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16EW02-220629-FD	**Units:**	µg/L
Lab Code:	E2200638-003	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.517**		0.100	0.0500	0.0250	1	7/ 6/22	7/6/22 19:47	402384	769646	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 0840
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16IW26-220629	**Units:**	µg/L
Lab Code:	E2200638-004	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0530**	J	0.100	0.0500	0.0250	1	7/ 6/22	7/7/22 12:34	402384	769895	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 0930
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16WW41-220629	**Units:**	µg/L
Lab Code:	E2200638-005	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**85.0**		1.00	0.500	0.250	10	7/ 6/22	7/7/22 12:42	402384	769895	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 0930
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16WW41-220629-FD	**Units:**	µg/L
Lab Code:	E2200638-006	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**64.6**		1.00	0.500	0.250	10	7/ 6/22	7/7/22 12:56	402384	769895	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 1025
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16WW22-220629	**Units:**	µg/L
Lab Code:	E2200638-007	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0564**	J	0.100	0.0500	0.0250	1	7/ 6/22	7/7/22 14:16	402384	769895	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 1110
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16WW39-220629	**Units:**	µg/L
Lab Code:	E2200638-008	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**5.56**		0.100	0.0500	0.0250	1	7/ 6/22	7/6/22 20:34	402384	769646	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 1155
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16WW49-220629	**Units:**	µg/L
Lab Code:	E2200638-009	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/ 6/22	7/6/22 20:42	402384	769646	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 1240
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16IW03-220629	**Units:**	µg/L
Lab Code:	E2200638-010	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.126**		0.100	0.0500	0.0250	1	7/ 6/22	7/7/22 13:12	402384	769895	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2200276-01	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/ 6/22	7/6/22 15:18	402384	769646	

Accuracy & Precision

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22061645
Sample Matrix: Water

Service Request: E2200638
Date Analyzed: 7/ 6/22

Lab Control Sample Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 402384

	Lab Control Sample EQ2200276-02			Duplicate Lab Control Sample EQ2200276-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.109	0.100	109	0.0951	0.100	95	84 - 119	14	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2200276-02	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.109**		0.100	0.0500	0.0250	1	7/ 6/22	7/6/22 15:51	402384	769646	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2200276-03	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0951**	J	0.100	0.0500	0.0250	1	7/ 6/22	7/6/22 15:59	402384	769646	

HS22061645-MSVOA-SW8260

ALS WO# HS22061645

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Form 1

Organic Analysis Data Sheet

Volatiles Organics by Method 8260C

Wokorder

HS22061645

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 June 2022

07/20/2022

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

HS22061645-01
16EW03-220629

Collected	Received	Matrix	Units
06/29/22 07:05	06/30/22 09:40	Groundwater	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	5	U	1.5	5.0	5.0	5	07/06/22 23:14	VOA6_412360	Y070621
1,1-Dichloroethene	2.5	U	1.0	5.0	5.0	5	07/06/22 23:14	VOA6_412360	Y070621
1,2-Dichloroethane	2.5	U	1.0	5.0	5.0	5	07/06/22 23:14	VOA6_412360	Y070621
cis-1,2-Dichloroethene	120		1.0	5.0	5.0	5	07/06/22 23:14	VOA6_412360	Y070621
Methylene chloride	15		2.0	10	10	5	07/06/22 23:14	VOA6_412360	Y070621
Trichloroethene	3.8	J	1.0	5.0	5.0	5	07/06/22 23:14	VOA6_412360	Y070621
Vinyl chloride	2.5	U	1.0	5.0	5.0	5	07/06/22 23:14	VOA6_412360	Y070621

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

HS22061645-02
16EW02-220629

Collected	Received	Matrix	Units
06/29/22 07:50	06/30/22 09:40	Groundwater	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	25	U	7.5	25	25	25	07/01/22 18:10	VOA6_412107	X070127
1,1-Dichloroethene	99		5.0	25	25	25	07/01/22 18:10	VOA6_412107	X070127
1,2-Dichloroethane	45		5.0	25	25	25	07/01/22 18:10	VOA6_412107	X070127
Methylene chloride	84		10	50	50	25	07/01/22 18:10	VOA6_412107	X070127
Vinyl chloride	730		5.0	25	25	25	07/01/22 18:10	VOA6_412107	X070127
cis-1,2-Dichloroethene	33000		50	250	250	250	07/01/22 18:31	VOA6_412107	X070128
Trichloroethene	35000		50	250	250	250	07/01/22 18:31	VOA6_412107	X070128

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

HS22061645-03
16EW02-220629-FD

Collected	Received	Matrix	Units
06/29/22 07:50	06/30/22 09:40	Groundwater	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	25	U	7.5	25	25	25	07/01/22 18:53	VOA6_412107	X070129
1,1-Dichloroethene	91		5.0	25	25	25	07/01/22 18:53	VOA6_412107	X070129
1,2-Dichloroethane	43		5.0	25	25	25	07/01/22 18:53	VOA6_412107	X070129
Methylene chloride	66		10	50	50	25	07/01/22 18:53	VOA6_412107	X070129
Vinyl chloride	650		5.0	25	25	25	07/01/22 18:53	VOA6_412107	X070129
cis-1,2-Dichloroethene	34000		50	250	250	250	07/01/22 19:14	VOA6_412107	X070130
Trichloroethene	38000		50	250	250	250	07/01/22 19:14	VOA6_412107	X070130

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

HS22061645-04
16IW26-220629

Collected	Received	Matrix	Units
06/29/22 08:40	06/30/22 09:40	Groundwater	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	5	U	1.5	5.0	5.0	5	07/06/22 22:53	VOA6_412360	Y070620
1,1-Dichloroethene	2.5	U	1.0	5.0	5.0	5	07/06/22 22:53	VOA6_412360	Y070620
1,2-Dichloroethane	2.5	U	1.0	5.0	5.0	5	07/06/22 22:53	VOA6_412360	Y070620
cis-1,2-Dichloroethene	2.5	U	1.0	5.0	5.0	5	07/06/22 22:53	VOA6_412360	Y070620
Methylene chloride	15		2.0	10	10	5	07/06/22 22:53	VOA6_412360	Y070620
Trichloroethene	3.6	J	1.0	5.0	5.0	5	07/06/22 22:53	VOA6_412360	Y070620
Vinyl chloride	2.5	U	1.0	5.0	5.0	5	07/06/22 22:53	VOA6_412360	Y070620

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

HS22061645-05
16WW41-220629

Collected	Received	Matrix	Units
06/29/22 09:30	06/30/22 09:40	Groundwater	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	10	U	3.0	10	10	10	07/06/22 23:35	VOA6_412360	Y070622
1,1-Dichloroethene	24		2.0	10	10	10	07/06/22 23:35	VOA6_412360	Y070622
1,2-Dichloroethane	6.6	J	2.0	10	10	10	07/06/22 23:35	VOA6_412360	Y070622
Methylene chloride	20	J	4.0	20	20	10	07/06/22 23:35	VOA6_412360	Y070622
Vinyl chloride	520		2.0	10	10	10	07/06/22 23:35	VOA6_412360	Y070622
cis-1,2-Dichloroethene	3800		20	100	100	100	07/06/22 23:56	VOA6_412360	Y070623
Trichloroethene	6200		20	100	100	100	07/06/22 23:56	VOA6_412360	Y070623

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

HS22061645-06
16WW41-220629-FD

Collected	Received	Matrix	Units
06/29/22 09:30	06/30/22 09:40	Groundwater	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	10	U	3.0	10	10	10	07/07/22 00:17	VOA6_412360	Y070624
1,1-Dichloroethene	21		2.0	10	10	10	07/07/22 00:17	VOA6_412360	Y070624
1,2-Dichloroethane	5.9	J	2.0	10	10	10	07/07/22 00:17	VOA6_412360	Y070624
Methylene chloride	21		4.0	20	20	10	07/07/22 00:17	VOA6_412360	Y070624
Vinyl chloride	440		2.0	10	10	10	07/07/22 00:17	VOA6_412360	Y070624
cis-1,2-Dichloroethene	3300		20	100	100	100	07/07/22 00:39	VOA6_412360	Y070625
Trichloroethene	5700		20	100	100	100	07/07/22 00:39	VOA6_412360	Y070625

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

HS22061645-07
16WW22-220629

Collected	Received	Matrix	Units
06/29/22 10:25	06/30/22 09:40	Groundwater	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/01/22 17:49	VOA6_412107	X070126
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/01/22 17:49	VOA6_412107	X070126
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/01/22 17:49	VOA6_412107	X070126
cis-1,2-Dichloroethene	0.96	J	0.20	1.0	1.0	1	07/01/22 17:49	VOA6_412107	X070126
Methylene chloride	2	U	0.40	2.0	2.0	1	07/01/22 17:49	VOA6_412107	X070126
Trichloroethene	6.1		0.20	1.0	1.0	1	07/01/22 17:49	VOA6_412107	X070126
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	07/01/22 17:49	VOA6_412107	X070126

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

HS22061645-08
16WW39-220629

Collected	Received	Matrix	Units
06/29/22 11:10	06/30/22 09:40	Groundwater	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/06/22 19:23	VOA6_412360	Y070610
1,1-Dichloroethene	0.93	J	0.20	1.0	1.0	1	07/06/22 19:23	VOA6_412360	Y070610
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/06/22 19:23	VOA6_412360	Y070610
cis-1,2-Dichloroethene	28		0.20	1.0	1.0	1	07/06/22 19:23	VOA6_412360	Y070610
Methylene chloride	2	U	0.40	2.0	2.0	1	07/06/22 19:23	VOA6_412360	Y070610
Vinyl chloride	2.2		0.20	1.0	1.0	1	07/06/22 19:23	VOA6_412360	Y070610
Trichloroethene	230		1.0	5.0	5.0	5	07/07/22 16:09	VOA6_412413	X070718

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

HS22061645-09
16WW49-220629

Collected	Received	Matrix	Units
06/29/22 11:55	06/30/22 09:40	Groundwater	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/06/22 19:44	VOA6_412360	Y070611
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/06/22 19:44	VOA6_412360	Y070611
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/06/22 19:44	VOA6_412360	Y070611
cis-1,2-Dichloroethene	50		0.20	1.0	1.0	1	07/06/22 19:44	VOA6_412360	Y070611
Methylene chloride	2	U	0.40	2.0	2.0	1	07/06/22 19:44	VOA6_412360	Y070611
Trichloroethene	46		0.20	1.0	1.0	1	07/06/22 19:44	VOA6_412360	Y070611
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	07/06/22 19:44	VOA6_412360	Y070611

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

HS22061645-10
16IW03-220629

Collected	Received	Matrix	Units
06/29/22 12:40	06/30/22 09:40	Groundwater	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	25	U	7.5	25	25	25	07/07/22 01:42	VOA6_412360	Y070628
1,1-Dichloroethene	44		5.0	25	25	25	07/07/22 01:42	VOA6_412360	Y070628
1,2-Dichloroethane	12	U	5.0	25	25	25	07/07/22 01:42	VOA6_412360	Y070628
Methylene chloride	49	J	10	50	50	25	07/07/22 01:42	VOA6_412360	Y070628
Vinyl chloride	2300		5.0	25	25	25	07/07/22 01:42	VOA6_412360	Y070628
cis-1,2-Dichloroethene	17000		50	250	250	250	07/07/22 02:03	VOA6_412360	Y070629
Trichloroethene	7300		50	250	250	250	07/07/22 02:03	VOA6_412360	Y070629

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

HS22061645-11
Trip Blank-220629

Collected	Received	Matrix	Units
06/29/22 00:00	06/30/22 09:40	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/01/22 17:28	VOA6_412107	X070125
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/01/22 17:28	VOA6_412107	X070125
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/01/22 17:28	VOA6_412107	X070125
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/01/22 17:28	VOA6_412107	X070125
Methylene chloride	2	U	0.40	2.0	2.0	1	07/01/22 17:28	VOA6_412107	X070125
Trichloroethene	0.5	U	0.20	1.0	1.0	1	07/01/22 17:28	VOA6_412107	X070125
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	07/01/22 17:28	VOA6_412107	X070125

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

VBLKW-220701
VBLKW-220701

Collected	Received	Matrix	Units
NA	NA	Aqueous	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/01/22 11:09	VOA6_412107	X070107
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/01/22 11:09	VOA6_412107	X070107
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/01/22 11:09	VOA6_412107	X070107
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/01/22 11:09	VOA6_412107	X070107
Methylene chloride	2	U	0.40	2.0	2.0	1	07/01/22 11:09	VOA6_412107	X070107
Trichloroethene	0.5	U	0.20	1.0	1.0	1	07/01/22 11:09	VOA6_412107	X070107
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	07/01/22 11:09	VOA6_412107	X070107

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

VBLKW-220706
VBLKW-220706

Collected	Received	Matrix	Units
NA	NA	Aqueous	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/06/22 18:40	VOA6_412360	Y070608
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/06/22 18:40	VOA6_412360	Y070608
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/06/22 18:40	VOA6_412360	Y070608
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/06/22 18:40	VOA6_412360	Y070608
Methylene chloride	2	U	0.40	2.0	2.0	1	07/06/22 18:40	VOA6_412360	Y070608
Trichloroethene	0.5	U	0.20	1.0	1.0	1	07/06/22 18:40	VOA6_412360	Y070608
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	07/06/22 18:40	VOA6_412360	Y070608

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

VBLKW-220707
VBLKW-220707

Collected	Received	Matrix	Units
NA	NA	Aqueous	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
Trichloroethene	0.5	U	0.20	1.0	1.0	1	07/07/22 12:23	VOA6_412413	X070707

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Form 2

System Monitoring Compound Recovery

Volatiles Organics by Method 8260C

Wokorder

HS22061645

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Aptim Environmental & Infrastucture, Inc.

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07/20/2022

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412107

Volatiles Organics by Method 8260C

VLCSW-220701 (6727214)	Analyzed 07/01/22 10:27		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
Dibromofluoromethane	52.20	50.00	104	80 - 119	
Toluene-d8	51.97	50.00	104	89 - 112	
4-Bromofluorobenzene	52.88	50.00	106	85 - 114	
1,2-Dichloroethane-d4	48.95	50.00	98	81 - 118	

VBLKW-220701 (6727215)	Analyzed 07/01/22 11:09		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	41.47	50.00	83	81 - 118	
Dibromofluoromethane	43.88	50.00	88	80 - 119	
Toluene-d8	51.70	50.00	103	89 - 112	
4-Bromofluorobenzene	45.23	50.00	91	85 - 114	

ZZZZZZMS (6727222)	Analyzed 07/01/22 13:37		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	41.65	50.00	83	81 - 118	
Dibromofluoromethane	44.27	50.00	89	80 - 119	
Toluene-d8	51.45	50.00	103	89 - 112	
4-Bromofluorobenzene	47.70	50.00	95	85 - 114	

ZZZZZZMSD (6727223)	Analyzed 07/01/22 13:58		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	42.61	50.00	85	81 - 118	
Dibromofluoromethane	44.41	50.00	89	80 - 119	
Toluene-d8	50.06	50.00	100	89 - 112	
4-Bromofluorobenzene	48.35	50.00	97	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412107

Volatiles Organics by Method 8260C

HS22061645-11 (6727232)	Analyzed 07/01/22 17:28		Conc Units µg/L	DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	40.97	50.00	82	81 - 118	
Dibromofluoromethane	41.94	50.00	84	80 - 119	
Toluene-d8	53.83	50.00	108	89 - 112	
4-Bromofluorobenzene	47.17	50.00	94	85 - 114	

HS22061645-07 (6727233)	Analyzed 07/01/22 17:49		Conc Units µg/L	DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	40.52	50.00	81	81 - 118	
Dibromofluoromethane	41.85	50.00	84	80 - 119	
Toluene-d8	50.27	50.00	101	89 - 112	
4-Bromofluorobenzene	46.96	50.00	94	85 - 114	

HS22061645-02 (6727234)	Analyzed 07/01/22 18:10		Conc Units µg/L	DF 25
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	1015	1250	81	81 - 118	
Dibromofluoromethane	1072	1250	86	80 - 119	
Toluene-d8	1226	1250	98	89 - 112	
4-Bromofluorobenzene	1179	1250	94	85 - 114	

HS22061645-02 (6727235)	Analyzed 07/01/22 18:31		Conc Units µg/L	DF 250
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	10140	12500	81	81 - 118	
Dibromofluoromethane	10530	12500	84	80 - 119	
Toluene-d8	12830	12500	103	89 - 112	
4-Bromofluorobenzene	11780	12500	94	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412107

Volatiles Organics by Method 8260C

HS22061645-03 (6727236)	Analyzed 07/01/22 18:53		Conc Units µg/L		DF 25
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	1013	1250	81	81 - 118	
Dibromofluoromethane	1051	1250	84	80 - 119	
Toluene-d8	1323	1250	106	89 - 112	
4-Bromofluorobenzene	1156	1250	93	85 - 114	

HS22061645-03 (6727237)	Analyzed 07/01/22 19:14		Conc Units µg/L		DF 250
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	10320	12500	83	81 - 118	
Dibromofluoromethane	10990	12500	88	80 - 119	
Toluene-d8	12710	12500	102	89 - 112	
4-Bromofluorobenzene	11570	12500	93	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412360

Volatiles Organics by Method 8260C

VLCSW-220706 (6733259)	Analyzed 07/06/22 17:37		Conc Units µg/L	DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
Dibromofluoromethane	53.10	50.00	106	80 - 119	
Toluene-d8	49.37	50.00	99	89 - 112	
4-Bromofluorobenzene	51.60	50.00	103	85 - 114	
1,2-Dichloroethane-d4	56.78	50.00	114	81 - 118	

VBLKW-220706 (6733260)	Analyzed 07/06/22 18:40		Conc Units µg/L	DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	50.06	50.00	100	81 - 118	
Dibromofluoromethane	48.37	50.00	97	80 - 119	
Toluene-d8	54.14	50.00	108	89 - 112	
4-Bromofluorobenzene	51.14	50.00	102	85 - 114	

HS22061645-08 (6733262)	Analyzed 07/06/22 19:23		Conc Units µg/L	DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	51.42	50.00	103	81 - 118	
Dibromofluoromethane	49.16	50.00	98	80 - 119	
Toluene-d8	54.58	50.00	109	89 - 112	
4-Bromofluorobenzene	51.24	50.00	102	85 - 114	

HS22061645-09 (6733263)	Analyzed 07/06/22 19:44		Conc Units µg/L	DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	50.21	50.00	100	81 - 118	
Dibromofluoromethane	48.18	50.00	96	80 - 119	
Toluene-d8	54.51	50.00	109	89 - 112	
4-Bromofluorobenzene	50.96	50.00	102	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412360

Volatiles Organics by Method 8260C

ZZZZZZMS (6733265)	Analyzed 07/06/22 20:26		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	53.93	50.00	108	81 - 118	
Dibromofluoromethane	49.44	50.00	99	80 - 119	
Toluene-d8	55.16	50.00	110	89 - 112	
4-Bromofluorobenzene	55.44	50.00	111	85 - 114	

ZZZZZZMSD (6733266)	Analyzed 07/06/22 20:47		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	46.22	50.00	92	81 - 118	
Dibromofluoromethane	46.66	50.00	93	80 - 119	
Toluene-d8	47.45	50.00	95	89 - 112	
4-Bromofluorobenzene	51.55	50.00	103	85 - 114	

HS22061645-04 (6733271)	Analyzed 07/06/22 22:53		Conc Units µg/L		DF 5
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	266.0	250.0	106	81 - 118	
Dibromofluoromethane	249.7	250.0	100	80 - 119	
Toluene-d8	268.9	250.0	108	89 - 112	
4-Bromofluorobenzene	256.2	250.0	102	85 - 114	

HS22061645-01 (6733272)	Analyzed 07/06/22 23:14		Conc Units µg/L		DF 5
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	261.3	250.0	105	81 - 118	
Dibromofluoromethane	248.3	250.0	99	80 - 119	
Toluene-d8	269.7	250.0	108	89 - 112	
4-Bromofluorobenzene	253.3	250.0	101	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412360

Volatiles Organics by Method 8260C

HS22061645-05 (6733273)	Analyzed 07/06/22 23:35		Conc Units µg/L		DF 10
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	526.6	500.0	105	81 - 118	
Dibromofluoromethane	498.2	500.0	100	80 - 119	
Toluene-d8	535.9	500.0	107	89 - 112	
4-Bromofluorobenzene	511.1	500.0	102	85 - 114	

HS22061645-05 (6733274)	Analyzed 07/06/22 23:56		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	5236	5000	105	81 - 118	
Dibromofluoromethane	5005	5000	100	80 - 119	
Toluene-d8	5428	5000	109	89 - 112	
4-Bromofluorobenzene	5035	5000	101	85 - 114	

HS22061645-06 (6733275)	Analyzed 07/07/22 00:17		Conc Units µg/L		DF 10
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	520.6	500.0	104	81 - 118	
Dibromofluoromethane	493.6	500.0	99	80 - 119	
Toluene-d8	537.9	500.0	108	89 - 112	
4-Bromofluorobenzene	509.3	500.0	102	85 - 114	

HS22061645-06 (6733276)	Analyzed 07/07/22 00:39		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	5117	5000	102	81 - 118	
Dibromofluoromethane	4922	5000	98	80 - 119	
Toluene-d8	5522	5000	110	89 - 112	
4-Bromofluorobenzene	5109	5000	102	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412360

Volatiles Organics by Method 8260C

HS22061645-10 (6733279)	Analyzed 07/07/22 01:42		Conc Units µg/L		DF 25
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	1274	1250	102	81 - 118	
Dibromofluoromethane	1210	1250	97	80 - 119	
Toluene-d8	1336	1250	107	89 - 112	
4-Bromofluorobenzene	1297	1250	104	85 - 114	

HS22061645-10 (6733280)	Analyzed 07/07/22 02:03		Conc Units µg/L		DF 250
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	12660	12500	101	81 - 118	
Dibromofluoromethane	12150	12500	97	80 - 119	
Toluene-d8	13680	12500	109	89 - 112	
4-Bromofluorobenzene	12710	12500	102	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412413

Volatiles Organics by Method 8260C

VLCSW-220707 (6734425)	Analyzed 07/07/22 11:41		Conc Units µg/L	DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
Dibromofluoromethane	49.57	50.00	99	80 - 119	
Toluene-d8	50.77	50.00	102	89 - 112	
4-Bromofluorobenzene	51.37	50.00	103	85 - 114	
1,2-Dichloroethane-d4	48.36	50.00	97	81 - 118	

VBLKW-220707 (6734426)	Analyzed 07/07/22 12:23		Conc Units µg/L	DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	51.98	50.00	104	81 - 118	
Dibromofluoromethane	49.85	50.00	100	80 - 119	
Toluene-d8	54.86	50.00	110	89 - 112	
4-Bromofluorobenzene	50.74	50.00	101	85 - 114	

ZZZZZZMS (6734433)	Analyzed 07/07/22 15:06		Conc Units µg/L	DF 250
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	12730	12500	102	81 - 118	
Dibromofluoromethane	12030	12500	96	80 - 119	
Toluene-d8	13560	12500	108	89 - 112	
4-Bromofluorobenzene	12930	12500	103	85 - 114	

ZZZZZZMSD (6734434)	Analyzed 07/07/22 15:27		Conc Units µg/L	DF 250
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	12700	12500	102	81 - 118	
Dibromofluoromethane	12090	12500	97	80 - 119	
Toluene-d8	13730	12500	110	89 - 112	
4-Bromofluorobenzene	13070	12500	105	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

RunID
VOA6_412413

HS22061645-08 (6734436) **Analyzed** 07/07/22 16:09 **Conc Units** µg/L **DF** 5

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	234.7	250.0	94	81 - 118	
Dibromofluoromethane	237.4	250.0	95	80 - 119	
Toluene-d8	275.3	250.0	110	89 - 112	
4-Bromofluorobenzene	256.3	250.0	103	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Volatiles Organics by Method 8260C

Wokorder

HS22061645

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 June 2022

07/20/2022

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412107

Volatiles Organics by Method 8260C

		HS22061671-07		HS22061671-07MS				HS22061671-07MSD						
Sample Matrix Aqueous **Units** µg/L		**Run Date** 07/01/22 **Run Time** 12:33 **Data File** X070111.D		07/01/22 13:37 X070114.D				07/01/22 13:58 X070115.D						
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	#	MSD Result	Spike Added	%R	#	RPD Limit	RPD	#
1,1,2-Trichloroethane	80-119	1	0	19.47	20.00	97		19.32	20.00	97		20	1	
1,1-Dichloroethene	71-131	1	0	17.06	20.00	85		15.83	20.00	79		20	8	
1,2-Dichloroethane	73-128	1	0	18.82	20.00	94		18.51	20.00	93		20	2	
cis-1,2-Dichloroethene	78-123	1	0	19.34	20.00	97		18.05	20.00	90		20	7	
Methylene chloride	74-124	1	0	16.11	20.00	81		15.33	20.00	77		20	5	
Trichloroethene	79-123	1	0	23.29	20.00	116		20.55	20.00	103		20	12	
Vinyl chloride	58-137	1	0	16.36	20.00	82		14.95	20.00	75		20	9	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412360

Volatiles Organics by Method 8260C

		HS22070020-08		HS22070020-08MS				HS22070020-08MSD						
Sample Matrix Aqueous **Units** µg/L		**Run Date** 07/06/22 **Run Time** 20:05 **Data File** Y070612.D		07/06/22 20:26 Y070613.D				07/06/22 20:47 Y070614.D						
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	#	MSD Result	Spike Added	%R	#	RPD Limit	RPD	#
1,1,2-Trichloroethane	80-119	1	0	20.31	20.00	102		18.16	20.00	91		20	11	
1,1-Dichloroethene	71-131	1	0	18.79	20.00	94		20.46	20.00	102		20	8	
1,2-Dichloroethane	73-128	1	0	20.44	20.00	102		19.46	20.00	97		20	5	
cis-1,2-Dichloroethene	78-123	1	0	19.71	20.00	99		18.29	20.00	91		20	8	
Methylene chloride	74-124	1	0	18.85	20.00	94		18.8	20.00	94		20	0	
Trichloroethene	79-123	1	1.313	21.20	20.00	99		20.55	20.00	96		20	3	
Vinyl chloride	58-137	1	0	19.12	20.00	96		19.46	20.00	97		20	2	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412413

Volatiles Organics by Method 8260C

		HS22070020-01		HS22070020-01MS				HS22070020-01MSD						
Sample Matrix Aqueous **Units** µg/L		**Run Date** 07/07/22 **Run Time** 14:24 **Data File** X070713.D		07/07/22 15:06 X070715.D				07/07/22 15:27 X070716.D						
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	#	MSD Result	Spike Added	%R	#	RPD Limit	RPD	#
Trichloroethene	79-123	250	40120	44070	5000	79		41640	5000	31	*	20	6	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits

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Form 3B

Laboratory Control Sample Recovery

Volatiles Organics by Method 8260C

Wokorder

HS22061645

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 June 2022

07/20/2022

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412107

Volatiles Organics by Method 8260C

Batch QC			LCS		
QC Matrix: Aqueous	Units: ug/L	Run Date / Run Time	07/01/22 10:27		
Analyte	%R Limits	Spike Added	LCS Result	%R	#
1,1,2-Trichloroethane	80-119	20	19.87	99	
1,1-Dichloroethene	71-131	20	17.25	86	
1,2-Dichloroethane	73-128	20	20.34	102	
1,2-Dichloroethane-d4	81-118	50	48.95	98	
4-Bromofluorobenzene	85-114	50	52.88	106	
cis-1,2-Dichloroethene	78-123	20	20.51	103	
Dibromofluoromethane	80-119	50	52.2	104	
Methylene chloride	74-124	20	18.62	93	
Toluene-d8	89-112	50	51.97	104	
Trichloroethene	79-123	20	21.13	106	
Vinyl chloride	58-137	20	15.47	77	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412360

Volatiles Organics by Method 8260C

Batch QC			LCS		
QC Matrix: Aqueous	Units: ug/L	Run Date / Run Time	07/06/22 17:37		
Analyte	%R Limits	Spike Added	LCS Result	%R	#
1,1,2-Trichloroethane	80-119	20	18.53	93	
1,1-Dichloroethene	71-131	20	16.37	82	
1,2-Dichloroethane	73-128	20	20.98	105	
1,2-Dichloroethane-d4	81-118	50	56.78	114	
4-Bromofluorobenzene	85-114	50	51.6	103	
cis-1,2-Dichloroethene	78-123	20	18.52	93	
Dibromofluoromethane	80-119	50	53.1	106	
Methylene chloride	74-124	20	18.23	91	
Toluene-d8	89-112	50	49.37	99	
Trichloroethene	79-123	20	18.55	93	
Vinyl chloride	58-137	20	15.59	78	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412413

Volatiles Organics by Method 8260C

Batch QC				LCS			
QC Matrix	Aqueous	Units	Run Date	07/07/22			
		%REC	Run Time	11:41			
Analyte		%R Limits	Spike Added	LCS Result	%R	#	
1,2-Dichloroethane-d4		81-118	50	48.36	97		
4-Bromofluorobenzene		85-114	50	51.37	103		
Dibromofluoromethane		80-119	50	49.57	99		
Toluene-d8		89-112	50	50.77	102		
Trichloroethene		79-123	20	20.29	101		

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits

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Form 4

Method Blank Summary

Volatiles Organics by Method 8260C

Wokorder

HS22061645

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 June 2022

07/20/2022

Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

BatchID
R412107

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	VBLKW-220701	X070107.D	07/01/22 11:09	VOA6_412107
VLCSW-220701	VLCSW-220701	X070105.D	07/01/22 10:27	VOA6_412107
ZZZZZZ	HS22061671-09	X070108.D	07/01/22 11:30	VOA6_412107
ZZZZZZ	HS22061671-10	X070109.D	07/01/22 11:51	VOA6_412107
ZZZZZZ	HS22061671-05	X070110.D	07/01/22 12:12	VOA6_412107
ZZZZZZ	HS22061671-07	X070111.D	07/01/22 12:33	VOA6_412107
ZZZZZZ	HS22061605-07	X070112.D	07/01/22 12:54	VOA6_412107
ZZZZZZ	HS22061605-08	X070113.D	07/01/22 13:16	VOA6_412107
ZZZZZZMS	HS22061671-07MS	X070114.D	07/01/22 13:37	VOA6_412107
ZZZZZZMSD	HS22061671-07MSD	X070115.D	07/01/22 13:58	VOA6_412107
ZZZZZZ	HS22061605-08	X070117.D	07/01/22 14:40	VOA6_412107
ZZZZZZ	HS22061671-01	X070119.D	07/01/22 15:22	VOA6_412107
ZZZZZZ	HS22061671-02	X070120.D	07/01/22 15:43	VOA6_412107
ZZZZZZ	HS22061671-03	X070121.D	07/01/22 16:04	VOA6_412107
ZZZZZZ	HS22061671-04	X070122.D	07/01/22 16:25	VOA6_412107
ZZZZZZ	HS22061671-06	X070123.D	07/01/22 16:46	VOA6_412107
ZZZZZZ	HS22061671-08	X070124.D	07/01/22 17:07	VOA6_412107
Trip Blank-220629	HS22061645-11	X070125.D	07/01/22 17:28	VOA6_412107
16WW22-220629	HS22061645-07	X070126.D	07/01/22 17:49	VOA6_412107
16EW02-220629	HS22061645-02	X070127.D	07/01/22 18:10	VOA6_412107
16EW02-220629	HS22061645-02	X070128.D	07/01/22 18:31	VOA6_412107
16EW02-220629-FD	HS22061645-03	X070129.D	07/01/22 18:53	VOA6_412107
16EW02-220629-FD	HS22061645-03	X070130.D	07/01/22 19:14	VOA6_412107

Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

BatchID
R412360

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	VBLKW-220706	Y070608.D	07/06/22 18:40	VOA6_412360
VLCSW-220706	VLCSW-220706	Y070605.D	07/06/22 17:37	VOA6_412360
ZZZZZZ	HS22070020-10	Y070609.D	07/06/22 19:01	VOA6_412360
16WW39-220629	HS22061645-08	Y070610.D	07/06/22 19:23	VOA6_412360
16WW49-220629	HS22061645-09	Y070611.D	07/06/22 19:44	VOA6_412360
ZZZZZZ	HS22070020-08	Y070612.D	07/06/22 20:05	VOA6_412360
ZZZZZZMS	HS22070020-08MS	Y070613.D	07/06/22 20:26	VOA6_412360
ZZZZZZMSD	HS22070020-08MSD	Y070614.D	07/06/22 20:47	VOA6_412360
ZZZZZZ	HS22061605-07	Y070615.D	07/06/22 21:08	VOA6_412360
ZZZZZZ	HS22070020-05	Y070617.D	07/06/22 21:50	VOA6_412360
ZZZZZZ	HS22070020-06	Y070618.D	07/06/22 22:11	VOA6_412360
ZZZZZZ	HS22070020-07	Y070619.D	07/06/22 22:32	VOA6_412360
16IW26-220629	HS22061645-04	Y070620.D	07/06/22 22:53	VOA6_412360
16EW03-220629	HS22061645-01	Y070621.D	07/06/22 23:14	VOA6_412360
16WW41-220629	HS22061645-05	Y070622.D	07/06/22 23:35	VOA6_412360
16WW41-220629	HS22061645-05	Y070623.D	07/06/22 23:56	VOA6_412360
16WW41-220629-FD	HS22061645-06	Y070624.D	07/07/22 00:17	VOA6_412360
16WW41-220629-FD	HS22061645-06	Y070625.D	07/07/22 00:39	VOA6_412360
ZZZZZZ	HS22070020-02	Y070626.D	07/07/22 01:00	VOA6_412360
ZZZZZZ	HS22070020-02	Y070627.D	07/07/22 01:21	VOA6_412360
16IW03-220629	HS22061645-10	Y070628.D	07/07/22 01:42	VOA6_412360
16IW03-220629	HS22061645-10	Y070629.D	07/07/22 02:03	VOA6_412360
ZZZZZZ	HS22070020-03	Y070630.D	07/07/22 02:24	VOA6_412360
ZZZZZZ	HS22070020-03	Y070631.D	07/07/22 02:45	VOA6_412360

Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

BatchID
R412413

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	VBLKW-220707	X070707.D	07/07/22 12:23	VOA6_412413
VLCSW-220707	VLCSW-220707	X070705.D	07/07/22 11:41	VOA6_412413
ZZZZZZ	HS22070255-02	X070708.D	07/07/22 12:44	VOA6_412413
ZZZZZZ	HS22070255-01	X070709.D	07/07/22 13:20	VOA6_412413
ZZZZZZ	HS22070020-09	X070711.D	07/07/22 13:42	VOA6_412413
ZZZZZZ	HS22070020-01	X070712.D	07/07/22 14:03	VOA6_412413
ZZZZZZ	HS22070020-01	X070713.D	07/07/22 14:24	VOA6_412413
ZZZZZZ	HS22070020-04	X070714.D	07/07/22 14:45	VOA6_412413
ZZZZZZMS	HS22070020-01MS	X070715.D	07/07/22 15:06	VOA6_412413
ZZZZZZMSD	HS22070020-01MSD	X070716.D	07/07/22 15:27	VOA6_412413
ZZZZZZ	HS22070020-04	X070717.D	07/07/22 15:48	VOA6_412413
16WW39-220629	HS22061645-08	X070718.D	07/07/22 16:09	VOA6_412413
ZZZZZZ	HS22070020-09	X070719.D	07/07/22 16:30	VOA6_412413

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Form 5

Instrument Performance Check

Volatiles Organics by Method 8260C

Wokorder

HS22061645

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 June 2022

07/20/2022

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_409368

Volatiles Organics by Method 8260C

Tune File X052401.D 05/24/22 11:07

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	20.3 (20.3)
75	30.0 - 60.0% of mass 95	51.1 (51.1)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.5 (6.46)
173	Less than 2.0% of mass 174	0.6 (0.703) 1
174	50.0 - 120.0% of mass 95	80.9 (80.9)
175	4.0 - 9.0% of mass 174	6.5 (8.04) 1
176	93.0 - 101.0% of mass 174	77.4 (95.7) 1
177	5.0 - 9.0% of mass 176	5.6 (7.26) 2

Value is % of mass 1) 174 2) 176 RA - Relative Abundance

This check applies to the following analyses

	Type	Date Analyzed	Lab File ID	Sample ID
1	ICAL1	05/24/22 11:28	X052402	VSTD000.25
2	ICAL2	05/24/22 12:10	X052403	VSTD000.5
3	ICAL3	05/24/22 12:30	X052404	VSTD001
4	ICAL4	05/24/22 12:51	X052405	VSTD002
5	ICAL5	05/24/22 13:12	X052406	VSTD005
6	ICAL6	05/24/22 13:33	X052407	VSTD020
7	ICAL7	05/24/22 13:54	X052408	VSTD050
8	ICAL8	05/24/22 14:15	X052409	VSTD100
9	ICAL9	05/24/22 14:36	X052410	VSTD150
10	ICAL	05/24/22 14:57	X052411	VSTD200
11	ICV	05/24/22 15:39	X052413	CCV

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412107

Volatiles Organics by Method 8260C

Tune File X070101.D 07/01/22 09:03

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	18.1 (18.1)
75	30.0 - 60.0% of mass 95	48.7 (48.7)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	7 (7.01)
173	Less than 2.0% of mass 174	0.6 (0.69) 1
174	50.0 - 120.0% of mass 95	80.5 (80.5)
175	4.0 - 9.0% of mass 174	6.8 (8.45) 1
176	93.0 - 101.0% of mass 174	76.6 (95.1) 1
177	5.0 - 9.0% of mass 176	5.1 (6.7) 2

Value is % of mass 1) 174 2) 176 RA - Relative Abundance

This check applies to the following analyses

	Type	Date Analyzed	Lab File ID	Sample ID
1	CCV	07/01/22 09:45	X070103	CCV
2	CCB	07/01/22 10:06	X070104	CCB
3	LCS	07/01/22 10:27	X070105	VLCSW-220701
4	MBLK	07/01/22 11:09	X070107	VBLKW-220701
5	MS	07/01/22 13:37	X070114	ZZZZZZMS
6	MSD	07/01/22 13:58	X070115	ZZZZZZMSD
7	SAMP	07/01/22 17:28	X070125	Trip Blank-220629
8	SAMP	07/01/22 17:49	X070126	16WW22-220629
9	SAMP	07/01/22 18:10	X070127	16EW02-220629
10	SAMP	07/01/22 18:31	X070128	16EW02-220629
11	SAMP	07/01/22 18:53	X070129	16EW02-220629-FD
12	SAMP	07/01/22 19:14	X070130	16EW02-220629-FD
13	CCV_EN	07/01/22 19:35	X070131	CCV-END

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

RunID
VOA6_412359

Tune File X070601.D 07/06/22 10:59

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	19.2 (19.2)
75	30.0 - 60.0% of mass 95	47.6 (47.6)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.3 (6.27)
173	Less than 2.0% of mass 174	0.7 (0.782) 1
174	50.0 - 120.0% of mass 95	89.3 (89.3)
175	4.0 - 9.0% of mass 174	6 (6.77) 1
176	93.0 - 101.0% of mass 174	86.9 (97.3) 1
177	5.0 - 9.0% of mass 176	7 (8.05) 2

Value is % of mass 1) 174 2) 176 RA - Relative Abundance

This check applies to the following analyses

	Type	Date Analyzed	Lab File ID	Sample ID
1	ICAL1	07/06/22 11:20	X070602	VSTD000.25
2	ICAL2	07/06/22 12:02	X070603	VSTD000.5
3	ICAL3	07/06/22 12:23	X070604	VSTD001
4	ICAL4	07/06/22 12:44	X070605	VSTD002
5	ICAL5	07/06/22 13:05	X070606	VSTD005
6	ICAL6	07/06/22 13:26	X070607	VSTD020
7	ICAL7	07/06/22 13:47	X070608	VSTD050
8	ICAL8	07/06/22 14:08	X070609	VSTD100
9	ICAL9	07/06/22 14:28	X070610	VSTD150
10	ICAL	07/06/22 14:49	X070611	VSTD200
11	ICV	07/06/22 15:52	X070614	CCV

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412360

Volatiles Organics by Method 8260C

Tune File Y070601.D 07/06/22 16:13

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	16.4 (16.4)
75	30.0 - 60.0% of mass 95	44.7 (44.7)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.7 (6.72)
173	Less than 2.0% of mass 174	0.6 (0.783) 1
174	50.0 - 120.0% of mass 95	79.3 (79.3)
175	4.0 - 9.0% of mass 174	5.8 (7.32) 1
176	93.0 - 101.0% of mass 174	80 (101) 1
177	5.0 - 9.0% of mass 176	4.9 (6.07) 2

Value is % of mass 1) 174 2) 176 RA - Relative Abundance

This check applies to the following analyses

	Type	Date Analyzed	Lab File ID	Sample ID
1	CCV	07/06/22 16:55	Y070603	CCV
2	CCB	07/06/22 17:16	Y070604	CCB
3	LCS	07/06/22 17:37	Y070605	VLCSW-220706
4	MBLK	07/06/22 18:40	Y070608	VBLKW-220706
5	SAMP	07/06/22 19:23	Y070610	16WW39-220629
6	SAMP	07/06/22 19:44	Y070611	16WW49-220629
7	MS	07/06/22 20:26	Y070613	ZZZZZZMS
8	MSD	07/06/22 20:47	Y070614	ZZZZZZMSD
9	SAMP	07/06/22 22:53	Y070620	16IW26-220629
10	SAMP	07/06/22 23:14	Y070621	16EW03-220629
11	SAMP	07/06/22 23:35	Y070622	16WW41-220629
12	SAMP	07/06/22 23:56	Y070623	16WW41-220629
13	SAMP	07/07/22 00:17	Y070624	16WW41-220629-FD
14	SAMP	07/07/22 00:39	Y070625	16WW41-220629-FD
15	SAMP	07/07/22 01:42	Y070628	16IW03-220629
16	SAMP	07/07/22 02:03	Y070629	16IW03-220629
17	CCV_EN	07/07/22 03:06	Y070632	CCV-END

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412413

Volatiles Organics by Method 8260C

Tune File X070701.D 07/07/22 10:17

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	15.6 (15.6)
75	30.0 - 60.0% of mass 95	44.3 (44.3)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.5 (6.46)
173	Less than 2.0% of mass 174	0.8 (0.928) 1
174	50.0 - 120.0% of mass 95	90.9 (90.9)
175	4.0 - 9.0% of mass 174	6.7 (7.37) 1
176	93.0 - 101.0% of mass 174	88.5 (97.4) 1
177	5.0 - 9.0% of mass 176	5.7 (6.43) 2

Value is % of mass 1) 174 2) 176 RA - Relative Abundance

This check applies to the following analyses

	Type	Date Analyzed	Lab File ID	Sample ID
1	CCV	07/07/22 10:38	X070702	CCV
2	CCB	07/07/22 11:20	X070704	CCB
3	LCS	07/07/22 11:41	X070705	VLCSW-220707
4	MBLK	07/07/22 12:23	X070707	VBLKW-220707
5	MS	07/07/22 15:06	X070715	ZZZZZZMS
6	MSD	07/07/22 15:27	X070716	ZZZZZZMSD
7	SAMP	07/07/22 16:09	X070718	16WW39-220629
8	CCV_EN	07/07/22 16:51	X070720	CCV-END

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Form 6

Initial Calibration Data

Volatiles Organics by Method 8260C

Wokorder

HS22061645

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 June 2022

07/20/2022

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_409368

Volatiles Organics by Method 8260C

ICAL Start Date 24-MAY-2022 1128
ICAL End Date 24-MAY-2022 1457

Calibration Files

Level 1 ..voa6.i\X220524.b\X052402.D
Level 2 ..voa6.i\X220524.b\X052403.D
Level 3 ..voa6.i\X220524.b\X052404.D
Level 4 ..voa6.i\X220524.b\X052405.D
Level 5 ..voa6.i\X220524.b\X052406.D
Level 6 ..voa6.i\X220524.b\X052407.D
Level 7 ..voa6.i\X220524.b\X052408.D
Level 8 ..voa6.i\X220524.b\X052409.D
Level 9 ..voa6.i\X220524.b\X052410.D
Level 10 ..voa6.i\X220524.b\X052411.D

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Dichlorodifluoromethane	NE 332006	3450 665027	5034 1000362	13713 1365363	34533	125156	LINR	0.00278	0.61868		0.99997	
Chloromethane	NE 324529	3635 662612	6589 1037005	15712 1434289	36891	129154	LINR	0.01703	0.64496		0.99913	
Propionitrile	NE 0.07131	0.08070 0.07520	0.08393 0.07626	0.08013 0.07507	0.07790	0.07379	AVRG		0.07714		5.06828	
Vinyl Chloride	NE 0.69582	0.75626 0.69769	0.60990 0.71180	0.74482 0.70609	0.72981	0.69181	AVRG		0.70489		5.98377	
Bromomethane	NE 0.43033	0.49091 0.42348	0.49949 0.41671	0.54181 0.40568	0.52436	0.48439	AVRG		0.46857		10.75616	
Chloroethane	NE 0.40987	0.40449 0.41537	0.36304 0.41880	0.43959 0.41469	0.47978	0.41733	AVRG		0.41811		7.35808	
Trichlorofluoromethane	NE 0.93126	1.01827 0.94822	0.77911 0.95418	1.00583 0.93929	1.04145	0.93757	AVRG		0.95058		7.97545	
Acrolein	NE 0.02580	0.02724 0.02377	0.02508 0.02309	0.02786 0.02263	0.02792	0.02763	AVRG		0.02567		8.27466	
Acetone	NE 188828	2602 358294	4838 513634	9378 678759	21828	76672	LINR	-0.09611	0.15527		0.99867	
1,1-Dichloroethene	NE 0.50922	0.58341 0.51096	0.44029 0.51511	0.57754 0.50480	0.54096	0.51040	AVRG		0.52141		8.20774	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_409368

Volatiles Organics by Method 8260C

ICAL Start Date 24-MAY-2022 1128 **ICAL End Date** 24-MAY-2022 1457

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Isobutyl Alcohol	NE 0.07563	0.06692 0.07741	0.06388 0.07851	0.06608 0.07937	0.08067	0.07906	AVRG		0.07417		8.89925	
Acetonitrile	NE 0.07139	0.06986 0.07280	0.06089 0.07394	0.07455 0.07337	0.07456	0.07253	AVRG		0.07154		5.97087	
Allyl Chloride	NE 1.33329	1.44589 1.36784	1.26025 1.39521	1.31229 1.38862	1.36660	1.34001	AVRG		1.35667		3.93337	
Iodomethane	NE 757764	5250 1607140	9364 2488480	21676 3421513	59050	261012	QUAD	0.04032	1.39217	-0.01869	0.99981	
Acrylonitrile	NE 0.20315	0.19568 0.21030	0.18651 0.21431	0.21382 0.21274	0.18418	0.20024	AVRG		0.20233		5.73302	
Methylene Chloride	NE 0.56245	0.70335 0.56214	0.74077 0.57440	0.63510 0.56465	0.74422	0.59486	AVRG		0.63133		12.32967	
Methyl tert-butyl ether	NE 1.60060	1.85175 1.63245	1.61598 1.66782	1.65015 1.65819	1.68577	1.62981	AVRG		1.66584		4.47328	
Carbon Disulfide	NE 1.50431	1.77630 1.52768	1.33309 1.56349	1.60933 1.53903	1.58297	1.50618	AVRG		1.54915		7.48877	
trans-1,2-Dichloroethene	NE 0.52369	0.54657 0.53175	0.49757 0.54815	0.52981 0.54558	0.56734	0.53134	AVRG		0.53575		3.63835	
Vinyl Acetate	NE 1.52956	1.58238 1.57476	1.40391 1.61073	1.57574 1.60356	1.59281	1.58296	AVRG		1.56182		4.06863	
1,1-Dichloroethane	NE 0.97008	1.06119 0.98603	0.86050 1.00508	1.02098 0.99480	1.03882	0.99054	AVRG		0.99200		5.72555	
Chloroprene	NE 0.25647	0.29592 0.25487	0.26627 0.26376	0.26387 0.26217	0.26979	0.25375	AVRG		0.26521		4.79370	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_409368

Volatiles Organics by Method 8260C

ICAL Start Date 24-MAY-2022 1128 **ICAL End Date** 24-MAY-2022 1457

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
2-Butanone	NE	0.19587	0.17133	0.16535	0.15302	0.17704						
	0.19403	0.20948	0.20750	0.20649			AVRG		0.18668		11.04476	
Methacrylonitrile	NE	0.48248	0.45202	0.48253	0.47581	0.50071						
	0.49973	0.50437	0.52029	0.51469			AVRG		0.49251		4.33239	
2,2-Dichloropropane	NE	4708	7932	17805	48295	176994						
	457611	926722	1411178	1904611			LINR	0.00402	0.86594		0.99992	
cis-1,2-Dichloroethene	NE	0.60752	0.51784	0.60982	0.63913	0.61007						
	0.59123	0.60760	0.62272	0.62130			AVRG		0.60302		5.73184	
Chloroform	NE	1.11763	0.99628	1.13159	1.10188	1.02729						
	0.99511	1.01809	1.04187	1.03048			AVRG		1.05114		4.96513	
Bromochloromethane	NE	0.32708	0.31067	0.34062	0.31585	0.32014						
	0.30615	0.31381	0.31832	0.31978			AVRG		0.31916		3.14581	
1,1,1-Trichloroethane	NE	0.95948	0.73520	0.89660	0.91764	0.84082						
	0.83937	0.85506	0.88139	0.87711			AVRG		0.86696		7.21079	
1,1-Dichloropropene	NE	0.50663	0.44289	0.47718	0.51814	0.46263						
	0.47227	0.48105	0.49024	0.48409			AVRG		0.48168		4.64649	
1,2-Dichloroethane	NE	0.54314	0.43707	0.46874	0.53657	0.50832						
	0.49039	0.49166	0.51109	0.50506			AVRG		0.49912		6.53390	
Carbon Tetrachloride	NE	0.53312	0.47776	0.47412	0.46839	0.43886						
	0.44812	0.45753	0.46627	0.46435			AVRG		0.46984		5.68832	
Benzene	NE	1.41365	1.19785	1.40871	1.40129	1.34875						
	1.32148	1.34027	1.35202	1.34128			AVRG		1.34726		4.85313	
Trichloroethene	NE	0.37451	0.33780	0.39159	0.40149	0.36925						
	0.37073	0.37550	0.38237	0.37750			AVRG		0.37564		4.67714	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_409368

Volatiles Organics by Method 8260C

ICAL Start Date 24-MAY-2022 1128 **ICAL End Date** 24-MAY-2022 1457

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Bromodichloromethane	NE 0.47624	0.55046 0.48915	0.45772 0.49633	0.50737 0.49342	0.50526	0.48567	AVRG		0.49574		5.14155	
Methyl Methacrylate	NE 0.48752	0.51168 0.51394	0.48949 0.52852	0.49052 0.52080	0.48793	0.49064	AVRG		0.50234		3.23824	
2-Chloroethylvinyl ether	NE 0.11949	0.12083 0.12928	0.10839 0.13395	0.11212 0.13456	0.10220	0.10954	AVRG		0.11893		9.88911	
1,2-Dichloropropane	NE 0.35950	0.38464 0.36600	0.30269 0.36873	0.33957 0.36800	0.39090	0.36756	AVRG		0.36084		7.26018	
2-Nitropropane	NE 0.18720	0.20224 0.19269	0.20698 0.19907	0.18968 0.19871	0.17074	0.17955	AVRG		0.19187		5.99987	
Dibromomethane	NE 0.23187	0.23860 0.23570	0.22396 0.23788	0.23493 0.23777	0.25182	0.23821	AVRG		0.23675		3.08483	
4-Methyl-2-Pentanone	NE 0.33364	0.36386 0.33930	0.31398 0.34279	0.33547 0.33935	0.36574	0.34595	AVRG		0.34223		4.58488	
cis-1,3-Dichloropropene	NE 0.60830	0.64327 0.62799	0.53597 0.63760	0.59977 0.63317	0.62742	0.60767	AVRG		0.61346		5.31919	
Ethyl Methacrylate	NE 0.51579	0.52873 0.52887	0.46912 0.53771	0.50039 0.53878	0.48640	0.51516	AVRG		0.51344		4.65893	
Toluene	NE 1.52687	1.70653 1.53986	1.32800 1.55688	1.59907 1.52112	1.66548	1.54406	AVRG		1.55421		6.85946	
trans-1,3-Dichloropropene	NE 0.51529	0.51884 0.54194	0.46997 0.54995	0.47648 0.54807	0.51130	0.51074	AVRG		0.51584		5.56471	
2-Hexanone	NE 0.22636	0.20498 0.22916	0.20013 0.23066	0.20088 0.22704	0.23609	0.23080	AVRG		0.22068		6.49787	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_409368

Volatiles Organics by Method 8260C

ICAL Start Date 24-MAY-2022 1128 **ICAL End Date** 24-MAY-2022 1457

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
1,1,2-Trichloroethane	NE 0.29272	0.34247 0.29730	0.30166 0.29993	0.31178 0.29754	0.33543	0.30369	AVRG		0.30917		5.74478	
1,3-Dichloropropane	NE 0.60481	0.69776 0.61076	0.58936 0.61712	0.64823 0.60946	0.65806	0.61128	AVRG		0.62743		5.41842	
Dibromochloromethane	NE 0.39510	0.44641 0.40801	0.34381 0.41694	0.42230 0.41395	0.40615	0.40093	AVRG		0.40596		6.80052	
Tetrachloroethene	NE 0.32205	0.37311 0.32771	0.28300 0.32858	0.34571 0.32355	0.35601	0.31507	AVRG		0.33053		7.80435	
1,2-Dibromoethane	NE 0.36556	0.39862 0.37442	0.33388 0.37633	0.38591 0.37118	0.39795	0.37355	AVRG		0.37527		5.16199	
1-Chlorohexane	NE 0.34100	0.35094 0.34773	0.30404 0.34993	0.34433 0.34682	0.34231	0.32591	AVRG		0.33922		4.46535	
Chlorobenzene	NE 1.00382	1.11879 1.02353	0.92606 1.03392	1.05257 1.01441	1.09528	1.01747	AVRG		1.03176		5.37175	
1,1,1,2-Tetrachloroethane	NE 0.36855	0.37621 0.37813	0.34422 0.38445	0.38399 0.38008	0.39357	0.36778	AVRG		0.37522		3.76043	
Ethylbenzene	NE 0.52062	0.55035 0.52875	0.46551 0.53899	0.52422 0.52600	0.56151	0.51273	AVRG		0.52541		5.16598	
m,p-Xylenes	NE 0.66111	0.71234 0.67122	0.57422 0.67806	0.66371 0.66044	0.69885	0.64781	AVRG		0.66308		5.87415	
o-Xylene	NE 0.62820	0.61137 0.63557	0.53834 0.64617	0.66629 0.63234	0.66232	0.61746	AVRG		0.62645		6.04041	
Styrene	NE 1.07978	1.08518 1.10982	0.89081 1.11666	1.00821 1.09251	1.10186	1.06309	AVRG		1.06088		6.73448	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_409368

Volatiles Organics by Method 8260C

ICAL Start Date 24-MAY-2022 1128 **ICAL End Date** 24-MAY-2022 1457

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Bromoform	NE 0.25159	0.23785 0.26126	0.19627 0.26787	0.23469 0.26475	0.24302	0.24319	AVRG		0.24450		8.86448	
Isopropylbenzene	NE 1.61559	2.17427 1.62708	1.38942 1.63571	1.66689 1.59706	1.70349	1.55616	AVRG		1.66285		12.72064	
1,1,2,2-Tetrachloroethane	NE 0.84289	0.92545 0.84763	0.83560 0.86008	0.91896 0.85120	0.90864	0.85646	AVRG		0.87188		4.05253	
1,2,3-Trichloropropane	NE 0.70356	0.72127 0.71578	0.60852 0.71640	0.69361 0.64767	0.73764	0.68582	AVRG		0.69225		5.86971	
trans-1,4-Dichloro-2-butene	NE 0.11570	0.11123 0.12304	0.09223 0.12620	0.10372 0.12606	0.11526	0.11576	AVRG		0.11436		9.62800	
n-Propylbenzene	NE 3.98693	4.33940 3.93631	3.22628 3.95850	3.96871 3.87479	4.18219	3.81743	AVRG		3.92117		7.79313	
Bromobenzene	NE 0.88801	0.94401 0.90403	0.80778 0.90600	0.97069 0.89588	0.97190	0.89824	AVRG		0.90962		5.49562	
1,3,5-Trimethylbenzene	NE 2.73238	3.05331 2.74888	2.35771 2.76793	2.81235 2.72427	2.90186	2.61214	AVRG		2.74565		6.96973	
2-Chlorotoluene	NE 2.35855	2.80317 2.33251	2.40437 2.34541	2.69420 2.30354	2.58656	2.32759	AVRG		2.46177		7.50920	
4-Chlorotoluene	NE 2.70976	2.89981 2.71468	2.29546 2.74972	2.91926 2.70173	2.89446	2.68738	AVRG		2.73025		6.90304	
tert-Butylbenzene	NE 2.29972	2.21330 2.28183	1.95213 2.30022	2.39714 2.26447	2.50360	2.18951	AVRG		2.26688		6.67827	
1,2,4-Trimethylbenzene	NE 2.70050	2.90187 2.71822	2.29090 2.74062	2.78157 2.68090	2.85278	2.63088	AVRG		2.69980		6.48503	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_409368

Volatiles Organics by Method 8260C

ICAL Start Date 24-MAY-2022 1128 **ICAL End Date** 24-MAY-2022 1457

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
sec-Butylbenzene	NE 3.28334	3.63492 3.27181	2.65881 3.27446	3.39413 3.23222	3.43391	3.07955	AVRG		3.25146		8.30824	
p-Isopropyltoluene	NE 2.81643	2.64995 2.82393	2.19863 2.83241	2.63917 2.78816	2.88832	2.61137	AVRG		2.69426		7.81665	
1,3-Dichlorobenzene	NE 1.51192	1.66734 1.52121	1.34611 1.54484	1.51183 1.52444	1.60098	1.48864	AVRG		1.52415		5.68701	
1,4-Dichlorobenzene	NE 1.54921	1.70447 1.56755	1.32227 1.58230	1.68582 1.55055	1.67499	1.54629	AVRG		1.57594		7.27316	
Benzyl Chloride	NE 0.53256	0.51890 0.59244	0.45343 0.63364	0.47144 0.63806	0.47945	0.50321	AVRG		0.53590		12.97820	
n-Butylbenzene	NE 2.54014	2.72597 2.55944	1.79599 2.58646	2.36702 2.56298	2.47558	2.28679	AVRG		2.43337		11.13245	
1,2-Dichlorobenzene	NE 1.39318	1.39363 1.39822	1.24221 1.42180	1.48119 1.39033	1.45449	1.36727	AVRG		1.39359		4.80151	
1,2-Dibromo-3-Chloropropane	NE 27976	222 61475	535 96010	875 127389	2471	10643	LINR	0.01766	0.07804		0.99938	
1,2,4-Trichlorobenzene	NE 0.55412	0.63965 0.58167	0.47151 0.60698	0.48611 0.60241	0.50960	0.52225	AVRG		0.55270		10.63276	
Hexachlorobutadiene	NE 0.44465	0.46464 0.44900	0.39411 0.45999	0.42410 0.45861	0.43931	0.39509	AVRG		0.43661		6.12903	
Naphthalene	NE 0.67716	0.71449 0.75721	0.66915 0.80355	0.71470 0.78258	0.67343	0.66440	AVRG		0.71741		7.30314	
1,2,3-Trichlorobenzene	NE 0.32807	0.35150 0.34401	0.28741 0.36485	0.31719 0.35808	0.31077	0.30497	AVRG		0.32965		8.05334	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_409368

Volatiles Organics by Method 8260C

ICAL Start Date 24-MAY-2022 1128 **ICAL End Date** 24-MAY-2022 1457

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Ethyl Acetate	NE 0.52543	0.57146 0.51830	0.46883 0.53450	0.61594 0.52283	0.66218	0.55577	AVRG		0.55281		10.41760	
Methyl Acrylate	NE 0.59964	0.58204 0.62735	0.48488 0.63673	0.57685 0.63417	0.62572	0.60479	AVRG		0.59691		7.94101	
n-Butanol	NE 111581	1300 259689	2286 392479	3851 520732	7855	40387	LINR	0.70812	0.01202		0.99875	
Ethyl Acrylate	NE 1.36474	1.36769 1.42726	1.32924 1.43407	1.16713 1.45664	1.30772	1.33160	AVRG		1.35401		6.43812	
Cyclohexanone	NE 169096	2100 365656	4203 558496	7696 722919	18156	72217	LINR	-0.31921	0.02226		0.99884	
1,4-Dioxane	0.00525 0.00506	0.00451 0.00500	0.00519 0.00555	0.00532 0.00541	0.00526	0.00546	AVRG		0.00520		5.73240	
n-Hexane	NE 0.64445	0.66337 0.65147	0.49814 0.64704	0.62616 0.65256	0.67396	0.59364	AVRG		0.62787		8.57642	
Freon TF	NE 0.53502	0.60771 0.53240	0.40407 0.53677	0.58588 0.52660	0.57916	0.51007	AVRG		0.53530		10.98678	
Methyl Acetate	NE 0.31811	0.35314 0.32846	0.27290 0.34330	0.28016 0.34062	0.30932	0.31947	AVRG		0.31839		8.62899	
Methylcyclohexane	NE 0.85529	0.68918 0.89157	0.67922 0.88787	0.75919 0.89833	0.83616	0.80289	AVRG		0.81108		10.45961	
Isopropyl alcohol	NE 0.02491	0.02236 0.02688	0.02471 0.02663	0.02599 0.02565	0.02701	0.02771	AVRG		0.02576		6.25906	
Amyl alcohol	NE 0.00764	0.00645 0.00860	0.00707 0.00886	0.00712 0.00855	0.00655	0.00758	AVRG		0.00760		11.79446	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_409368

Volatiles Organics by Method 8260C

ICAL Start Date 24-MAY-2022 1128 **ICAL End Date** 24-MAY-2022 1457

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Allyl alcohol	NE 0.03222	0.02705 0.03257	0.02491 0.03235	0.03131 0.03263	0.03370	0.02968	AVRG		0.03071		9.59767	
4-Methyl-2-pentanol	NE 1069553	11774 2227480	41622 3458756	55112 4625807	118250	432005	LINR	-0.01309	0.06499		0.99964	
Tert-butyl alcohol	NE 0.04357	0.04487 0.04627	0.04115 0.04705	0.04608 0.04592	0.04679	0.04742	AVRG		0.04546		4.38868	
Diethyl ether	NE 0.43691	0.52070 0.43826	0.44077 0.44272	0.48268 0.43888	0.49044	0.45208	AVRG		0.46038		6.56466	
1,3-Butadiene	NE 0.58075	0.67042 0.59428	0.54532 0.60351	0.61856 0.59731	0.62918	0.57215	AVRG		0.60128		5.97594	
Cyclohexane	NE 0.85580	0.97379 0.85738	0.68485 0.85848	0.86501 0.86236	0.87884	0.83707	AVRG		0.85262		8.70544	
alpha-Methylstyrene	NE 1.33168	1.52238 1.34707	1.04648 1.38692	1.23586 1.35493	1.33405	1.29823	AVRG		1.31751		9.67672	
Diisopropyl ether	NE 1.74752	1.95091 1.78382	1.70861 1.82274	1.83189 1.81207	1.87192	1.76431	AVRG		1.81042		3.96821	
Dichlorofluoromethane	NE 1.05396	1.21817 1.07000	1.13485 1.07268	1.14961 1.07133	1.12912	1.06071	AVRG		1.10672		4.97086	
Propylene oxide	NE 0.05963	0.07104 0.05461	0.06270 0.05299	0.06723 0.05231	0.06493	0.05553	AVRG		0.06011		11.20947	
3-Methyl-1-butanol	NE 0.00720	0.00717 0.00786	0.00712 0.00815	0.00711 0.00790	0.00669	0.00771	AVRG		0.00743		6.51702	
Butyl acrylate	NE 0.74011	0.81790 0.79785	0.74287 0.83198	0.60968 0.82943	0.65669	0.66644	AVRG		0.74366		11.15935	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_409368

Volatiles Organics by Method 8260C

ICAL Start Date 24-MAY-2022 1128 **ICAL End Date** 24-MAY-2022 1457

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
1,2,3-Trimethylbenzene	NE 2.66044	2.36445 2.68045	2.91782 2.70641	2.61345 2.66895	2.75519	2.64020	AVRG		2.66749		5.42594	
Ethanol	NE 39409	578 80850	1098 115543	2162 152784	4813	18151	LINR	-0.84645	0.00349		0.99880	
tert-Butyl formate	NE 369835	1592 785007	3474 1202853	15607 1647789	36837	149666	LINR	0.04158	0.37331		0.99956	
3,3-Dimethyl-1-butanol	NE 480396	6115 1019411	19154 1557577	24821 2063208	51946	203028	LINR	-0.25339	0.03083		0.99942	
tert-Amyl methyl ether	NE 1.81726	1.82078 1.87468	1.83353 1.93246	1.73080 1.93241	1.87491	1.82490	AVRG		1.84908		3.41218	
tert-Butyl ethyl ether	NE 1.77828	1.93386 1.82038	1.85727 1.85676	1.89216 1.85193	1.91658	1.80567	AVRG		1.85699		2.75195	
tert-Amyl alcohol	NE 0.03404	0.02806 0.03628	0.02886 0.03711	0.03302 0.03740	0.03425	0.03616	AVRG		0.03391		10.09706	
Epichlorohydrin	NE 0.02764	0.02518 0.02966	0.02947 0.03025	0.02435 0.02975	0.02405	0.02833	AVRG		0.02763		8.95313	
Isoprene	NE 0.21826	0.22439 0.21537	0.21726 0.21266	0.22187 0.20848	0.22693	0.21154	AVRG		0.21742		2.82092	
n-Amyl acetate	NE 0.55124	0.66293 0.58283	0.57795 0.60567	0.53900 0.60712	0.56672	0.53559	AVRG		0.58100		6.92011	
Isopropyl acetate	NE 0.95298	0.95415 0.96782	0.96041 0.97210	0.96840 0.97919	1.02251	0.96458	AVRG		0.97135		2.15320	
n-Butyl acetate	NE 0.52647	0.46612 0.54510	0.38959 0.55886	0.44883 0.55828	0.50785	0.52350	AVRG		0.50273		11.36128	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_409368

Volatiles Organics by Method 8260C

ICAL Start Date 24-MAY-2022 1128 **ICAL End Date** 24-MAY-2022 1457

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Acetaldehyde	NE 80429	NE 151535	NE 241125	4607 324749	9177	35371	LINR	-0.07520	0.03653		0.99899	
Methyl Amyl Ketone	NE 0.71727	0.73380 0.73457	0.72247 0.75386	0.59189 0.74333	0.61599	0.67261	AVRG		0.69842		8.37826	
Dimethyl Disulfide	NE 0.79848	0.83477 0.82985	0.74562 0.84730	0.71785 0.84146	0.76743	0.78049	AVRG		0.79592		5.80141	
1,2-Dichloroethylene (total)	NE 0.55746	0.57704 0.56967	0.50770 0.58544	0.56982 0.58344	0.60323	0.57070	AVRG		0.56939		4.65013	
Xylenes (total)	NE 0.60540	0.61392 0.61860	0.51325 0.62767	0.60798 0.61617	0.62451	0.59658	AVRG		0.60268		5.78745	
Dibromofluoromethane	NE 273214	3406 573971	4587 857897	11150 1152135	29413	112071	LINR	-0.00047	0.52536		0.99982	
1,2-Dichloroethane-d4	NE 325873	4171 671007	6545 1000304	13694 1343168	36258	132108	LINR	-0.00670	0.61187		0.99988	
Toluene-d8	NE 1.23616	1.53577 1.27149	1.22268 1.24797	1.34360 1.22388	1.50485	1.29745	AVRG		1.32043		9.08291	
4-Bromofluorobenzene	NE 368870	4188 768821	9115 1156873	17686 1557639	48914	154990	LINR	-0.01762	0.46256		0.99973	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120
ICAL End Date 06-JUL-2022 1449

Calibration Files

Level 1 ..Voa6.i\X220706.b\X070602.D
Level 2 ..Voa6.i\X220706.b\X070603.D
Level 3 ..Voa6.i\X220706.b\X070604.D
Level 4 ..Voa6.i\X220706.b\X070605.D
Level 5 ..Voa6.i\X220706.b\X070606.D
Level 6 ..Voa6.i\X220706.b\X070607.D
Level 7 ..Voa6.i\X220706.b\X070608.D
Level 8 ..Voa6.i\X220706.b\X070609.D
Level 9 ..Voa6.i\X220706.b\X070610.D
Level 10 ..Voa6.i\X220706.b\X070611.D

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Dichlorodifluoromethane	NE 228618	2244 472287	3986 730536	8882 NE	18774	92044	LINR	0.02678	0.52058		0.99751	
Chloromethane	NE 294786	3473 593952	6557 933811	13168 NE	29886	112794	LINR	0.02315	0.66134		0.99763	
Propionitrile	NE 0.05770	0.06489 0.06278	0.05598 0.05859	0.04621 0.05823	0.05594	0.06198	AVRG		0.05803		9.32069	
Vinyl Chloride	NE 0.57196	0.70191 0.66494	0.67775 0.69281	0.60470 0.60241	0.58529	0.65392	AVRG		0.63952		7.64867	
Bromomethane	NE 176516	2387 344344	3753 NE	11634 NE	19488	75223	LINR	-0.00734	0.36869		0.99608	
Chloroethane	NE 0.34789	0.45911 0.38597	0.40065 0.40462	0.37357 0.35342	0.40334	0.40593	AVRG		0.39272		8.47705	
Trichlorofluoromethane	NE 0.67093	0.82389 0.77105	0.69347 0.93760	0.78330 0.79565	0.74470	0.85058	AVRG		0.78569		10.30295	
Acrolein	NE 19387	255 34243	357 53183	1255 NE	2163	7750	LINR	-0.03329	0.01875		0.99941	
Acetone	NE 0.11922	0.14672 0.12870	0.13728 0.13116	0.12933 0.11774	0.14765	0.14137	AVRG		0.13324		8.17429	
1,1-Dichloroethene	NE 0.41281	0.55905 0.47435	0.48136 0.52133	0.46051 0.45169	0.46054	0.48332	AVRG		0.47833		8.76191	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Isobutyl Alcohol	NE 0.05972	0.05853 0.06396	0.05565 0.05904	0.06459 0.05263	0.05996	0.06123	AVRG		0.05948		6.29876	
Acetonitrile	NE 0.05236	0.05823 0.05673	0.05046 0.06335	0.06147 0.05461	0.05651	0.05891	AVRG		0.05696		7.23354	
Allyl Chloride	NE 1.12540	1.18248 1.26397	1.18379 1.28361	1.06667 1.12357	1.19299	1.27683	AVRG		1.18881		6.35509	
Iodomethane	NE 662033	4551 1331022	8470 2317759	17091 NE	46631	226571	QUAD	0.01853	1.63495	-0.08684	0.99983	
Acrylonitrile	NE 0.16390	0.16016 0.17760	0.15012 0.18748	0.16394 0.16646	0.14359	0.16757	AVRG		0.16454		7.97212	
Methylene Chloride	NE 278913	3611 510517	6773 843638	19043 NE	28961	104226	LINR	0.01251	0.58854		0.99715	
Methyl tert-butyl ether	NE 1.28444	1.51807 1.34533	1.34886 1.47525	1.40025 1.30321	1.31864	1.34442	AVRG		1.37094		5.76884	
Carbon Disulfide	NE 1.30403	1.50018 1.48870	1.48724 1.57227	1.35754 1.35759	1.41146	1.47062	AVRG		1.43885		5.99587	
trans-1,2-Dichloroethene	NE 0.48821	0.55751 0.52160	0.47815 0.57257	0.49281 0.49651	0.46859	0.49485	AVRG		0.50787		7.02264	
Vinyl Acetate	NE 1.27195	1.20065 1.37516	1.20040 1.46961	1.18381 1.30183	1.25923	1.34556	AVRG		1.28980		7.31928	
1,1-Dichloroethane	NE 0.87630	1.04484 0.94846	0.92994 1.01939	0.91579 0.88962	0.86940	0.90988	AVRG		0.93374		6.57881	
Chloroprene	NE 0.20536	0.25440 0.24395	0.22795 0.25442	NE 0.22948	0.23231	0.22968	AVRG		0.23469		6.88366	*

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Initial Calibration Data

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Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
2-Butanone	NE 0.15636	0.13754 0.17587	0.14536 0.16130	0.14185 0.16471	0.12762	0.14926	AVRG		0.15110		9.89300	
Methacrylonitrile	NE 0.36505	0.44287 0.38625	0.36611 0.36505	0.34136 0.36928	0.34918	0.38115	AVRG		0.37403		7.83511	
2,2-Dichloropropane	NE 373902	3935 695305	6446 1055611	16259 1584194	32701	128059	LINR	0.00723	0.75133		0.99982	
cis-1,2-Dichloroethene	NE 0.55488	0.63077 0.58845	0.56859 0.57150	0.57565 0.56603	0.57206	0.58048	AVRG		0.57871		3.73871	
Chloroform	NE 0.88569	1.03131 0.93179	0.93537 0.87682	0.94502 0.89595	0.90220	0.90517	AVRG		0.92326		5.05904	
Bromochloromethane	NE 0.29220	0.33675 0.29841	0.32625 0.28777	0.28304 0.29573	0.30665	0.29851	AVRG		0.30281		5.87685	
1,1,1-Trichloroethane	NE 0.72024	0.87686 0.77822	0.73831 0.73792	0.78712 0.76734	0.68762	0.71793	AVRG		0.75684		7.27207	
1,1-Dichloropropene	NE 0.43437	0.51761 0.40862	0.42920 0.45747	0.44713 0.52928	0.43947	0.42234	AVRG		0.45395		9.23043	
1,2-Dichloroethane	NE 0.41462	0.45426 0.38626	0.40960 0.41130	0.41677 0.42528	0.39826	0.41275	AVRG		0.41434		4.51566	
Carbon Tetrachloride	NE 0.39798	0.48575 0.37809	0.45944 0.42138	0.46312 0.50377	0.40207	0.38561	AVRG		0.43302		10.63840	
Benzene	NE 1.30676	1.41120 1.21967	1.23145 1.34745	1.26142 1.40267	1.35361	1.33106	AVRG		1.31836		5.27209	
Trichloroethene	NE 0.36579	0.39730 0.37976	0.37807 0.37485	0.37368 0.37578	0.35687	0.36774	AVRG		0.37443		2.97845	

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Initial Calibration Data

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Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Bromodichloromethane	NE	0.49277	0.50529	0.44456	0.43180	0.43314						
	0.44349	0.40839	0.44050	0.44514			AVRG		0.44945		6.77432	
Methyl Methacrylate	NE	0.40537	0.38781	0.37932	0.34216	0.36653						
	0.36904	0.41719	0.36397	0.31823			AVRG		0.37218		8.14060	
2-Chloroethylvinyl ether	NE	1262	2653	4759	10612	49783						
	155463	304667	461701	623026			LINR	0.11717	0.11052		0.99586	
1,2-Dichloropropane	NE	0.40295	0.37630	0.32988	0.35679	0.35264						
	0.34791	0.34622	0.35392	0.35296			AVRG		0.35773		5.81206	
2-Nitropropane	NE	0.17611	0.14281	0.13075	0.12064	0.11023						
	0.11824	0.12143	0.11333	0.10220			AVRG		0.12619		17.49861	*
Dibromomethane	NE	0.26219	0.25295	0.22382	0.21408	0.20879						
	0.21219	0.20988	0.20664	0.20879			AVRG		0.22215		9.37137	
4-Methyl-2-Pentanone	NE	0.28217	0.24988	0.26328	0.28186	0.29160						
	0.29347	0.31267	0.28643	0.29264			AVRG		0.28378		6.41473	
cis-1,3-Dichloropropene	NE	0.61233	0.61725	0.56220	0.55529	0.58065						
	0.58897	0.54578	0.59239	0.60076			AVRG		0.58396		4.30480	
Ethyl Methacrylate	NE	0.43281	0.37149	0.39269	0.38010	0.42610						
	0.40478	0.38018	0.42138	0.43224			AVRG		0.40464		6.01432	
Toluene	NE	1.64034	1.52244	1.56895	1.51332	1.54320						
	1.51365	1.63387	1.53111	1.52139			AVRG		1.55425		3.22020	
trans-1,3-Dichloropropene	NE	0.51749	0.48569	0.43703	0.44092	0.48270						
	0.48284	0.44191	0.48469	0.48859			AVRG		0.47354		5.78180	
2-Hexanone	NE	0.16495	0.16255	0.16326	0.17647	0.18250						
	0.19028	0.19643	0.18949	0.19121			AVRG		0.17968		7.41565	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
1,1,2-Trichloroethane	NE 0.28174	0.29379 0.28852	0.29020 0.27613	0.27210 0.27912	0.28696	0.28978	AVRG		0.28426		2.57584	
1,3-Dichloropropane	NE 0.57798	0.64476 0.59697	0.59666 0.56514	0.57811 0.57038	0.59005	0.58259	AVRG		0.58918		3.99341	
Dibromochloromethane	NE 0.39001	0.39651 0.39390	0.40546 0.38728	0.37677 0.39588	0.38505	0.38007	AVRG		0.39010		2.28706	
Tetrachloroethene	NE 0.31727	0.36587 0.34614	0.32830 0.33586	0.35475 0.33278	0.32458	0.32369	AVRG		0.33658		4.75168	
1,2-Dibromoethane	NE 0.34681	0.33961 0.34913	0.32298 0.33959	0.35379 0.34292	0.35083	0.34074	AVRG		0.34293		2.64628	
1-Chlorohexane	NE 0.27315	0.31576 0.27241	0.31351 0.31523	0.29592 0.31230	0.24973	0.27317	AVRG		0.29124		8.47163	
Chlorobenzene	NE 0.99533	1.06589 1.02411	1.01980 0.99685	1.03527 0.99758	1.02341	0.99871	AVRG		1.01744		2.30728	
1,1,1,2-Tetrachloroethane	NE 0.36431	0.41539 0.37124	0.36422 0.36718	0.37071 0.37302	0.35178	0.35947	AVRG		0.37081		4.84448	
Ethylbenzene	NE 0.51053	0.56789 0.54247	0.52141 0.53021	0.53238 0.53143	0.52072	0.50444	AVRG		0.52905		3.52558	
m,p-Xylenes	NE 0.64203	0.64695 0.67448	0.61885 0.65712	0.67406 0.65517	0.65903	0.64743	AVRG		0.65279		2.60707	
o-Xylene	NE 0.61765	0.63614 0.64101	0.61100 0.62607	0.64034 0.62521	0.62668	0.62039	AVRG		0.62717		1.64261	
Styrene	NE 1.05358	1.04948 1.09546	0.98990 1.06360	0.98629 1.06601	1.00918	1.05677	AVRG		1.04114		3.59353	

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Initial Calibration Data

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Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Bromoform	NE	0.20694	0.21031	0.21435	0.21513	0.22091						
	0.23376	0.23842	0.23725	0.24335			AVRG		0.22449		6.12077	
Isopropylbenzene	NE	1.66264	1.47409	1.58570	1.51881	1.50831						
	1.50142	1.62393	1.58792	1.57808			AVRG		1.56010		4.02658	
1,1,2,2-Tetrachloroethane	NE	0.91864	0.86647	0.84137	0.83101	0.76347						
	0.77319	0.65427	0.76490	0.78390			AVRG		0.79969		9.47670	
1,2,3-Trichloropropane	NE	0.79579	0.69499	0.70443	0.66588	0.66691						
	0.61007	0.54217	0.62638	0.63262			AVRG		0.65991		10.71177	
trans-1,4-Dichloro-2-butene	NE	0.09533	0.08788	0.06679	0.07966	0.08623						
	0.09582	0.09878	0.09845	0.10031			AVRG		0.08992		12.31675	
n-Propylbenzene	NE	4.08468	3.59493	3.67782	3.61849	3.62881						
	3.62769	3.32262	3.86636	3.87837			AVRG		3.69997		5.87768	
Bromobenzene	NE	0.95684	0.89832	0.93069	0.90839	0.89768						
	0.89102	0.77851	0.90375	0.91825			AVRG		0.89816		5.48400	
1,3,5-Trimethylbenzene	NE	2.96923	2.71715	2.76431	2.59034	2.61229						
	2.59354	2.34923	2.70202	2.70665			AVRG		2.66719		6.23675	
2-Chlorotoluene	NE	2.52397	2.60604	2.50790	2.40238	2.27798						
	2.23076	1.97980	2.29806	2.31708			AVRG		2.34933		8.01606	
4-Chlorotoluene	NE	2.63948	2.78326	2.63588	2.62571	2.55318						
	2.54418	2.24256	2.59723	2.58817			AVRG		2.57885		5.59058	
tert-Butylbenzene	NE	2.55300	2.29297	2.30592	2.17037	2.16203						
	2.12758	1.95416	2.28544	2.28961			AVRG		2.23790		7.32334	
1,2,4-Trimethylbenzene	NE	2.85096	2.60303	2.65839	2.59496	2.56634						
	2.57871	2.29534	2.65574	2.67499			AVRG		2.60872		5.56946	

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Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
sec-Butylbenzene	NE 2.94203	3.48906 3.21595	3.06207 3.20274	3.15737 3.20853	2.96867	2.94253	AVRG		3.13210		5.63946	
p-Isopropyltoluene	NE 2.56474	2.59548 2.80205	2.35214 2.77820	2.60344 2.79812	2.50961	2.53136	AVRG		2.61502		5.82143	
1,3-Dichlorobenzene	NE 1.45535	1.57752 1.51457	1.47466 1.51648	1.51358 1.54059	1.41588	1.45084	AVRG		1.49549		3.36596	
1,4-Dichlorobenzene	NE 1.47543	1.74560 1.53130	1.62017 1.51969	1.61194 1.53771	1.55675	1.49059	AVRG		1.56546		5.31687	
Benzyl Chloride	NE 0.46252	0.48897 0.60455	0.40396 0.52364	0.41979 0.55988	0.41984	0.42676	AVRG		0.47888		14.77196	
n-Butylbenzene	NE 2.17743	2.24648 2.47185	1.85913 2.38974	2.05070 2.41410	2.05377	2.13676	AVRG		2.19999		9.12320	
1,2-Dichlorobenzene	NE 1.30147	1.45436 1.36632	1.19509 1.34144	1.35612 1.35513	1.32191	1.29245	AVRG		1.33159		5.22300	
1,2-Dibromo-3-Chloropropane	NE 19733	220 46014	240 59633	747 82211	1639	6429	LINR	0.04576	0.06653		0.99805	*
1,2,4-Trichlorobenzene	NE 0.49382	0.50149 0.54518	0.42991 0.55210	0.46261 0.58201	0.42253	0.53767	AVRG		0.50304		11.15060	
Hexachlorobutadiene	NE 0.41067	0.41715 0.48271	0.38357 0.48056	0.45039 0.49539	0.39667	0.46324	AVRG		0.44226		9.31709	
Naphthalene	NE 195396	2154 445332	3671 593234	7630 821089	16357	68129	LINR	0.04645	0.66146		0.99746	
1,2,3-Trichlorobenzene	NE 94733	953 223441	1624 293740	3319 408985	7553	35281	LINR	0.04891	0.32935		0.99720	

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Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Ethyl Acetate	NE 0.42963	0.49197 0.45633	0.46840 0.41610	NE 0.42554	0.48963	0.44650	AVRG		0.45301		6.36097	*
Methyl Acrylate	NE 241889	NE 452925	NE 648238	6582 990328	14161	56584	LINR	0.04034	0.47545		0.99823	*
n-Butanol	NE 84111	922 181490	1186 255408	NE NE	4438	27545	LINR	0.80892	0.00944		0.99521	*
Ethyl Acrylate	NE 1.03892	NE 1.26891	NE 1.13515	0.52808 0.98180	0.35441	1.08187	AVRG		0.91273		37.02764	*
Cyclohexanone	NE 0.01770	0.03889 0.01459	0.02516 0.01708	0.01919 0.01720	0.01981	0.01849	AVRG		0.02090		35.07283	*
1,4-Dioxane	0.00436 0.00431	0.00451 0.00462	0.00550 0.00427	NE 0.00365	0.00479	0.00462	AVRG		0.00452		10.86985	*
n-Hexane	NE 0.48063	0.52638 0.60871	0.46851 0.65543	0.48442 0.56193	0.48311	0.50949	AVRG		0.53096		12.25408	
Freon TF	NE 205242	2637 437673	4021 759845	9995 NE	19880	82373	QUAD	-0.00726	2.55524	-0.43716	0.99889	
Methyl Acetate	NE 0.27711	0.31181 0.31330	0.31208 0.32391	0.26390 0.29114	0.26196	0.29675	AVRG		0.29466		7.72156	
Methylcyclohexane	NE 0.69028	0.71896 0.72387	0.59155 0.74864	0.68849 0.74618	0.65141	0.68367	AVRG		0.69367		7.15077	
Isopropyl alcohol	NE 0.02008	0.02224 0.02164	0.01991 0.02251	0.02034 0.01922	0.01988	0.02348	AVRG		0.02103		6.99120	
Amyl alcohol	NE 0.00628	NE 0.00704	NE 0.00671	0.00522 0.00672	0.00409	0.00580	AVRG		0.00598		17.37162	*

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Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Allyl alcohol	NE 0.02403	0.02632 0.03044	0.02343 0.03277	0.02422 0.02810	0.02416	0.02547	AVRG		0.02655		12.25408	
4-Methyl-2-pentanol	NE 0.04445	0.08503 0.04445	0.04945 0.04858	0.05265 0.04950	0.05370	0.05090	AVRG		0.05319		23.22821	*
Tert-butyl alcohol	NE 0.03514	0.04248 0.03732	0.03485 0.03980	0.03179 0.03454	0.03460	0.03537	AVRG		0.03621		8.84717	
Diethyl ether	NE 0.33801	0.42954 0.37244	0.37176 0.38274	0.37946 0.34211	0.40411	0.40564	AVRG		0.38064		7.78247	
1,3-Butadiene	NE 0.44569	0.56311 0.54282	0.48612 0.53855	0.44236 0.48396	0.45613	0.51704	AVRG		0.49731		9.04179	
Cyclohexane	NE 338562	3905 730603	5668 1071645	14214 NE	29249	129079	QUAD	0.01494	1.37109	-0.03808	0.99699	
alpha-Methylstyrene	NE 1.31747	1.26366 1.18816	1.27917 1.37782	1.23821 1.39629	1.24952	1.28864	AVRG		1.28877		5.15102	
Diisopropyl ether	NE 1.43671	1.53372 1.55869	1.40078 1.64730	1.49149 1.44601	1.47306	1.55489	AVRG		1.50474		5.07498	
Dichlorofluoromethane	NE 0.85060	NE 0.94003	NE 1.05898	1.00882 0.92349	0.97836	1.02313	AVRG		0.96906		7.25146	*
Propylene oxide	NE 0.04992	0.07500 0.05087	0.05851 0.05357	0.05396 0.04855	0.05553	0.06009	AVRG		0.05622		14.24058	
3-Methyl-1-butanol	NE 0.00581	NE 0.00654	NE 0.00625	0.00145 0.00624	0.00487	0.00558	AVRG		0.00525		33.58407	*
Butyl acrylate	NE 0.52147	NE 0.57263	0.39905 0.59198	0.48299 0.61912	0.48528	0.50938	AVRG		0.52274		13.53409	*

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Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
1,2,3-Trimethylbenzene	NE 2.32763	2.61779 2.38960	2.17266 2.36896	2.68306 2.38882	2.26360	2.36488	AVRG		2.39744		6.68433	
Ethanol	NE 0.00305	NE 0.00308	NE 0.00274	0.00403 0.00232	0.00343	0.00362	AVRG		0.00318		17.83184	*
tert-Butyl formate	NE 0.26357	NE 0.29562	NE 0.27752	0.26267 0.23838	NE	0.26910	AVRG		0.26781		7.04493	*
3,3-Dimethyl-1-butanol	NE 0.02275	NE 0.02324	NE 0.02281	NE 0.02290	0.02518	0.02530	AVRG		0.02370		5.09004	*
tert-Amyl methyl ether	NE 1.43699	2.09954 1.58784	1.84206 1.49104	1.76788 1.32713	1.77658	1.53779	AVRG		1.65187		14.51959	
tert-Butyl ethyl ether	NE 1.42724	1.56852 1.50317	1.53872 1.64661	1.55151 1.45446	1.46230	1.52505	AVRG		1.51973		4.43030	
tert-Amyl alcohol	NE 0.02636	0.03310 0.02956	0.02698 0.02775	0.03185 0.02384	0.02841	0.02691	AVRG		0.02831		10.06299	
Epichlorohydrin	NE 0.02250	NE 0.02024	0.01807 0.02286	0.02137 0.02288	0.02265	0.02324	AVRG		0.02173		8.17071	*
Isoprene	NE 0.15902	0.24454 0.17230	0.21632 0.19846	0.25701 0.17192	0.21352	0.18837	AVRG		0.20239		16.57739	*
n-Amyl acetate	NE 0.43772	NE 0.46697	NE 0.47751	NE 0.49928	NE	0.43849	AVRG		0.46399		5.67875	*
Isopropyl acetate	NE 0.79437	0.36983 0.73032	0.87712 0.77875	0.84689 0.80021	0.79606	0.79357	AVRG		0.75412		19.87108	*
n-Butyl acetate	NE 0.19069	0.31787 0.18402	0.26460 0.17444	0.20421 0.17218	0.23654	0.21349	AVRG		0.21756		22.15930	*

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Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Acetaldehyde	NE 66564	NE 129846	NE 181687	2907 NE	11383	25191	LINR	-0.14857	0.03276		0.99589	
Methyl Amyl Ketone	NE 0.50401	NE 0.52962	NE 0.53046	0.41257 0.55064	0.42225	0.49770	AVRG		0.49246		11.02369	*
Dimethyl Disulfide	NE 0.75621	0.65543 0.82365	0.66876 0.78053	0.73789 0.79630	0.65126	0.73135	AVRG		0.73349		8.60528	
1,2-Dichloroethylene (total)	NE 0.52154	0.59414 0.55502	0.52337 0.57203	0.53423 0.53127	0.52033	0.53766	AVRG		0.54329		4.69482	
Xylenes (total)	NE 0.57483	0.59008 0.52262	0.61201 0.59560	0.58690 0.59247	0.58938	0.58471	AVRG		0.58318		4.24847	
Dibromofluoromethane	NE 241477	2530 434904	3275 627970	9962 978031	21128	85780	LINR	-0.00580	0.45849		0.99941	
1,2-Dichloroethane-d4	NE 251549	2572 454111	3656 634876	11348 964795	21986	88656	LINR	-0.02335	0.45760		0.99847	
Toluene-d8	NE 1.22083	1.48278 1.29799	0.98355 1.21131	1.24160 1.20806	1.26438	1.26401	AVRG		1.24161		10.32338	
4-Bromofluorobenzene	NE 310560	3152 562316	5552 839072	12993 1105705	28163	113041	LINR	-0.00630	0.43176		0.99980	

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Form 6I

Initial Calibration Verification (ICV)

Volatiles Organics by Method 8260C

Wokorder

HS22061645

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 June 2022

07/20/2022

Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

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RunID VOA6_409368

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X052413.D
Lab Smp Id ICV
Analysis Type VOA

ICAL Date 24-MAY-2022
ICAL Time 1354
Client Smp ID ICV
Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
1,1,1,2-Tetrachlor	50.00	49.81	99.64	80-120	
1,1,1-Trichloroeth	50.00	48.35	96.70	80-120	
1,1,2,2-Tetrachlor	50.00	49.40	98.82	80-120	
Freon TF	50.00	48.78	97.57	80-120	
Methyl Acetate	50.00	52.34	104.69	80-120	
Cyclohexane	50.00	49.39	98.79	80-120	
Methylcyclohexane	50.00	55.51	111.03	80-120	
Carbon Disulfide	100.00	98.56	98.57	80-120	
2-Hexanone	100.00	107.18	107.19	80-120	
1,1,2-Trichloroeth	50.00	48.04	96.10	80-120	
1,1-Dichloroethane	50.00	49.09	98.19	80-120	
1,1-Dichloroethene	50.00	47.58	95.17	80-120	
1,1-Dichloropropen	50.00	49.71	99.44	80-120	
1,2,3-Trichloroben	50.00	58.91	117.82	80-120	
1,2,3-Trichloropro	50.00	50.03	100.06	80-120	
1,2,4-Trichloroben	50.00	55.12	110.26	80-120	
1,2,4-Trimethylben	50.00	49.61	99.24	80-120	
1,2-Dibromo-3-Chlo	50.00	48.21	96.43	80-120	
1,2-Dibromoethane	50.00	49.74	99.50	80-120	
1,2-Dichlorobenzen	50.00	49.98	99.98	80-120	
1,2-Dichloroethane	50.00	49.96	99.93	80-120	
1,2-Dichloropropan	50.00	50.56	101.13	80-120	
1,3,5-Trimethylben	50.00	48.91	97.82	80-120	
1,3-Dichlorobenzen	50.00	49.61	99.22	80-120	
1,3-Dichloropropan	50.00	49.03	98.07	80-120	
1,4-Dichlorobenzen	50.00	49.69	99.40	80-120	
1-Chlorohexane	50.00	49.61	99.22	80-120	
2,2-Dichloropropan	50.00	50.68	101.37	80-120	
2-Butanone	100.00	113.09	113.09	80-120	
2-Chlorotoluene	50.00	47.14	94.29	80-120	
4-Chlorotoluene	50.00	49.16	98.33	80-120	
p-Isopropyltoluene	50.00	51.15	102.31	80-120	
4-Methyl-2-Pentano	100.00	99.60	99.61	80-120	
Acetone	100.00	119.78	119.79	80-120	

Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_409368

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X052413.D
Lab Smp Id ICV
Analysis Type VOA

ICAL Date 24-MAY-2022
ICAL Time 1354
Client Smp ID ICV
Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
Acetonitrile	500.00	509.76	101.95	80-120	
Benzene	50.00	49.76	99.54	80-120	
Bromobenzene	50.00	49.50	99.01	80-120	
Bromochloromethane	50.00	48.42	96.85	80-120	
Bromodichlorometha	50.00	48.85	97.70	80-120	
Bromoform	50.00	52.72	105.44	80-120	
Bromomethane	50.00	46.98	93.97	80-120	
Carbon Tetrachlori	50.00	46.93	93.88	80-120	
Chlorobenzene	50.00	49.60	99.21	80-120	
Chloroethane	50.00	49.34	98.70	80-120	
Chloroform	50.00	48.18	96.38	80-120	
Chloromethane	50.00	51.71	103.43	80-120	
cis-1,2-Dichloroet	50.00	49.80	99.62	80-120	
cis-1,3-Dichloropr	50.00	50.94	101.90	80-120	
Dibromochlorometha	50.00	49.84	99.70	80-120	
Dibromomethane	50.00	50.08	100.17	80-120	
Dichlorodifluorome	50.00	50.28	100.57	80-120	
Ethylbenzene	50.00	49.88	99.78	80-120	
Hexachlorobutadien	50.00	52.60	105.22	80-120	
Isopropylbenzene	50.00	47.78	95.58	80-120	
m,p-Xylenes	100.00	99.17	99.18	80-120	
Methyl tert-butyl	50.00	50.51	101.03	80-120	
Methylene Chloride	50.00	45.70	91.41	80-120	
n-Butylbenzene	50.00	51.65	103.31	80-120	
n-Propylbenzene	50.00	49.47	98.96	80-120	
Naphthalene	50.00	58.17	116.35	80-120	
o-Xylene	50.00	50.14	100.28	80-120	
sec-Butylbenzene	50.00	49.26	98.53	80-120	
Styrene	50.00	51.21	102.43	80-120	
tert-Butylbenzene	50.00	49.10	98.21	80-120	
Tetrachloroethene	50.00	48.42	96.86	80-120	
Toluene	50.00	49.45	98.92	80-120	
trans-1,2-Dichloro	50.00	49.19	98.39	80-120	
trans-1,3-Dichloro	50.00	51.74	103.49	80-120	

Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_409368

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X052413.D
Lab Smp Id ICV
Analysis Type VOA
ICAL Date 24-MAY-2022
ICAL Time 1354
Client Smp ID ICV
Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
Trichloroethene	50.00	49.48	98.97	80-120	
Trichlorofluoromet	50.00	48.80	97.61	80-120	
Vinyl Chloride	50.00	48.88	97.76	80-120	
1,2-Dichloroethyle	100.00	99.00	99.00	80-120	
Xylenes (total)	150.00	149.31	99.54	80-120	
Tert-butyl alcohol	1000.00	1036.32	103.63	80-120	
Dibromofluorometha	50.00	49.48	98.97	80-120	
1,2-Dichloroethane	50.00	50.23	100.46	80-120	
Toluene-d8	50.00	47.20	94.40	80-120	
4-Bromofluorobenze	50.00	50.21	100.43	80-120	
1,2-Dichloroethane	50.00	50.23	100.46	0-130	
4-Bromofluorobenze	50.00	50.21	100.43	0-130	
Dibromofluorometha	10.00	49.48	98.97	74-125	
Toluene-d8	50.00	47.20	94.40	78-123	

Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_412359

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X070614.D
Lab Smp Id ICV
Analysis Type VOA

ICAL Date 06-JUL-2022
ICAL Time 1347
Client Smp ID ICV
Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
1,1,1,2-Tetrachlor	50.00	47.77	95.56	80-120	
1,1,1-Trichloroeth	50.00	43.57	87.14	80-120	
1,1,2,2-Tetrachlor	50.00	47.78	95.57	80-120	
Freon TF	50.00	50.42	100.85	80-120	
Methyl Acetate	50.00	52.89	105.79	80-120	
Cyclohexane	50.00	40.22	80.45	80-120	
Methylcyclohexane	50.00	49.87	99.75	80-120	
Carbon Disulfide	100.00	100.61	100.62	80-120	
2-Hexanone	100.00	106.18	106.18	80-120	
1,1,2-Trichloroeth	50.00	47.91	95.82	80-120	
1,1-Dichloroethane	50.00	51.34	102.68	80-120	
1,1-Dichloroethene	50.00	48.66	97.33	80-120	
1,1-Dichloropropen	50.00	44.21	88.43	80-120	
1,2,3-Trichloroben	50.00	56.53	113.06	80-120	
1,2,3-Trichloropro	50.00	46.94	93.89	80-120	
1,2,4-Trichloroben	50.00	59.83	119.68	80-120	
1,2,4-Trimethylben	50.00	49.10	98.20	80-120	
1,2-Dibromo-3-Chlo	50.00	49.15	98.30	80-120	
1,2-Dibromoethane	50.00	48.64	97.30	80-120	
Acrolein	100.00	102.58	102.59	80-120	
Acrylonitrile	100.00	104.26	104.26	80-120	
1,2-Dichlorobenzen	50.00	50.47	100.95	80-120	
1,2-Dichloroethane	50.00	46.35	92.70	80-120	
1,2-Dichloropropan	50.00	47.98	95.97	80-120	
1,3,5-Trimethylben	50.00	47.94	95.90	80-120	
1,3-Dichlorobenzen	50.00	49.56	99.14	80-120	
1,3-Dichloropropan	50.00	47.61	95.22	80-120	
1,4-Dichlorobenzen	50.00	48.75	97.51	80-120	
1-Chlorohexane	50.00	44.75	89.50	80-120	
2,2-Dichloropropan	50.00	45.14	90.29	80-120	
2-Butanone	100.00	104.45	104.46	80-120	
2-Chlorotoluene	50.00	46.68	93.36	80-120	
4-Chlorotoluene	50.00	48.71	97.42	80-120	
p-Isopropyltoluene	50.00	49.08	98.16	80-120	

Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_412359

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X070614.D
Lab Smp Id ICV
Analysis Type VOA
ICAL Date 06-JUL-2022
ICAL Time 1347
Client Smp ID ICV
Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
4-Methyl-2-Pentano	100.00	100.35	100.35	80-120	
Acetone	100.00	113.99	114.00	80-120	
Benzene	50.00	48.27	96.55	80-120	
Bromobenzene	50.00	49.23	98.47	80-120	
Bromochloromethane	50.00	45.37	90.75	80-120	
Bromodichlorometha	50.00	46.64	93.29	80-120	
Bromoform	50.00	51.60	103.20	80-120	
Bromomethane	50.00	55.13	110.27	80-120	
Carbon Tetrachlori	50.00	40.95	81.91	80-120	
Chlorobenzene	50.00	48.18	96.38	80-120	
Chloroethane	50.00	48.92	97.85	80-120	
Chloroform	50.00	45.18	90.38	80-120	
Chloromethane	50.00	47.85	95.71	80-120	
cis-1,2-Dichloroet	50.00	46.56	93.13	80-120	
cis-1,3-Dichloropr	50.00	48.90	97.82	80-120	
Dibromochlorometha	50.00	47.73	95.48	80-120	
Dibromomethane	50.00	45.16	90.34	80-120	
Dichlorodifluorome	50.00	44.23	88.47	80-120	
Ethylbenzene	50.00	47.42	94.84	80-120	
Hexachlorobutadien	50.00	53.45	106.91	80-120	
Isopropylbenzene	50.00	46.65	93.32	80-120	
m,p-Xylenes	100.00	97.09	97.10	80-120	
Methyl tert-butyl	50.00	53.13	106.27	80-120	
Methylene Chloride	50.00	50.08	100.16	80-120	
n-Butylbenzene	50.00	50.44	100.89	80-120	
n-Propylbenzene	50.00	47.83	95.66	80-120	
Naphthalene	50.00	56.59	113.20	80-120	
o-Xylene	50.00	48.17	96.35	80-120	
sec-Butylbenzene	50.00	45.81	91.62	80-120	
Styrene	50.00	50.18	100.36	80-120	
tert-Butylbenzene	50.00	46.42	92.85	80-120	
Tetrachloroethene	50.00	44.87	89.74	80-120	
Toluene	50.00	47.63	95.28	80-120	
trans-1,2-Dichloro	50.00	52.82	105.65	80-120	

Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_412359

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X070614.D
Lab Smp Id ICV
Analysis Type VOA

ICAL Date 06-JUL-2022
ICAL Time 1347
Client Smp ID ICV
Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
trans-1,3-Dichloro	50.00	48.85	97.71	80-120	
Trichloroethene	50.00	46.69	93.39	80-120	
Trichlorofluoromet	50.00	49.15	98.31	80-120	
Vinyl Chloride	50.00	47.18	94.37	80-120	
1,2-Dichloroethyle	100.00	99.38	99.39	80-120	
Xylenes (total)	150.00	145.27	96.85	80-120	
1,4-Dioxane	1000.00	838.63	83.86	80-120	
1,2-Dichloroethane	50.00	49.44	98.88	0-130	
4-Bromofluorobenze	50.00	52.44	104.88	0-130	
Dibromofluorometha	50.00	49.49	99.00	74-125	
Toluene-d8	50.00	51.51	103.03	78-123	

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Form 7

Continuing Calibration Verification (CCV)

Volatiles Organics by Method 8260C

Wokorder

HS22061645

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 June 2022

07/20/2022

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_412107

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X070103.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 01-JUL-2022 0945
ICAL Date(s) 24-MAY-2022 24-MAY-2022
ICAL Times 1128 1457
Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2-Dichloroethane-d4	50.0	48.81550	0.60148	0.100	2.36899	20.0	Linear	
4-Bromofluorobenzene	50.0	54.25240	0.51005	0.100	-8.50479	20.0	Linear	
Dibromofluoromethane	50.0	52.26344	0.54939	0.100	-4.52688	20.0	Linear	
Toluene-d8	1.32043	1.38000	1.38000	0.100	-4.51125	20.0	Averaged	
1,1,2-Trichloroethane	0.30917	0.31478	0.31478	0.100	-1.81580	20.0	Averaged	
1,1-Dichloroethene	0.52141	0.47140	0.47140	0.100	9.59215	20.0	Averaged	
1,2-Dichloroethane	0.49912	0.51407	0.51407	0.100	-2.99667	20.0	Averaged	
cis-1,2-Dichloroethene	0.60302	0.62349	0.62349	0.100	-3.39426	20.0	Averaged	
Methylene Chloride	0.63133	0.58138	0.58138	0.100	7.91084	20.0	Averaged	
Trichloroethene	0.37564	0.41393	0.41393	0.200	-10.19325	20.0	Averaged	
Vinyl Chloride	0.70489	0.58169	0.58169	0.100	17.47808	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_412107

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X070131.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 01-JUL-2022 1935
ICAL Date(s) 24-MAY-2022 24-MAY-2022
ICAL Times 1128 1457
Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2-Dichloroethane-d4	50.0	46.33465	0.57112	0.100	7.33071	50.0	Linear	
4-Bromofluorobenzene	50.0	49.47141	0.46582	0.100	1.05718	50.0	Linear	
Dibromofluoromethane	50.0	49.51093	0.52047	0.100	0.97813	50.0	Linear	
Toluene-d8	1.32043	1.26604	1.26604	0.100	4.11933	50.0	Averaged	
1,1,2-Trichloroethane	0.30917	0.27883	0.27883	0.100	9.81253	50.0	Averaged	
1,1-Dichloroethene	0.52141	0.39710	0.39710	0.100	23.84164	50.0	Averaged	
1,2-Dichloroethane	0.49912	0.46788	0.46788	0.100	6.25783	50.0	Averaged	
cis-1,2-Dichloroethene	0.60302	0.57149	0.57149	0.100	5.22888	50.0	Averaged	
Methylene Chloride	0.63133	0.53717	0.53717	0.100	14.91458	50.0	Averaged	
Trichloroethene	0.37564	0.36035	0.36035	0.200	4.07076	50.0	Averaged	
Vinyl Chloride	0.70489	0.48496	0.48496	0.100	31.19979	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_412360

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID Y070603.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 06-JUL-2022 1655
ICAL Date(s) 06-JUL-2022 06-JUL-2022
ICAL Times 1120 1449
Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2-Dichloroethane-d4	50.0	58.00653	0.54156	0.100	-16.01305	20.0	Linear	
4-Bromofluorobenzene	50.0	52.16955	0.45322	0.100	-4.33909	20.0	Linear	
Dibromofluoromethane	50.0	53.80414	0.49604	0.100	-7.60828	20.0	Linear	
Toluene-d8	1.24161	1.23044	1.23044	0.100	0.90004	20.0	Averaged	
1,1,2-Trichloroethane	0.28426	0.27758	0.27758	0.100	2.35082	20.0	Averaged	
1,1-Dichloroethene	0.47833	0.41264	0.41264	0.100	13.73309	20.0	Averaged	
1,2-Dichloroethane	0.41434	0.46684	0.46684	0.100	-12.66889	20.0	Averaged	
cis-1,2-Dichloroethene	0.57871	0.56392	0.56392	0.100	2.55589	20.0	Averaged	
Methylene Chloride	50.0	45.20560	0.52474	0.100	9.58880	20.0	Linear	
Trichloroethene	0.37443	0.36605	0.36605	0.200	2.23735	20.0	Averaged	
Vinyl Chloride	0.63952	0.51982	0.51982	0.100	18.71684	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_412360

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID Y070632.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 07-JUL-2022 0306
ICAL Date(s) 06-JUL-2022 06-JUL-2022
ICAL Times 1120 1449
Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2-Dichloroethane-d4	50.0	55.53283	0.51893	0.100	-11.06566	50.0	Linear	
4-Bromofluorobenzene	50.0	51.61417	0.44842	0.100	-3.22834	50.0	Linear	
Dibromofluoromethane	50.0	53.15712	0.49011	0.100	-6.31424	50.0	Linear	
Toluene-d8	1.24161	1.31583	1.31583	0.100	-5.97719	50.0	Averaged	
1,1,2-Trichloroethane	0.28426	0.28874	0.28874	0.100	-1.57526	50.0	Averaged	
1,1-Dichloroethene	0.47833	0.44096	0.44096	0.100	7.81330	50.0	Averaged	
1,2-Dichloroethane	0.41434	0.42285	0.42285	0.100	-2.05290	50.0	Averaged	
cis-1,2-Dichloroethene	0.57871	0.57586	0.57586	0.100	0.49328	50.0	Averaged	
Methylene Chloride	50.0	47.19957	0.54821	0.100	5.60085	50.0	Linear	
Trichloroethene	0.37443	0.37775	0.37775	0.200	-0.88812	50.0	Averaged	
Vinyl Chloride	0.63952	0.59498	0.59498	0.100	6.96432	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_412413

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X070702.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 07-JUL-2022 1038
ICAL Date(s) 06-JUL-2022 06-JUL-2022
ICAL Times 1120 1449
Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2-Dichloroethane-d4	50.0	51.44970	0.48156	0.100	-2.89939	20.0	Linear	
4-Bromofluorobenzene	50.0	51.45113	0.44702	0.100	-2.90225	20.0	Linear	
Dibromofluoromethane	50.0	51.01711	0.47048	0.100	-2.03421	20.0	Linear	
Toluene-d8	1.24161	1.27041	1.27041	0.100	-2.31929	20.0	Averaged	
1,1,2-Trichloroethane	0.28426	0.27737	0.27737	0.100	2.42555	20.0	Averaged	
1,1-Dichloroethene	0.47833	0.43551	0.43551	0.100	8.95111	20.0	Averaged	
1,2-Dichloroethane	0.41434	0.42263	0.42263	0.100	-2.00100	20.0	Averaged	
cis-1,2-Dichloroethene	0.57871	0.56187	0.56187	0.100	2.90953	20.0	Averaged	
Methylene Chloride	50.0	46.93123	0.54505	0.100	6.13754	20.0	Linear	
Trichloroethene	0.37443	0.35967	0.35967	0.200	3.94073	20.0	Averaged	
Vinyl Chloride	0.63952	0.60150	0.60150	0.100	5.94515	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 June 2022

Workorder HS22061645

RunID VOA6_412413

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X070720.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 07-JUL-2022 1651
ICAL Date(s) 06-JUL-2022 06-JUL-2022
ICAL Times 1120 1449
Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2-Dichloroethane-d4	50.0	49.48624	0.46359	0.100	1.02751	50.0	Linear	
4-Bromofluorobenzene	50.0	58.52125	0.50807	0.100	-17.04250	50.0	Linear	
Dibromofluoromethane	50.0	50.24121	0.46337	0.100	-0.48243	50.0	Linear	
Toluene-d8	1.24161	1.26441	1.26441	0.100	-1.83622	50.0	Averaged	
1,1,2-Trichloroethane	0.28426	0.27855	0.27855	0.100	2.00989	50.0	Averaged	
1,1-Dichloroethene	0.47833	0.51798	0.51798	0.100	-8.29035	50.0	Averaged	
1,2-Dichloroethane	0.41434	0.39254	0.39254	0.100	5.26132	50.0	Averaged	
cis-1,2-Dichloroethene	0.57871	0.56259	0.56259	0.100	2.78633	50.0	Averaged	
Methylene Chloride	50.0	53.48194	0.62216	0.100	-6.96388	50.0	Linear	
Trichloroethene	0.37443	0.36950	0.36950	0.200	1.31475	50.0	Averaged	
Vinyl Chloride	0.63952	0.67744	0.67744	0.100	-5.93007	50.0	Averaged	

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Form 8

Internal Standard Area and RT Summary

Volatiles Organics by Method 8260C

Wokorder

HS22061645

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 June 2022

07/20/2022

Form 8 - Internal Standard Area and RT Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412107

Volatiles Organics by Method 8260C

		IS1				IS2				IS3				IS4			
Sample ID	File ID	Area		RT		Area		RT		Area		RT		Area		RT	
12-HOUR STD (CCV)	X070103	477569	#	4.19	#	728772	#	4.97	#	675339	#	7.67	#	335334	#	9.67	#
CCB	X070104	569198		4.19		823385		4.97		711507		7.67		304603		9.67	
VLCSW-220701	X070105	478148		4.19		733954		4.97		681091		7.67		328684		9.67	
VBLKW-220701	X070107	579445		4.19		835704		4.97		716686		7.67		302388		9.67	
ZZZZZZMS	X070114	553292		4.19		797408		4.97		688992		7.67		321478		9.67	
ZZZZZZMSD	X070115	571475		4.19		836543		4.97		733130		7.67		347915		9.66	
HS22061645-11	X070125	608899		4.19		882265		4.97		722194		7.67		310458		9.67	
HS22061645-07	X070126	588591		4.19		850206		4.97		759666		7.67		344579		9.67	
HS22061645-02	X070127	585367		4.19		853072		4.97		780418		7.67		328399		9.67	
HS22061645-02	X070128	587694		4.19		843328		4.97		736993		7.67		321317		9.67	
HS22061645-03	X070129	583060		4.19		845372		4.97		703693		7.67		304389		9.67	
HS22061645-03	X070130	558789		4.19		818893		4.97		705767		7.67		310131		9.67	
CCV-END	X070131	469036		4.19		729395		4.97		693175		7.67		338698		9.67	

IS1 - Pentafluorobenzene IS2 - 1,4-Difluorobenzene IS3 - Chlorobenzene-d5 IS4 - 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of 12H STD IS Area
AREA LOWER LIMIT = - 50% of 12H STD IS Area
RT - Retention Time IS - Internal Standard

RT UPPER LIMIT = + 0.50 of 12H STD IS RT
RT LOWER LIMIT = - 0.50 of 12H STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

Form 8 - Internal Standard Area and RT Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412360

Volatiles Organics by Method 8260C

		IS1				IS2				IS3				IS4			
Sample ID	File ID	Area		RT		Area		RT		Area		RT		Area		RT	
12-HOUR STD (CCV)	Y070603	502697	#	4.19	#	768128	#	4.97	#	719712	#	7.67	#	350847	#	9.67	#
CCB	Y070604	595769		4.19		861996		4.97		746167		7.67		327153		9.67	
VLCSW-220706	Y070605	529254		4.19		811904		4.97		759938		7.67		364410		9.66	
VBLKW-220706	Y070608	638197		4.19		914598		4.97		789897		7.67		356188		9.67	
HS22061645-08	Y070610	613599		4.19		884129		4.97		752719		7.67		332571		9.67	
HS22061645-09	Y070611	620038		4.19		887244		4.97		772345		7.67		341419		9.67	
ZZZZZZMS	Y070613	557092		4.19		858636		4.97		665533		7.67		355703		9.67	
ZZZZZZMSD	Y070614	533586		4.19		759776		4.97		760309		7.67		306381		9.67	
HS22061645-04	Y070620	599977		4.19		875633		4.97		772881		7.67		344012		9.67	
HS22061645-01	Y070621	612801		4.19		891659		4.97		773197		7.67		346491		9.67	
HS22061645-05	Y070622	603603		4.19		879760		4.97		765268		7.67		336968		9.67	
HS22061645-05	Y070623	596534		4.19		864319		4.97		738531		7.67		322706		9.67	
HS22061645-06	Y070624	613585		4.19		894615		4.97		769686		7.67		346190		9.67	
HS22061645-06	Y070625	619502		4.19		882965		4.97		751101		7.67		337355		9.67	
HS22061645-10	Y070628	615231		4.19		879995		4.97		779223		7.67		360876		9.67	
HS22061645-10	Y070629	626838		4.19		898075		4.97		771253		7.67		348852		9.67	
CCV-END	Y070632	520784		4.19		808784		4.97		704431		7.67		342987		9.67	

IS1 - Pentafluorobenzene IS2 - 1,4-Difluorobenzene IS3 - Chlorobenzene-d5 IS4 - 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of 12H STD IS Area
AREA LOWER LIMIT = - 50% of 12H STD IS Area
RT - Retention Time IS - Internal Standard

RT UPPER LIMIT = + 0.50 of 12H STD IS RT
RT LOWER LIMIT = - 0.50 of 12H STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

Form 8 - Internal Standard Area and RT Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

RunID
VOA6_412413

Volatiles Organics by Method 8260C

		IS1				IS2				IS3				IS4			
Sample ID	File ID	Area		RT		Area		RT		Area		RT		Area		RT	
12-HOUR STD (CCV)	X070702	501061	#	4.19	#	742502	#	4.97	#	617814	#	7.67	#	300342	#	9.66	#
CCB	X070704	525828		4.19		738935		4.97		711577		7.67		333635		9.67	
VLCSW-220707	X070705	443226		4.19		664479		4.97		610892		7.67		292724		9.67	
VBLKW-220707	X070707	600072		4.19		871359		4.97		749639		7.67		330561		9.67	
ZZZZZZMS	X070715	628349		4.19		893831		4.97		773639		7.67		348111		9.67	
ZZZZZZMSD	X070716	610592		4.19		866659		4.97		744549		7.67		332978		9.67	
HS22061645-08	X070718	603450		4.19		755677		4.97		651965		7.67		293447		9.67	
CCV-END	X070720	437090		4.19		662385		4.97		603418		7.67		289877		9.66	

IS1 - Pentafluorobenzene IS2 - 1,4-Difluorobenzene IS3 - Chlorobenzene-d5 IS4 - 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of 12H STD IS Area
AREA LOWER LIMIT = - 50% of 12H STD IS Area
RT - Retention Time IS - Internal Standard

RT UPPER LIMIT = + 0.50 of 12H STD IS RT
RT LOWER LIMIT = - 0.50 of 12H STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

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Analysis Run Log

Volatiles Organics by Method 8260C

Wokorder

HS22061645

Client

Aptim Environmental & Infrastucture, Inc.

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LHAAP 16 June 2022

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Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

RunID
VOA6_409368

Instrument ID VOA6 **Matrix** R409368 **Start Date** 05/24/2022 **EndDate** 05/24/2022

Client Sample ID	Type	Lab Sample ID	DF	Analysis Date	File ID
BFB	TUNE	BFB	1	05/24/22 11:07	X052401.D
VSTD000.25	ICAL1	VSTD000.25	1	05/24/22 11:28	X052402.D
VSTD000.5	ICAL2	VSTD000.5	1	05/24/22 12:10	X052403.D
VSTD001	ICAL3	VSTD001	1	05/24/22 12:30	X052404.D
VSTD002	ICAL4	VSTD002	1	05/24/22 12:51	X052405.D
VSTD005	ICAL5	VSTD005	1	05/24/22 13:12	X052406.D
VSTD020	ICAL6	VSTD020	1	05/24/22 13:33	X052407.D
VSTD050	ICAL7	VSTD050	1	05/24/22 13:54	X052408.D
VSTD100	ICAL8	VSTD100	1	05/24/22 14:15	X052409.D
VSTD150	ICAL9	VSTD150	1	05/24/22 14:36	X052410.D
VSTD200	ICAL	VSTD200	1	05/24/22 14:57	X052411.D
CCV	ICV	CCV	1	05/24/22 15:39	X052413.D

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

RunID
VOA6_412107

Instrument ID VOA6 **Matrix** R412107 **Start Date** 07/01/2022 **EndDate** 07/01/2022

Client Sample ID	Type	Lab Sample ID	DF	Analysis Date	File ID
BFB	TUNE	BFB	1	07/01/22 09:03	X070101.D
CCV	CCV	CCV	1	07/01/22 09:45	X070103.D
CCB	CCB	CCB	1	07/01/22 10:06	X070104.D
VLCSW-220701	LCS	VLCSW-220701	1	07/01/22 10:27	X070105.D
VBLKW-220701	MBLK	VBLKW-220701	1	07/01/22 11:09	X070107.D
ZZZZZZZZZZ	SAMP	HS22061671-09	1	07/01/22 11:30	X070108.D
ZZZZZZZZZZ	SAMP	HS22061671-10	1	07/01/22 11:51	X070109.D
ZZZZZZZZZZ	SAMP	HS22061671-05	1	07/01/22 12:12	X070110.D
ZZZZZZZZZZ	SAMP	HS22061671-07	1	07/01/22 12:33	X070111.D
ZZZZZZZZZZ	SAMP	HS22061605-07	25	07/01/22 12:54	X070112.D
ZZZZZZZZZZ	SAMP	HS22061605-08	10	07/01/22 13:16	X070113.D
ZZZZZZMS	MS	HS22061671-07MS	1	07/01/22 13:37	X070114.D
ZZZZZZMSD	MSD	HS22061671-07MSD	1	07/01/22 13:58	X070115.D
ZZZZZZZZZZ	SAMP	HS22061605-08	50	07/01/22 14:40	X070117.D
ZZZZZZZZZZ	SAMP	HS22061671-01	1	07/01/22 15:22	X070119.D
ZZZZZZZZZZ	SAMP	HS22061671-02	1	07/01/22 15:43	X070120.D
ZZZZZZZZZZ	SAMP	HS22061671-03	1	07/01/22 16:04	X070121.D
ZZZZZZZZZZ	SAMP	HS22061671-04	1	07/01/22 16:25	X070122.D
ZZZZZZZZZZ	SAMP	HS22061671-06	1	07/01/22 16:46	X070123.D
ZZZZZZZZZZ	SAMP	HS22061671-08	1	07/01/22 17:07	X070124.D
Trip Blank-220629	SAMP	HS22061645-11	1	07/01/22 17:28	X070125.D
16WW22-220629	SAMP	HS22061645-07	1	07/01/22 17:49	X070126.D
16EW02-220629	SAMP	HS22061645-02	25	07/01/22 18:10	X070127.D
16EW02-220629	SAMP	HS22061645-02	250	07/01/22 18:31	X070128.D
16EW02-220629-FD	SAMP	HS22061645-03	25	07/01/22 18:53	X070129.D
16EW02-220629-FD	SAMP	HS22061645-03	250	07/01/22 19:14	X070130.D
CCV-END	CCV_END	CCV-END	1	07/01/22 19:35	X070131.D

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

RunID
VOA6_412359

Instrument ID VOA6 **Matrix** R412359 **Start Date** 07/06/2022 **EndDate** 07/06/2022

Client Sample ID	Type	Lab Sample ID	DF	Analysis Date	File ID
BFB	TUNE	BFB	1	07/06/22 10:59	X070601.D
VSTD000.25	ICAL1	VSTD000.25	1	07/06/22 11:20	X070602.D
VSTD000.5	ICAL2	VSTD000.5	1	07/06/22 12:02	X070603.D
VSTD001	ICAL3	VSTD001	1	07/06/22 12:23	X070604.D
VSTD002	ICAL4	VSTD002	1	07/06/22 12:44	X070605.D
VSTD005	ICAL5	VSTD005	1	07/06/22 13:05	X070606.D
VSTD020	ICAL6	VSTD020	1	07/06/22 13:26	X070607.D
VSTD050	ICAL7	VSTD050	1	07/06/22 13:47	X070608.D
VSTD100	ICAL8	VSTD100	1	07/06/22 14:08	X070609.D
VSTD150	ICAL9	VSTD150	1	07/06/22 14:28	X070610.D
VSTD200	ICAL	VSTD200	1	07/06/22 14:49	X070611.D
CCV	ICV	CCV	1	07/06/22 15:52	X070614.D

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

RunID
VOA6_412360

Instrument ID VOA6 **Matrix** R412360 **Start Date** 07/06/2022 **EndDate** 07/07/2022

Client Sample ID	Type	Lab Sample ID	DF	Analysis Date	File ID
BFB	TUNE	BFB	1	07/06/22 16:13	Y070601.D
CCV	CCV	CCV	1	07/06/22 16:55	Y070603.D
CCB	CCB	CCB	1	07/06/22 17:16	Y070604.D
VLCSW-220706	LCS	VLCSW-220706	1	07/06/22 17:37	Y070605.D
VBLKW-220706	MBLK	VBLKW-220706	1	07/06/22 18:40	Y070608.D
ZZZZZZZZZZ	SAMP	HS22070020-10	1	07/06/22 19:01	Y070609.D
16WW39-220629	SAMP	HS22061645-08	1	07/06/22 19:23	Y070610.D
16WW49-220629	SAMP	HS22061645-09	1	07/06/22 19:44	Y070611.D
ZZZZZZZZZZ	SAMP	HS22070020-08	1	07/06/22 20:05	Y070612.D
ZZZZZZMS	MS	HS22070020-08MS	1	07/06/22 20:26	Y070613.D
ZZZZZZMSD	MSD	HS22070020-08MSD	1	07/06/22 20:47	Y070614.D
ZZZZZZZZZZ	SAMP	HS22061605-07	500	07/06/22 21:08	Y070615.D
ZZZZZZZZZZ	SAMP	HS22070020-05	1	07/06/22 21:50	Y070617.D
ZZZZZZZZZZ	SAMP	HS22070020-06	1	07/06/22 22:11	Y070618.D
ZZZZZZZZZZ	SAMP	HS22070020-07	1	07/06/22 22:32	Y070619.D
16IW26-220629	SAMP	HS22061645-04	5	07/06/22 22:53	Y070620.D
16EW03-220629	SAMP	HS22061645-01	5	07/06/22 23:14	Y070621.D
16WW41-220629	SAMP	HS22061645-05	10	07/06/22 23:35	Y070622.D
16WW41-220629	SAMP	HS22061645-05	100	07/06/22 23:56	Y070623.D
16WW41-220629-FD	SAMP	HS22061645-06	10	07/07/22 00:17	Y070624.D
16WW41-220629-FD	SAMP	HS22061645-06	100	07/07/22 00:39	Y070625.D
ZZZZZZZZZZ	SAMP	HS22070020-02	10	07/07/22 01:00	Y070626.D
ZZZZZZZZZZ	SAMP	HS22070020-02	100	07/07/22 01:21	Y070627.D
16IW03-220629	SAMP	HS22061645-10	25	07/07/22 01:42	Y070628.D
16IW03-220629	SAMP	HS22061645-10	250	07/07/22 02:03	Y070629.D
ZZZZZZZZZZ	SAMP	HS22070020-03	25	07/07/22 02:24	Y070630.D
ZZZZZZZZZZ	SAMP	HS22070020-03	250	07/07/22 02:45	Y070631.D
CCV-END	CCV_END	CCV-END	1	07/07/22 03:06	Y070632.D

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 June 2022

Workorder
HS22061645

Volatiles Organics by Method 8260C

RunID
VOA6_412413

Instrument ID VOA6 **Matrix** R412413 **Start Date** 07/07/2022 **EndDate** 07/07/2022

Client Sample ID	Type	Lab Sample ID	DF	Analysis Date	File ID
BFB	TUNE	BFB	1	07/07/22 10:17	X070701.D
CCV	CCV	CCV	1	07/07/22 10:38	X070702.D
CCB	CCB	CCB	1	07/07/22 11:20	X070704.D
VLCSW-220707	LCS	VLCSW-220707	1	07/07/22 11:41	X070705.D
VBLKW-220707	MBLK	VBLKW-220707	1	07/07/22 12:23	X070707.D
ZZZZZZZZZZ	SAMP	HS22070255-02	1	07/07/22 12:44	X070708.D
ZZZZZZZZZZ	SAMP	HS22070255-01	1	07/07/22 13:20	X070709.D
ZZZZZZZZZZ	SAMP	HS22070020-09	1	07/07/22 13:42	X070711.D
ZZZZZZZZZZ	SAMP	HS22070020-01	25	07/07/22 14:03	X070712.D
ZZZZZZZZZZ	SAMP	HS22070020-01	250	07/07/22 14:24	X070713.D
ZZZZZZZZZZ	SAMP	HS22070020-04	25	07/07/22 14:45	X070714.D
ZZZZZZMS	MS	HS22070020-01MS	250	07/07/22 15:06	X070715.D
ZZZZZZMSD	MSD	HS22070020-01MSD	250	07/07/22 15:27	X070716.D
ZZZZZZZZZZ	SAMP	HS22070020-04	250	07/07/22 15:48	X070717.D
16WW39-220629	SAMP	HS22061645-08	5	07/07/22 16:09	X070718.D
ZZZZZZZZZZ	SAMP	HS22070020-09	25	07/07/22 16:30	X070719.D
CCV-END	CCV_END	CCV-END	1	07/07/22 16:51	X070720.D

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Raw Data VOA6 409368

Volatiles Organics by Method 8260C

Wokorder

HS22061645

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 June 2022

07/20/2022

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220524.b\X052401.D Page 1
Report Date: 24-May-2022 11:45

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220524.b\X052401.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 24-MAY-2022 11:07
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220524.b\bfb.m
Meth Date : 13-Apr-2022 10:36 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.695	8.889	(0.000)	95	86704			0.00- 100.00	100.00
8.695	8.889	(0.000)	50	17624			15.00- 40.00	20.33
8.695	8.889	(0.000)	75	44304			30.00- 60.00	51.10
8.695	8.889	(0.000)	96	5605			5.00- 9.00	6.46
8.695	8.889	(0.000)	173	493			0.00- 2.00	0.70
8.695	8.889	(0.000)	174	70104			50.00- 0.00	80.85
8.695	8.889	(0.000)	175	5634			5.00- 9.00	8.04
8.695	8.889	(0.000)	176	67104			95.00- 101.00	95.72
8.695	8.889	(0.000)	177	4869			5.00- 9.00	7.26

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.33
75	30.00 - 60.00% of mass 95	51.10
96	5.00 - 9.00% of mass 95	6.46
173	Less than 2.00% of mass 174	0.57 (0.70)
174	Greater than 50.00% of mass 95	80.85
175	5.00 - 9.00% of mass 174	6.50 (8.04)
176	95.00 - 101.00% of mass 174	77.39 (95.72)
177	5.00 - 9.00% of mass 176	5.62 (7.26)

Data File: X052401.D
Spectrum: Scan 2161 (8.69)
Location of Maximum: 95.00
Number of points: 102

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1011	64.90	137	96.10	5605	142.80	593
37.00	4691	66.10	88	97.00	194	143.90	62
38.00	4174	66.70	295	102.10	50	145.70	180
39.00	2059	68.00	8604	102.80	125	147.80	195
40.00	843	69.00	9240	103.80	445	148.70	76
40.80	90	70.00	773	104.70	107	149.90	142
42.10	73	72.00	431	105.80	381	151.80	60
42.90	146	73.00	3463	106.70	170	152.70	80
44.00	1265	74.00	14977	108.90	80	153.80	62
45.10	816	75.00	44304	109.90	81	155.00	133
46.10	88	76.10	4203	110.80	72	157.00	138
47.00	860	77.00	1092	112.70	90	158.60	64
47.90	633	78.10	629	114.90	171	161.00	72
49.10	3992	78.90	2797	115.80	293	168.90	157
50.00	17624	79.80	675	116.90	581	169.90	175
51.00	5692	80.90	3163	117.80	312	171.20	99
52.00	357	81.90	627	118.80	416	172.80	493
55.00	653	82.90	89	127.90	419	173.90	70104
56.00	1506	85.90	72	128.80	147	174.90	5634
57.00	2345	87.00	3355	129.90	222	175.90	67104
57.90	94	87.90	3416	130.80	109	176.90	4869
60.10	629	91.00	420	134.90	164	177.90	112
61.00	3621	92.00	2386	136.60	104	185.90	396
62.00	4245	93.00	3366	139.90	68	262.00	122
63.00	3268	94.00	9669	141.00	574		
64.00	456	95.00	86704	141.90	122		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220524.b\X052401.D

Date : 24-MAY-2022 11:07

Client ID: BFB

Instrument: voa6.i

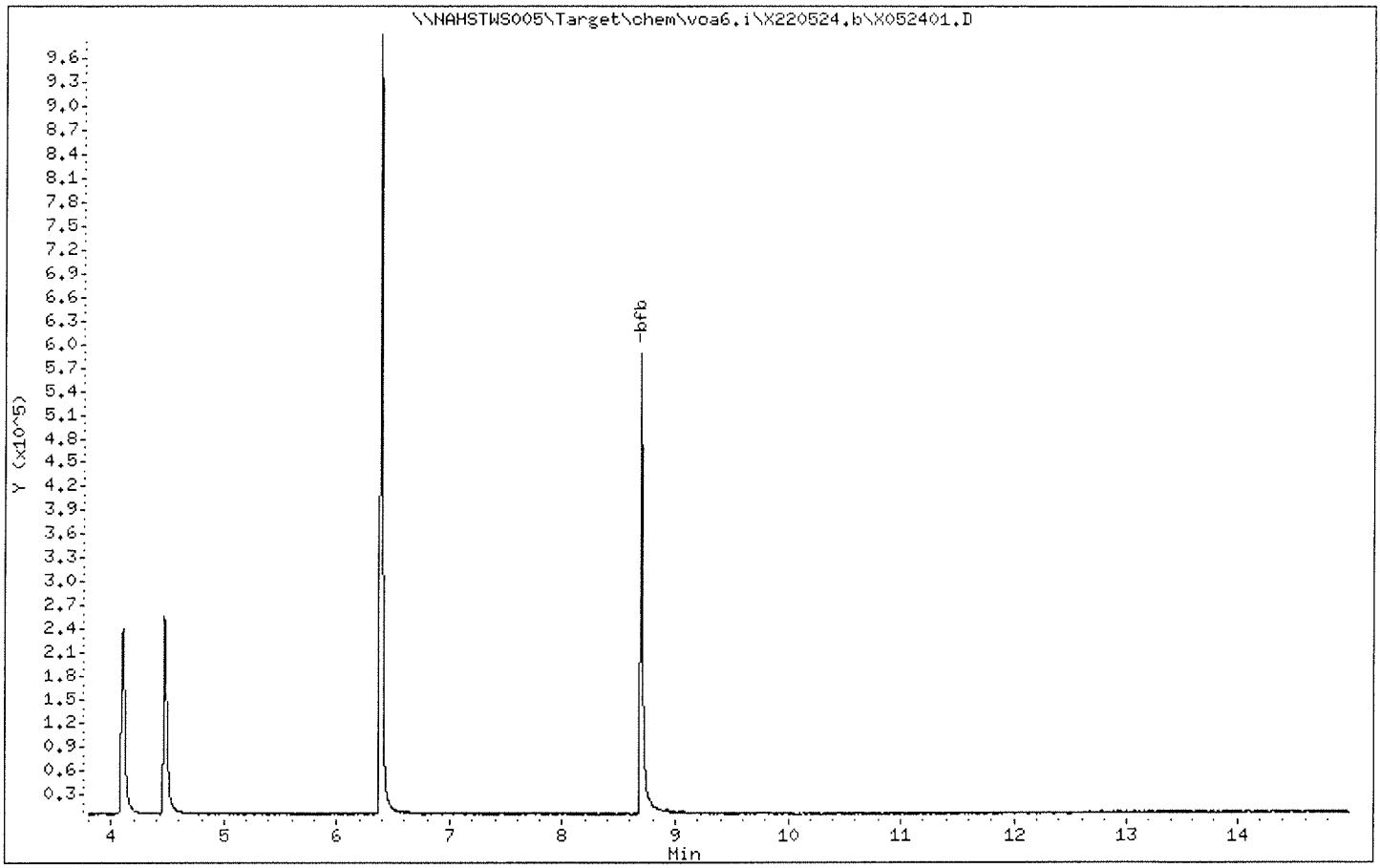
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220524.b\X052401.D Page 2

Date : 24-MAY-2022 11:07

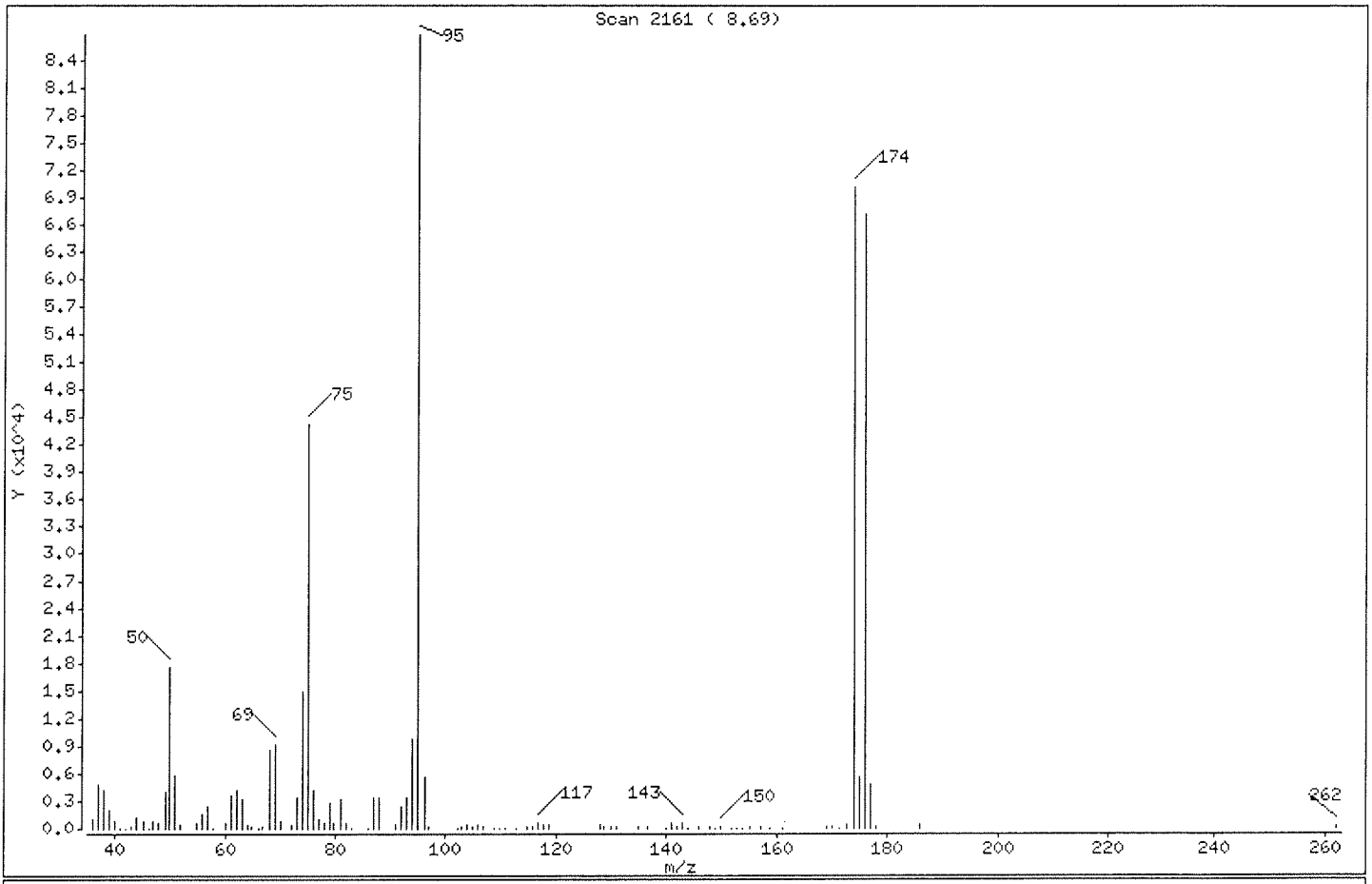
Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.33
75	30.00 - 60.00% of mass 95	51.10
96	5.00 - 9.00% of mass 95	6.46
173	Less than 2.00% of mass 174	0.57 (0.70)
174	Greater than 50.00% of mass 95	80.85
175	5.00 - 9.00% of mass 174	6.50 (8.04)
176	95.00 - 101.00% of mass 174	77.39 (95.72)
177	5.00 - 9.00% of mass 176	5.62 (7.26)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220524.b\X052401.D

Date : 24-MAY-2022 11:07

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

Data File: X052401.D
Spectrum: Scan 2161 (8.69)
Location of Maximum: 95.00
Number of points: 102

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1011	64.90	137	96.10	5605	142.80	593
37.00	4691	66.10	88	97.00	194	143.90	62
38.00	4174	66.70	295	102.10	50	145.70	180
39.00	2059	68.00	8604	102.80	125	147.80	195
40.00	843	69.00	9240	103.80	445	148.70	76
40.80	90	70.00	773	104.70	107	149.90	142
42.10	73	72.00	431	105.80	381	151.80	60
42.90	146	73.00	3463	106.70	170	152.70	80
44.00	1265	74.00	14977	108.90	80	153.80	62
45.10	816	75.00	44304	109.90	81	155.00	133
46.10	88	76.10	4203	110.80	72	157.00	138
47.00	860	77.00	1092	112.70	90	158.60	64
47.90	633	78.10	629	114.90	171	161.00	72
49.10	3992	78.90	2797	115.80	293	168.90	157
50.00	17624	79.80	675	116.90	581	169.90	175
51.00	5692	80.90	3163	117.80	312	171.20	99
52.00	357	81.90	627	118.80	416	172.80	493
55.00	653	82.90	89	127.90	419	173.90	70104
56.00	1506	85.90	72	128.80	147	174.90	5634
57.00	2345	87.00	3355	129.90	222	175.90	67104
57.90	94	87.90	3416	130.80	109	176.90	4869
60.10	629	91.00	420	134.90	164	177.90	112
61.00	3621	92.00	2386	136.60	104	185.90	396
62.00	4245	93.00	3366	139.90	68	262.00	122
63.00	3268	94.00	9669	141.00	574		
64.00	456	95.00	86704	141.90	122		

Data File : \\NAHSTWS005\Target\chem\voa6.i\X220524.b\X052401.D
Inj Date : 24-MAY-2022 11:07
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052402.D Page 1
Report Date: 15-Jul-2022 12:20

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052402.D
Lab Smp Id: VSTD000.25 Client Smp ID: VSTD000.25
Inj Date : 24-MAY-2022 11:28
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.25;VSTD000.25;1;1;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\8260W.m
Meth Date : 15-Jul-2022 12:20 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 14:57 Cal File: X052411.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

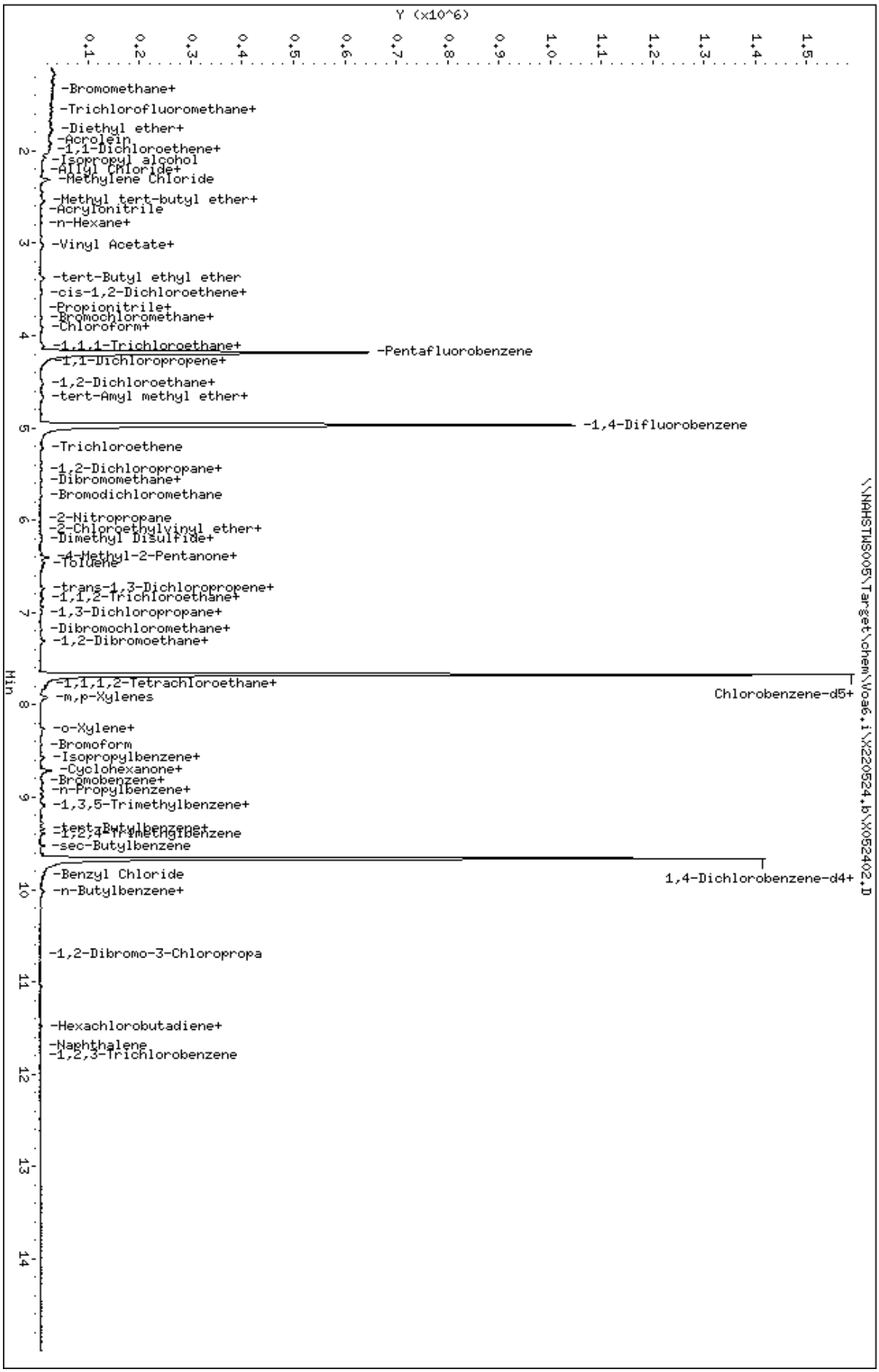
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	552023	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	881331	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	806273	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	358416	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.496	4.496	(1.074)	1963	0.25000	(TaM)
$ 69 4-Bromofluorobenzene	95	8.702	8.702	(1.134)	2868	0.25000	(aM)
$ 30 Dibromofluoromethane	113	4.106	4.106	(0.981)	1578	0.25000	0.24(M)
$ 48 Toluene-d8	98	6.401	6.401	(0.834)	8867	0.25000	0.41(aM)
53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	1051	0.25000	0.21(a)
11 1,1-Dichloroethene	96	1.917	1.917	(0.458)	1128	0.25000	0.19(a)
33 1,2-Dichloroethane	62	4.575	4.575	(0.921)	2125	0.25000	0.24(a)
27 cis-1,2-Dichloroethene	96	3.540	3.540	(0.846)	1621	0.25000	0.24(a)
17 Methylene Chloride	84	2.303	2.303	(0.550)	1599	0.25000	0.22(aM)
38 Trichloroethene	130	5.227	5.227	(1.052)	1339	0.25000	0.20(a)
5 Vinyl Chloride	62	1.141	1.141	(0.273)	1375	0.25000	0.17(a)

QC Flag Legend

T - Target compound detected outside RT window.

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052402.D
Date : 24-MAY-2022 11:28
Client ID: VSTD000.25
Sample Info: VSTD000.25;VSTD000.25;1;1;
Purge Volume: 5.0
Column phase: DB624

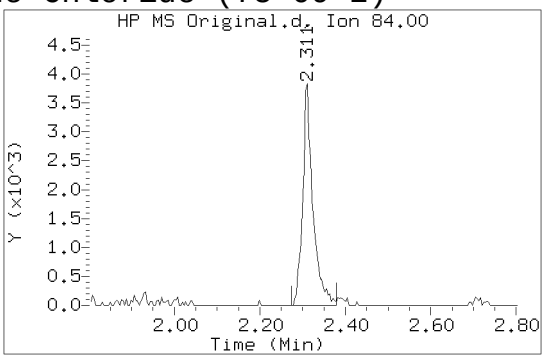
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052402.D
Inj Date : 24-MAY-2022 11:28
InstruID : voa6.i
LabSampID : VSTD000.25

Methylene Chloride (75-09-2)

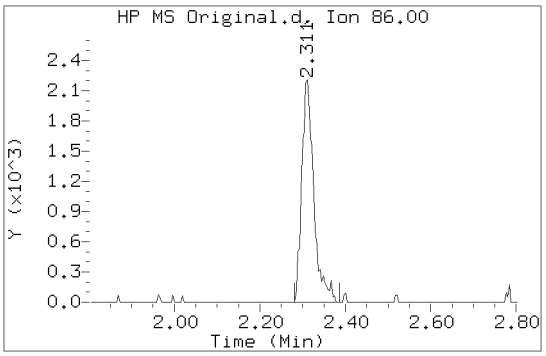
BEFORE

MASS
62
AREA
1102
HEIGHT
1180
24-May-2022
11:44
ALSHS
Server



BEFORE

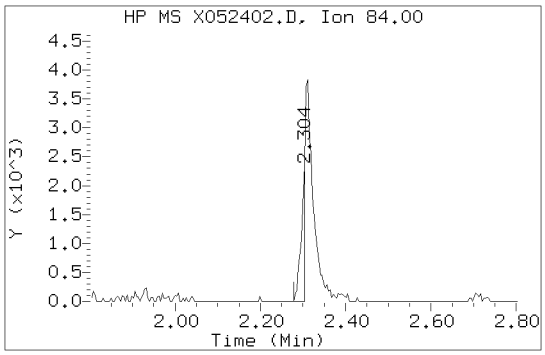
MASS
64
AREA
1290
HEIGHT
847
24-May-2022
11:44
ALSHS
Server



Reason Code:

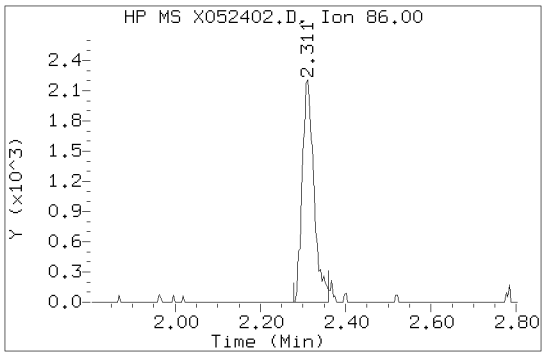
AFTER

MASS
84
AREA
1599
HEIGHT
2345
15-Jul-2022
12:20
ALSHS
Ser



AFTER

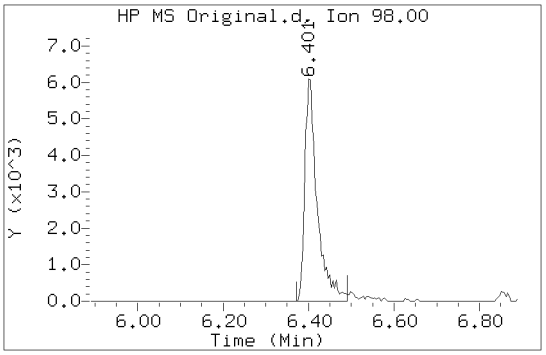
MASS
86
AREA
4289
HEIGHT
2208
15-Jul-2022
12:20
ALSHS
Ser



Toluene-d8 (2037-26-5)

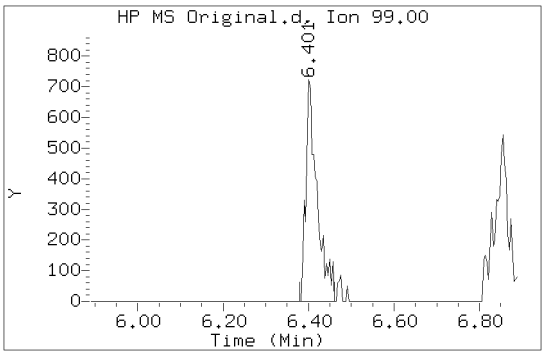
BEFORE

MASS
96
AREA
1128
HEIGHT
787
24-May-2022
11:44
ALSHS
Server



BEFORE

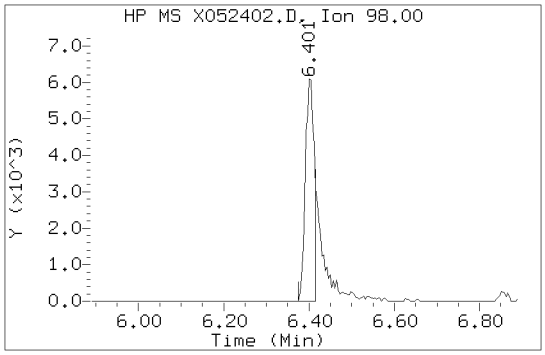
MASS
61
AREA
2063
HEIGHT
1198
24-May-2022
11:44
ALSHS
Server



Reason Code:

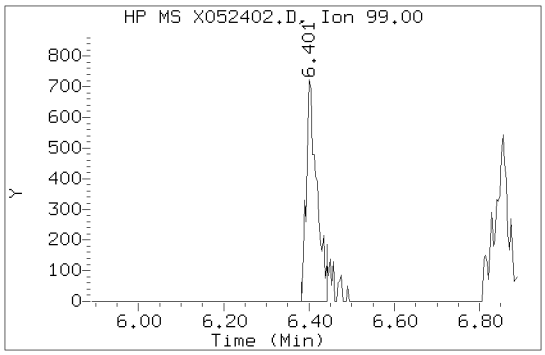
AFTER

MASS
98
AREA
8867
HEIGHT
6095
15-Jul-2022
12:20
ALSHS
Ser



AFTER

MASS
99
AREA
1238
HEIGHT
723
15-Jul-2022
12:20
ALSHS
Ser



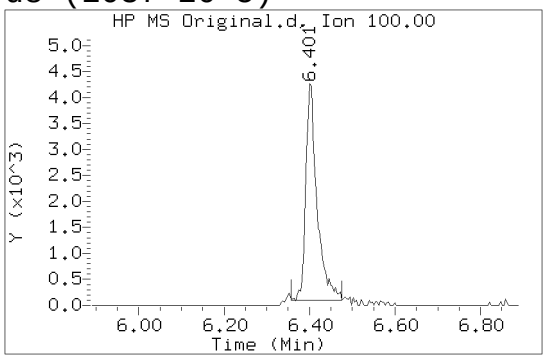
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052402.D
Inj Date : 24-MAY-2022 11:28
InstruID : voa6.i
LabSampID : VSTD000.25

Toluene-d8 (2037-26-5)

Reason Code:

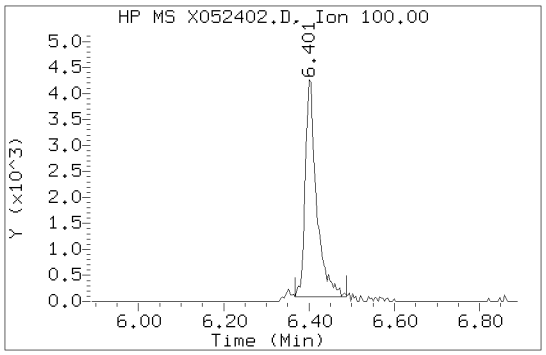
BEFORE

MASS
63
AREA
1005
HEIGHT
571
24-May-2022
11:44
ALSHS
Server



AFTER

MASS
100
AREA
7849
HEIGHT
4184
15-Jul-2022
12:20
ALSHS
Ser

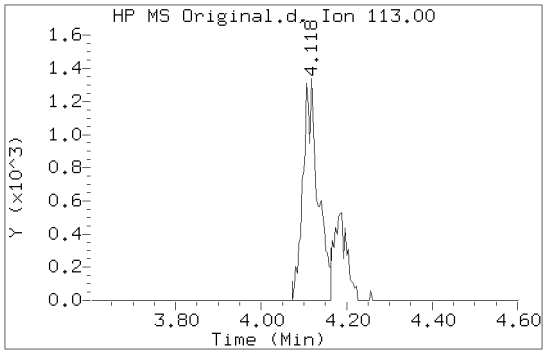


Dibromofluoromethane (1868-53-7)

Reason Code:

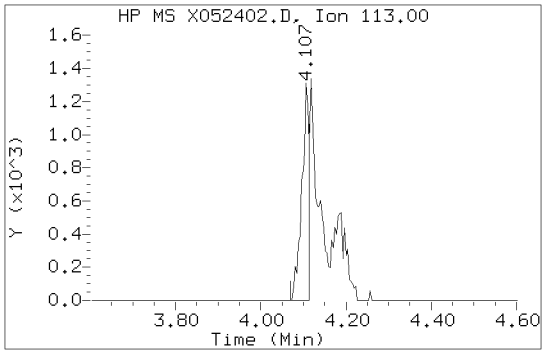
BEFORE

MASS
142
AREA
2751
HEIGHT
1263
24-May-2022
11:44
ALSHS
Server



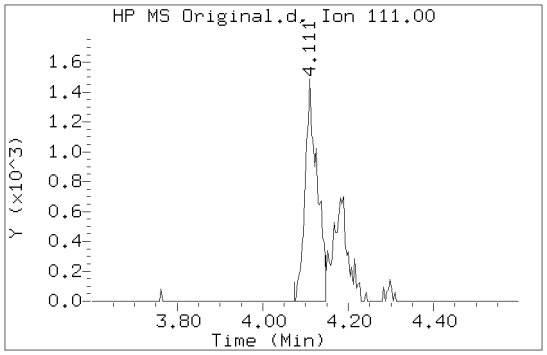
AFTER

MASS
113
AREA
1578
HEIGHT
1310
15-Jul-2022
12:20
ALSHS
Ser



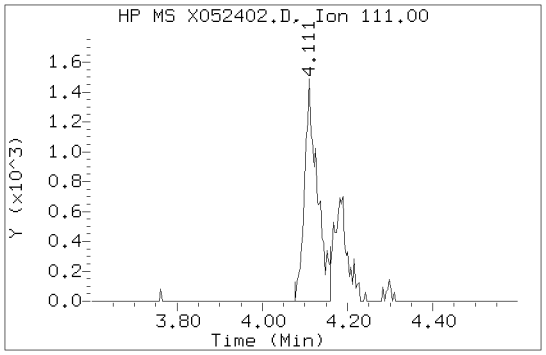
BEFORE

MASS
127
AREA
1070
HEIGHT
674
24-May-2022
11:44
ALSHS
Server



AFTER

MASS
111
AREA
3108
HEIGHT
1488
15-Jul-2022
12:20
ALSHS
Ser

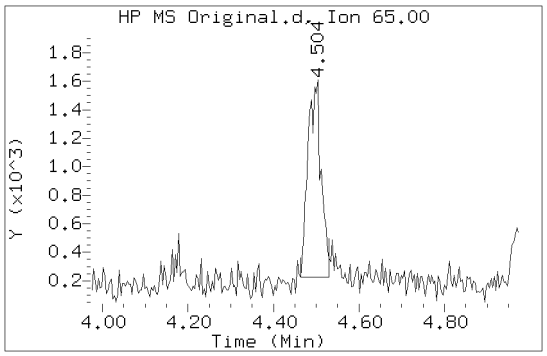


1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

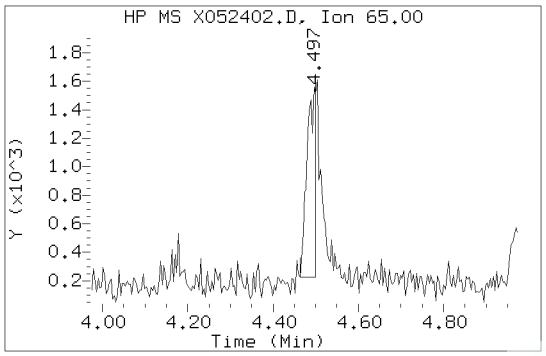
BEFORE

MASS
53
AREA
0
HEIGHT
0
24-May-2022
11:44
ALSHS
Server



AFTER

MASS
65
AREA
1963
HEIGHT
1335
15-Jul-2022
12:20
ALSHS
Ser



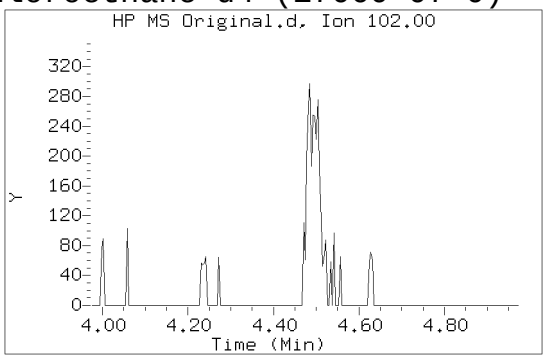
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052402.D
Inj Date : 24-MAY-2022 11:28
InstruID : voa6.i
LabSampID : VSTD000.25

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

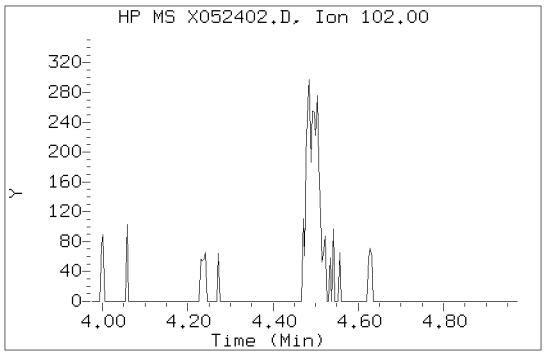
BEFORE

MASS
52
AREA
0
HEIGHT
0
24-May-2022
11:44
ALSHS
Server



AFTER

MASS
102
AREA
0
HEIGHT
0
15-Jul-2022
12:20
ALSHS
Ser

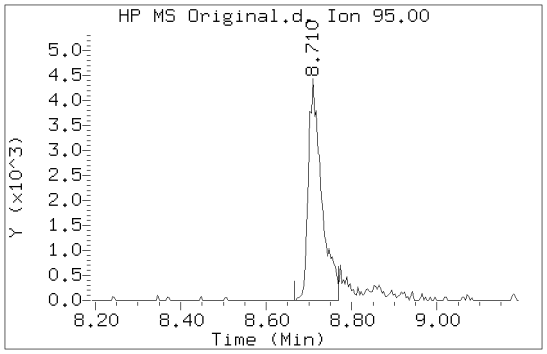


4-Bromofluorobenzene (460-00-4)

Reason Code:

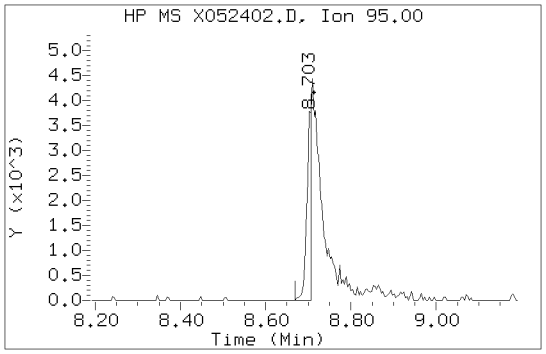
BEFORE

MASS
84
AREA
6441
HEIGHT
3833
24-May-2022
11:44
ALSHS
Server



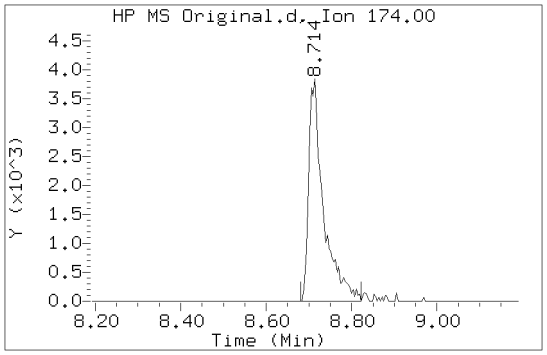
AFTER

MASS
95
AREA
2868
HEIGHT
3782
15-Jul-2022
12:20
ALSHS
Ser



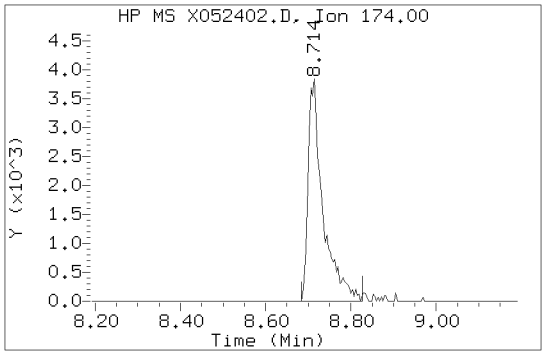
BEFORE

MASS
86
AREA
4390
HEIGHT
2208
24-May-2022
11:44
ALSHS
Server



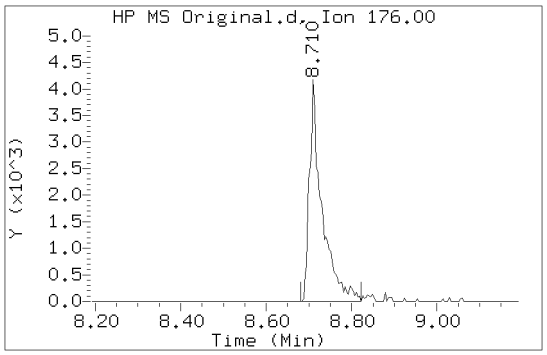
AFTER

MASS
174
AREA
9262
HEIGHT
3838
15-Jul-2022
12:20
ALSHS
Ser



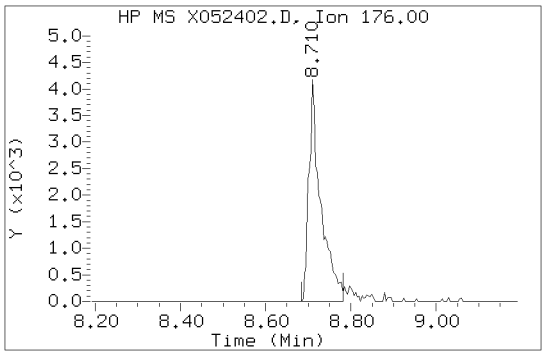
BEFORE

MASS
49
AREA
8039
HEIGHT
4374
24-May-2022
11:44
ALSHS
Server



AFTER

MASS
176
AREA
8113
HEIGHT
4173
15-Jul-2022
12:20
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052403.D Page 1
Report Date: 15-Jul-2022 12:20

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052403.D
Lab Smp Id: VSTD000.5 Client Smp ID: VSTD000.5
Inj Date : 24-MAY-2022 12:10
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.5;VSTD000.5;1;2;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\8260W.m
Meth Date : 15-Jul-2022 12:20 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 11:28 Cal File: X052402.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

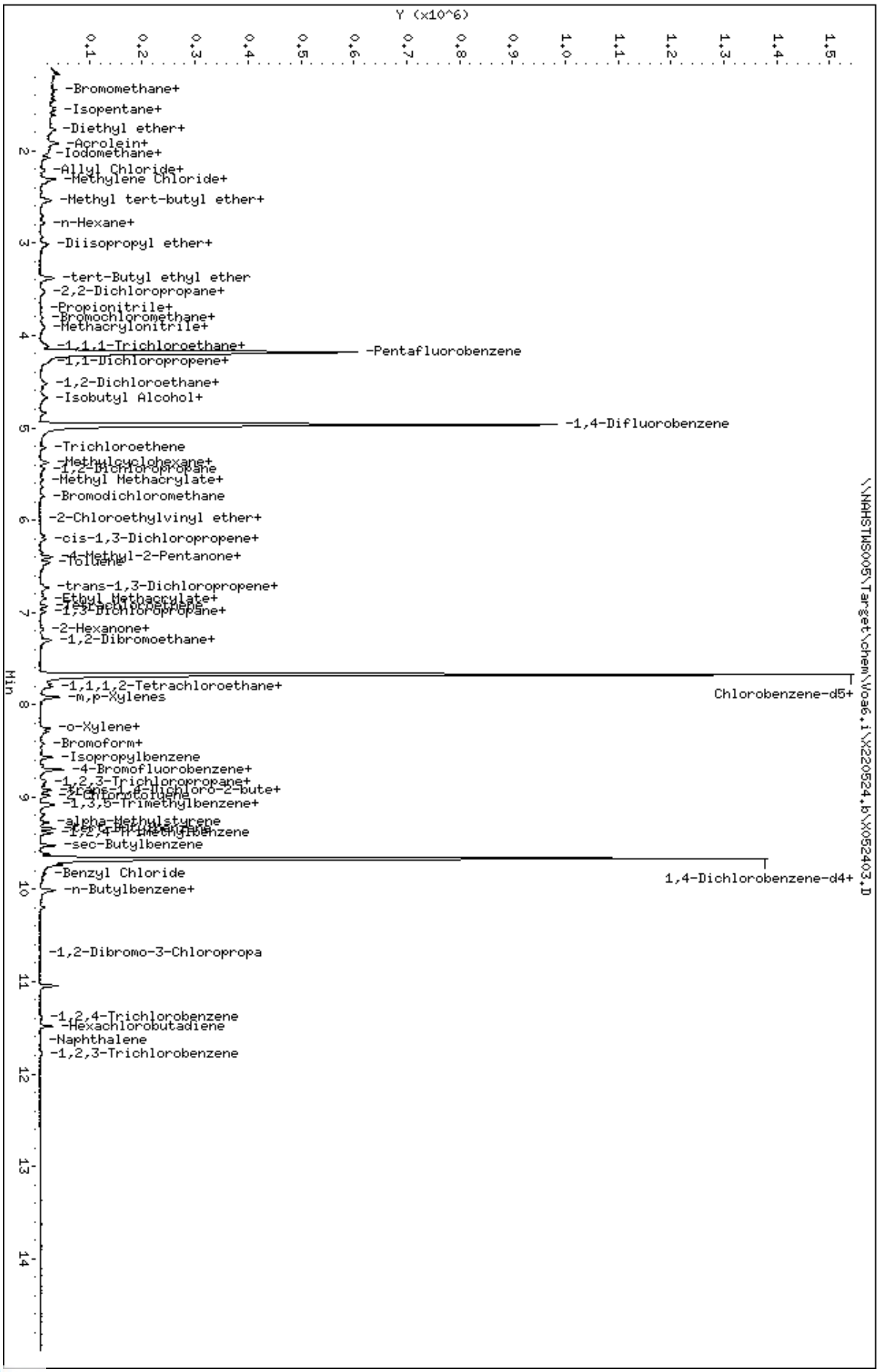
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.181	4.181	(1.000)	510275	50.0000	
*	36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	818945	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	740800	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	339402	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.485	4.485	(1.073)	4171	0.50000	0.33(aM)
$	69 4-Bromofluorobenzene	95	8.698	8.698	(1.134)	4188	0.50000	(aM)
$	30 Dibromofluoromethane	113	4.110	4.110	(0.983)	3406	0.50000	0.61(M)
$	48 Toluene-d8	98	6.401	6.401	(0.834)	11377	0.50000	0.58(aM)
	53 1,1,2-Trichloroethane	83	6.850	6.850	(0.893)	2537	0.50000	0.55(aM)
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	2977	0.50000	0.55(aM)
	33 1,2-Dichloroethane	62	4.567	4.567	(0.919)	4448	0.50000	0.54(a)
	27 cis-1,2-Dichloroethene	96	3.537	3.537	(0.846)	3100	0.50000	0.50(aM)
	17 Methylene Chloride	84	2.307	2.307	(0.552)	3589	0.50000	0.55(aM)
	38 Trichloroethene	130	5.216	5.216	(1.050)	3067	0.50000	0.49(aM)
	5 Vinyl Chloride	62	1.145	1.145	(0.274)	3859	0.50000	0.53(aM)

QC Flag Legend

a - Target compound detected but, quantitated amount

Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052403.D
Date : 24-MAY-2022 12:10
Client ID: VSTD000.5
Sample Info: VSTD000.5;VSTD000.5;1;2;
Purge Volume: 5.0
Column phase: DB624

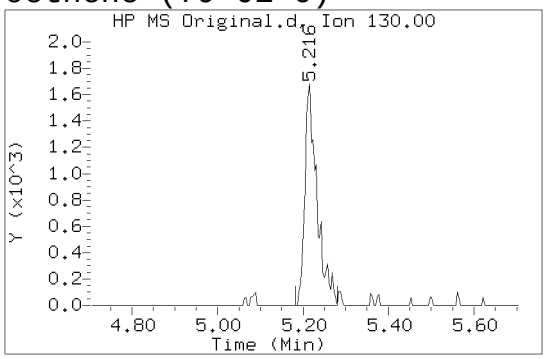
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052403.D
Inj Date : 24-MAY-2022 12:10
InstruID : voa6.i
LabSampID : VSTD000.5

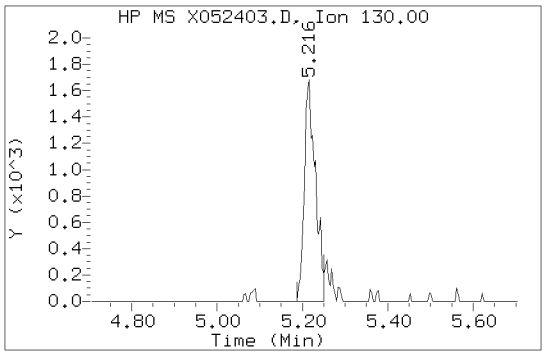
Trichloroethene (79-01-6)

Reason Code:

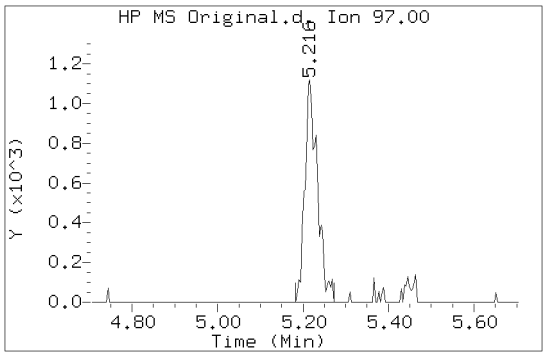
BEFORE
MASS
75
AREA
4730
HEIGHT
1690
09-Jun-2022
16:42
linh
pham



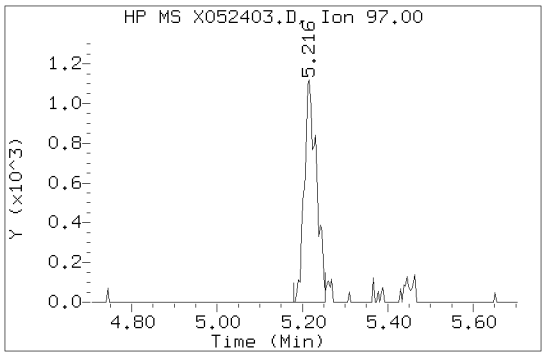
AFTER
MASS
130
AREA
3067
HEIGHT
1683
15-Jul-2022
12:20
linh
pham



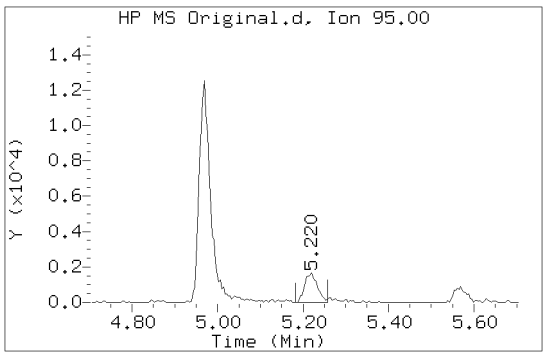
BEFORE
MASS
110
AREA
1935
HEIGHT
885
09-Jun-2022
16:42
linh
pham



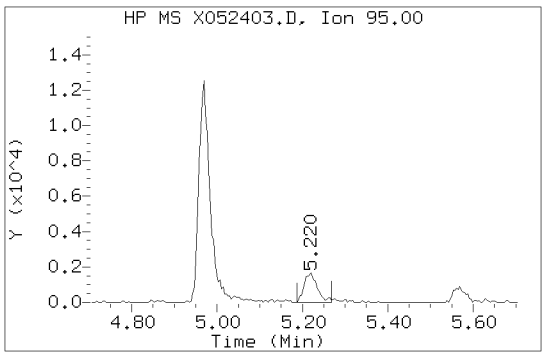
AFTER
MASS
97
AREA
2228
HEIGHT
1119
15-Jul-2022
12:20
linh
pham



BEFORE
MASS
77
AREA
1630
HEIGHT
737
09-Jun-2022
16:42
linh
pham



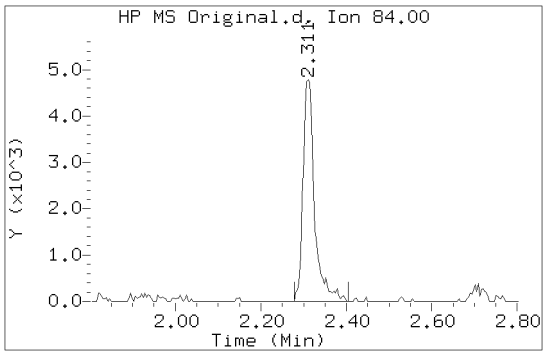
AFTER
MASS
95
AREA
3641
HEIGHT
1660
15-Jul-2022
12:20
linh
pham



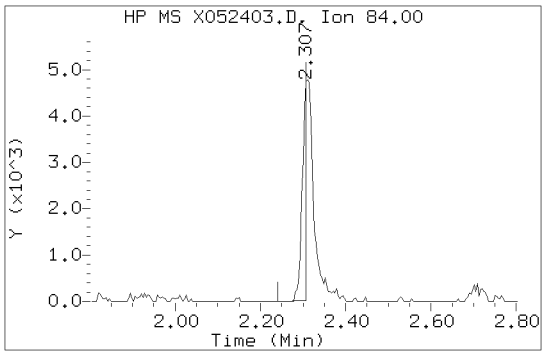
Methylene Chloride (75-09-2)

Reason Code:

BEFORE
MASS
93
AREA
2341
HEIGHT
1251
09-Jun-2022
16:42
linh
pham



AFTER
MASS
84
AREA
3589
HEIGHT
4733
15-Jul-2022
12:20
linh
pham

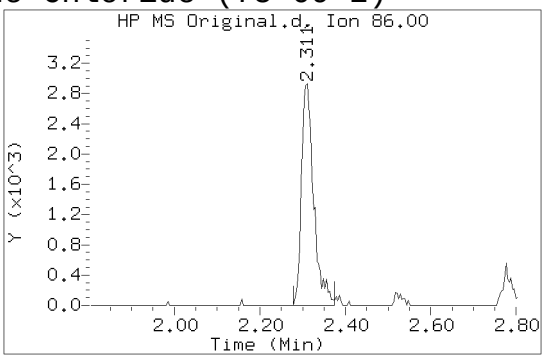


Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052403.D
Inj Date : 24-MAY-2022 12:10
InstruID : voa6.i
LabSampID : VSTD000.5

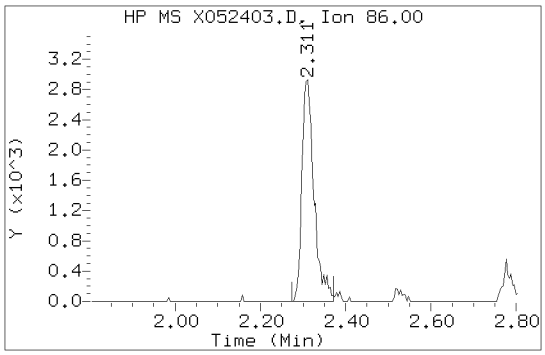
Methylene Chloride (75-09-2)

Reason Code:

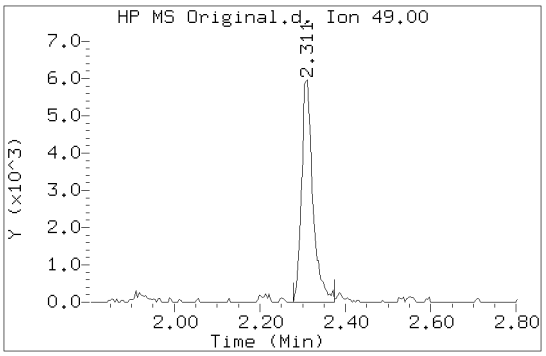
BEFORE
MASS
95
AREA
1750
HEIGHT
902
09-Jun-2022
16:42
linh
pham



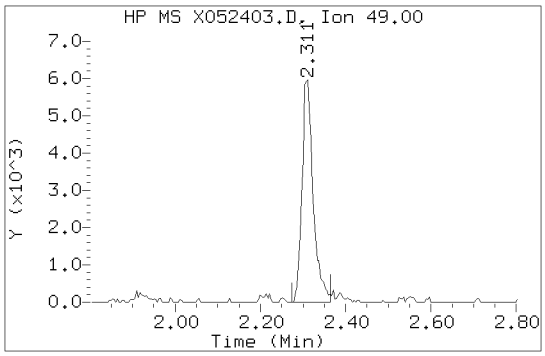
AFTER
MASS
86
AREA
5901
HEIGHT
2929
15-Jul-2022
12:20
linh
pham



BEFORE
MASS
174
AREA
2070
HEIGHT
1242
09-Jun-2022
16:42
linh
pham



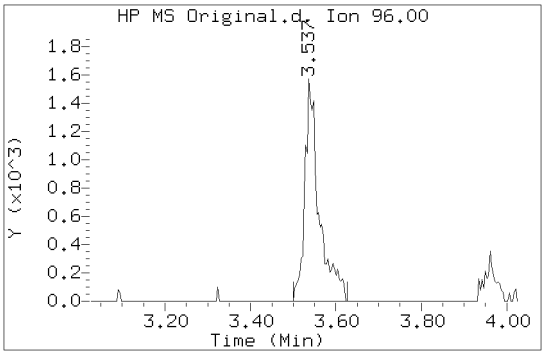
AFTER
MASS
49
AREA
11128
HEIGHT
5962
15-Jul-2022
12:20
linh
pham



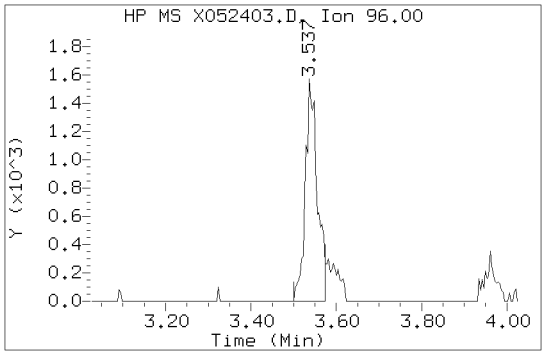
cis-1,2-Dichloroethene (156-59-2)

Reason Code:

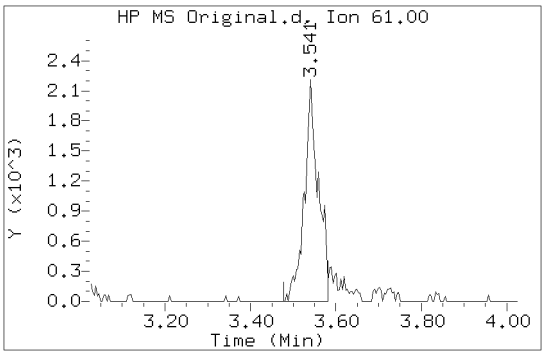
BEFORE
MASS
107
AREA
3297
HEIGHT
1738
09-Jun-2022
16:42
linh
pham



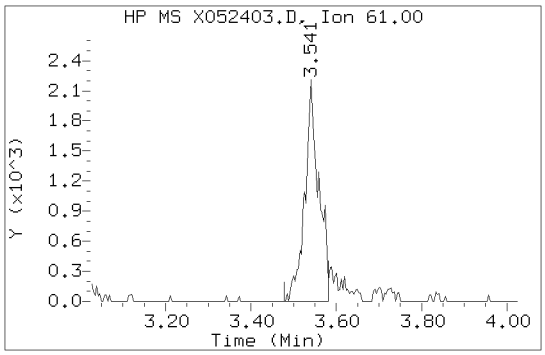
AFTER
MASS
96
AREA
3100
HEIGHT
1571
15-Jul-2022
12:20
linh
pham



BEFORE
MASS
109
AREA
2941
HEIGHT
1369
09-Jun-2022
16:42
linh
pham



AFTER
MASS
61
AREA
5064
HEIGHT
2211
15-Jul-2022
12:20
linh
pham



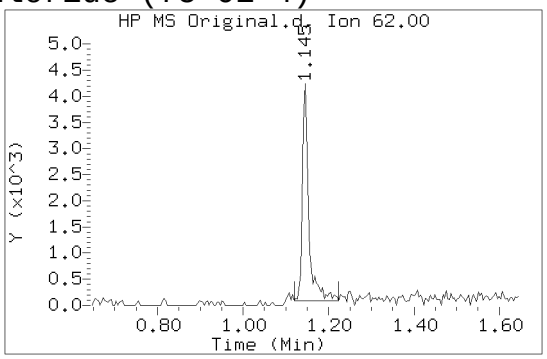
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052403.D
Inj Date : 24-MAY-2022 12:10
InstruID : voa6.i
LabSampID : VSTD000.5

Vinyl Chloride (75-01-4)

Reason Code:

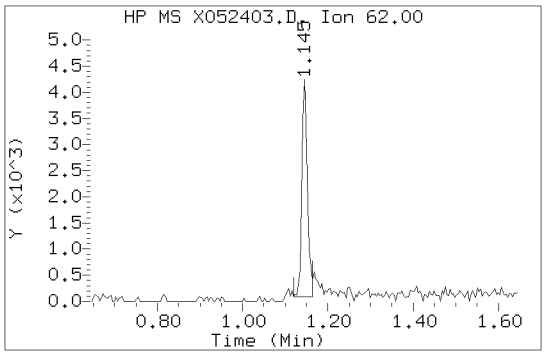
BEFORE

MASS
96
AREA
3022
HEIGHT
1557
09-Jun-2022
16:42
linh
pham



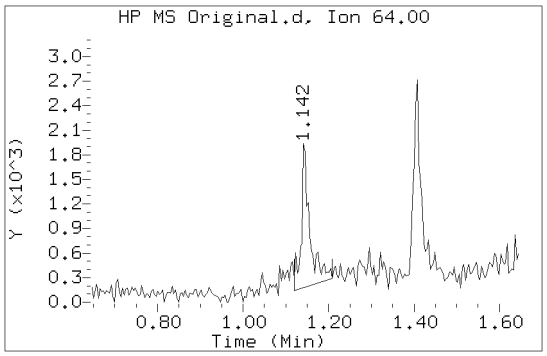
AFTER

MASS
62
AREA
3859
HEIGHT
4161
15-Jul-2022
12:20
linh
pham



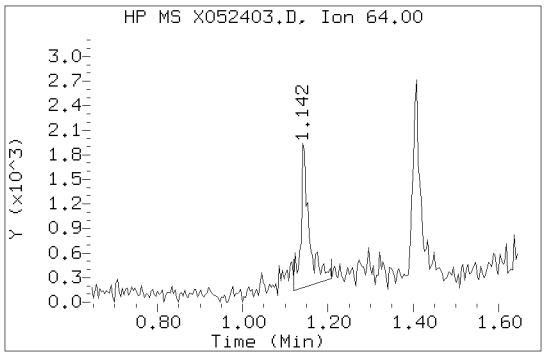
BEFORE

MASS
61
AREA
4246
HEIGHT
2020
09-Jun-2022
16:42
linh
pham



AFTER

MASS
64
AREA
2454
HEIGHT
1764
15-Jul-2022
12:20
linh
pham

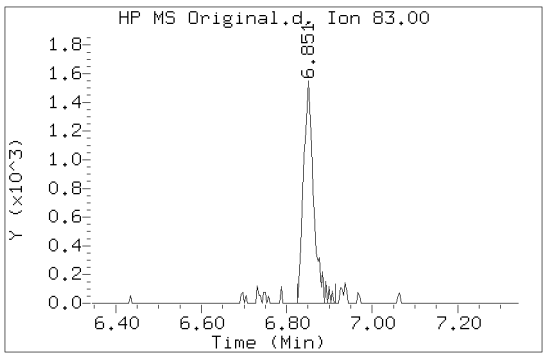


1,1,2-Trichloroethane (79-00-5)

Reason Code:

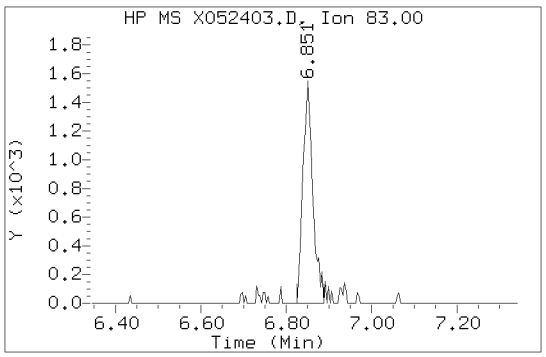
BEFORE

MASS
131
AREA
3246
HEIGHT
2441
09-Jun-2022
16:42
linh
pham



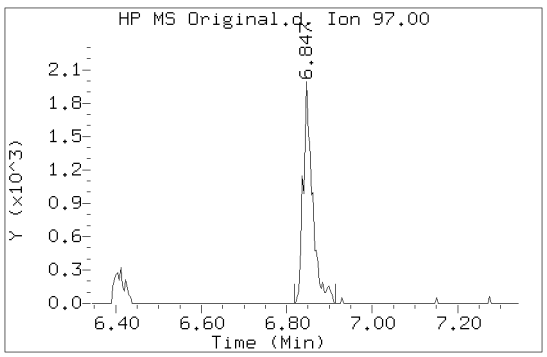
AFTER

MASS
83
AREA
2537
HEIGHT
1550
15-Jul-2022
12:20
linh
pham



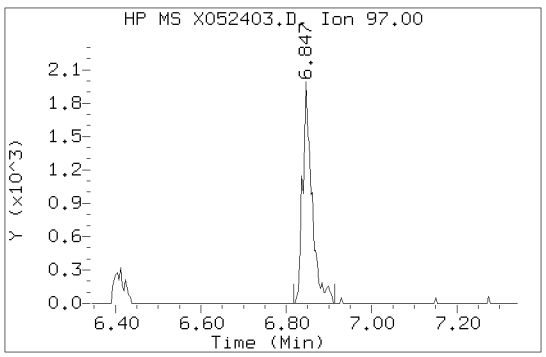
BEFORE

MASS
133
AREA
3041
HEIGHT
1996
09-Jun-2022
16:42
linh
pham



AFTER

MASS
97
AREA
3082
HEIGHT
1993
15-Jul-2022
12:20
linh
pham

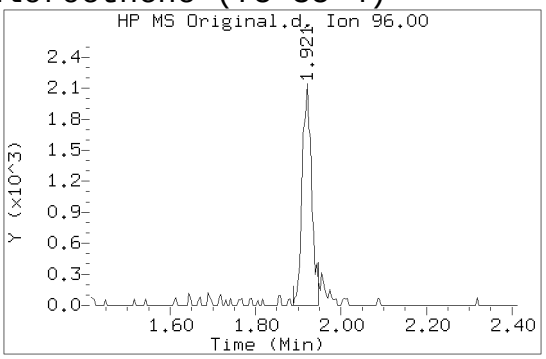


Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052403.D
Inj Date : 24-MAY-2022 12:10
InstruID : voa6.i
LabSampID : VSTD000.5

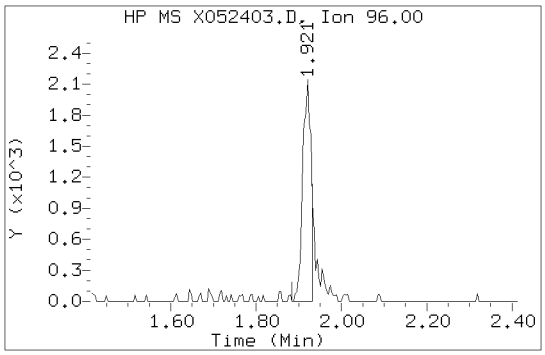
1,1-Dichloroethene (75-35-4)

Reason Code:

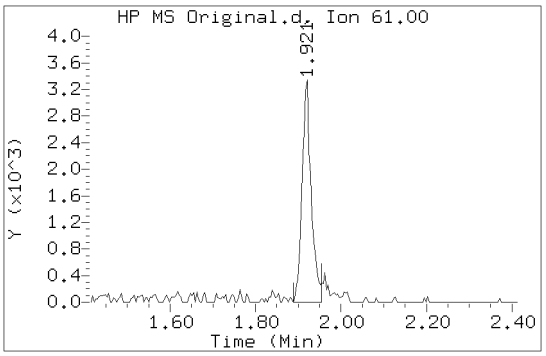
BEFORE
MASS
97
AREA
4955
HEIGHT
1941
09-Jun-2022
16:42
linh
pham



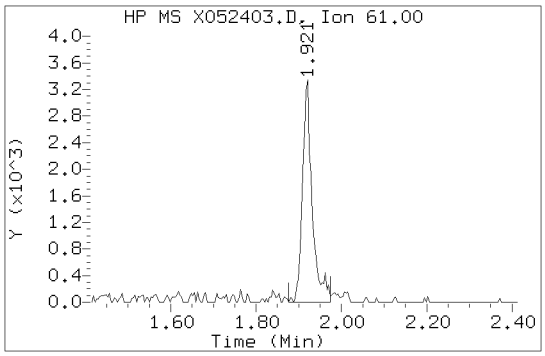
AFTER
MASS
96
AREA
2977
HEIGHT
2143
15-Jul-2022
12:20
linh
pham



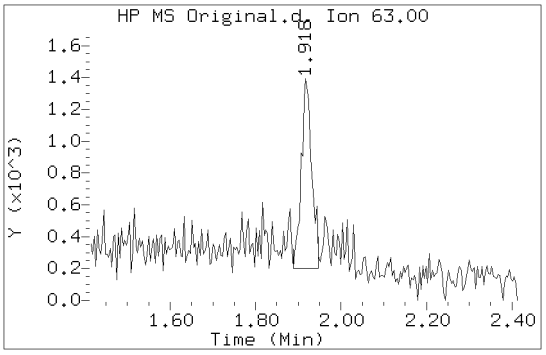
BEFORE
MASS
99
AREA
3158
HEIGHT
1349
09-Jun-2022
16:42
linh
pham



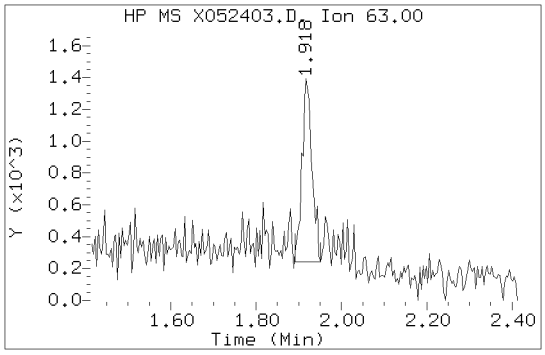
AFTER
MASS
61
AREA
5399
HEIGHT
3344
15-Jul-2022
12:20
linh
pham



BEFORE
MASS
61
AREA
1234
HEIGHT
988
09-Jun-2022
16:42
linh
pham



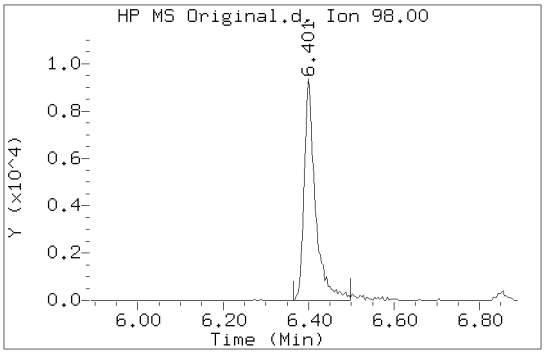
AFTER
MASS
63
AREA
1917
HEIGHT
1152
15-Jul-2022
12:20
linh
pham



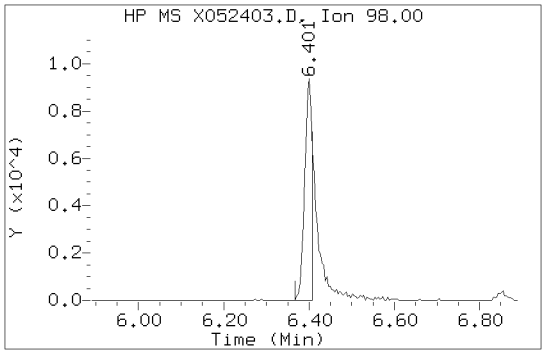
Toluene-d8 (2037-26-5)

Reason Code:

BEFORE
MASS
83
AREA
2617
HEIGHT
1550
09-Jun-2022
16:42
linh
pham



AFTER
MASS
98
AREA
11377
HEIGHT
9370
15-Jul-2022
12:20
linh
pham



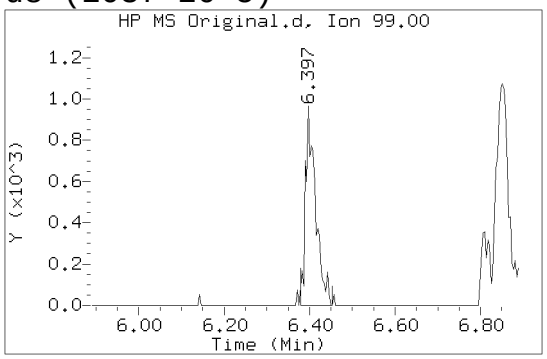
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052403.D
Inj Date : 24-MAY-2022 12:10
InstruID : voa6.i
LabSampID : VSTD000.5

Toluene-d8 (2037-26-5)

Reason Code:

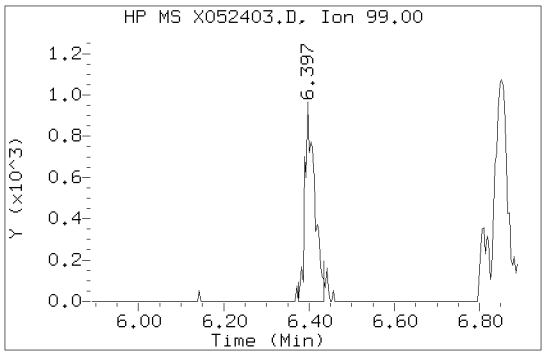
BEFORE

MASS
97
AREA
3082
HEIGHT
1993
09-Jun-2022
16:42
linh
pham



AFTER

MASS
99
AREA
1551
HEIGHT
966
15-Jul-2022
12:20
linh
pham

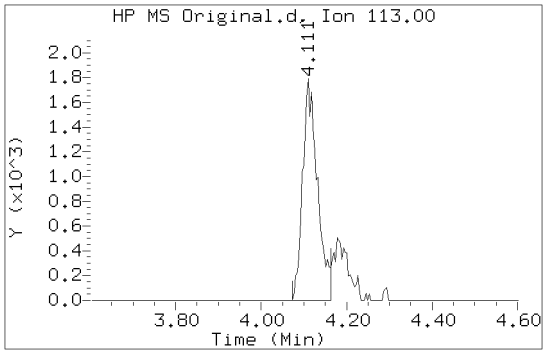


Dibromofluoromethane (1868-53-7)

Reason Code:

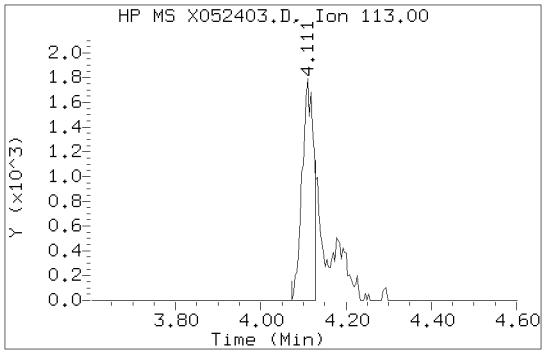
BEFORE

MASS
63
AREA
6402
HEIGHT
2679
09-Jun-2022
16:42
linh
pham



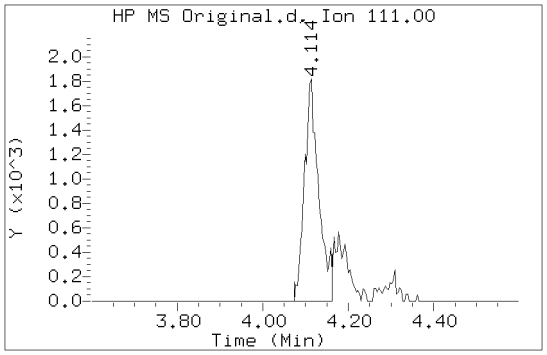
AFTER

MASS
113
AREA
3406
HEIGHT
1791
15-Jul-2022
12:20
linh
pham



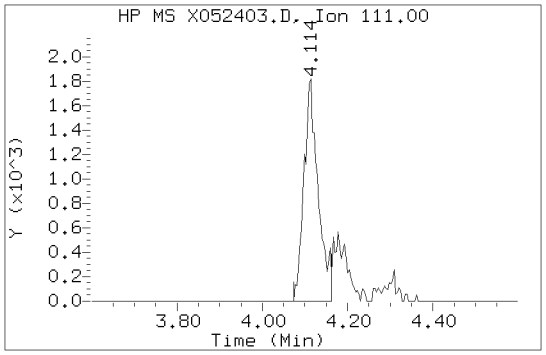
BEFORE

MASS
65
AREA
1344
HEIGHT
829
09-Jun-2022
16:42
linh
pham



AFTER

MASS
111
AREA
4280
HEIGHT
1818
15-Jul-2022
12:20
linh
pham

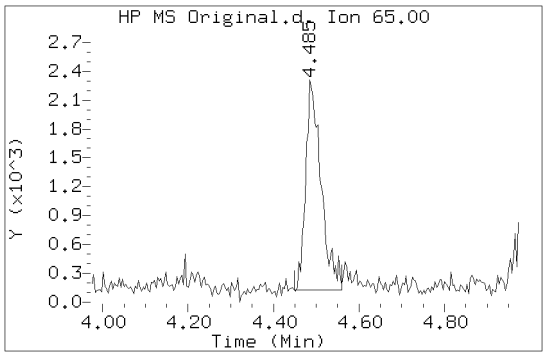


1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

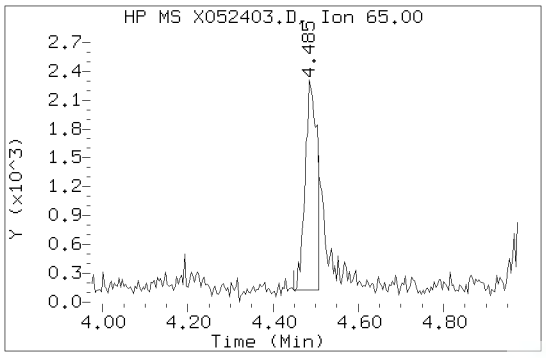
BEFORE

MASS
96
AREA
3339
HEIGHT
2143
09-Jun-2022
16:42
linh
pham



AFTER

MASS
65
AREA
4171
HEIGHT
2186
15-Jul-2022
12:20
linh
pham

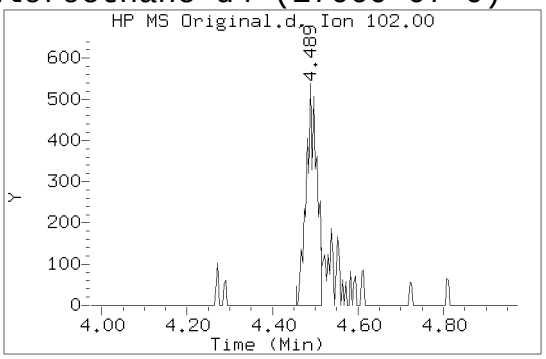


Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052403.D
Inj Date : 24-MAY-2022 12:10
InstruID : voa6.i
LabSampID : VSTD000.5

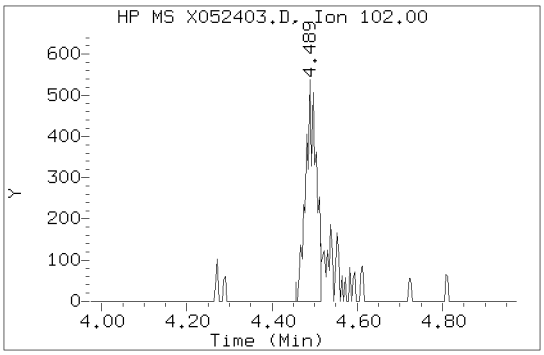
1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE
MASS
61
AREA
5088
HEIGHT
3344
09-Jun-2022
16:42
linh
pham



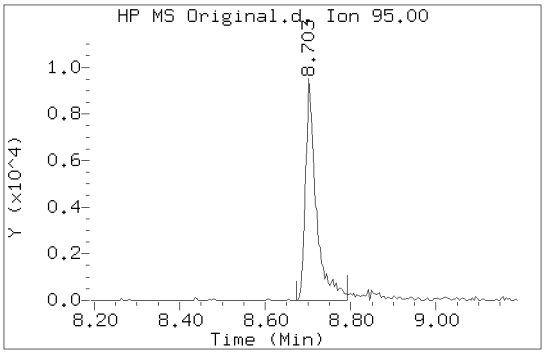
AFTER
MASS
102
AREA
924
HEIGHT
538
15-Jul-2022
12:20
linh
pham



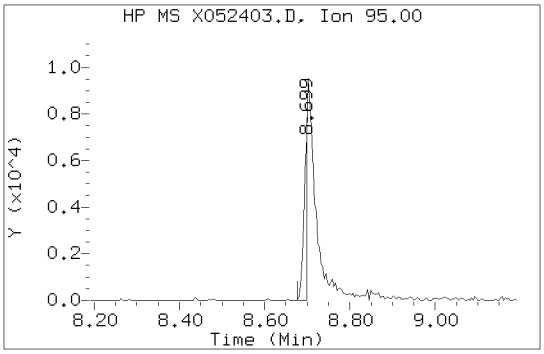
4-Bromofluorobenzene (460-00-4)

Reason Code:

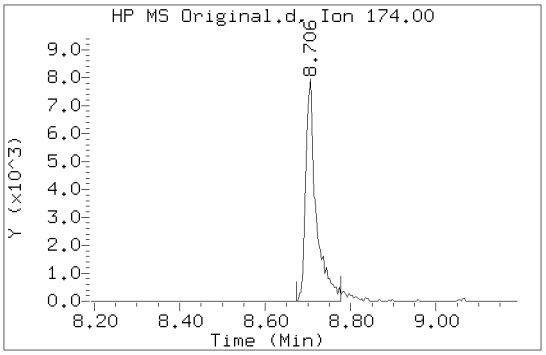
BEFORE
MASS
130
AREA
3353
HEIGHT
1683
09-Jun-2022
16:42
linh
pham



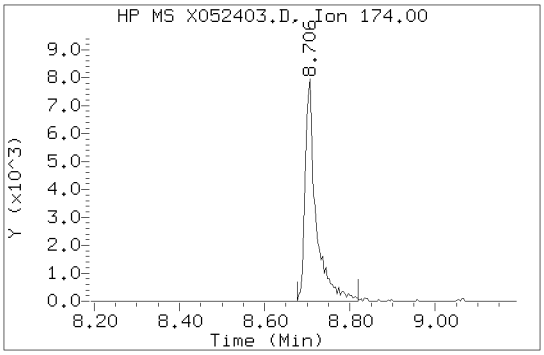
AFTER
MASS
95
AREA
4188
HEIGHT
7013
15-Jul-2022
12:20
linh
pham



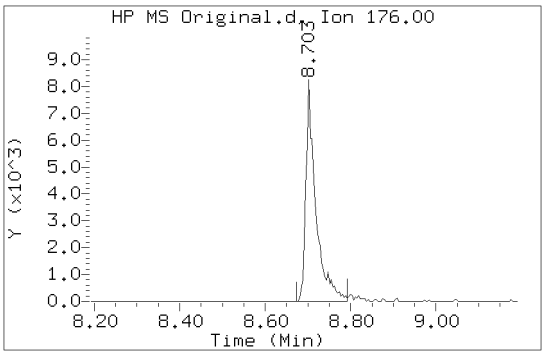
BEFORE
MASS
97
AREA
2316
HEIGHT
1119
09-Jun-2022
16:42
linh
pham



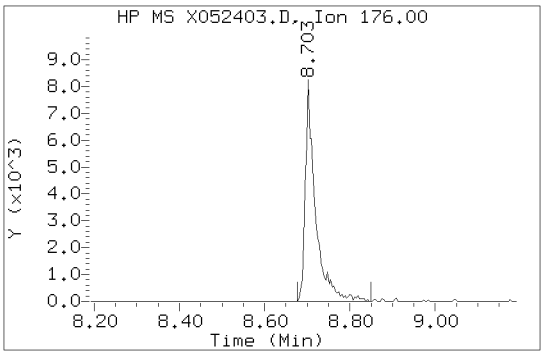
AFTER
MASS
174
AREA
14181
HEIGHT
7958
15-Jul-2022
12:20
linh
pham



BEFORE
MASS
95
AREA
3498
HEIGHT
1660
09-Jun-2022
16:42
linh
pham



AFTER
MASS
176
AREA
13720
HEIGHT
8256
15-Jul-2022
12:20
linh
pham



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052404.D Page 1
Report Date: 15-Jul-2022 12:20

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052404.D
Lab Smp Id: VSTD001 Client Smp ID: VSTD001
Inj Date : 24-MAY-2022 12:30
Operator : PC Inst ID: voa6.i
Smp Info : VSTD001;VSTD001;1;3;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\8260W.m
Meth Date : 15-Jul-2022 12:20 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 12:10 Cal File: X052403.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

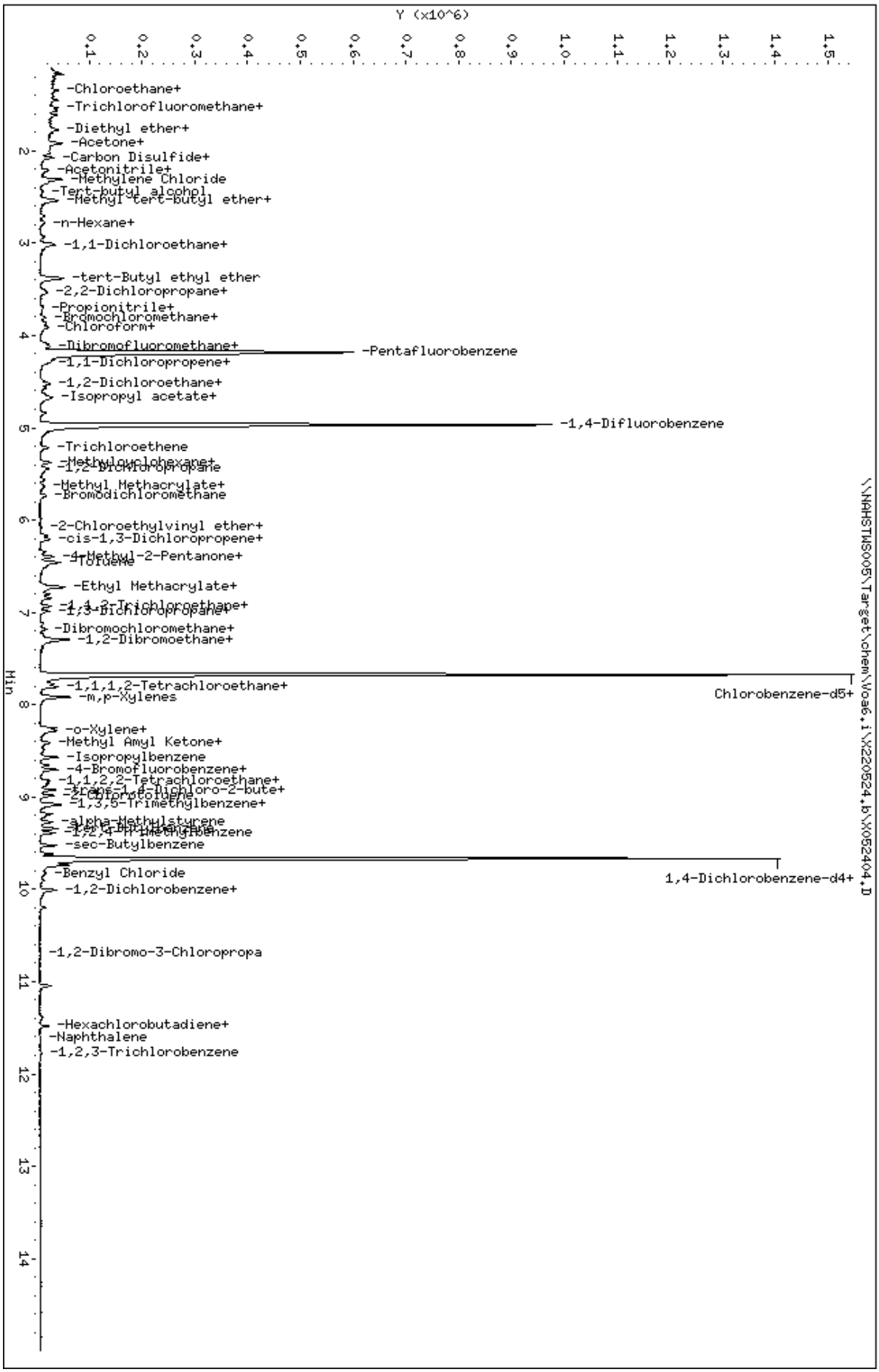
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	520334	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	816004	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	744880	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	339757	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.496	4.496	(1.074)	6545	1.00000	0.69(a)
$ 69 4-Bromofluorobenzene	95	8.706	8.706	(1.135)	9115	1.00000	0.44(aM)
$ 30 Dibromofluoromethane	113	4.110	4.110	(0.982)	4587	1.00000	0.81
$ 48 Toluene-d8	98	6.401	6.401	(0.834)	18215	1.00000	0.92(a)
53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	4494	1.00000	0.97(a)
11 1,1-Dichloroethene	96	1.917	1.917	(0.458)	4582	1.00000	0.84(a)
33 1,2-Dichloroethane	62	4.571	4.571	(0.920)	7133	1.00000	0.87(a)
27 cis-1,2-Dichloroethene	96	3.540	3.540	(0.846)	5389	1.00000	0.85(a)
17 Methylene Chloride	84	2.307	2.307	(0.551)	7709	1.00000	1.17(aM)
38 Trichloroethene	130	5.216	5.216	(1.050)	5513	1.00000	0.89(a)
5 Vinyl Chloride	62	1.145	1.145	(0.274)	6347	1.00000	0.86(a)

QC Flag Legend

a - Target compound detected but, quantitated amount

Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052404.D
Date : 24-MAY-2022 12:30
Client ID: VSTD001
Sample Info: VSTD001;VSTD001;1;3;
Purge Volume: 5.0
Column phase: DB624

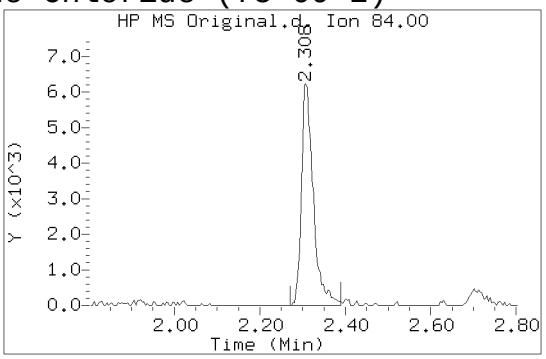
\\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052404.D

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052404.D
Inj Date : 24-MAY-2022 12:30
InstruID : voa6.i
LabSampID : VSTD001

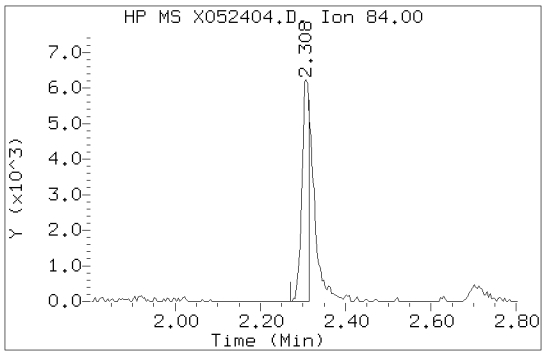
Methylene Chloride (75-09-2)

BEFORE
MASS
93
AREA
3655
HEIGHT
2067
09-Jun-2022
16:42
linh
pham

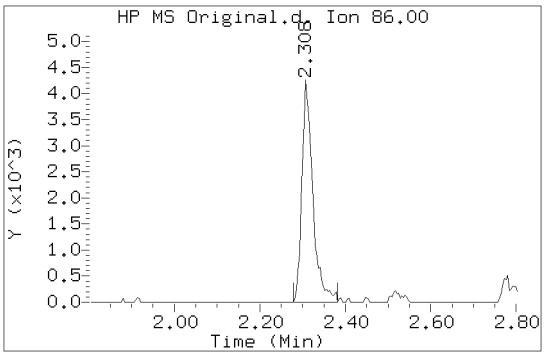


Reason Code:

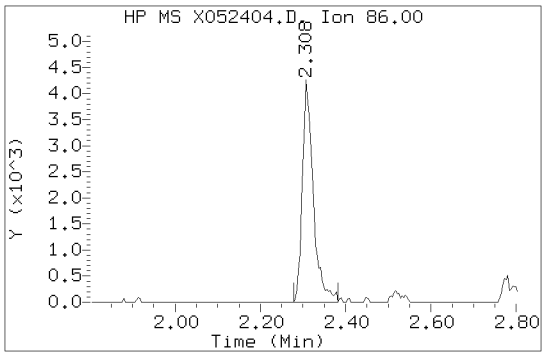
AFTER
MASS
84
AREA
7709
HEIGHT
6234
15-Jul-2022
12:20
linh
pham



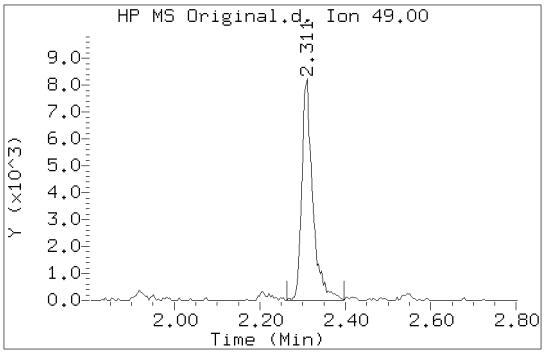
BEFORE
MASS
95
AREA
2997
HEIGHT
1695
09-Jun-2022
16:42
linh
pham



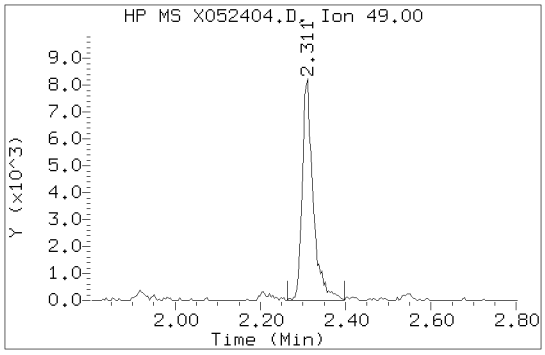
AFTER
MASS
86
AREA
7732
HEIGHT
4262
15-Jul-2022
12:20
linh
pham



BEFORE
MASS
174
AREA
3341
HEIGHT
1661
09-Jun-2022
16:42
linh
pham

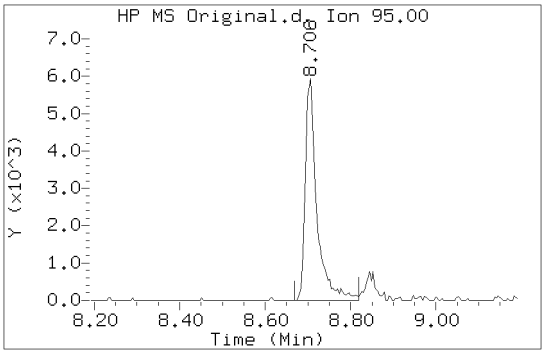


AFTER
MASS
49
AREA
14961
HEIGHT
8243
15-Jul-2022
12:20
linh
pham



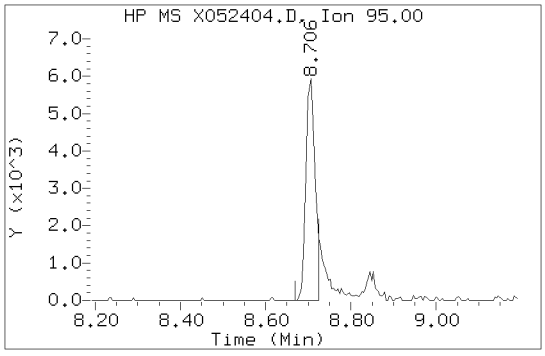
4-Bromofluorobenzene (460-00-4)

BEFORE
MASS
130
AREA
5513
HEIGHT
2570
09-Jun-2022
16:42
linh
pham



Reason Code:

AFTER
MASS
95
AREA
9115
HEIGHT
5935
15-Jul-2022
12:20
linh
pham



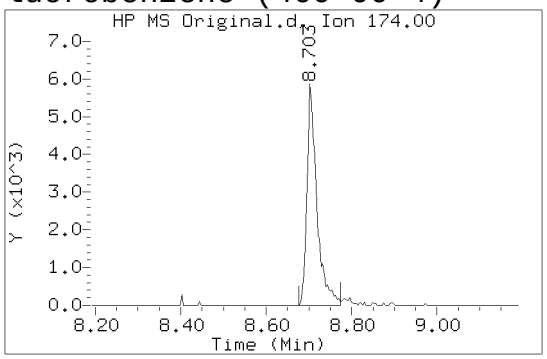
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052404.D
Inj Date : 24-MAY-2022 12:30
InstruID : voa6.i
LabSampID : VSTD001

4-Bromofluorobenzene (460-00-4)

Reason Code:

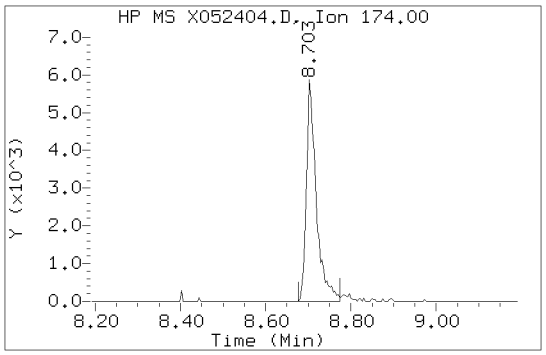
BEFORE

MASS
97
AREA
3348
HEIGHT
1753
09-Jun-2022
16:42
linh
pham



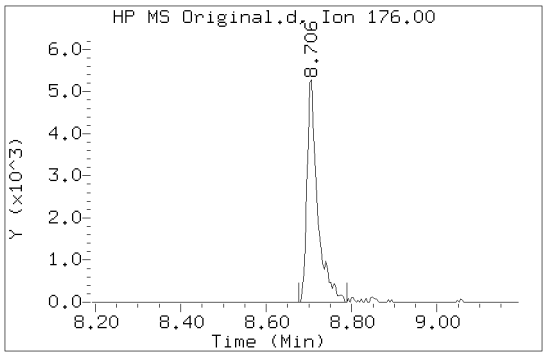
AFTER

MASS
174
AREA
9528
HEIGHT
5873
15-Jul-2022
12:20
linh
pham



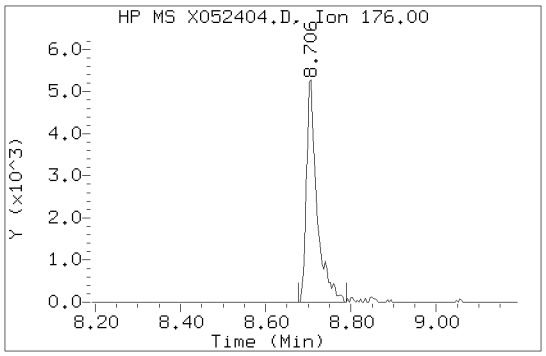
BEFORE

MASS
95
AREA
5169
HEIGHT
2986
09-Jun-2022
16:42
linh
pham



AFTER

MASS
176
AREA
9192
HEIGHT
5277
15-Jul-2022
12:20
linh
pham



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052405.D Page 1
Report Date: 15-Jul-2022 12:20

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052405.D
Lab Smp Id: VSTD002 Client Smp ID: VSTD002
Inj Date : 24-MAY-2022 12:51
Operator : PC Inst ID: voa6.i
Smp Info : VSTD002;VSTD002;1;4;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\8260W.m
Meth Date : 15-Jul-2022 12:20 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 12:30 Cal File: X052404.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

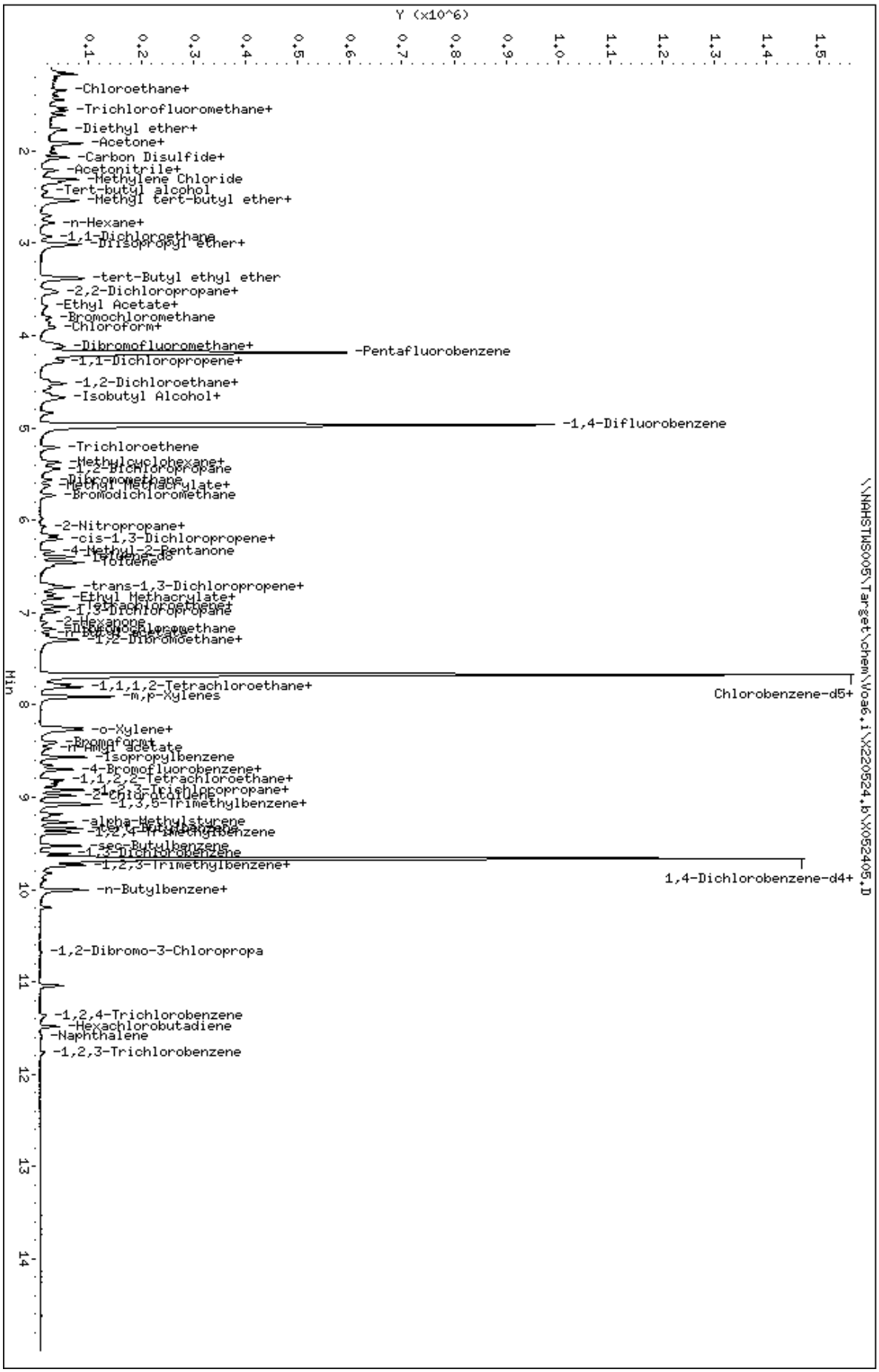
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	506499	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	823111	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	753017	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	340249	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.485	4.485	(1.072)	13694	2.00000	1.87(aM)
$ 69 4-Bromofluorobenzene	95	8.702	8.702	(1.134)	17686	2.00000	1.65(aM)
$ 30 Dibromofluoromethane	113	4.106	4.106	(0.981)	11150	2.00000	2.07
$ 48 Toluene-d8	98	6.393	6.393	(0.833)	40470	2.00000	2.03(a)
53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	9391	2.00000	2.01(a)
11 1,1-Dichloroethene	96	1.917	1.917	(0.458)	11701	2.00000	2.21(a)
33 1,2-Dichloroethane	62	4.567	4.567	(0.919)	15433	2.00000	1.87(a)
27 cis-1,2-Dichloroethene	96	3.537	3.537	(0.845)	12355	2.00000	2.02(a)
17 Methylene Chloride	84	2.307	2.307	(0.551)	12867	2.00000	2.01(aM)
38 Trichloroethene	130	5.212	5.212	(1.049)	12893	2.00000	2.08(a)
5 Vinyl Chloride	62	1.145	1.145	(0.274)	15090	2.00000	2.11(a)

QC Flag Legend

a - Target compound detected but, quantitated amount

Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052405.D
Date : 24-MAY-2022 12:51
Client ID: VSTD002
Sample Info: VSTD002;VSTD002;1;4;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

\\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052405.D

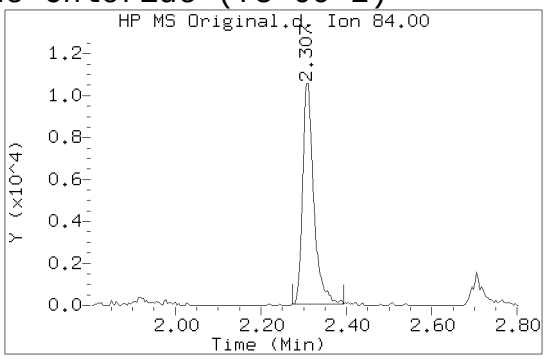
Page 1

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052405.D
Inj Date : 24-MAY-2022 12:51
InstruID : voa6.i
LabSampID : VSTD002

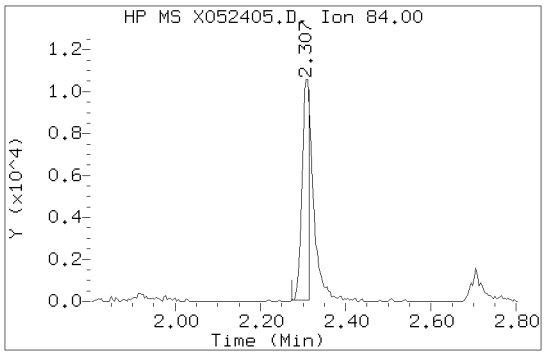
Methylene Chloride (75-09-2)

Reason Code:

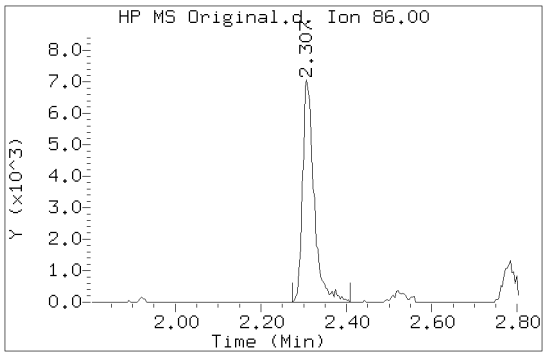
BEFORE
MASS
93
AREA
7735
HEIGHT
4035
09-Jun-2022
16:42
linh
pham



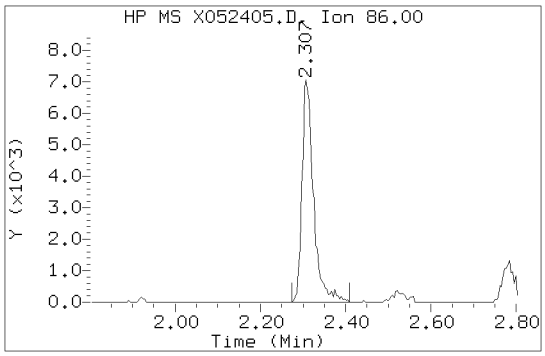
AFTER
MASS
84
AREA
12867
HEIGHT
10497
15-Jul-2022
12:20
linh
pham



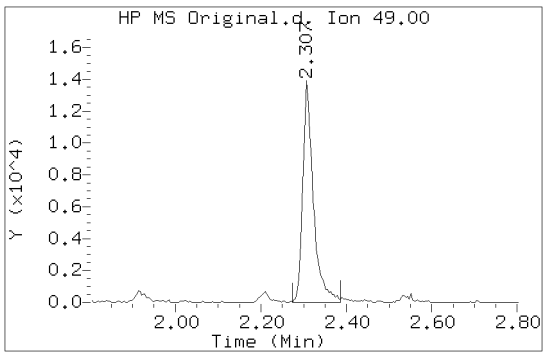
BEFORE
MASS
95
AREA
6481
HEIGHT
3356
09-Jun-2022
16:42
linh
pham



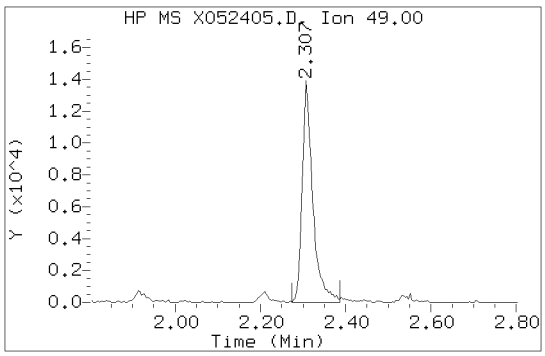
AFTER
MASS
86
AREA
13511
HEIGHT
7061
15-Jul-2022
12:20
linh
pham



BEFORE
MASS
174
AREA
7980
HEIGHT
4123
09-Jun-2022
16:42
linh
pham



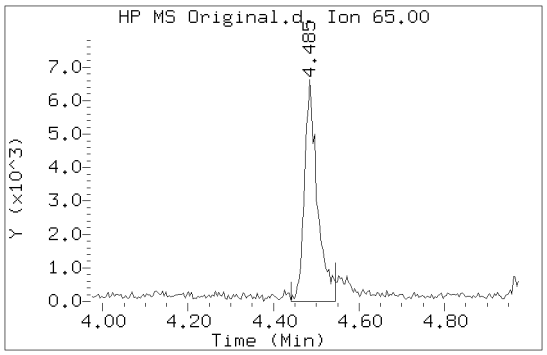
AFTER
MASS
49
AREA
24435
HEIGHT
13912
15-Jul-2022
12:20
linh
pham



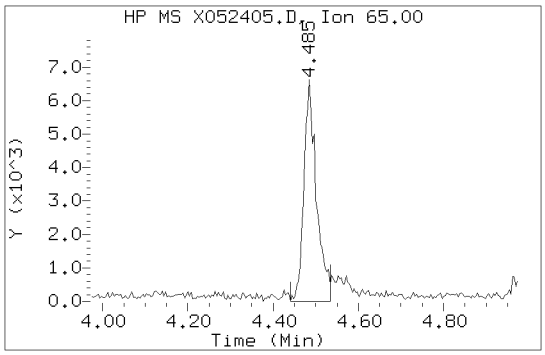
1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE
MASS
96
AREA
11701
HEIGHT
7057
09-Jun-2022
16:42
linh
pham



AFTER
MASS
65
AREA
13694
HEIGHT
6628
15-Jul-2022
12:20
linh
pham



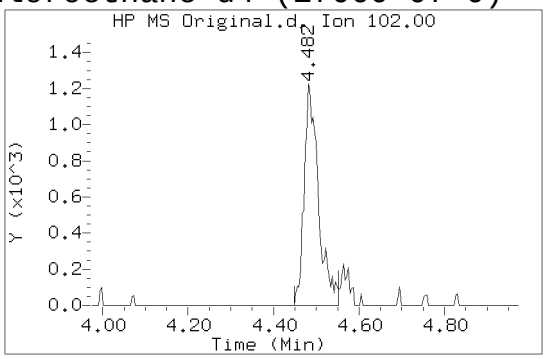
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052405.D
Inj Date : 24-MAY-2022 12:51
InstruID : voa6.i
LabSampID : VSTD002

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

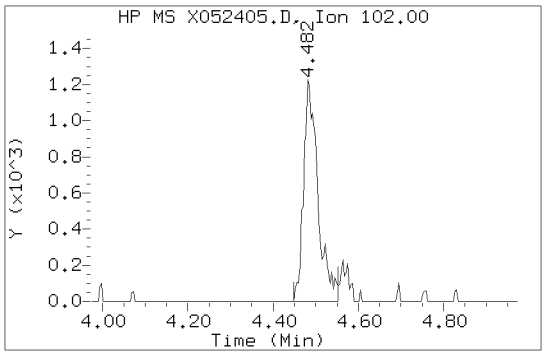
BEFORE

MASS
61
AREA
18435
HEIGHT
11023
09-Jun-2022
16:42
linh
pham



AFTER

MASS
102
AREA
2890
HEIGHT
1227
15-Jul-2022
12:20
linh
pham

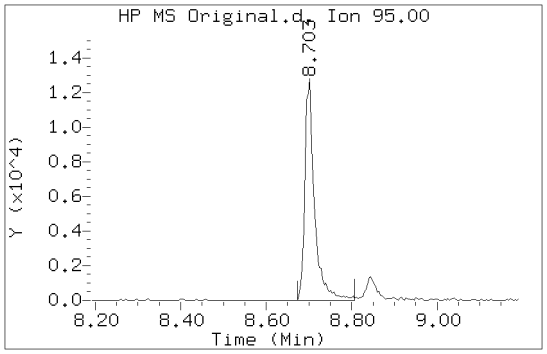


4-Bromofluorobenzene (460-00-4)

Reason Code:

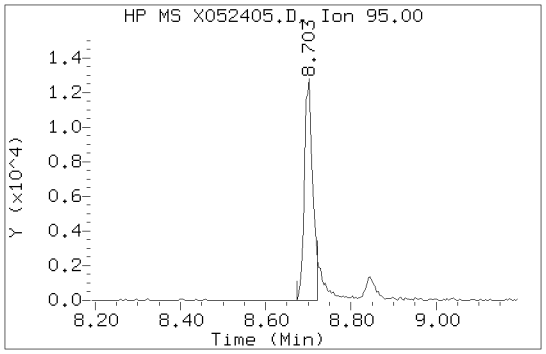
BEFORE

MASS
130
AREA
12893
HEIGHT
6384
09-Jun-2022
16:42
linh
pham



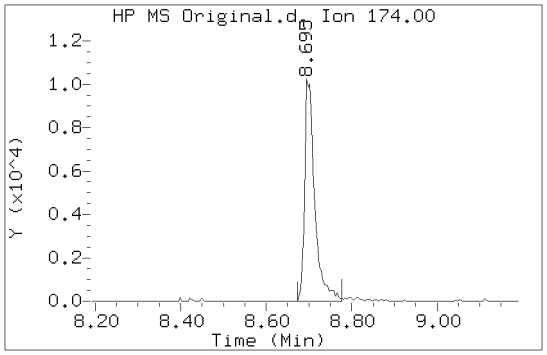
AFTER

MASS
95
AREA
17686
HEIGHT
12793
15-Jul-2022
12:20
linh
pham



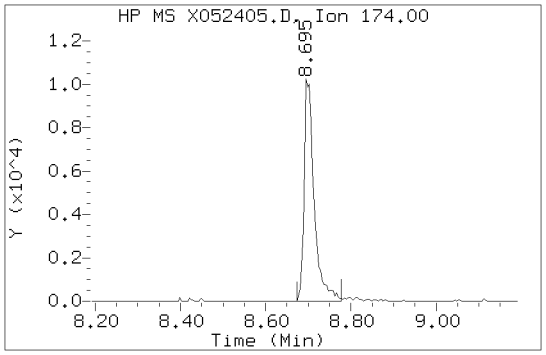
BEFORE

MASS
97
AREA
7964
HEIGHT
4033
09-Jun-2022
16:42
linh
pham



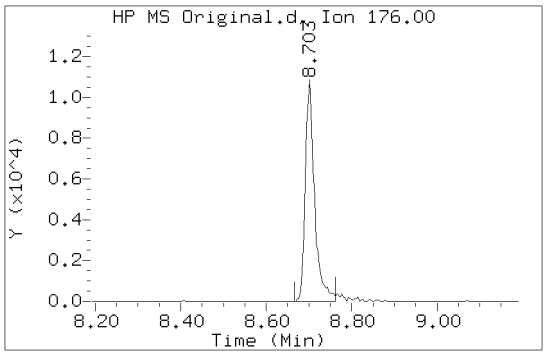
AFTER

MASS
174
AREA
17086
HEIGHT
10253
15-Jul-2022
12:20
linh
pham



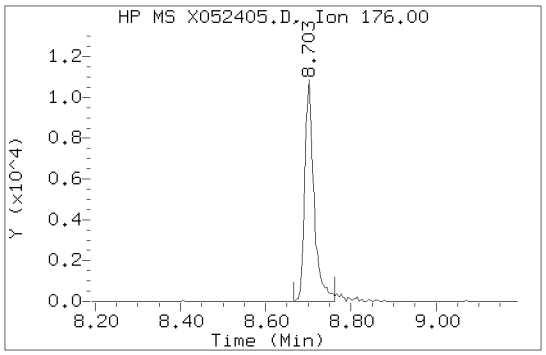
BEFORE

MASS
95
AREA
13139
HEIGHT
7283
09-Jun-2022
16:42
linh
pham



AFTER

MASS
176
AREA
16652
HEIGHT
10870
15-Jul-2022
12:20
linh
pham



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052406.D Page 1
Report Date: 15-Jul-2022 12:20

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052406.D
Lab Smp Id: VSTD005 Client Smp ID: VSTD005
Inj Date : 24-MAY-2022 13:12
Operator : PC Inst ID: voa6.i
Smp Info : VSTD005;VSTD005;1;5;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\8260W.m
Meth Date : 15-Jul-2022 12:20 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 12:51 Cal File: X052405.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

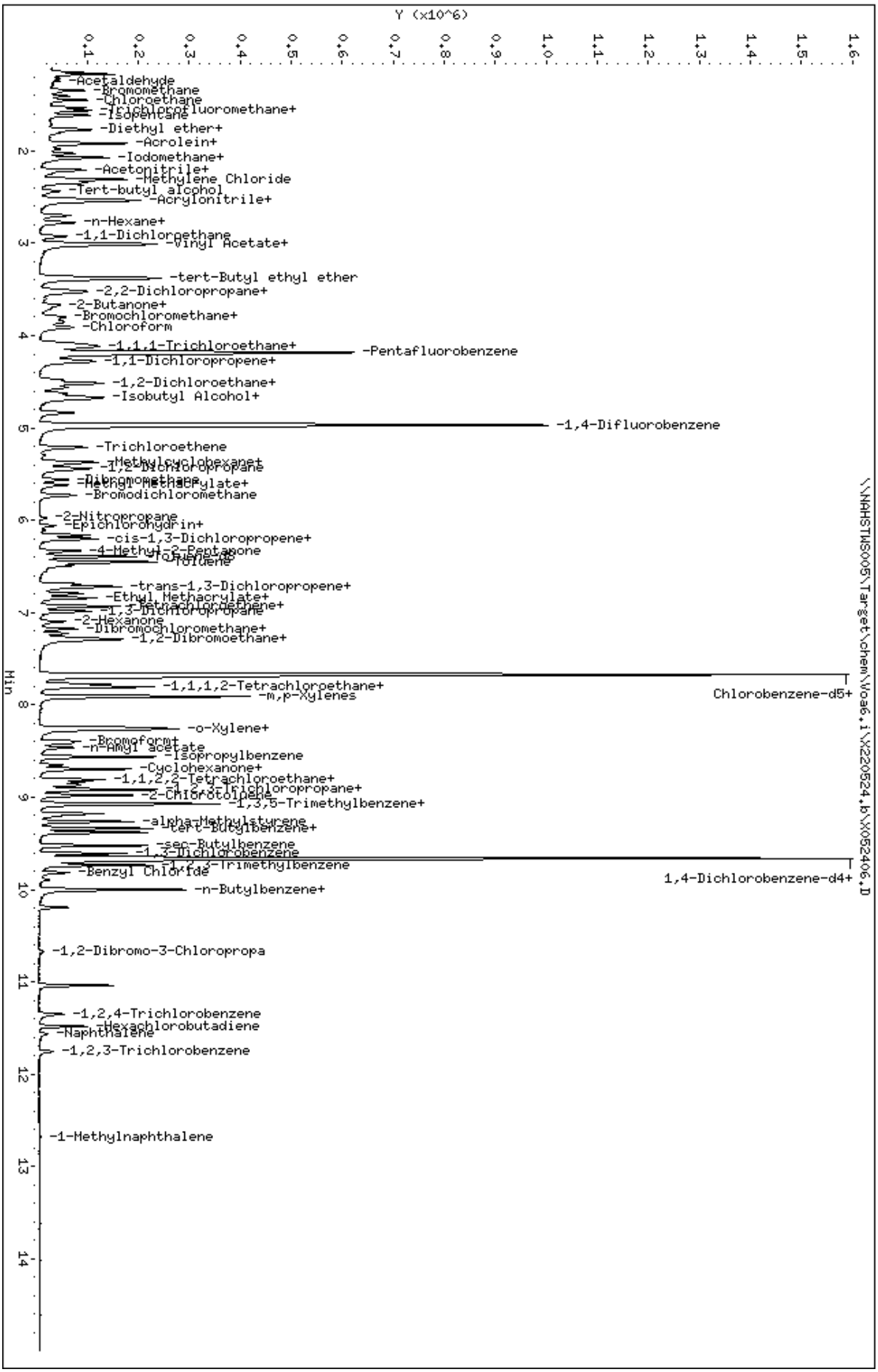
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.181	4.181	(1.000)	517817	50.0000	
*	36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	833465	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	758015	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	355376	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.481	4.481	(1.072)	36258	5.00000	5.38(M)
$	69 4-Bromofluorobenzene	95	8.695	8.695	(1.133)	48914	5.00000	6.09(M)
$	30 Dibromofluoromethane	113	4.103	4.103	(0.981)	29413	5.00000	5.38(M)
$	48 Toluene-d8	98	6.393	6.393	(0.833)	114070	5.00000	5.69
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	25426	5.00000	5.42
	11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	28012	5.00000	5.18
	33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	44721	5.00000	5.37
	27 cis-1,2-Dichloroethene	96	3.537	3.537	(0.846)	33095	5.00000	5.29
	17 Methylene Chloride	84	2.307	2.307	(0.552)	38537	5.00000	5.89
	38 Trichloroethene	130	5.212	5.212	(1.049)	33463	5.00000	5.34
	5 Vinyl Chloride	62	1.145	1.145	(0.274)	37791	5.00000	5.17

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\Woa6.i\X220524.b\X052406.D
Date : 24-MAY-2022 13:12
Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;5;
Purge Volume: 5.0
Column phase: DB624

\\NAHSTWS005\Target\chem\Woa6.i\X220524.b\X052406.D

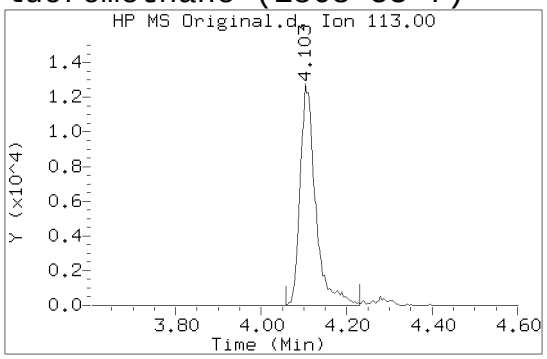
Instrument: woa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052406.D
Inj Date : 24-MAY-2022 13:12
InstruID : voa6.i
LabSampID : VSTD005

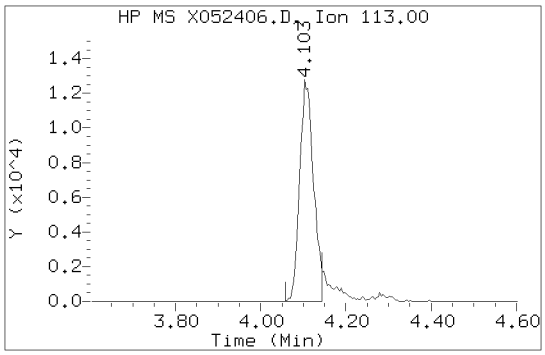
Dibromofluoromethane (1868-53-7)

Reason Code:

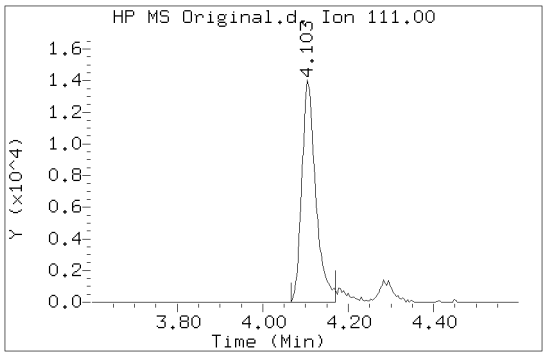
BEFORE
MASS
63
AREA
53792
HEIGHT
25984
09-Jun-2022
16:42
linh
pham



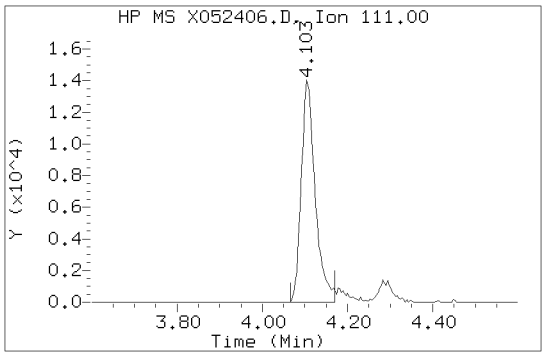
AFTER
MASS
113
AREA
29413
HEIGHT
12784
15-Jul-2022
12:20
linh
pham



BEFORE
MASS
65
AREA
17706
HEIGHT
8417
09-Jun-2022
16:42
linh
pham



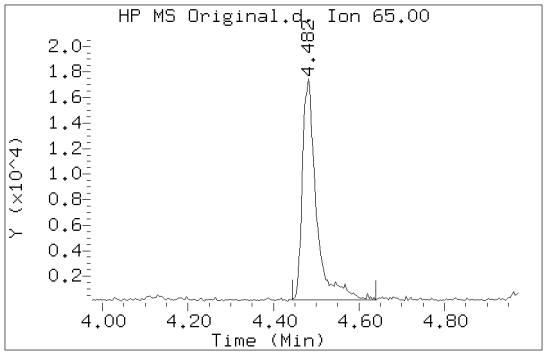
AFTER
MASS
111
AREA
32528
HEIGHT
14046
15-Jul-2022
12:20
linh
pham



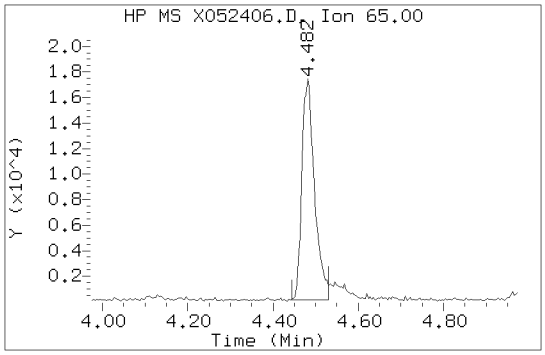
1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

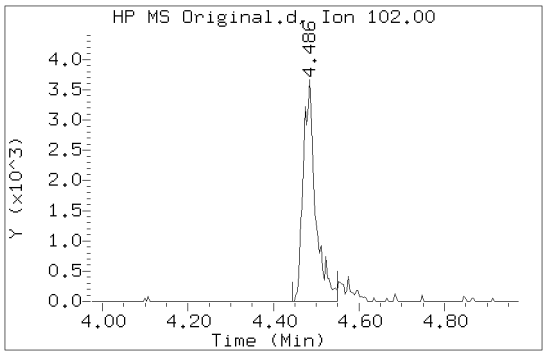
BEFORE
MASS
96
AREA
28012
HEIGHT
16744
09-Jun-2022
16:42
linh
pham



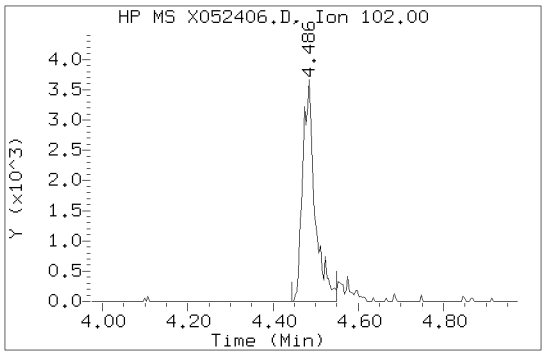
AFTER
MASS
65
AREA
36258
HEIGHT
17280
15-Jul-2022
12:20
linh
pham



BEFORE
MASS
61
AREA
47136
HEIGHT
27256
09-Jun-2022
16:42
linh
pham



AFTER
MASS
102
AREA
7479
HEIGHT
3667
15-Jul-2022
12:20
linh
pham



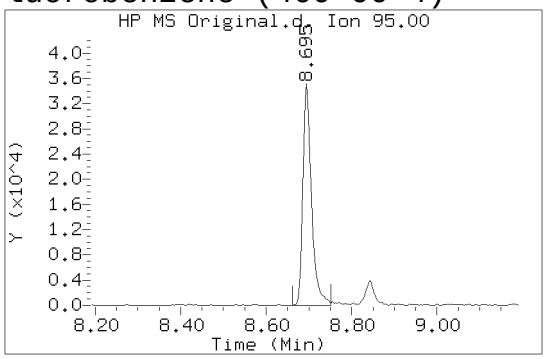
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052406.D
Inj Date : 24-MAY-2022 13:12
InstruID : voa6.i
LabSampID : VSTD005

4-Bromofluorobenzene (460-00-4)

Reason Code:

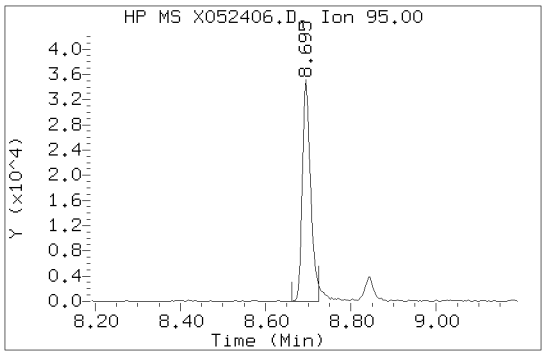
BEFORE

MASS
130
AREA
33463
HEIGHT
17776
09-Jun-2022
16:42
linh
pham



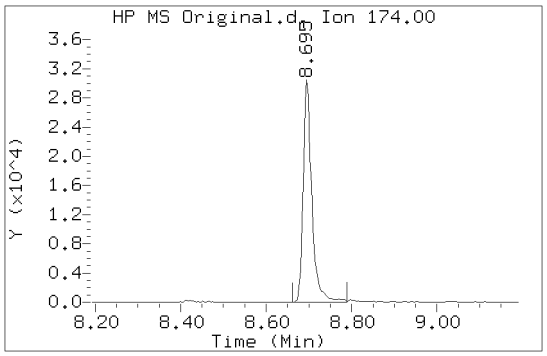
AFTER

MASS
95
AREA
48914
HEIGHT
35160
15-Jul-2022
12:20
linh
pham



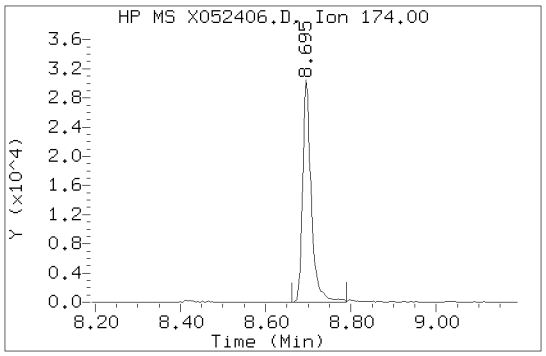
BEFORE

MASS
97
AREA
20450
HEIGHT
10901
09-Jun-2022
16:42
linh
pham



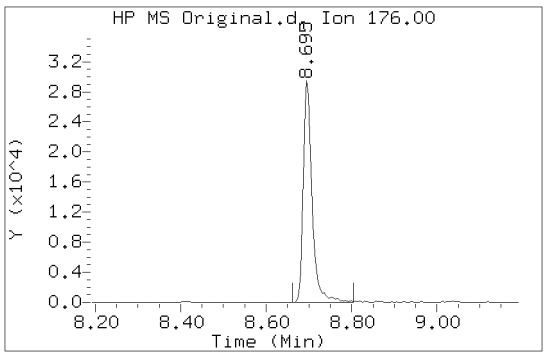
AFTER

MASS
174
AREA
43976
HEIGHT
30472
15-Jul-2022
12:20
linh
pham



BEFORE

MASS
95
AREA
31684
HEIGHT
16829
09-Jun-2022
16:42
linh
pham



AFTER

MASS
176
AREA
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HEIGHT
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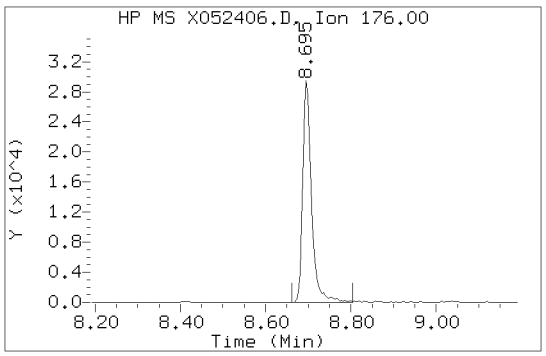
15-Jul-2022
12:20
linh
pham



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052407.D Page 1
Report Date: 15-Jul-2022 12:20

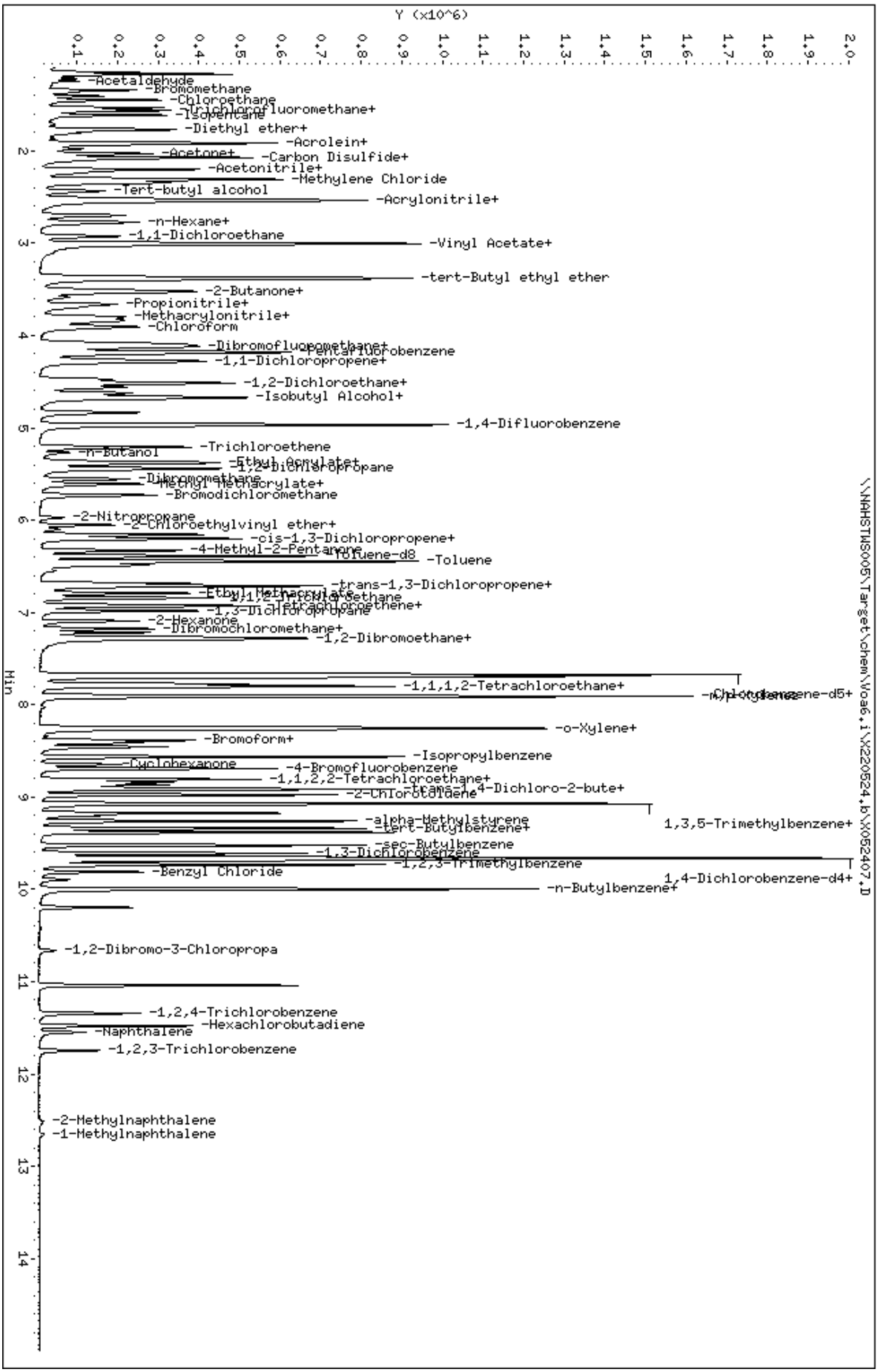
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052407.D
Lab Smp Id: VSTD020 Client Smp ID: VSTD020
Inj Date : 24-MAY-2022 13:33
Operator : PC Inst ID: voa6.i
Smp Info : VSTD020;VSTD020;1;6;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\8260W.m
Meth Date : 15-Jul-2022 12:20 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 13:12 Cal File: X052406.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.181	(1.000)	517604	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	827602	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	774241	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	369188	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	132108	20.0000	20.52
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	154990	20.0000	20.75
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.981)	112071	20.0000	20.58
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	401816	20.0000	19.65
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	94053	20.0000	19.64
11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	105673	20.0000	19.57
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	168275	20.0000	20.36
27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.845)	126310	20.0000	20.23
17 Methylene Chloride	84	2.307	2.307	(0.552)	123160	20.0000	18.84
38 Trichloroethene	130	5.208	5.208	(1.048)	122238	20.0000	19.66
5 Vinyl Chloride	62	1.145	1.145	(0.274)	143233	20.0000	19.62



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052407.D
Date : 24-MAY-2022 13:33
Client ID: VSTD020
Sample Info: VSTD020;VSTD020;1;6;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052407.D
Inj Date : 24-MAY-2022 13:33
InstruID : voa6.i
LabSampID : VSTD020

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052408.D Page 1
Report Date: 15-Jul-2022 12:20

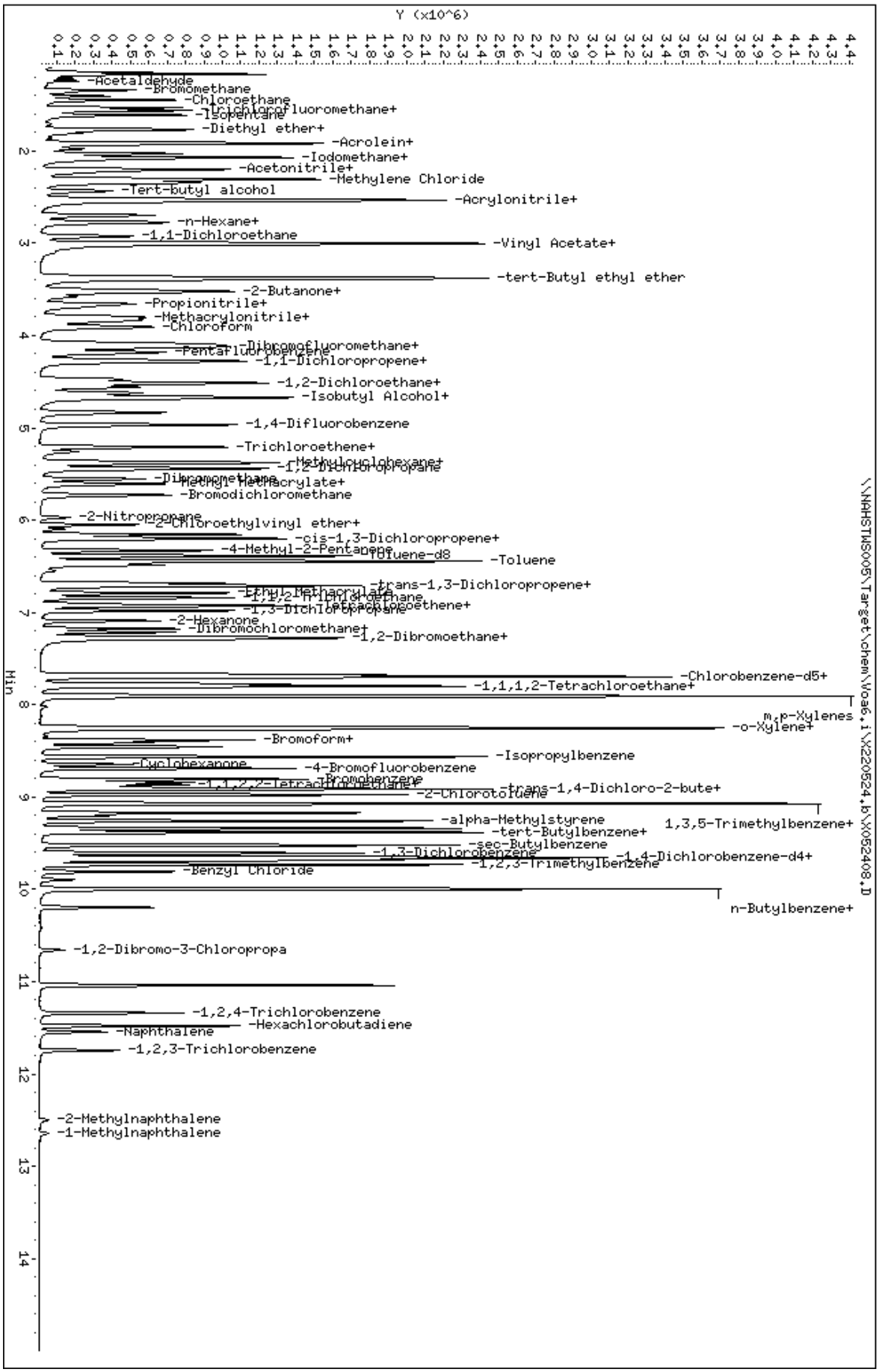
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052408.D
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 24-MAY-2022 13:54
Operator : PC Inst ID: voa6.i
Smp Info : VSTD050;VSTD050;1;7;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\8260W.m
Meth Date : 15-Jul-2022 12:20 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 13:33 Cal File: X052407.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.181	(1.000)	543171	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	866710	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	807069	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	390008	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	325873	50.0000	48.69
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	368870	50.0000	48.52
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.980)	273214	50.0000	47.84
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	997670	50.0000	46.80
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	236243	50.0000	47.33
11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	276594	50.0000	48.83
33 1,2-Dichloroethane	62	4.556	4.556	(0.917)	425030	50.0000	49.12
27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.843)	321139	50.0000	49.02
17 Methylene Chloride	84	2.303	2.303	(0.551)	305506	50.0000	44.54
38 Trichloroethene	130	5.208	5.208	(1.048)	321314	50.0000	49.34
5 Vinyl Chloride	62	1.145	1.145	(0.274)	377950	50.0000	49.35



Data File: \\NAHSTMS005\Target\chem\Voa6.i\X220524.b\X052408.D
Date : 24-MAY-2022 13:54
Client ID: VSTD050
Sample Info: VSTD050;VSTD050;1;7;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052408.D
Inj Date : 24-MAY-2022 13:54
InstruID : voa6.i
LabSampID : VSTD050

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052409.D Page 1
Report Date: 15-Jul-2022 12:20

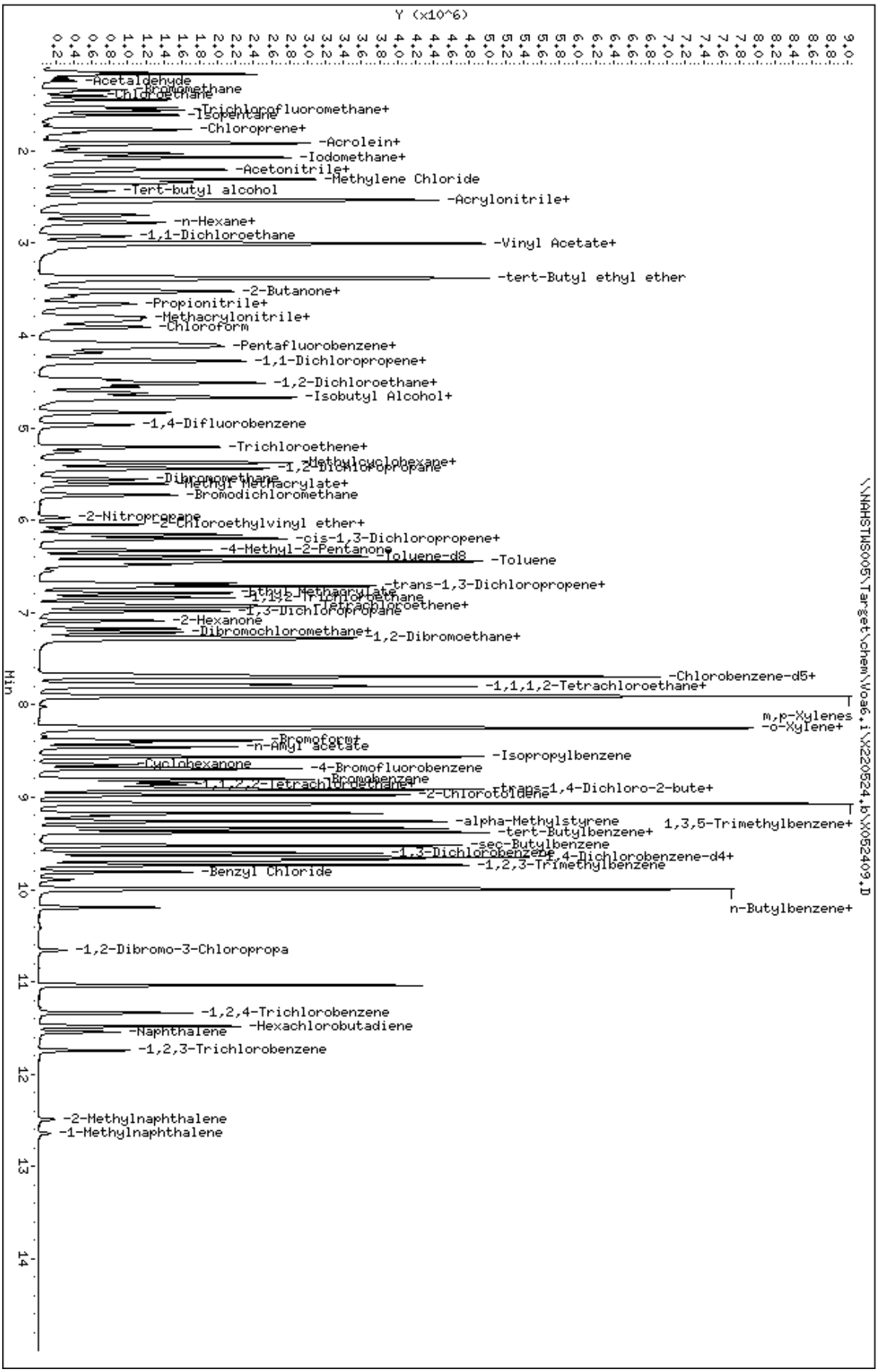
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052409.D
Lab Smp Id: VSTD100 Client Smp ID: VSTD100
Inj Date : 24-MAY-2022 14:15
Operator : PC Inst ID: voa6.i
Smp Info : VSTD100;VSTD100;1;8;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\8260W.m
Meth Date : 15-Jul-2022 12:20 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 13:54 Cal File: X052408.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.181	(1.000)	540996	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	866045	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	812540	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	400085	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.473	4.473	(1.070)	671007	100.000	101.01
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	768821	100.000	101.39
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.980)	573971	100.000	100.95
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	2066277	100.000	96.29
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	483130	100.000	96.15
11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	552855	100.000	97.99
33 1,2-Dichloroethane	62	4.556	4.556	(0.917)	851603	100.000	98.50
27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.843)	657416	100.000	100.75
17 Methylene Chloride	84	2.303	2.303	(0.551)	608232	100.000	89.04
38 Trichloroethene	130	5.204	5.204	(1.048)	650395	100.000	99.96
5 Vinyl Chloride	62	1.145	1.145	(0.274)	754890	100.000	98.97



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052409.D
Date : 24-MAY-2022 14:15
Client ID: VSTD100
Sample Info: VSTD100;VSTD100;1;8;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052409.D
Inj Date : 24-MAY-2022 14:15
InstruID : voa6.i
LabSampID : VSTD100

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052410.D Page 1
Report Date: 15-Jul-2022 12:20

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052410.D
Lab Smp Id: VSTD150 Client Smp ID: VSTD150
Inj Date : 24-MAY-2022 14:36
Operator : PC Inst ID: voa6.i
Smp Info : VSTD150;VSTD150;1;9;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\8260W.m
Meth Date : 15-Jul-2022 12:20 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 14:15 Cal File: X052409.D
Als bottle: 11 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

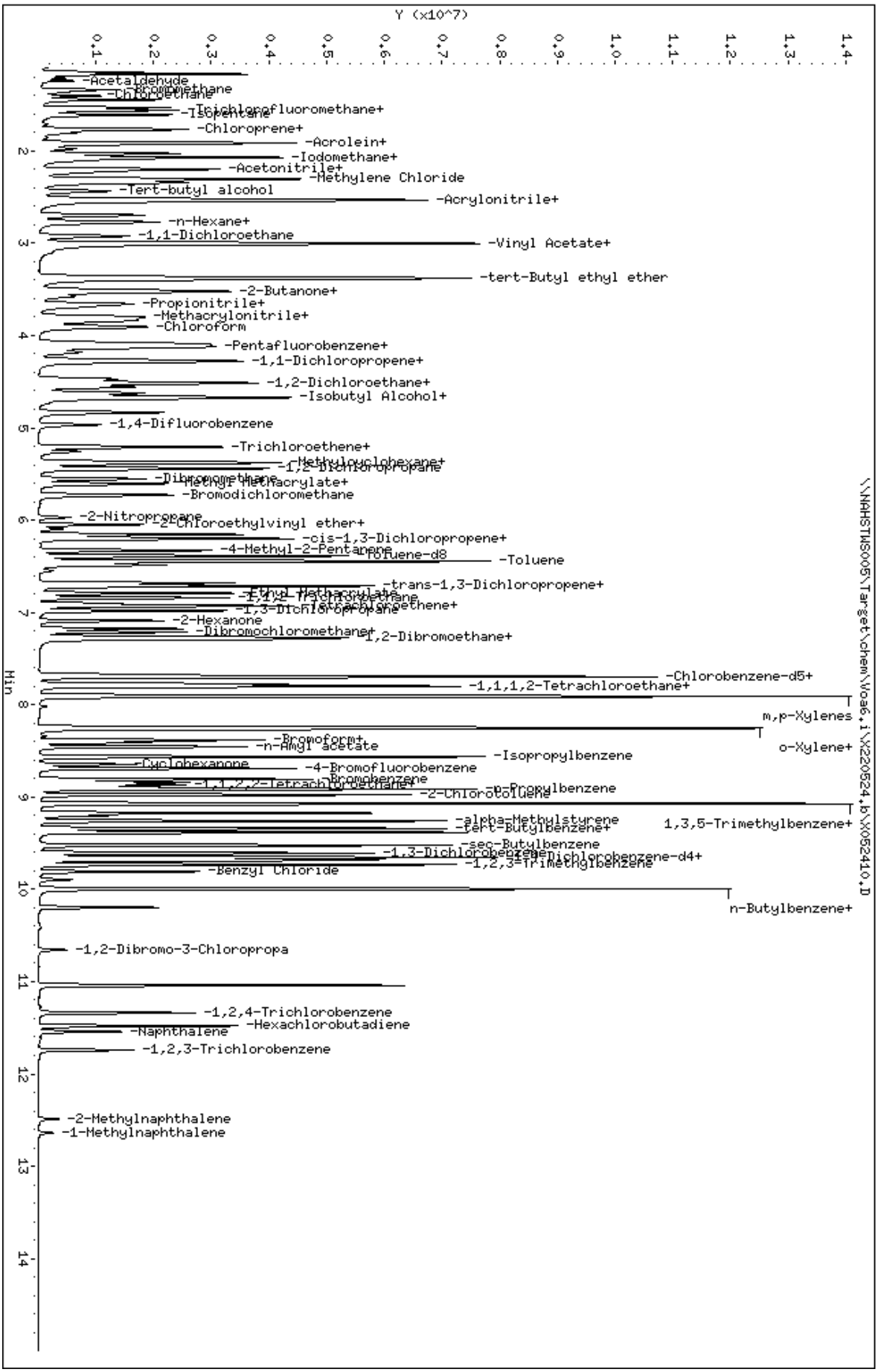
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	540150	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	872439	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	820461	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	403092	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	1000304	150.000	150.99
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	1156873	150.000	151.53
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.979)	857897	150.000	151.13
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	3071727	150.000	141.76(A)
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	738253	150.000	145.51
11 1,1-Dichloroethene	96	1.913	1.913	(0.457)	834706	150.000	148.18
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	1337696	150.000	153.59
27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.842)	1009093	150.000	154.90
17 Methylene Chloride	84	2.303	2.303	(0.550)	930781	150.000	136.47
38 Trichloroethene	130	5.208	5.208	(1.048)	1000791	150.000	152.68
5 Vinyl Chloride	62	1.145	1.145	(0.274)	1153438	150.000	151.47

QC Flag Legend

A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTMS005\Target\chem\Voa6.i\X220524.b\X052410.D
Date : 24-MAY-2022 14:36
Client ID: VSTD150
Sample Info: VSTD150;VSTD150;1;9;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052410.D
Inj Date : 24-MAY-2022 14:36
InstruID : voa6.i
LabSampID : VSTD150

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052411.D Page 1
Report Date: 15-Jul-2022 12:20

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052411.D
Lab Smp Id: VSTD200 Client Smp ID: VSTD200
Inj Date : 24-MAY-2022 14:57
Operator : PC Inst ID: voa6.i
Smp Info : VSTD200;VSTD200;1;10;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\8260W.m
Meth Date : 15-Jul-2022 12:20 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 14:36 Cal File: X052410.D
Als bottle: 12 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

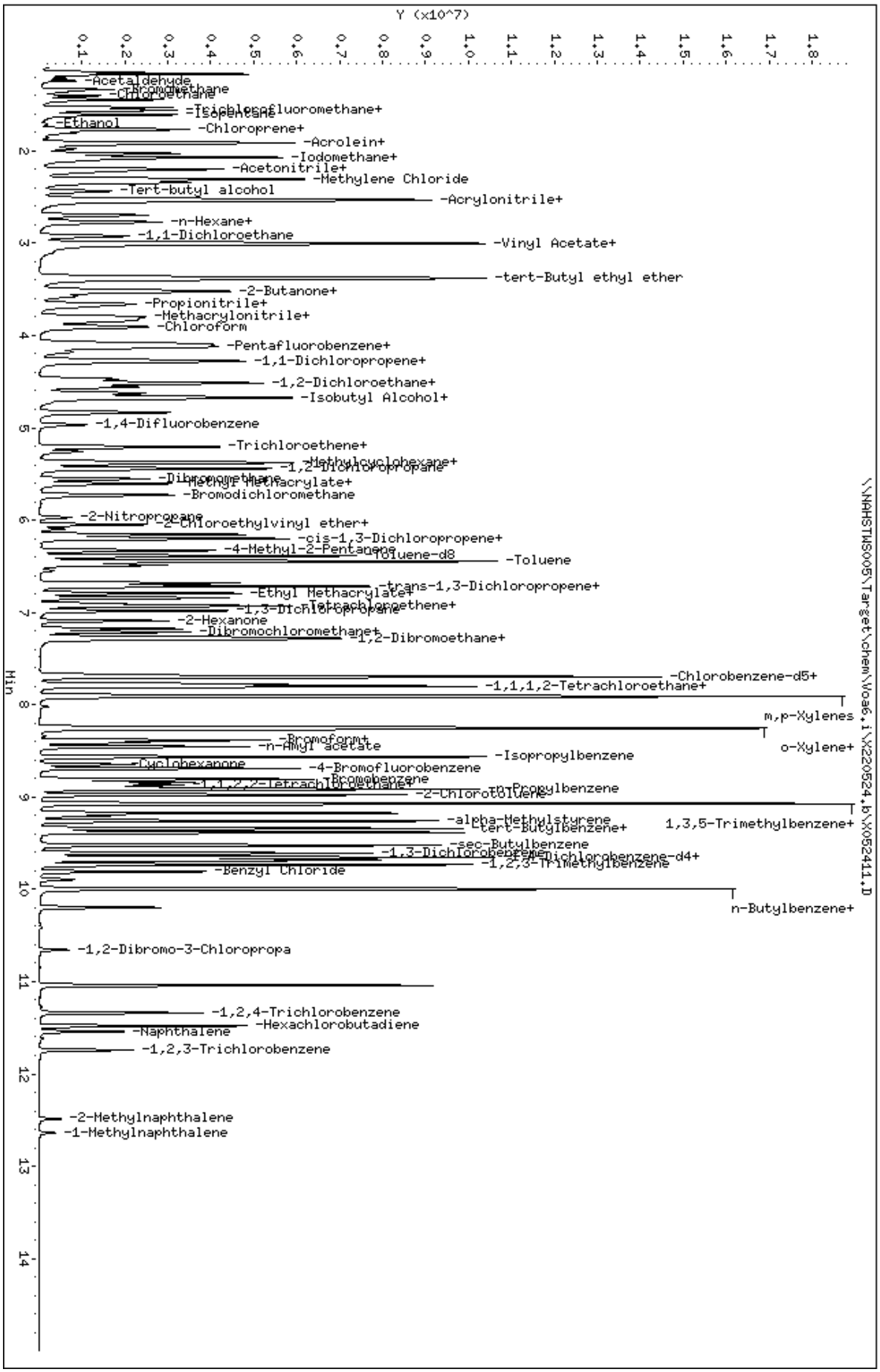
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	550666	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	892902	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	845028	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	413231	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	1343168	200.000	198.98
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	1557639	200.000	198.36
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	1152135	200.000	199.10
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	4136842	200.000	185.37(A)
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	1005726	200.000	192.47
11 1,1-Dichloroethene	96	1.913	1.913	(0.457)	1111897	200.000	193.62
33 1,2-Dichloroethane	62	4.556	4.556	(0.917)	1803872	200.000	202.38(A)
27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.842)	1368508	200.000	206.06(A)
17 Methylene Chloride	84	2.303	2.303	(0.550)	1243727	200.000	178.87
38 Trichloroethene	130	5.205	5.205	(1.048)	1348299	200.000	200.99(A)
5 Vinyl Chloride	62	1.145	1.145	(0.274)	1555289	200.000	200.34(A)

QC Flag Legend

A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052411.D
Date : 24-MAY-2022 14:57
Client ID: VSTD200
Sample Info: VSTD200;VSTD200;1;10;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052411.D
Inj Date : 24-MAY-2022 14:57
InstruID : voa6.i
LabSampID : VSTD200

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052413.D Page 1
Report Date: 15-Jul-2022 12:20

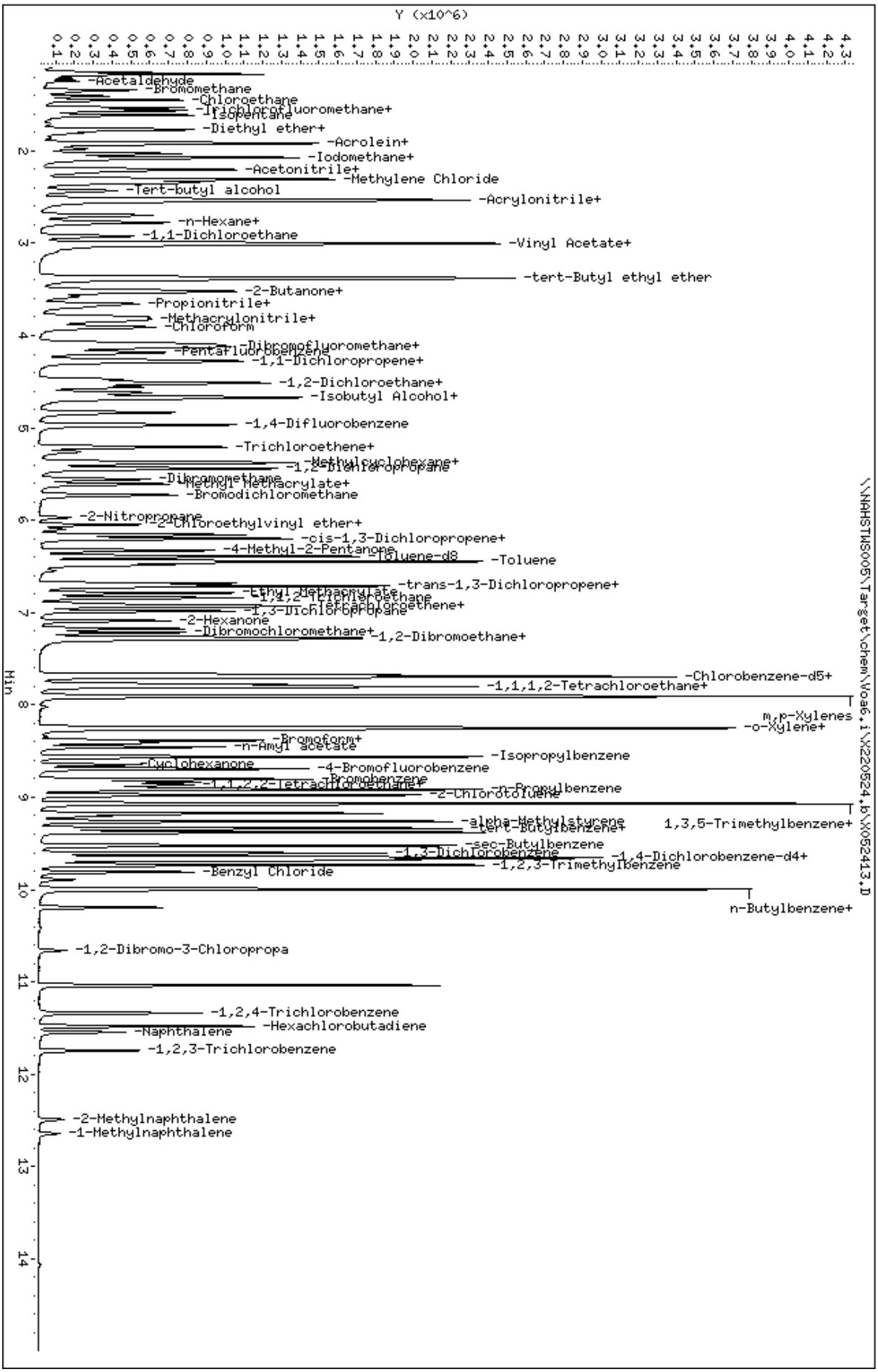
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052413.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 24-MAY-2022 15:39
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;ICV
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\8260W.m
Meth Date : 15-Jul-2022 12:20 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 14:57 Cal File: X052411.D
Als bottle: 14 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	538516	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	859799	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	806383	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	395952	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	333237	50.2317	50.23
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	381181	50.2151	50.21
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	280144	49.4867	49.48
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1005171	47.2013	47.20
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	239579	48.0487	48.04
11 1,1-Dichloroethene	96	1.917	1.913	(0.458)	267231	47.5859	47.58
33 1,2-Dichloroethane	62	4.556	4.556	(0.917)	428857	49.9671	49.96
27 cis-1,2-Dichloroethene	96	3.529	3.525	(0.843)	323496	49.8087	49.80
17 Methylene Chloride	84	2.307	2.303	(0.551)	310763	45.7033	45.70
38 Trichloroethene	130	5.208	5.205	(1.048)	319638	49.4835	49.48
5 Vinyl Chloride	62	1.145	1.145	(0.274)	371097	48.8808	48.88



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052413.D
Date : 24-MAY-2022 15:39
Client ID: ICV
Sample Info: CCV;CCV;2;;ICV
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220524.b\X052413.D
Inj Date : 24-MAY-2022 15:39
InstruID : voa6.i
LabSampID : ICV

NO MANUAL INTEGRATIONS

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Raw Data VOA6 412107

Volatiles Organics by Method 8260C

Wokorder

HS22061645

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 June 2022

07/20/2022

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070101.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 01-JUL-2022 09:03
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : HS22052000V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\bfb.m
Meth Date : 14-Jun-2022 12:47 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.691	8.889	(0.000)	95	131136			0.00- 100.00	100.00
8.691	8.889	(0.000)	50	23768			15.00- 40.00	18.12
8.691	8.889	(0.000)	75	63816			30.00- 60.00	48.66
8.691	8.889	(0.000)	96	9195			5.00- 9.00	7.01
8.691	8.889	(0.000)	173	728			0.00- 2.00	0.69
8.691	8.889	(0.000)	174	105544			50.00- 0.00	80.48
8.691	8.889	(0.000)	175	8917			5.00- 9.00	8.45
8.691	8.889	(0.000)	176	100416			95.00- 101.00	95.14
8.691	8.889	(0.000)	177	6729			5.00- 9.00	6.70

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.12
75	30.00 - 60.00% of mass 95	48.66
96	5.00 - 9.00% of mass 95	7.01
173	Less than 2.00% of mass 174	0.56 (0.69)
174	Greater than 50.00% of mass 95	80.48
175	5.00 - 9.00% of mass 174	6.80 (8.45)
176	95.00 - 101.00% of mass 174	76.57 (95.14)
177	5.00 - 9.00% of mass 176	5.13 (6.70)

Data File: X070101.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 118

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1357	66.90	506	103.00	188	142.00	165
37.10	6243	68.00	13063	104.00	573	142.90	1169
38.00	5885	69.00	12981	104.90	513	143.90	161
39.00	2956	70.00	1737	105.90	422	144.90	70
40.00	1188	71.00	265	106.90	308	145.90	118
41.00	1450	72.00	610	108.70	112	146.80	120
42.10	2631	73.00	5484	109.90	169	148.00	228
43.00	1295	74.00	20824	110.80	149	149.00	83
44.00	1396	75.00	63816	111.80	89	149.90	74
45.00	1465	76.00	5612	112.70	93	151.80	133
47.00	1243	77.00	1266	113.20	56	152.90	89
48.00	871	77.90	919	114.80	352	155.10	324
49.00	4875	78.90	3753	115.90	257	156.90	266
50.00	23768	80.00	1092	116.90	682	158.10	78
51.00	7660	80.90	3854	117.90	336	158.90	161
52.00	464	81.90	946	118.80	567	160.90	164
52.90	209	83.10	467	120.10	104	167.70	57
54.00	212	83.90	56	124.00	63	170.00	146
55.00	3299	85.10	183	124.70	72	170.90	63
56.10	2409	86.10	240	127.00	57	171.80	126
57.00	3697	86.90	5770	127.70	516	172.90	728
58.00	299	88.00	5321	128.90	283	173.90	105544
58.90	157	91.00	615	129.80	619	174.90	8917
60.00	1132	91.90	3119	130.80	184	175.90	100416
61.00	5528	93.00	5937	134.00	69	176.90	6729
62.00	5644	94.00	12911	134.70	242	177.80	185
63.00	4827	95.00	131136	136.80	244	185.90	350
63.80	513	96.00	9195	138.80	56	262.00	126
65.00	134	97.00	270	140.00	149		
66.00	120	98.00	1545	140.90	1179		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070101.D Page 1

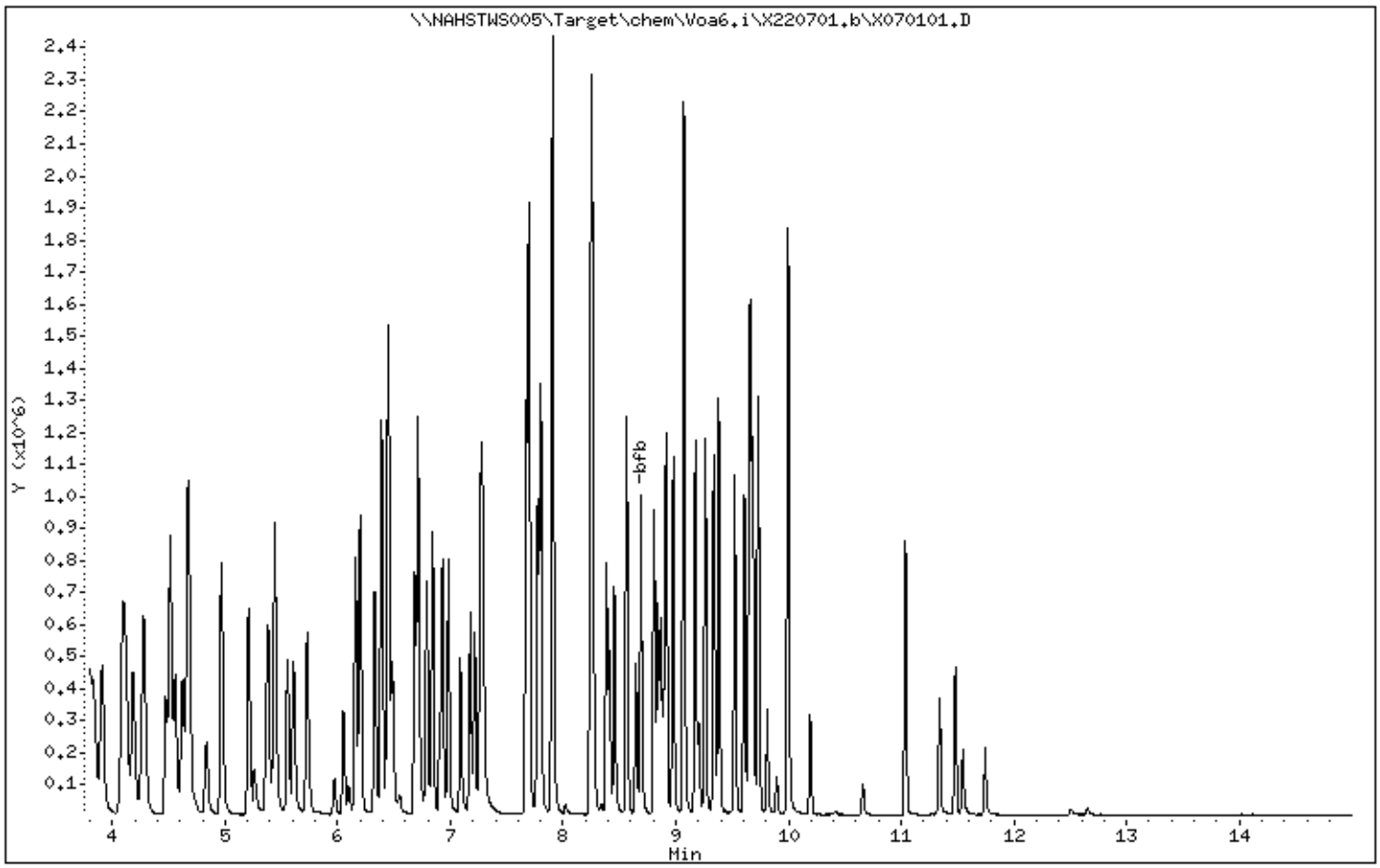
Date : 01-JUL-2022 09:03

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070101.D Page 2

Date : 01-JUL-2022 09:03

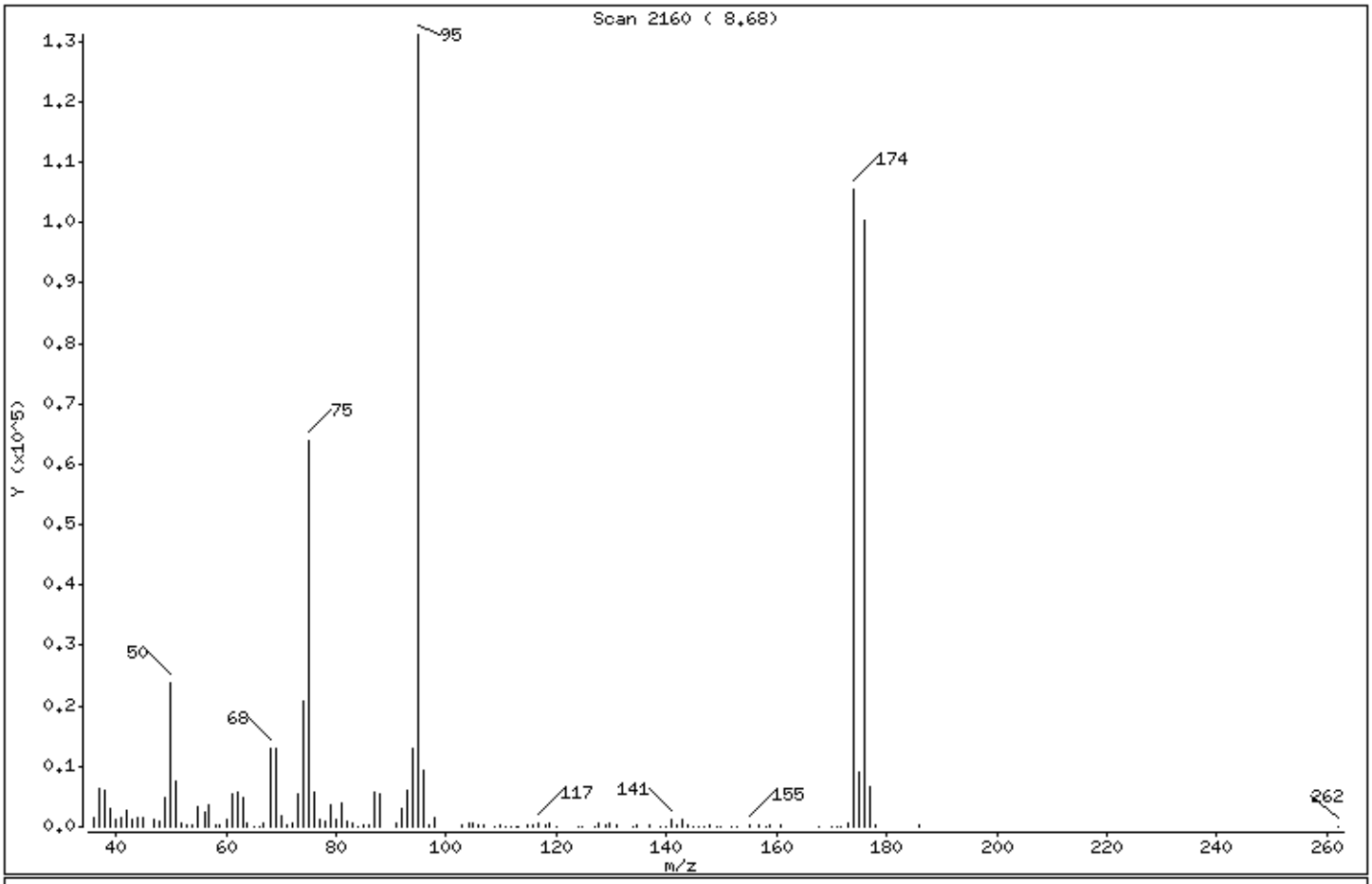
Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.12
75	30.00 - 60.00% of mass 95	48.66
96	5.00 - 9.00% of mass 95	7.01
173	Less than 2.00% of mass 174	0.56 (0.69)
174	Greater than 50.00% of mass 95	80.48
175	5.00 - 9.00% of mass 174	6.80 (8.45)
176	95.00 - 101.00% of mass 174	76.57 (95.14)
177	5.00 - 9.00% of mass 176	5.13 (6.70)

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070101.D

Date : 01-JUL-2022 09:03

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

Data File: X070101.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 118

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1357	66.90	506	103.00	188	142.00	165
37.10	6243	68.00	13063	104.00	573	142.90	1169
38.00	5885	69.00	12981	104.90	513	143.90	161
39.00	2956	70.00	1737	105.90	422	144.90	70
40.00	1188	71.00	265	106.90	308	145.90	118
41.00	1450	72.00	610	108.70	112	146.80	120
42.10	2631	73.00	5484	109.90	169	148.00	228
43.00	1295	74.00	20824	110.80	149	149.00	83
44.00	1396	75.00	63816	111.80	89	149.90	74
45.00	1465	76.00	5612	112.70	93	151.80	133
47.00	1243	77.00	1266	113.20	56	152.90	89
48.00	871	77.90	919	114.80	352	155.10	324
49.00	4875	78.90	3753	115.90	257	156.90	266
50.00	23768	80.00	1092	116.90	682	158.10	78
51.00	7660	80.90	3854	117.90	336	158.90	161
52.00	464	81.90	946	118.80	567	160.90	164
52.90	209	83.10	467	120.10	104	167.70	57
54.00	212	83.90	56	124.00	63	170.00	146
55.00	3299	85.10	183	124.70	72	170.90	63
56.10	2409	86.10	240	127.00	57	171.80	126
57.00	3697	86.90	5770	127.70	516	172.90	728
58.00	299	88.00	5321	128.90	283	173.90	105544
58.90	157	91.00	615	129.80	619	174.90	8917
60.00	1132	91.90	3119	130.80	184	175.90	100416
61.00	5528	93.00	5937	134.00	69	176.90	6729
62.00	5644	94.00	12911	134.70	242	177.80	185
63.00	4827	95.00	131136	136.80	244	185.90	350
63.80	513	96.00	9195	138.80	56	262.00	126
65.00	134	97.00	270	140.00	149		
66.00	120	98.00	1545	140.90	1179		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070103.D Page 1
Report Date: 15-Jul-2022 14:10

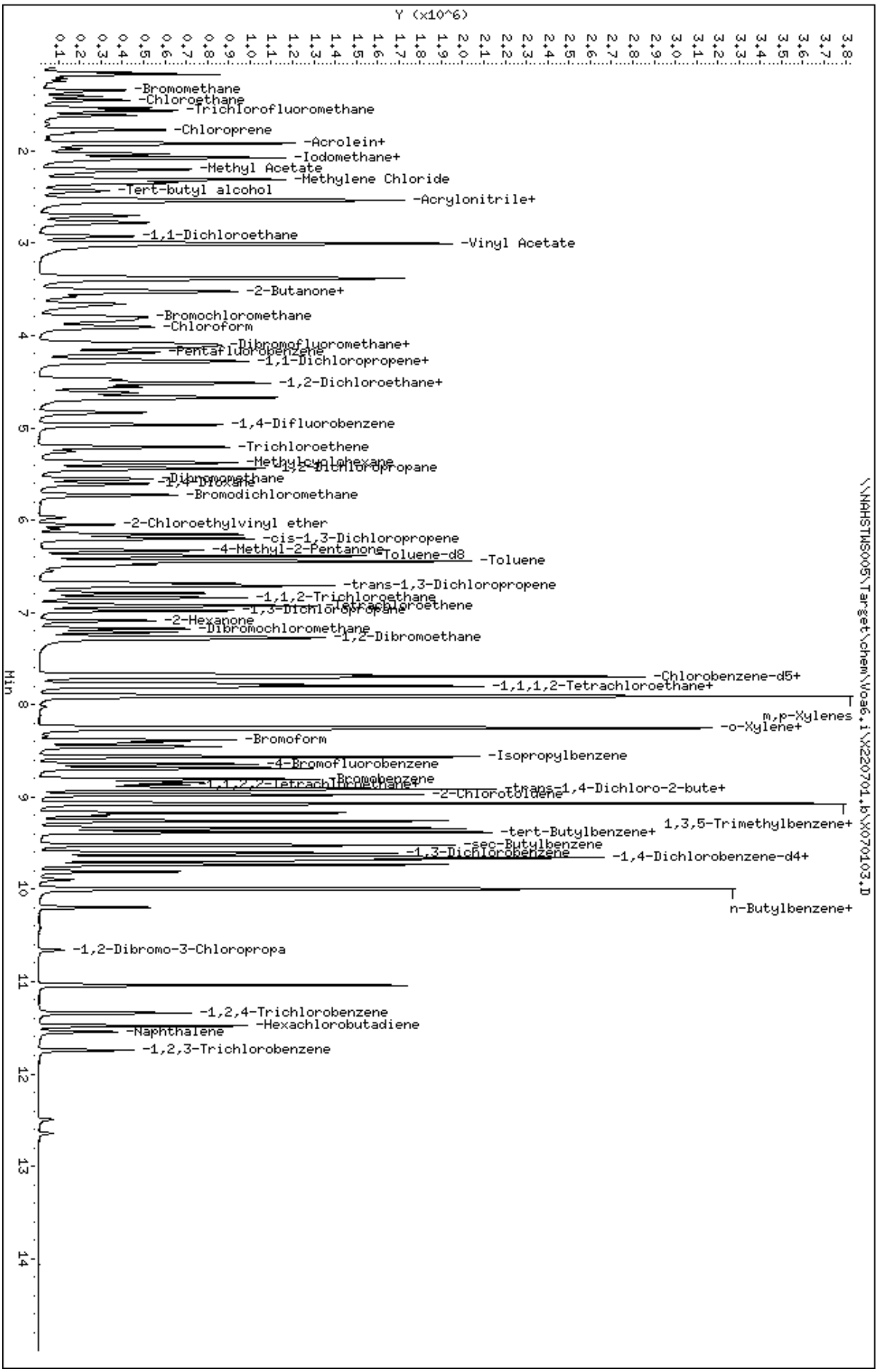
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070103.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 01-JUL-2022 09:45
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\8260W.m
Meth Date : 15-Jul-2022 14:10 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 13:54 Cal File: X052408.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	477569	50.0000	
*	36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	728772	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	675339	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	335334	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	287246	50.0000	48.81
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	344460	50.0000	54.25
$	30 Dibromofluoromethane	113	4.103	4.103	(0.980)	262372	50.0000	52.26
$	48 Toluene-d8	98	6.389	6.389	(0.833)	931965	50.0000	52.25
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	212585	50.0000	50.90
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	225124	50.0000	45.20
	33 1,2-Dichloroethane	62	4.556	4.556	(0.917)	374642	50.0000	51.49
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	297761	50.0000	51.69
	17 Methylene Chloride	84	2.307	2.307	(0.551)	277650	50.0000	46.04
	38 Trichloroethene	130	5.208	5.208	(1.048)	301660	50.0000	55.09
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	277796	50.0000	41.26



Data File: \\NAHSTWS005\Target\chem\Woa6.i\X220701.b\X070103.D
Date : 01-JUL-2022 09:45
Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

Instrument: woa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070103.D
Inj Date : 01-JUL-2022 09:45
InstruID : voa6.i
LabSampID : CCV

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070104.D Page 1
Report Date: 01-Jul-2022 22:30

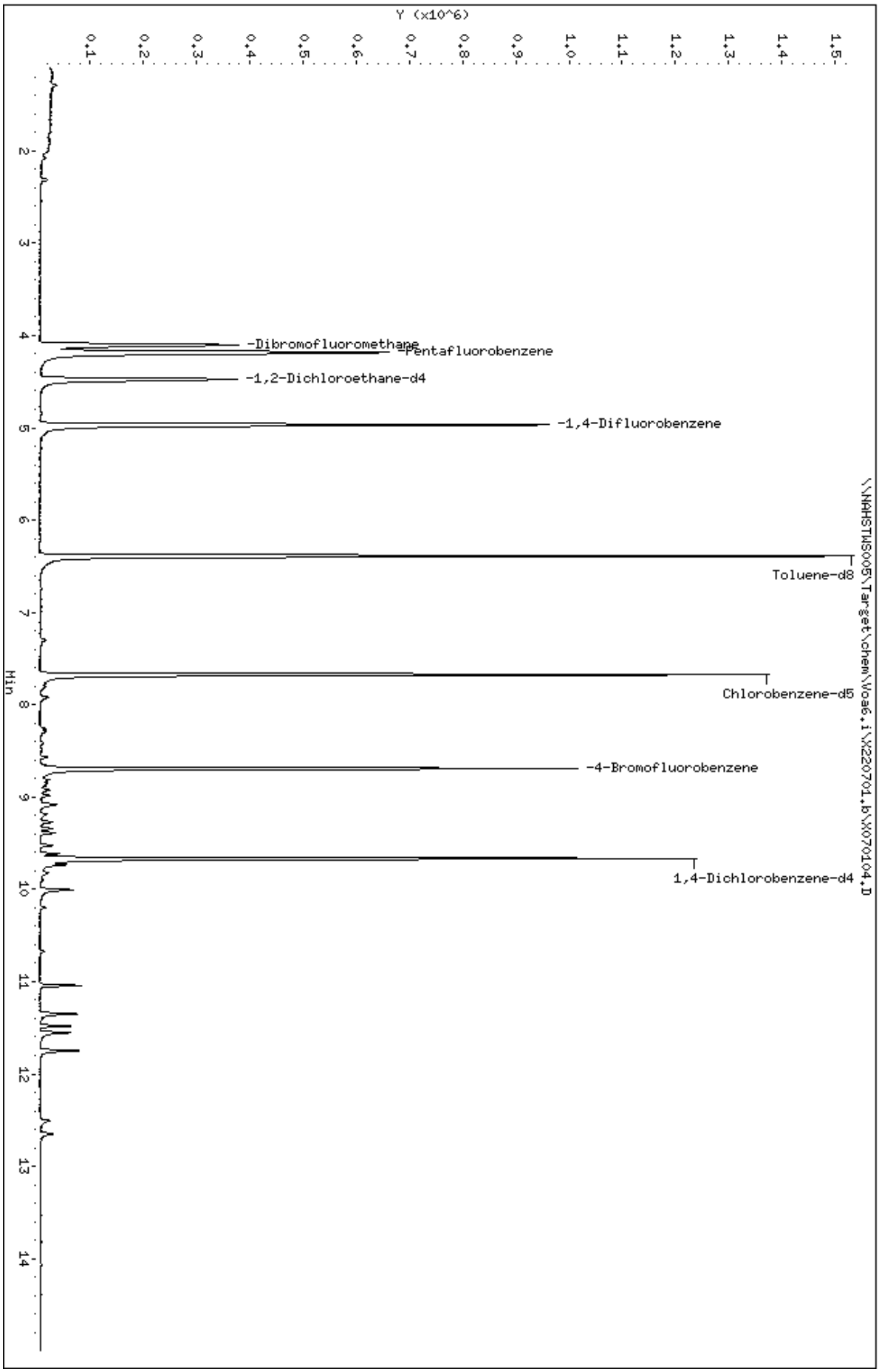
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070104.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 01-JUL-2022 10:06
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X220701.b\8260W.m
Meth Date : 01-Jul-2022 20:33 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 13:54 Cal File: X052408.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTWS005

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	569198	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	263340	44.0082	44.00
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	290572	41.3808	41.38
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	823385	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	711507	50.0000	
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	958444	51.0085	51.00
$ 69 4-Bromofluorobenzene	95	8.695	8.691	(1.133)	308469	45.9820	45.98
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.666	(1.000)	304603	50.0000	


Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070104.D
Date : 01-JUL-2022 10:06
Client ID: CCB
Sample Info: CCB;CCB;;;
Purge Volume: 5.0
Column phase: DB624
Instrument: voa6.i
Operator: PC
Column diameter: 0.18
Page 1
Y (x10^6)
Min
-Dibromofluoromethane
-Pentafluorobenzene
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene
Toluene-d8
Chlorobenzene-d5
-4-Bromofluorobenzene
1,4-Dichlorobenzene-d4
\\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070104.D

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070104.D
Inj Date : 01-JUL-2022 10:06
InstruID : voa6.i
LabSampID : CCB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070105.D Page 1
Report Date: 15-Jul-2022 14:10

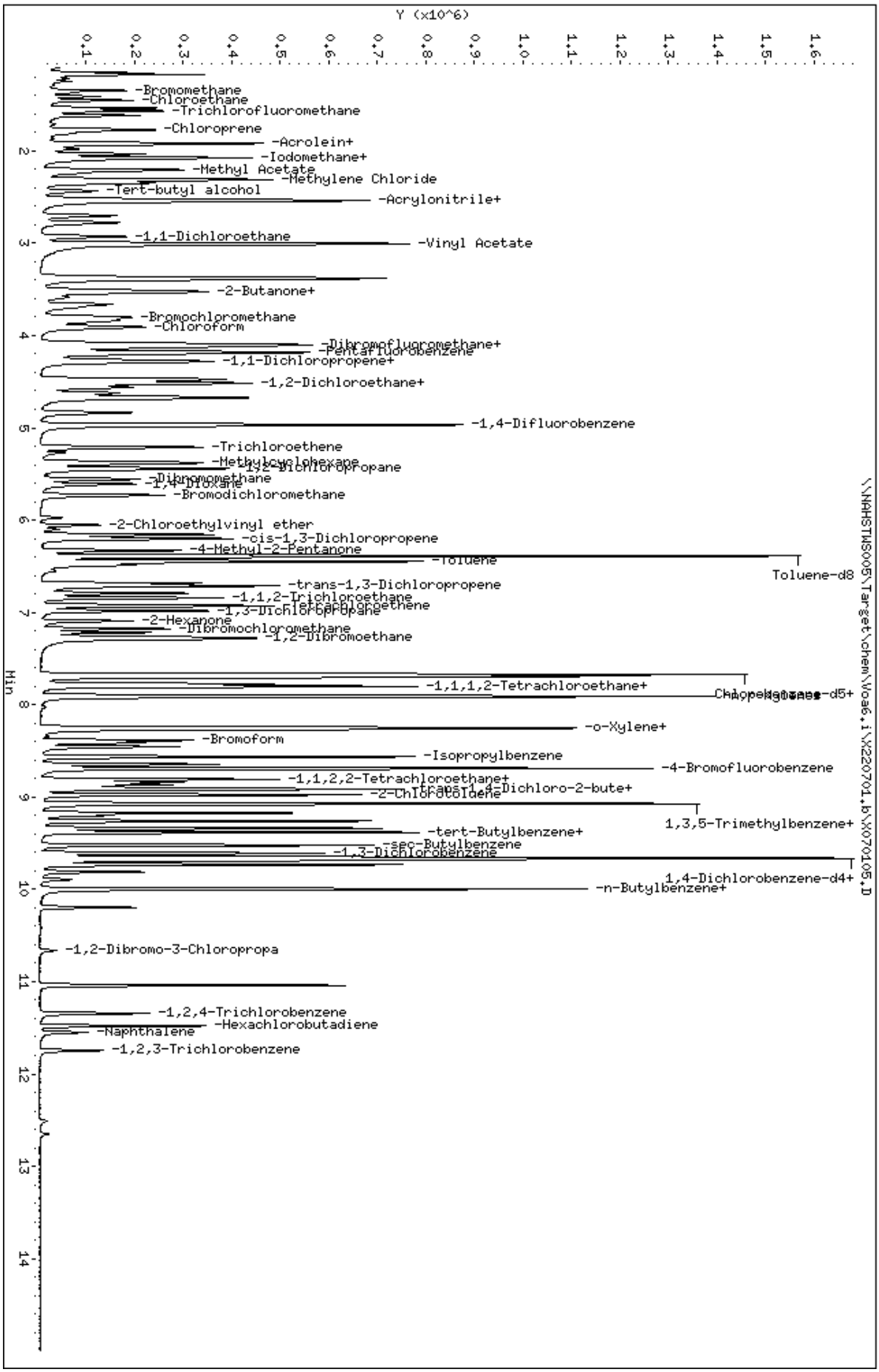
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070105.D
Lab Smp Id: VLCSW-220701 Client Smp ID: VLCSW-220701
Inj Date : 01-JUL-2022 10:27
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-220701;VLCSW-220701;3;;LCS
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\8260W.m
Meth Date : 15-Jul-2022 14:10 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 13:54 Cal File: X052408.D
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	478148	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	733954	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	681091	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.666	(1.000)	328684	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	288401	48.9534	48.95
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	338769	52.8836	52.88
$ 30 Dibromofluoromethane	113	4.102	4.103	(0.980)	262360	52.1977	52.19
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	934769	51.9702	51.97
53 1,1,2-Trichloroethane	83	6.843	6.839	(0.892)	83698	19.8740	19.87
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	86000	17.2475	17.24
33 1,2-Dichloroethane	62	4.560	4.556	(0.918)	149046	20.3432	20.34
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	118273	20.5096	20.50
17 Methylene Chloride	84	2.311	2.307	(0.552)	112397	18.6170	18.61
38 Trichloroethene	130	5.208	5.208	(1.048)	116539	21.1350	21.13
5 Vinyl Chloride	62	1.149	1.149	(0.275)	104258	15.4667	15.46



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070105.D
Date : 01-JUL-2022 10:27
Client ID: VLCSW-220701
Sample Info: VLCSW-220701;VLCSW-220701;3;;LCS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070105.D
Inj Date : 01-JUL-2022 10:27
InstruID : voa6.i
LabSampID : VLCSW-220701

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070107.D Page 1
Report Date: 15-Jul-2022 14:10

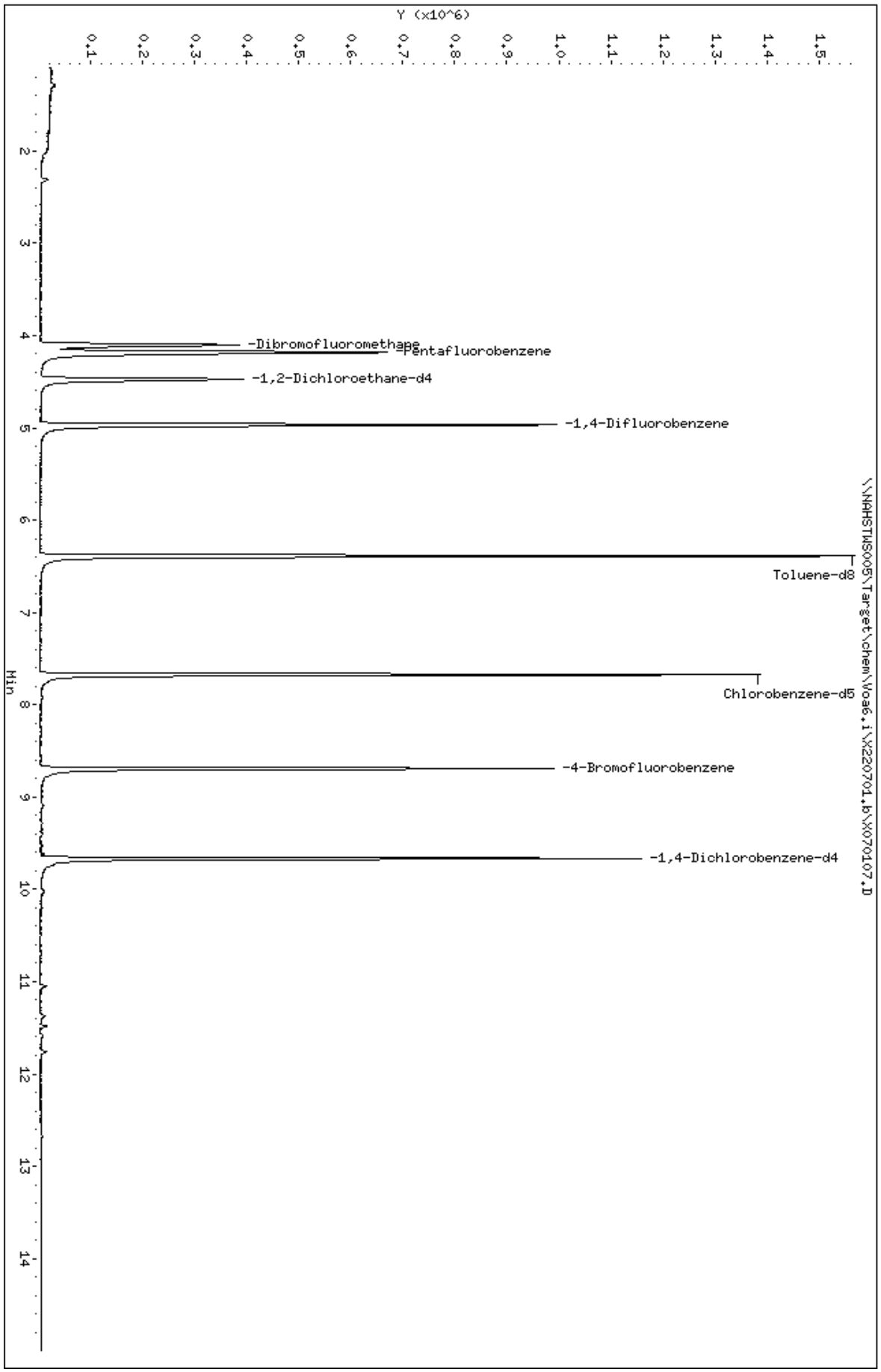
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070107.D
Lab Smp Id: VBLKW-220701 Client Smp ID: VBLKW-220701
Inj Date : 01-JUL-2022 11:09
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-220701;VBLKW-220701;3;;BLANK
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\8260W.m
Meth Date : 15-Jul-2022 14:10 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 13:54 Cal File: X052408.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	579445	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	835704	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	716686	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.666	(1.000)	302388	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	296443	41.4711	41.47
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	305759	45.2346	45.23
$ 30 Dibromofluoromethane	113	4.102	4.103	(0.980)	267306	43.8809	43.88
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	978532	51.7013	51.70


Data File: \\NAHSTMS005\Target\chem\Voa6.i\X220701.b\X070107.D
Date : 01-JUL-2022 11:09
Client ID: VBLKW-220701
Sample Info: VBLKW-220701;VBLKW-220701;3;;BLANK
Purge Volume: 5.0
Column phase: DB624
Instrument: voa6.i
Operator: PC
Column diameter: 0.18
Page 1
Y (x10^6)
Min
-Dibromofluoromethane
Pentafluorobenzene
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene
Toluene-d8
Chlorobenzene-d5
-4-Bromofluorobenzene
-1,4-Dichlorobenzene-d4
\\NAHSTMS005\Target\chem\Voa6.i\X220701.b\X070107.D

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070107.D
Inj Date : 01-JUL-2022 11:09
InstruID : voa6.i
LabSampID : VBLKW-220701

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070114.D Page 1
Report Date: 15-Jul-2022 14:10

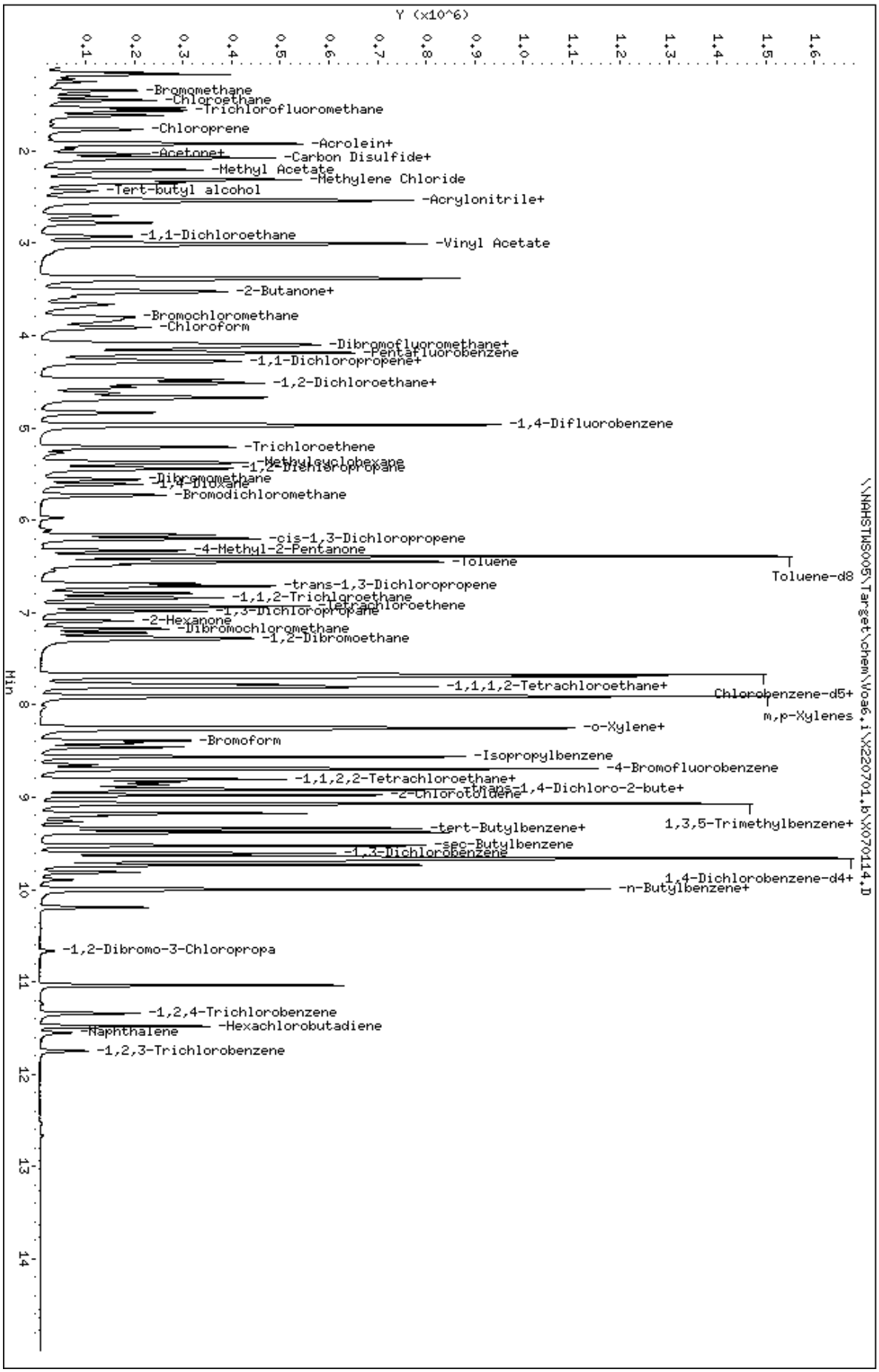
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070114.D
Lab Smp Id: HS22061671-07MS Client Smp ID: HS22061671-07MS
Inj Date : 01-JUL-2022 13:37
Operator : PC Inst ID: voa6.i
Smp Info : HS22061671-07MS;HS22061671-07MS;3;;MS
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\8260W.m
Meth Date : 15-Jul-2022 14:10 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 13:54 Cal File: X052408.D
Als bottle: 14 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	553292	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	797408	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	688992	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	321478	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	284248	41.6460	41.64
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	309688	47.7046	47.70
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	257513	44.2717	44.27
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	936185	51.4521	51.45
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	82951	19.4707	19.47
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	98434	17.0601	17.06
33 1,2-Dichloroethane	62	4.560	4.556	(0.918)	149771	18.8155	18.81
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	129056	19.3401	19.34
17 Methylene Chloride	84	2.307	2.307	(0.551)	112579	16.1146	16.11
38 Trichloroethene	130	5.208	5.208	(1.048)	139508	23.2872	23.28
5 Vinyl Chloride	62	1.149	1.149	(0.275)	127646	16.3645	16.36



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Date : 01-JUL-2022 13:37
Client ID: HS22061671-07MS
Sample Info: HS22061671-07MS;HS22061671-07MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Page 1

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070114.D
Inj Date : 01-JUL-2022 13:37
InstruID : voa6.i
LabSampID : HS22061671-07MS

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070115.D Page 1
Report Date: 15-Jul-2022 14:10

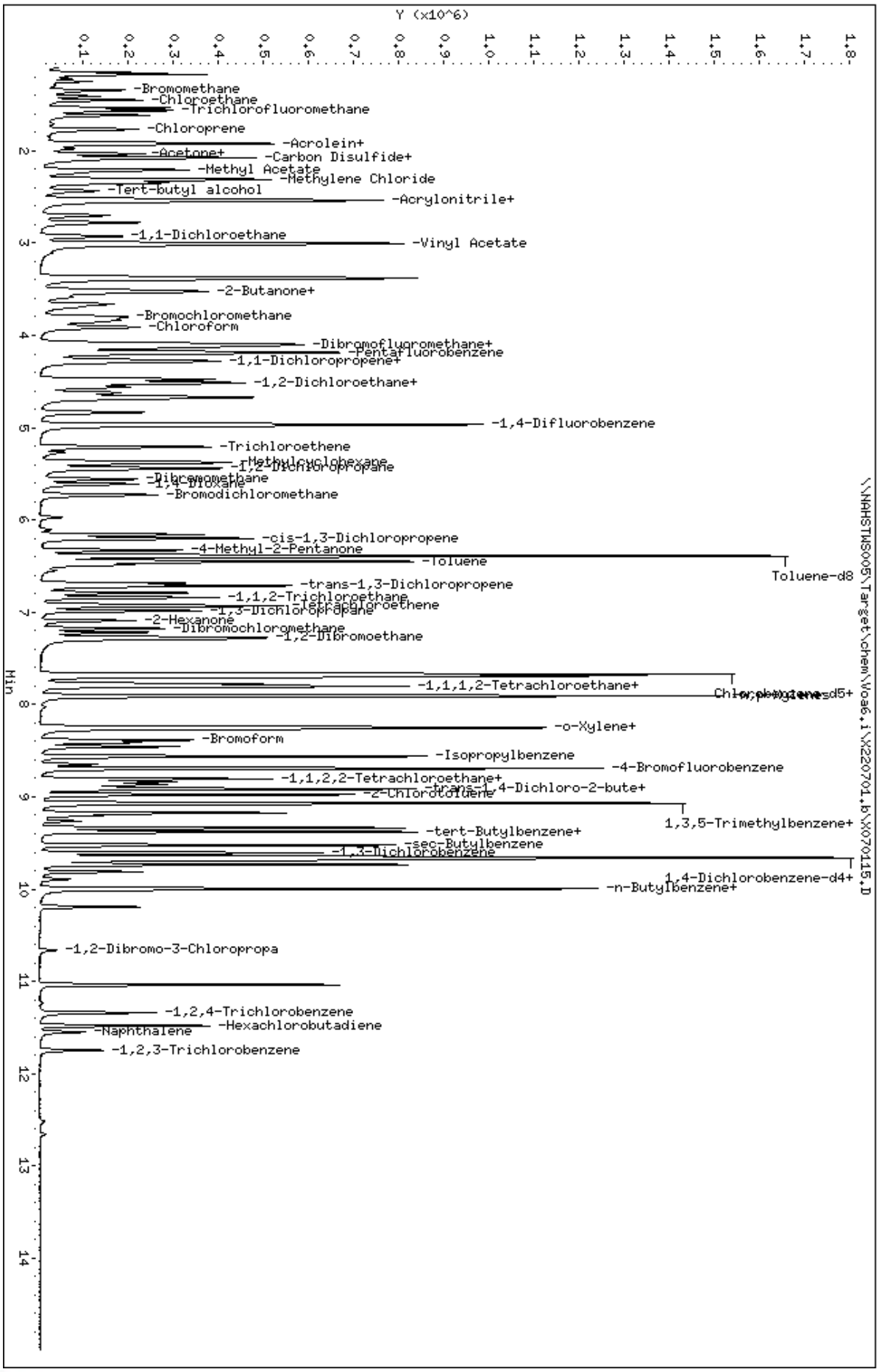
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070115.D
Lab Smp Id: HS22061671-07MSD Client Smp ID: HS22061671-07MSD
Inj Date : 01-JUL-2022 13:58
Operator : PC Inst ID: voa6.i
Smp Info : HS22061671-07MSD;HS22061671-07MSD;3;;MSD
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\8260W.m
Meth Date : 15-Jul-2022 14:10 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 13:54 Cal File: X052408.D
Als bottle: 14 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	571475	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	836543	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	733130	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.666	(1.000)	347915	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	300338	42.6110	42.61
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	333910	48.3509	48.35
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	266821	44.4124	44.41
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	969237	50.0615	50.06
53 1,1,2-Trichloroethane	83	6.843	6.839	(0.892)	87565	19.3163	19.31
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	94359	15.8335	15.83
33 1,2-Dichloroethane	62	4.560	4.556	(0.918)	154544	18.5068	18.50
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	124405	18.0499	18.04
17 Methylene Chloride	84	2.311	2.307	(0.552)	110598	15.3273	15.32
38 Trichloroethene	130	5.208	5.208	(1.048)	129182	20.5548	20.55
5 Vinyl Chloride	62	1.149	1.149	(0.275)	120459	14.9517	14.95



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070115.D
Date : 01-JUL-2022 13:58
Client ID: HS220616?1-07HSD
Sample Info: HS220616?1-07HSD;HS220616?1-07HSD;3;;HSD
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070115.D
Inj Date : 01-JUL-2022 13:58
InstruID : voa6.i
LabSampID : HS22061671-07MSD

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070125.D Page 1
Report Date: 01-Jul-2022 22:53

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070125.D
Lab Smp Id: HS22061645-11 Client Smp ID: HS22061645-11
Inj Date : 01-JUL-2022 17:28
Operator : PC Inst ID: voa6.i
Smp Info : HS22061645-11;HS22061645-11;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220701.b\8260W.m
Meth Date : 01-Jul-2022 20:33 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 13:54 Cal File: X052408.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTWS005

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	608899	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	268483	41.9411	41.94
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	307776	40.9697	40.96(M)
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	882265	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	722194	50.0000	
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1026654	53.8301	53.83
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	321037	47.1696	47.16
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	310458	50.0000	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070125.D

Date : 01-JUL-2022 17:28

Client ID: HS22061645-11

Instrument: voa6.i

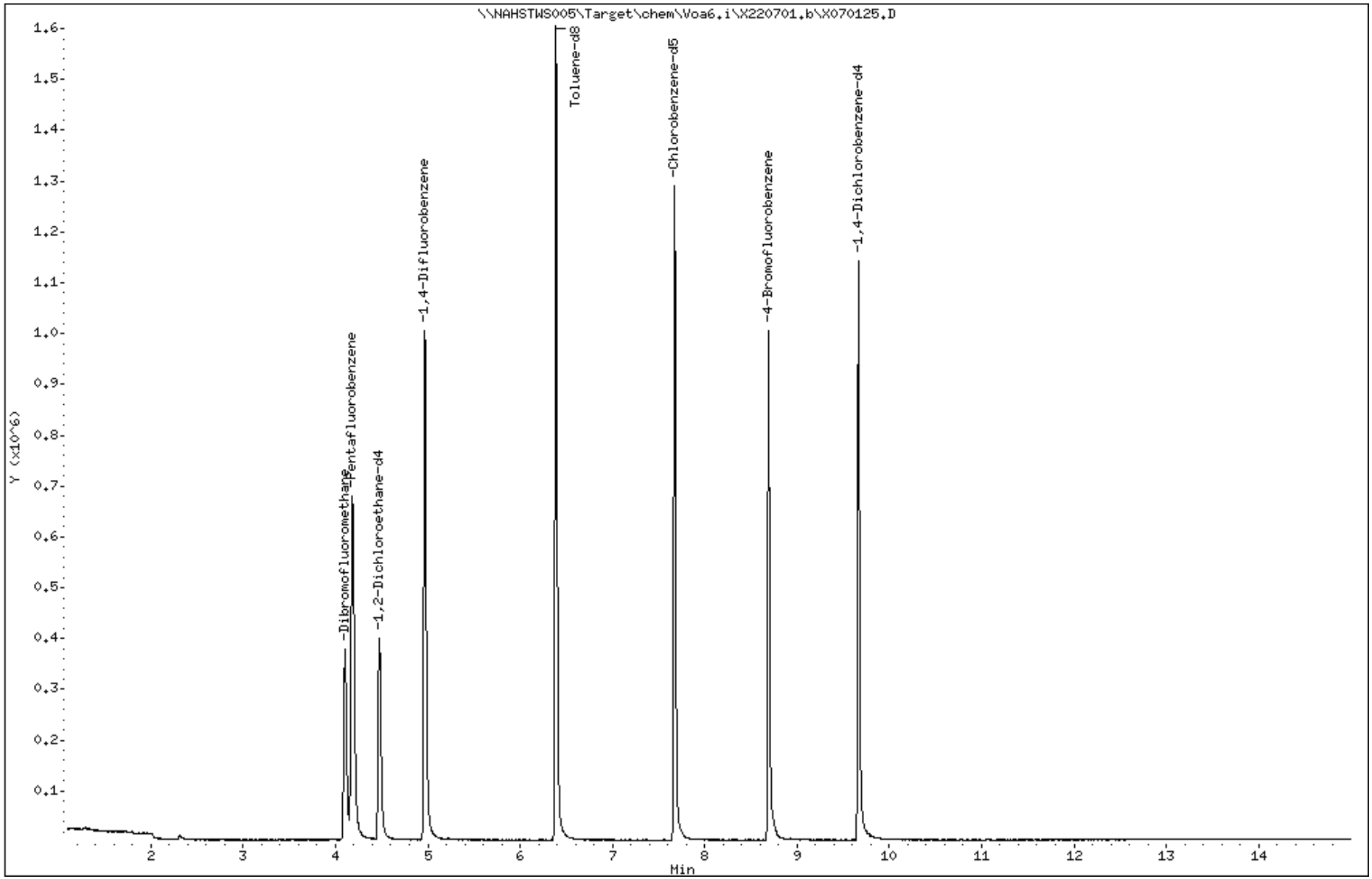
Sample Info: HS22061645-11;HS22061645-11;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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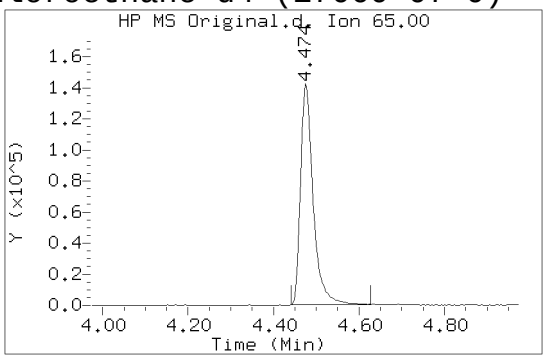
Inj Date : 01-JUL-2022 17:28
InstruID : voa6.i
LabSampID : HS22061645-11

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

MASS
53
AREA
0
HEIGHT
0
01-Jul-2022
17:46
ALSHS
Server



AFTER

MASS
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AREA
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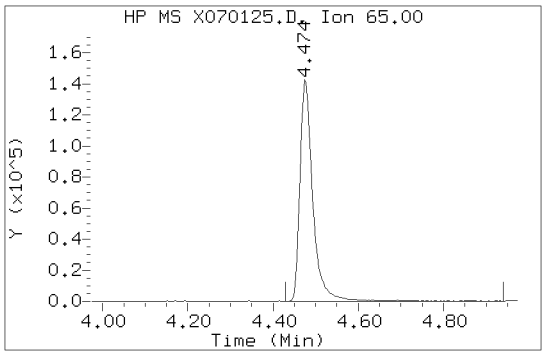
HEIGHT
142645
01-Jul-2022
22:53
ALSHS
Se



BEFORE

MASS
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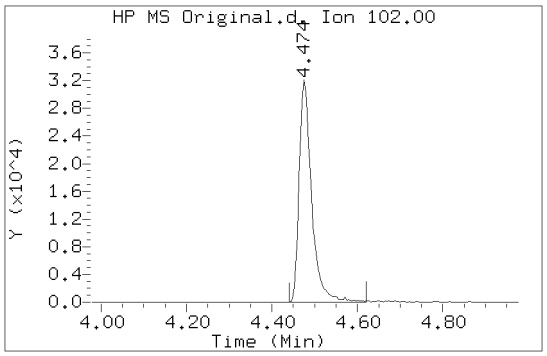
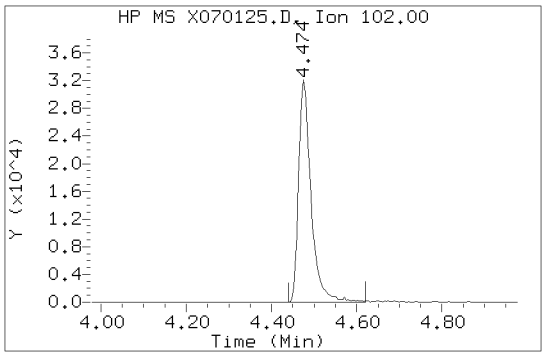
AREA
0
HEIGHT
0
01-Jul-2022
17:46
ALSHS
Server



AFTER

MASS
102
AREA
66619
HEIGHT
32096
01-Jul-2022
22:53
ALSHS
Se



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070126.D Page 1
Report Date: 15-Jul-2022 14:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070126.D
Lab Smp Id: HS22061645-07 Client Smp ID: HS22061645-07
Inj Date : 01-JUL-2022 17:49
Operator : PC Inst ID: voa6.i
Smp Info : HS22061645-07;HS22061645-07;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\8260W.m
Meth Date : 15-Jul-2022 14:10 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 13:54 Cal File: X052408.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

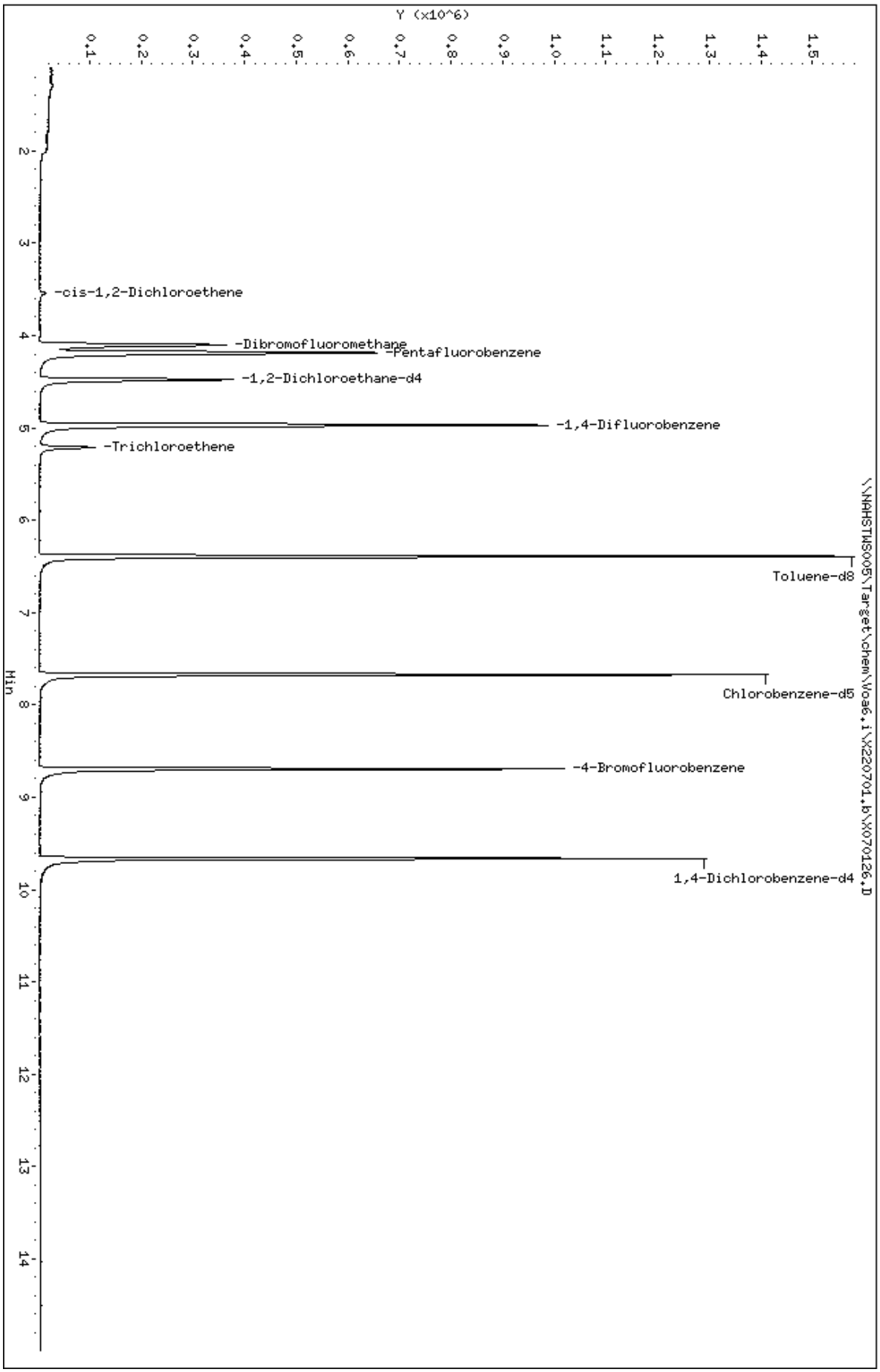
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	588591	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	850206	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	759666	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	344579	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	294282	40.5214	40.52(M)
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	336203	46.9574	46.95
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	258974	41.8514	41.85
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1008418	50.2659	50.26
27 cis-1,2-Dichloroethene	96	3.548	3.529	(0.848)	6785	0.95581	0.95(a)
38 Trichloroethene	130	5.212	5.208	(1.049)	39275	6.14881	6.14

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\Voa6,i\X220701,b\X070126.D
Date : 01-JUL-2022 17:49
Client ID: HS22061645-07
Sample Info: HS22061645-07;HS22061645-07;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6,i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070126.D

Date : 01-JUL-2022 17:49

Client ID: HS22061645-07

Instrument: voa6.i

Sample Info: HS22061645-07;HS22061645-07;;;

Purge Volume: 5.0

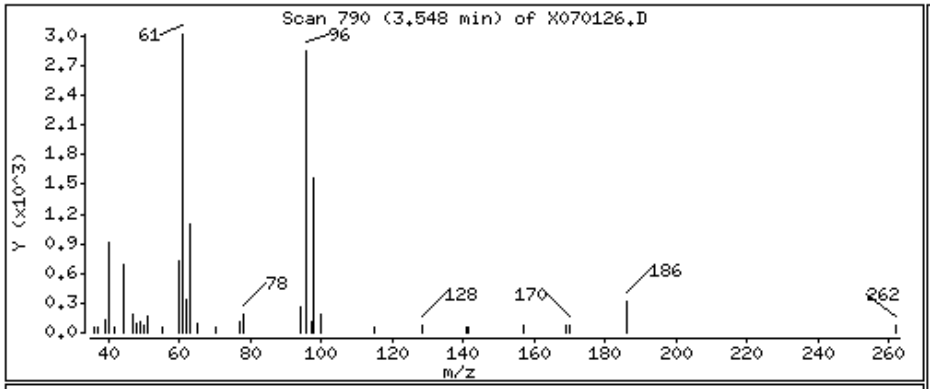
Operator: PC

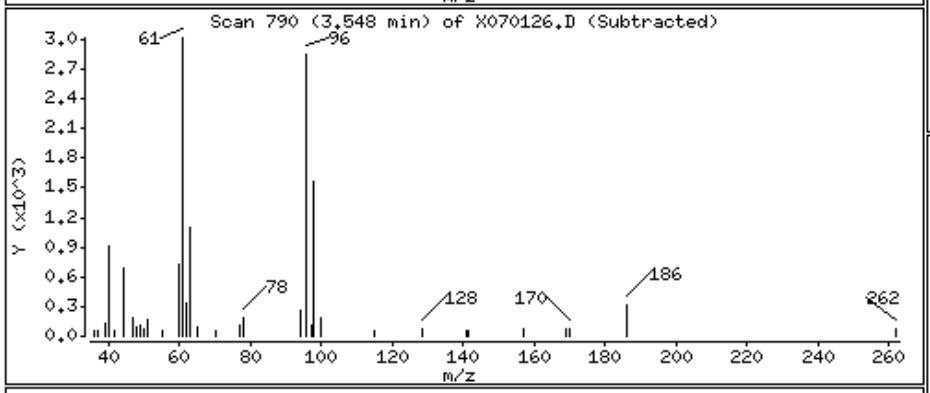
Column phase: DB624

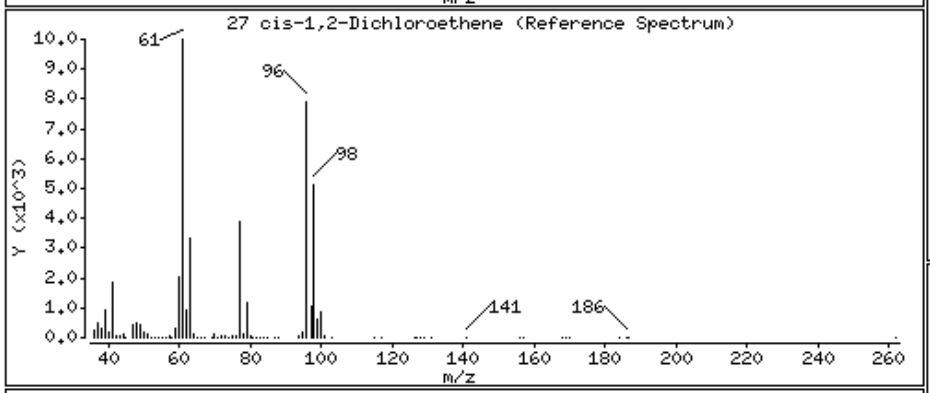
Column diameter: 0.18

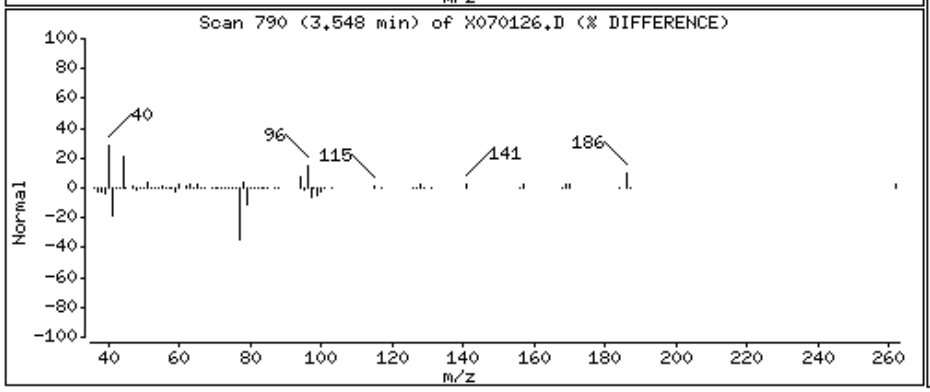
27 cis-1,2-Dichloroethene

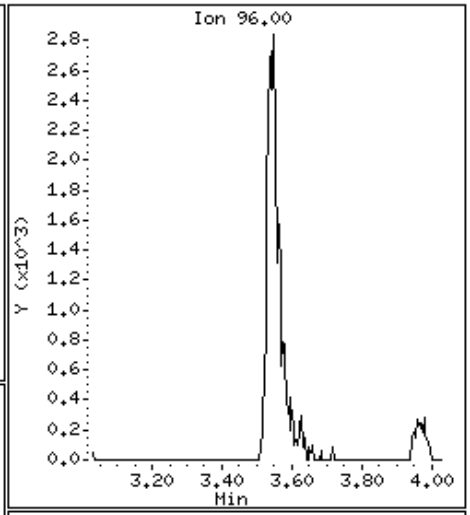
Concentration: 0.95 ug/l

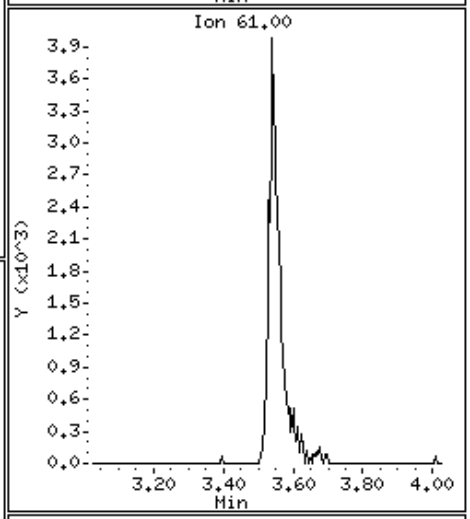


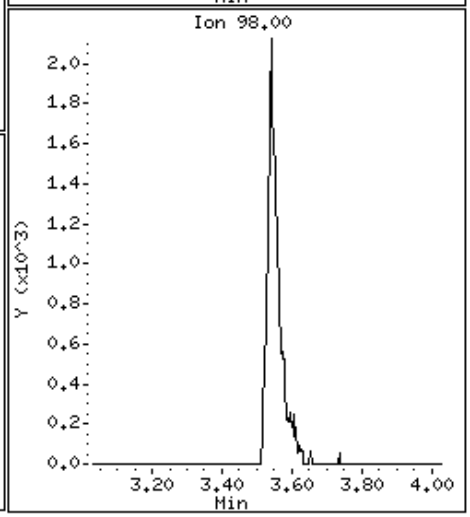












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070126.D Page 3

Date : 01-JUL-2022 17:49

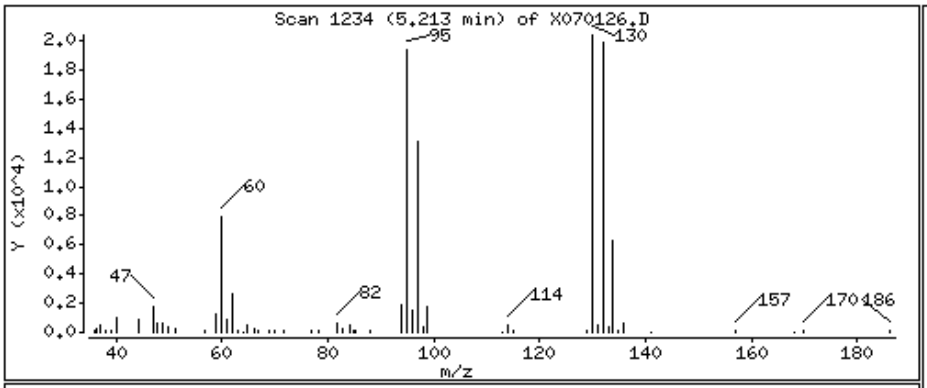
Client ID: HS22061645-07 Instrument: voa6.i

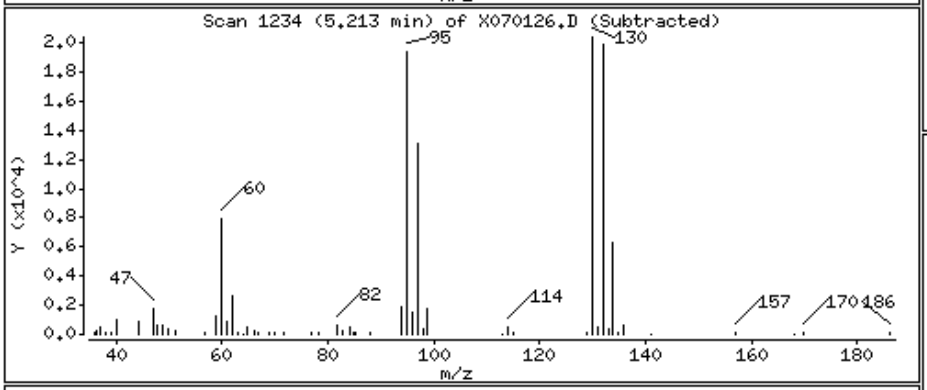
Sample Info: HS22061645-07;HS22061645-07;;;

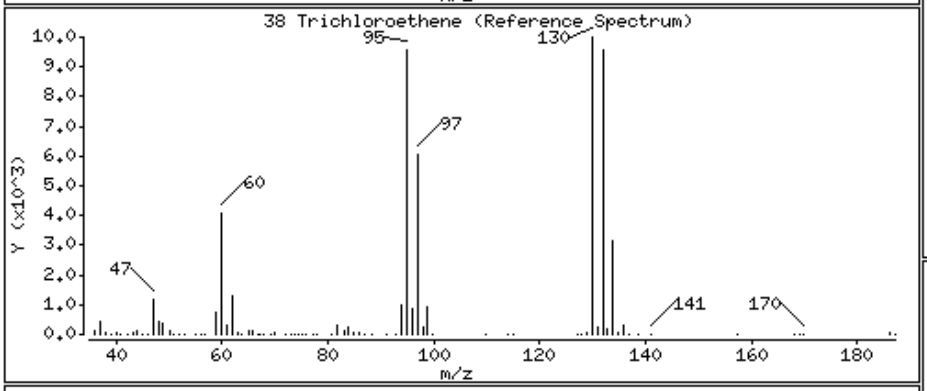
Purge Volume: 5.0 Operator: PC

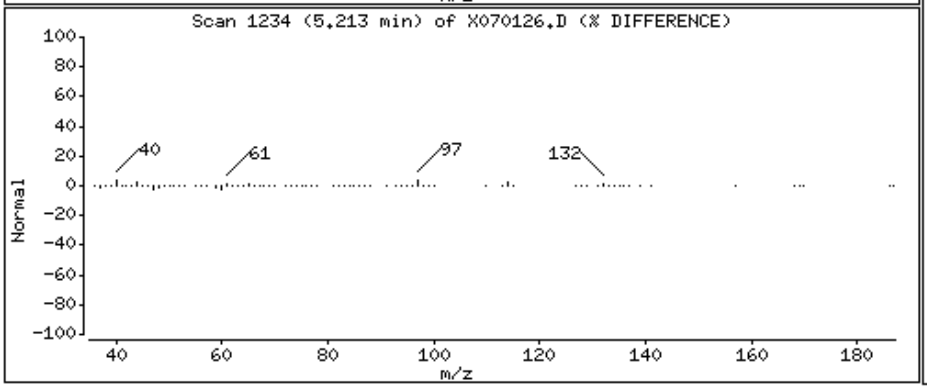
Column phase: DB624 Column diameter: 0.18

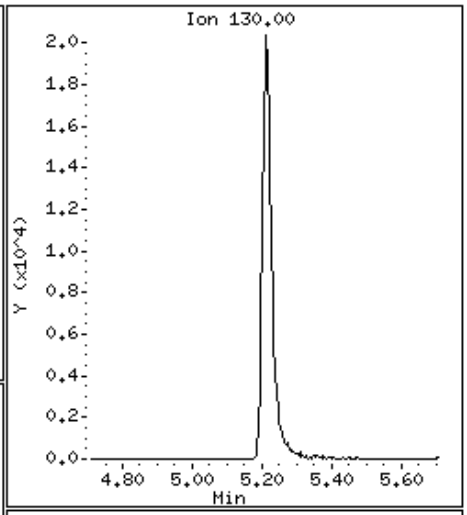
38 Trichloroethene Concentration: 6.14 ug/l

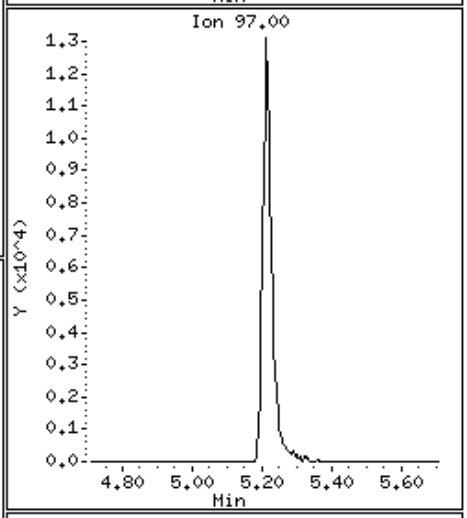


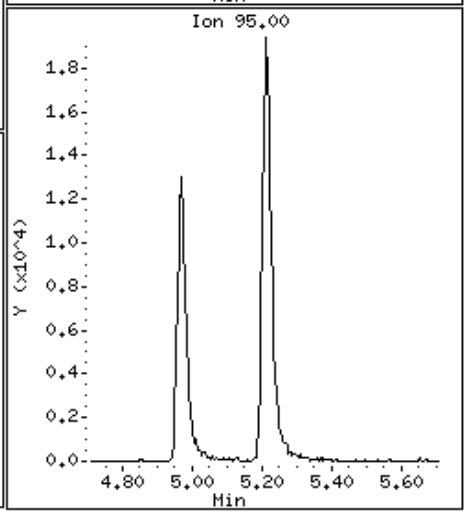












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Inj Date : 01-JUL-2022 17:49
InstruID : voa6.i
LabSampID : HS22061645-07

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

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53
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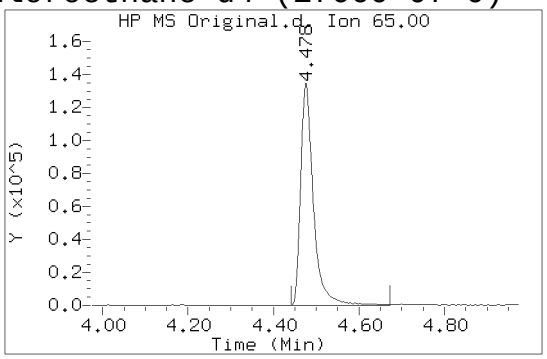
0
HEIGHT
0
01-Jul-2022
18:05
ALSHS
Server



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14:10
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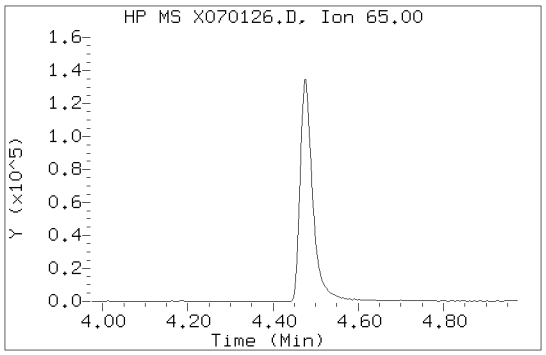

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01-Jul-2022
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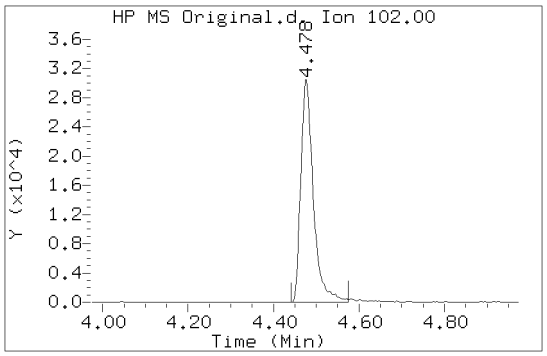

AFTER

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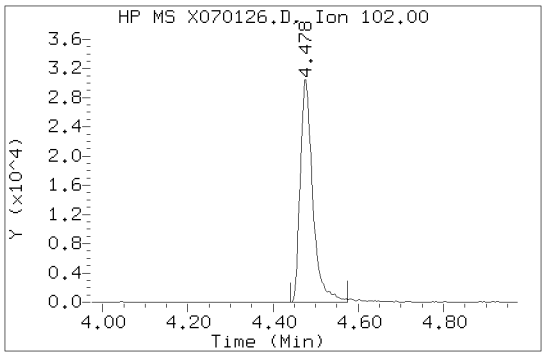
15-Jul-2022
14:10
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070127.D Page 1
Report Date: 15-Jul-2022 14:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070127.D
Lab Smp Id: HS22061645-02 Client Smp ID: HS22061645-02
Inj Date : 01-JUL-2022 18:10
Operator : PC Inst ID: voa6.i
Smp Info : HS22061645-02;HS22061645-02;;;
Misc Info : HS22052000V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\8260W.m
Meth Date : 15-Jul-2022 14:10 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 13:54 Cal File: X052408.D
Als bottle: 26
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

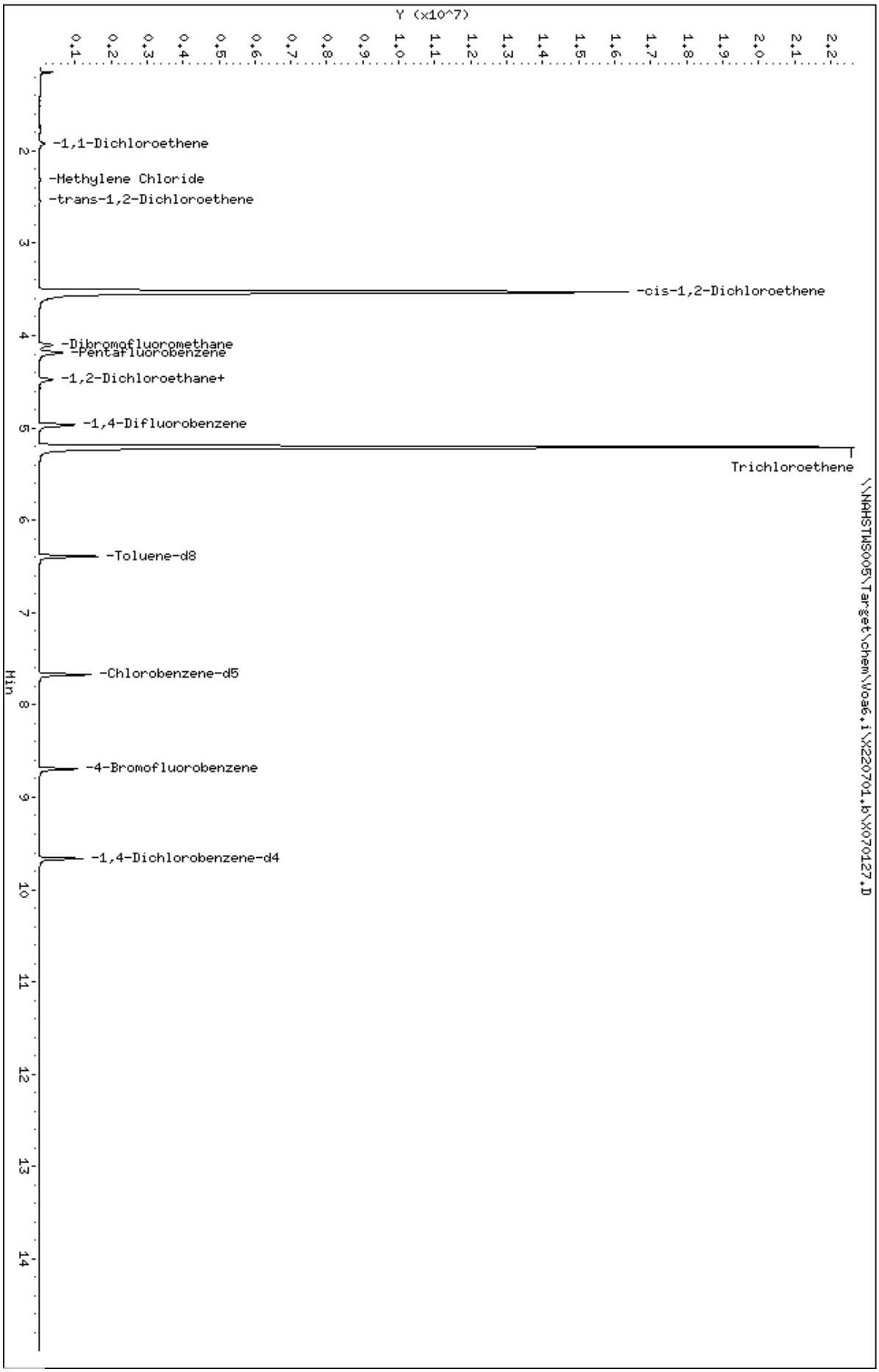
Name	Value	Description
DF	25.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	585367	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	853072	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	780418	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.666	(1.000)	328399	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	293362	40.6180	40.61(M)
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	346880	47.1642	47.16
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	263822	42.8703	42.87
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1010846	49.0471	49.04
11 1,1-Dichloroethene	96	1.917	1.921	(0.458)	24203	3.96489	99.12(a)
33 1,2-Dichloroethane	62	4.571	4.556	(0.920)	15229	1.78836	44.70(a)
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	8640971	1223.97	30599.12(A)
17 Methylene Chloride	84	2.307	2.307	(0.551)	24905	3.36958	84.23(a)
38 Trichloroethene	130	5.212	5.208	(1.049)	7771335	1212.58	30314.39(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	241955	29.3194	732.98

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220701.b\X070127.D
Date : 01-JUL-2022 18:10
Client ID: HS22061645-02
Sample Info: HS22061645-02;HS22061645-02;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070127.D Page 2

Date : 01-JUL-2022 18:10

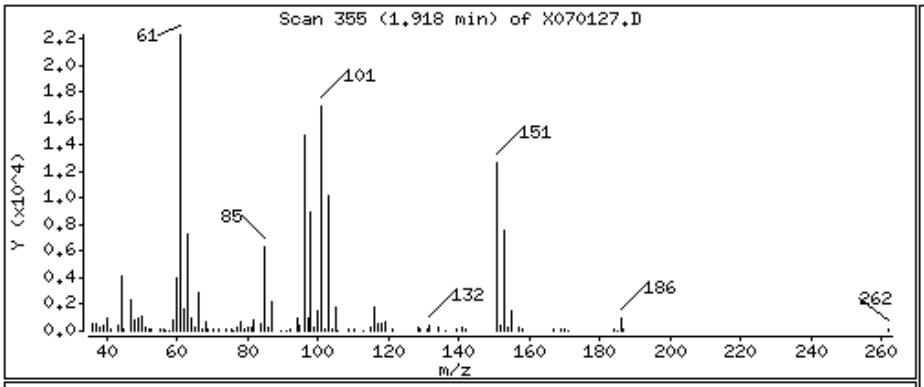
Client ID: HS22061645-02 Instrument: voa6.i

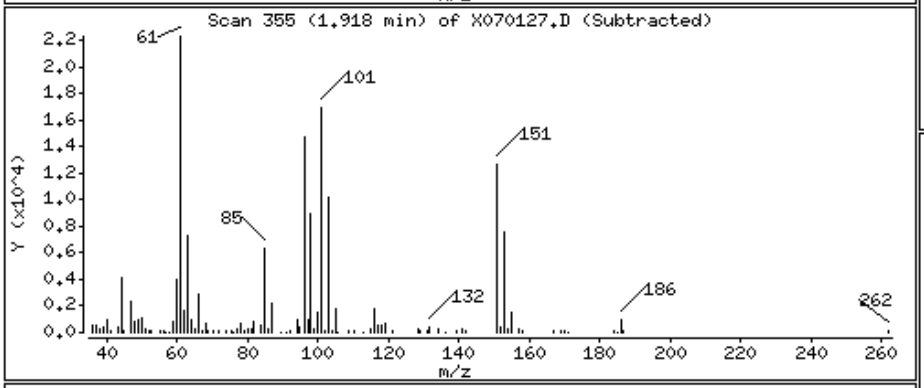
Sample Info: HS22061645-02;HS22061645-02;;;

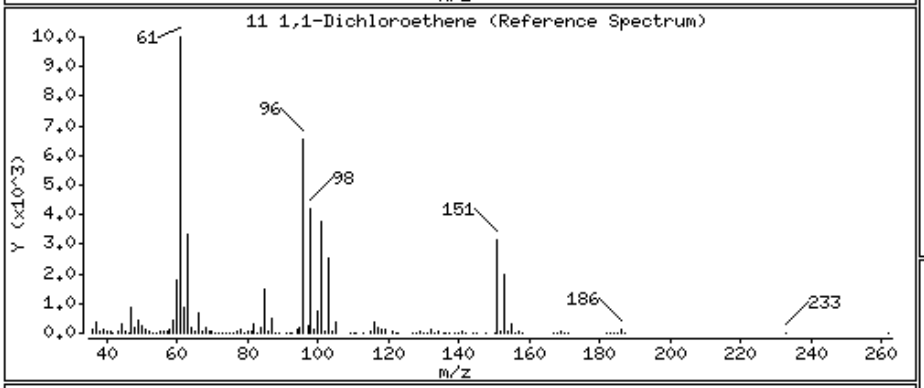
Purge Volume: 5.0 Operator: PC

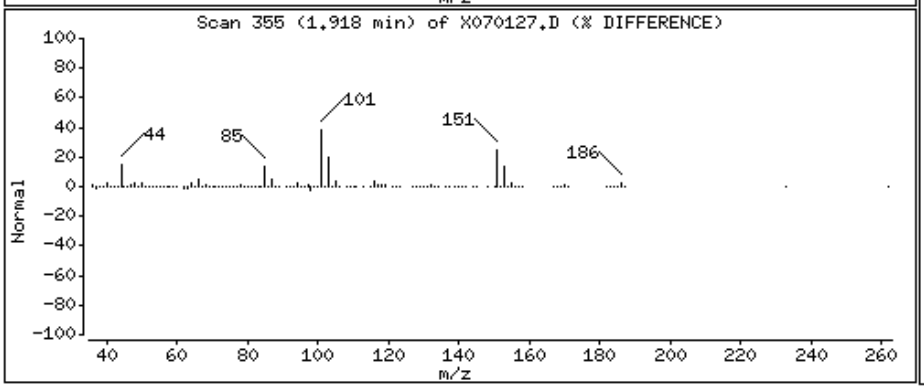
Column phase: DB624 Column diameter: 0.18

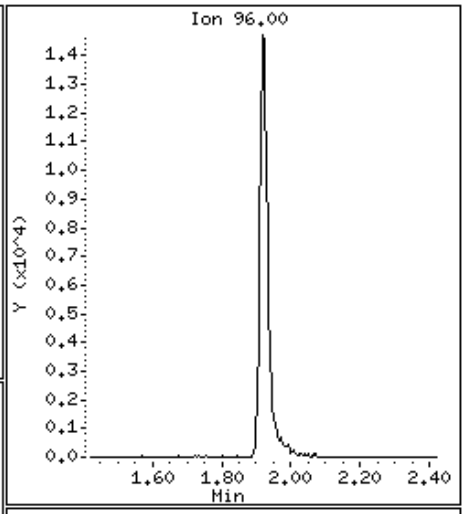
11 1,1-Dichloroethene Concentration: 99.12 ug/l

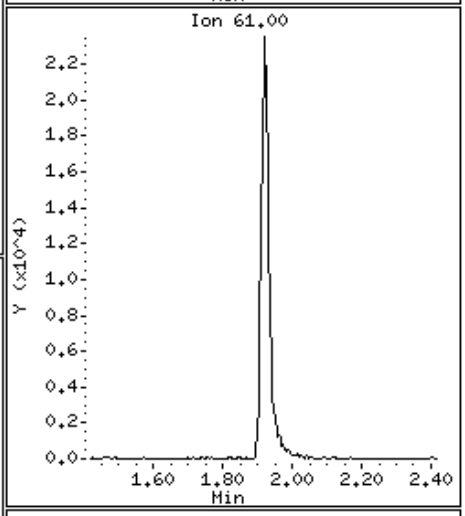


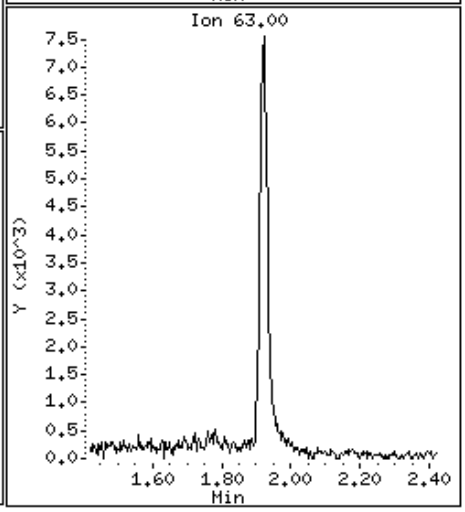












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070127.D

Date : 01-JUL-2022 18:10

Client ID: HS22061645-02

Instrument: voa6.i

Sample Info: HS22061645-02;HS22061645-02;;;

Purge Volume: 5.0

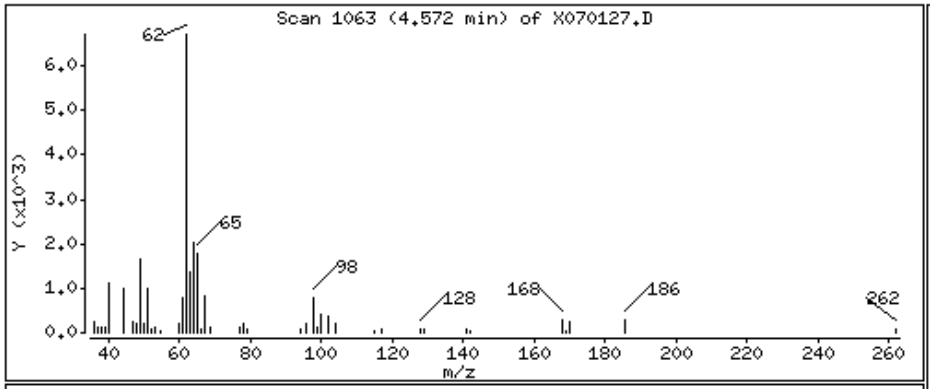
Operator: PC

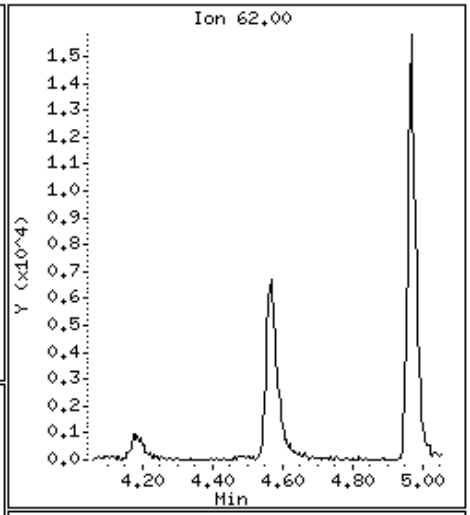
Column phase: DB624

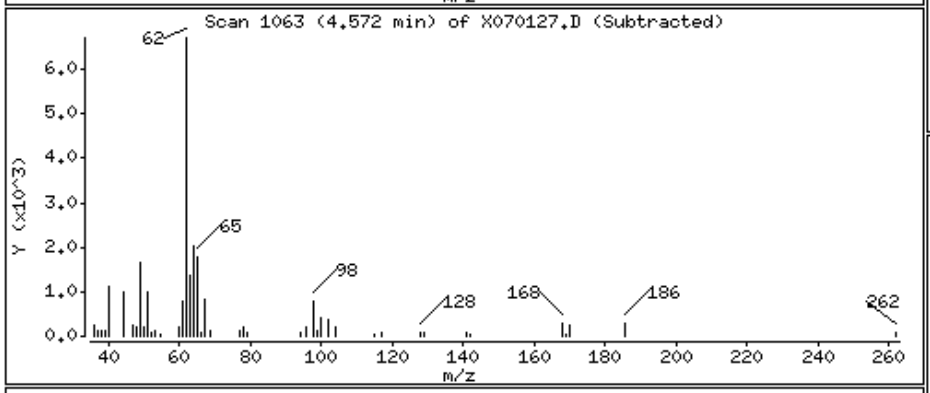
Column diameter: 0.18

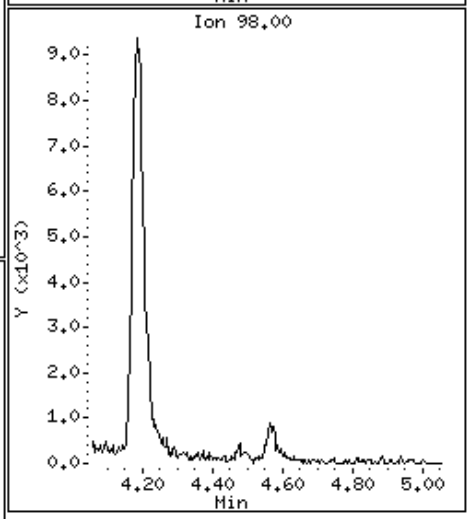
33 1,2-Dichloroethane

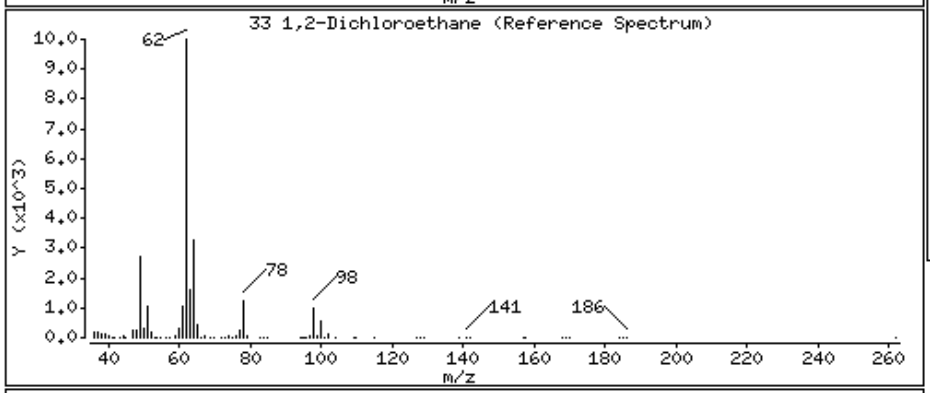
Concentration: 44.70 ug/l

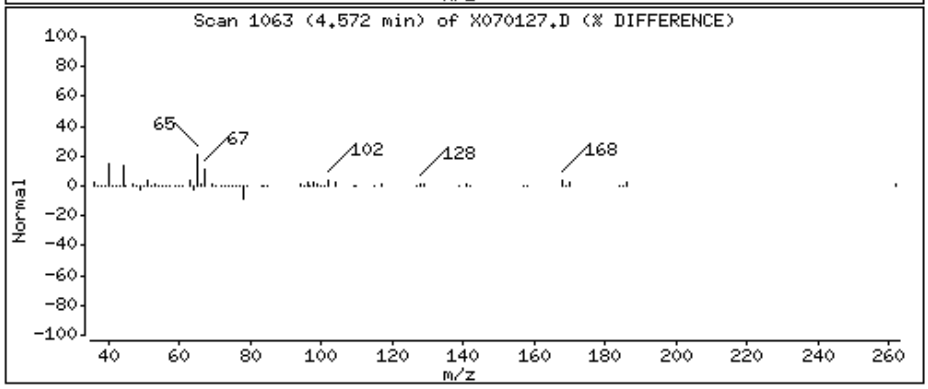












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070127.D Page 4

Date : 01-JUL-2022 18:10

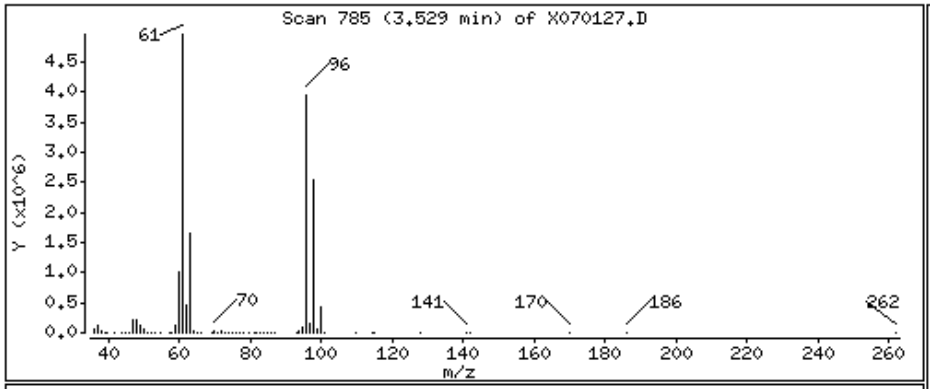
Client ID: HS22061645-02 Instrument: voa6.i

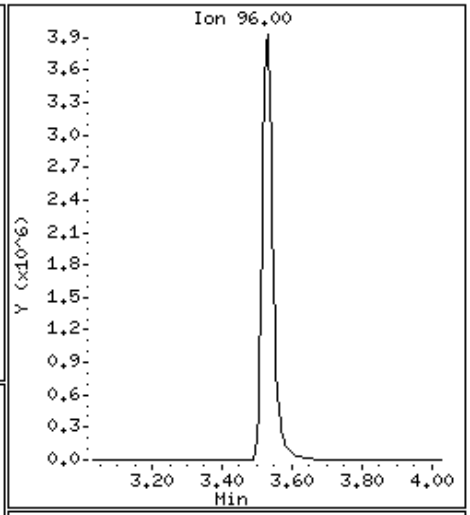
Sample Info: HS22061645-02;HS22061645-02;;;

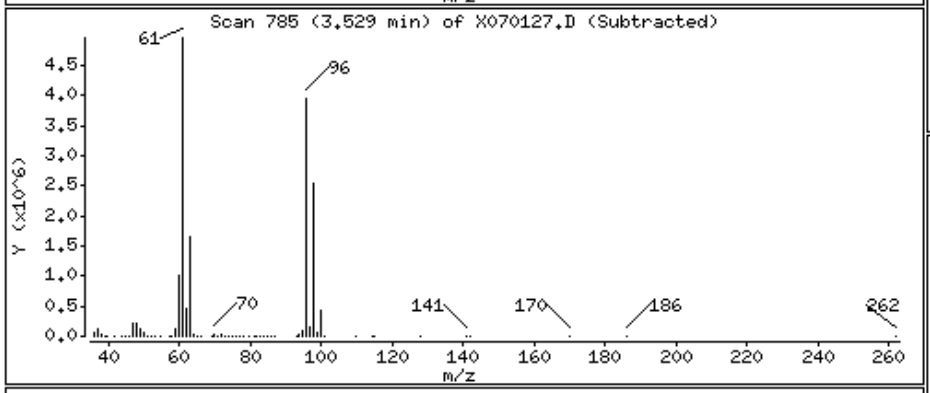
Purge Volume: 5.0 Operator: PC

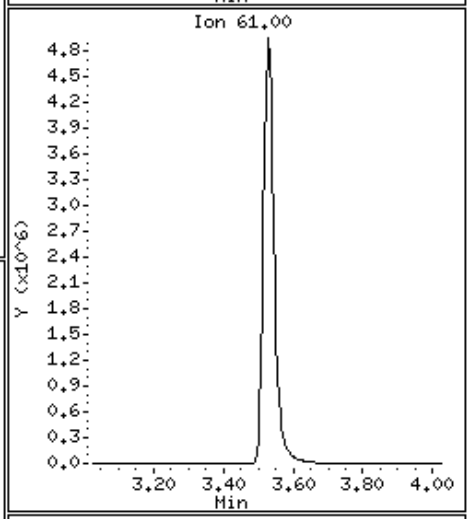
Column phase: DB624 Column diameter: 0.18

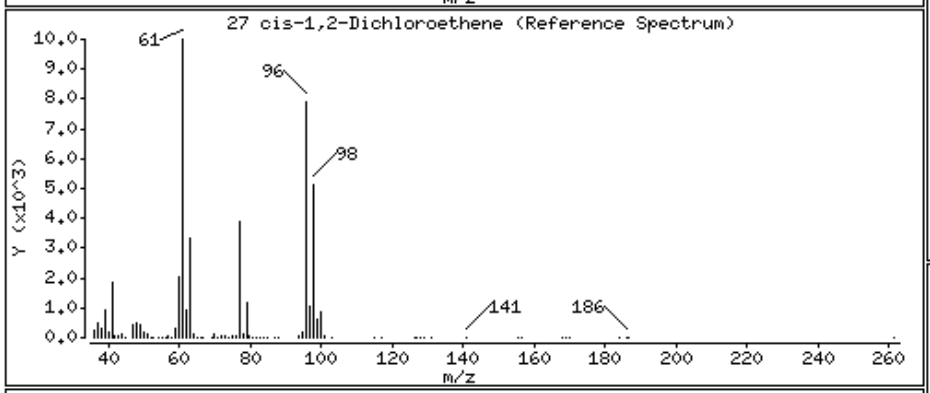
27 cis-1,2-Dichloroethene Concentration: 30599.12 ug/l

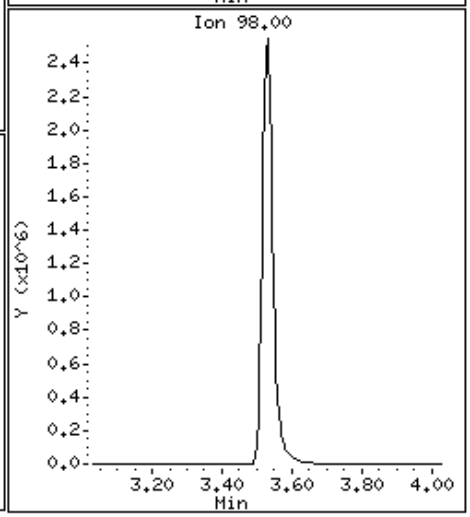


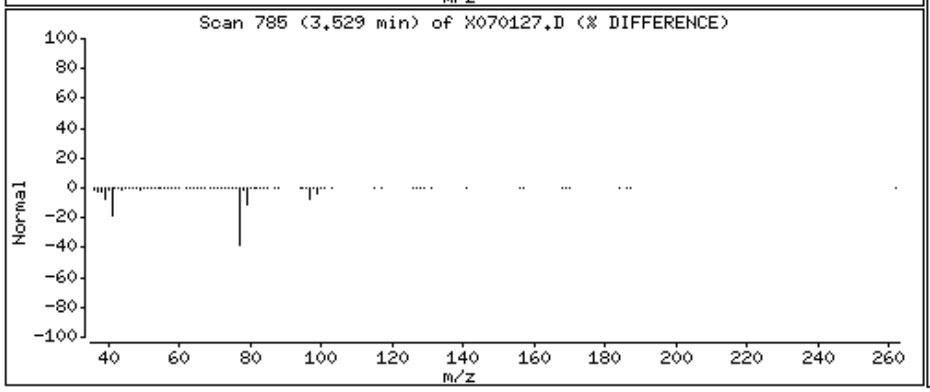












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070127.D Page 5

Date : 01-JUL-2022 18:10

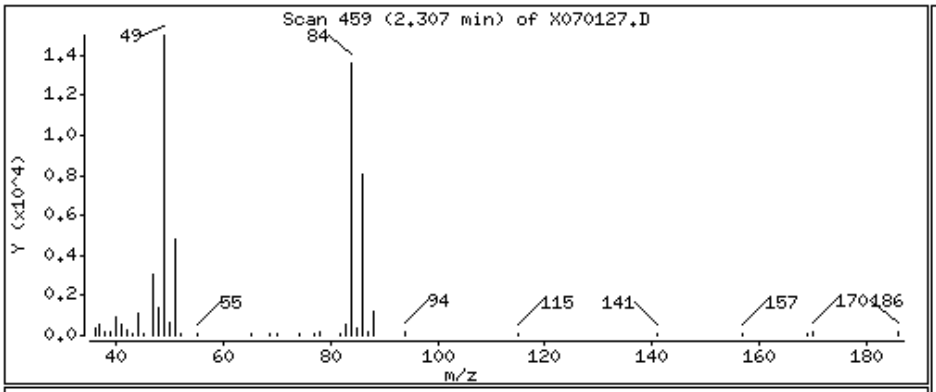
Client ID: HS22061645-02 Instrument: voa6.i

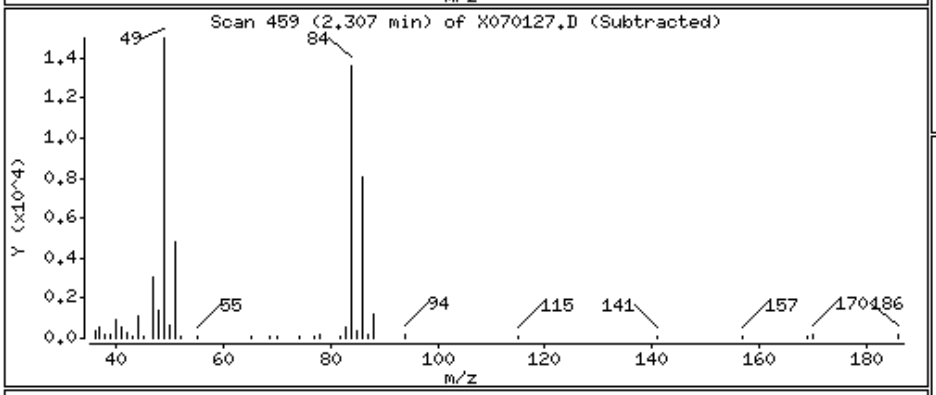
Sample Info: HS22061645-02;HS22061645-02;;;

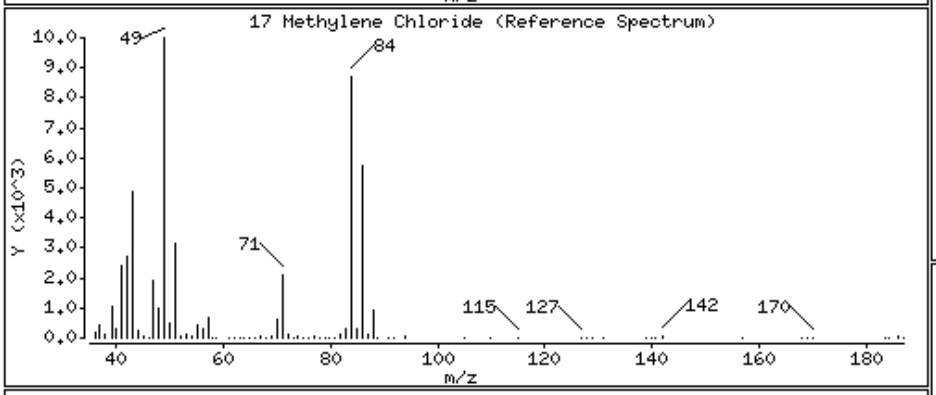
Purge Volume: 5.0 Operator: PC

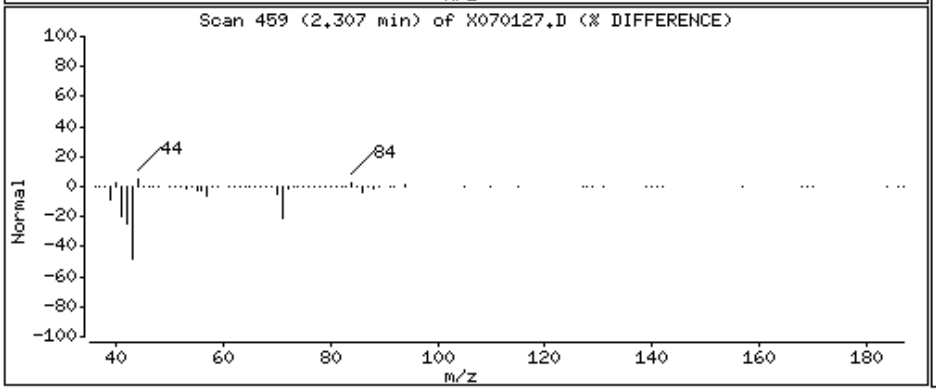
Column phase: DB624 Column diameter: 0.18

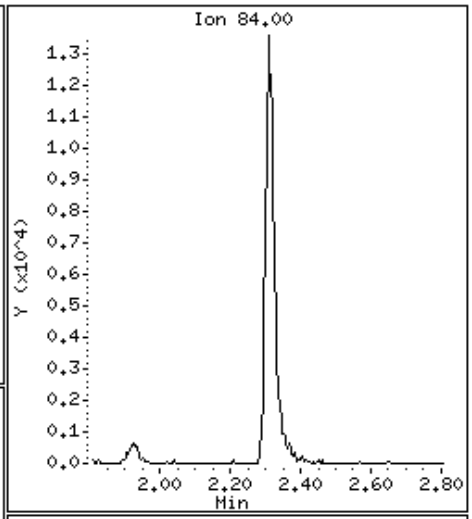
17 Methylene Chloride Concentration: 84.23 ug/l

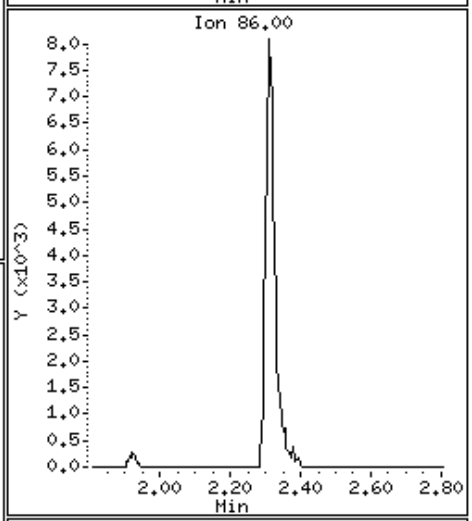


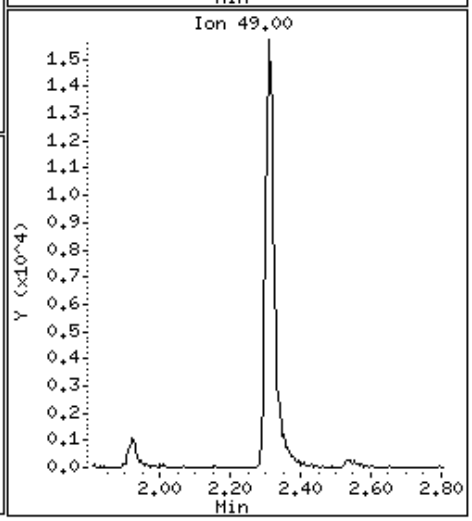












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070127.D Page 6

Date : 01-JUL-2022 18:10

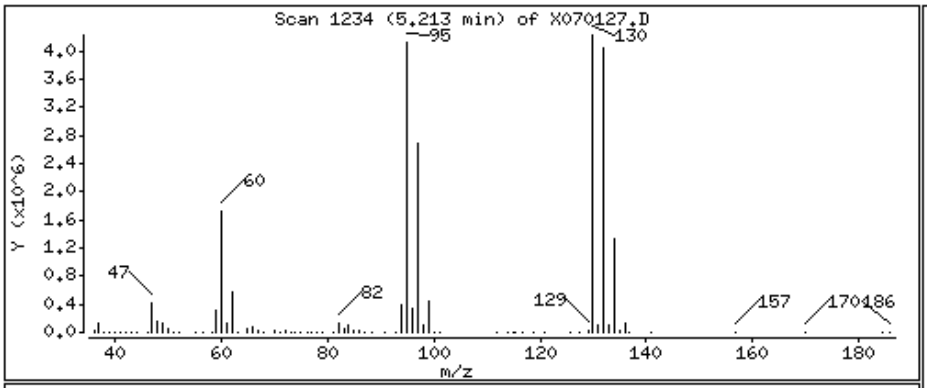
Client ID: HS22061645-02 Instrument: voa6.i

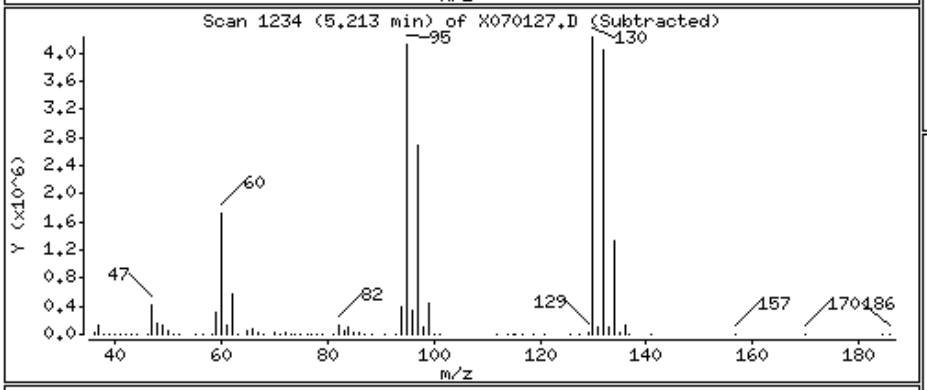
Sample Info: HS22061645-02;HS22061645-02;;;

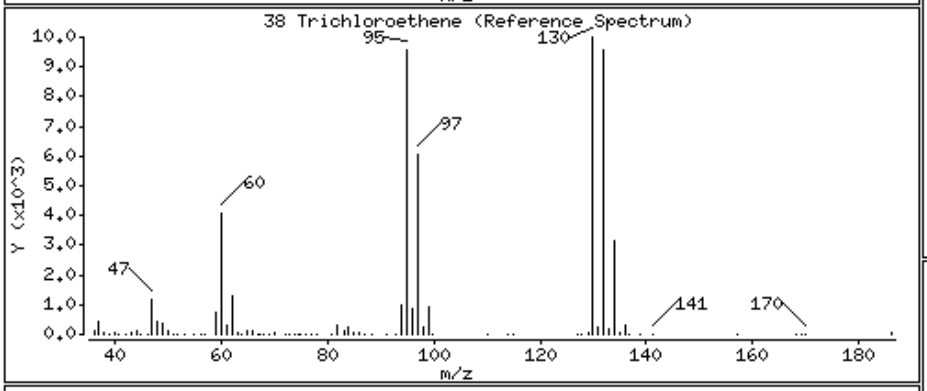
Purge Volume: 5.0 Operator: PC

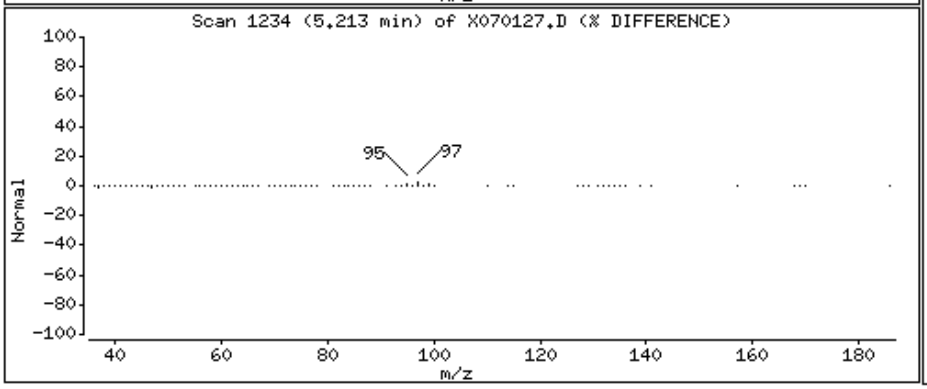
Column phase: DB624 Column diameter: 0.18

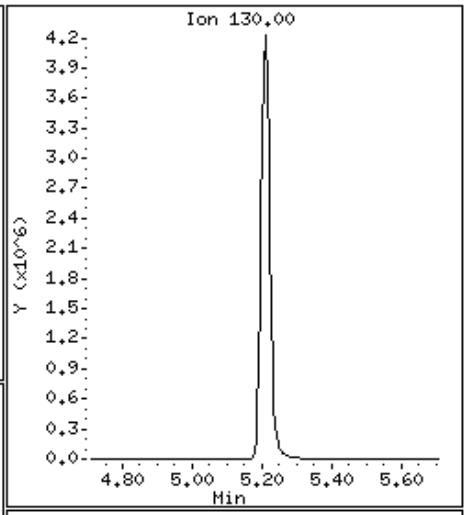
38 Trichloroethene Concentration: 30314.39 ug/l

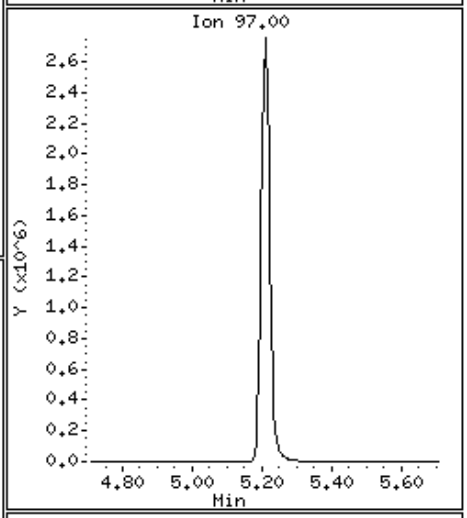


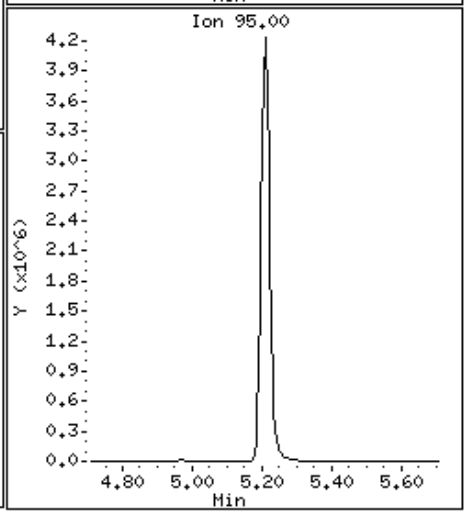












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070127.D

Date : 01-JUL-2022 18:10

Client ID: HS22061645-02

Instrument: voa6.i

Sample Info: HS22061645-02;HS22061645-02;;;

Purge Volume: 5.0

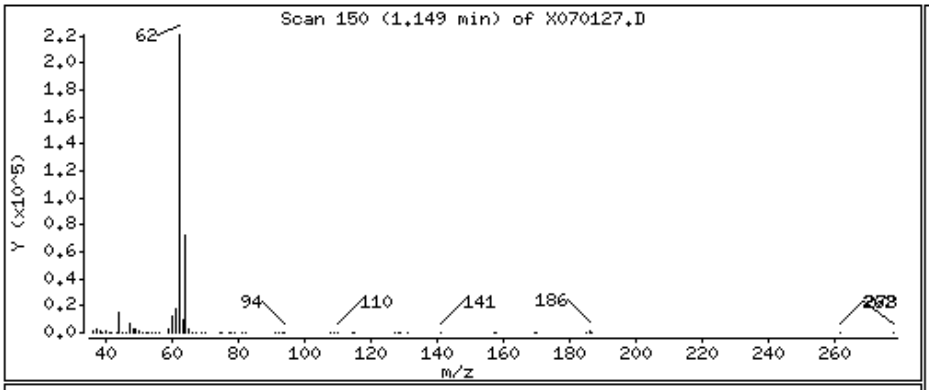
Operator: PC

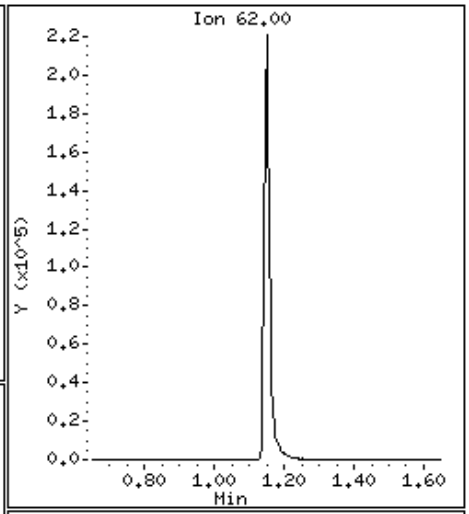
Column phase: DB624

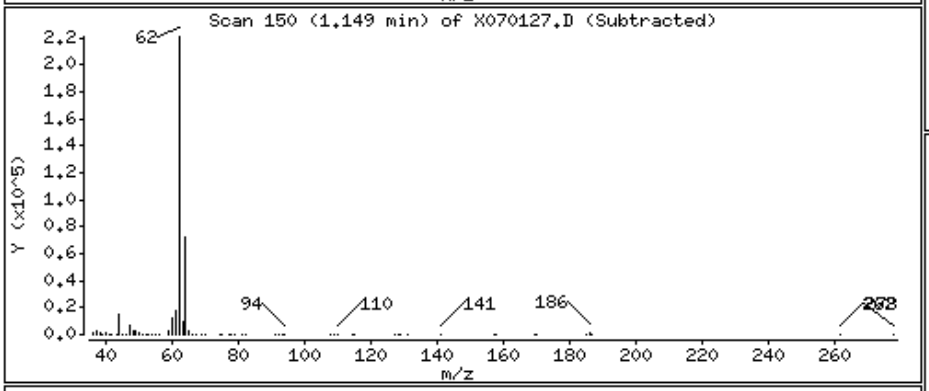
Column diameter: 0.18

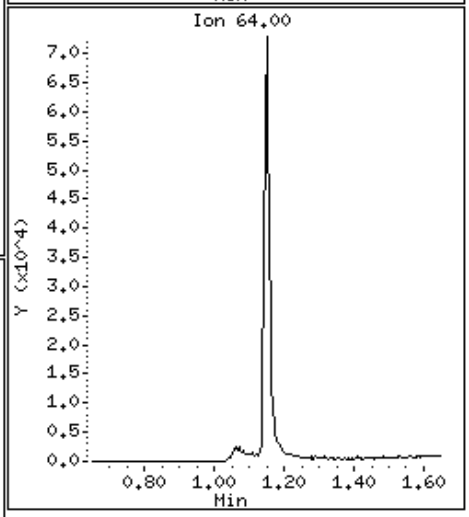
5 Vinyl Chloride

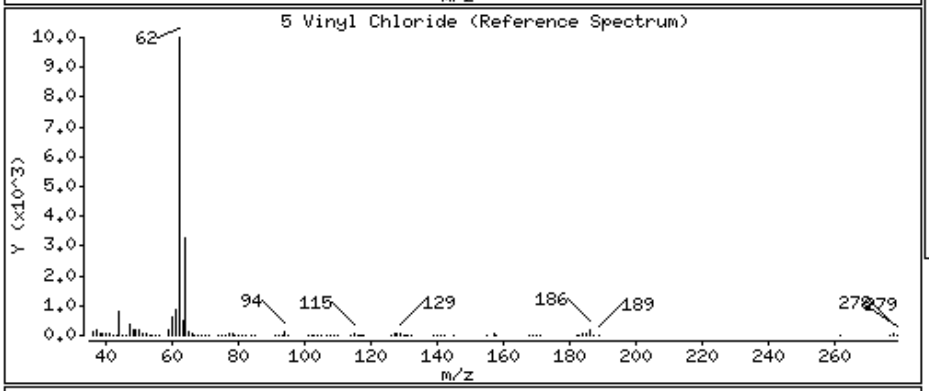
Concentration: 732.98 ug/l

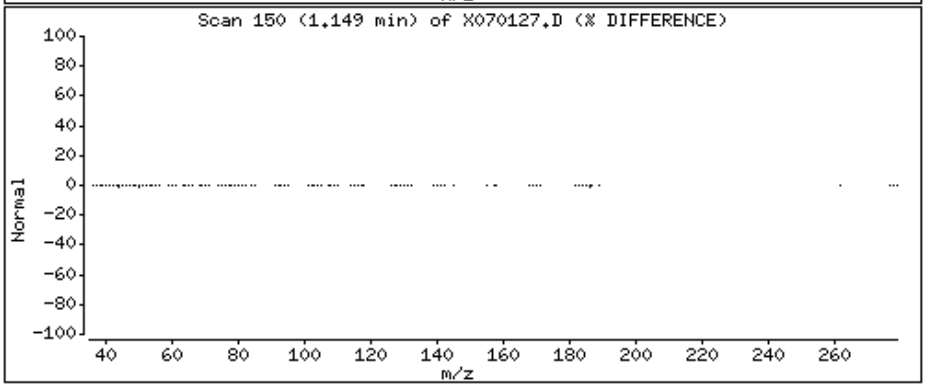












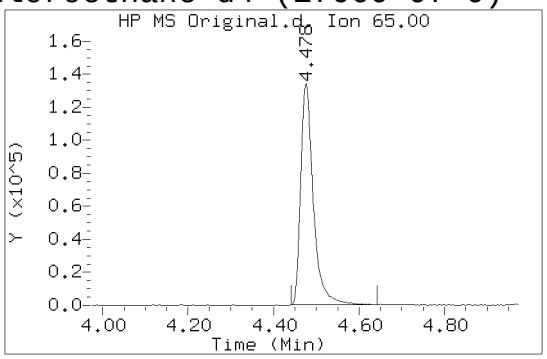
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070127.D
Inj Date : 01-JUL-2022 18:10
InstruID : voa6.i
LabSampID : HS22061645-02

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

MASS
53
AREA
0
HEIGHT
0
01-Jul-2022
18:26
ALSHS
Server



AFTER

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AREA
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HEIGHT
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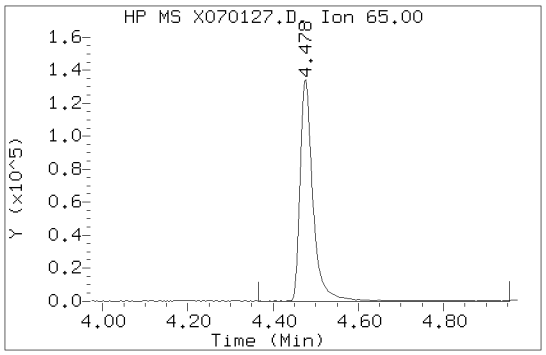
15-Jul-2022
14:10
ALSHS
Ser



BEFORE

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AREA
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HEIGHT
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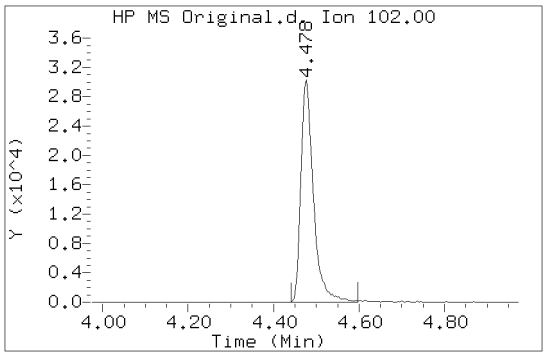
01-Jul-2022
18:26
ALSHS
Server



AFTER

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AREA
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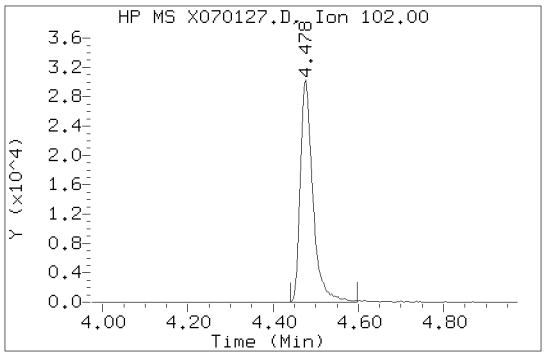
HEIGHT
30304
15-Jul-2022
14:10
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070128.D Page 1
Report Date: 15-Jul-2022 14:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070128.D
Lab Smp Id: HS22061645-02 Client Smp ID: HS22061645-02
Inj Date : 01-JUL-2022 18:31
Operator : PC Inst ID: voa6.i
Smp Info : HS22061645-02;HS22061645-02;;;
Misc Info : HS22052000V6;WATER;0;250;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\8260W.m
Meth Date : 15-Jul-2022 14:10 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 13:54 Cal File: X052408.D
Als bottle: 27
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

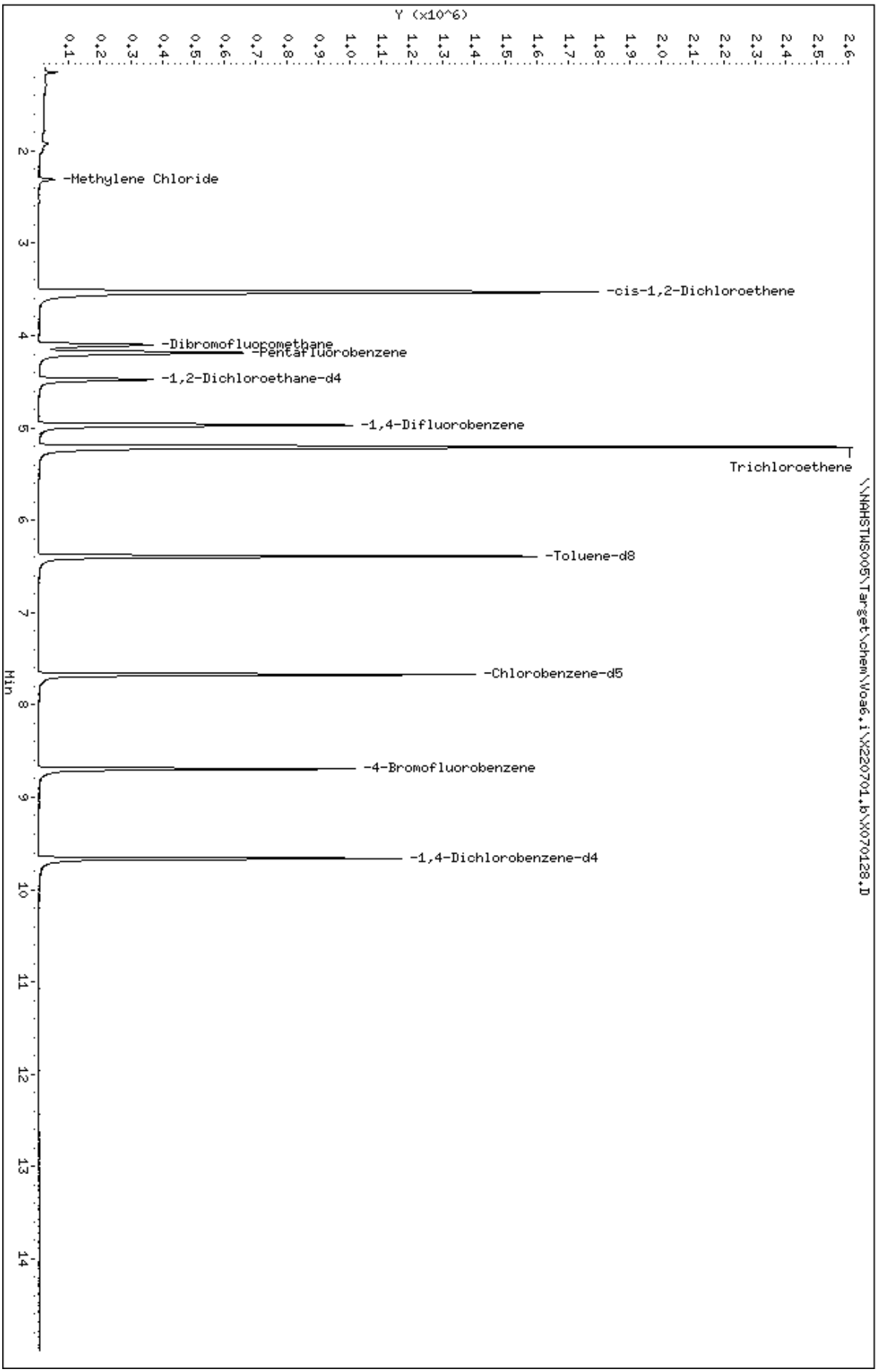
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	250.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	587694	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	843328	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	736993	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	321317	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	294136	40.5635	40.56(M)
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	327265	47.1182	47.11
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	260281	42.1270	42.12
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	999103	51.3337	51.33
27 cis-1,2-Dichloroethene	96	3.525	3.529	(0.842)	947752	133.714	33428.60
17 Methylene Chloride	84	2.311	2.307	(0.552)	23116	3.11515	778.78(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	899608	141.989	35497.33
5 Vinyl Chloride	62	1.149	1.149	(0.275)	26235	3.16650	791.62(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220701.b\X070128.D
Date : 01-JUL-2022 18:31
Client ID: HS220616645-02
Sample Info: HS220616645-02;HS220616645-02;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070128.D Page 2

Date : 01-JUL-2022 18:31

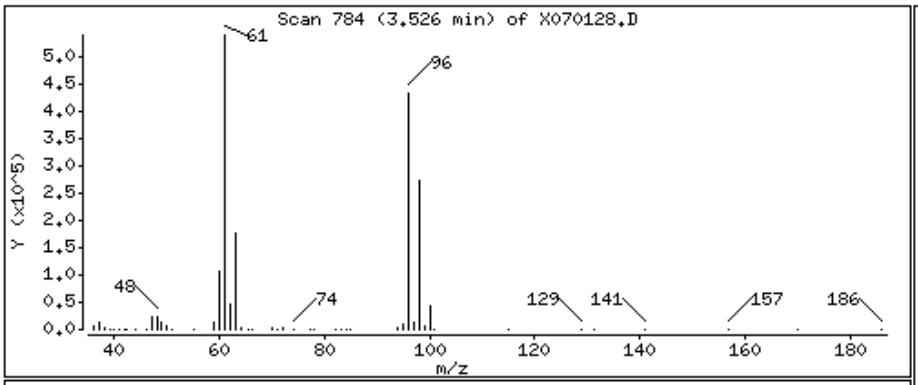
Client ID: HS22061645-02 Instrument: voa6.i

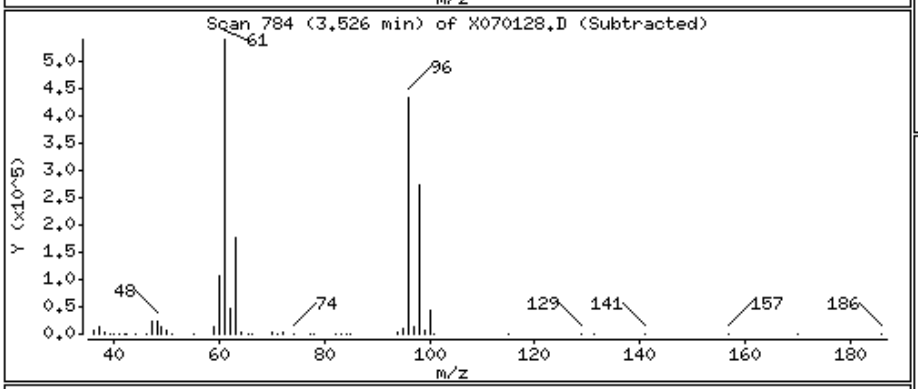
Sample Info: HS22061645-02;HS22061645-02;;;

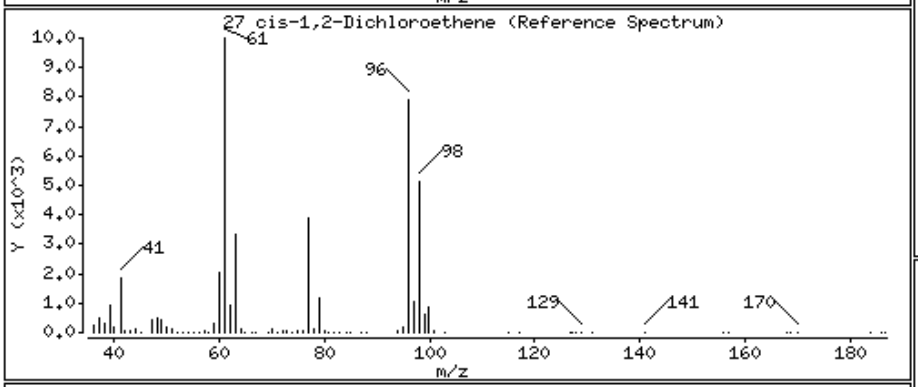
Purge Volume: 5.0 Operator: PC

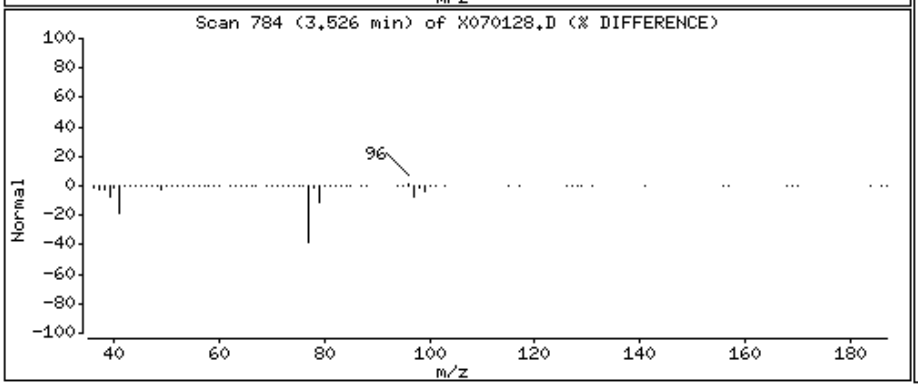
Column phase: DB624 Column diameter: 0.18

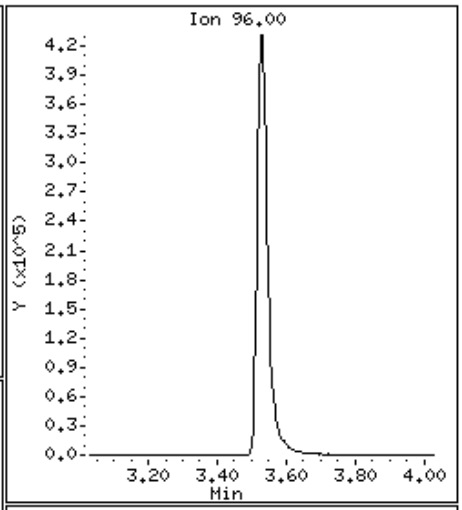
27 cis-1,2-Dichloroethene Concentration: 33428.60 ug/l

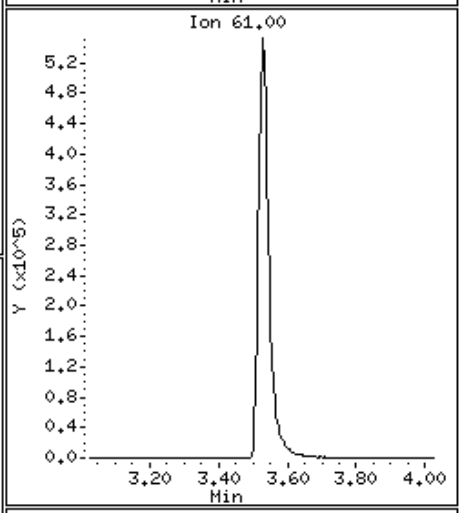


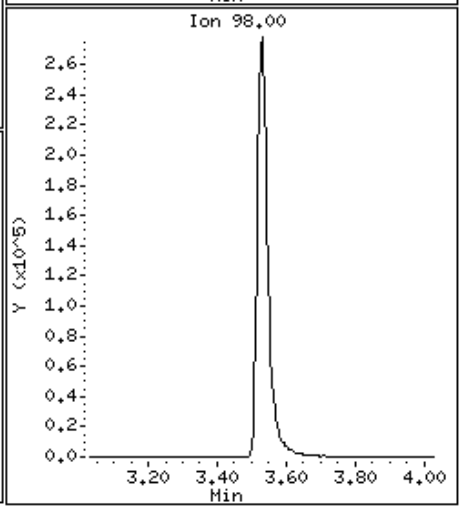












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070128.D

Date : 01-JUL-2022 18:31

Client ID: HS22061645-02

Instrument: voa6.i

Sample Info: HS22061645-02;HS22061645-02;;;

Purge Volume: 5.0

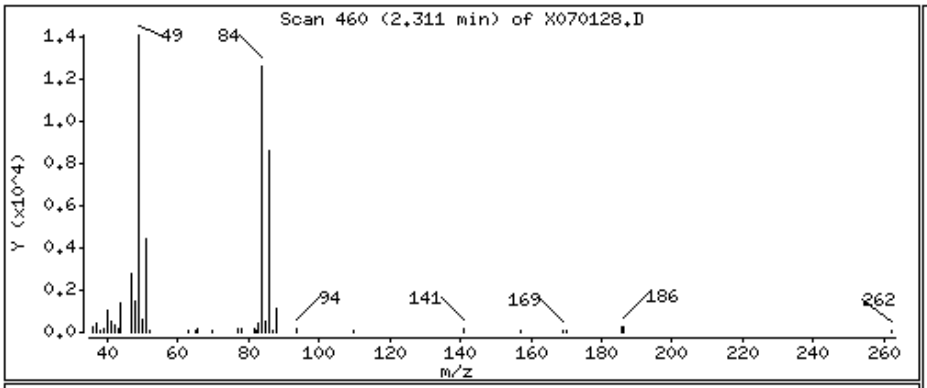
Operator: PC

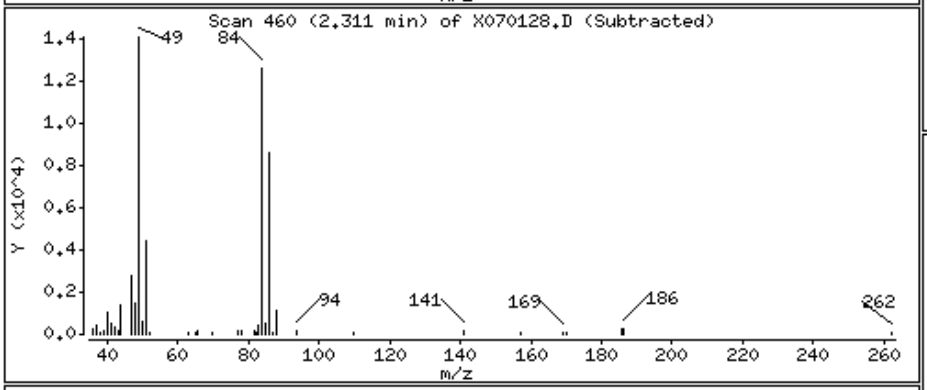
Column phase: DB624

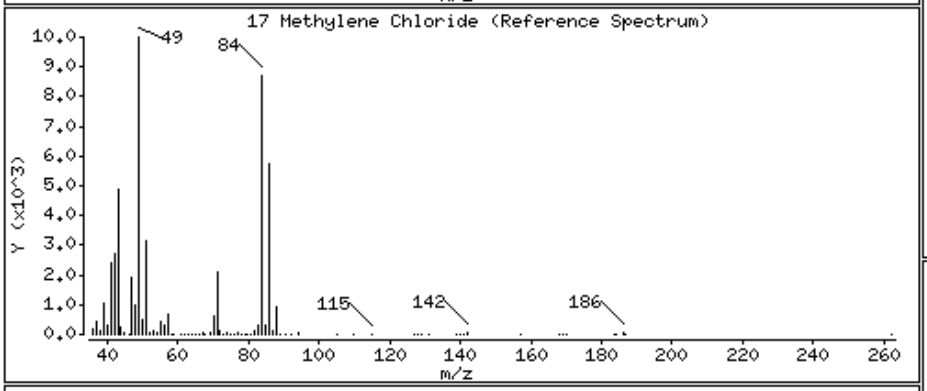
Column diameter: 0.18

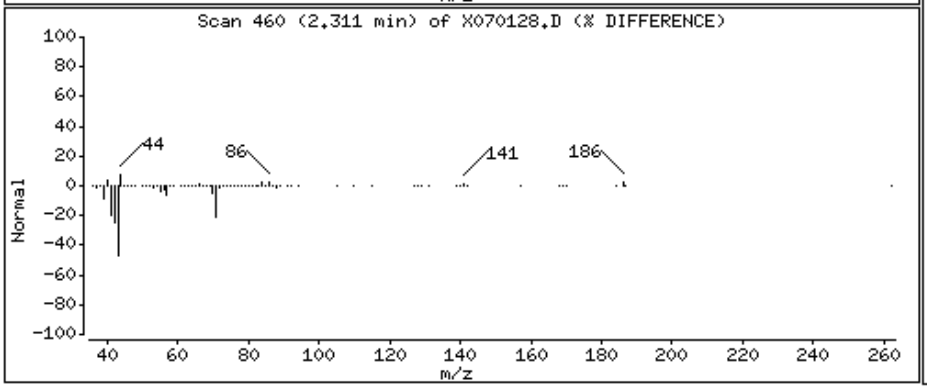
17 Methylene Chloride

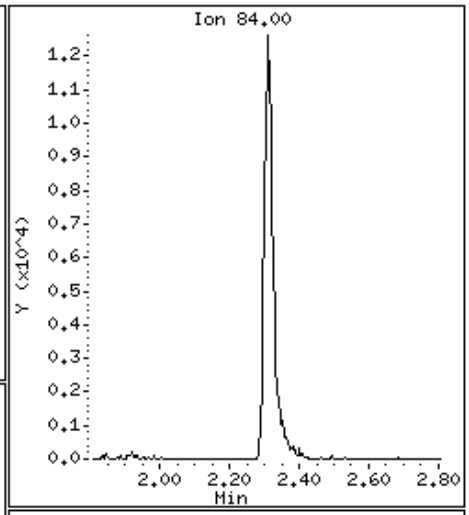
Concentration: 778.78 ug/l

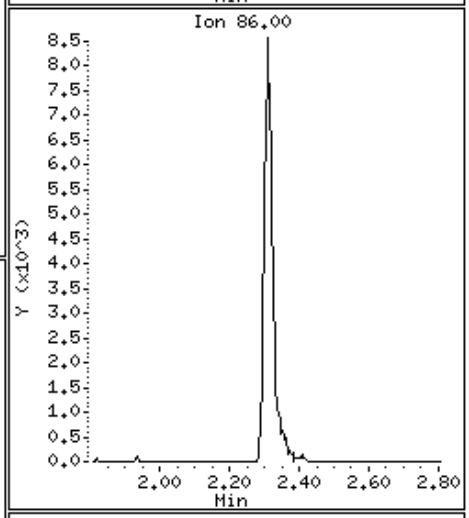


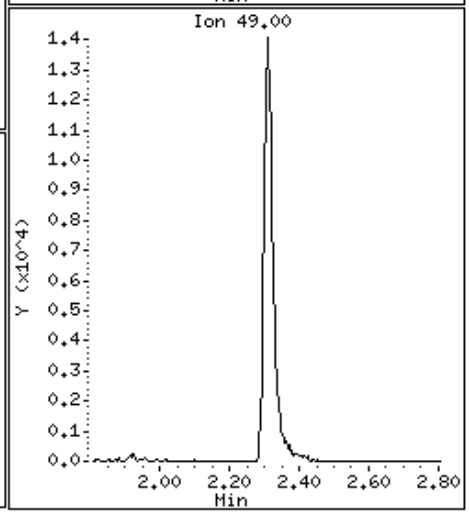












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070128.D Page 4

Date : 01-JUL-2022 18:31

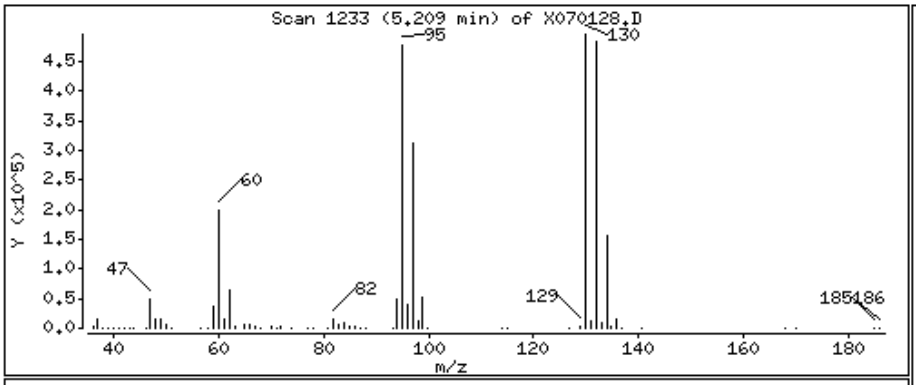
Client ID: HS22061645-02 Instrument: voa6.i

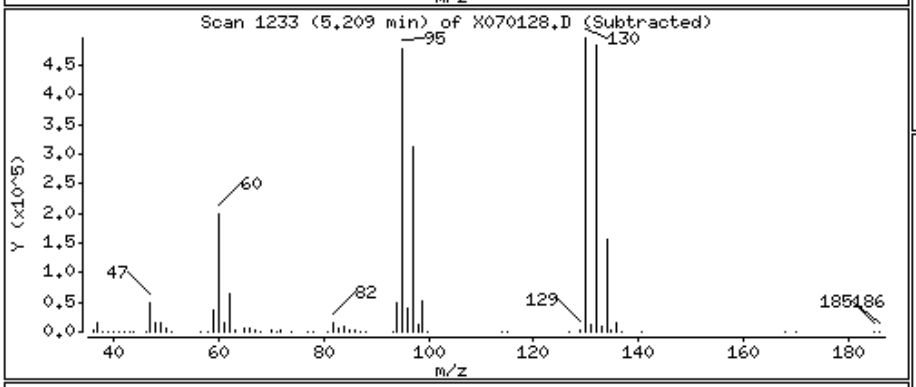
Sample Info: HS22061645-02;HS22061645-02;;;

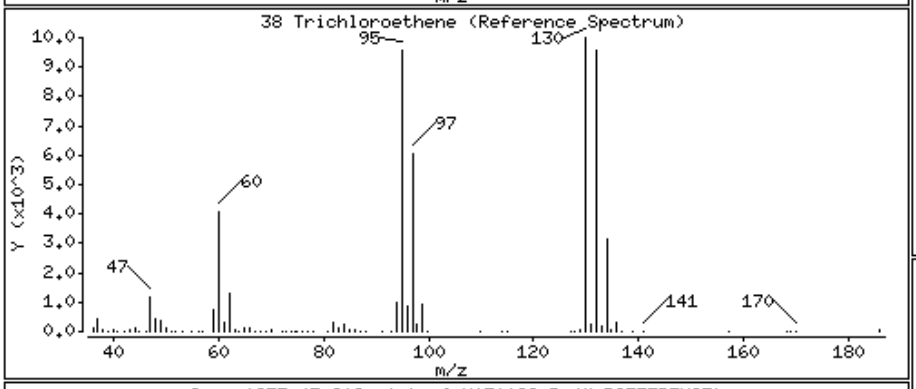
Purge Volume: 5.0 Operator: PC

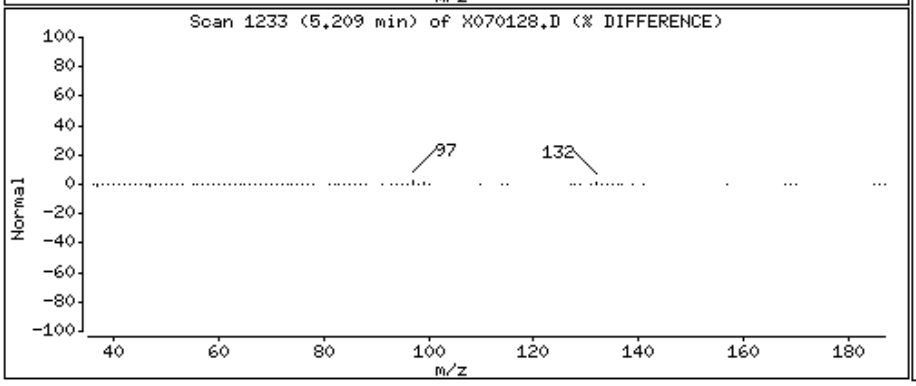
Column phase: DB624 Column diameter: 0.18

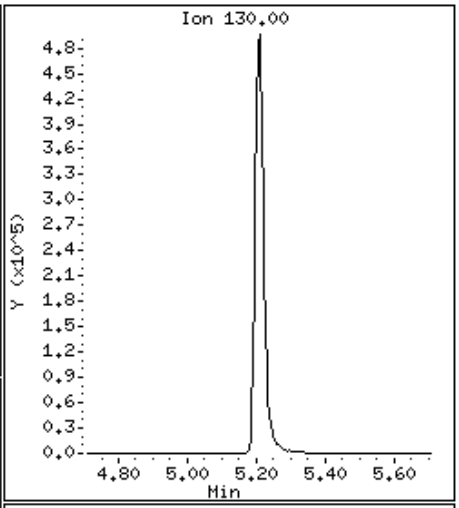
38 Trichloroethene Concentration: 35497.33 ug/l

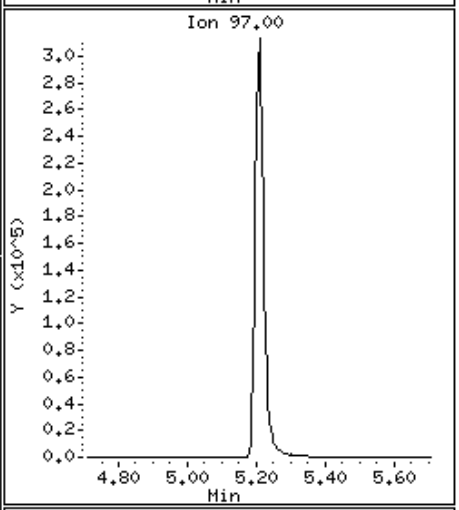


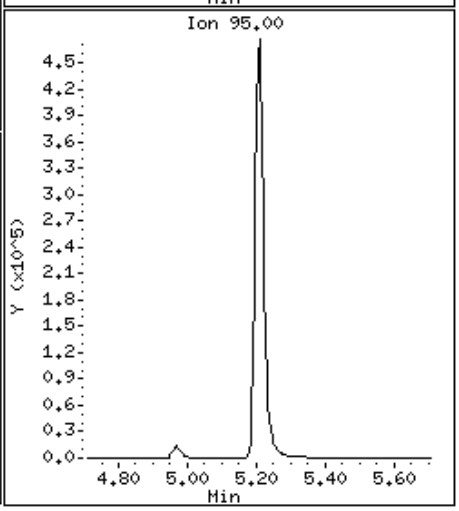












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070128.D Page 5

Date : 01-JUL-2022 18:31

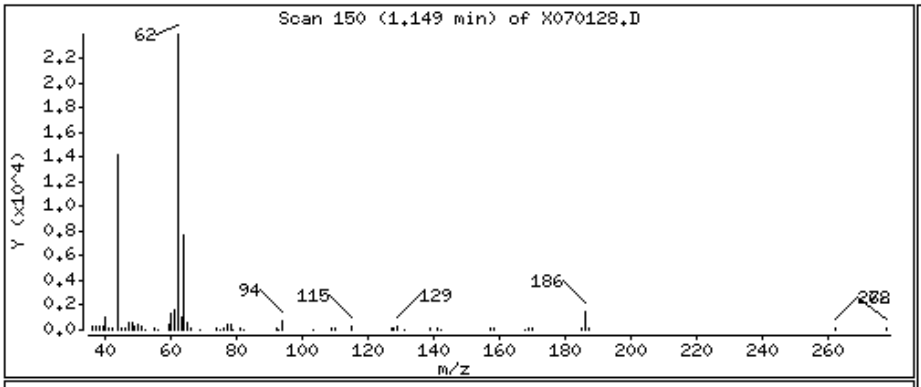
Client ID: HS22061645-02 Instrument: voa6.i

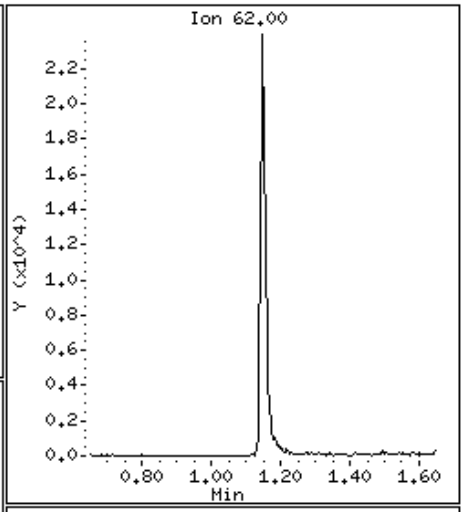
Sample Info: HS22061645-02;HS22061645-02;;;

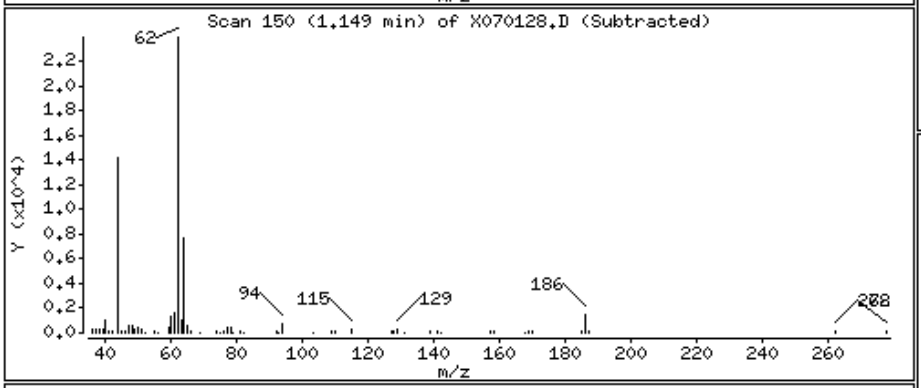
Purge Volume: 5.0 Operator: PC

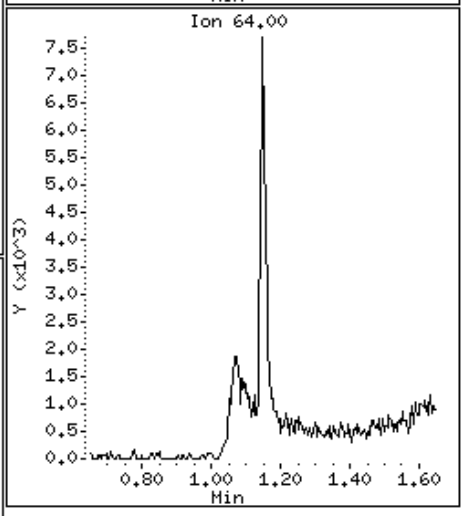
Column phase: DB624 Column diameter: 0.18

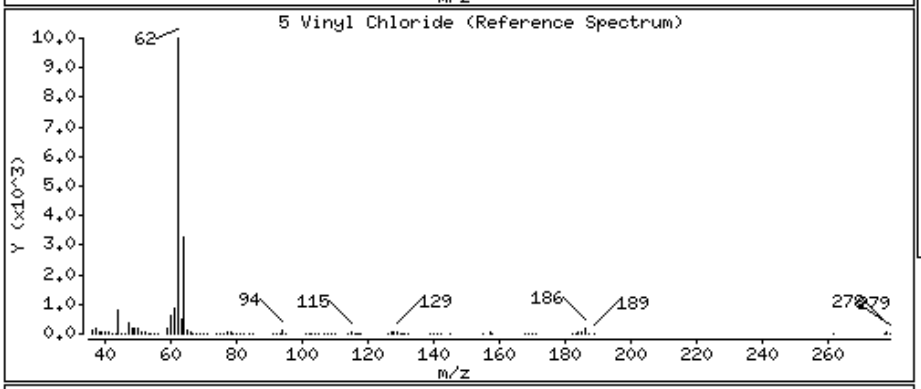
5 Vinyl Chloride Concentration: 791.62 ug/l

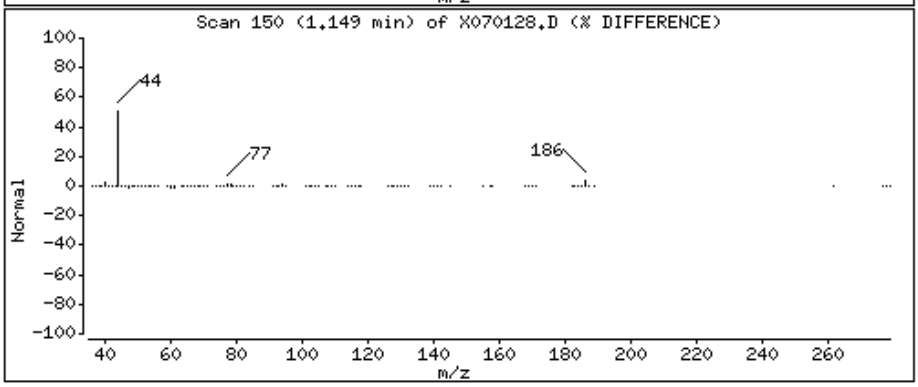












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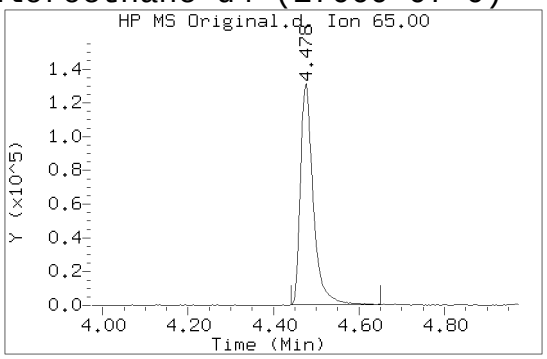
Inj Date : 01-JUL-2022 18:31
InstruID : voa6.i
LabSampID : HS22061645-02

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

MASS
53
AREA
0
HEIGHT
0
01-Jul-2022
18:47
ALSHS
Server



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15-Jul-2022
14:10
ALSHS
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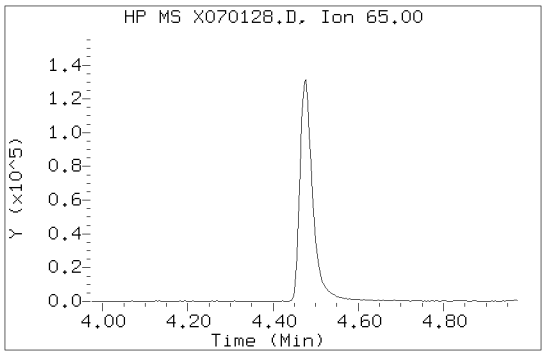

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HEIGHT
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01-Jul-2022
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ALSHS
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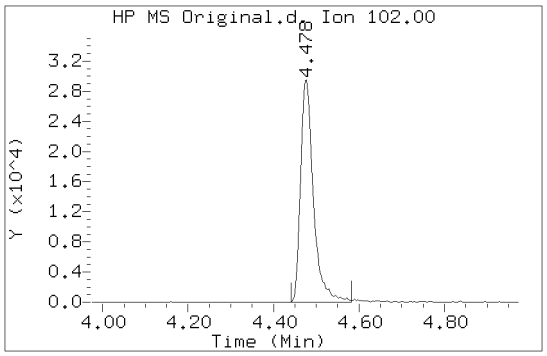

AFTER

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AREA
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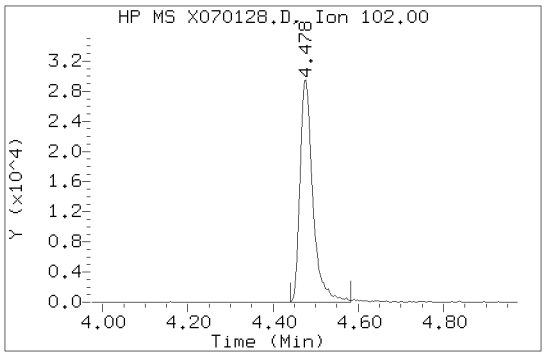
HEIGHT
29504
15-Jul-2022
14:10
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070129.D Page 1
Report Date: 15-Jul-2022 14:11

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070129.D
Lab Smp Id: HS22061645-03 Client Smp ID: HS22061645-03
Inj Date : 01-JUL-2022 18:53
Operator : PC Inst ID: voa6.i
Smp Info : HS22061645-03;HS22061645-03;;;
Misc Info : HS22052000V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\8260W.m
Meth Date : 15-Jul-2022 14:10 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 13:54 Cal File: X052408.D
Als bottle: 28
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

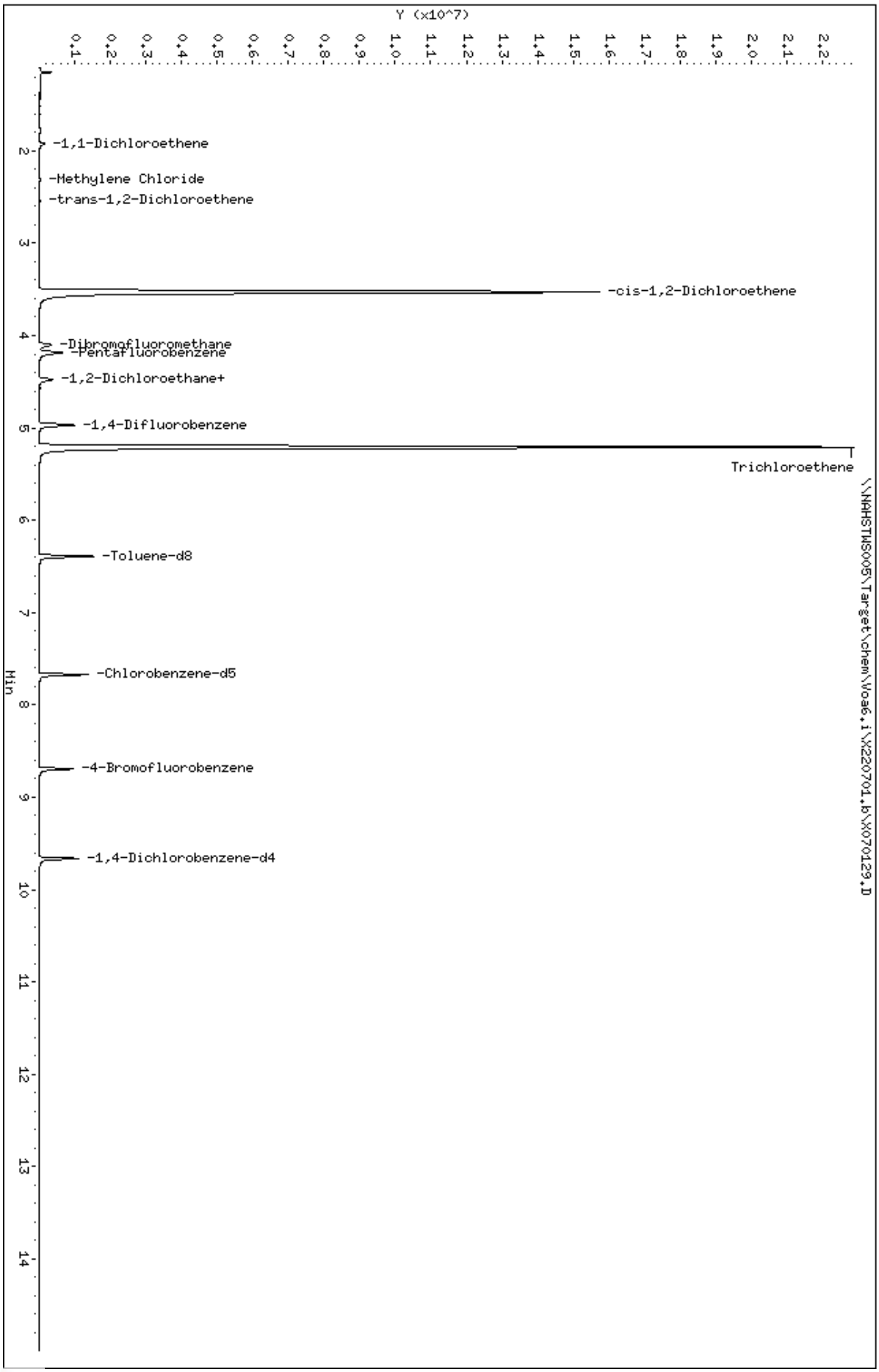
Name	Value	Description
DF	25.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	583060	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	845372	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	703693	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	304389	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	291523	40.5223	40.52(M)
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	306719	46.2336	46.23
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	257679	42.0373	42.03
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	983288	52.9118	52.91
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	22101	3.63487	90.87(a)
33 1,2-Dichloroethane	62	4.567	4.556	(0.919)	14651	1.73615	43.40(a)
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	8292083	1179.19	29479.84(A)
17 Methylene Chloride	84	2.315	2.307	(0.553)	19464	2.64384	66.09(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	7801459	1228.36	30709.08(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	214976	26.1533	653.83

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220701.b\X070129.D
Date : 01-JUL-2022 18:53
Client ID: HS22061645-03
Sample Info: HS22061645-03;HS22061645-03;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070129.D

Date : 01-JUL-2022 18:53

Client ID: HS22061645-03

Instrument: voa6.i

Sample Info: HS22061645-03;HS22061645-03;;;

Purge Volume: 5.0

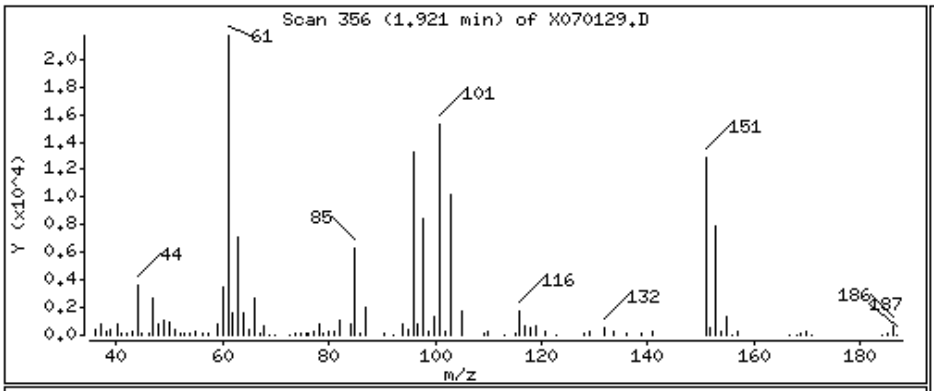
Operator: PC

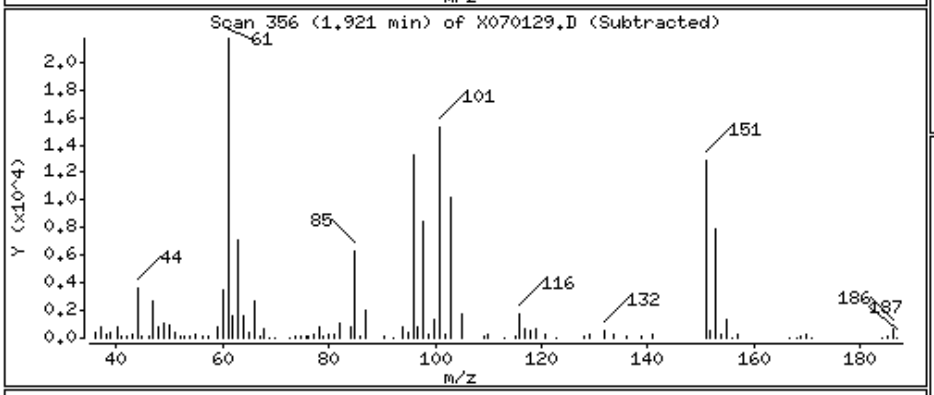
Column phase: DB624

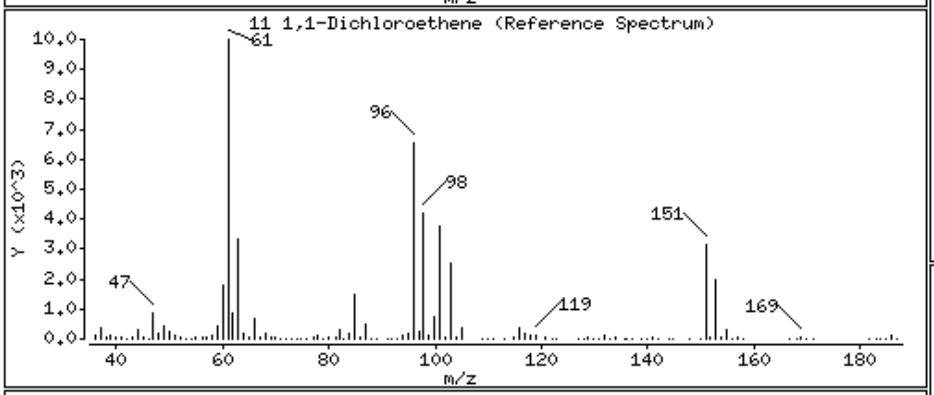
Column diameter: 0.18

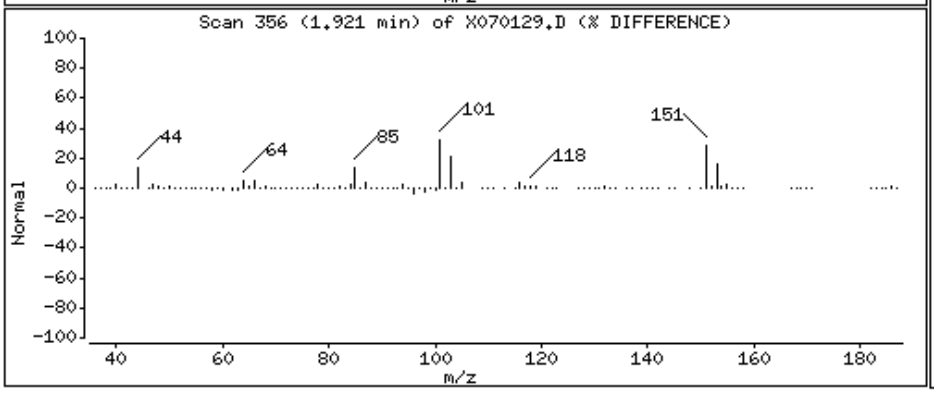
11 1,1-Dichloroethene

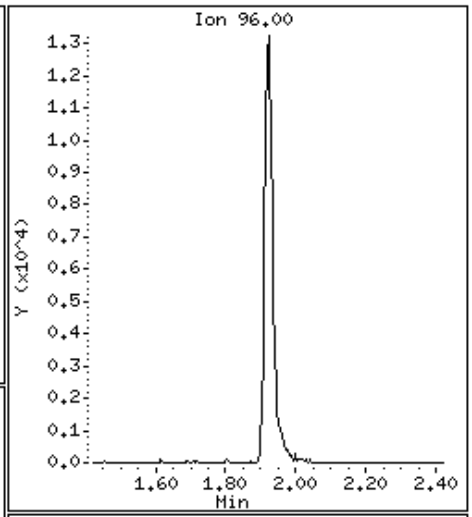
Concentration: 90.87 ug/l

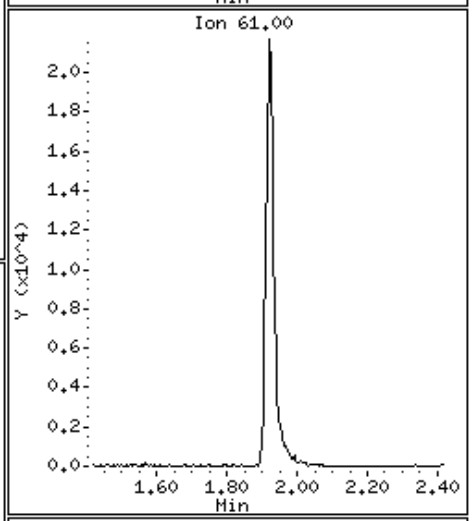


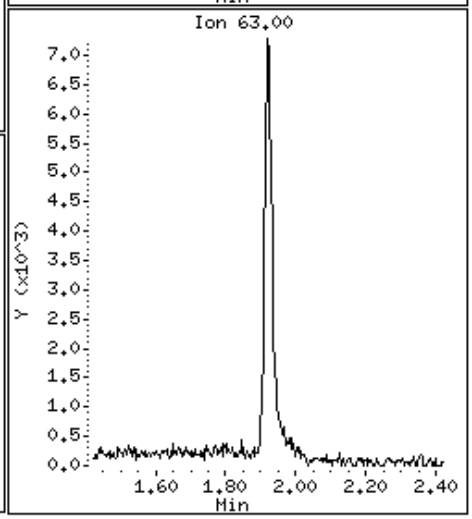












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070129.D Page 3

Date : 01-JUL-2022 18:53

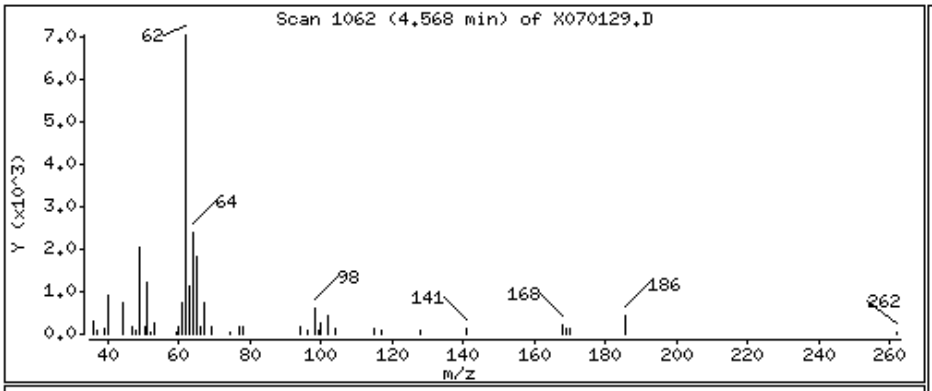
Client ID: HS22061645-03 Instrument: voa6.i

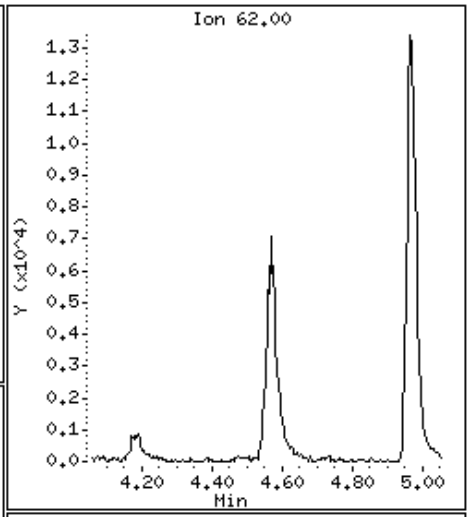
Sample Info: HS22061645-03;HS22061645-03;;;

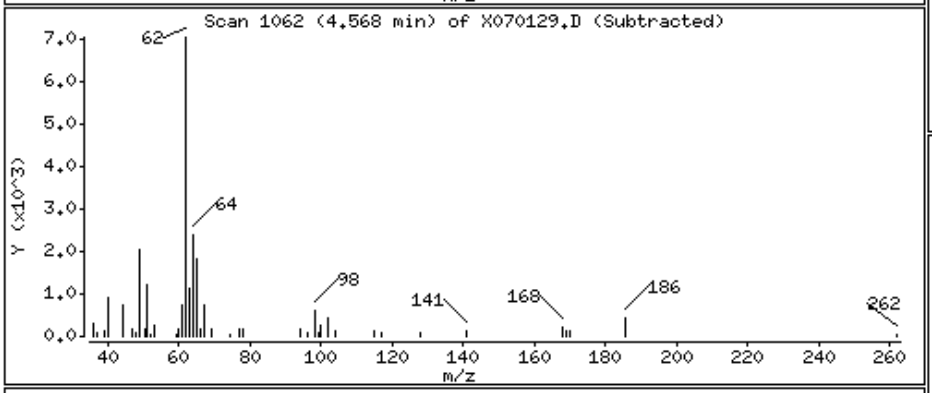
Purge Volume: 5.0 Operator: PC

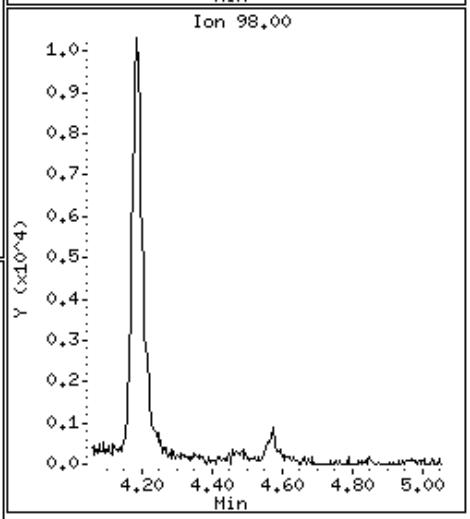
Column phase: DB624 Column diameter: 0.18

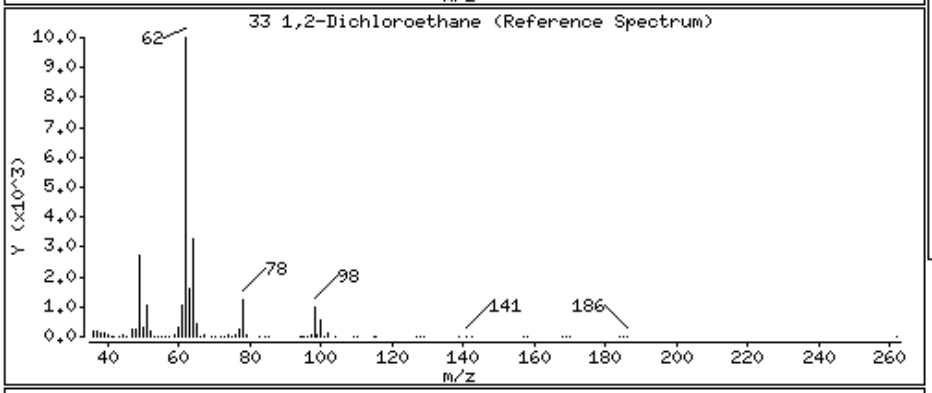
33 1,2-Dichloroethane Concentration: 43.40 ug/l

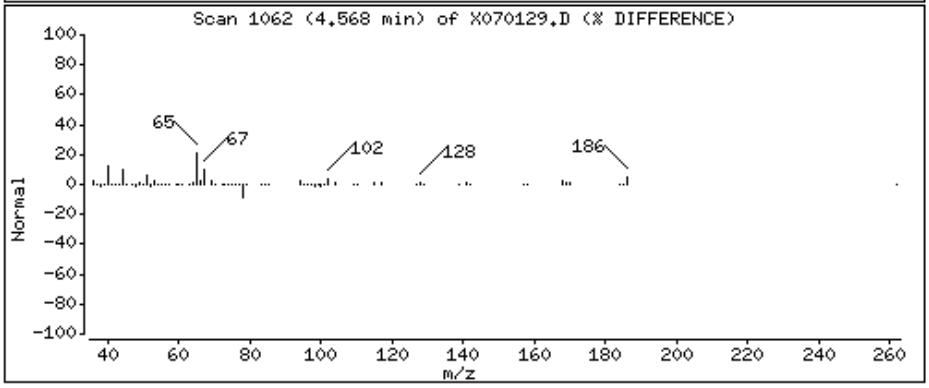












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070129.D Page 4

Date : 01-JUL-2022 18:53

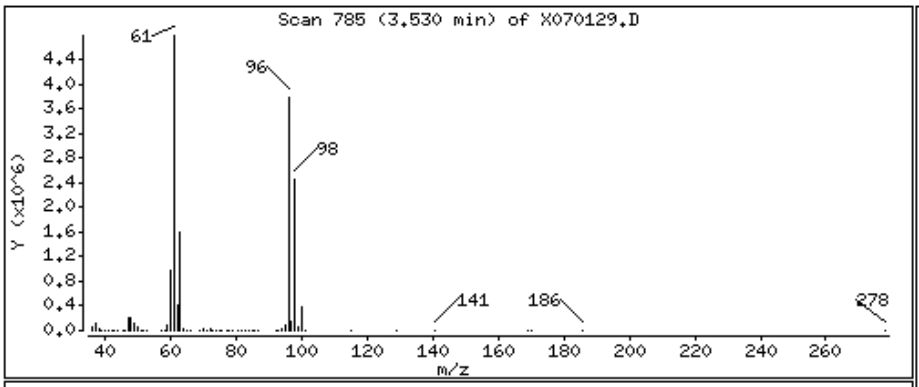
Client ID: HS22061645-03 Instrument: voa6.i

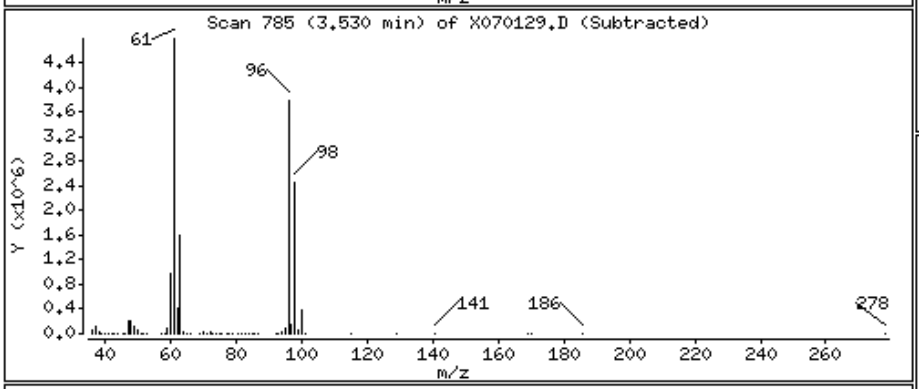
Sample Info: HS22061645-03;HS22061645-03;;;

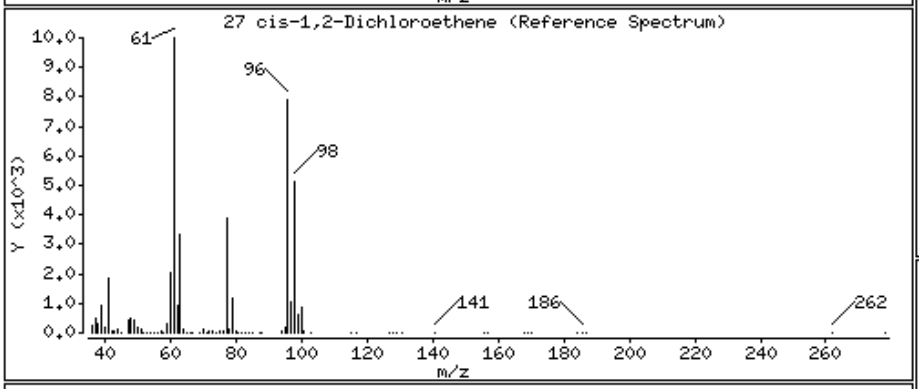
Purge Volume: 5.0 Operator: PC

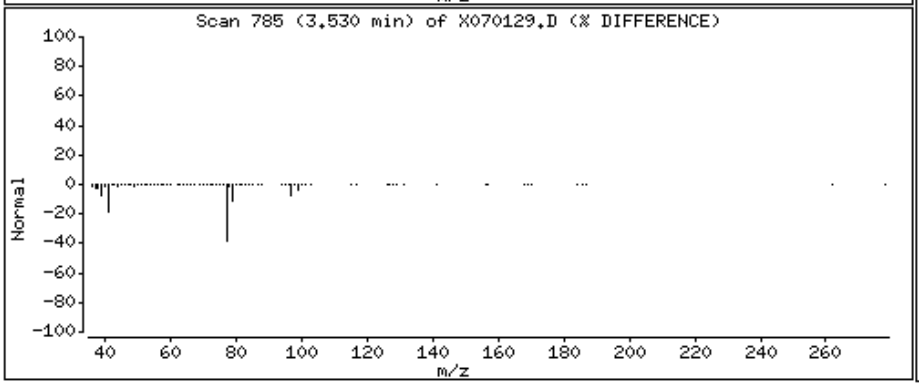
Column phase: DB624 Column diameter: 0.18

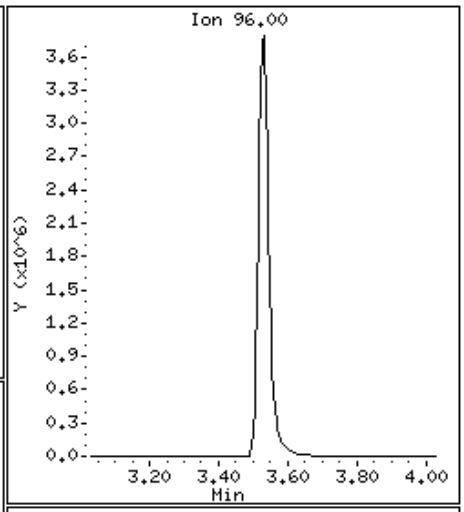
27 cis-1,2-Dichloroethene Concentration: 29479.84 ug/l

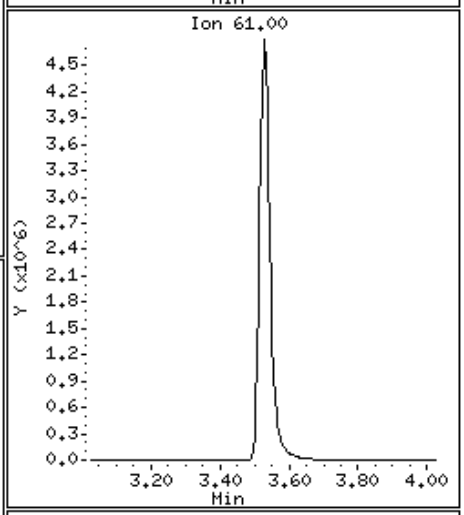


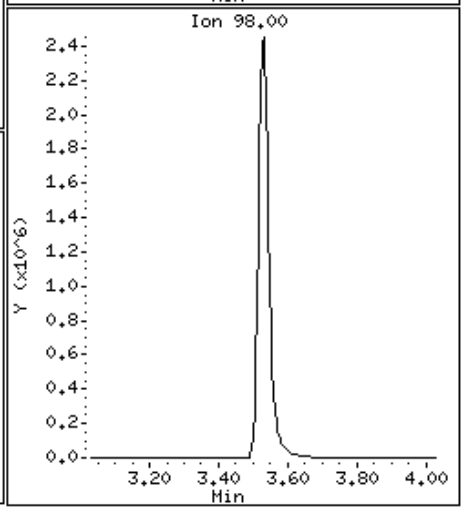












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070129.D

Date : 01-JUL-2022 18:53

Client ID: HS22061645-03

Instrument: voa6.i

Sample Info: HS22061645-03;HS22061645-03;;;

Purge Volume: 5.0

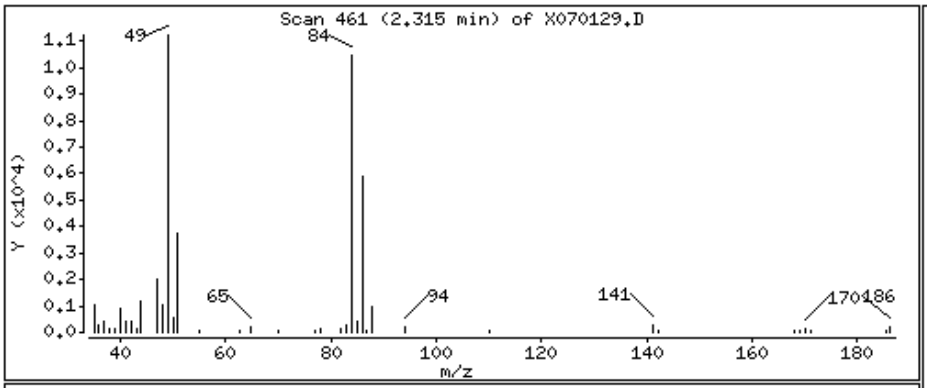
Operator: PC

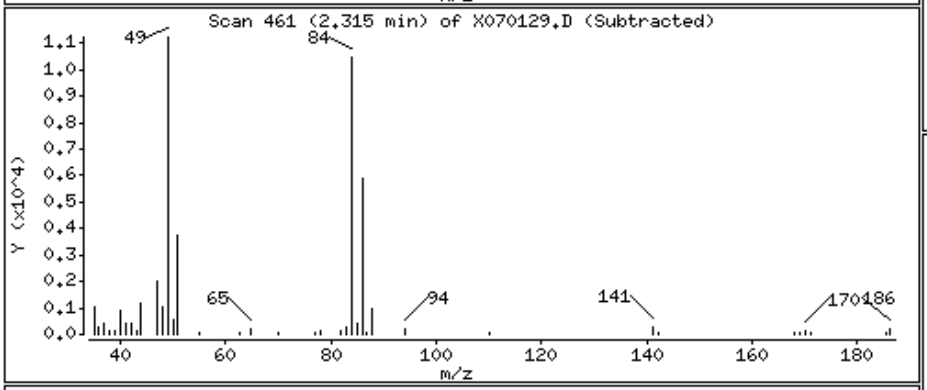
Column phase: DB624

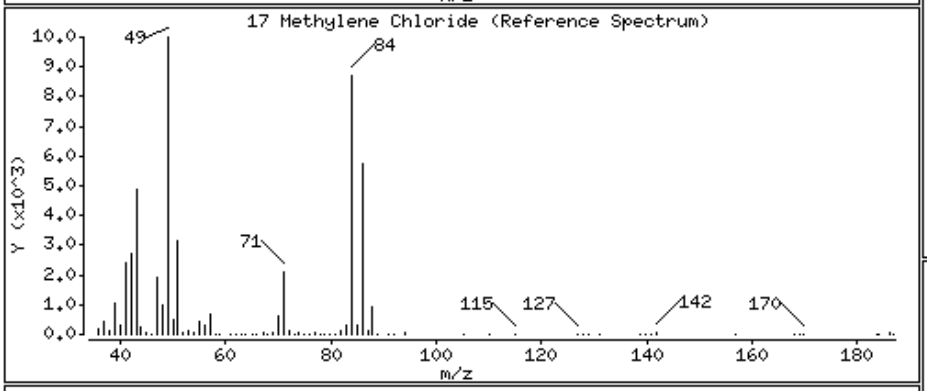
Column diameter: 0.18

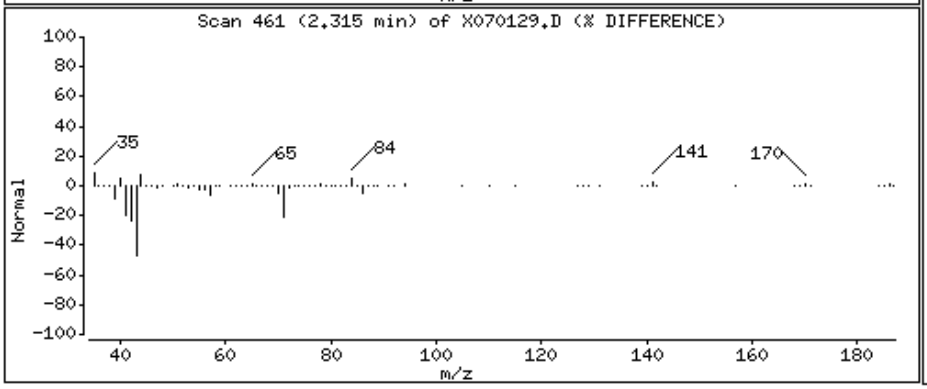
17 Methylene Chloride

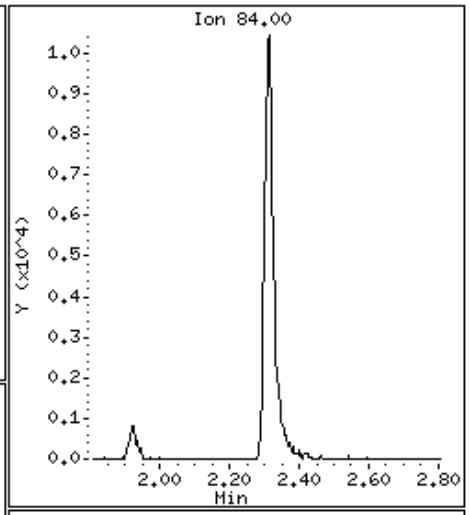
Concentration: 66.09 ug/l

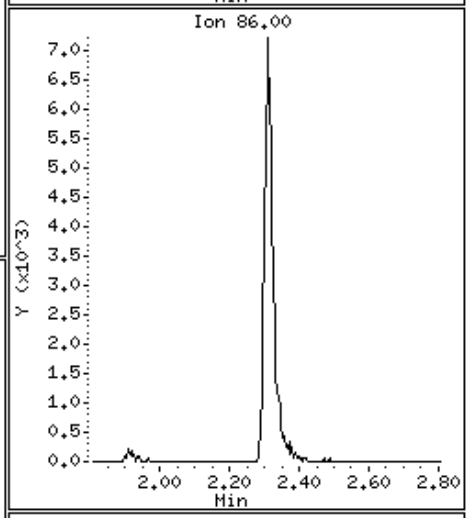


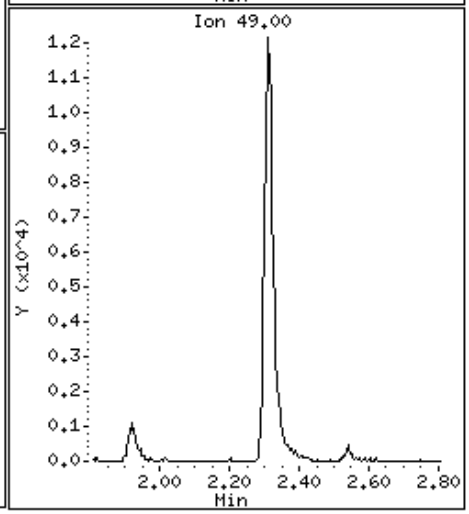












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070129.D Page 6

Date : 01-JUL-2022 18:53

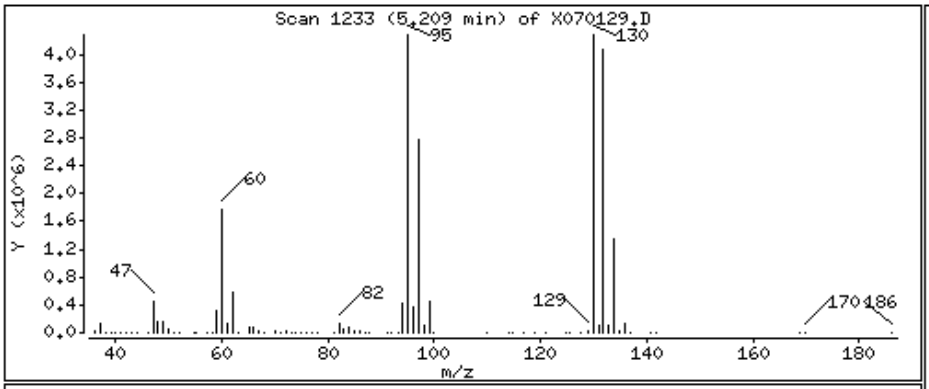
Client ID: HS22061645-03 Instrument: voa6.i

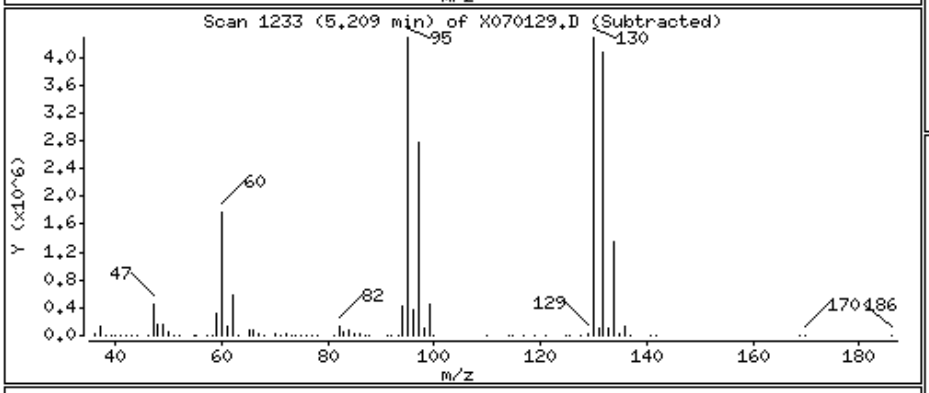
Sample Info: HS22061645-03;HS22061645-03;;;

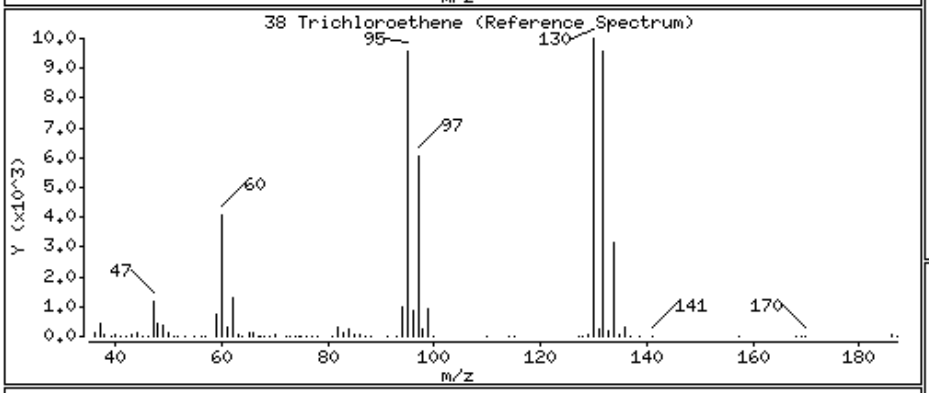
Purge Volume: 5.0 Operator: PC

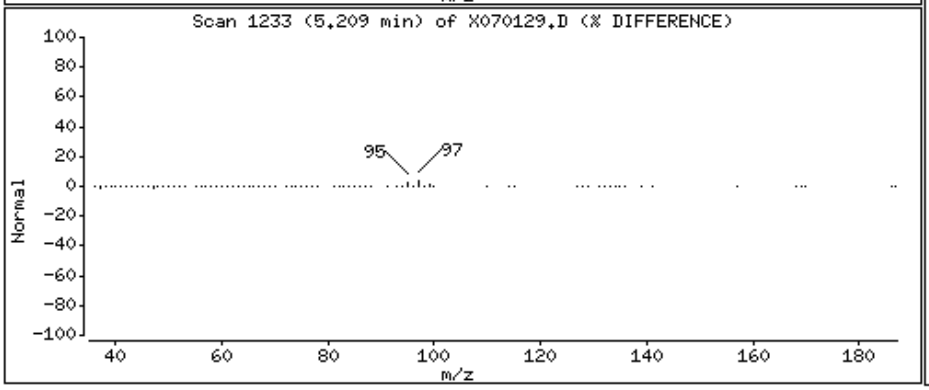
Column phase: DB624 Column diameter: 0.18

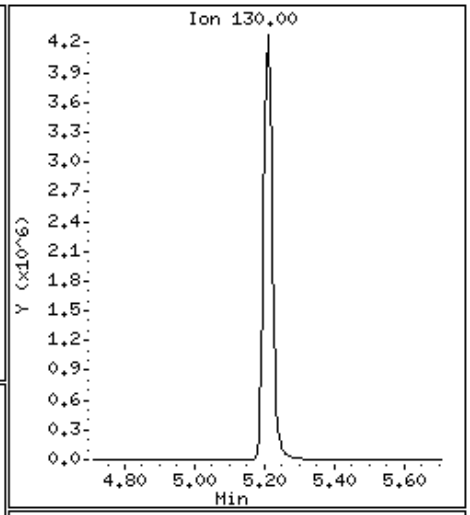
38 Trichloroethene Concentration: 30709.08 ug/l

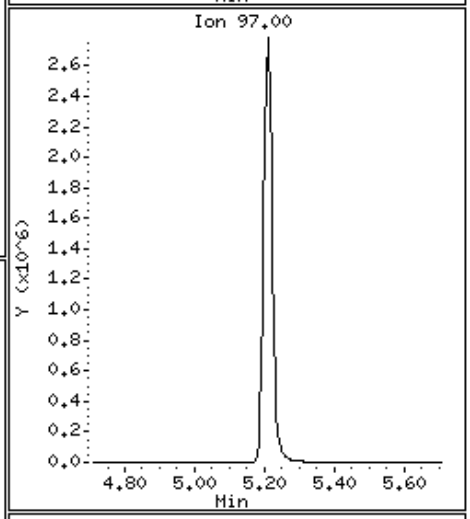


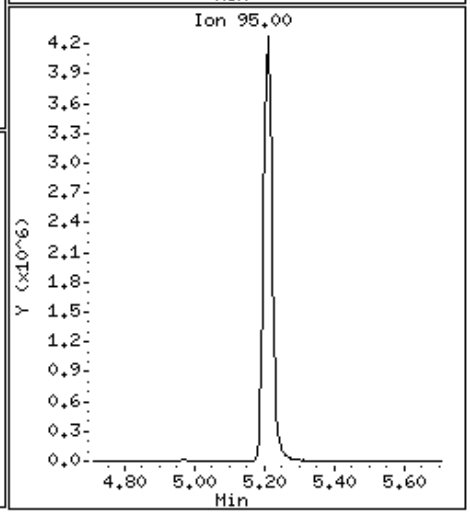












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070129.D Page 7

Date : 01-JUL-2022 18:53

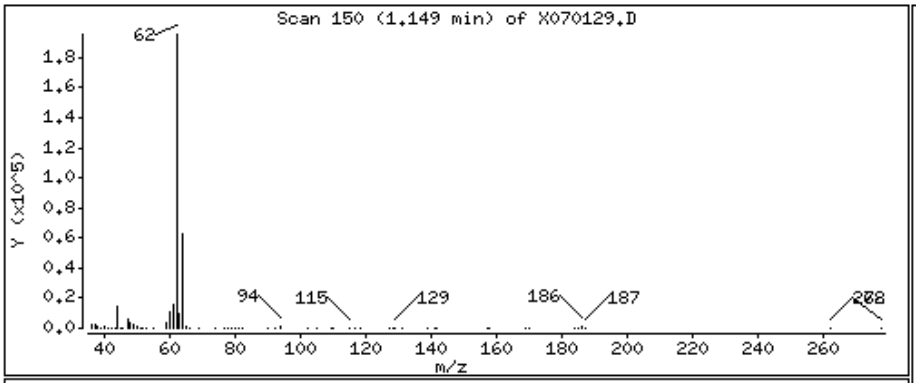
Client ID: HS22061645-03 Instrument: voa6.i

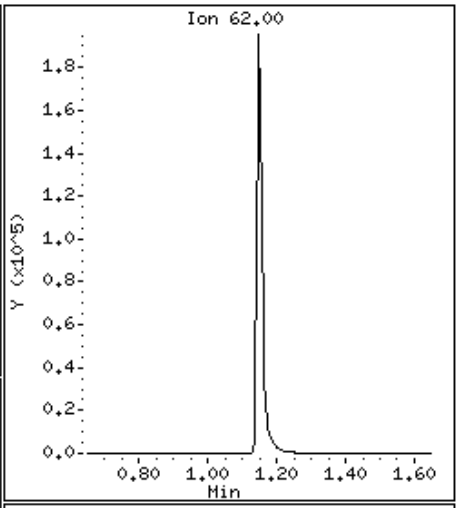
Sample Info: HS22061645-03;HS22061645-03;;;

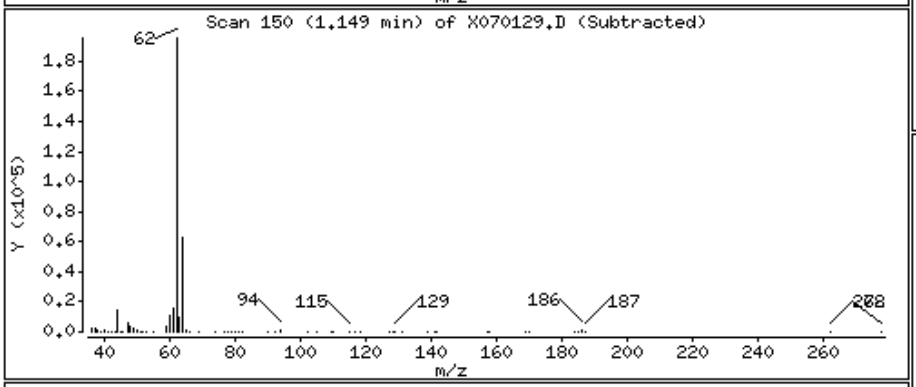
Purge Volume: 5.0 Operator: PC

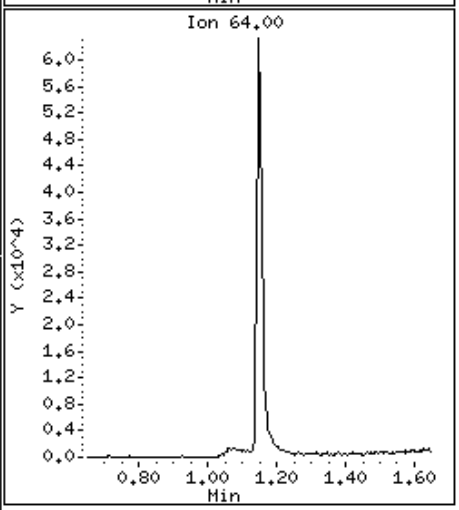
Column phase: DB624 Column diameter: 0.18

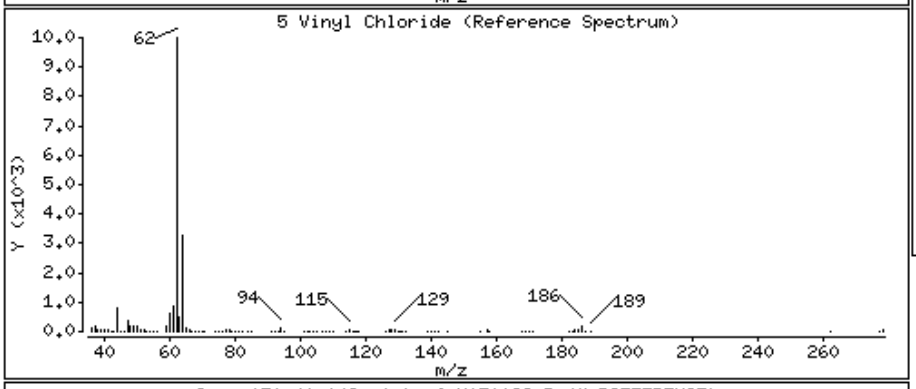
5 Vinyl Chloride Concentration: 653.83 ug/l

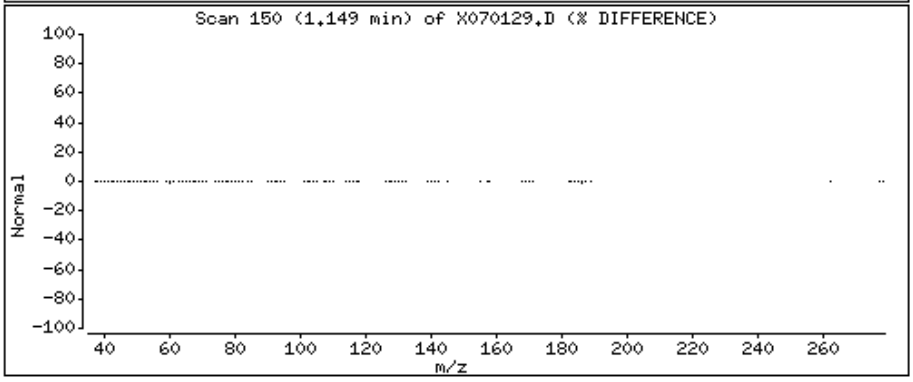












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Inj Date : 01-JUL-2022 18:53
InstruID : voa6.i
LabSampID : HS22061645-03

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

MASS
53
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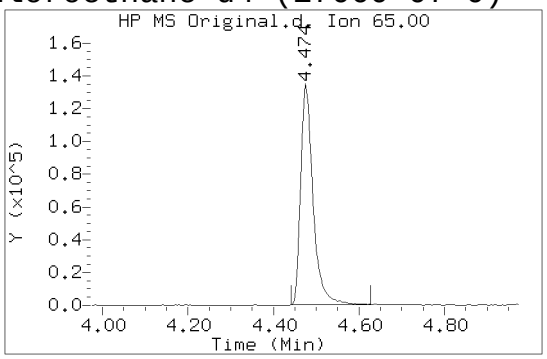
HEIGHT
0
01-Jul-2022
19:10
ALSHS
Server



AFTER

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15-Jul-2022
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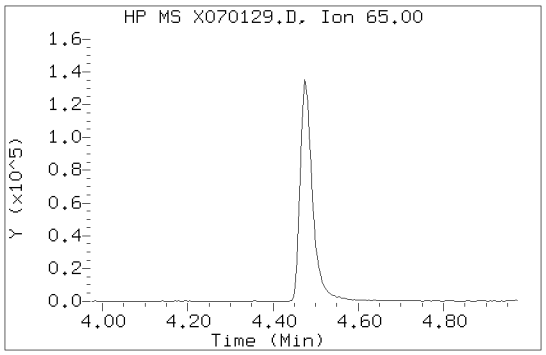

BEFORE

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01-Jul-2022
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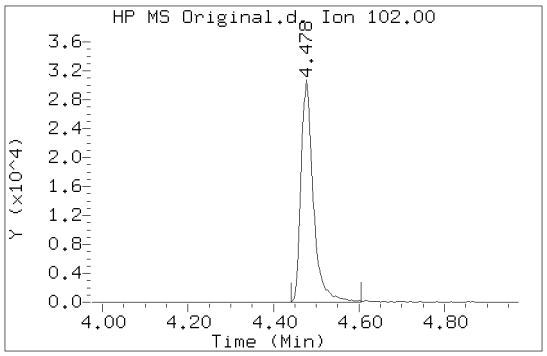

AFTER

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AREA
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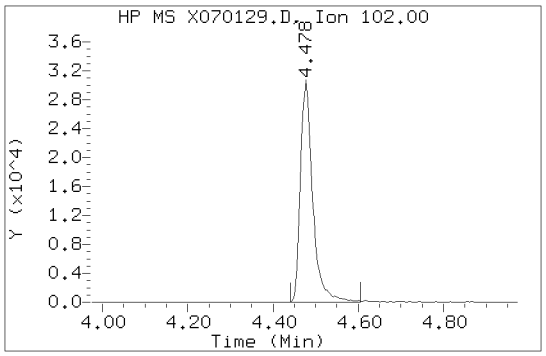
15-Jul-2022
14:10
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070130.D Page 1
Report Date: 15-Jul-2022 14:11

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070130.D
Lab Smp Id: HS22061645-03 Client Smp ID: HS22061645-03
Inj Date : 01-JUL-2022 19:14
Operator : PC Inst ID: voa6.i
Smp Info : HS22061645-03;HS22061645-03;;;
Misc Info : HS22052000V6;WATER;0;250;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\8260W.m
Meth Date : 15-Jul-2022 14:10 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 13:54 Cal File: X052408.D
Als bottle: 29
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

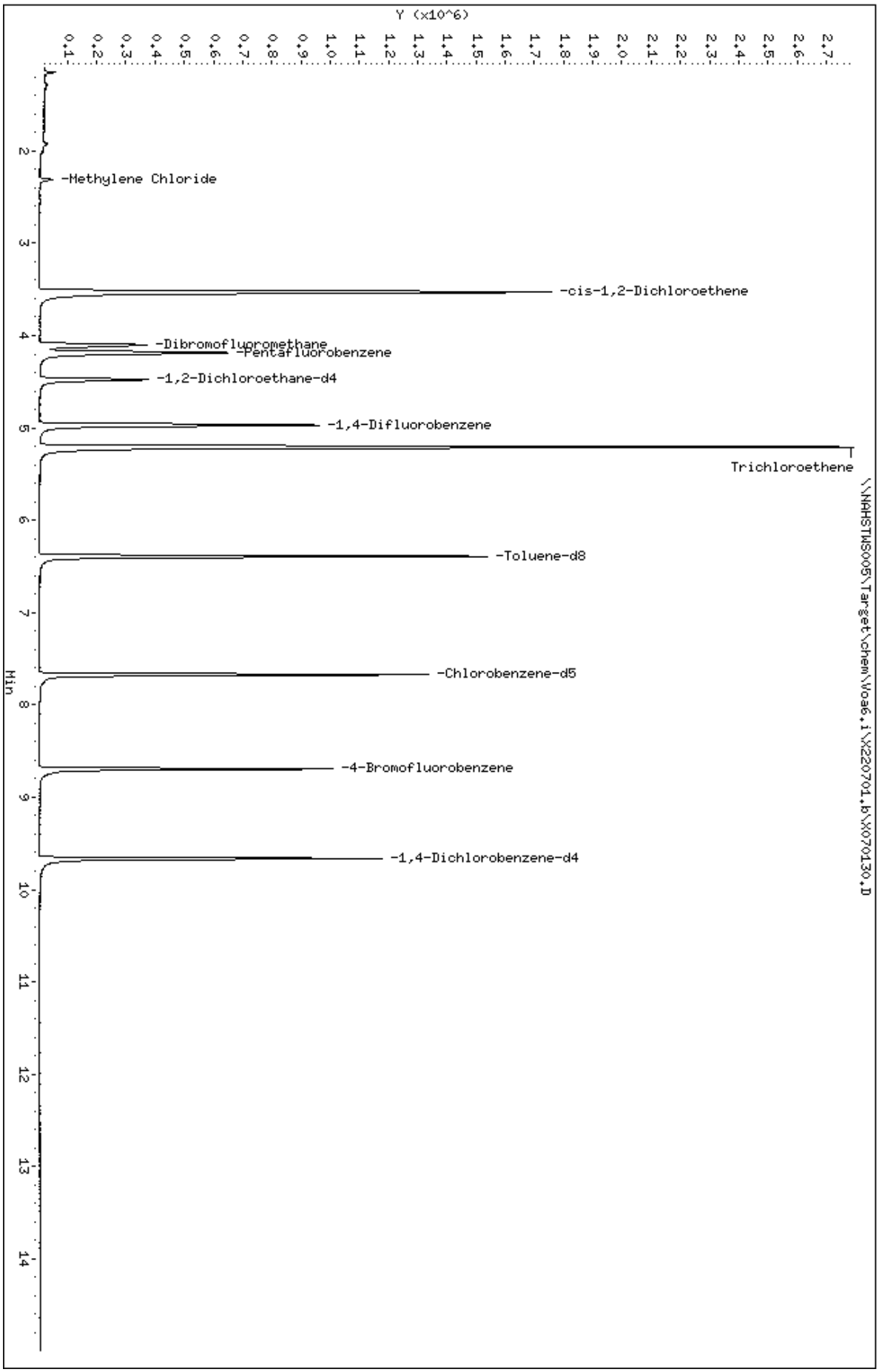
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	250.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	558789	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	818893	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	705767	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	310131	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	284591	41.2832	41.28
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	307908	46.2772	46.27
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	258235	43.9589	43.95
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	947243	50.8224	50.82
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	909789	134.998	33749.51
17 Methylene Chloride	84	2.307	2.307	(0.551)	19961	2.82912	707.28(a)
38 Trichloroethene	130	5.209	5.208	(1.048)	932070	151.503	37875.67
5 Vinyl Chloride	62	1.149	1.149	(0.275)	21762	2.76249	690.62(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070130.D
Date : 01-JUL-2022 19:14
Client ID: HS220616645-03
Sample Info: HS220616645-03;HS220616645-03;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070130.D Page 2

Date : 01-JUL-2022 19:14

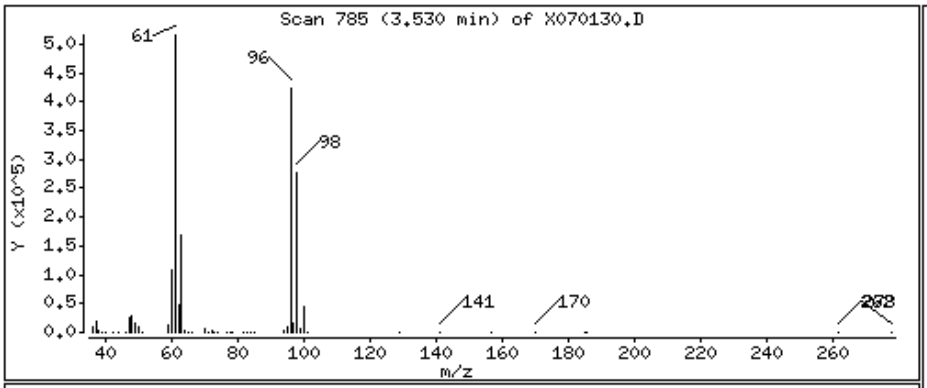
Client ID: HS22061645-03 Instrument: voa6.i

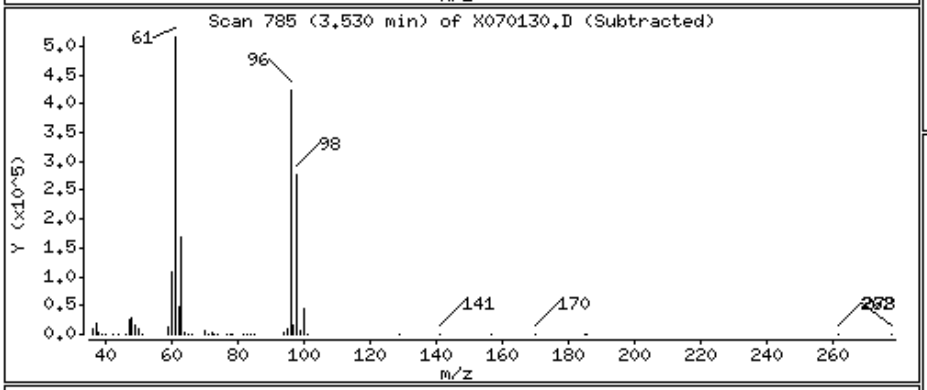
Sample Info: HS22061645-03;HS22061645-03;;;

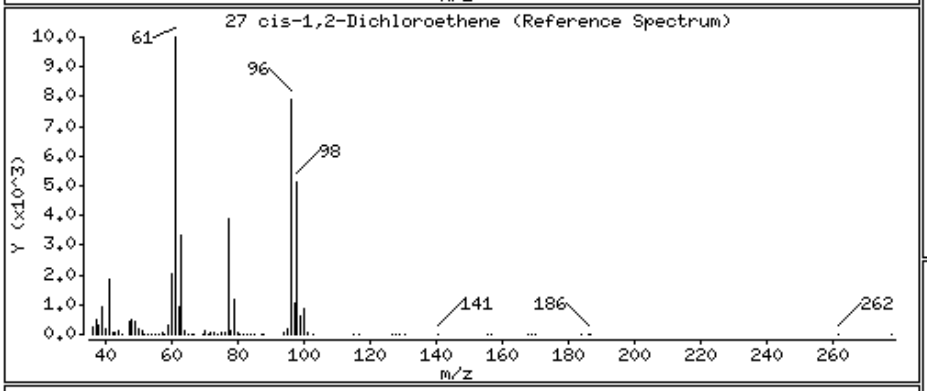
Purge Volume: 5.0 Operator: PC

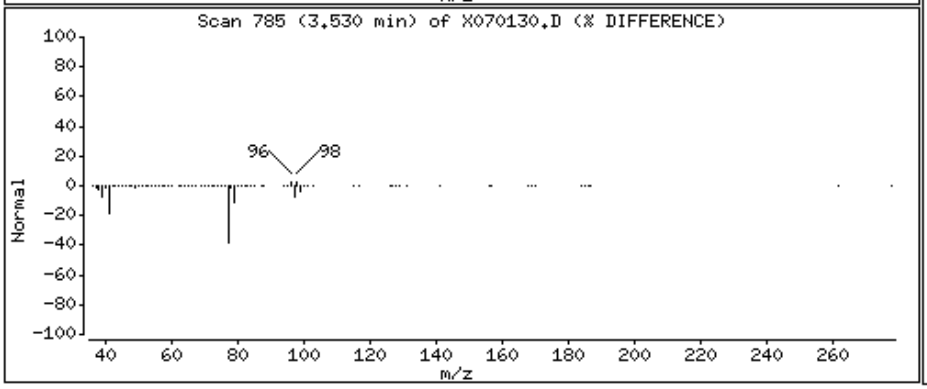
Column phase: DB624 Column diameter: 0.18

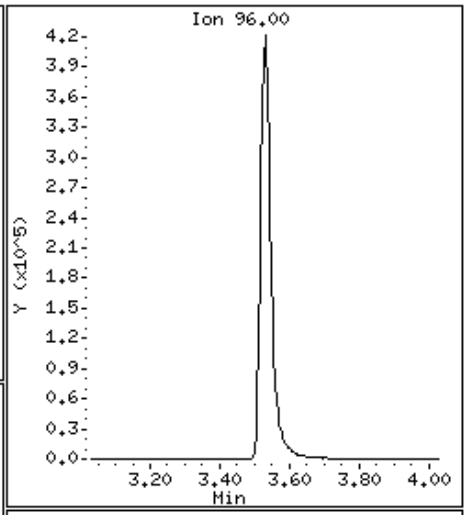
27 cis-1,2-Dichloroethene Concentration: 33749.51 ug/l

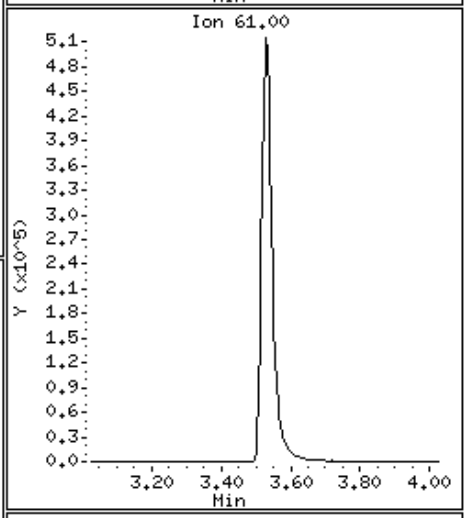


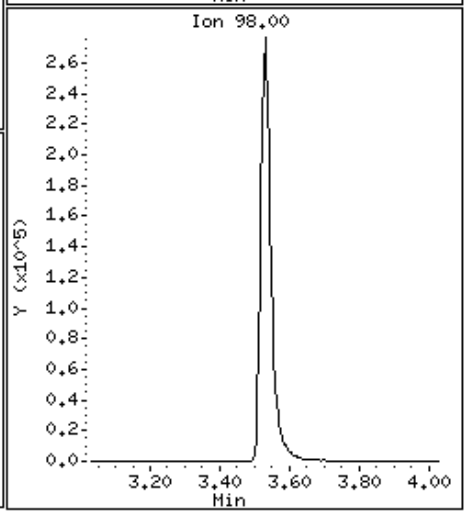












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070130.D Page 3

Date : 01-JUL-2022 19:14

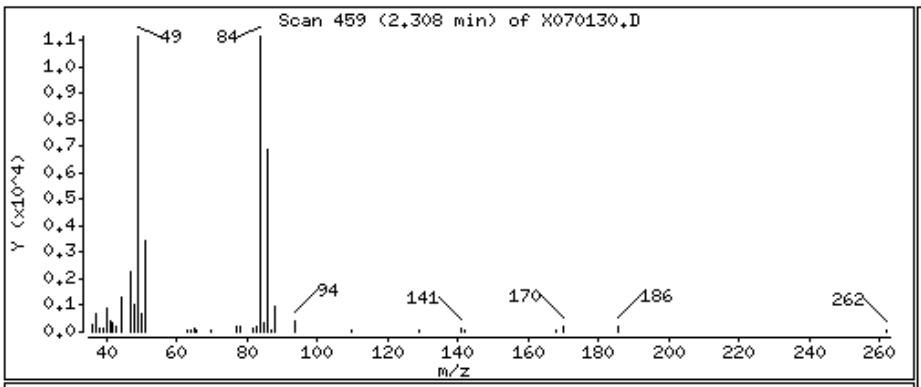
Client ID: HS22061645-03 Instrument: voa6.i

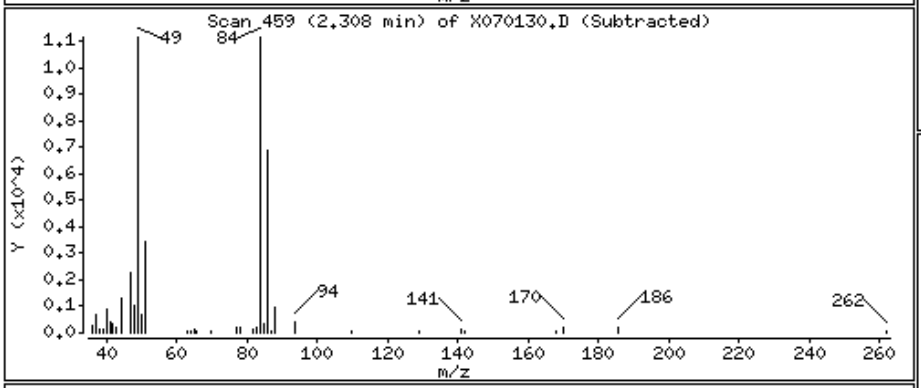
Sample Info: HS22061645-03;HS22061645-03;;;

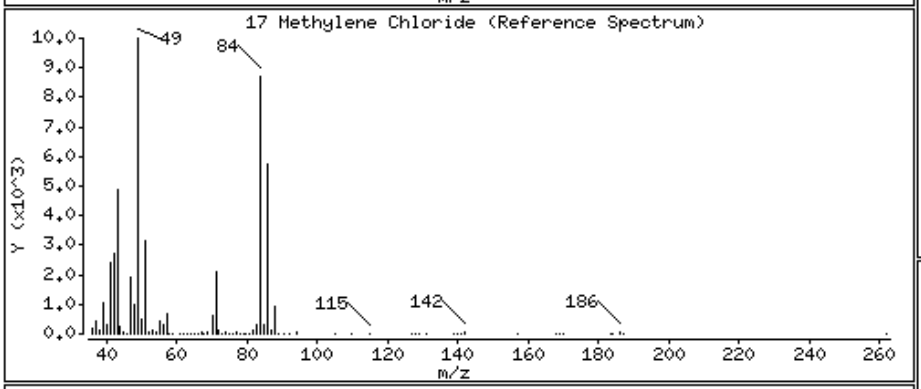
Purge Volume: 5.0 Operator: PC

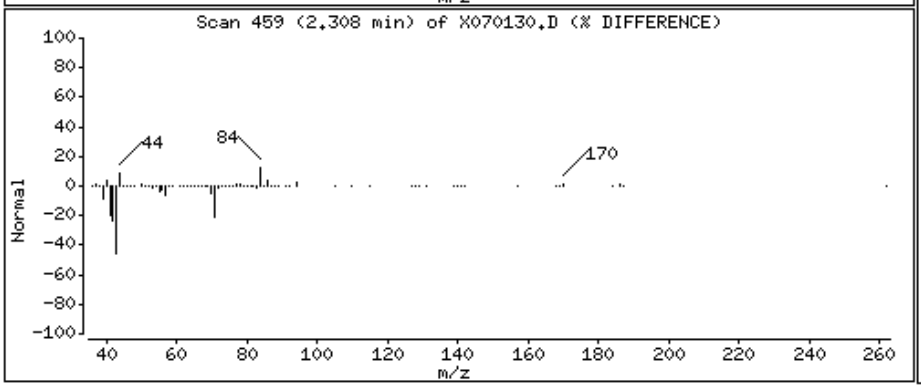
Column phase: DB624 Column diameter: 0.18

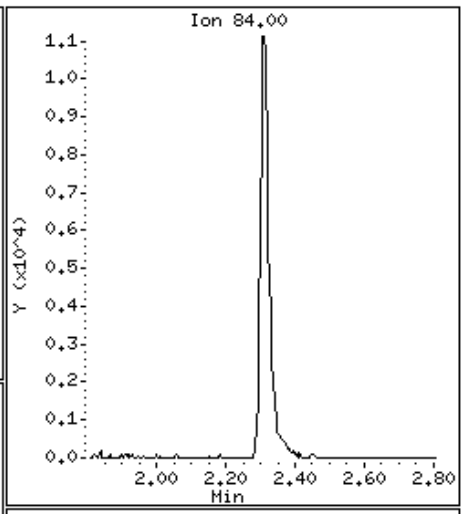
17 Methylene Chloride Concentration: 707.28 ug/l

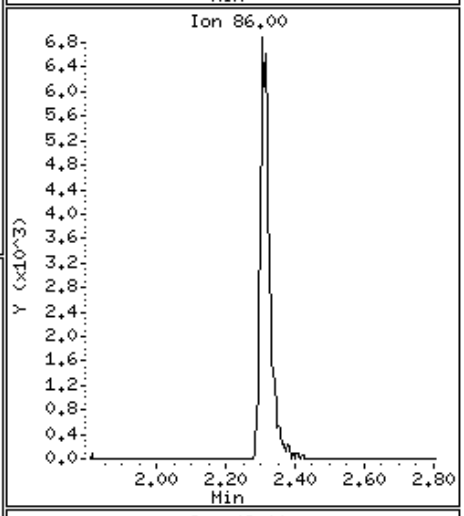


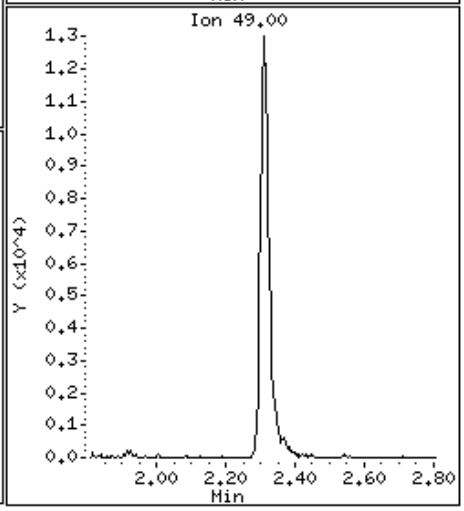












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070130.D Page 4

Date : 01-JUL-2022 19:14

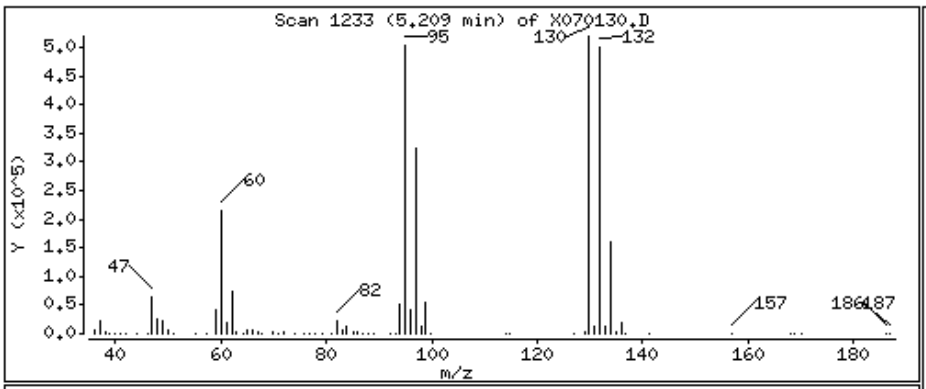
Client ID: HS22061645-03 Instrument: voa6.i

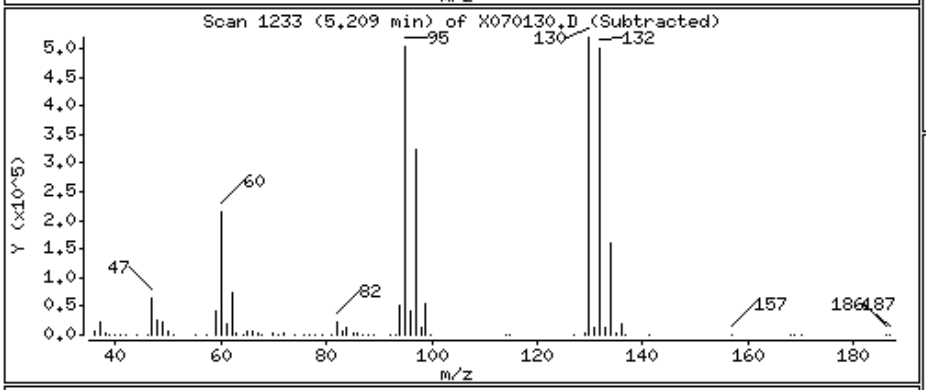
Sample Info: HS22061645-03;HS22061645-03;;;

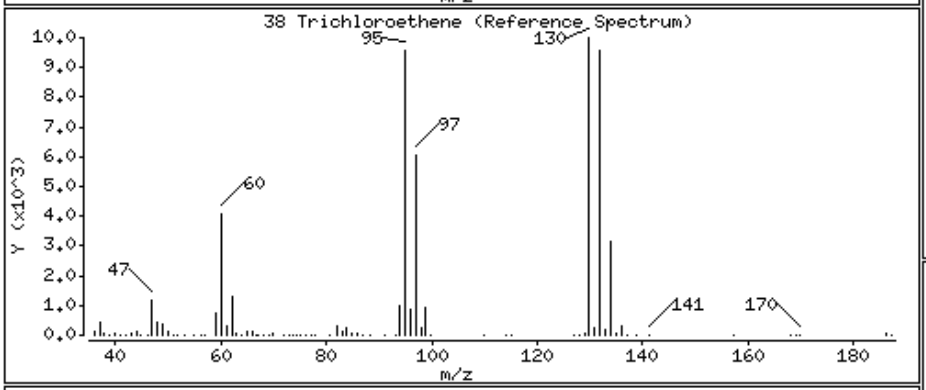
Purge Volume: 5.0 Operator: PC

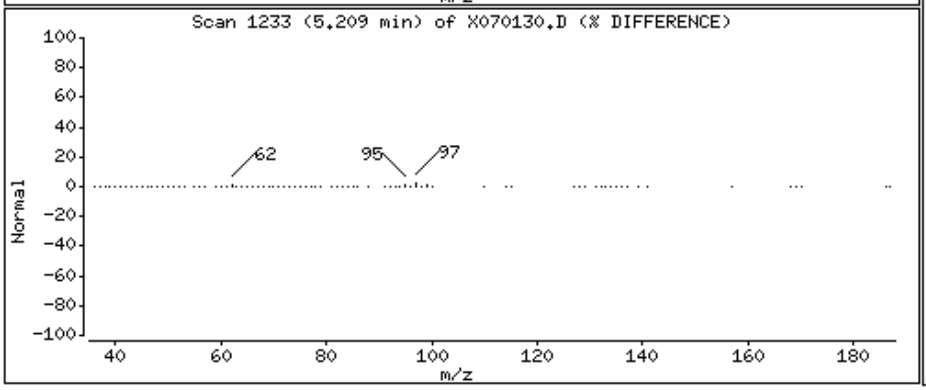
Column phase: DB624 Column diameter: 0.18

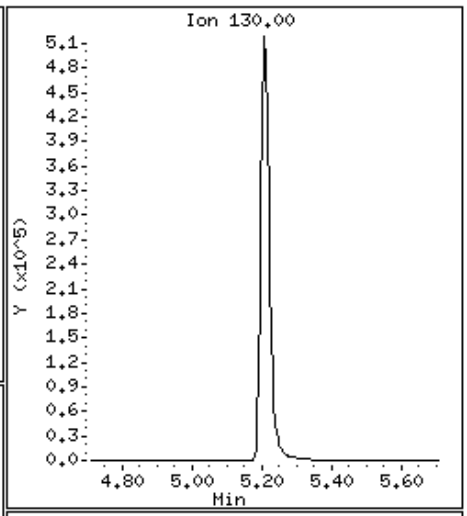
38 Trichloroethene Concentration: 37875.67 ug/l

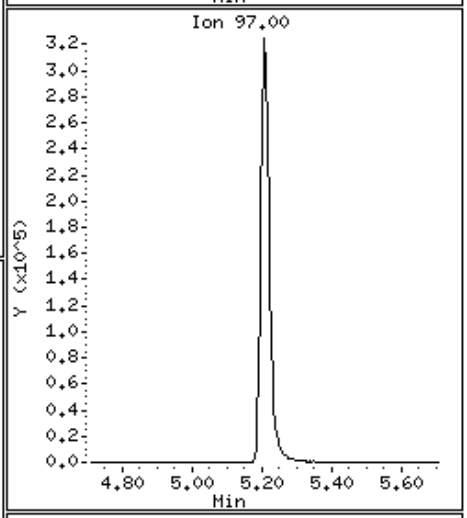


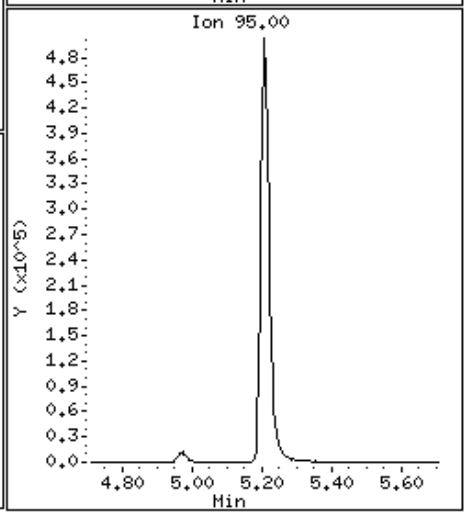












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070130.D Page 5

Date : 01-JUL-2022 19:14

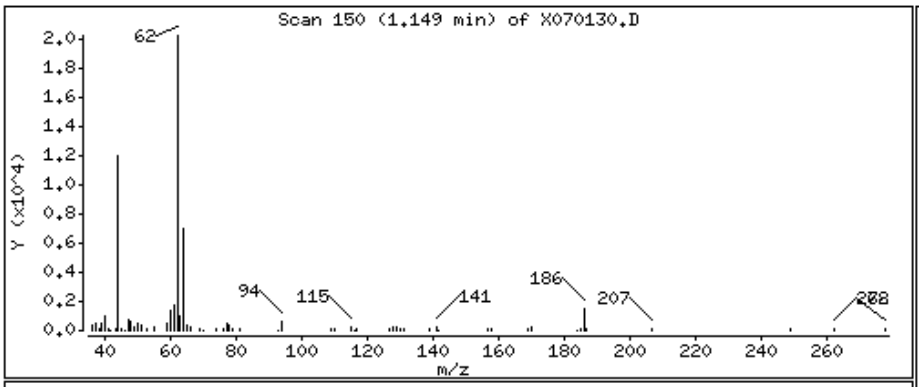
Client ID: HS22061645-03 Instrument: voa6.i

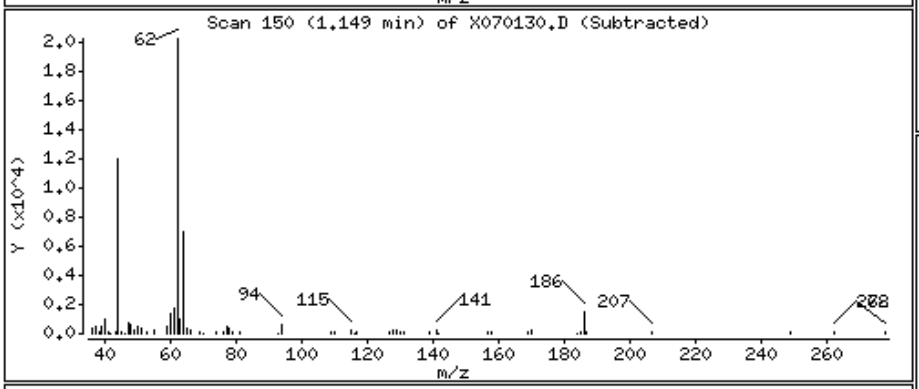
Sample Info: HS22061645-03;HS22061645-03;;;

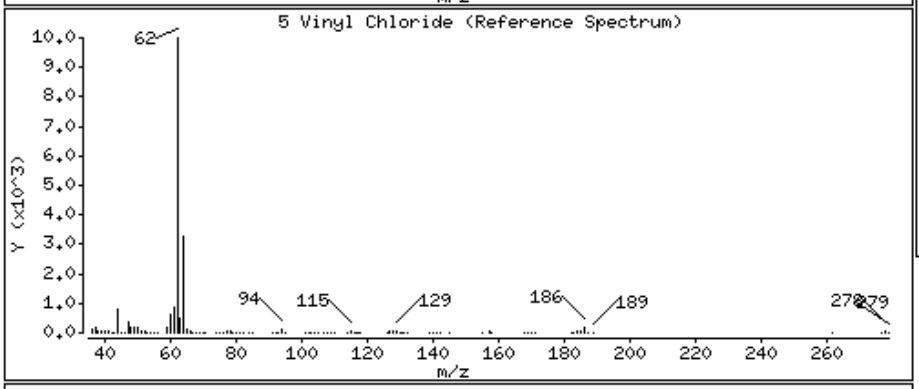
Purge Volume: 5.0 Operator: PC

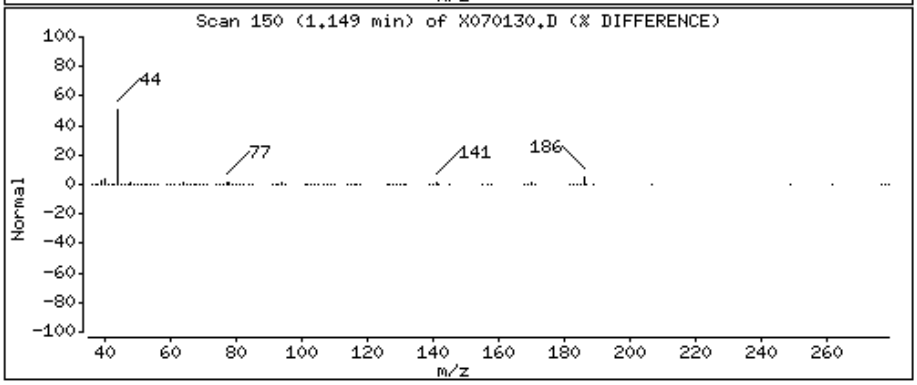
Column phase: DB624 Column diameter: 0.18

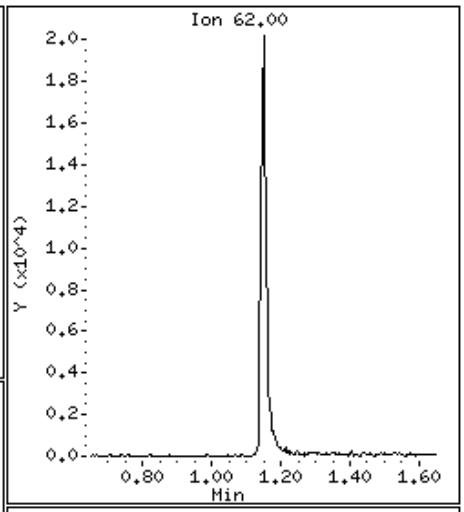
5 Vinyl Chloride Concentration: 690.62 ug/l

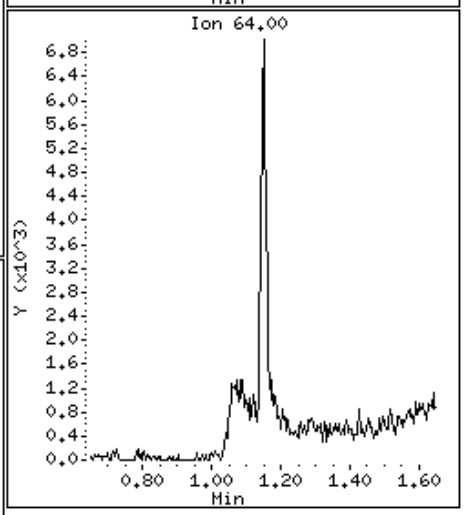












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070130.D
Inj Date : 01-JUL-2022 19:14
InstruID : voa6.i
LabSampID : HS22061645-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070131.D Page 1
Report Date: 15-Jul-2022 14:11

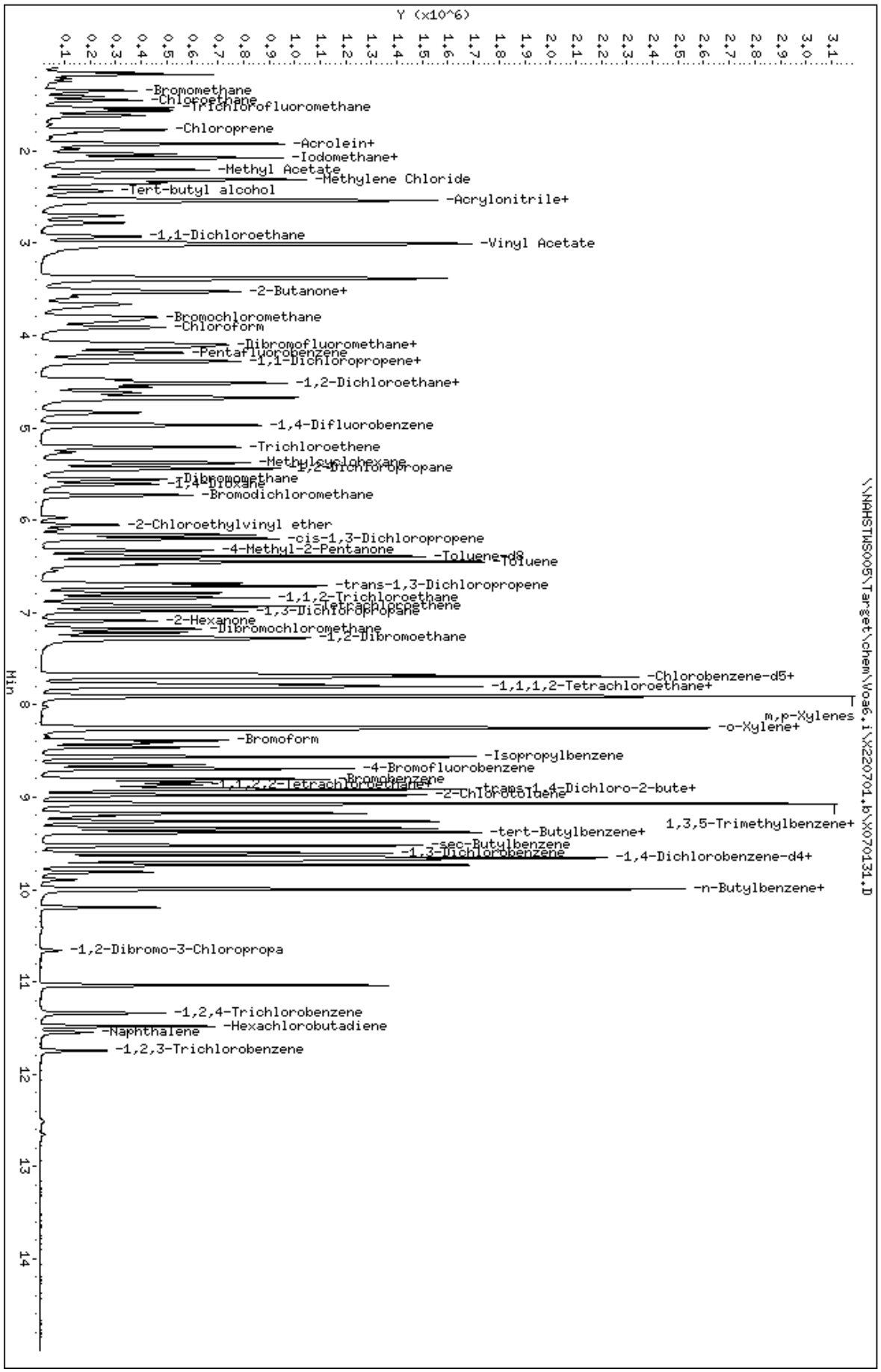
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070131.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 01-JUL-2022 19:35
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\8260W.m
Meth Date : 15-Jul-2022 14:11 voa6.i Quant Type: ISTD
Cal Date : 24-MAY-2022 13:54 Cal File: X052408.D
Als bottle: 30 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	469036	50.0000	
*	36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	729395	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	693175	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	338698	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	267874	50.0000	46.33
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	322898	50.0000	49.47
$	30 Dibromofluoromethane	113	4.103	4.103	(0.980)	244119	50.0000	49.51
$	48 Toluene-d8	98	6.389	6.389	(0.833)	877584	50.0000	47.94
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	193279	50.0000	45.09
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	186253	50.0000	38.07
	33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	341271	50.0000	46.87
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	268051	50.0000	47.38
	17 Methylene Chloride	84	2.311	2.311	(0.552)	251950	50.0000	42.54
	38 Trichloroethene	130	5.209	5.209	(1.048)	262836	50.0000	47.96
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	227466	50.0000	34.40



Data File: \\NAHSTMS005\Target\chem\Voa6.i\X220701.b\X070131.D
Date : 01-JUL-2022 19:35
Client ID: CCV-END
Sample Info: CCV-END,CCV-END,2,,
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220701.b\X070131.D
Inj Date : 01-JUL-2022 19:35
InstruID : voa6.i
LabSampID : CCV-END

NO MANUAL INTEGRATIONS

right solutions.
right partner.

Raw Data VOA6 412359

Volatiles Organics by Method 8260C

Wokorder

HS22061645

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 June 2022

07/20/2022

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070601.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 06-JUL-2022 10:59
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\bfb.m
Meth Date : 14-Jun-2022 12:47 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.702	8.889	(0.000)	95	25488			0.00- 100.00	100.00
8.702	8.889	(0.000)	50	4886			15.00- 40.00	19.17
8.702	8.889	(0.000)	75	12128			30.00- 60.00	47.58
8.702	8.889	(0.000)	96	1599			5.00- 9.00	6.27
8.702	8.889	(0.000)	173	178			0.00- 2.00	0.78
8.702	8.889	(0.000)	174	22768			50.00- 0.00	89.33
8.702	8.889	(0.000)	175	1541			5.00- 9.00	6.77
8.702	8.889	(0.000)	176	22152			95.00- 101.00	97.29
8.702	8.889	(0.000)	177	1783			5.00- 9.00	8.05

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.17
75	30.00 - 60.00% of mass 95	47.58
96	5.00 - 9.00% of mass 95	6.27
173	Less than 2.00% of mass 174	0.70 (0.78)
174	Greater than 50.00% of mass 95	89.33
175	5.00 - 9.00% of mass 174	6.05 (6.77)
176	95.00 - 101.00% of mass 174	86.91 (97.29)
177	5.00 - 9.00% of mass 176	7.00 (8.05)

Data File: X070601.D
Spectrum: Scan 2164 (8.70)
Location of Maximum: 95.00
Number of points: 75

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	239	62.90	924	86.90	968	129.00	126
37.10	1021	64.10	221	88.00	1186	129.90	146
38.00	900	65.20	186	90.80	67	138.90	72
39.00	471	66.10	89	91.90	658	140.90	395
39.90	845	67.00	99	93.00	1011	142.80	346
41.90	63	68.00	2733	94.00	2894	145.70	78
44.00	1042	69.00	2427	95.00	25488	154.80	111
44.90	335	69.80	151	96.00	1599	157.10	175
47.00	267	71.90	113	103.90	180	167.80	73
47.90	114	73.00	1230	106.00	55	170.00	83
49.00	781	74.00	4070	109.70	56	172.70	178
50.00	4886	75.00	12128	112.90	50	173.90	22768
51.00	1387	76.00	1032	115.00	174	174.90	1541
55.10	54	77.10	365	115.80	150	175.90	22152
55.90	287	78.10	269	116.90	209	176.90	1783
57.00	773	78.80	689	117.60	150	177.80	82
60.00	207	79.80	169	118.80	115	185.90	590
61.00	895	80.90	795	119.00	114	262.10	177
62.00	1194	81.80	230	128.00	131		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070601.D Page 1

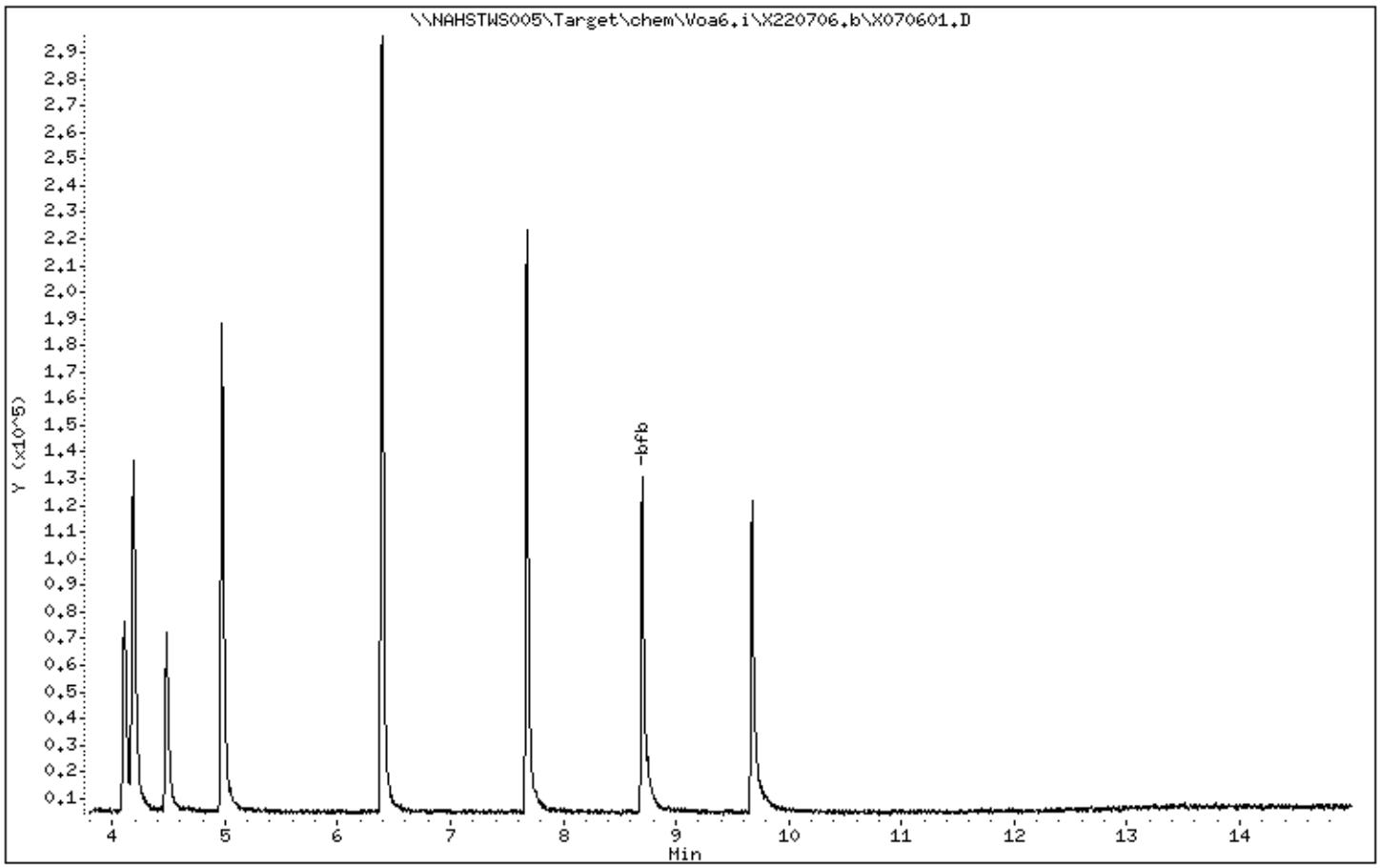
Date : 06-JUL-2022 10:59

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070601.D Page 2

Date : 06-JUL-2022 10:59

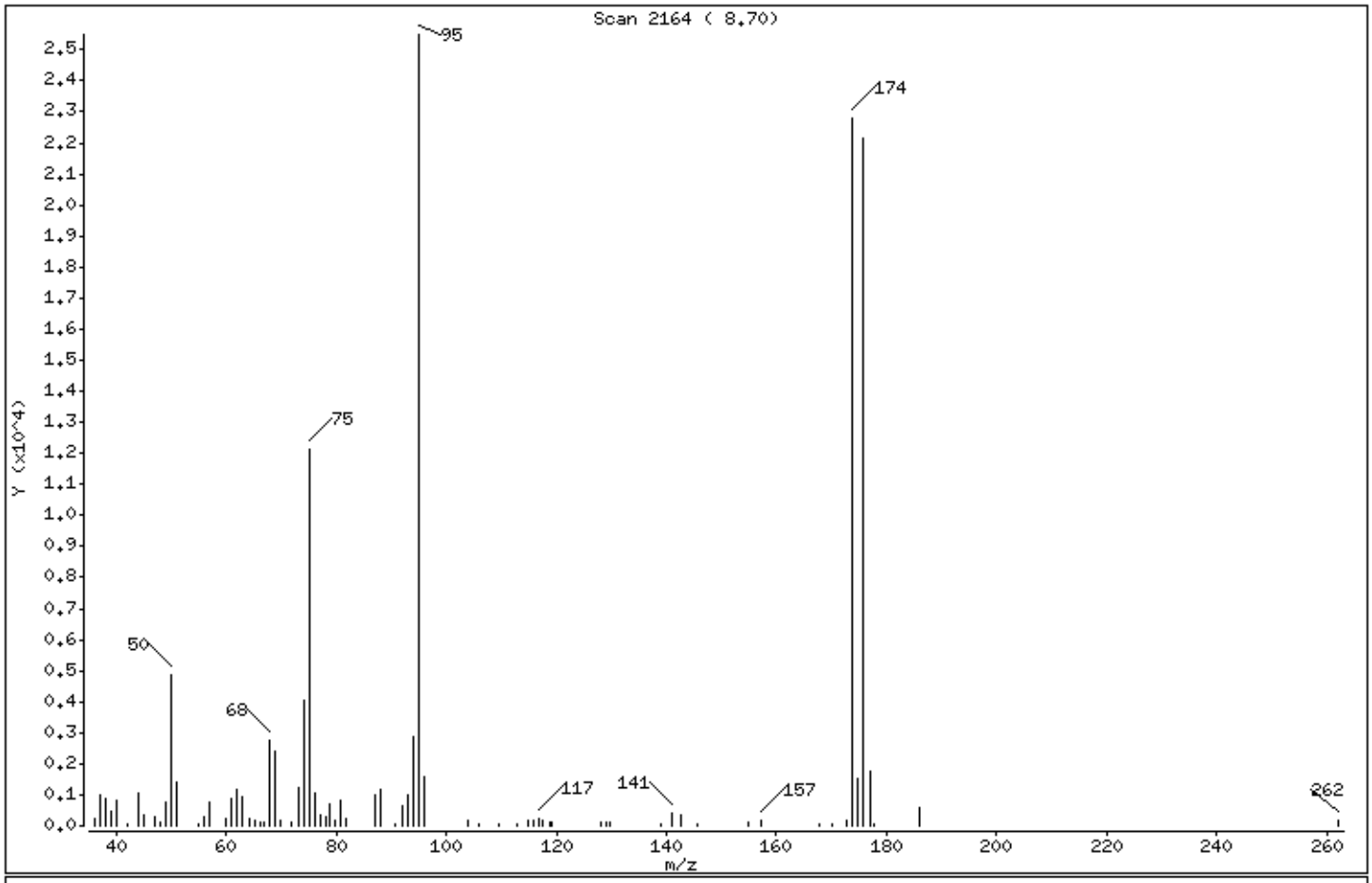
Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.17
75	30.00 - 60.00% of mass 95	47.58
96	5.00 - 9.00% of mass 95	6.27
173	Less than 2.00% of mass 174	0.70 (0.78)
174	Greater than 50.00% of mass 95	89.33
175	5.00 - 9.00% of mass 174	6.05 (6.77)
176	95.00 - 101.00% of mass 174	86.91 (97.29)
177	5.00 - 9.00% of mass 176	7.00 (8.05)

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070601.D

Date : 06-JUL-2022 10:59

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

Data File: X070601.D
Spectrum: Scan 2164 (8.70)
Location of Maximum: 95.00
Number of points: 75

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	239	62.90	924	86.90	968	129.00	126
37.10	1021	64.10	221	88.00	1186	129.90	146
38.00	900	65.20	186	90.80	67	138.90	72
39.00	471	66.10	89	91.90	658	140.90	395
39.90	845	67.00	99	93.00	1011	142.80	346
41.90	63	68.00	2733	94.00	2894	145.70	78
44.00	1042	69.00	2427	95.00	25488	154.80	111
44.90	335	69.80	151	96.00	1599	157.10	175
47.00	267	71.90	113	103.90	180	167.80	73
47.90	114	73.00	1230	106.00	55	170.00	83
49.00	781	74.00	4070	109.70	56	172.70	178
50.00	4886	75.00	12128	112.90	50	173.90	22768
51.00	1387	76.00	1032	115.00	174	174.90	1541
55.10	54	77.10	365	115.80	150	175.90	22152
55.90	287	78.10	269	116.90	209	176.90	1783
57.00	773	78.80	689	117.60	150	177.80	82
60.00	207	79.80	169	118.80	115	185.90	590
61.00	895	80.90	795	119.00	114	262.10	177
62.00	1194	81.80	230	128.00	131		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070602.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070602.D
Lab Smp Id: VSTD000.25 Client Smp ID: VSTD000.25
Inj Date : 06-JUL-2022 11:20
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.25;VSTD000.25;1;1;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

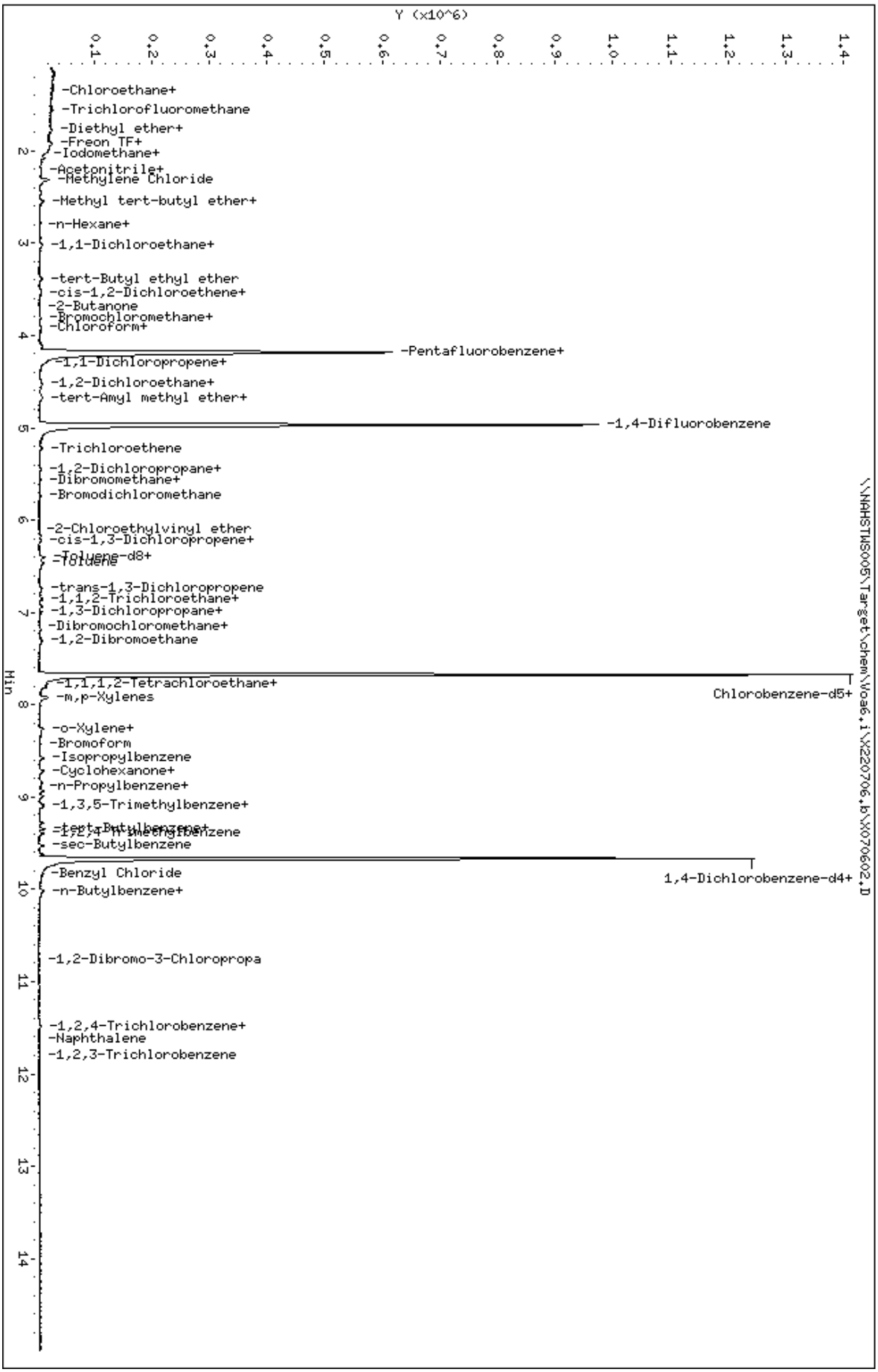
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	554842	50.0000	
*	36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	841573	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	758983	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	332385	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.492	4.492	(1.073)	1413	0.25000	(Ta)
$	69 4-Bromofluorobenzene	95	8.717	8.717	(1.136)	2364	0.25000	0.04(aM)
$	30 Dibromofluoromethane	113	4.106	4.106	(0.981)	2078	0.25000	0.11
$	48 Toluene-d8	98	6.404	6.404	(0.835)	7582	0.25000	0.40(a)
	53 1,1,2-Trichloroethane	83	6.854	6.854	(0.893)	1359	0.25000	0.31(a)
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	1469	0.25000	0.27(aM)
	33 1,2-Dichloroethane	62	4.575	4.575	(0.921)	2424	0.25000	0.34(a)
	27 cis-1,2-Dichloroethene	96	3.544	3.544	(0.847)	1688	0.25000	0.26(a)
	17 Methylene Chloride	84	2.311	2.311	(0.552)	3035	0.25000	1.09(aM)
	38 Trichloroethene	130	5.223	5.223	(1.051)	1665	0.25000	0.26(a)
	5 Vinyl Chloride	62	1.148	1.148	(0.275)	2150	0.25000	0.30(a)

QC Flag Legend

T - Target compound detected outside RT window.

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTNS005\Target\chem\Voa6.i\X220706.b\X070602.D
Date : 06-JUL-2022 11:20
Client ID: VSTD000.25
Sample Info: VSTD000.25;VSTD000.25;1;1;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

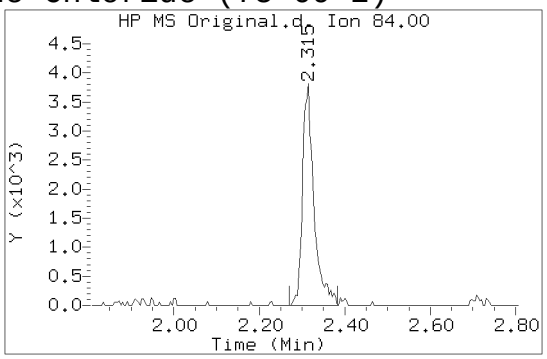
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070602.D
Inj Date : 06-JUL-2022 11:20
InstruID : voa6.i
LabSampID : VSTD000.25

Methylene Chloride (75-09-2)

Reason Code:

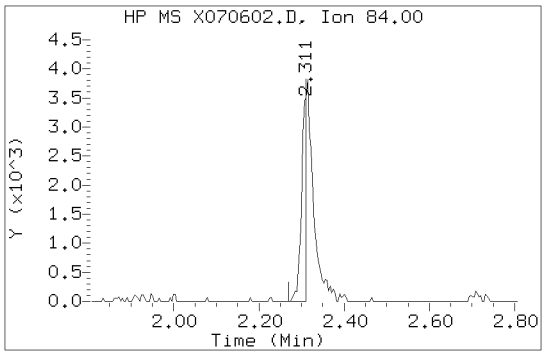
BEFORE

MASS
64
AREA
1122
HEIGHT
1063
06-Jul-2022
11:36
ALSHS
Server



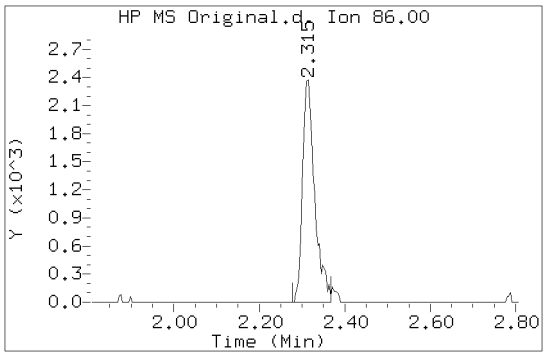
AFTER

MASS
84
AREA
3035
HEIGHT
3496
15-Jul-2022
14:25
ALSHS
Ser



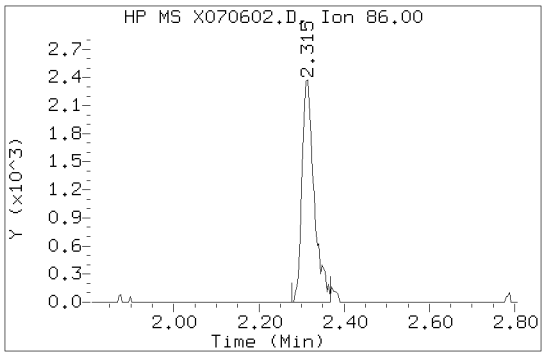
BEFORE

MASS
66
AREA
629
HEIGHT
432
06-Jul-2022
11:36
ALSHS
Server



AFTER

MASS
86
AREA
4755
HEIGHT
2374
15-Jul-2022
14:25
ALSHS
Ser

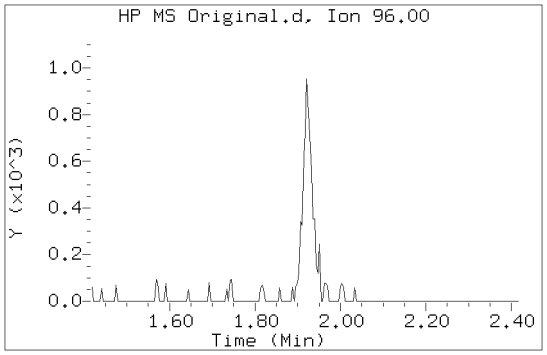


1,1-Dichloroethene (75-35-4)

Reason Code:

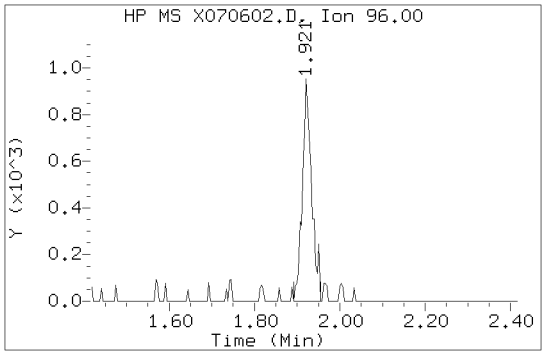
BEFORE

MASS
142
AREA
2076
HEIGHT
1275
06-Jul-2022
11:36
ALSHS
Server



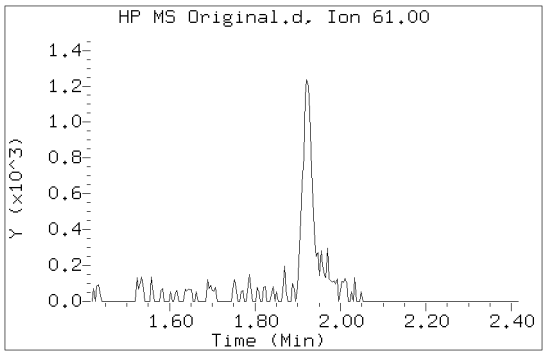
AFTER

MASS
96
AREA
1469
HEIGHT
953
15-Jul-2022
14:25
ALSHS
Ser



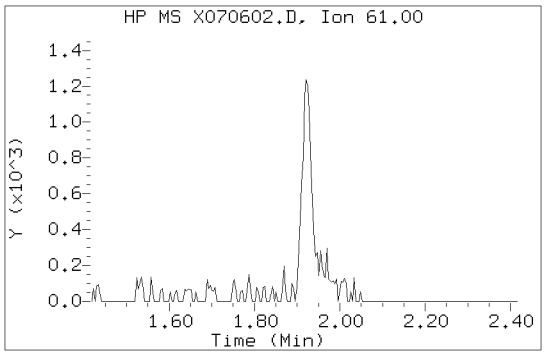
BEFORE

MASS
127
AREA
1136
HEIGHT
640
06-Jul-2022
11:36
ALSHS
Server



AFTER

MASS
61
AREA
0
HEIGHT
0
15-Jul-2022
14:25
ALSHS
Ser



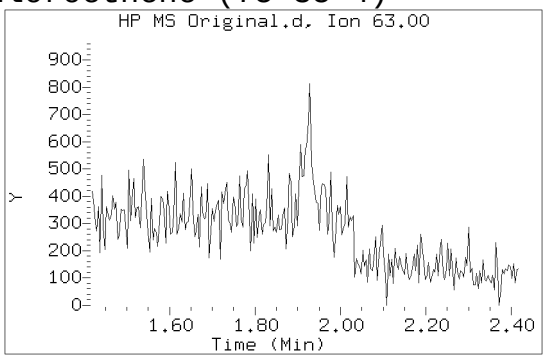
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070602.D
Inj Date : 06-JUL-2022 11:20
InstruID : voa6.i
LabSampID : VSTD000.25

1,1-Dichloroethene (75-35-4)

Reason Code:

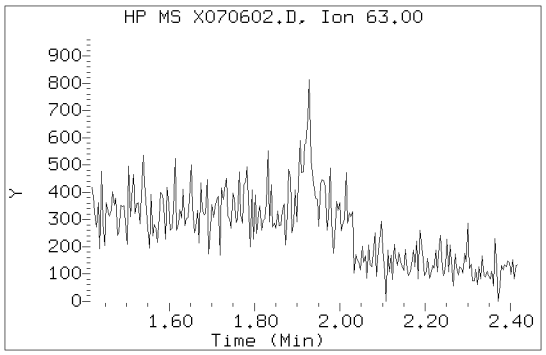
BEFORE

MASS
141
AREA
0
HEIGHT
0
06-Jul-2022
11:36
ALSHS
Server



AFTER

MASS
63
AREA
0
HEIGHT
0
15-Jul-2022
14:25
ALSHS
Ser

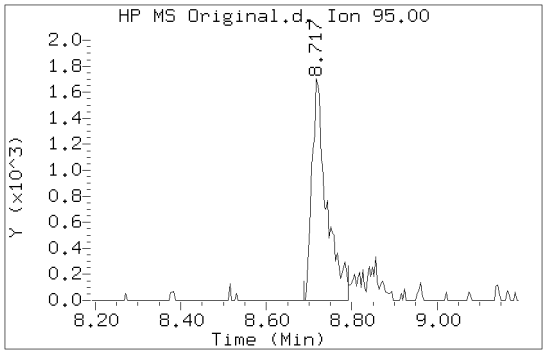


4-Bromofluorobenzene (460-00-4)

Reason Code:

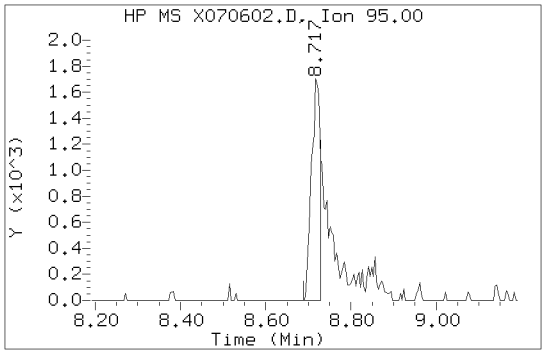
BEFORE

MASS
96
AREA
1513
HEIGHT
746
06-Jul-2022
11:36
ALSHS
Server



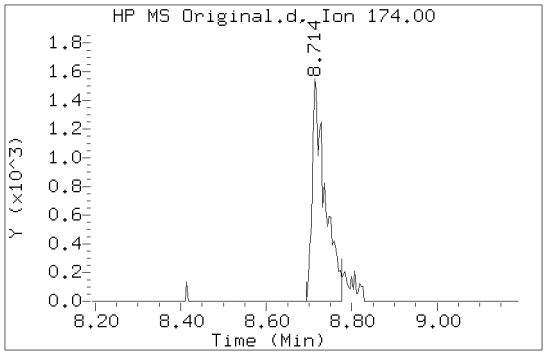
AFTER

MASS
95
AREA
2364
HEIGHT
1704
15-Jul-2022
14:25
ALSHS
Ser



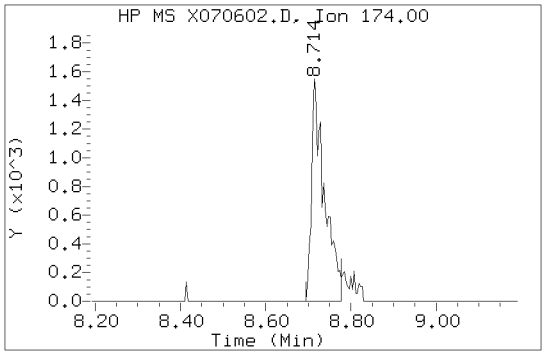
BEFORE

MASS
61
AREA
1976
HEIGHT
952
06-Jul-2022
11:36
ALSHS
Server



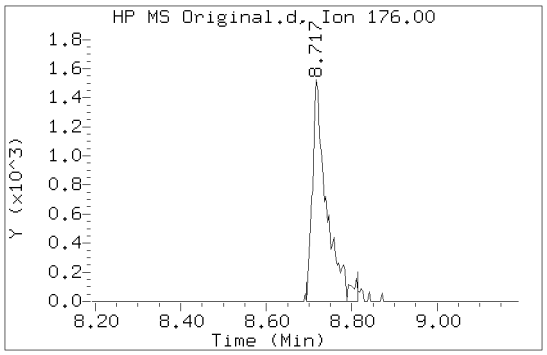
AFTER

MASS
174
AREA
3272
HEIGHT
1550
15-Jul-2022
14:25
ALSHS
Ser



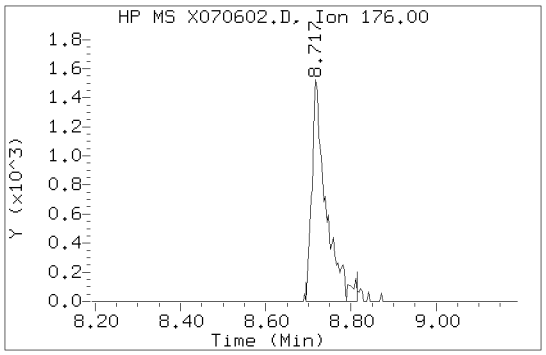
BEFORE

MASS
98
AREA
887
HEIGHT
675
06-Jul-2022
11:36
ALSHS
Server



AFTER

MASS
176
AREA
3533
HEIGHT
1524
15-Jul-2022
14:25
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D
Lab Smp Id: VSTD000.5 Client Smp ID: VSTD000.5
Inj Date : 06-JUL-2022 12:02
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.5;VSTD000.5;1;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 11:20 Cal File: X070602.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

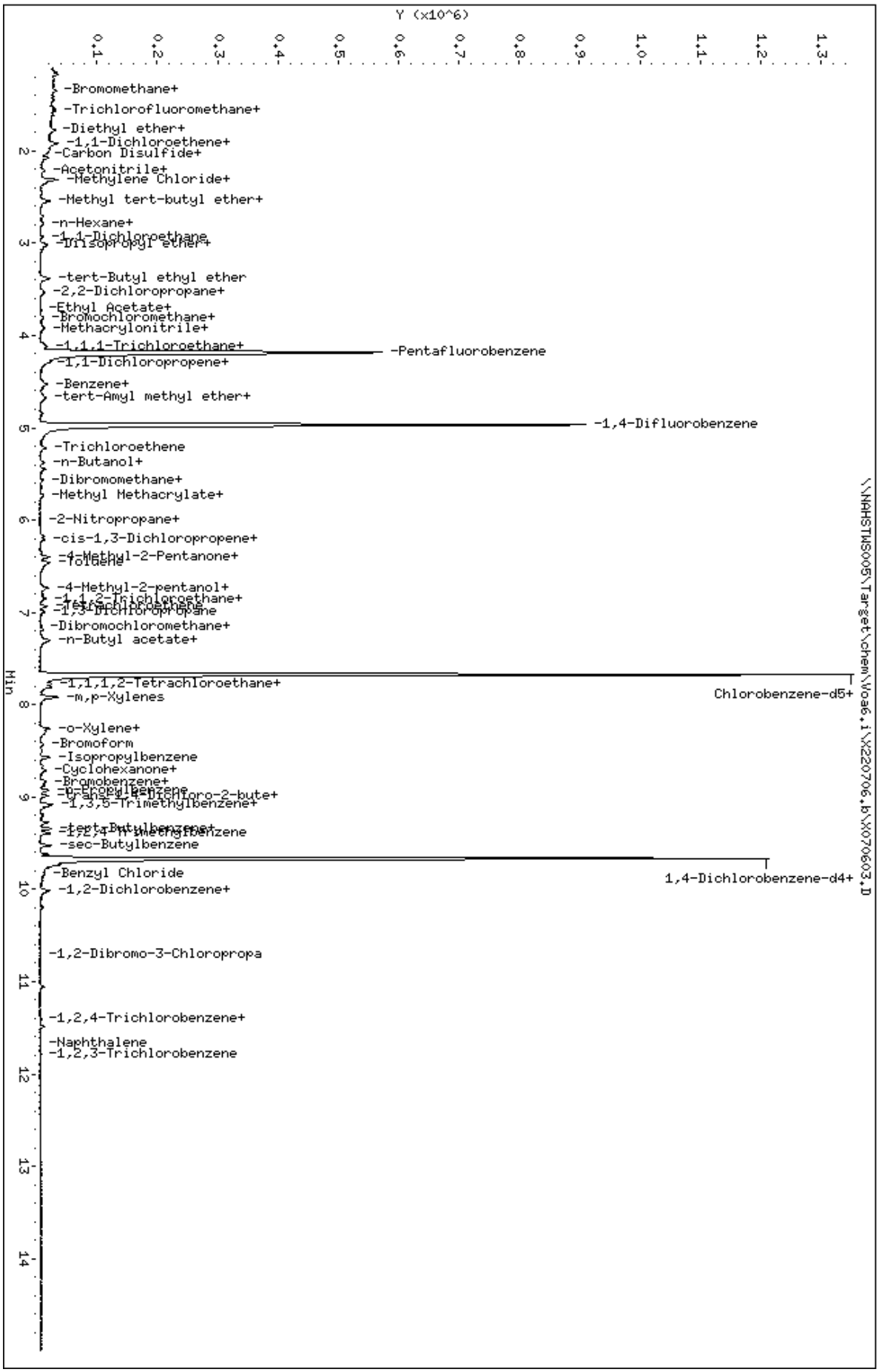
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	517303	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	797124	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	731127	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	327223	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.489	4.489	(1.073)	2572	0.50000	(TaM)
$ 69 4-Bromofluorobenzene	95	8.717	8.717	(1.136)	3152	0.50000	0.18(aM)
$ 30 Dibromofluoromethane	113	4.121	4.121	(0.985)	2530	0.50000	0.24(M)
$ 48 Toluene-d8	98	6.400	6.400	(0.834)	10841	0.50000	0.59(aM)
53 1,1,2-Trichloroethane	83	6.850	6.850	(0.893)	2148	0.50000	0.51(a)
11 1,1-Dichloroethene	96	1.925	1.925	(0.460)	2892	0.50000	0.58(a)
33 1,2-Dichloroethane	62	4.575	4.575	(0.921)	3621	0.50000	0.54(aM)
27 cis-1,2-Dichloroethene	96	3.548	3.548	(0.848)	3263	0.50000	0.54(a)
17 Methylene Chloride	84	2.307	2.307	(0.551)	3611	0.50000	1.21(aM)
38 Trichloroethene	130	5.220	5.220	(1.051)	3167	0.50000	0.53(a)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	3631	0.50000	0.54(aM)

QC Flag Legend

T - Target compound detected outside RT window.

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D
Date : 06-JUL-2022 12:02
Client ID: VSTD000.5
Sample Info: VSTD000.5;VSTD000.5;1;2;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

\\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D

Page 1

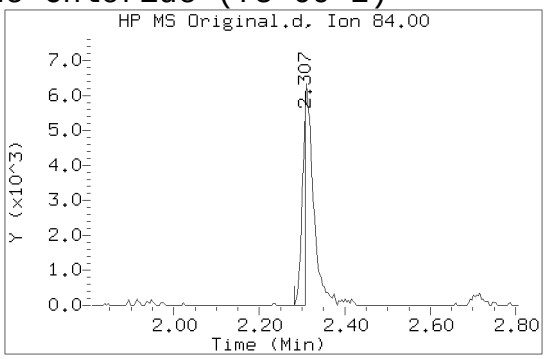
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D
Inj Date : 06-JUL-2022 12:02
InstruID : voa6.i
LabSampID : VSTD000.5

Methylene Chloride (75-09-2)

Reason Code:

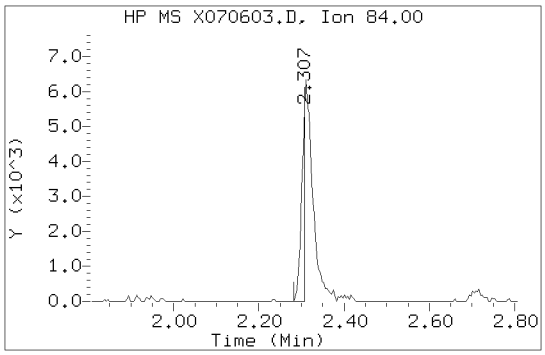
BEFORE

MASS
84
AREA
3611
HEIGHT
5578
15-Jul-2022
14:25
linh
pham



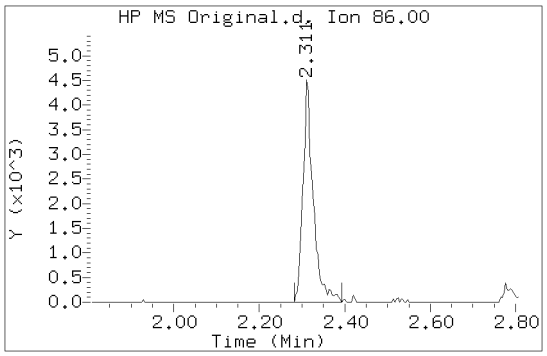
AFTER

MASS
84
AREA
3611
HEIGHT
5578
15-Jul-2022
14:25
linh
pham



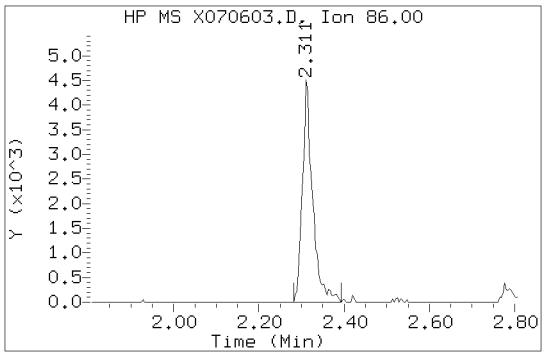
BEFORE

MASS
86
AREA
7666
HEIGHT
4512
15-Jul-2022
14:25
linh
pham



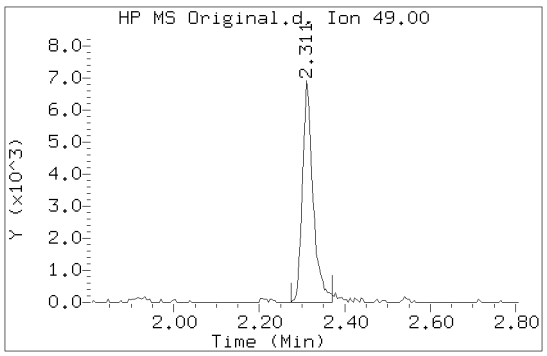
AFTER

MASS
86
AREA
7666
HEIGHT
4512
15-Jul-2022
14:25
linh
pham



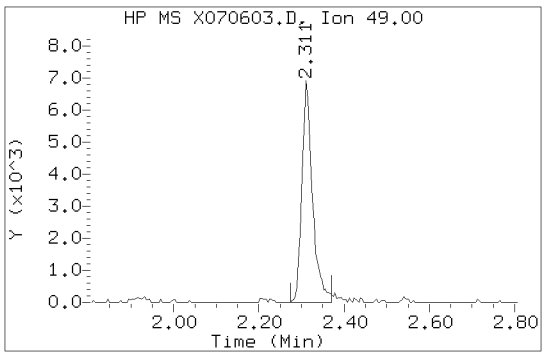
BEFORE

MASS
49
AREA
12193
HEIGHT
6914
15-Jul-2022
14:25
linh
pham



AFTER

MASS
49
AREA
12193
HEIGHT
6914
15-Jul-2022
14:25
linh
pham

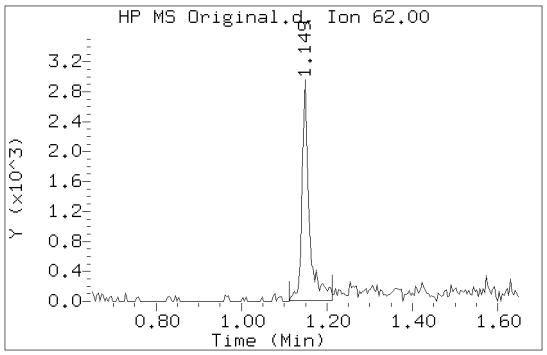


Vinyl Chloride (75-01-4)

Reason Code:

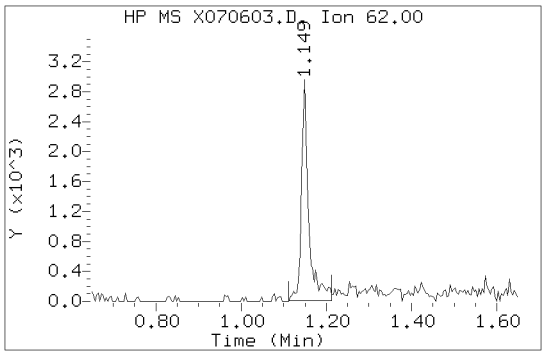
BEFORE

MASS
62
AREA
3631
HEIGHT
2951
15-Jul-2022
14:25
linh
pham



AFTER

MASS
62
AREA
3631
HEIGHT
2951
15-Jul-2022
14:25
linh
pham

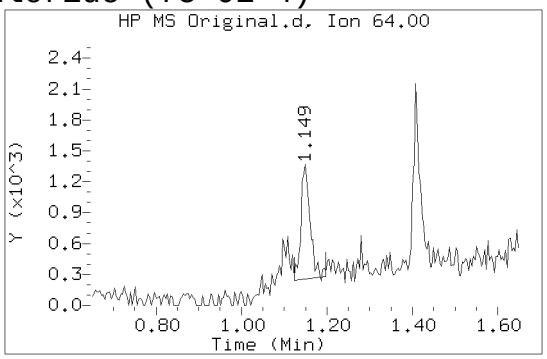


Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D
Inj Date : 06-JUL-2022 12:02
InstruID : voa6.i
LabSampID : VSTD000.5

Vinyl Chloride (75-01-4)

BEFORE

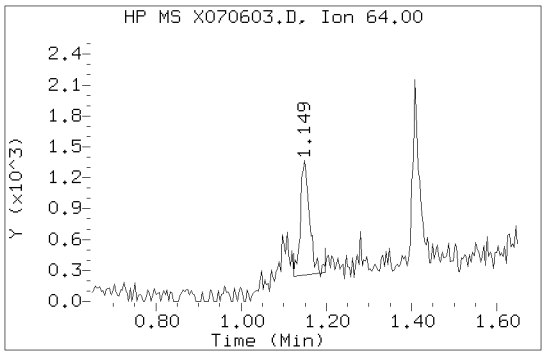
MASS
64
AREA
1708
HEIGHT
1116
15-Jul-2022
14:25
linh
pham



Reason Code:

AFTER

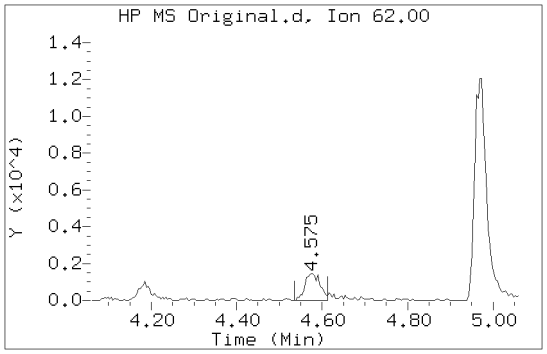
MASS
64
AREA
1708
HEIGHT
1116
15-Jul-2022
14:25
linh
pham



1,2-Dichloroethane (107-06-2)

BEFORE

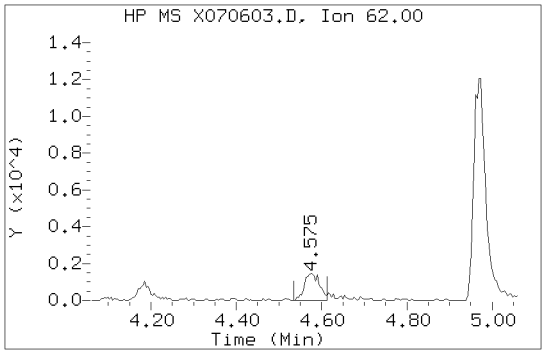
MASS
62
AREA
3621
HEIGHT
1448
15-Jul-2022
14:25
linh
pham



Reason Code:

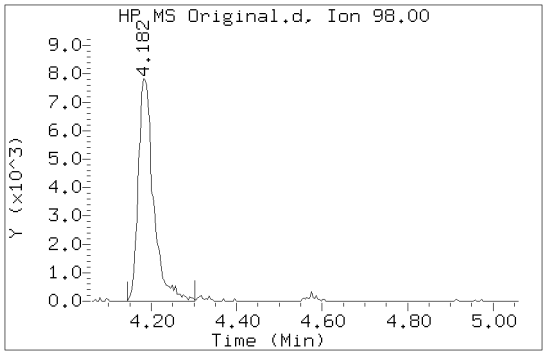
AFTER

MASS
62
AREA
3621
HEIGHT
1448
15-Jul-2022
14:25
linh
pham



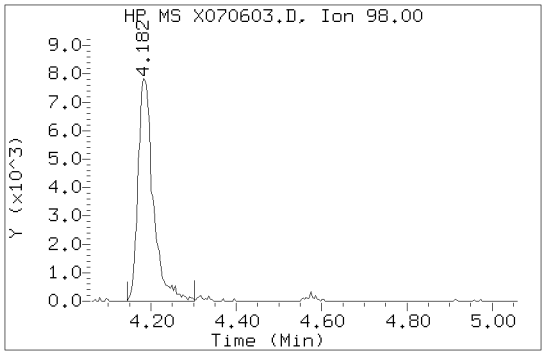
BEFORE

MASS
98
AREA
19367
HEIGHT
7823
15-Jul-2022
14:25
linh
pham



AFTER

MASS
98
AREA
19367
HEIGHT
7823
15-Jul-2022
14:25
linh
pham

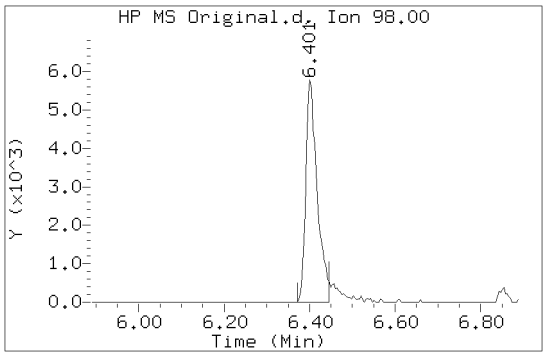


Toluene-d8 (2037-26-5)

Reason Code:

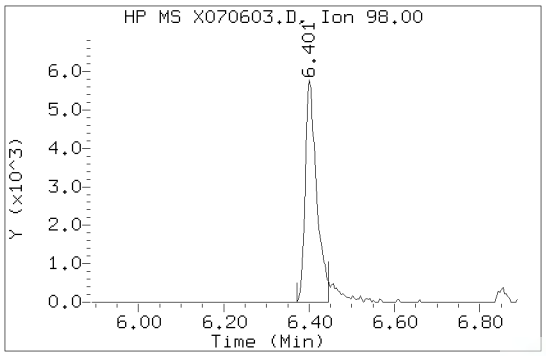
BEFORE

MASS
98
AREA
10841
HEIGHT
5782
15-Jul-2022
14:25
linh
pham



AFTER

MASS
98
AREA
10841
HEIGHT
5782
15-Jul-2022
14:25
linh
pham



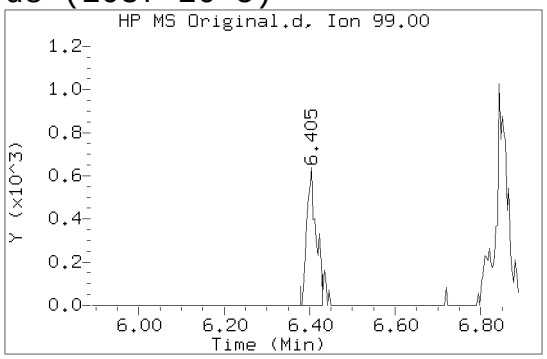
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D
Inj Date : 06-JUL-2022 12:02
InstruID : voa6.i
LabSampID : VSTD000.5

Toluene-d8 (2037-26-5)

Reason Code:

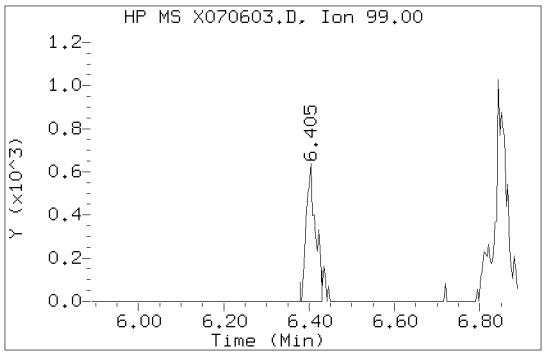
BEFORE

MASS
99
AREA
971
HEIGHT
639
15-Jul-2022
14:25
linh
pham



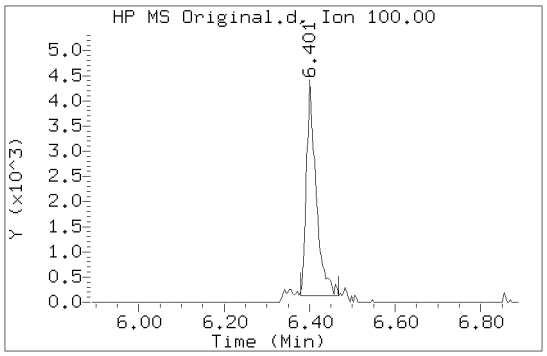
AFTER

MASS
99
AREA
971
HEIGHT
639
15-Jul-2022
14:25
linh
pham



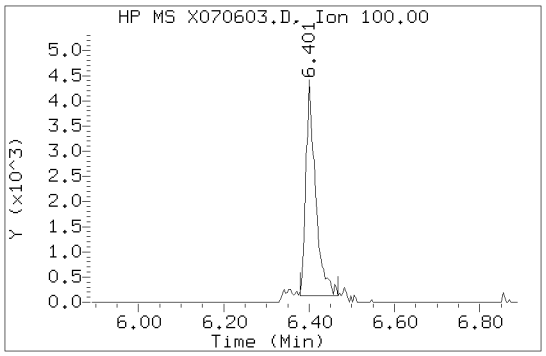
BEFORE

MASS
100
AREA
6864
HEIGHT
4294
15-Jul-2022
14:25
linh
pham



AFTER

MASS
100
AREA
6864
HEIGHT
4294
15-Jul-2022
14:25
linh
pham

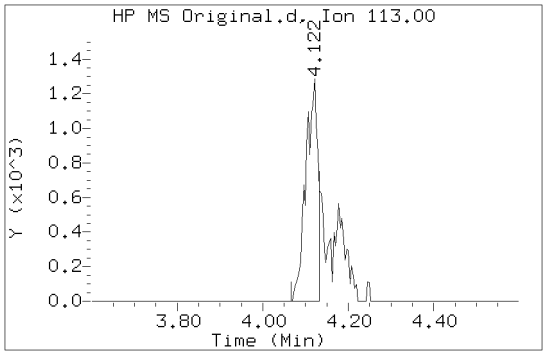


Dibromofluoromethane (1868-53-7)

Reason Code:

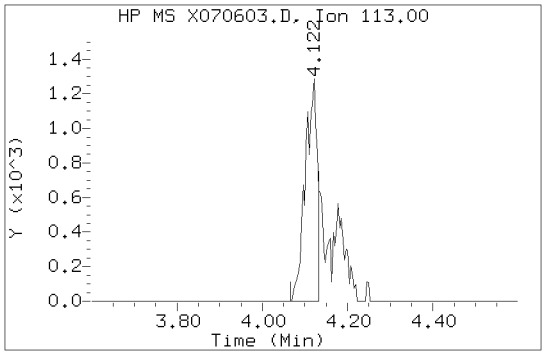
BEFORE

MASS
113
AREA
2530
HEIGHT
1286
15-Jul-2022
14:25
linh
pham



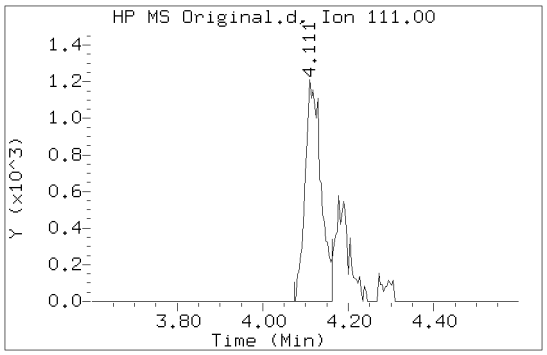
AFTER

MASS
113
AREA
2530
HEIGHT
1286
15-Jul-2022
14:25
linh
pham



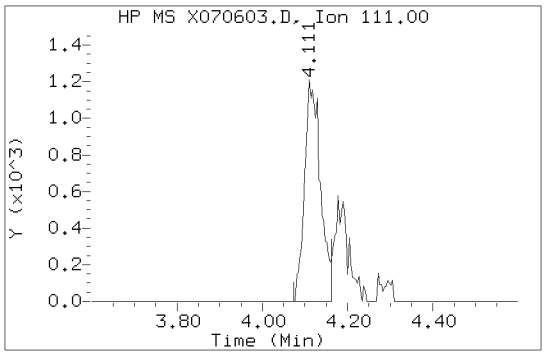
BEFORE

MASS
111
AREA
3177
HEIGHT
1211
15-Jul-2022
14:25
linh
pham



AFTER

MASS
111
AREA
3177
HEIGHT
1211
15-Jul-2022
14:25
linh
pham

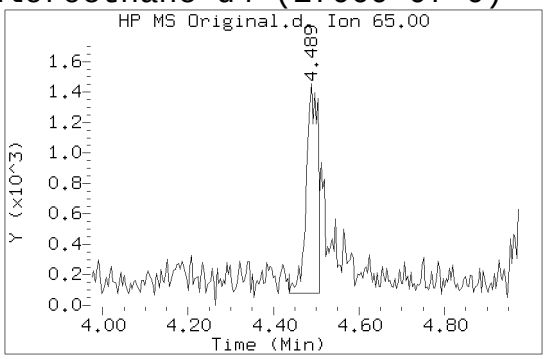


Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D
Inj Date : 06-JUL-2022 12:02
InstruID : voa6.i
LabSampID : VSTD000.5

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE
MASS
65
AREA
2572
HEIGHT
1375
15-Jul-2022
14:25
linh
pham



AFTER
MASS
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HEIGHT
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15-Jul-2022
14:25
linh
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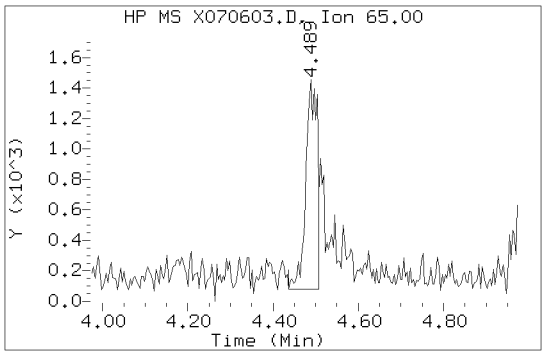
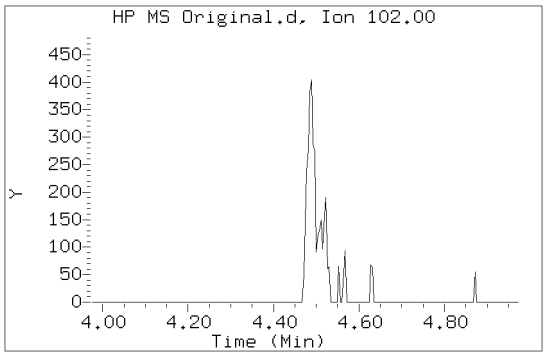
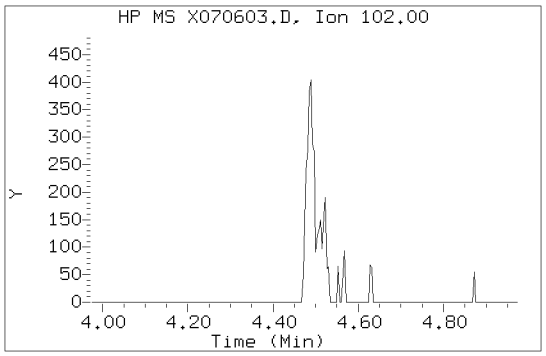


BEFORE
MASS
102
AREA
0
HEIGHT
0
15-Jul-2022
14:25
linh
pham



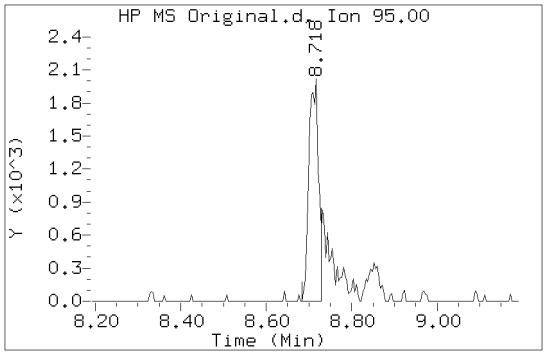
AFTER
MASS
102
AREA
0
HEIGHT
0
15-Jul-2022
14:25
linh
pham



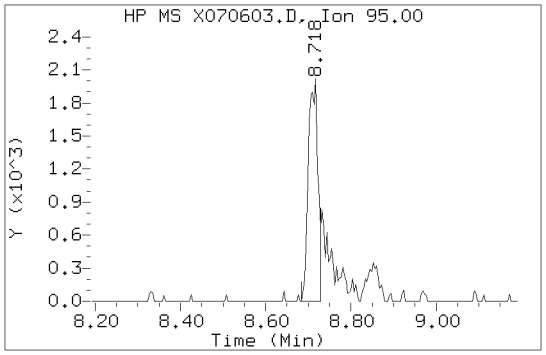
4-Bromofluorobenzene (460-00-4)

Reason Code:

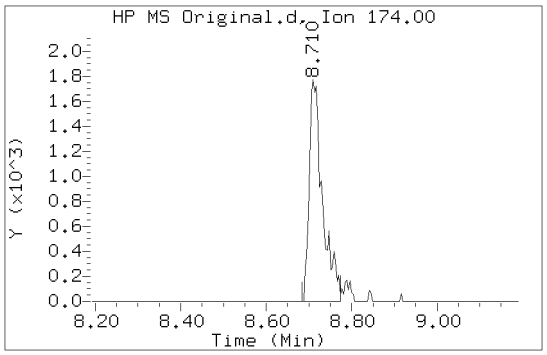
BEFORE
MASS
95
AREA
3152
HEIGHT
2018
15-Jul-2022
14:25
linh
pham



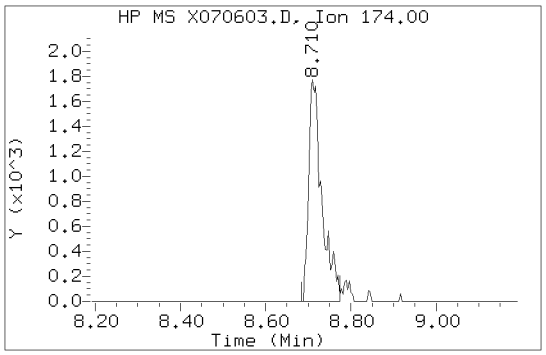
AFTER
MASS
95
AREA
3152
HEIGHT
2018
15-Jul-2022
14:25
linh
pham



BEFORE
MASS
174
AREA
3817
HEIGHT
1773
15-Jul-2022
14:25
linh
pham



AFTER
MASS
174
AREA
3817
HEIGHT
1773
15-Jul-2022
14:25
linh
pham



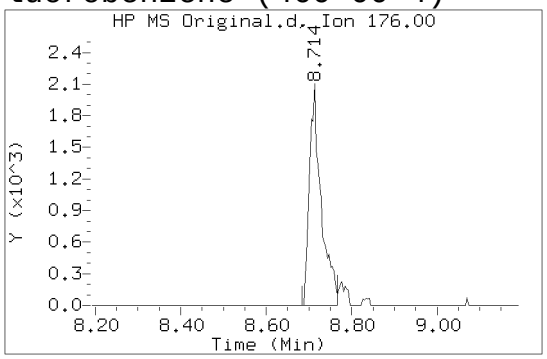
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D
Inj Date : 06-JUL-2022 12:02
InstruID : voa6.i
LabSampID : VSTD000.5

4-Bromofluorobenzene (460-00-4)

Reason Code:

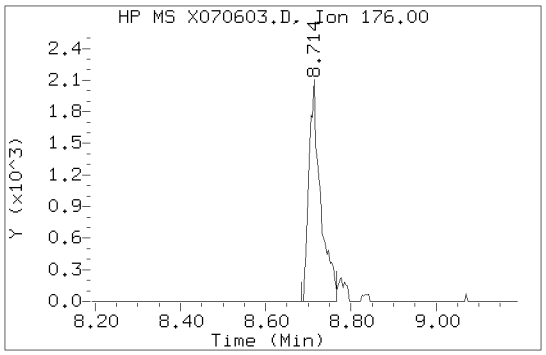
BEFORE

MASS
176
AREA
3989
HEIGHT
2104
15-Jul-2022
14:25
linh
pham



AFTER

MASS
176
AREA
3989
HEIGHT
2104
15-Jul-2022
14:25
linh
pham



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070604.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070604.D
Lab Smp Id: VSTD001 Client Smp ID: VSTD001
Inj Date : 06-JUL-2022 12:23
Operator : PC Inst ID: voa6.i
Smp Info : VSTD001;VSTD001;1;3;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 12:02 Cal File: X070603.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

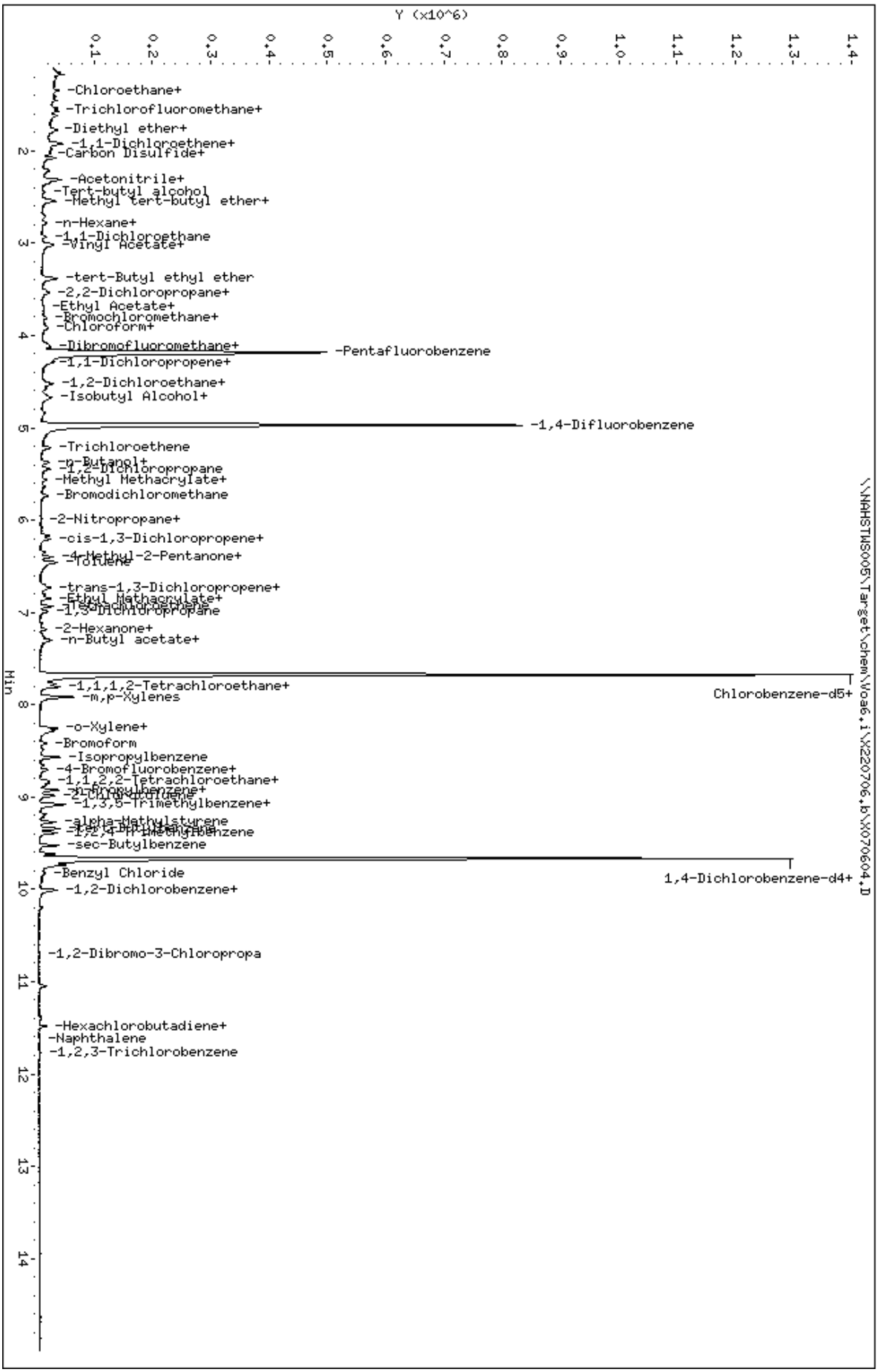
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	451641	50.0000	
* 36 1,4-Difluorobenzene	114	4.972	4.972	(1.000)	737303	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	732248	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	331230	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.489	4.489	(1.073)	3656	1.00000	(a)
$ 69 4-Bromofluorobenzene	95	8.706	8.706	(1.135)	5552	1.00000	0.56(a)
$ 30 Dibromofluoromethane	113	4.114	4.114	(0.983)	3275	1.00000	0.50
$ 48 Toluene-d8	98	6.401	6.401	(0.834)	14404	1.00000	0.79(a)
53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	4250	1.00000	1.02(a)
11 1,1-Dichloroethene	96	1.925	1.925	(0.460)	4348	1.00000	1.00(a)
33 1,2-Dichloroethane	62	4.579	4.579	(0.921)	6040	1.00000	0.98(a)
27 cis-1,2-Dichloroethene	96	3.540	3.540	(0.846)	5136	1.00000	0.98(a)
17 Methylene Chloride	84	2.315	2.315	(0.553)	6773	1.00000	1.89(aM)
38 Trichloroethene	130	5.216	5.216	(1.049)	5575	1.00000	1.00(a)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	6122	1.00000	1.05(a)

QC Flag Legend

a - Target compound detected but, quantitated amount

Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070604.D
Date : 06-JUL-2022 12:23
Client ID: VSTD001
Sample Info: VSTD001;VSTD001;1;3;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

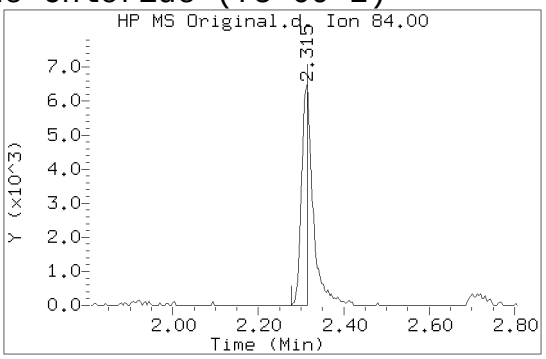
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070604.D
Inj Date : 06-JUL-2022 12:23
InstruID : voa6.i
LabSampID : VSTD001

Methylene Chloride (75-09-2)

Reason Code:

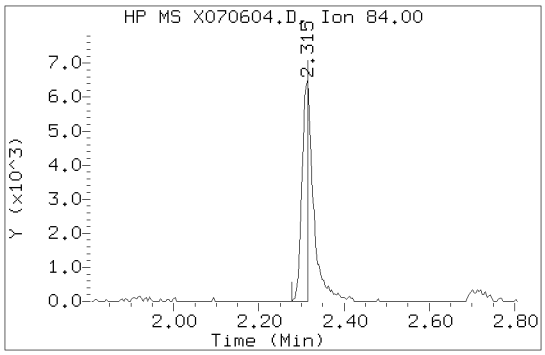
BEFORE

MASS
84
AREA
6773
HEIGHT
6513
15-Jul-2022
14:25
linh
pham



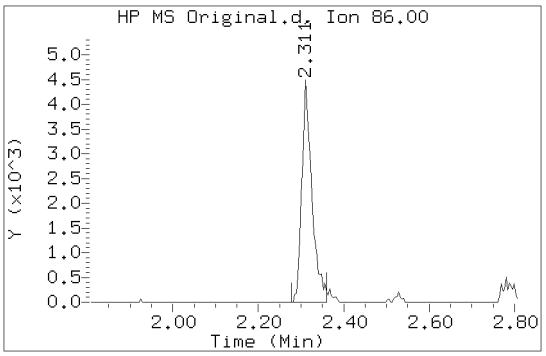
AFTER

MASS
84
AREA
6773
HEIGHT
6513
15-Jul-2022
14:25
linh
pham



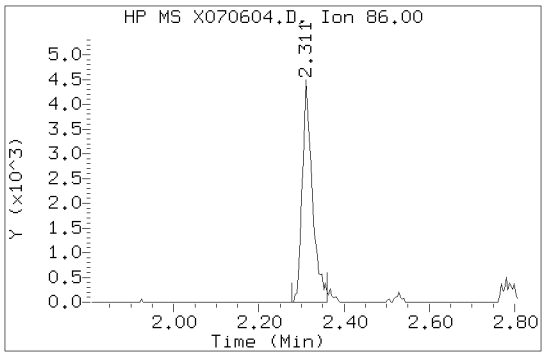
BEFORE

MASS
86
AREA
7530
HEIGHT
4492
15-Jul-2022
14:25
linh
pham



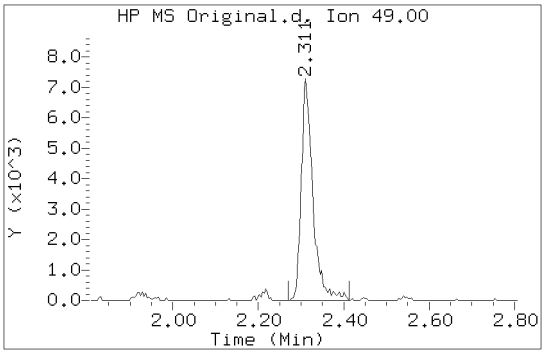
AFTER

MASS
86
AREA
7530
HEIGHT
4492
15-Jul-2022
14:25
linh
pham



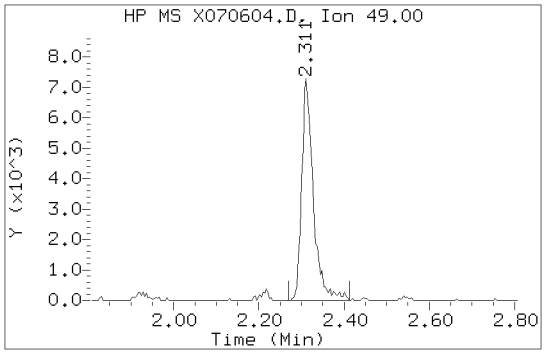
BEFORE

MASS
49
AREA
14080
HEIGHT
7288
15-Jul-2022
14:25
linh
pham



AFTER

MASS
49
AREA
14080
HEIGHT
7288
15-Jul-2022
14:25
linh
pham



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070605.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070605.D
Lab Smp Id: VSTD002 Client Smp ID: VSTD002
Inj Date : 06-JUL-2022 12:44
Operator : PC Inst ID: voa6.i
Smp Info : VSTD002;VSTD002;1;4;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 12:23 Cal File: X070604.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

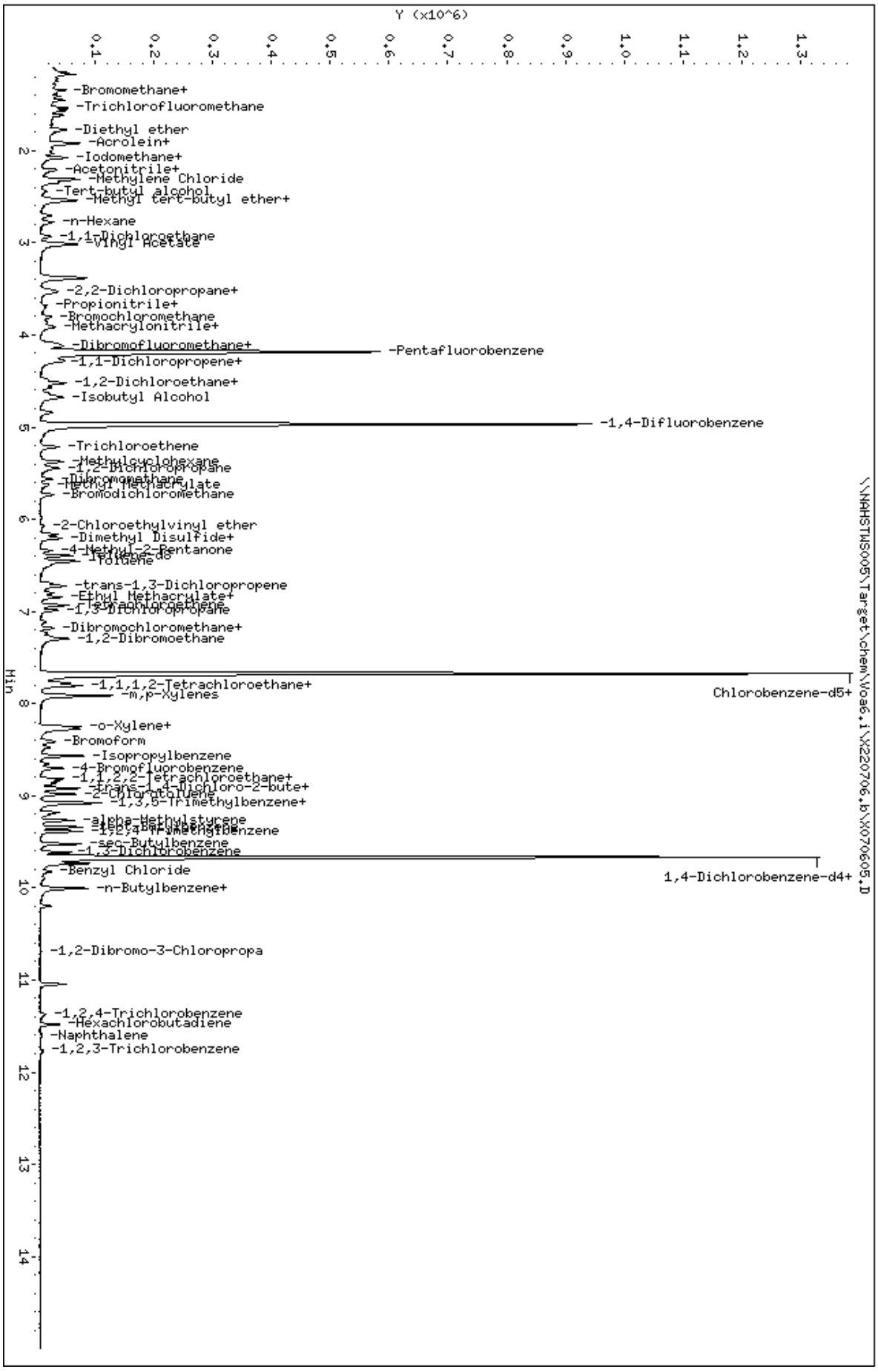
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	530225	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	824307	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	729884	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	337544	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.485	4.485	(1.072)	11348	2.00000	1.17(a)
$ 69 4-Bromofluorobenzene	95	8.702	8.702	(1.134)	12993	2.00000	1.74(a)
$ 30 Dibromofluoromethane	113	4.117	4.117	(0.984)	9962	2.00000	1.75
$ 48 Toluene-d8	98	6.397	6.397	(0.834)	36249	2.00000	1.99(a)
53 1,1,2-Trichloroethane	83	6.846	6.846	(0.892)	7944	2.00000	1.91(a)
11 1,1-Dichloroethene	96	1.917	1.917	(0.458)	9767	2.00000	1.92(a)
33 1,2-Dichloroethane	62	4.567	4.567	(0.919)	13742	2.00000	2.01(a)
27 cis-1,2-Dichloroethene	96	3.540	3.540	(0.846)	12209	2.00000	1.98(a)
17 Methylene Chloride	84	2.311	2.311	(0.552)	19043	2.00000	3.67(a)
38 Trichloroethene	130	5.212	5.212	(1.049)	12321	2.00000	1.99(a)
5 Vinyl Chloride	62	1.148	1.148	(0.275)	12825	2.00000	1.89(a)

QC Flag Legend

a - Target compound detected but, quantitated amount

Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070605.D
Date : 06-JUL-2022 12:44
Client ID: VSTD002
Sample Info: VSTD002;VSTD002;1;4;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070605.D
Inj Date : 06-JUL-2022 12:44
InstruID : voa6.i
LabSampID : VSTD002

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070606.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070606.D
Lab Smp Id: VSTD005 Client Smp ID: VSTD005
Inj Date : 06-JUL-2022 13:05
Operator : PC Inst ID: voa6.i
Smp Info : VSTD005;VSTD005;1;5;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 12:44 Cal File: X070605.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

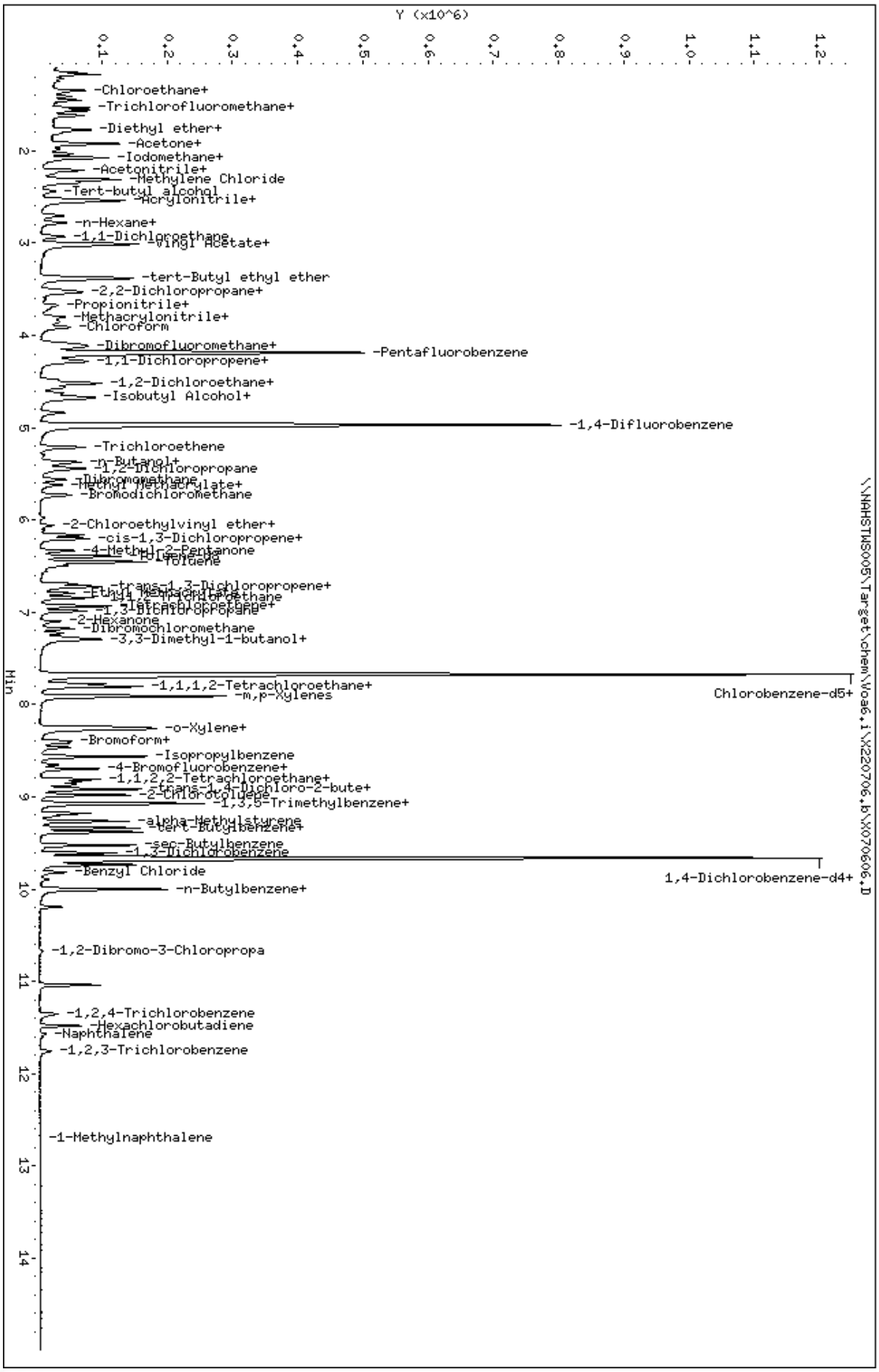
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	457328	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	703889	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	639975	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	300852	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.485	4.485	(1.072)	21986	5.00000	4.08(a)
$ 69 4-Bromofluorobenzene	95	8.695	8.695	(1.133)	28163	5.00000	4.78(a)
$ 30 Dibromofluoromethane	113	4.106	4.106	(0.981)	21128	5.00000	4.74
$ 48 Toluene-d8	98	6.393	6.393	(0.833)	80917	5.00000	5.09
53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	18365	5.00000	5.04
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	21062	5.00000	4.81(a)
33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	28033	5.00000	4.80(a)
27 cis-1,2-Dichloroethene	96	3.537	3.537	(0.845)	26162	5.00000	4.94(a)
17 Methylene Chloride	84	2.311	2.311	(0.552)	28961	5.00000	6.00(M)
38 Trichloroethene	130	5.212	5.212	(1.049)	25120	5.00000	4.76(a)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	26767	5.00000	4.57(a)

QC Flag Legend

a - Target compound detected but, quantitated amount

Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



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Date : 06-JUL-2022 13:05
Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;5;;
Purge Volume: 5.0
Column phase: DB624

\\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070606.D

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

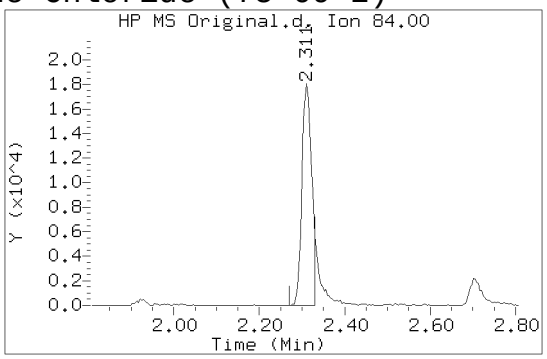
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070606.D
Inj Date : 06-JUL-2022 13:05
InstruID : voa6.i
LabSampID : VSTD005

Methylene Chloride (75-09-2)

Reason Code:

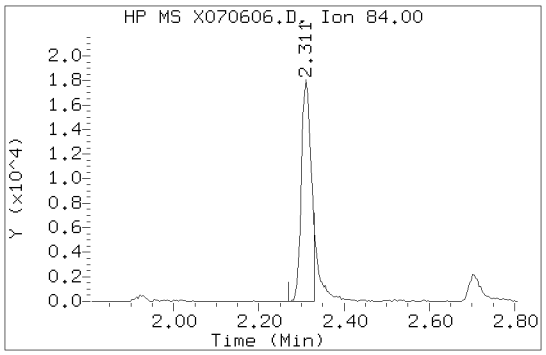
BEFORE

MASS
84
AREA
28961
HEIGHT
18056
15-Jul-2022
14:25
linh
pham



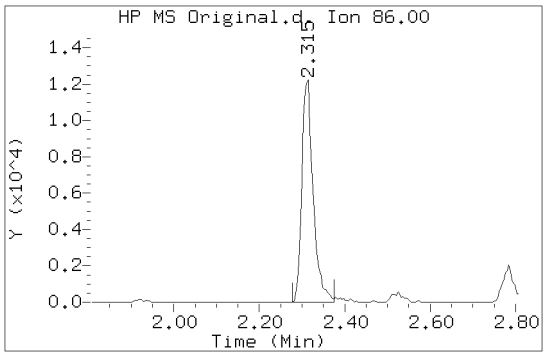
AFTER

MASS
84
AREA
28961
HEIGHT
18056
15-Jul-2022
14:25
linh
pham



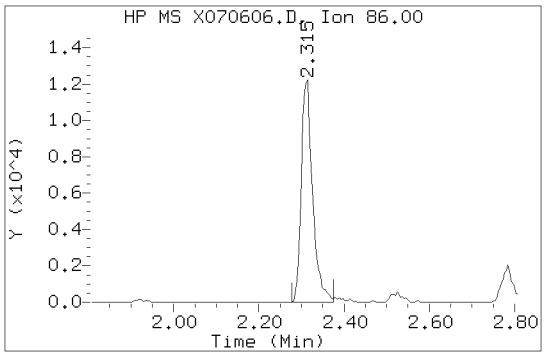
BEFORE

MASS
86
AREA
22788
HEIGHT
12232
15-Jul-2022
14:25
linh
pham



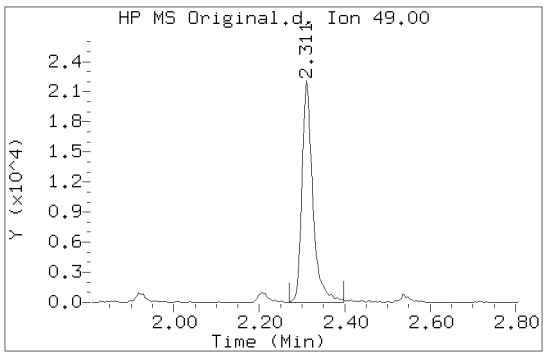
AFTER

MASS
86
AREA
22788
HEIGHT
12232
15-Jul-2022
14:25
linh
pham



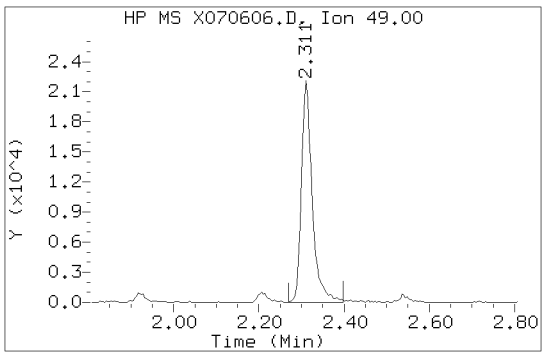
BEFORE

MASS
49
AREA
39454
HEIGHT
22104
15-Jul-2022
14:25
linh
pham



AFTER

MASS
49
AREA
39454
HEIGHT
22104
15-Jul-2022
14:25
linh
pham



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070607.D Page 1
Report Date: 15-Jul-2022 14:25

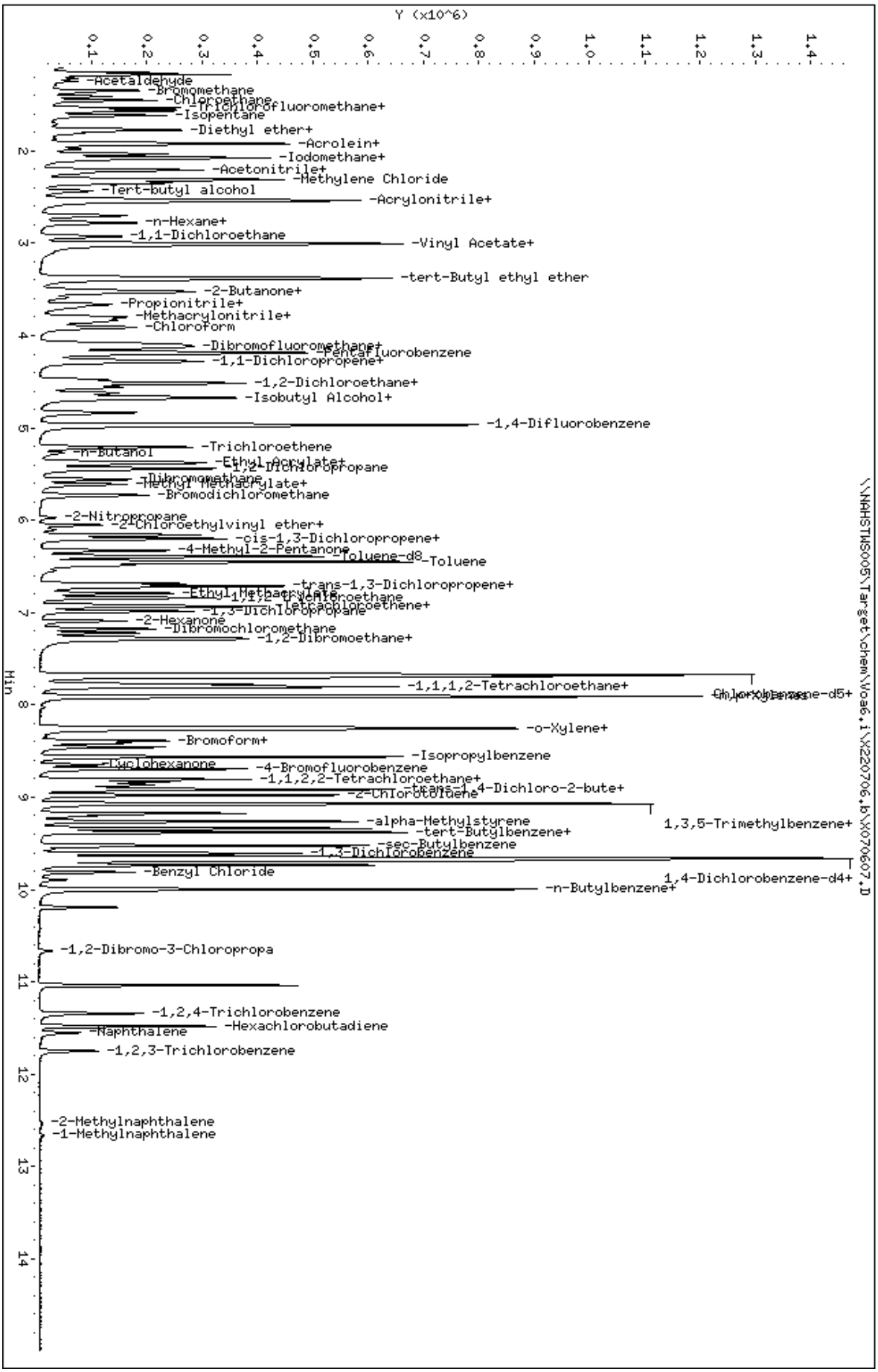
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070607.D
Lab Smp Id: VSTD020 Client Smp ID: VSTD020
Inj Date : 06-JUL-2022 13:26
Operator : PC Inst ID: voa6.i
Smp Info : VSTD020;VSTD020;1;6;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:05 Cal File: X070606.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	441521	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	687694	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	629838	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	301150	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	88656	20.0000	20.77
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	113041	20.0000	20.46
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	85780	20.0000	20.89
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	318449	20.0000	20.36
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	73006	20.0000	20.38
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	85358	20.0000	20.20
33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	113537	20.0000	19.92
27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	102517	20.0000	20.06
17 Methylene Chloride	84	2.307	2.307	(0.551)	104226	20.0000	20.68
38 Trichloroethene	130	5.208	5.208	(1.048)	101157	20.0000	19.64
5 Vinyl Chloride	62	1.149	1.149	(0.275)	115487	20.0000	20.45



Data File: \\NAHSTWS005\Target\chem\Woa6.i\X220706.b\X070607.D
Date : 06-JUL-2022 13:26
Client ID: VSTD020
Sample Info: WSTD020;VSTD020;1;6;;
Purge Volume: 5.0
Column phase: DB624

Instrument: woa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070607.D
Inj Date : 06-JUL-2022 13:26
InstruID : voa6.i
LabSampID : VSTD020

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070608.D Page 1
Report Date: 15-Jul-2022 14:25

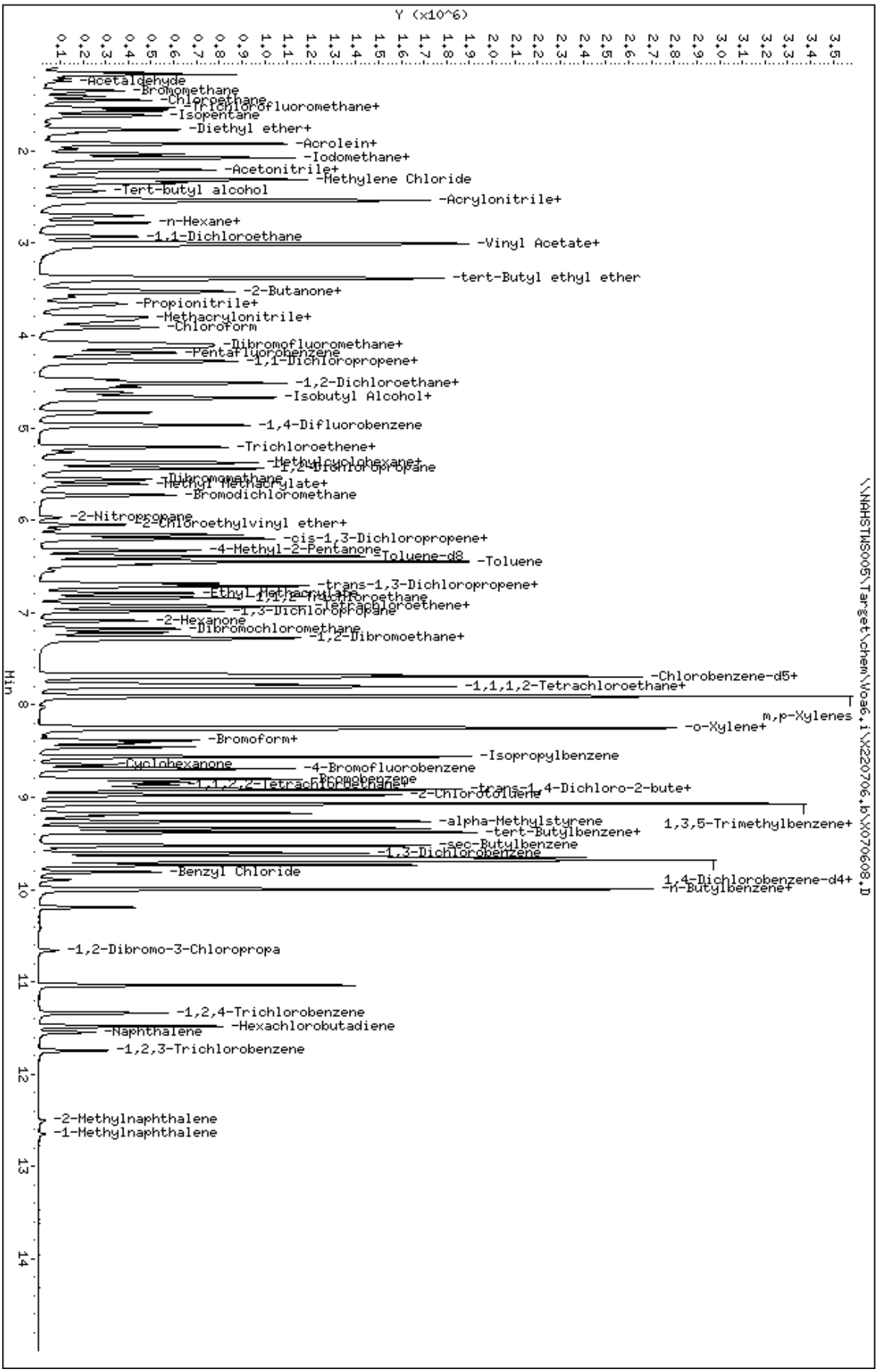
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070608.D
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 06-JUL-2022 13:47
Operator : PC Inst ID: voa6.i
Smp Info : VSTD050;VSTD050;1;7;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:26 Cal File: X070607.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	524720	50.0000	
*	36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	789735	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	716144	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	343654	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	251549	50.0000	51.21
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	310560	50.0000	49.90
$	30 Dibromofluoromethane	113	4.103	4.103	(0.980)	241477	50.0000	49.89
$	48 Toluene-d8	98	6.389	6.389	(0.833)	874288	50.0000	49.16
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	201769	50.0000	49.55
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	216608	50.0000	43.15
	33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	327436	50.0000	50.03
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	291155	50.0000	47.94
	17 Methylene Chloride	84	2.311	2.311	(0.552)	278913	50.0000	45.78
	38 Trichloroethene	130	5.209	5.209	(1.048)	288879	50.0000	48.84
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	300120	50.0000	44.71



Data File: \\NAHSTMS005\Target\chem\Voa6.i\X220706.b\X070608.D
Date : 06-JUL-2022 13:47
Client ID: VSTD050
Sample Info: VSTD050;VSTD050;1;7;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070608.D
Inj Date : 06-JUL-2022 13:47
InstruID : voa6.i
LabSampID : VSTD050

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070609.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070609.D
Lab Smp Id: VSTD100 Client Smp ID: VSTD100
Inj Date : 06-JUL-2022 14:08
Operator : PC Inst ID: voa6.i
Smp Info : VSTD100;VSTD100;1;8;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

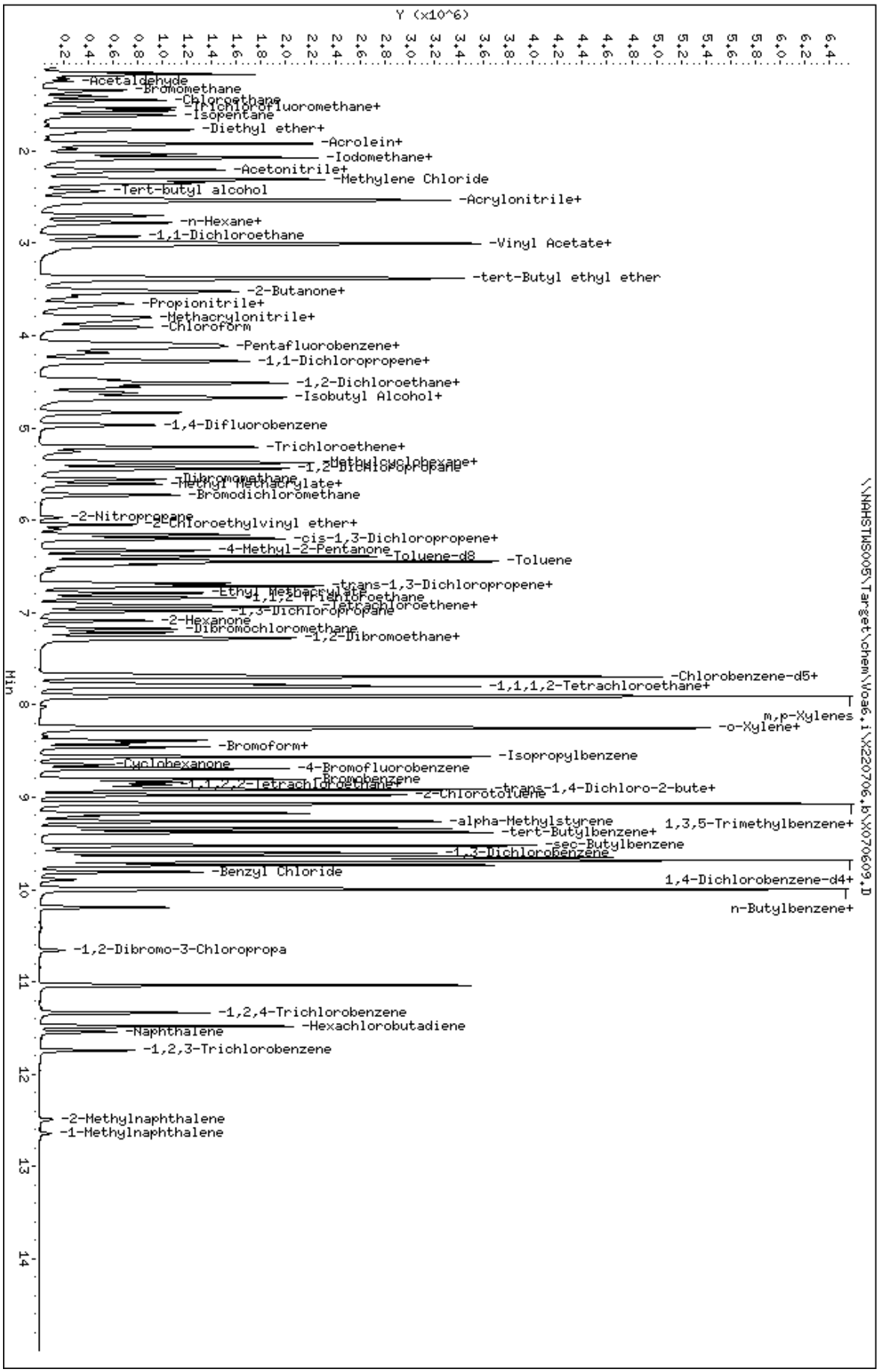
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	458566	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	803838	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	633328	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	360755	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	454111	100.000	107.03
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	562316	100.000	102.50
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.979)	434904	100.000	103.13
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1644104	100.000	104.54(A)
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	365458	100.000	101.49
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	435039	100.000	99.16
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	620979	100.000	93.22
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	539682	100.000	101.68
17 Methylene Chloride	84	2.307	2.307	(0.551)	510517	100.000	95.20
38 Trichloroethene	130	5.208	5.208	(1.048)	610532	100.000	101.42
5 Vinyl Chloride	62	1.149	1.149	(0.275)	609836	100.000	103.97

QC Flag Legend

A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTMS005\Target\chem\Voa6.i\X220706.b\X070609.D
Date : 06-JUL-2022 14:08
Client ID: VSTD100
Sample Info: VSTD100;VSTD100;1;8;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070609.D
Inj Date : 06-JUL-2022 14:08
InstruID : voa6.i
LabSampID : VSTD100

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070610.D Page 1
Report Date: 15-Jul-2022 14:25

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Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070610.D
Lab Smp Id: VSTD150 Client Smp ID: VSTD150
Inj Date : 06-JUL-2022 14:28
Operator : PC Inst ID: voa6.i
Smp Info : VSTD150;VSTD150;1;9;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:08 Cal File: X070609.D
Als bottle: 11 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

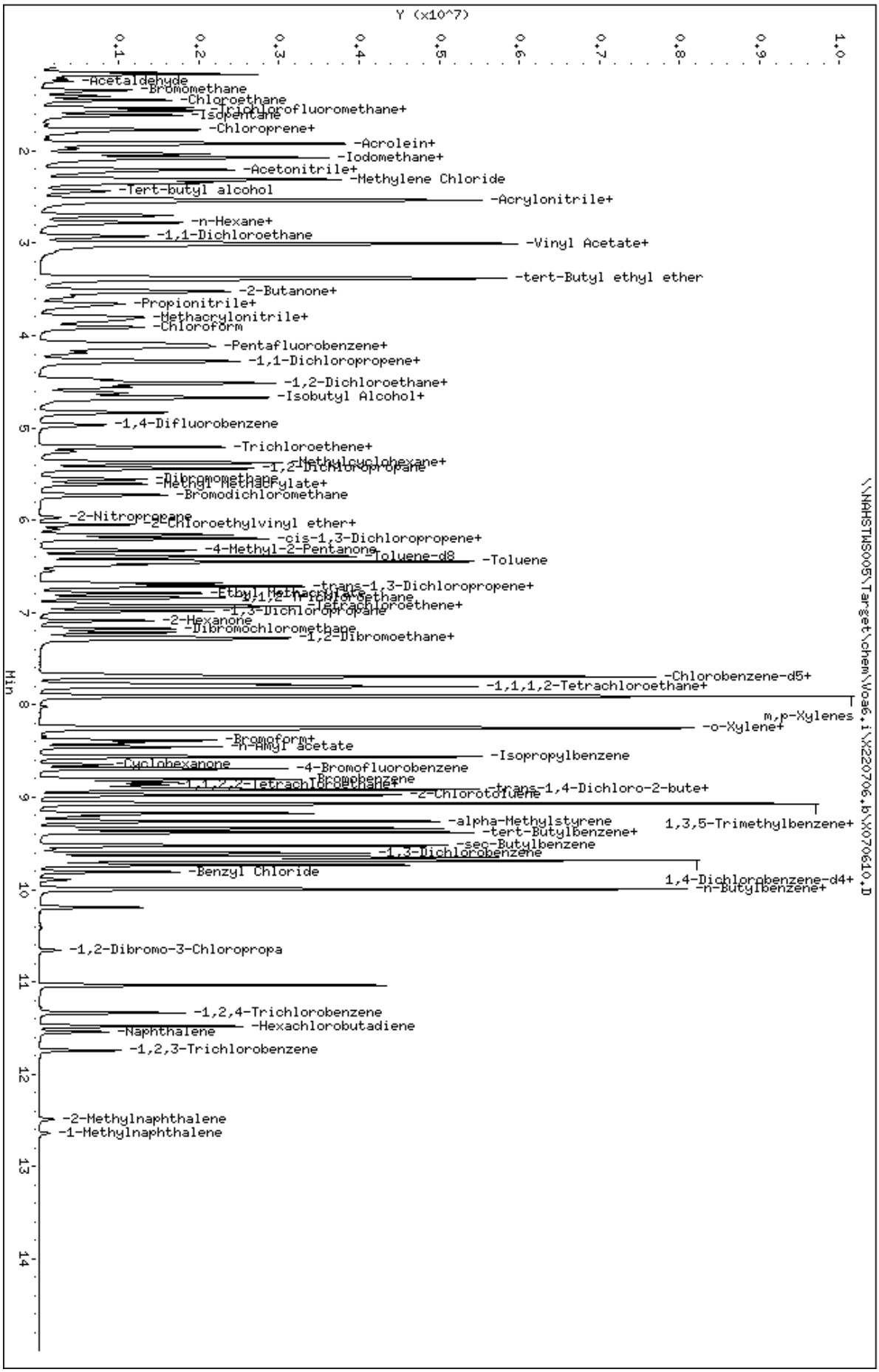
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	467218	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	708435	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	652387	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	312809	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	634876	150.000	147.30
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	839072	150.000	148.62
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.979)	627970	150.000	146.28
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	2370733	150.000	146.33(A)
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	540430	150.000	145.70
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	730731	150.000	163.48
33 1,2-Dichloroethane	62	4.556	4.556	(0.917)	874133	150.000	148.89
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	801041	150.000	148.13
17 Methylene Chloride	84	2.307	2.307	(0.551)	843638	150.000	154.02
38 Trichloroethene	130	5.208	5.208	(1.048)	796666	150.000	150.16
5 Vinyl Chloride	62	1.149	1.149	(0.275)	971073	150.000	162.49

QC Flag Legend

A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070610.D
Date : 06-JUL-2022 14:28
Client ID: VSTD150
Sample Info: VSTD150;VSTD150;1;9;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070610.D
Inj Date : 06-JUL-2022 14:28
InstruID : voa6.i
LabSampID : VSTD150

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070611.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070611.D
Lab Smp Id: VSTD200 Client Smp ID: VSTD200
Inj Date : 06-JUL-2022 14:49
Operator : PC Inst ID: voa6.i
Smp Info : VSTD200;VSTD200;1;10;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:28 Cal File: X070610.D
Als bottle: 12 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

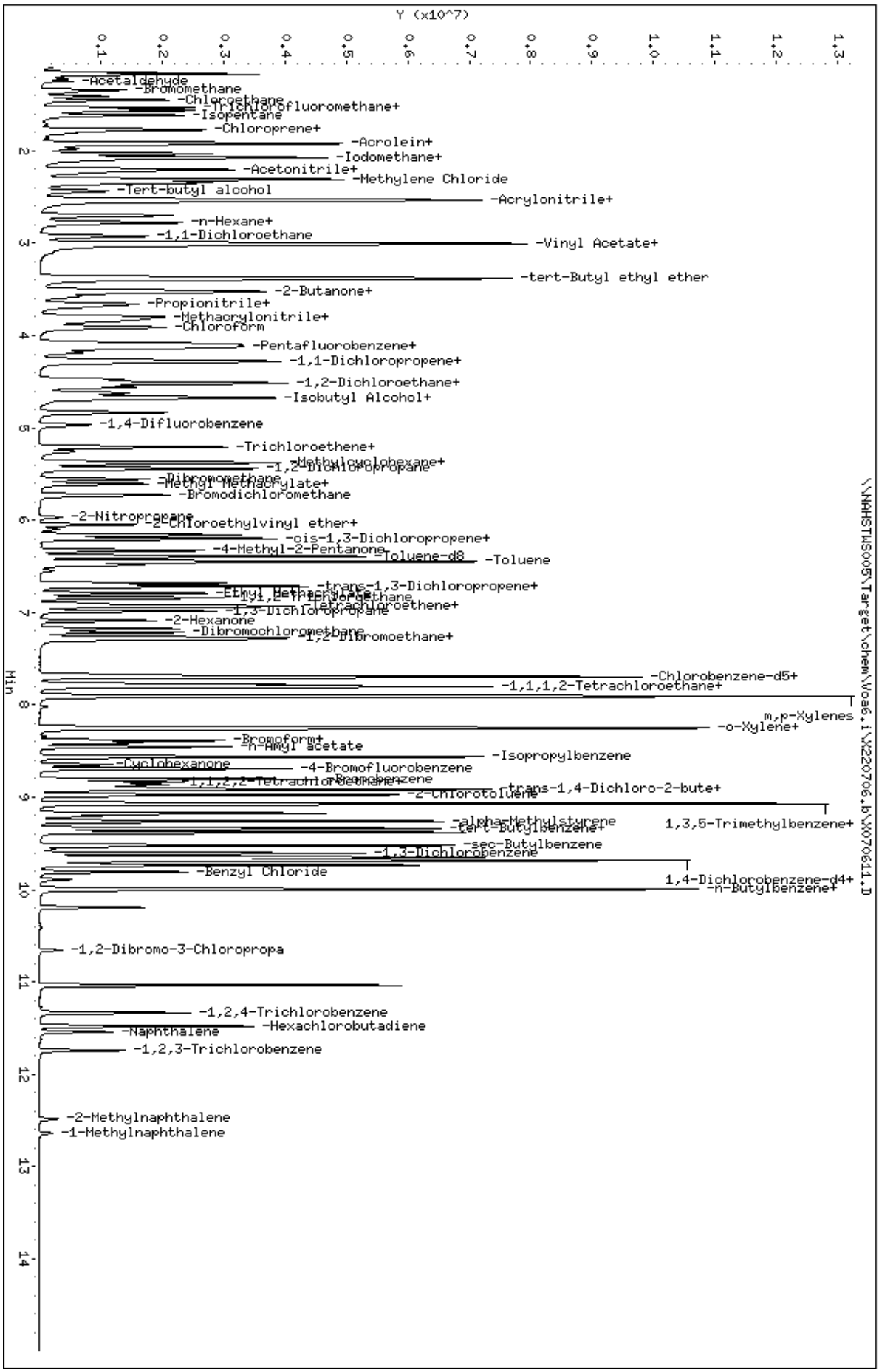
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	529767	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	697056	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	640107	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	304695	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	964795	200.000	197.82
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	1105705	200.000	199.72
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.979)	978031	200.000	201.03(A)
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	3093155	200.000	194.59(A)
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	714668	200.000	196.38
11 1,1-Dichloroethene	96	1.917	1.917	(0.458)	957171	200.000	188.86
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	1185784	200.000	205.28(A)
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	1199454	200.000	195.61
17 Methylene Chloride	84	2.307	2.307	(0.551)	1096995	200.000	176.54
38 Trichloroethene	130	5.208	5.208	(1.048)	1047757	200.000	200.72(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	1276551	200.000	188.39

QC Flag Legend

A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070611.D
Date : 06-JUL-2022 14:49
Client ID: VSTD200
Sample Info: VSTD200;VSTD200;1;10;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070611.D
Inj Date : 06-JUL-2022 14:49
InstruID : voa6.i
LabSampID : VSTD200

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070614.D Page 1
Report Date: 15-Jul-2022 14:25

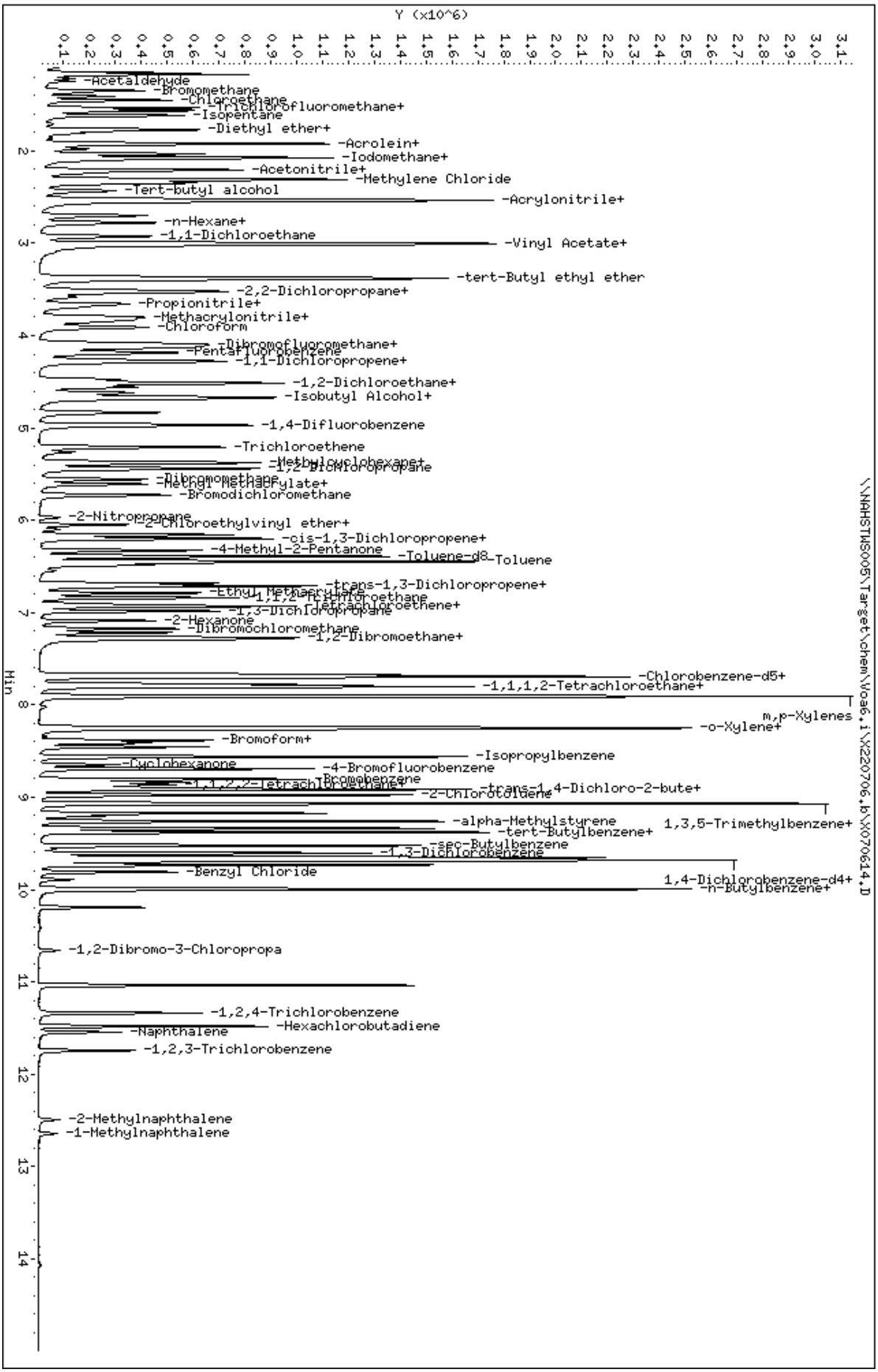
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070614.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 06-JUL-2022 15:52
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;ICV
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 15 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	472913	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	715416	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	649761	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.665	(1.000)	314721	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	219042	49.4414	49.44
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	296009	52.4412	52.44
$ 30 Dibromofluoromethane	113	4.103	4.099	(0.980)	215909	49.4980	49.49
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	831163	51.5130	51.51
53 1,1,2-Trichloroethane	83	6.839	6.843	(0.892)	176990	47.9123	47.91
11 1,1-Dichloroethene	96	1.921	1.917	(0.459)	220172	48.6658	48.66
33 1,2-Dichloroethane	62	4.556	4.560	(0.917)	274800	46.3519	46.35
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	254872	46.5638	46.56
17 Methylene Chloride	84	2.307	2.307	(0.551)	275295	50.0810	50.08
38 Trichloroethene	130	5.209	5.208	(1.048)	250171	46.6962	46.69
5 Vinyl Chloride	62	1.149	1.149	(0.275)	285397	47.1828	47.18



Data File: \\NAHSTWS005\Target\chem\Woa6.i\X220706.b\X070614.D
Date : 06-JUL-2022 15:52
Client ID: ICV
Sample Info: CCV;CCV;2;;ICV
Purge Volume: 5.0
Column phase: DB624

Instrument: woa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070614.D
Inj Date : 06-JUL-2022 15:52
InstruID : voa6.i
LabSampID : ICV

NO MANUAL INTEGRATIONS

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right partner.

Raw Data VOA6 412360

Volatiles Organics by Method 8260C

Wokorder

HS22061645

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 June 2022

07/20/2022

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070601.D Page 1
Report Date: 07-Jul-2022 10:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070601.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 06-JUL-2022 16:13
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\bfb.m
Meth Date : 14-Jun-2022 12:47 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 16 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.691	8.889	(0.000)	95	119736			0.00- 100.00	100.00
8.691	8.889	(0.000)	50	19688			15.00- 40.00	16.44
8.691	8.889	(0.000)	75	53536			30.00- 60.00	44.71
8.691	8.889	(0.000)	96	8044			5.00- 9.00	6.72
8.691	8.889	(0.000)	173	744			0.00- 2.00	0.78
8.691	8.889	(0.000)	174	94992			50.00- 0.00	79.33
8.691	8.889	(0.000)	175	6958			5.00- 9.00	7.32
8.691	8.889	(0.000)	176	95736			95.00- 101.00	100.78
8.691	8.889	(0.000)	177	5809			5.00- 9.00	6.07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.44
75	30.00 - 60.00% of mass 95	44.71
96	5.00 - 9.00% of mass 95	6.72
173	Less than 2.00% of mass 174	0.62 (0.78)
174	Greater than 50.00% of mass 95	79.33
175	5.00 - 9.00% of mass 174	5.81 (7.32)
176	95.00 - 101.00% of mass 174	79.96 (100.78)
177	5.00 - 9.00% of mass 176	4.85 (6.07)

Data File: Y070601.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 105

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	799	65.00	129	96.90	299	143.90	78
37.10	4874	65.90	115	97.90	282	144.70	76
38.00	4076	67.00	244	103.00	84	145.80	132
39.00	1543	68.00	10638	103.90	343	147.00	107
40.00	900	69.10	11319	104.90	185	147.70	335
41.00	87	69.90	952	105.90	380	148.90	83
42.00	171	72.20	441	107.00	86	149.60	92
43.00	164	73.00	4480	109.10	63	150.10	78
44.10	734	74.00	17136	110.80	95	152.00	72
45.00	679	75.00	53536	114.80	141	152.80	65
46.10	92	76.10	4912	115.90	413	153.90	115
47.10	1560	77.00	582	116.90	714	154.70	209
48.00	729	78.00	1028	117.90	420	156.90	319
49.00	3782	79.00	2419	118.80	561	158.90	119
50.10	19688	79.90	651	127.90	290	160.80	236
51.10	5626	80.90	2148	128.80	207	170.20	139
52.00	247	82.00	454	129.70	356	172.90	744
52.80	90	83.10	99	130.80	116	174.00	94992
55.00	458	85.60	75	133.90	56	175.00	6958
56.10	1276	87.00	5392	134.80	104	175.90	95736
57.00	2445	88.00	5705	135.00	105	176.90	5809
58.10	166	91.00	307	136.70	130	177.90	286
60.10	979	92.00	2719	139.20	62	186.00	269
61.00	4478	93.00	4281	140.10	112	261.90	120
62.00	4497	94.00	12569	140.90	916		
63.10	3369	95.00	119736	141.90	215		
64.00	336	96.10	8044	142.90	881		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070601.D Page 1

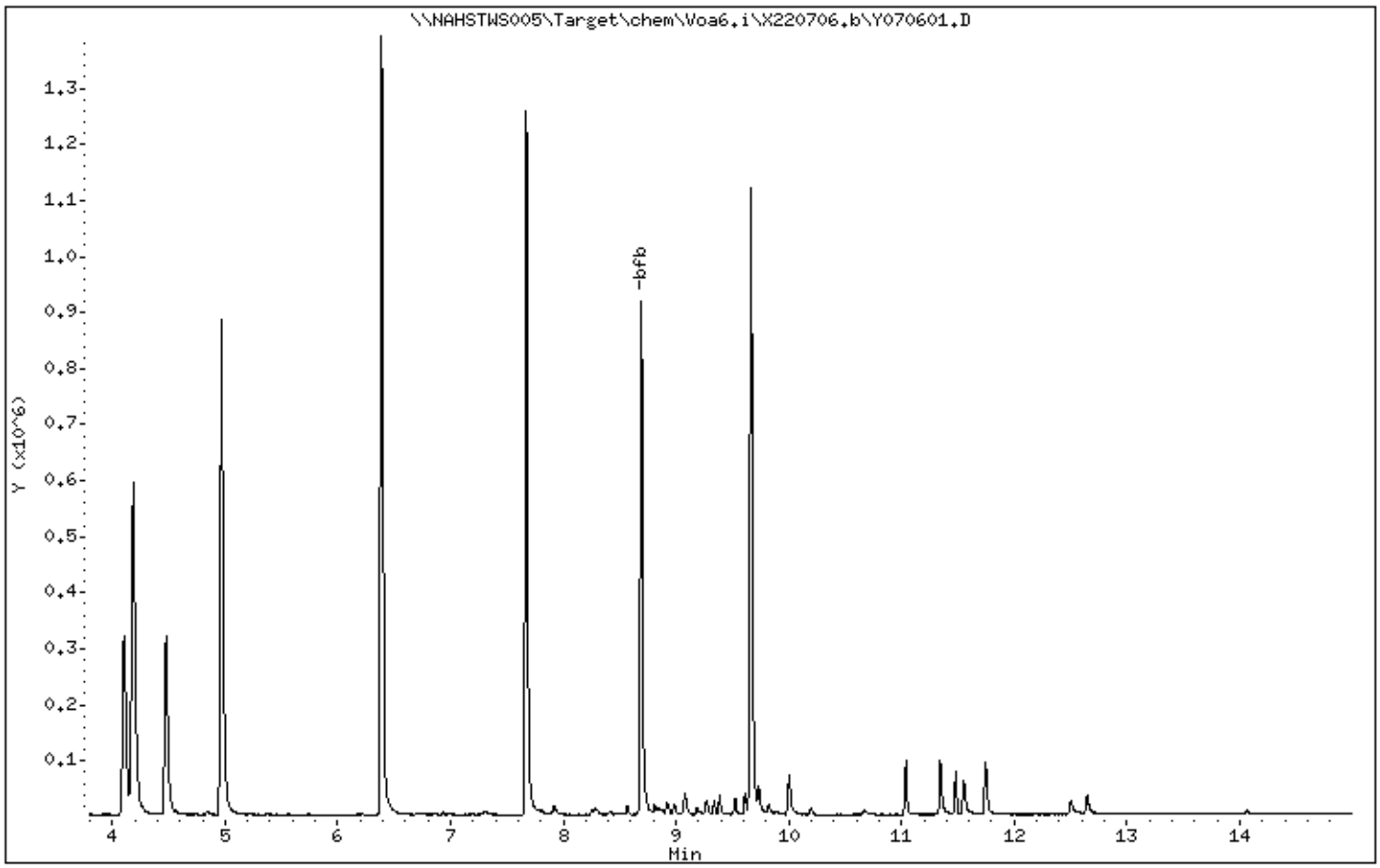
Date : 06-JUL-2022 16:13

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070601.D Page 2

Date : 06-JUL-2022 16:13

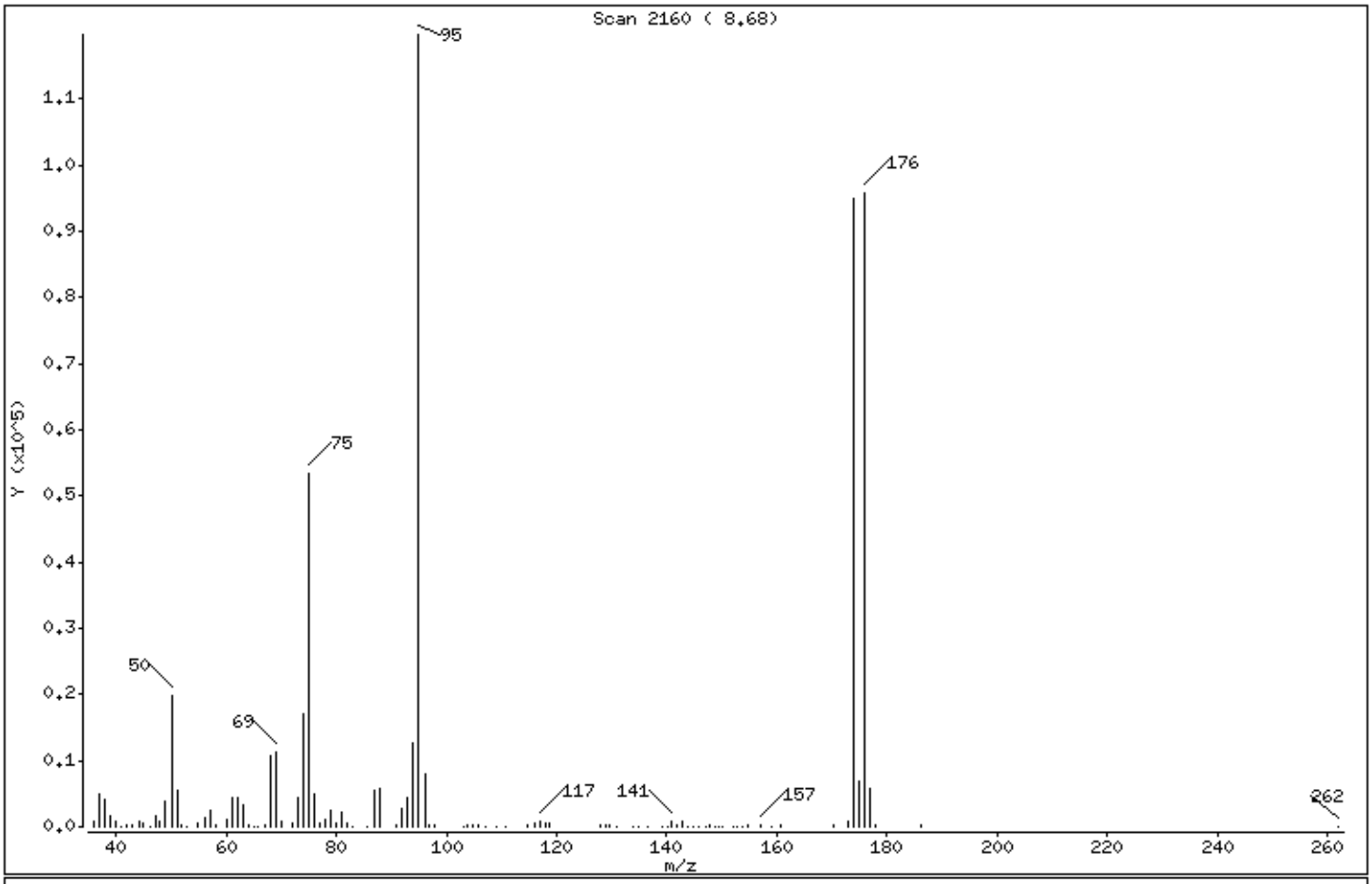
Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.44
75	30.00 - 60.00% of mass 95	44.71
96	5.00 - 9.00% of mass 95	6.72
173	Less than 2.00% of mass 174	0.62 (0.78)
174	Greater than 50.00% of mass 95	79.33
175	5.00 - 9.00% of mass 174	5.81 (7.32)
176	95.00 - 101.00% of mass 174	79.96 (100.78)
177	5.00 - 9.00% of mass 176	4.85 (6.07)

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070601.D Page 3

Date : 06-JUL-2022 16:13

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

Data File: Y070601.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 105

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	799	65.00	129	96.90	299	143.90	78
37.10	4874	65.90	115	97.90	282	144.70	76
38.00	4076	67.00	244	103.00	84	145.80	132
39.00	1543	68.00	10638	103.90	343	147.00	107
40.00	900	69.10	11319	104.90	185	147.70	335
41.00	87	69.90	952	105.90	380	148.90	83
42.00	171	72.20	441	107.00	86	149.60	92
43.00	164	73.00	4480	109.10	63	150.10	78
44.10	734	74.00	17136	110.80	95	152.00	72
45.00	679	75.00	53536	114.80	141	152.80	65
46.10	92	76.10	4912	115.90	413	153.90	115
47.10	1560	77.00	582	116.90	714	154.70	209
48.00	729	78.00	1028	117.90	420	156.90	319
49.00	3782	79.00	2419	118.80	561	158.90	119
50.10	19688	79.90	651	127.90	290	160.80	236
51.10	5626	80.90	2148	128.80	207	170.20	139
52.00	247	82.00	454	129.70	356	172.90	744
52.80	90	83.10	99	130.80	116	174.00	94992
55.00	458	85.60	75	133.90	56	175.00	6958
56.10	1276	87.00	5392	134.80	104	175.90	95736
57.00	2445	88.00	5705	135.00	105	176.90	5809
58.10	166	91.00	307	136.70	130	177.90	286
60.10	979	92.00	2719	139.20	62	186.00	269
61.00	4478	93.00	4281	140.10	112	261.90	120
62.00	4497	94.00	12569	140.90	916		
63.10	3369	95.00	119736	141.90	215		
64.00	336	96.10	8044	142.90	881		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070603.D Page 1
Report Date: 15-Jul-2022 14:30

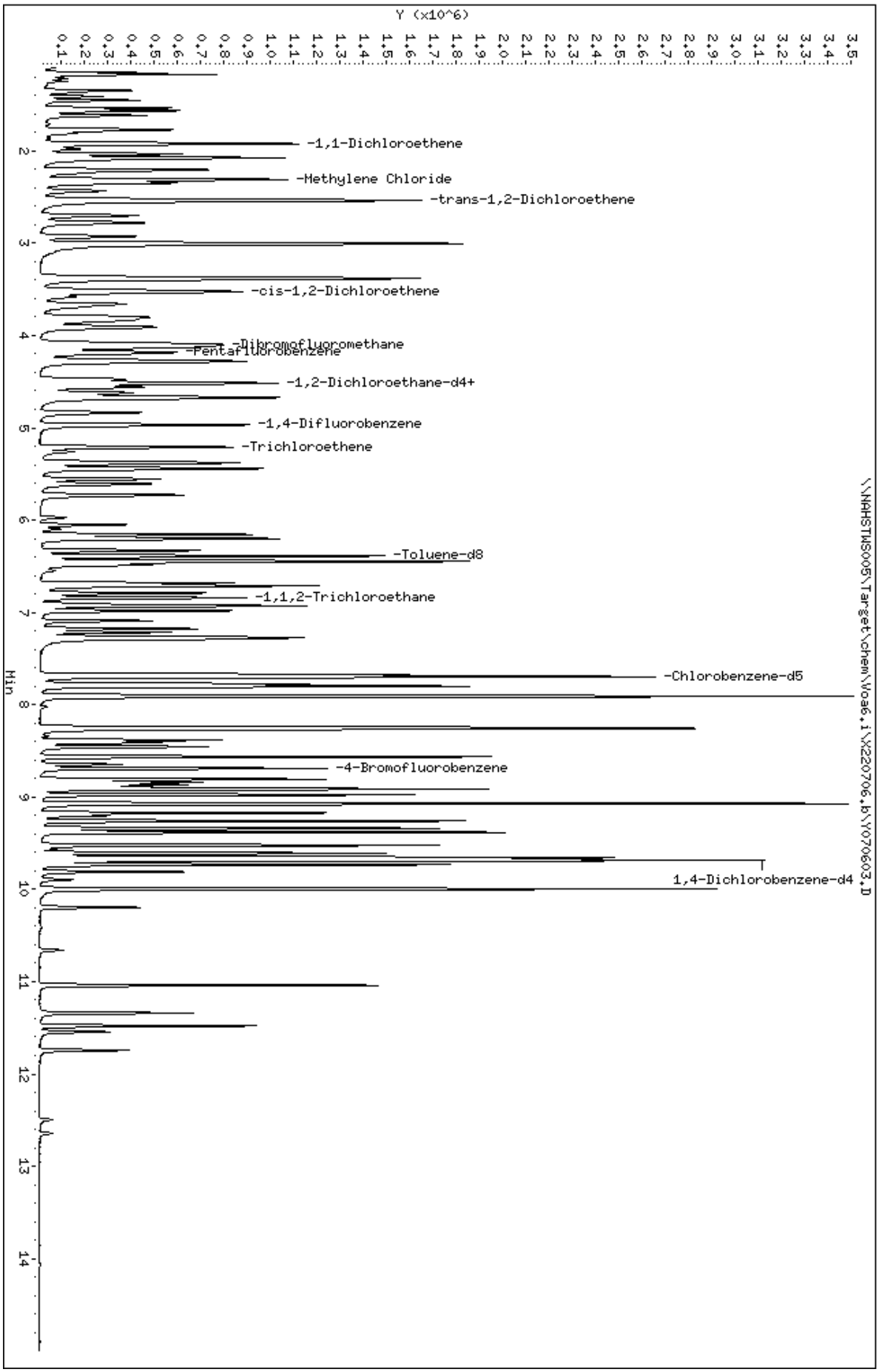
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070603.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 06-JUL-2022 16:55
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	502697	50.0000	
*	36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	768128	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	719712	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	350847	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	272243	50.0000	58.00
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	326188	50.0000	52.16
$	30 Dibromofluoromethane	113	4.103	4.103	(0.980)	249357	50.0000	53.80
$	48 Toluene-d8	98	6.389	6.389	(0.833)	885560	50.0000	49.54
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	199777	50.0000	48.82
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	207433	50.0000	43.13
	33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	358590	50.0000	56.33
	27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	283481	50.0000	48.72
	17 Methylene Chloride	84	2.311	2.311	(0.552)	263785	50.0000	45.20
	38 Trichloroethene	130	5.208	5.208	(1.048)	281173	50.0000	48.88
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	261313	50.0000	40.64



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220706.b\Y070603.D
Date : 06-JUL-2022 16:55
Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070603.D
Inj Date : 06-JUL-2022 16:55
InstruID : voa6.i
LabSampID : CCV

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070604.D Page 1
Report Date: 07-Jul-2022 10:49

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070604.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 06-JUL-2022 17:16
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220706.b\8260W.m
Meth Date : 07-Jul-2022 10:49 pcabasca Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	595769	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	269281	49.0004	49.00
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	291824	52.3535	52.35
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	861996	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	746167	50.0000	
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	995868	53.7465	53.74
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	329483	50.8201	50.82
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	327153	50.0000	
17 Methylene Chloride	84	2.315	2.311	(0.553)	7543	1.70112	1.70(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070605.D Page 1
Report Date: 15-Jul-2022 14:30

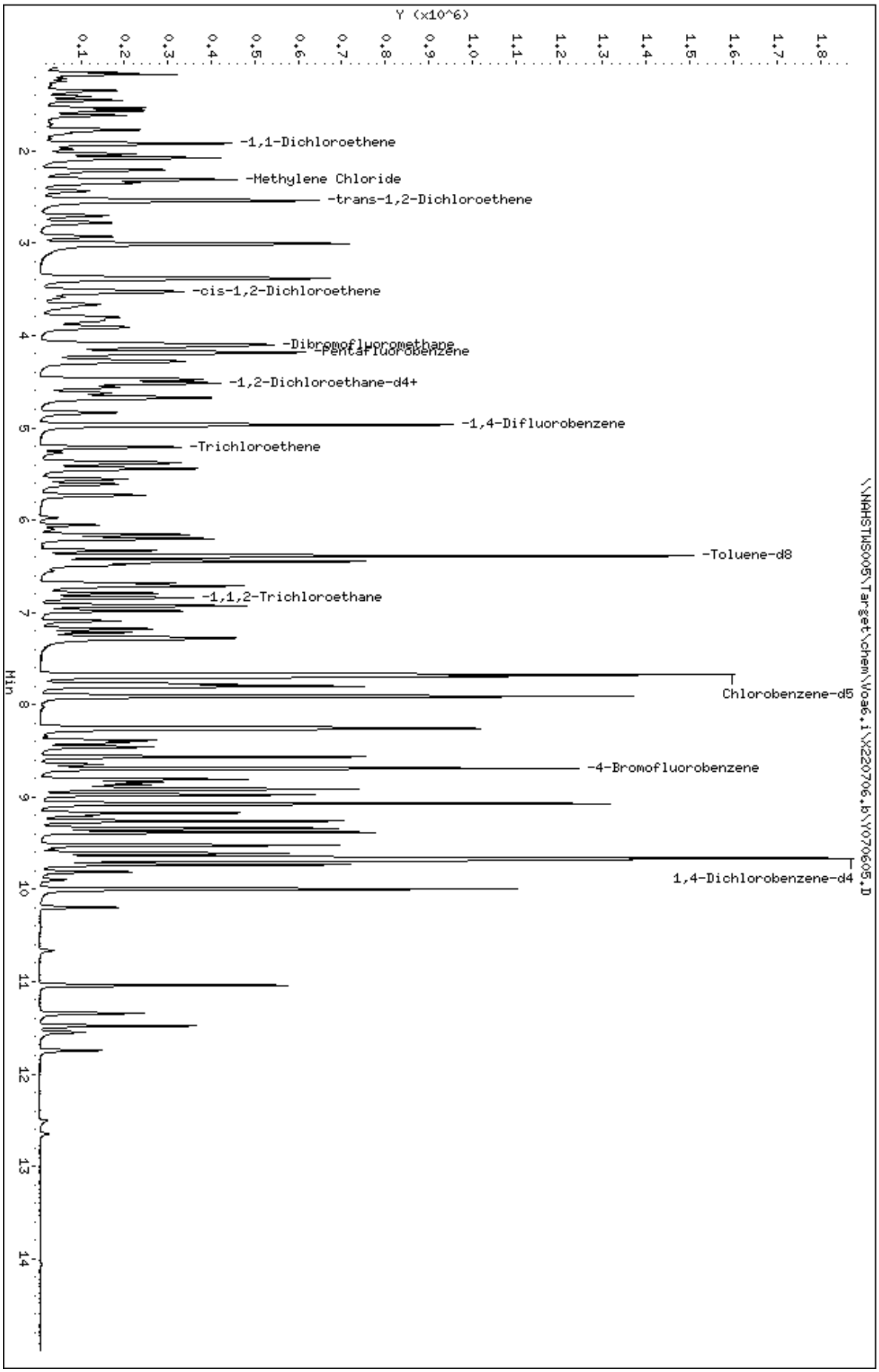
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070605.D
Lab Smp Id: VLCSW-220706 Client Smp ID: VLCSW-220706
Inj Date : 06-JUL-2022 17:37
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-220706;VLCSW-220706;3;;LCS
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 19 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	529254	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	811904	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	759938	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.666	(1.000)	364410	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	280674	56.7779	56.77
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	340705	51.6035	51.60
$ 30 Dibromofluoromethane	113	4.106	4.103	(0.981)	259125	53.1025	53.10
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	931746	49.3746	49.37
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	80049	18.5280	18.52
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	82891	16.3714	16.37
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	141135	20.9768	20.97
27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	113420	18.5154	18.51
17 Methylene Chloride	84	2.311	2.311	(0.552)	109690	18.2331	18.23
38 Trichloroethene	130	5.212	5.208	(1.049)	112807	18.5539	18.55
5 Vinyl Chloride	62	1.149	1.149	(0.275)	105567	15.5948	15.59



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220706.b\Y070605.D
Date : 06-JUL-2022 17:37
Client ID: VLCSW-220706
Sample Info: VLCSW-220706;VLCSW-220706;3;;LCS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070605.D
Inj Date : 06-JUL-2022 17:37
InstruID : voa6.i
LabSampID : VLCSW-220706

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070608.D Page 1
Report Date: 15-Jul-2022 14:30

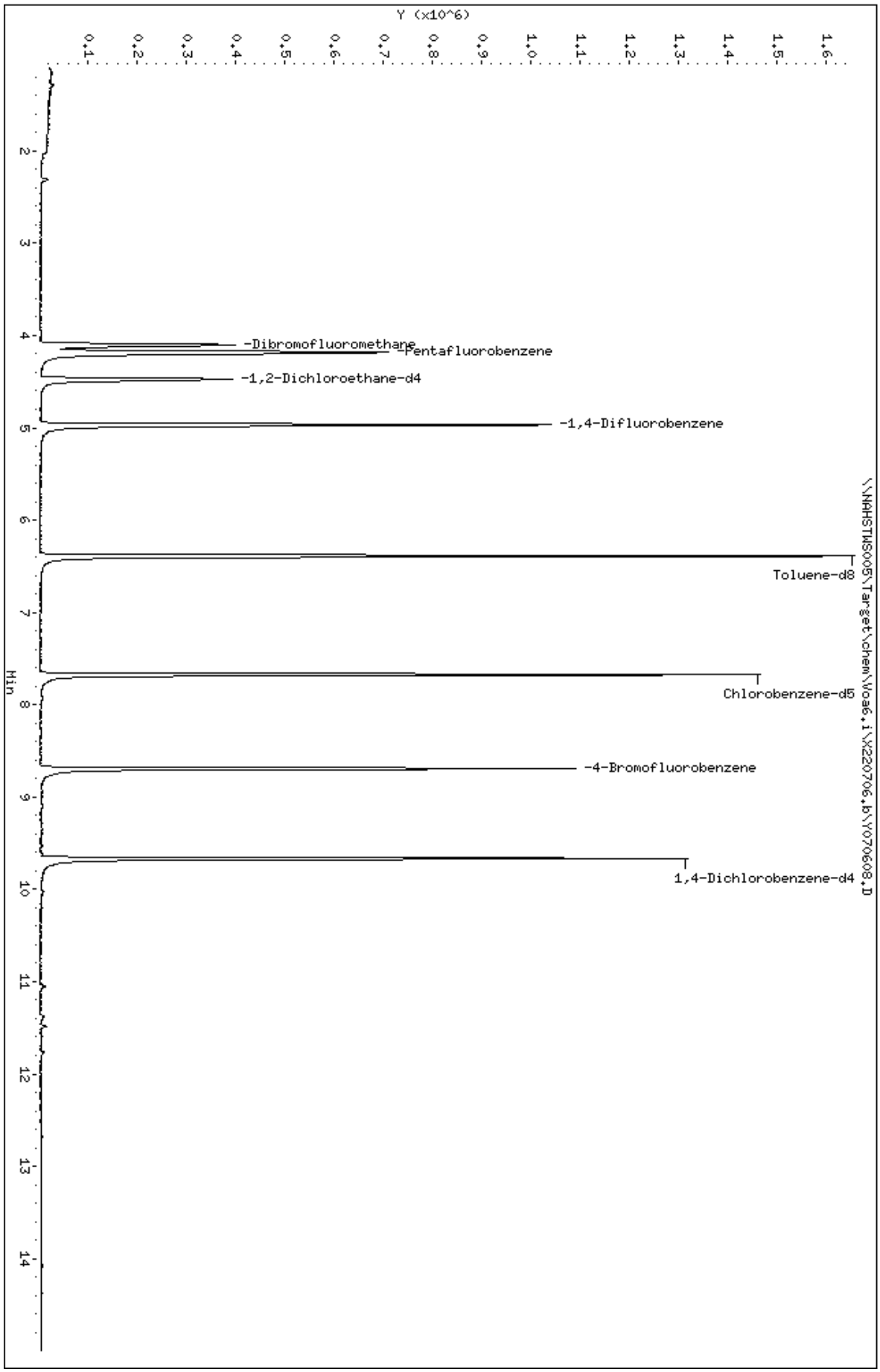
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070608.D
Lab Smp Id: VBLKW-220706 Client Smp ID: VBLKW-220706
Inj Date : 06-JUL-2022 18:40
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-220706;VBLKW-220706;3;;BLANK
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 22 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	638197	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	914598	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	789897	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.666	(1.000)	356188	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	299182	50.0551	50.05
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	350982	51.1411	51.14
$ 30 Dibromofluoromethane	113	4.102	4.103	(0.980)	284763	48.3690	48.36
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1062048	54.1449	54.14


Data File: \\NAHSTWS005\Target\chem\voa6.i\X220706.b\Y070608.D
Date : 06-JUL-2022 18:40
Client ID: VBLKW-220706
Sample Info: VBLKW-220706;VBLKW-220706;3;;BLANK
Purge Volume: 5.0
Column phase: DB624
Instrument: voa6.i
Operator: PC
Column diameter: 0.18
Page 1
Y (x10^6)
Min
-Dibromofluoromethane
-Pentafluorobenzene
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene
Toluene-d8
Chlorobenzene-d5
-4-Bromofluorobenzene
1,4-Dichlorobenzene-d4
\\NAHSTWS005\Target\chem\voa6.i\X220706.b\Y070608.D

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070608.D
Inj Date : 06-JUL-2022 18:40
InstruID : voa6.i
LabSampID : VBLKW-220706

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070610.D Page 1
Report Date: 15-Jul-2022 14:30

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070610.D
Lab Smp Id: HS22061645-08 Client Smp ID: HS22061645-08
Inj Date : 06-JUL-2022 19:23
Operator : PC Inst ID: voa6.i
Smp Info : HS22061645-08;HS22061645-08;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

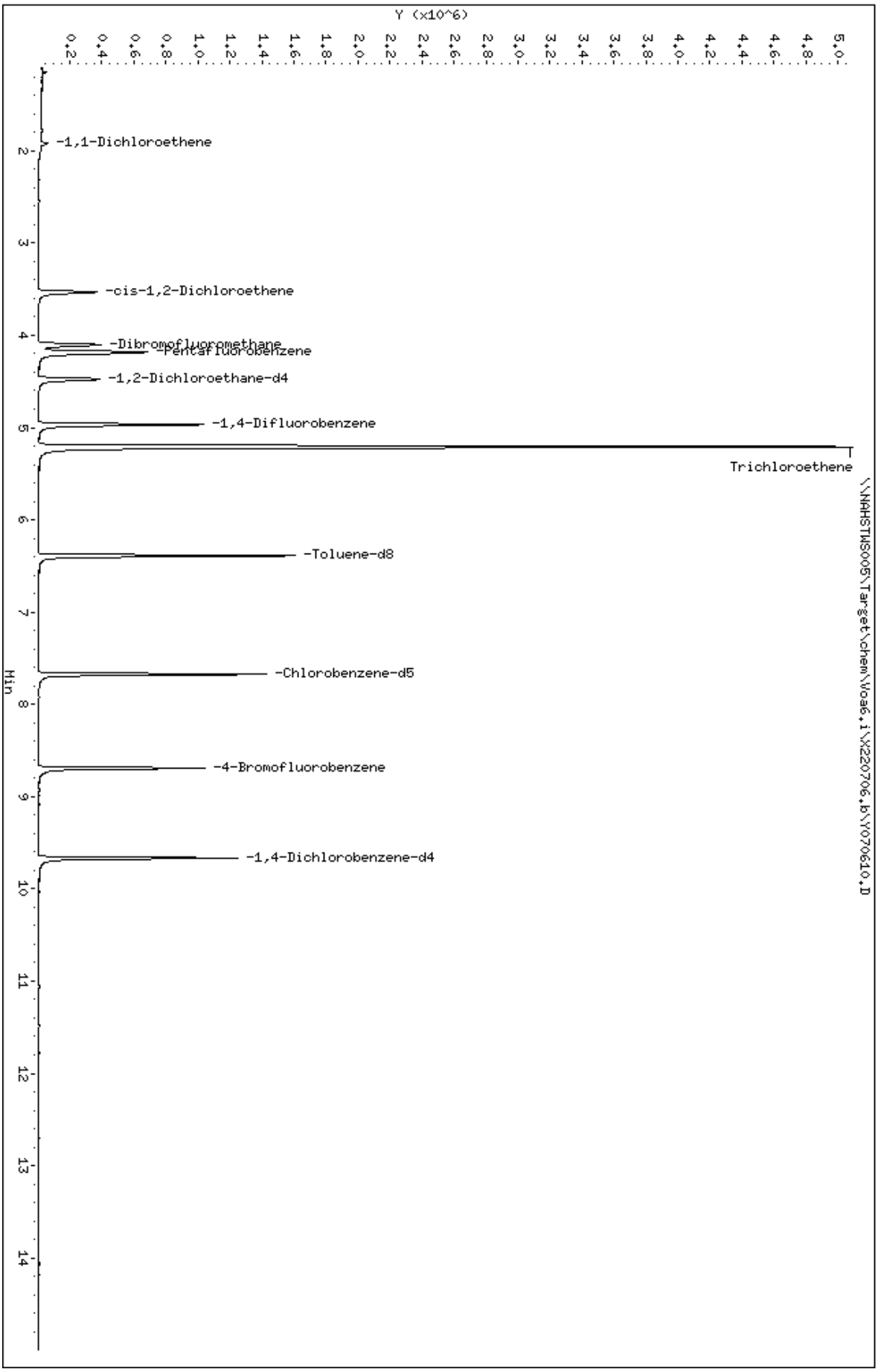
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	613599	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	884129	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	752719	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	332571	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	295320	51.4208	51.42
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	335123	51.2427	51.24
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	278229	49.1584	49.15
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1020187	54.5797	54.57
11 1,1-Dichloroethene	96	1.917	1.921	(0.458)	5434	0.92572	0.92(a)
27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	197156	27.7609	27.76
38 Trichloroethene	130	5.208	5.208	(1.048)	1744508	263.488	263.48(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	17171	2.18790	2.18(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
    exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220706.b\Y070610.D
Date : 06-JUL-2022 19:23
Client ID: HS22061645-08
Sample Info: HS22061645-08;HS22061645-08;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070610.D

Date : 06-JUL-2022 19:23

Client ID: HS22061645-08

Instrument: voa6.i

Sample Info: HS22061645-08;HS22061645-08;;;

Purge Volume: 5.0

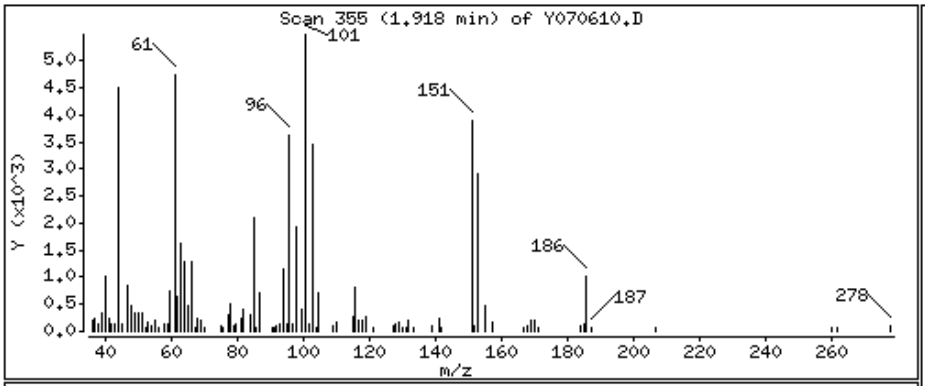
Operator: PC

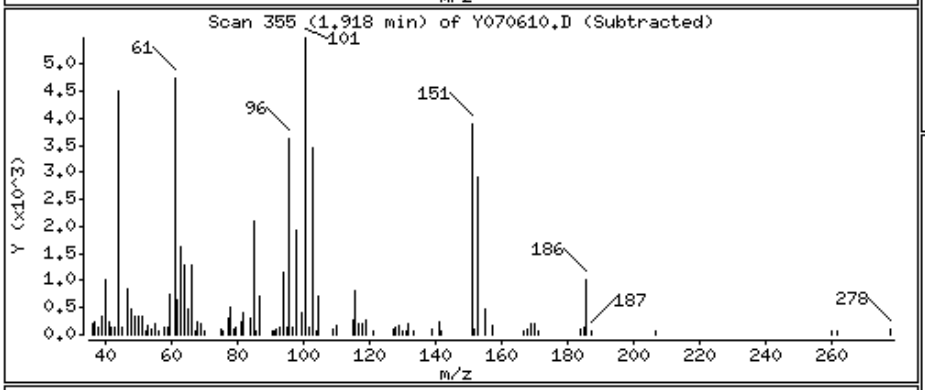
Column phase: DB624

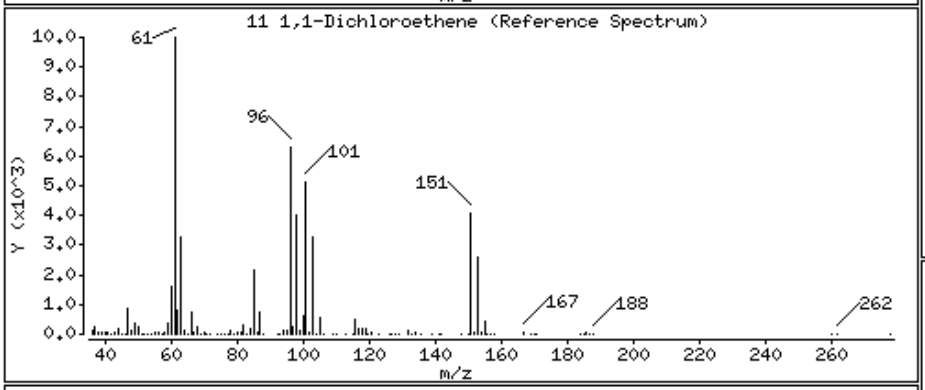
Column diameter: 0.18

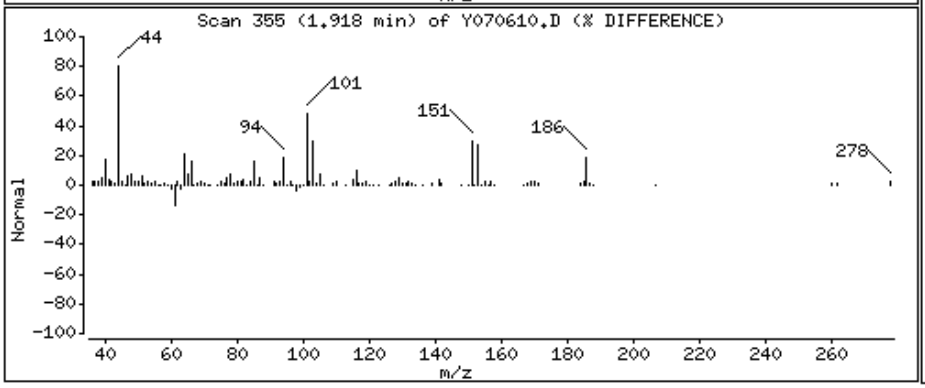
11 1,1-Dichloroethene

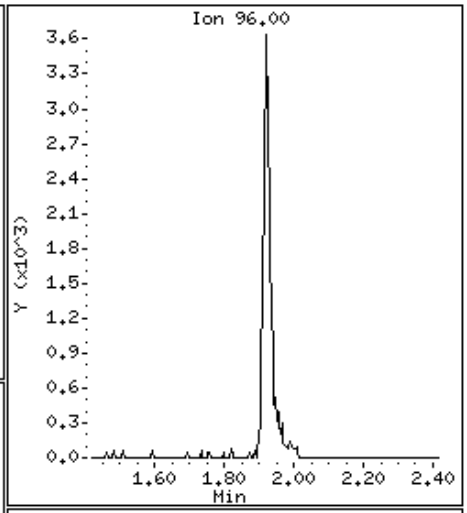
Concentration: 0.92 ug/l

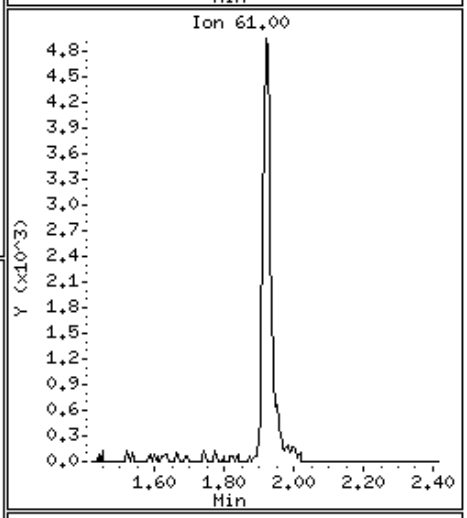


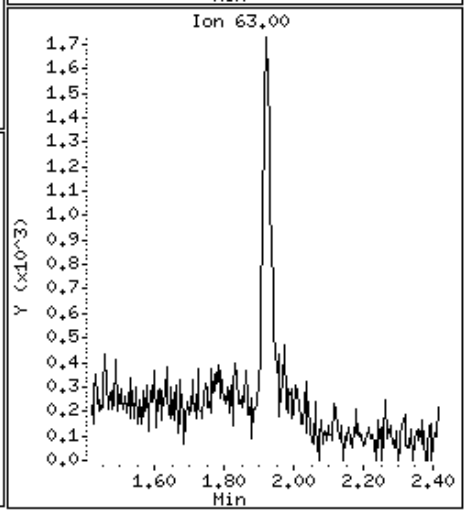












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070610.D Page 3

Date : 06-JUL-2022 19:23

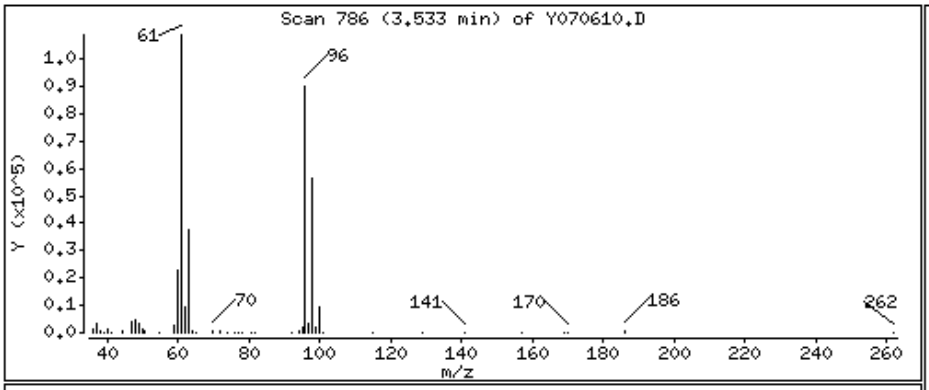
Client ID: HS22061645-08 Instrument: voa6.i

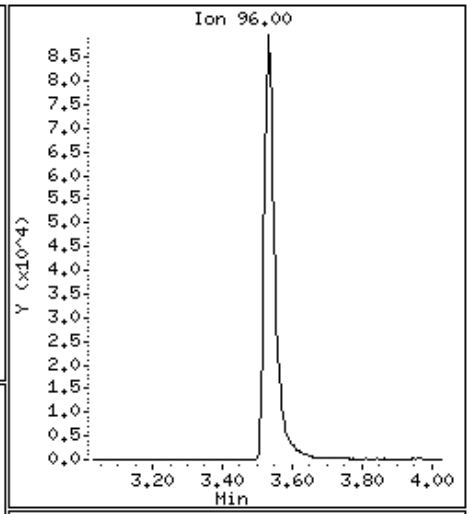
Sample Info: HS22061645-08;HS22061645-08;;;

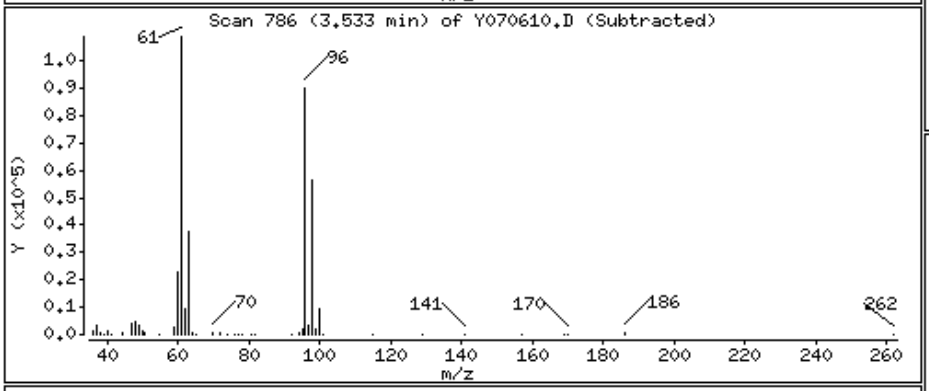
Purge Volume: 5.0 Operator: PC

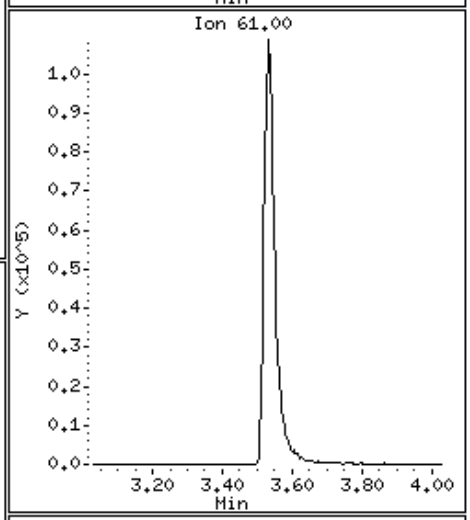
Column phase: DB624 Column diameter: 0.18

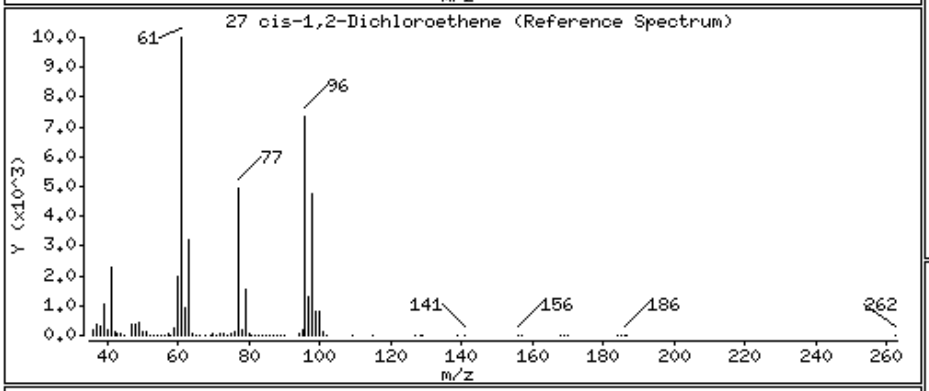
27 cis-1,2-Dichloroethene Concentration: 27.76 ug/l

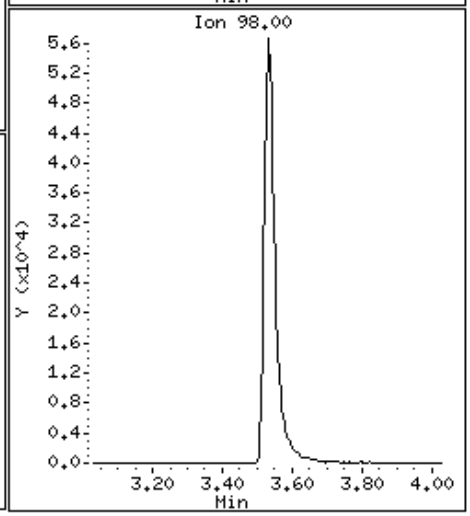


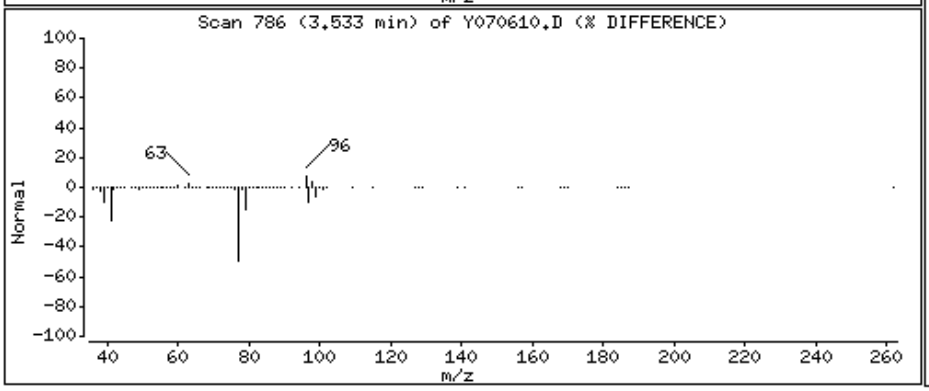












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Date : 06-JUL-2022 19:23

Client ID: HS22061645-08

Instrument: voa6.i

Sample Info: HS22061645-08;HS22061645-08;;;

Purge Volume: 5.0

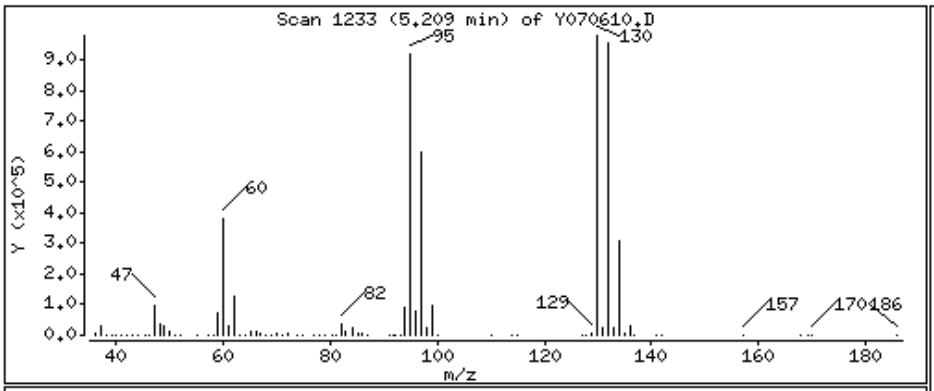
Operator: PC

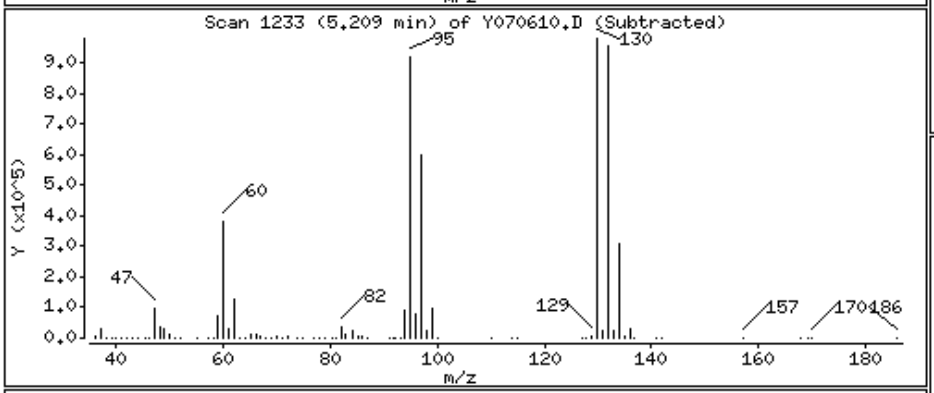
Column phase: DB624

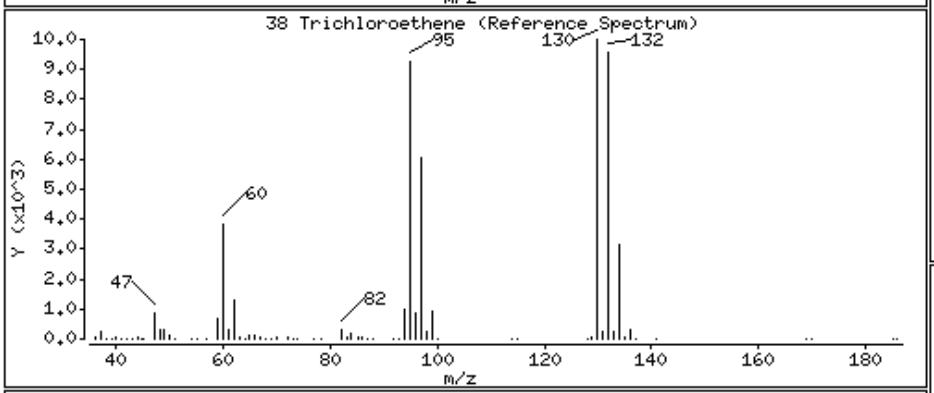
Column diameter: 0.18

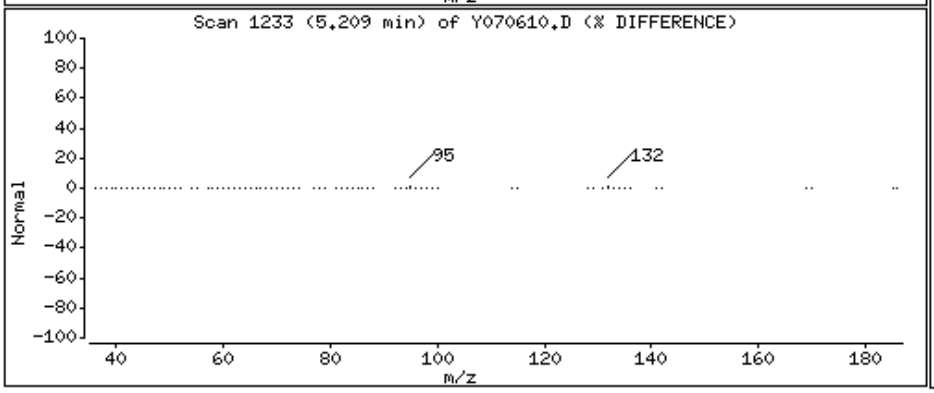
38 Trichloroethene

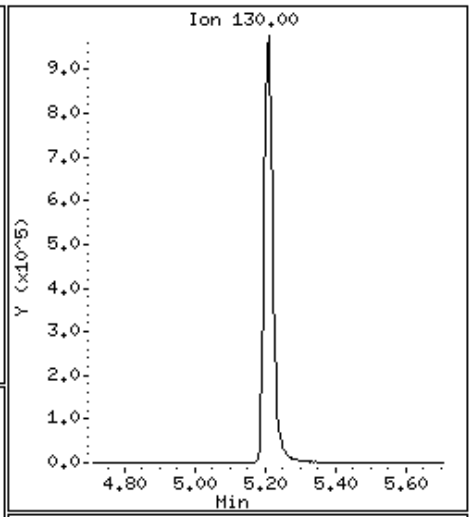
Concentration: 263.48 ug/l

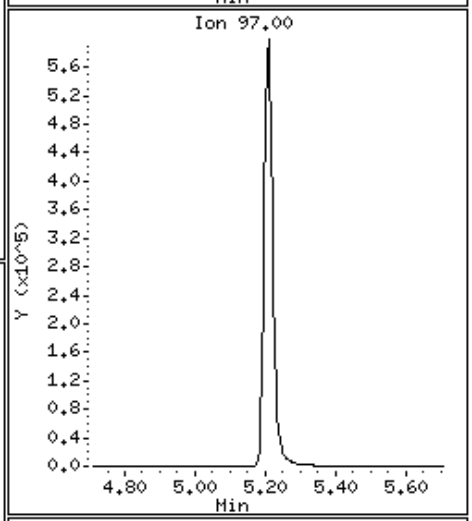


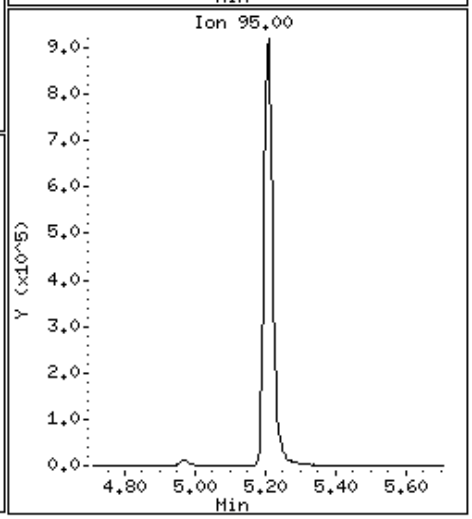












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070610.D Page 5

Date : 06-JUL-2022 19:23

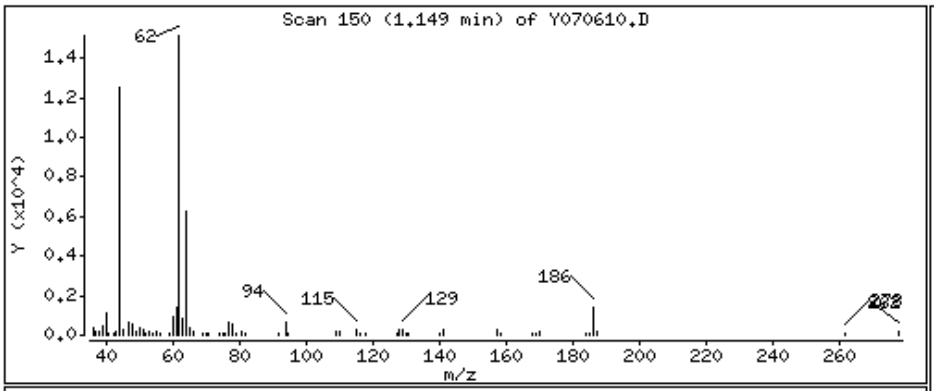
Client ID: HS22061645-08 Instrument: voa6.i

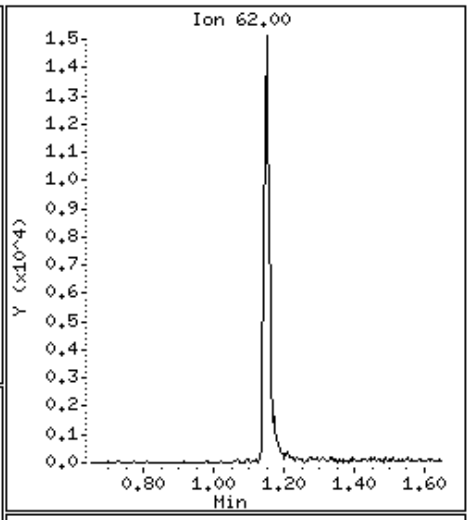
Sample Info: HS22061645-08;HS22061645-08;;;

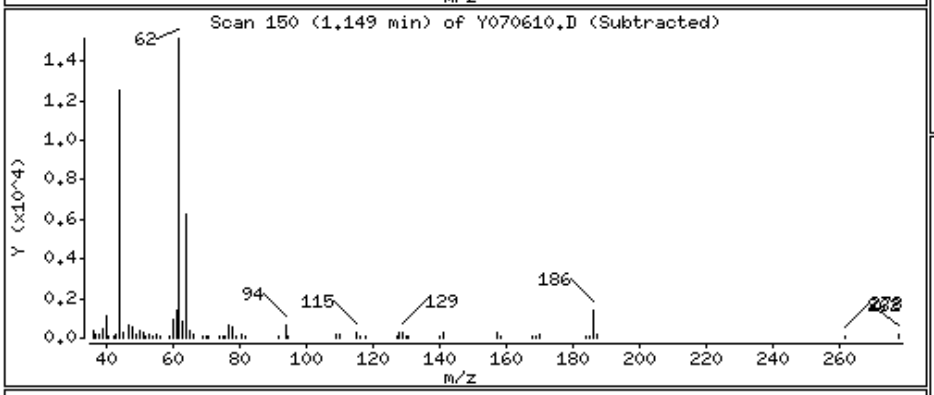
Purge Volume: 5.0 Operator: PC

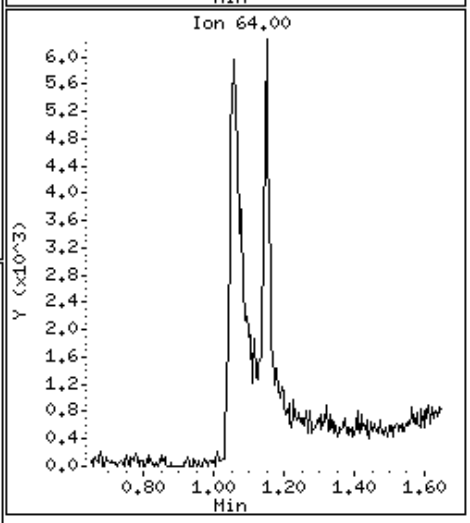
Column phase: DB624 Column diameter: 0.18

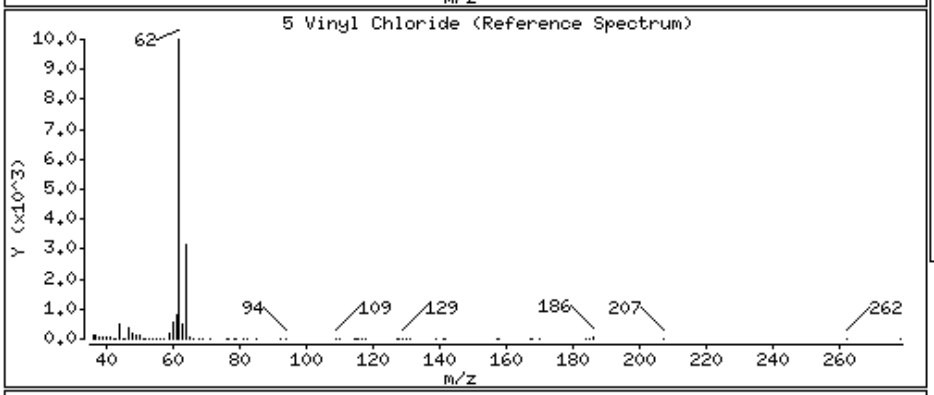
5 Vinyl Chloride Concentration: 2.18 ug/l

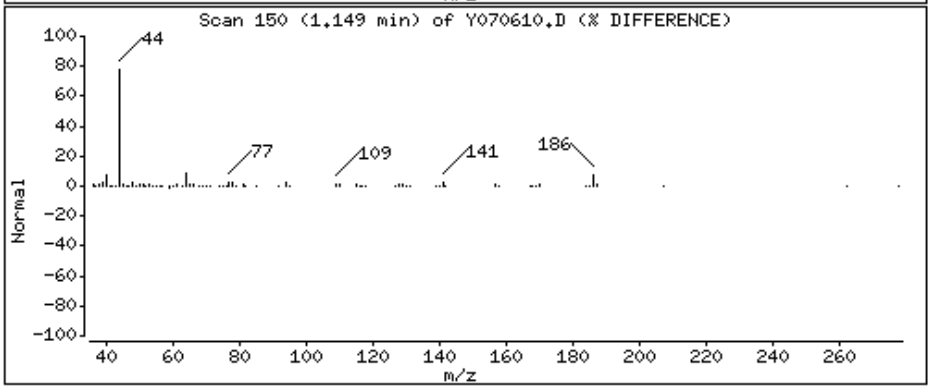












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070610.D
Inj Date : 06-JUL-2022 19:23
InstruID : voa6.i
LabSampID : HS22061645-08

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070611.D Page 1
Report Date: 15-Jul-2022 14:30

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070611.D
Lab Smp Id: HS22061645-09 Client Smp ID: HS22061645-09
Inj Date : 06-JUL-2022 19:44
Operator : PC Inst ID: voa6.i
Smp Info : HS22061645-09;HS22061645-09;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

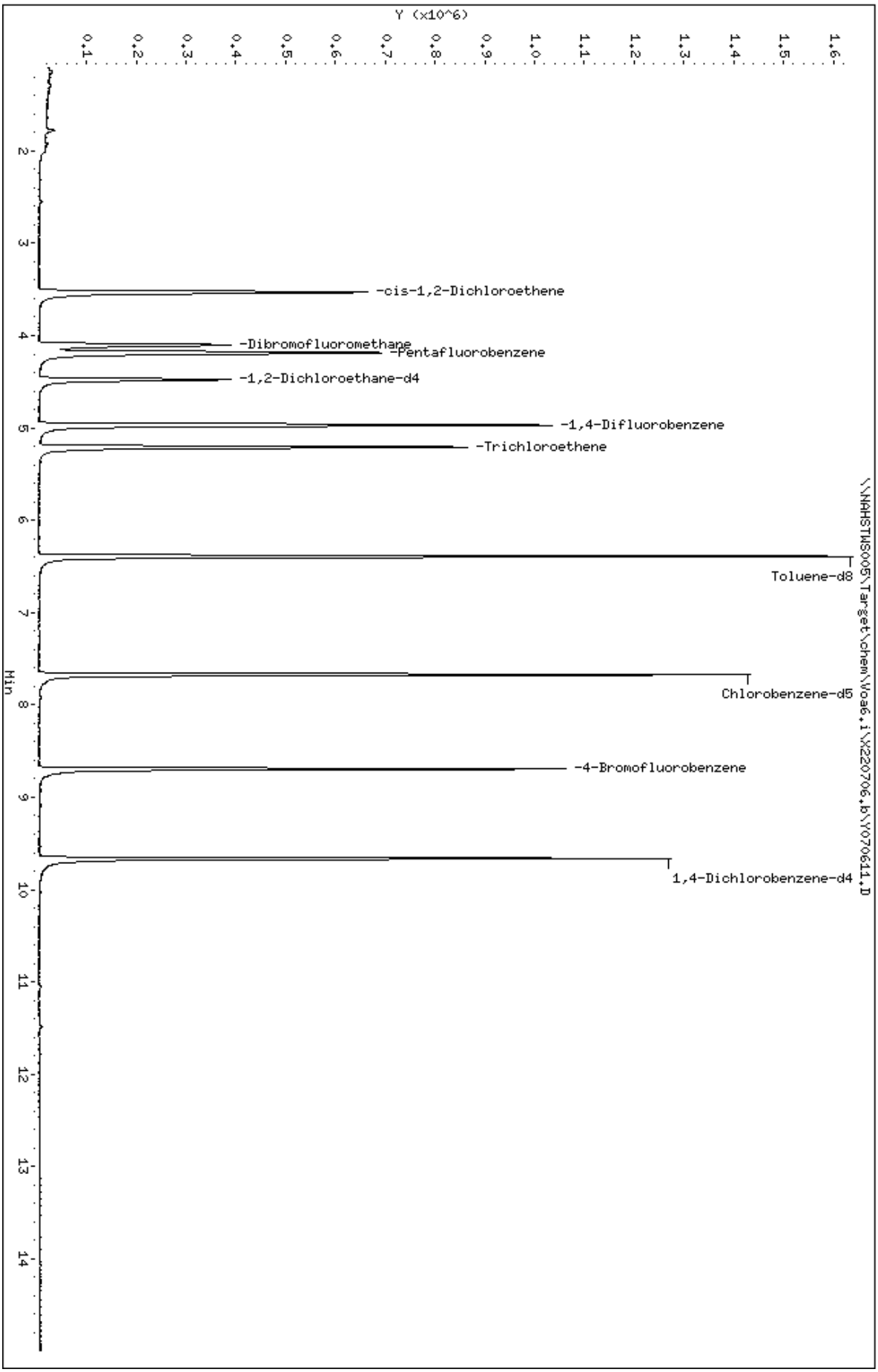
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	620038	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	887244	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	772345	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	341419	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	291530	50.2068	50.20
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	341961	50.9578	50.95
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	275610	48.1843	48.18
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1045405	54.5076	54.50
27 cis-1,2-Dichloroethene	96	3.529	3.533	(0.843)	355949	49.5995	49.59
38 Trichloroethene	130	5.208	5.208	(1.048)	306141	46.0767	46.07

Data File: \\NAHSTWS005\Target\chem\Voa6,i\X220706,b\Y070611.D
Date : 06-JUL-2022 19:44
Client ID: HS22061645-09
Sample Info: HS22061645-09;HS22061645-09;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6,i
Operator: PC
Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070611.D Page 2

Date : 06-JUL-2022 19:44

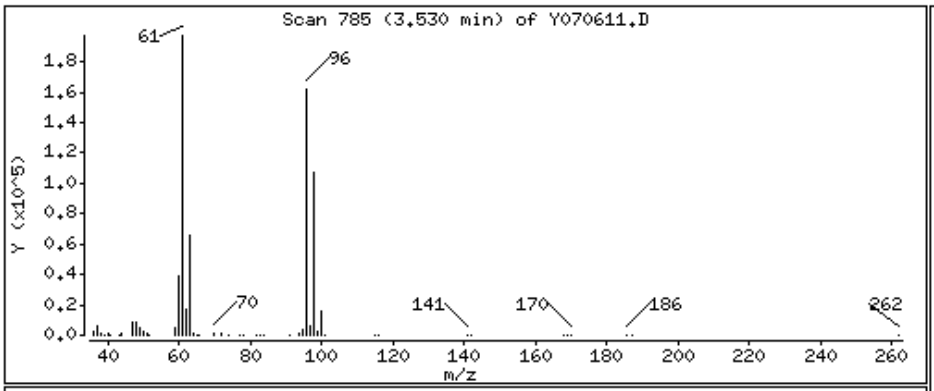
Client ID: HS22061645-09 Instrument: voa6.i

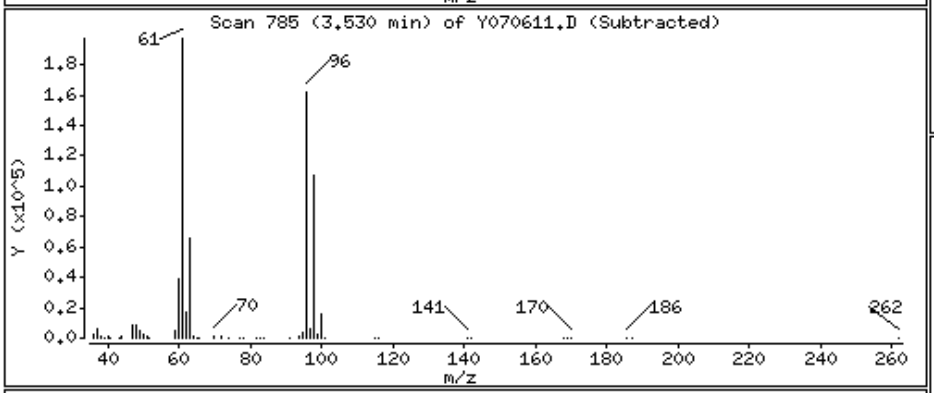
Sample Info: HS22061645-09;HS22061645-09;;;

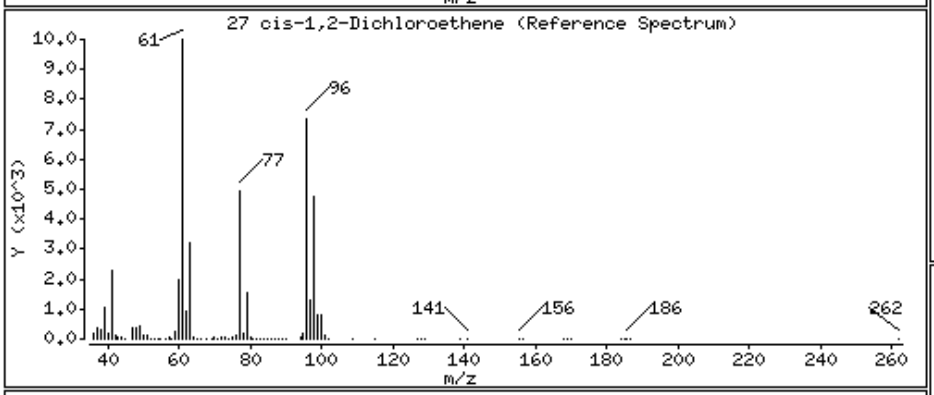
Purge Volume: 5.0 Operator: PC

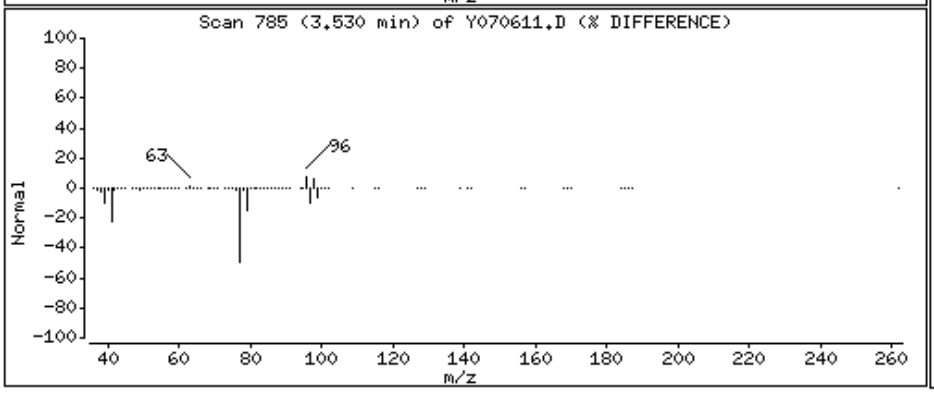
Column phase: DB624 Column diameter: 0.18

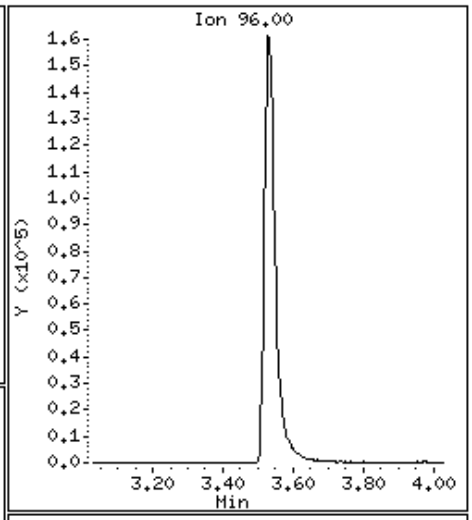
27 cis-1,2-Dichloroethene Concentration: 49.59 ug/l

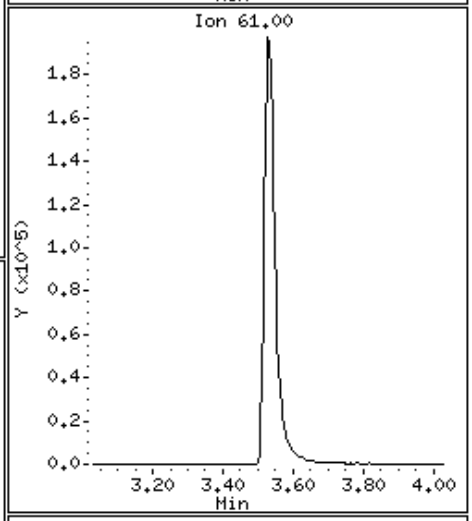


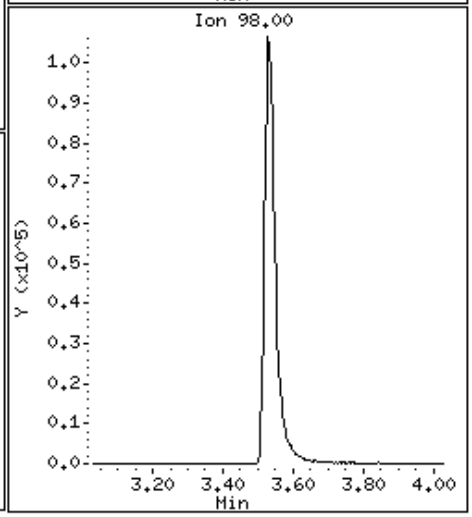












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070611.D Page 3

Date : 06-JUL-2022 19:44

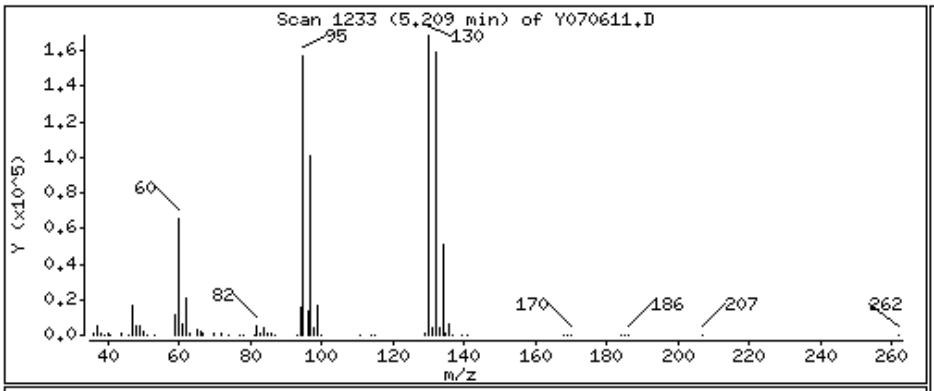
Client ID: HS22061645-09 Instrument: voa6.i

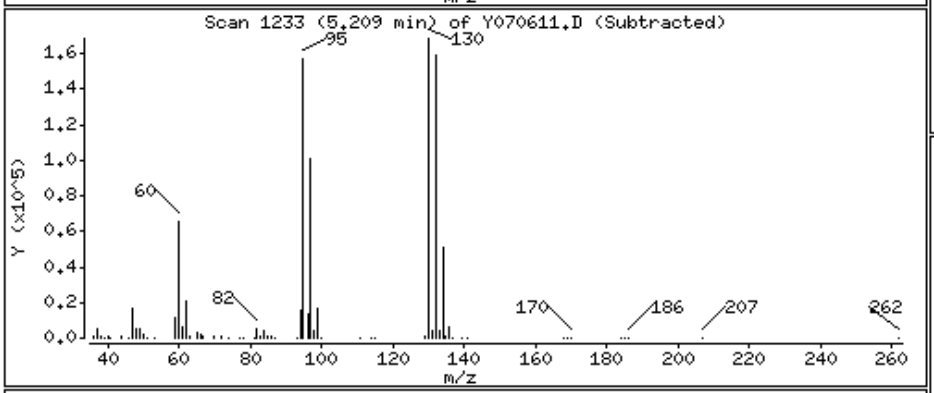
Sample Info: HS22061645-09;HS22061645-09;;;

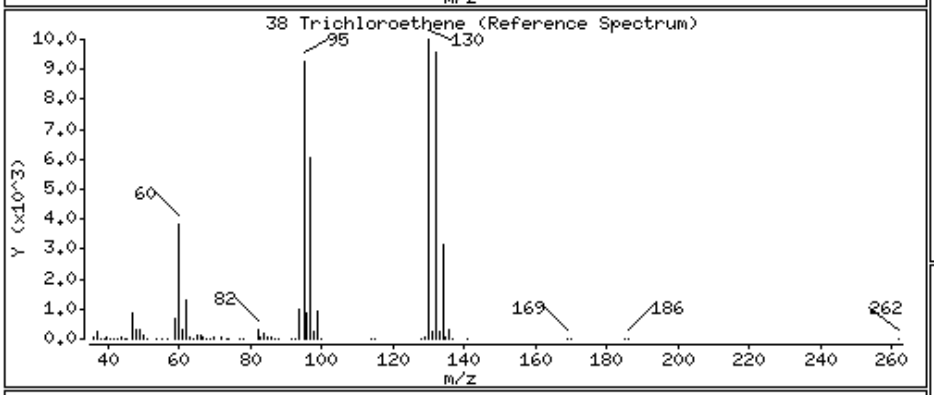
Purge Volume: 5.0 Operator: PC

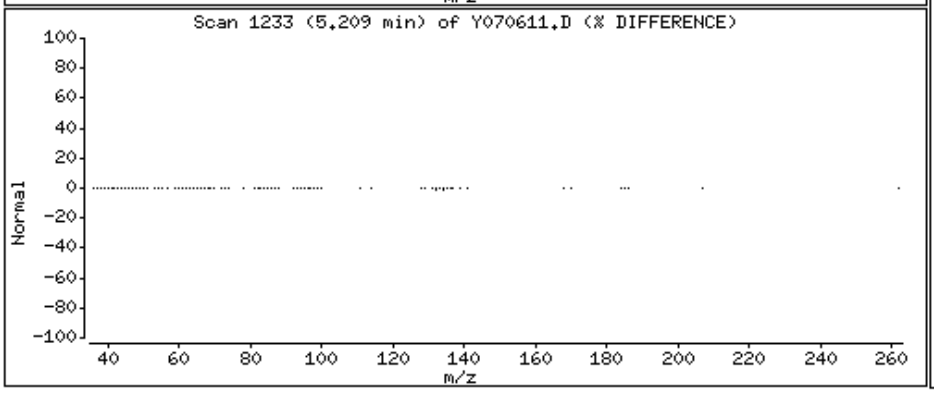
Column phase: DB624 Column diameter: 0.18

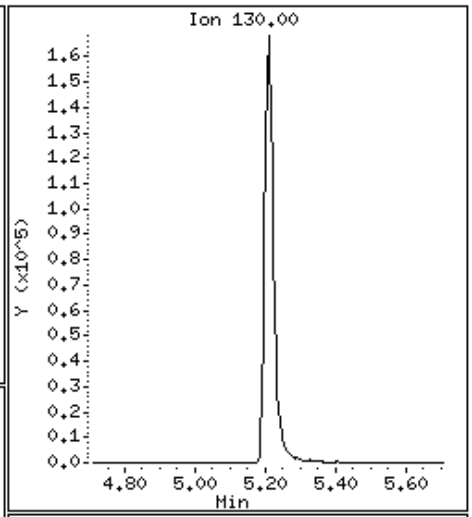
38 Trichloroethene Concentration: 46.07 ug/l

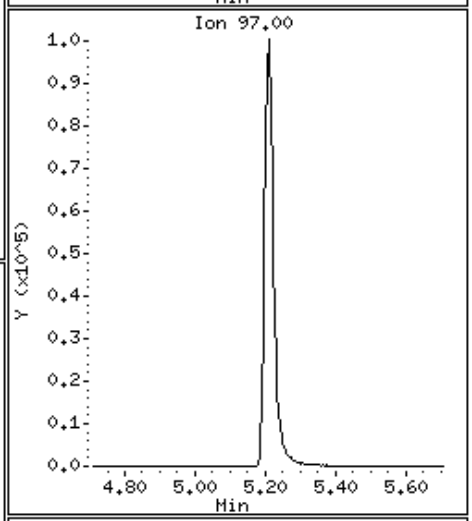


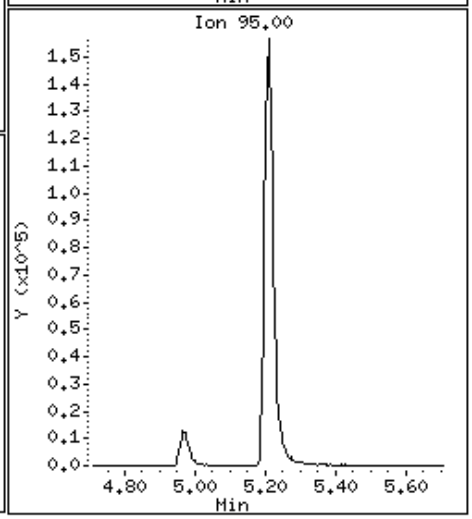












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Inj Date : 06-JUL-2022 19:44
InstruID : voa6.i
LabSampID : HS22061645-09

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070613.D Page 1
Report Date: 15-Jul-2022 14:30

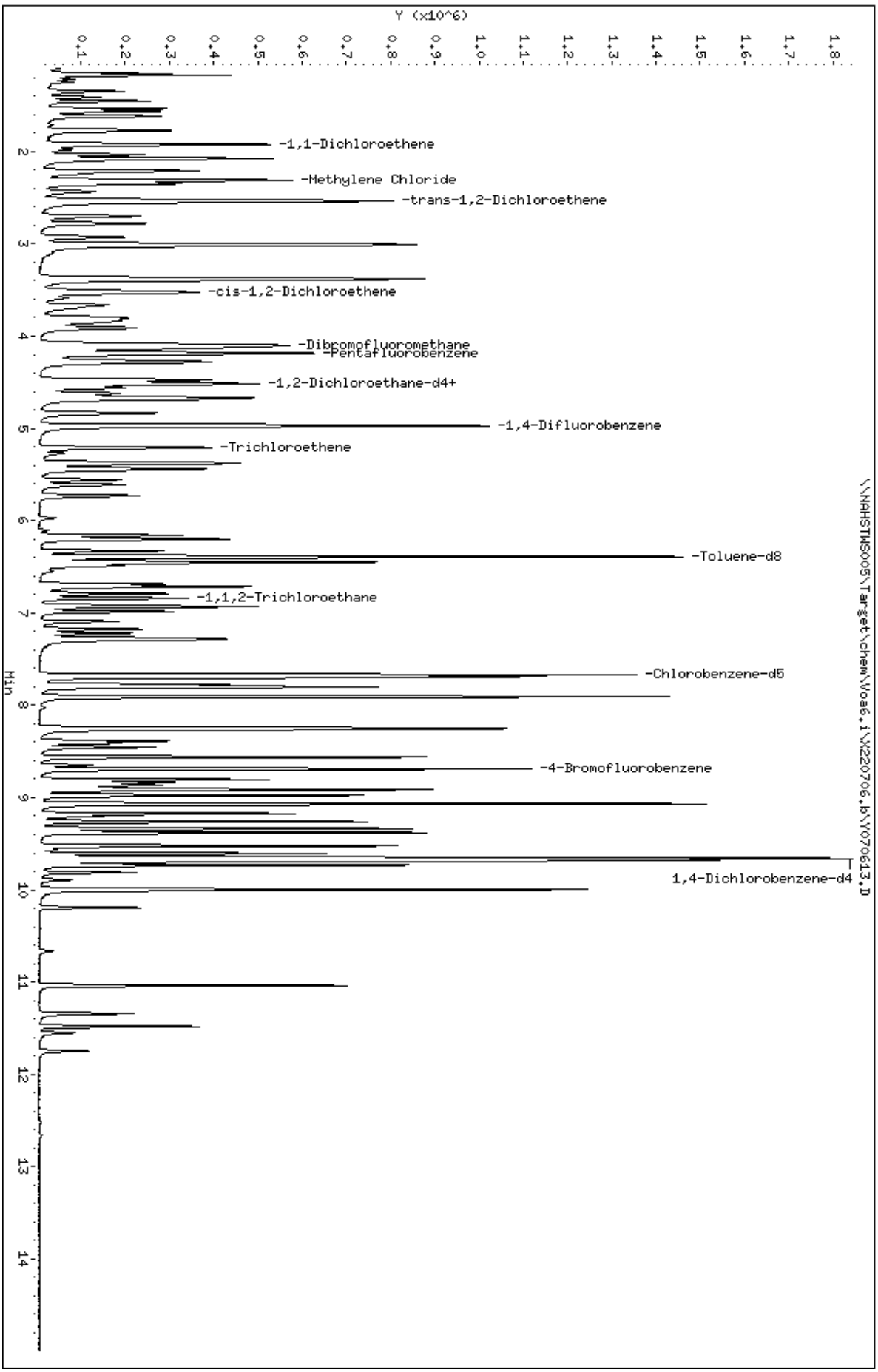
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070613.D
Lab Smp Id: HS22070020-08MS Client Smp ID: HS22070020-08MS
Inj Date : 06-JUL-2022 20:26
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-08MS;HS22070020-08MS;3;;MS
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 27 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	557092	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	858636	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	665533	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	355703	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	280934	53.9333	53.93
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	320423	55.4390	55.43
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	254063	49.4435	49.44
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	911649	55.1623	55.16
53 1,1,2-Trichloroethane	83	6.843	6.839	(0.892)	76863	20.3142	20.31
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	100142	18.7902	18.79
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	145430	20.4388	20.43
27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	127108	19.7131	19.71
17 Methylene Chloride	84	2.311	2.311	(0.552)	119512	18.8511	18.85
38 Trichloroethene	130	5.209	5.208	(1.048)	136331	21.2026	21.20
5 Vinyl Chloride	62	1.149	1.149	(0.275)	136252	19.1219	19.12



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Date : 06-JUL-2022 20:26
Client ID: HS220700Z0-08MS
Sample Info: HS220700Z0-08MS;HS220700Z0-08MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6,i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070613.D
Inj Date : 06-JUL-2022 20:26
InstruID : voa6.i
LabSampID : HS22070020-08MS

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070614.D Page 1
Report Date: 15-Jul-2022 14:31

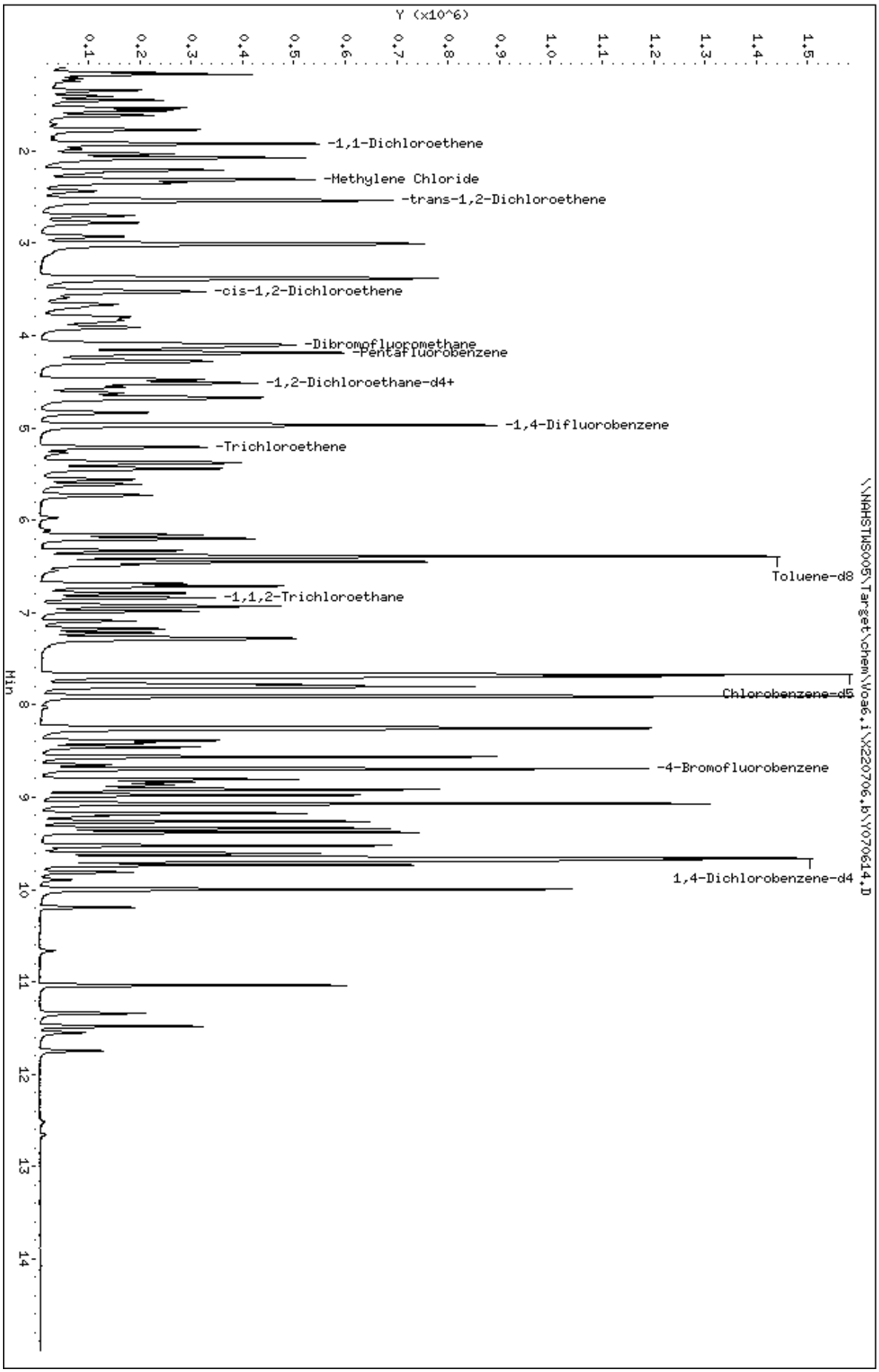
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070614.D
Lab Smp Id: HS22070020-08MSD Client Smp ID: HS22070020-08MSD
Inj Date : 06-JUL-2022 20:47
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-08MSD;HS22070020-08MSD;3;;MSD
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 27 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	533586	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	759776	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	760309	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	306381	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	231411	46.2196	46.21
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	340542	51.5534	51.55
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	229707	46.6566	46.65
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	895921	47.4530	47.45
53 1,1,2-Trichloroethane	83	6.843	6.839	(0.892)	78505	18.1618	18.16
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	104450	20.4619	20.46
33 1,2-Dichloroethane	62	4.564	4.560	(0.919)	122530	19.4611	19.46
27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	112951	18.2892	18.28
17 Methylene Chloride	84	2.307	2.311	(0.551)	114129	18.7969	18.79
38 Trichloroethene	130	5.212	5.208	(1.049)	116940	20.5532	20.55
5 Vinyl Chloride	62	1.149	1.149	(0.275)	132818	19.4611	19.46



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220706.b\Y070614.D
Date : 06-JUL-2022 20:47
Client ID: HS220700Z0-08MSD
Sample Info: HS220700Z0-08MSD;HS220700Z0-08MSD;3;;MSD
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070614.D
Inj Date : 06-JUL-2022 20:47
InstruID : voa6.i
LabSampID : HS22070020-08MSD

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070620.D Page 1
Report Date: 15-Jul-2022 14:31

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Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070620.D
Lab Smp Id: HS22061645-04 Client Smp ID: HS22061645-04
Inj Date : 06-JUL-2022 22:53
Operator : PC Inst ID: voa6.i
Smp Info : HS22061645-04;HS22061645-04;;;
Misc Info : HS22052000V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 33
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

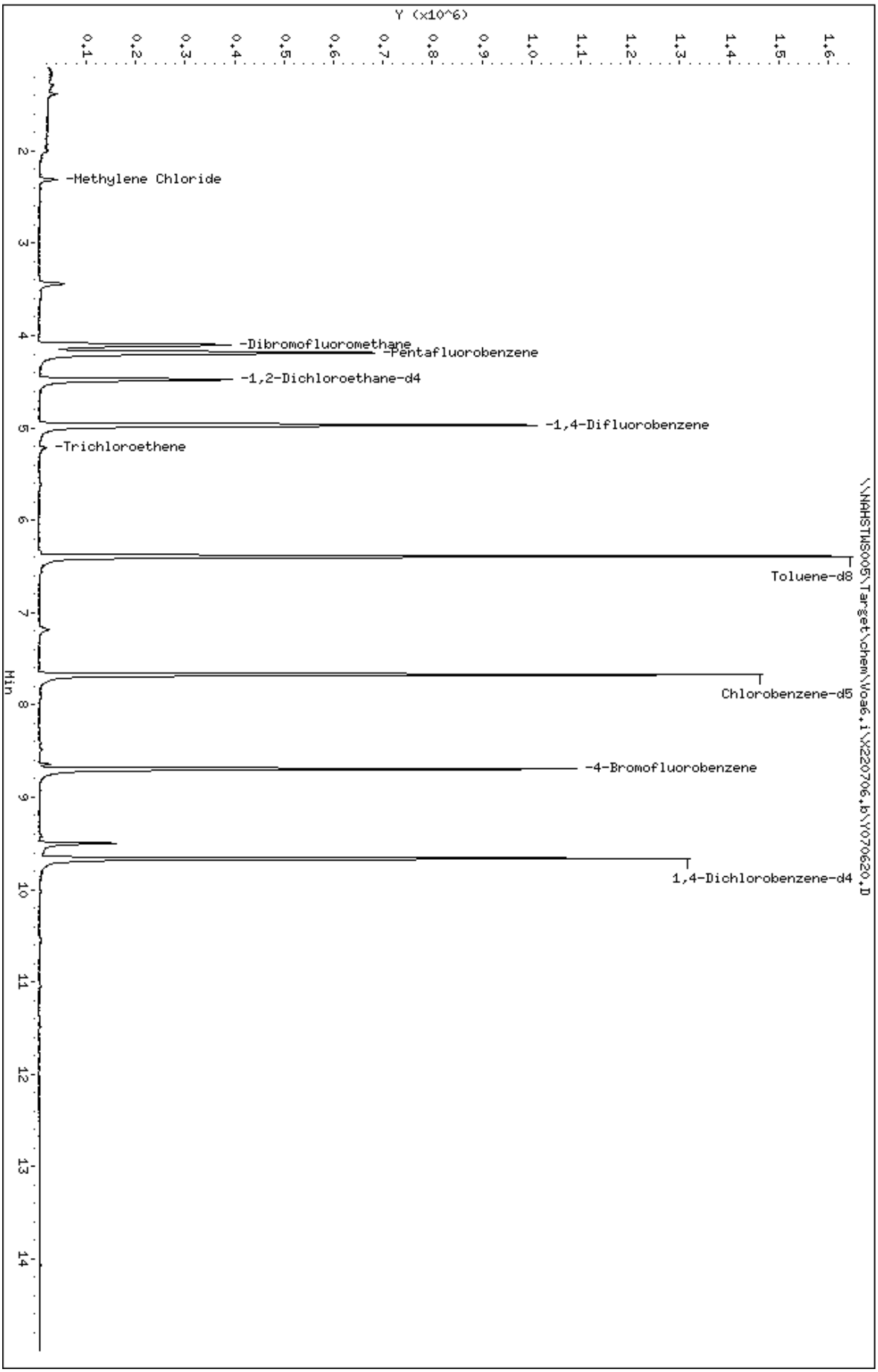
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	5.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	599977	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	875633	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	772881	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	344012	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.478	4.474	(1.070)	298502	53.1942	53.19
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	344036	51.2332	51.23
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	276353	49.9401	49.94
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1032033	53.7731	53.77
17 Methylene Chloride	84	2.307	2.311	(0.551)	16705	2.99091	14.95(a)
38 Trichloroethene	130	5.212	5.208	(1.049)	4760	0.72592	3.62(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220706.b\Y070620.D
Date : 06-JUL-2022 22:53
Client ID: HS22061645-04
Sample Info: HS22061645-04;HS22061645-04;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070620.D Page 2

Date : 06-JUL-2022 22:53

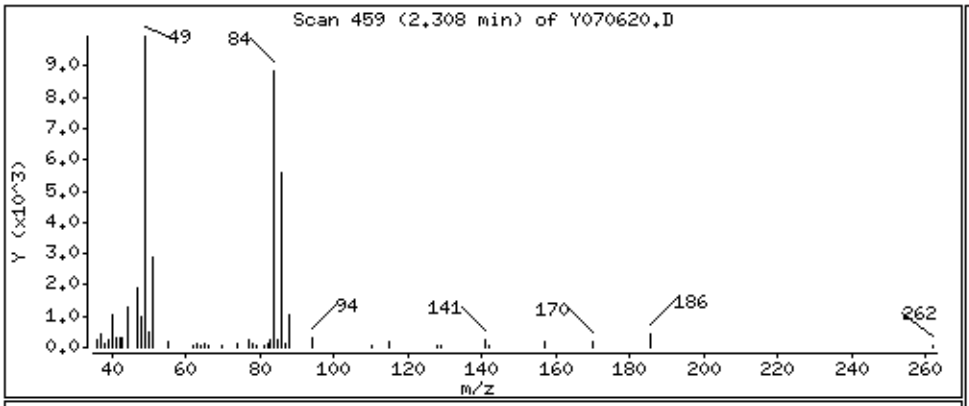
Client ID: HS22061645-04 Instrument: voa6.i

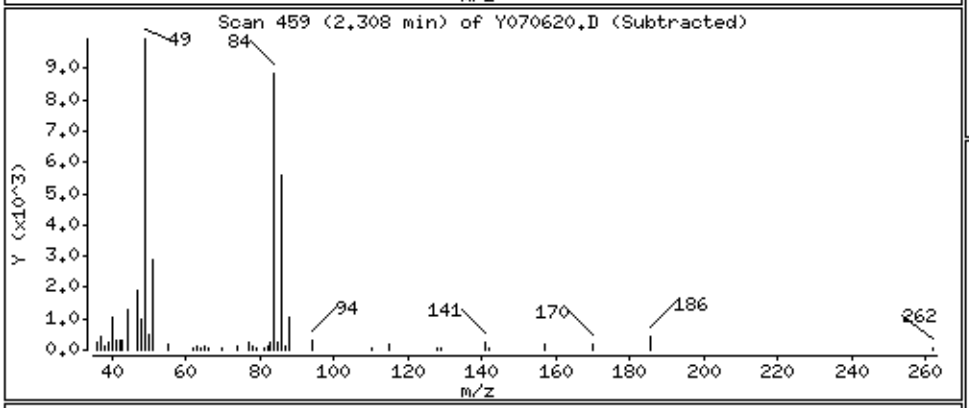
Sample Info: HS22061645-04;HS22061645-04;;;

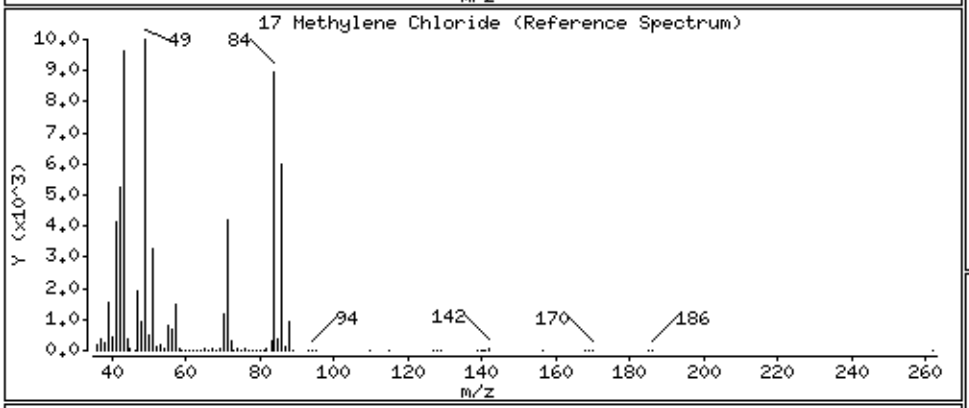
Purge Volume: 5.0 Operator: PC

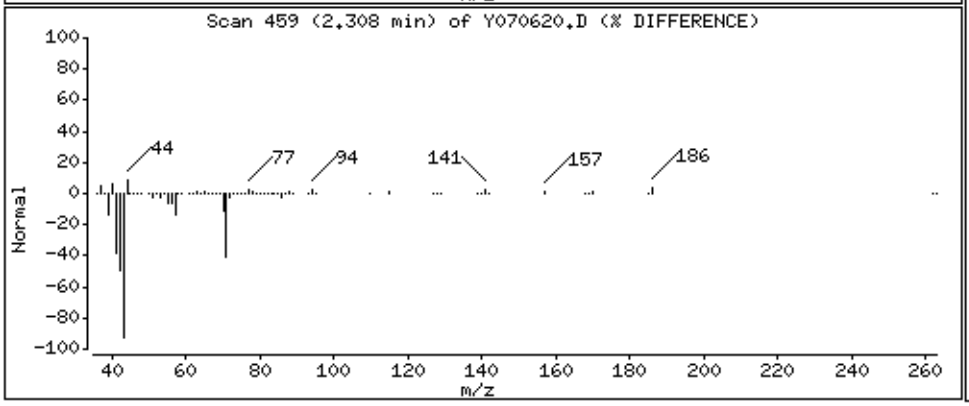
Column phase: DB624 Column diameter: 0.18

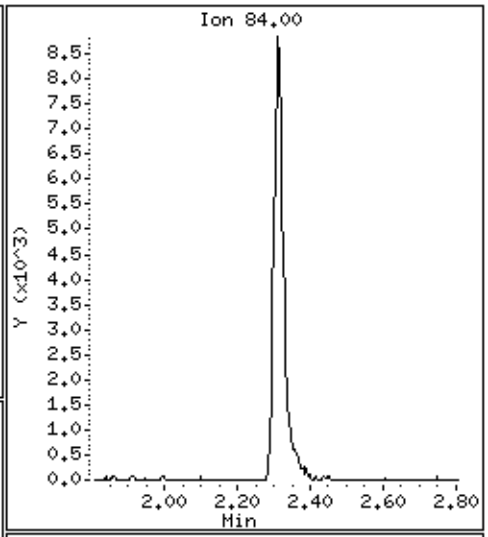
17 Methylene Chloride Concentration: 14.95 ug/l

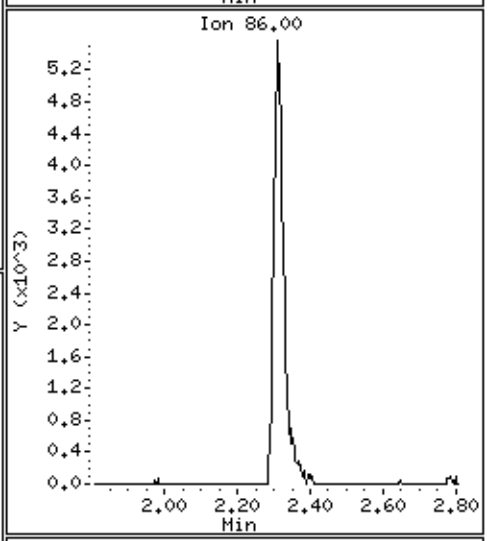


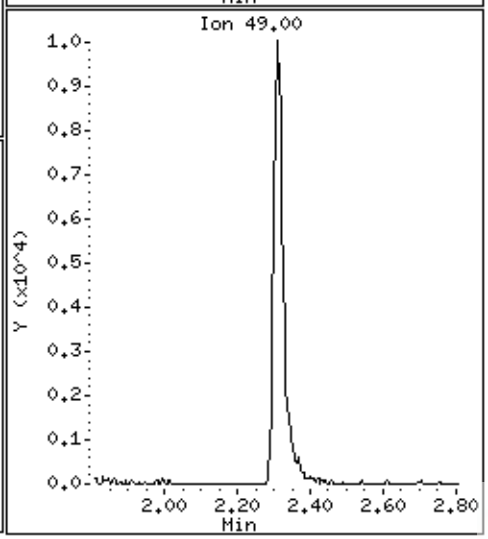












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070620.D

Date : 06-JUL-2022 22:53

Client ID: HS22061645-04

Instrument: voa6.i

Sample Info: HS22061645-04;HS22061645-04;;;

Purge Volume: 5.0

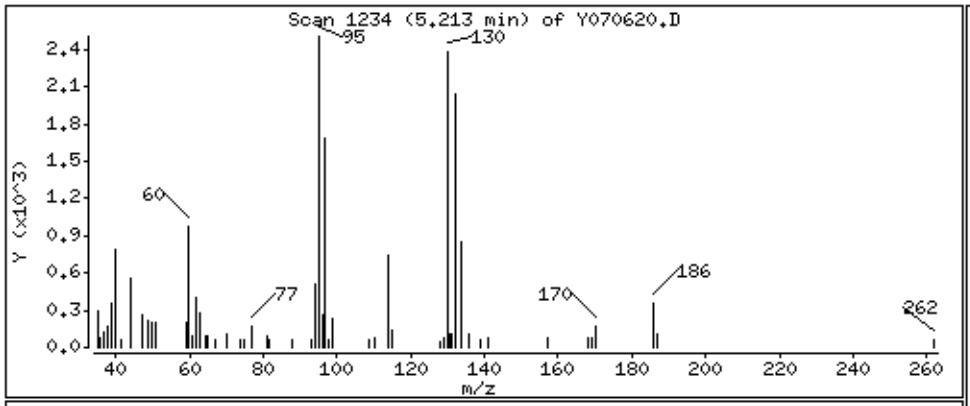
Operator: PC

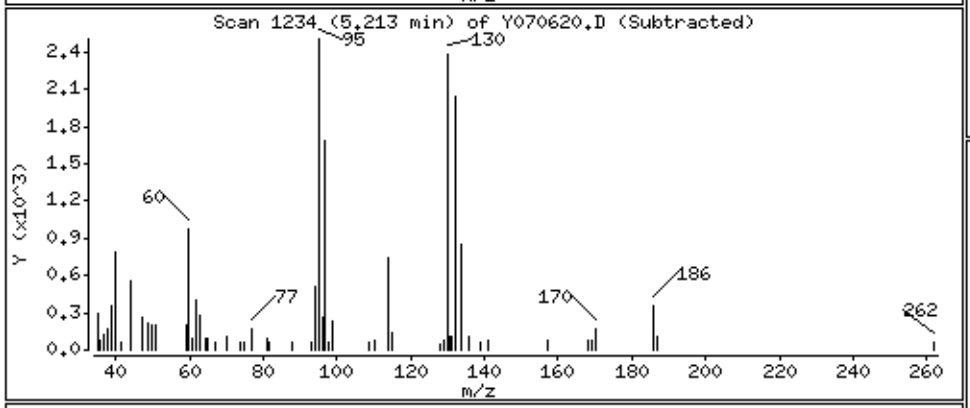
Column phase: DB624

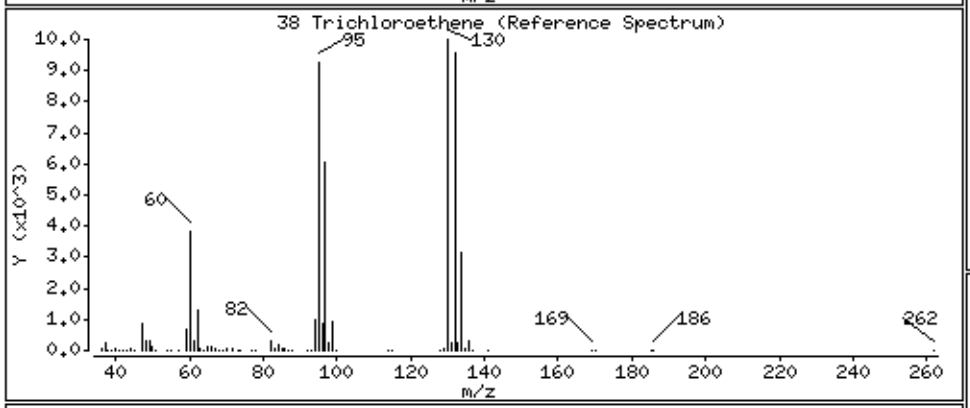
Column diameter: 0.18

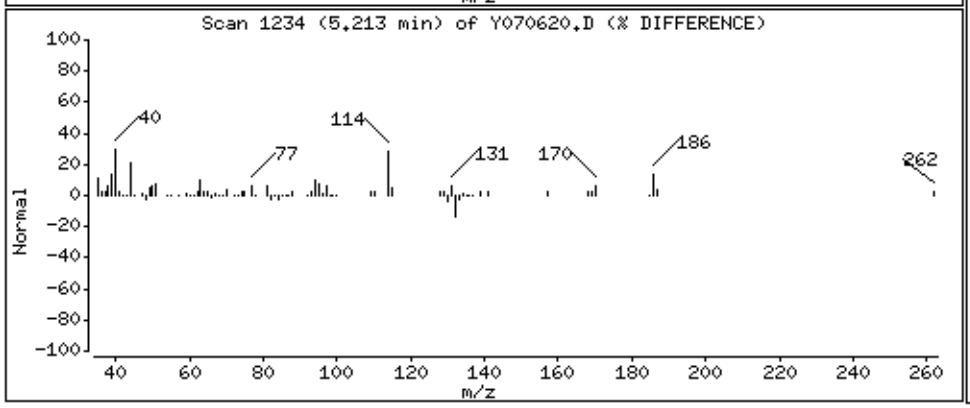
38 Trichloroethene

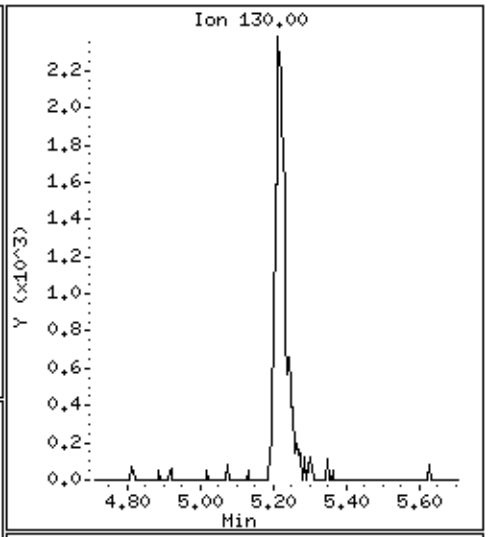
Concentration: 3.62 ug/l

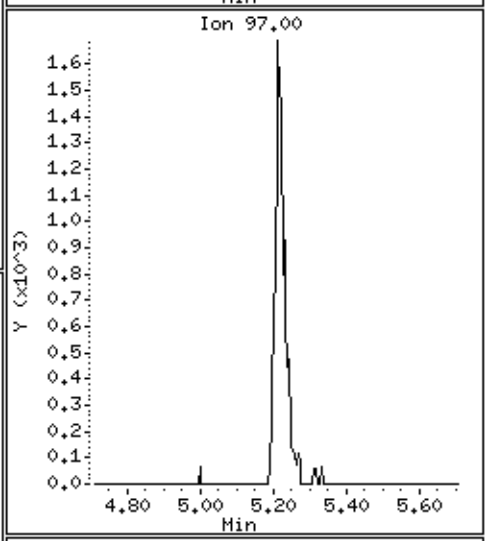


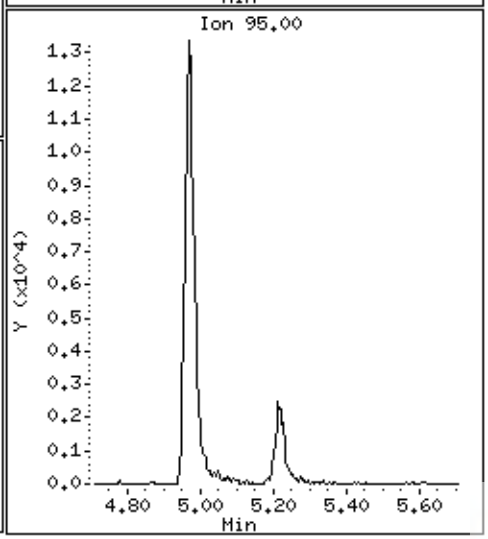












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Inj Date : 06-JUL-2022 22:53
InstruID : voa6.i
LabSampID : HS22061645-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070621.D Page 1
Report Date: 15-Jul-2022 14:31

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070621.D
Lab Smp Id: HS22061645-01 Client Smp ID: HS22061645-01
Inj Date : 06-JUL-2022 23:14
Operator : PC Inst ID: voa6.i
Smp Info : HS22061645-01;HS22061645-01;;;
Misc Info : HS22052000V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 34
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

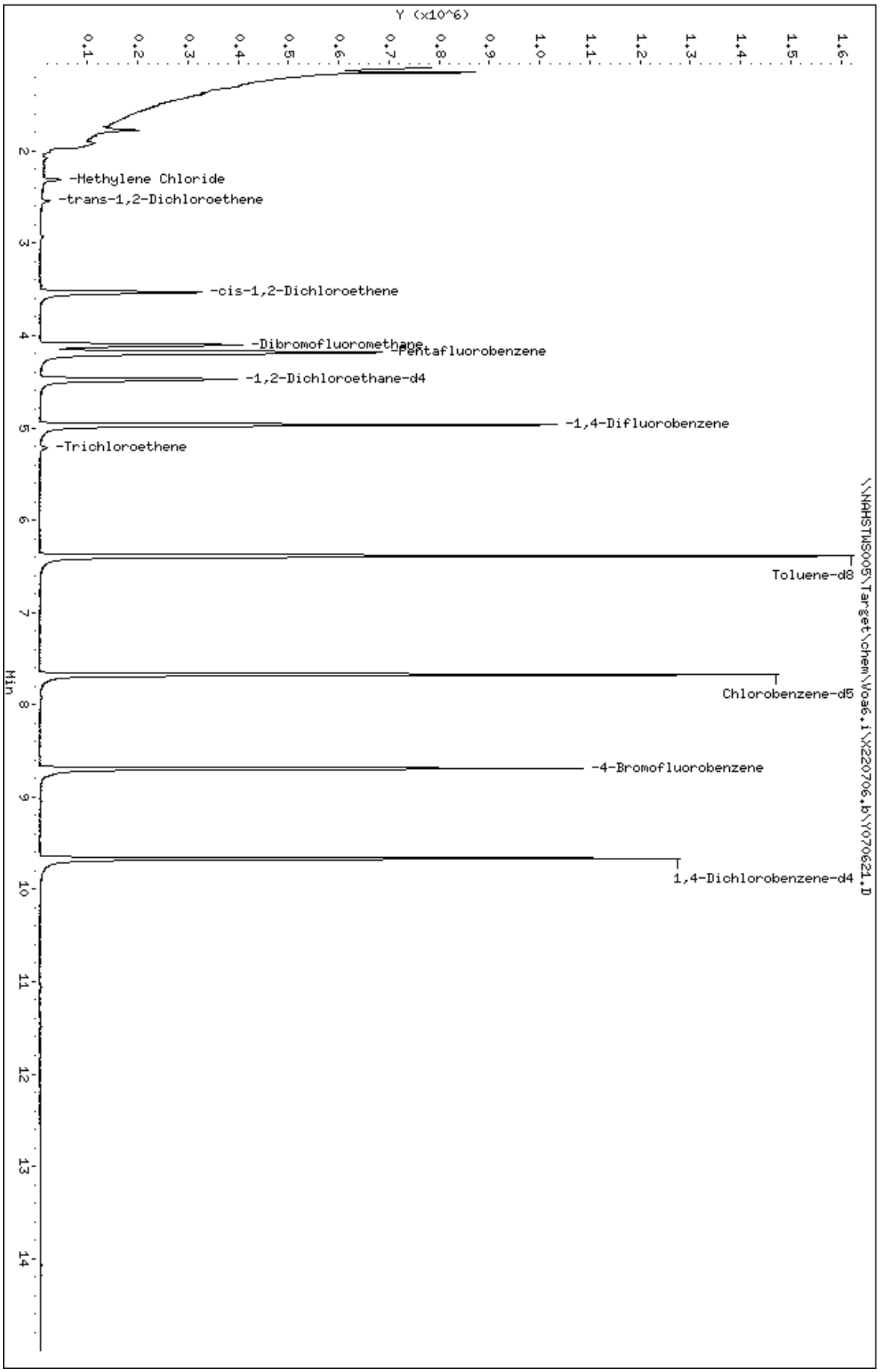
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	5.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	612801	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	891659	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	773197	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	346491	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	299598	52.2520	52.25
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	340315	50.6548	50.65
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	280665	49.6563	49.65
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1035581	53.9359	53.93
27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	174068	24.5419	122.70
17 Methylene Chloride	84	2.311	2.311	(0.552)	16984	2.98009	14.90(a)
38 Trichloroethene	130	5.220	5.208	(1.051)	5097	0.76334	3.81(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



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Date : 06-JUL-2022 23:14
Client ID: HS22061645-01
Sample Info: HS22061645-01;HS22061645-01;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070621.D Page 2

Date : 06-JUL-2022 23:14

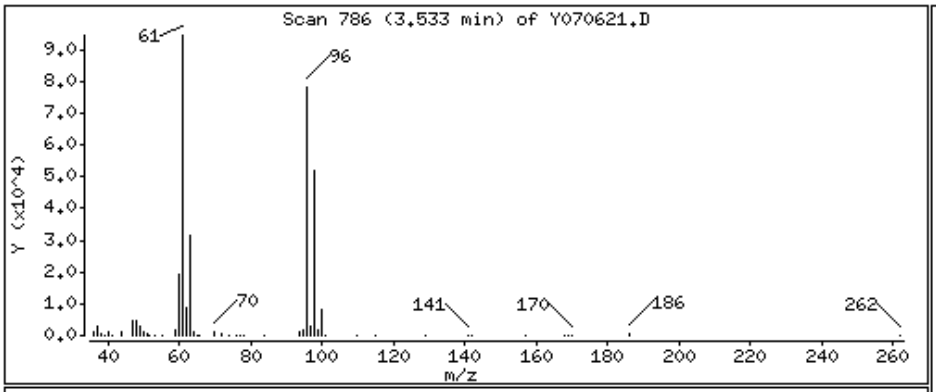
Client ID: HS22061645-01 Instrument: voa6.i

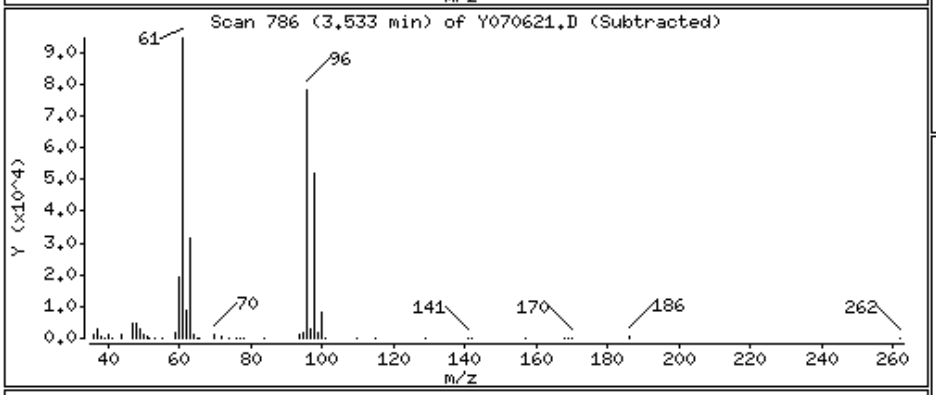
Sample Info: HS22061645-01;HS22061645-01;;;

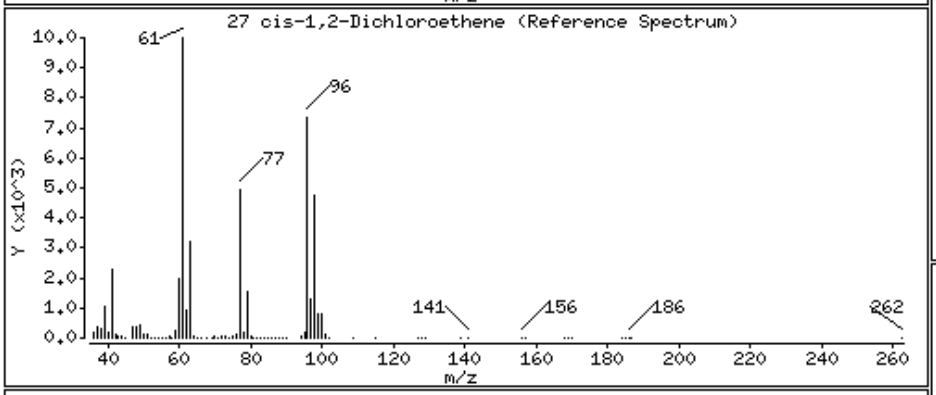
Purge Volume: 5.0 Operator: PC

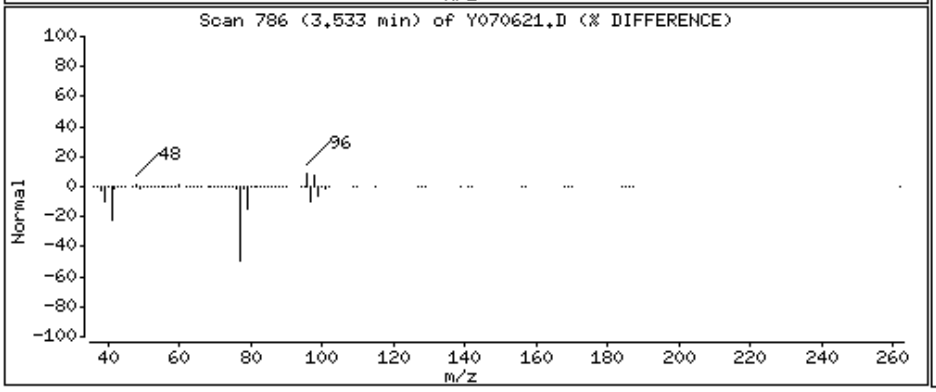
Column phase: DB624 Column diameter: 0.18

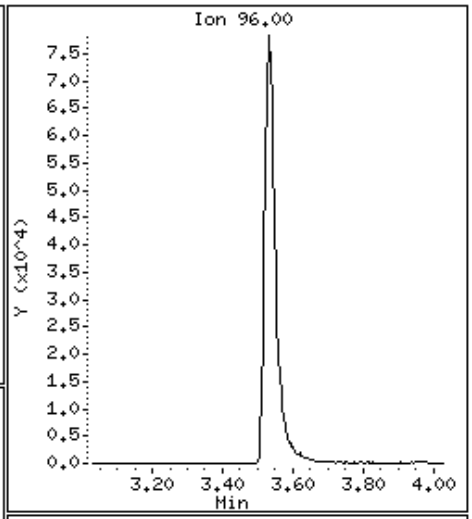
27 cis-1,2-Dichloroethene Concentration: 122.70 ug/l

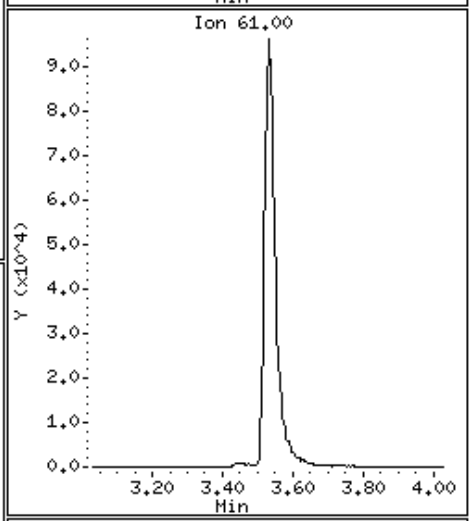


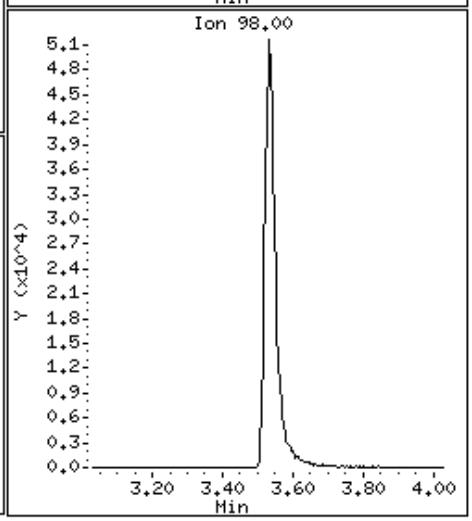












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070621.D Page 3

Date : 06-JUL-2022 23:14

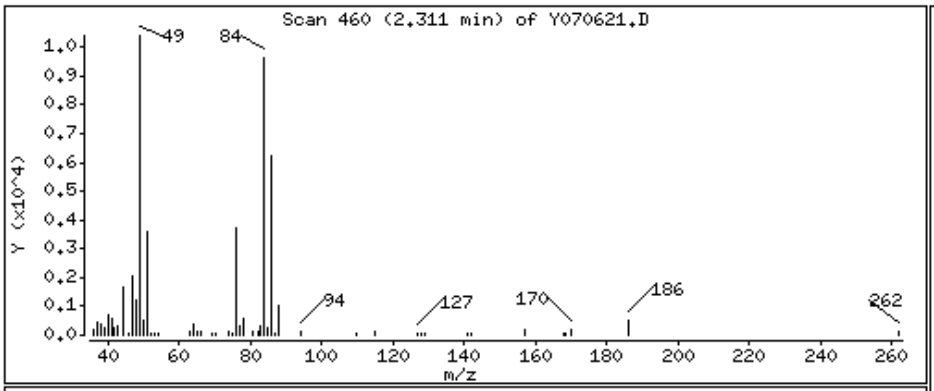
Client ID: HS22061645-01 Instrument: voa6.i

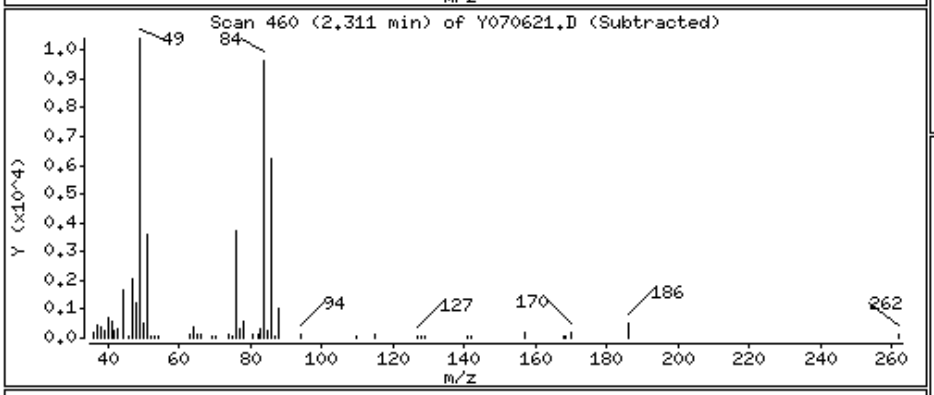
Sample Info: HS22061645-01;HS22061645-01;;;

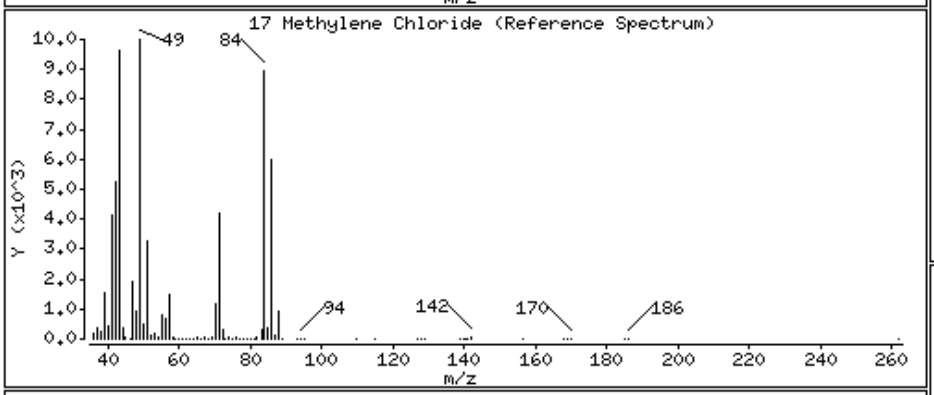
Purge Volume: 5.0 Operator: PC

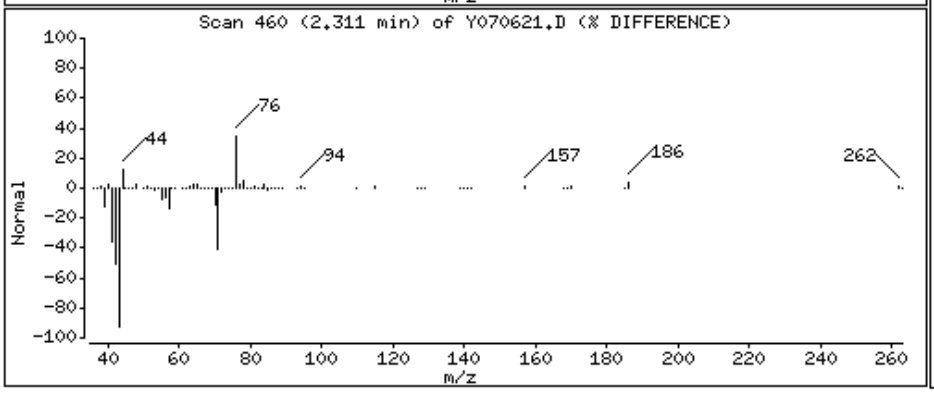
Column phase: DB624 Column diameter: 0.18

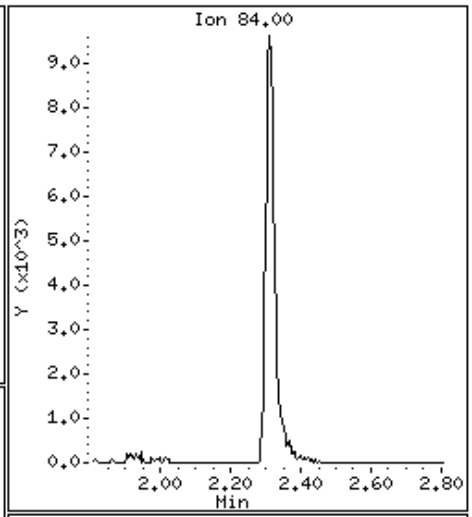
17 Methylene Chloride Concentration: 14.90 ug/l

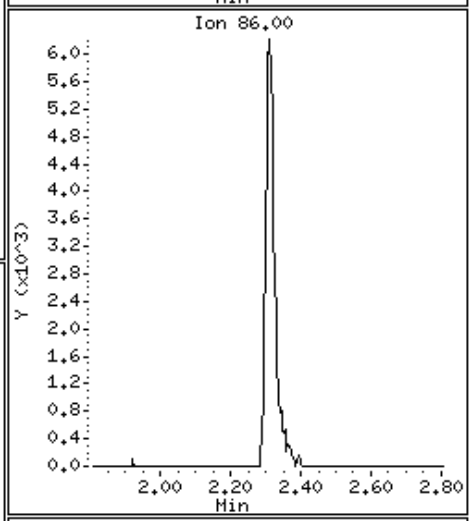


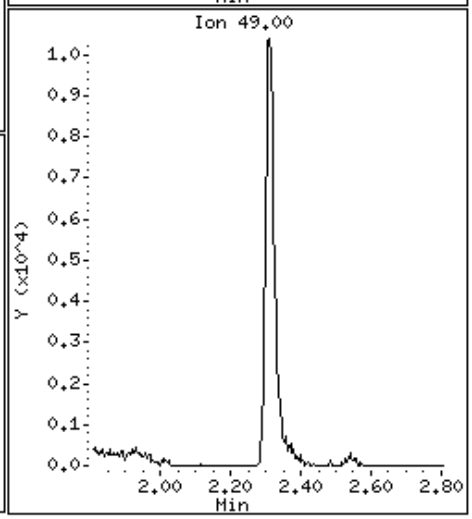












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070621.D Page 4

Date : 06-JUL-2022 23:14

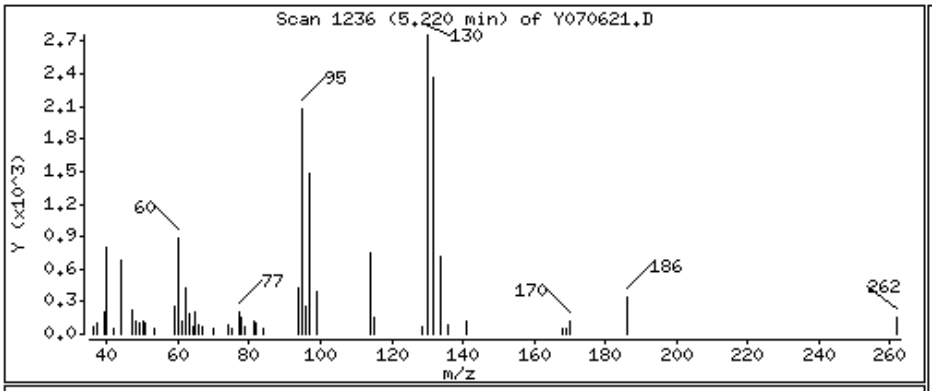
Client ID: HS22061645-01 Instrument: voa6.i

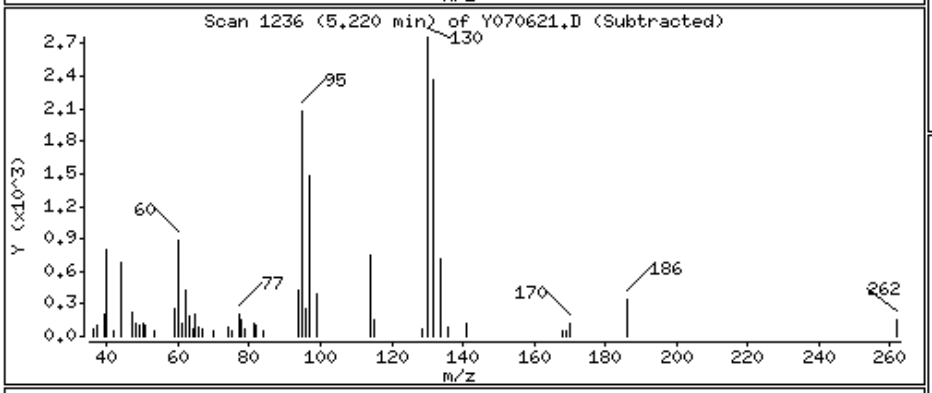
Sample Info: HS22061645-01;HS22061645-01;;;

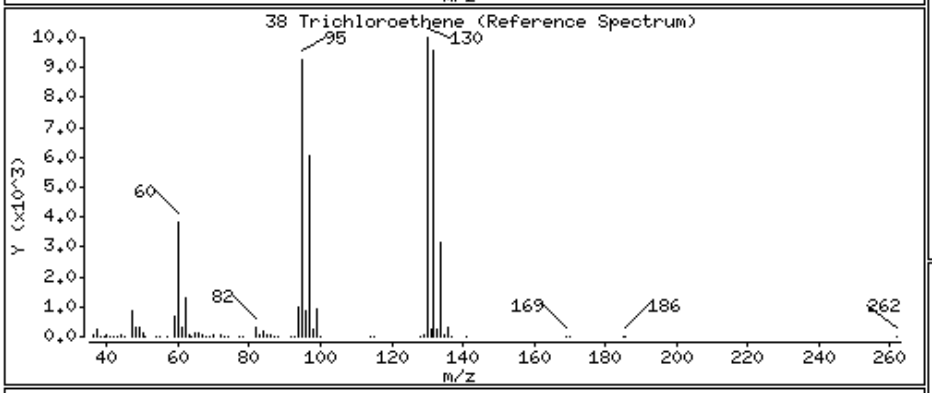
Purge Volume: 5.0 Operator: PC

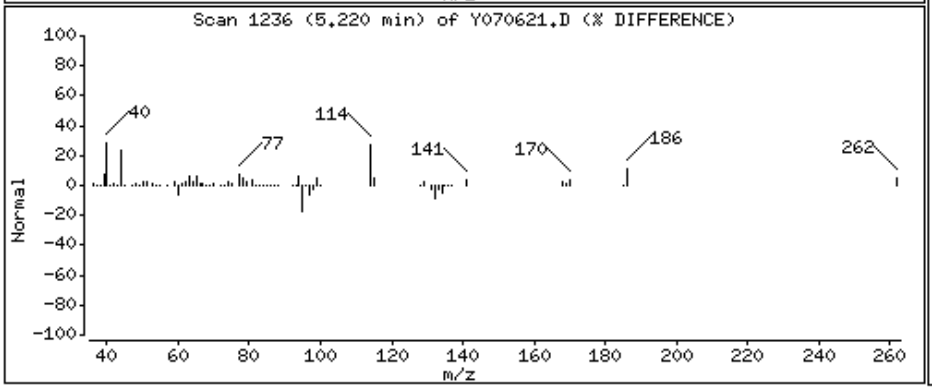
Column phase: DB624 Column diameter: 0.18

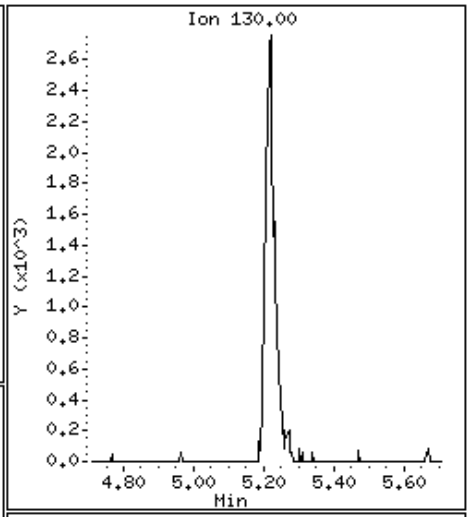
38 Trichloroethene Concentration: 3.81 ug/l

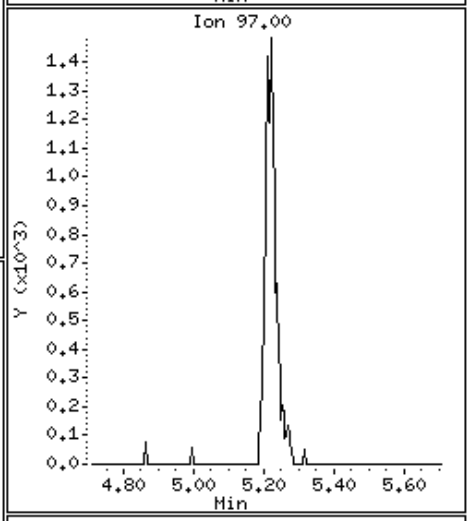


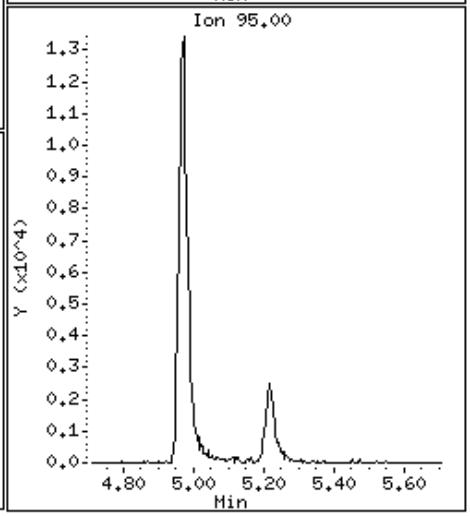












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070621.D
Inj Date : 06-JUL-2022 23:14
InstruID : voa6.i
LabSampID : HS22061645-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070622.D Page 1
Report Date: 15-Jul-2022 14:31

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070622.D
Lab Smp Id: HS22061645-05 Client Smp ID: HS22061645-05
Inj Date : 06-JUL-2022 23:35
Operator : PC Inst ID: voa6.i
Smp Info : HS22061645-05;HS22061645-05;;;
Misc Info : HS22052000V6;WATER;0;10;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 35
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

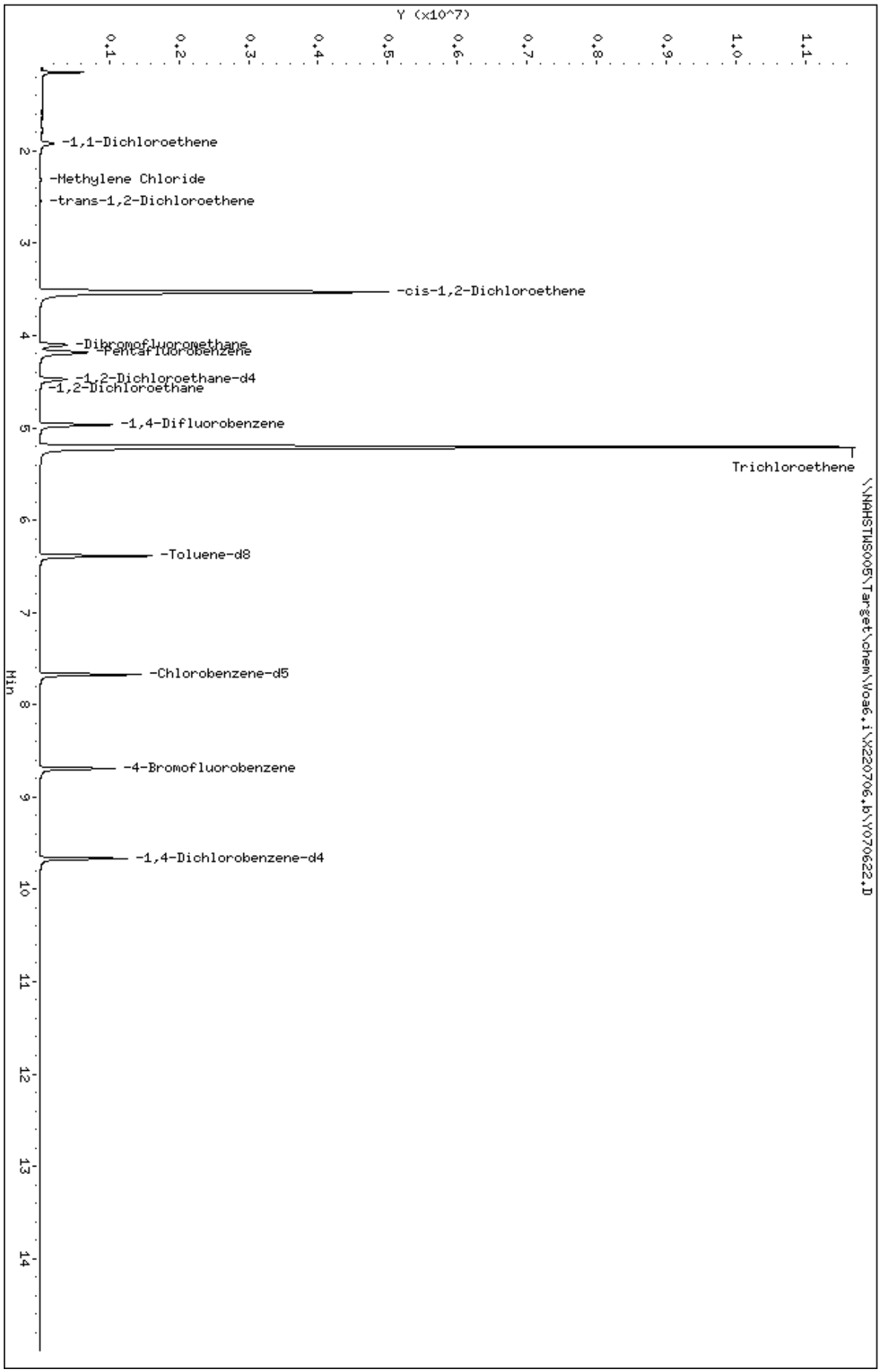
Name	Value	Description
DF	10.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	603603	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	879760	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	765268	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	336968	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	297367	52.6622	52.66
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	339805	51.1057	51.10
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	277362	49.8207	49.82
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1018304	53.5856	53.58
11 1,1-Dichloroethene	96	1.917	1.921	(0.458)	14120	2.44527	24.45(a)
33 1,2-Dichloroethane	62	4.575	4.560	(0.921)	4822	0.66141	6.61(a)
27 cis-1,2-Dichloroethene	96	3.529	3.533	(0.843)	2619815	374.996	3749.96(A)
17 Methylene Chloride	84	2.314	2.311	(0.553)	9431	1.95289	19.52(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	3932269	596.873	5968.73(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	399398	51.7333	517.33

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

A - Target compound detected but, quantitated amount exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070622.D
Date : 06-JUL-2022 23:35
Client ID: HS220616 45-05
Sample Info: HS220616 45-05;HS220616 45-05;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070622.D Page 2

Date : 06-JUL-2022 23:35

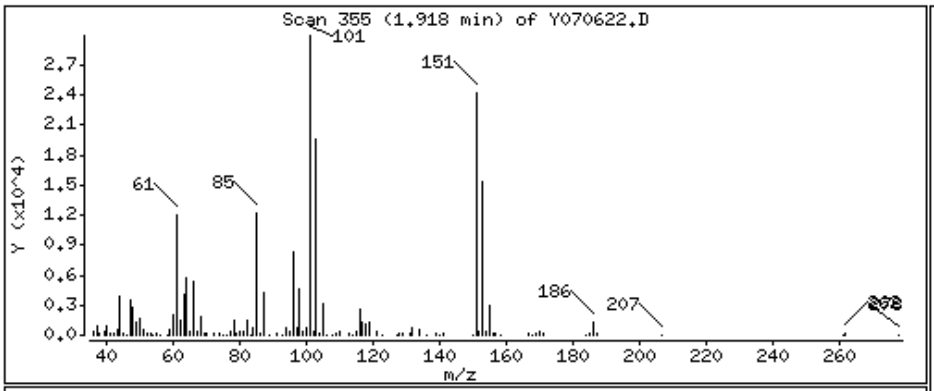
Client ID: HS22061645-05 Instrument: voa6.i

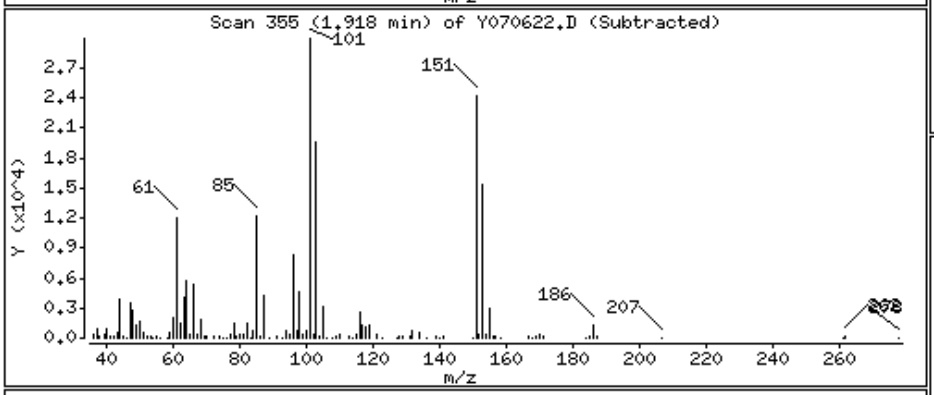
Sample Info: HS22061645-05;HS22061645-05;;;

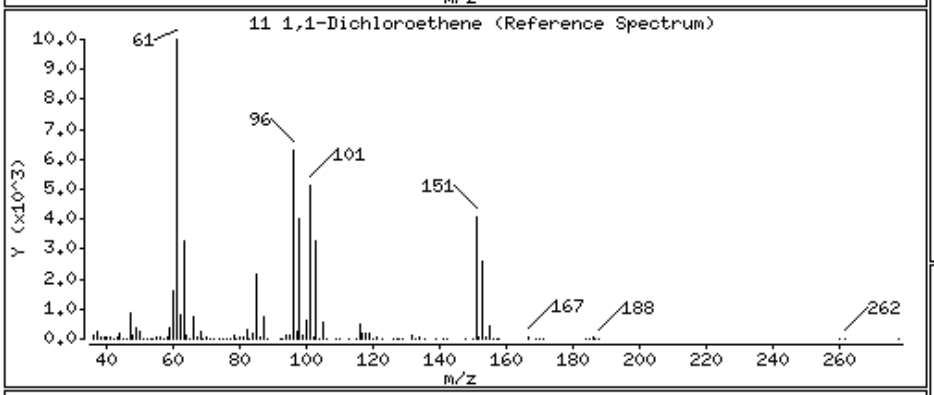
Purge Volume: 5.0 Operator: PC

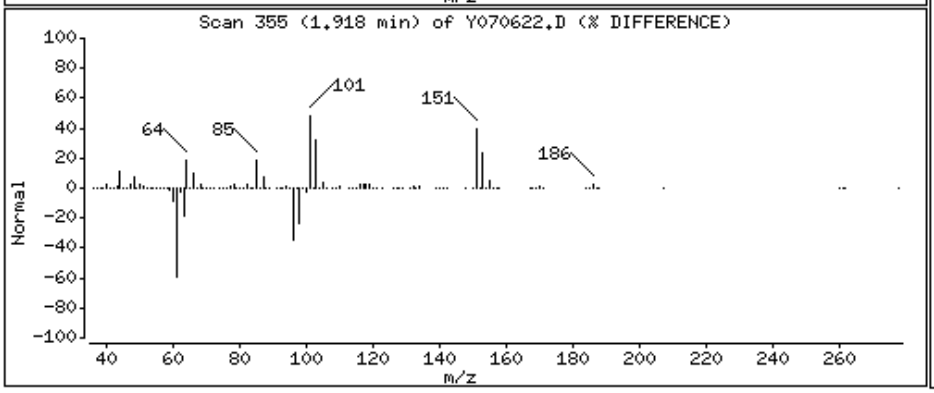
Column phase: DB624 Column diameter: 0.18

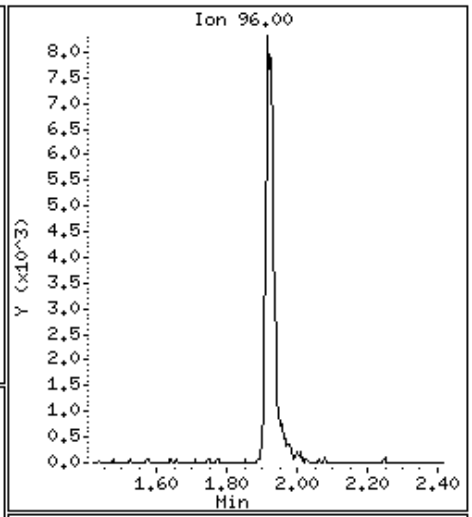
11 1,1-Dichloroethene Concentration: 24.45 ug/l

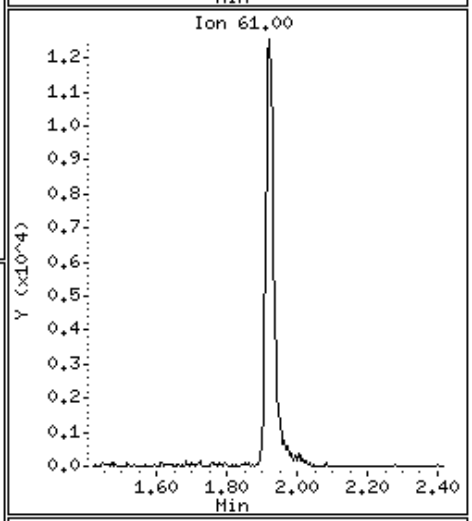


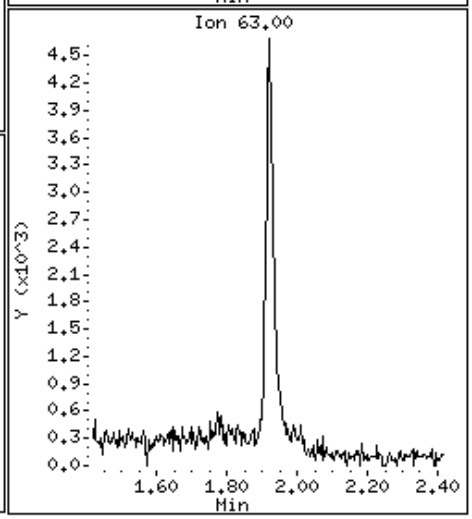












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070622.D Page 3

Date : 06-JUL-2022 23:35

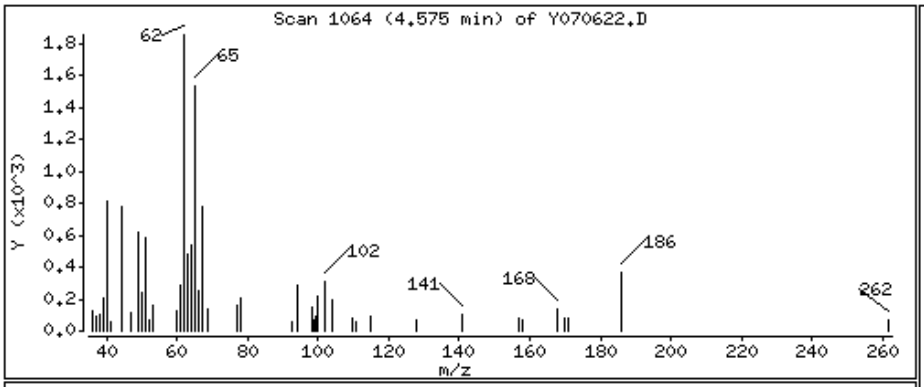
Client ID: HS22061645-05 Instrument: voa6.i

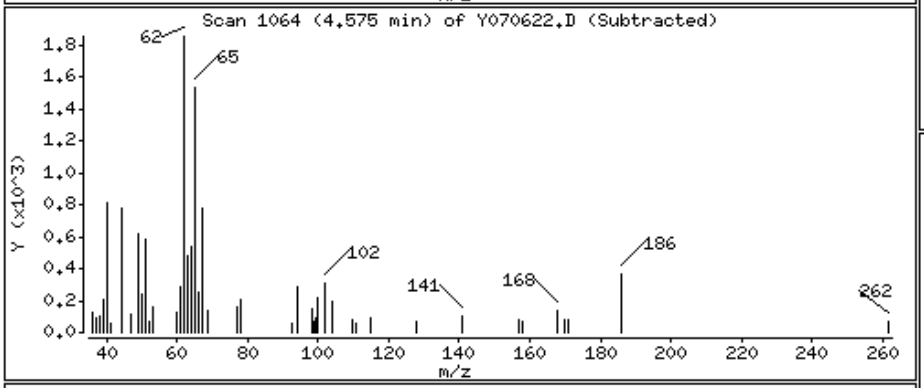
Sample Info: HS22061645-05;HS22061645-05;;;

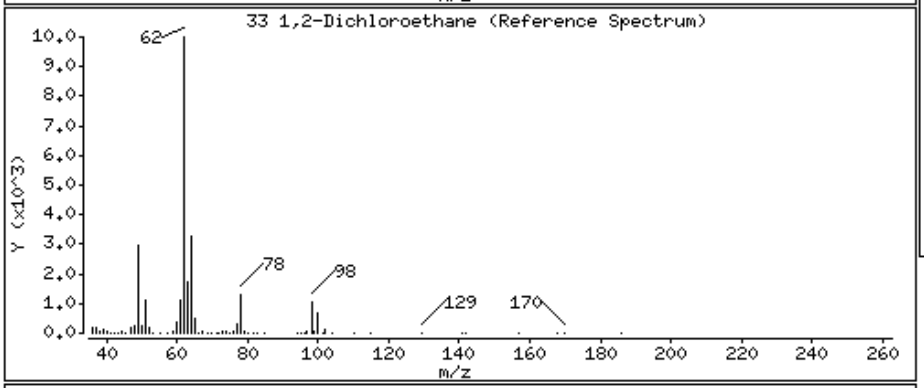
Purge Volume: 5.0 Operator: PC

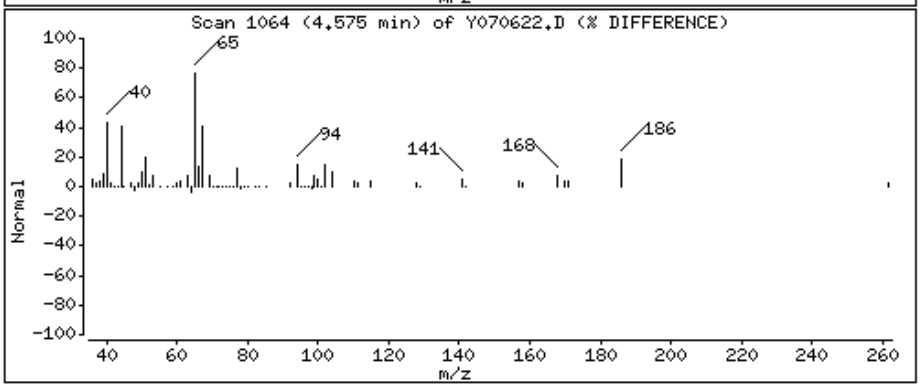
Column phase: DB624 Column diameter: 0.18

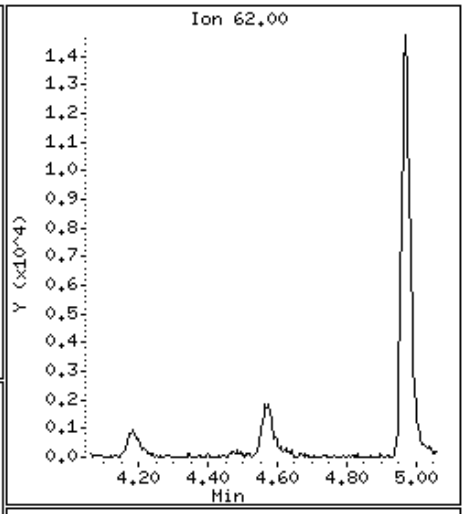
33 1,2-Dichloroethane Concentration: 6.61 ug/l

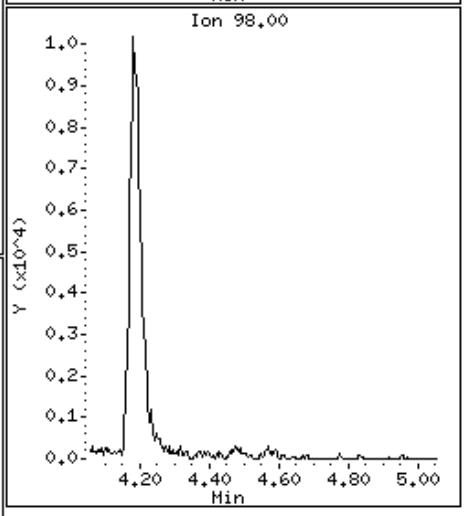












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070622.D

Date : 06-JUL-2022 23:35

Client ID: HS22061645-05

Instrument: voa6.i

Sample Info: HS22061645-05;HS22061645-05;;;

Purge Volume: 5.0

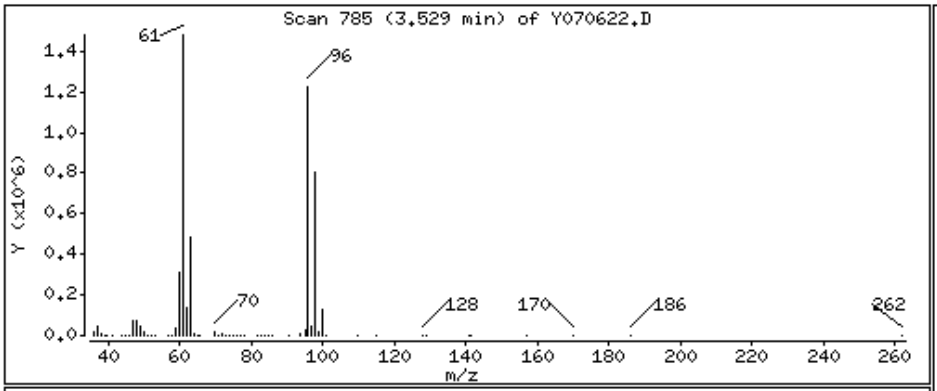
Operator: PC

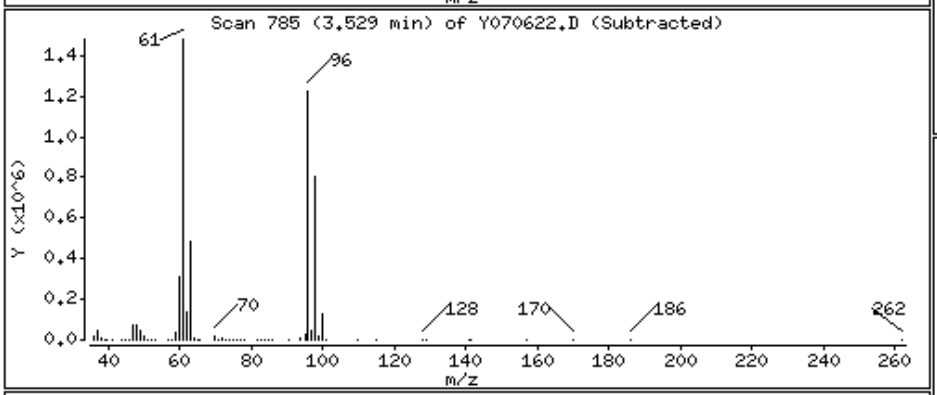
Column phase: DB624

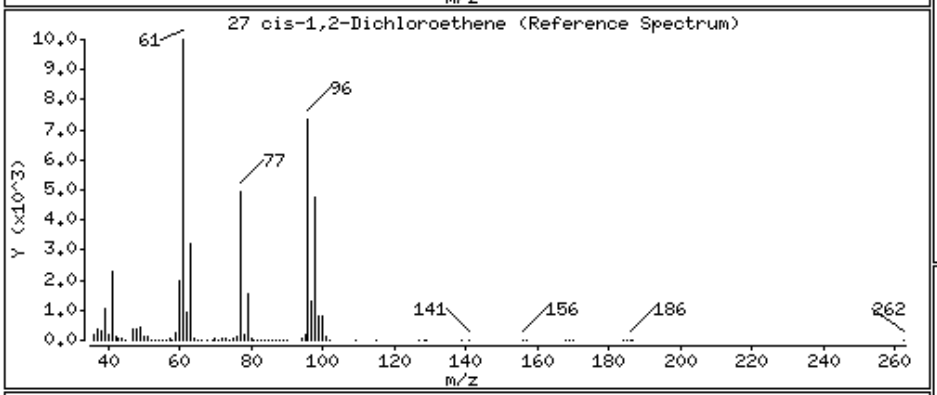
Column diameter: 0.18

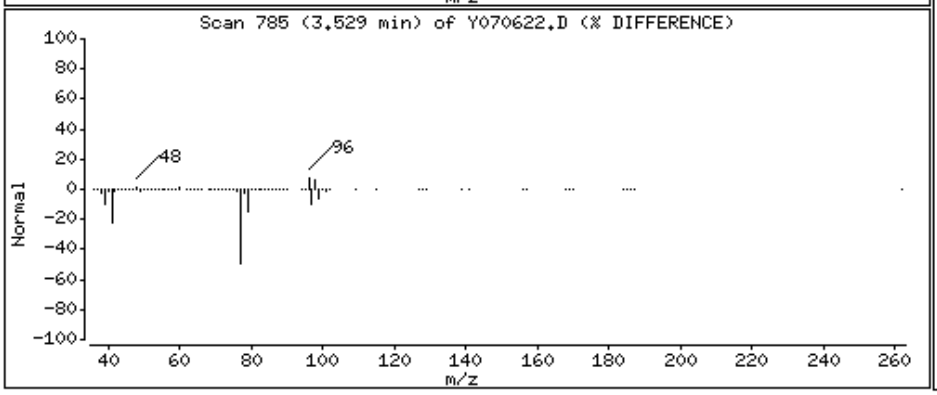
27 cis-1,2-Dichloroethene

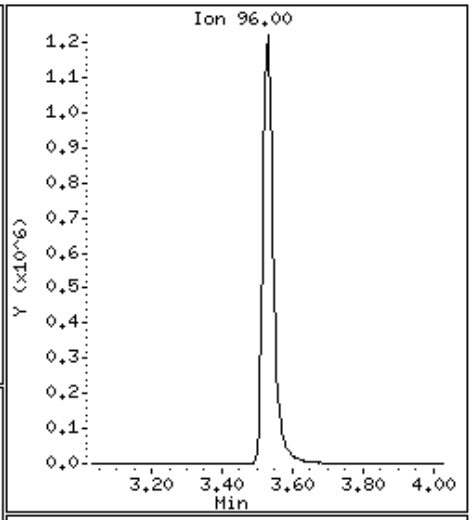
Concentration: 3749.96 ug/l

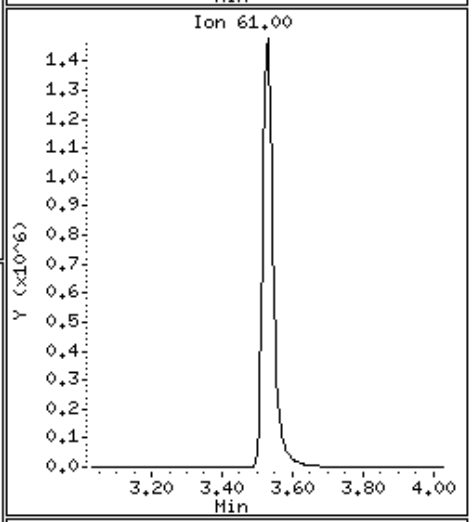


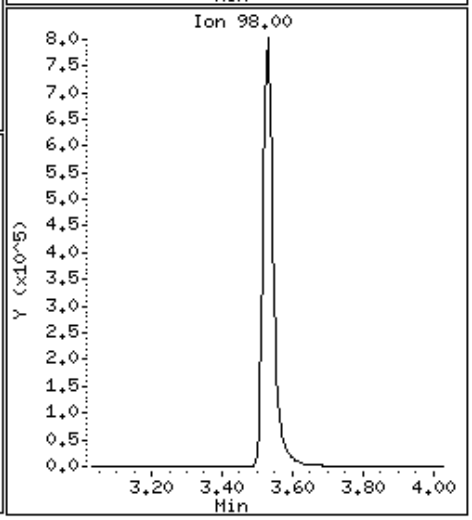












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070622.D Page 5

Date : 06-JUL-2022 23:35

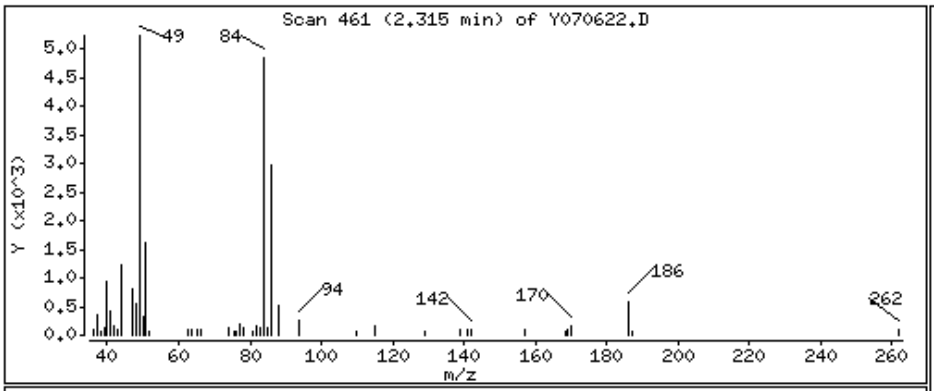
Client ID: HS22061645-05 Instrument: voa6.i

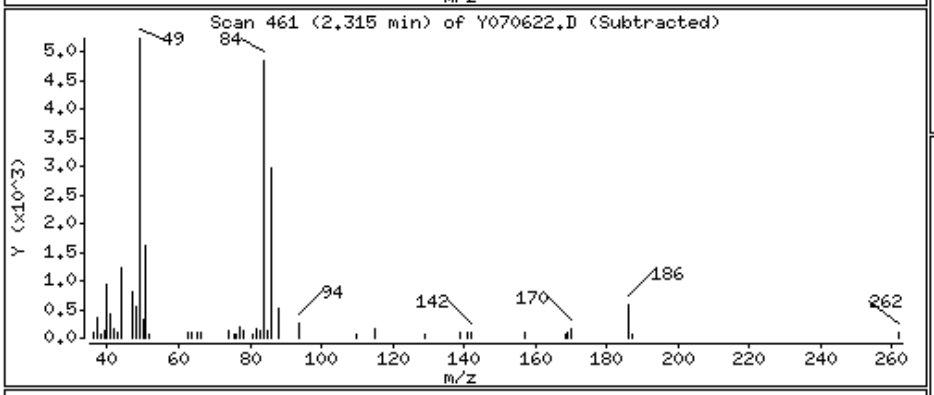
Sample Info: HS22061645-05;HS22061645-05;;;

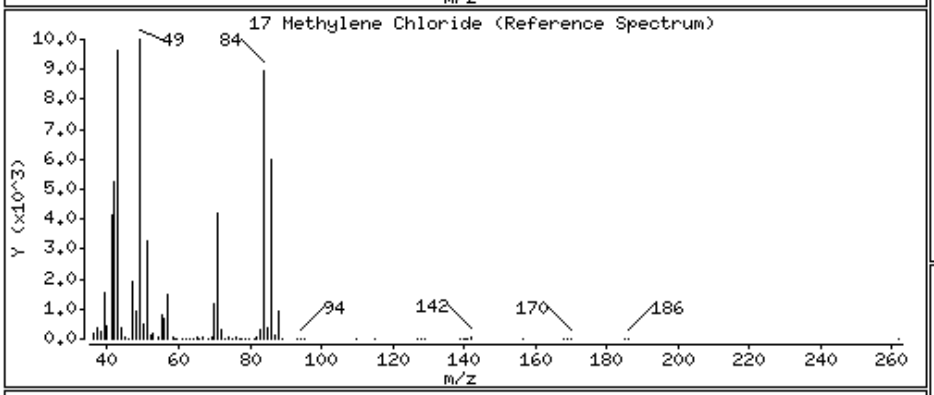
Purge Volume: 5.0 Operator: PC

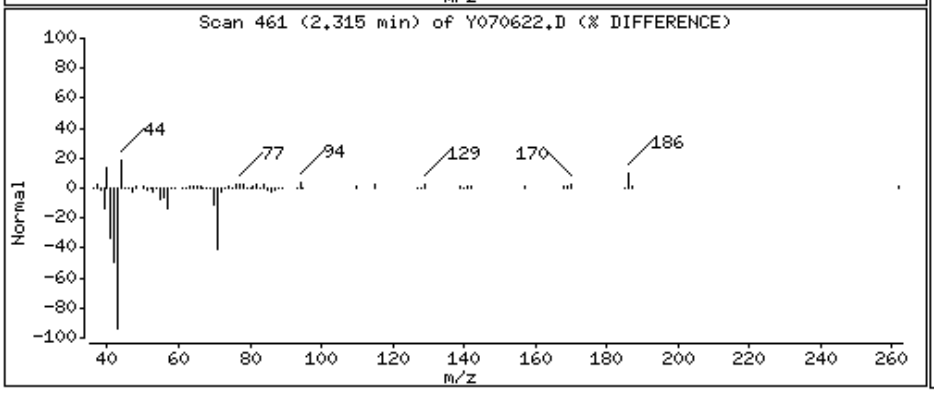
Column phase: DB624 Column diameter: 0.18

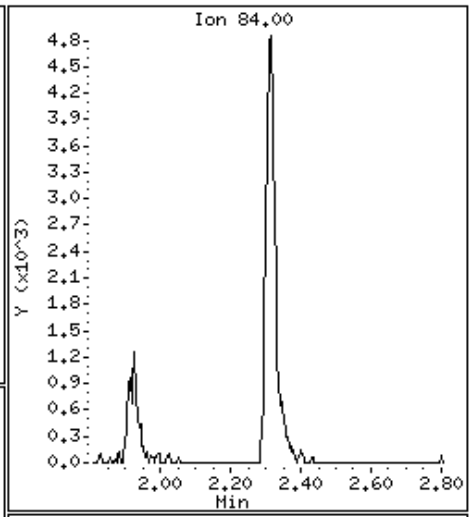
17 Methylene Chloride Concentration: 19.52 ug/l

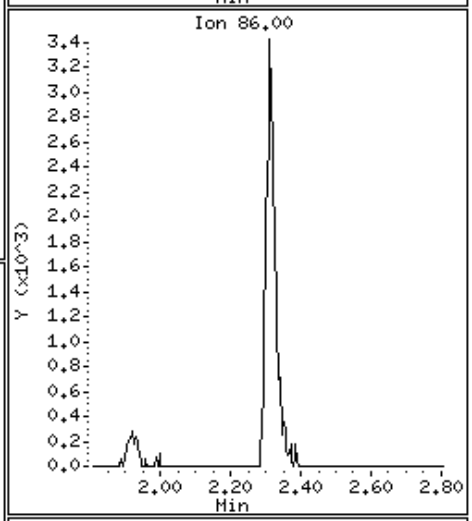


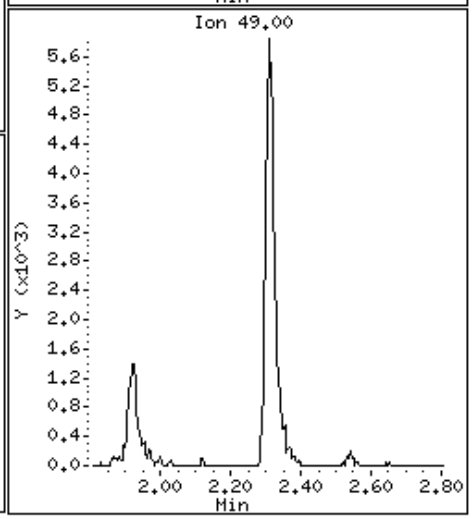












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070622.D Page 6

Date : 06-JUL-2022 23:35

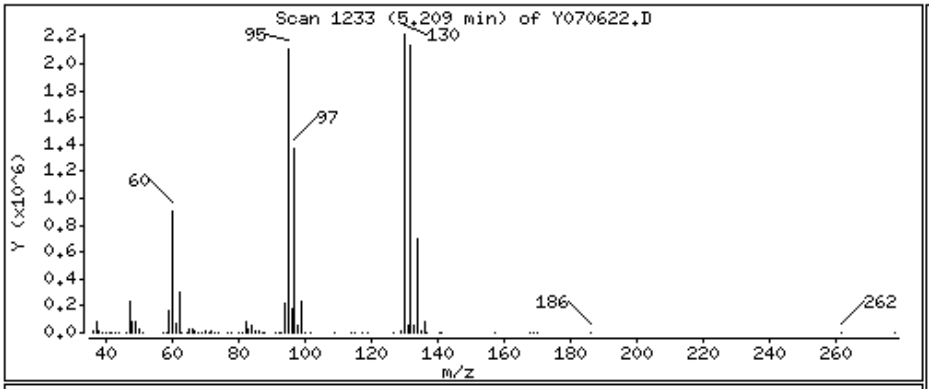
Client ID: HS22061645-05 Instrument: voa6.i

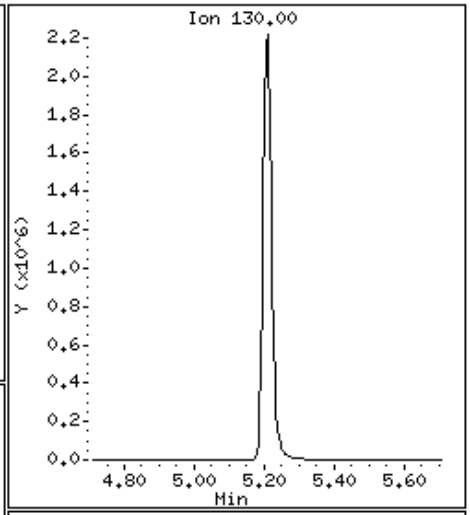
Sample Info: HS22061645-05;HS22061645-05;;;

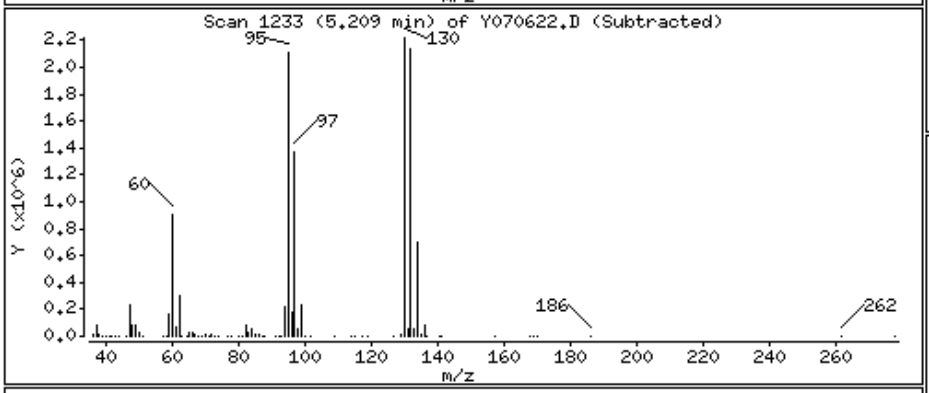
Purge Volume: 5.0 Operator: PC

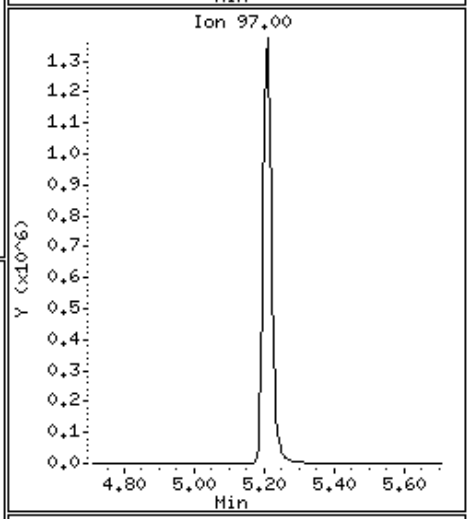
Column phase: DB624 Column diameter: 0.18

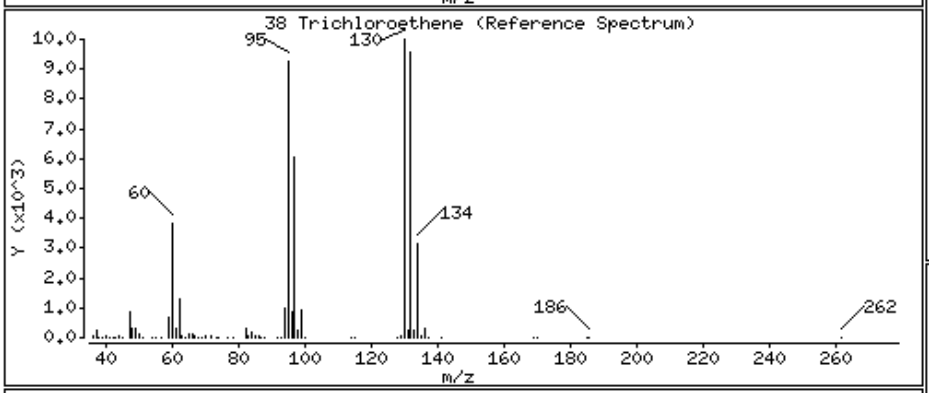
38 Trichloroethene Concentration: 5968.73 ug/l

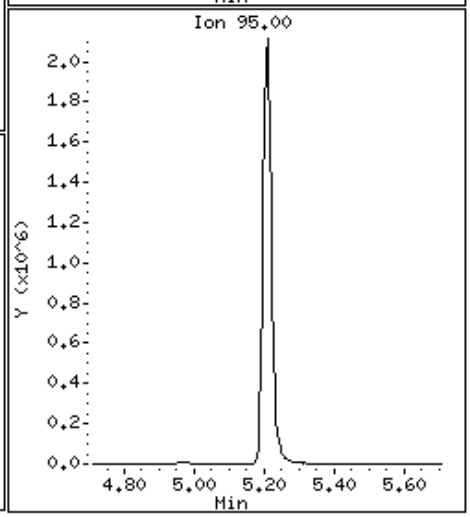


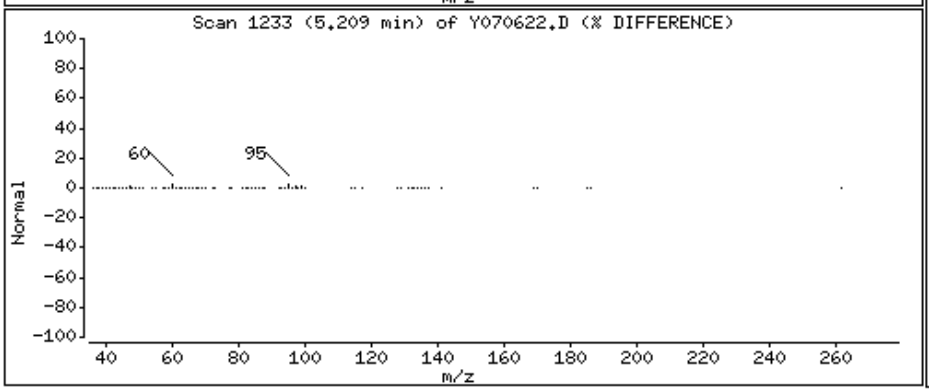












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070622.D Page 7

Date : 06-JUL-2022 23:35

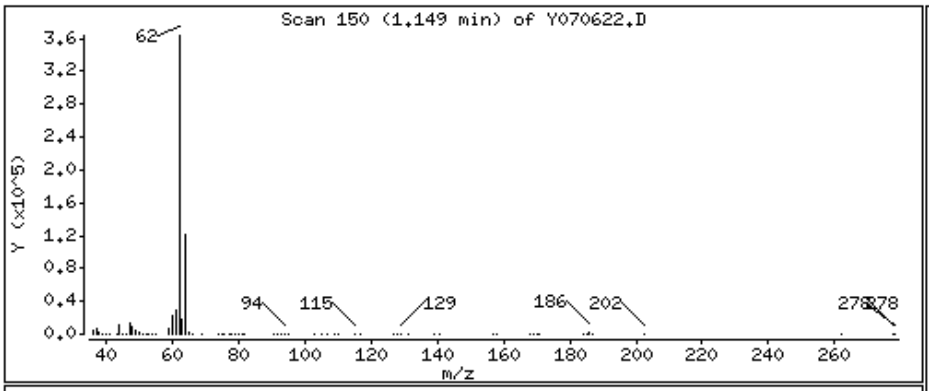
Client ID: HS22061645-05 Instrument: voa6.i

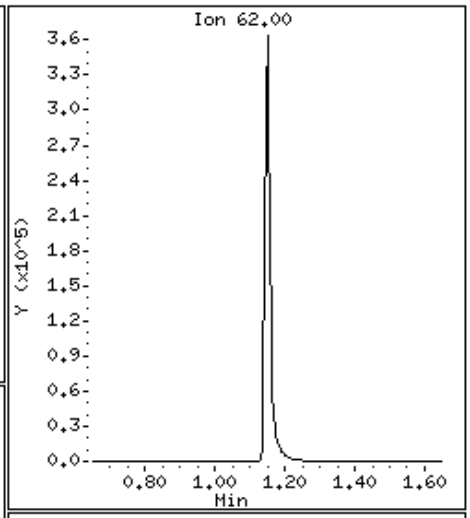
Sample Info: HS22061645-05;HS22061645-05;;;

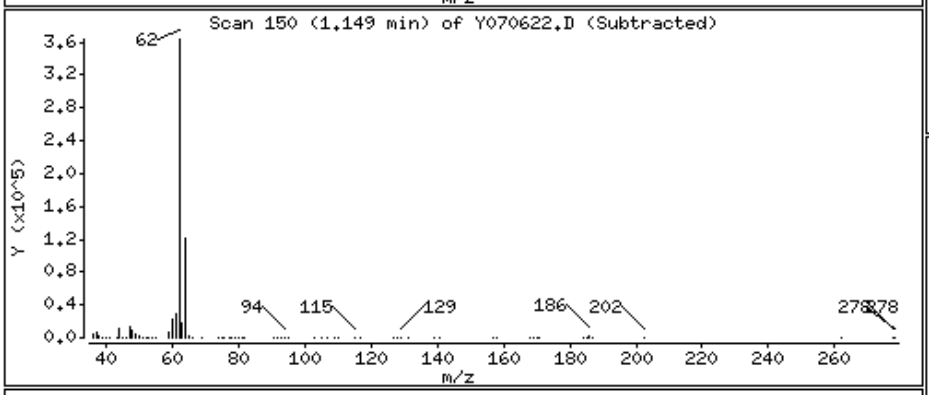
Purge Volume: 5.0 Operator: PC

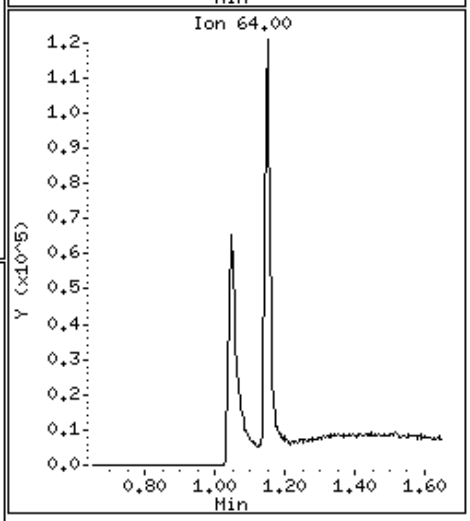
Column phase: DB624 Column diameter: 0.18

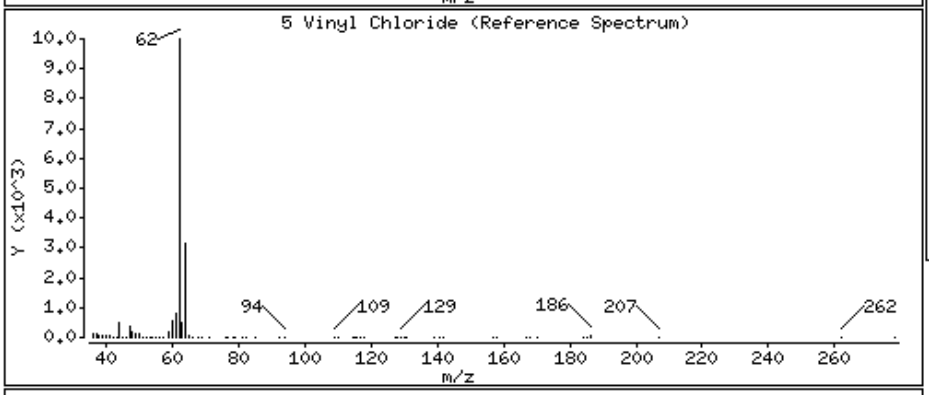
5 Vinyl Chloride Concentration: 517.33 ug/l

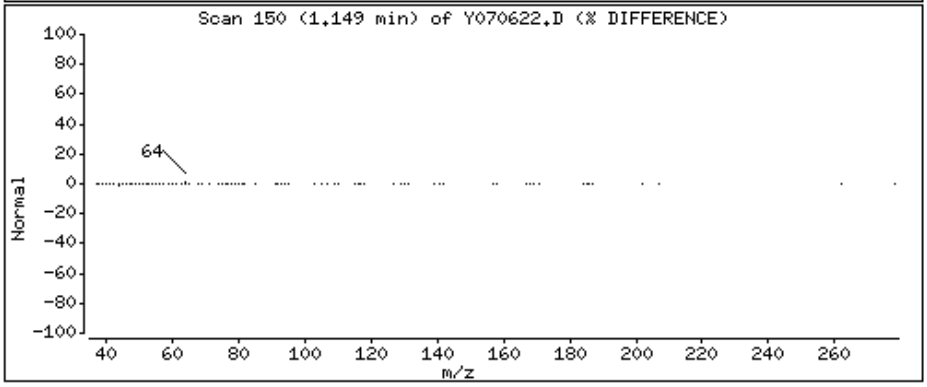












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Inj Date : 06-JUL-2022 23:35
InstruID : voa6.i
LabSampID : HS22061645-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070623.D Page 1
Report Date: 15-Jul-2022 14:31

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070623.D
Lab Smp Id: HS22061645-05 Client Smp ID: HS22061645-05
Inj Date : 06-JUL-2022 23:56
Operator : PC Inst ID: voa6.i
Smp Info : HS22061645-05;HS22061645-05;;;
Misc Info : HS22052000V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 36
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

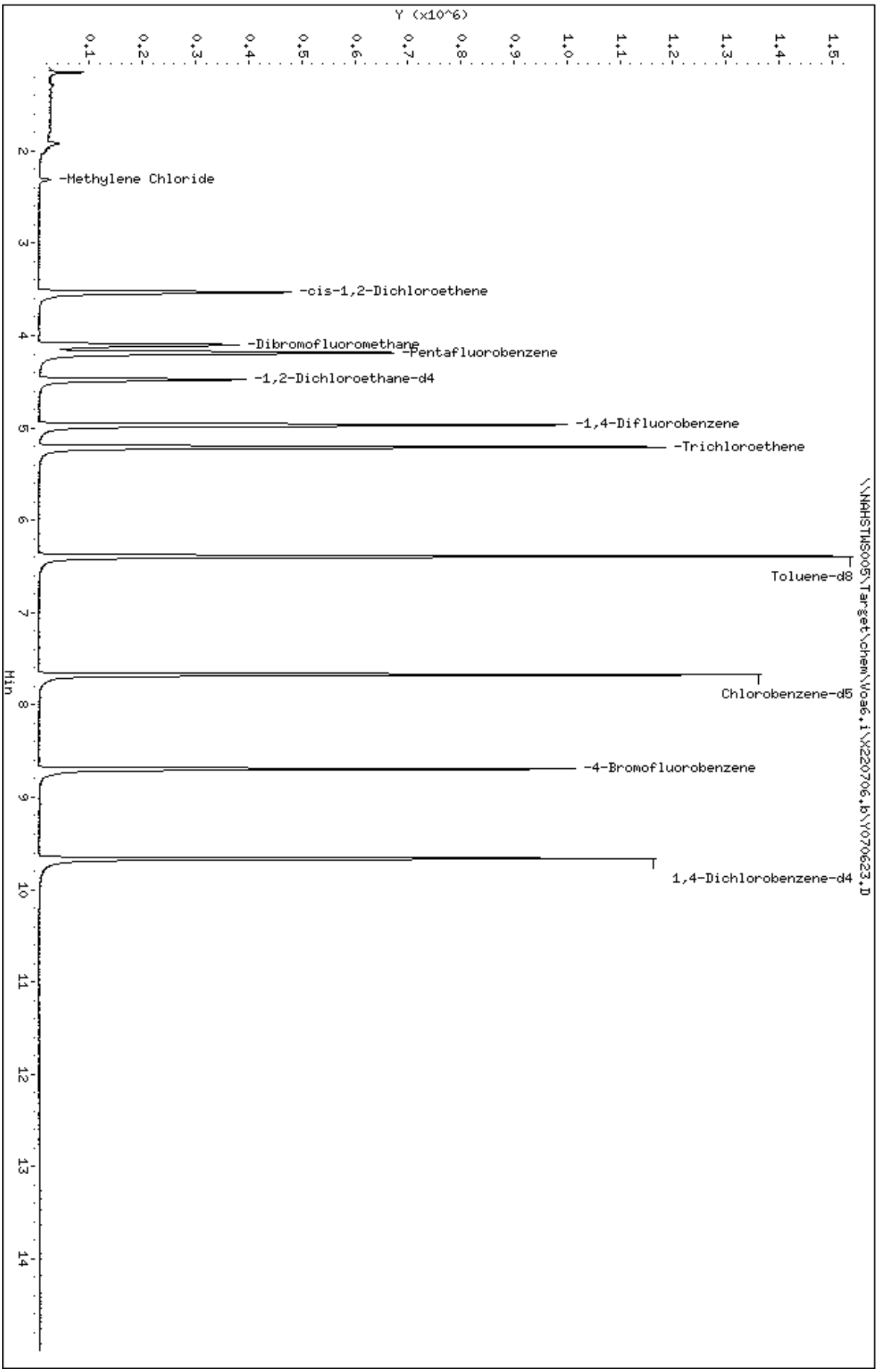
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	100.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	596534	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	864319	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	738531	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.666	(1.000)	322706	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	292248	52.3625	52.36
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	323130	50.3526	50.35
$ 30 Dibromofluoromethane	113	4.106	4.103	(0.981)	275367	50.0498	50.04
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	995442	54.2790	54.27
27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	260439	37.7206	3772.06
17 Methylene Chloride	84	2.311	2.311	(0.552)	9713	2.00878	200.87(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	403518	62.3436	6234.35
5 Vinyl Chloride	62	1.149	1.149	(0.275)	41208	5.40085	540.08

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220706.b\Y070623.D
Date : 06-JUL-2022 23:56
Client ID: HS22061645-05
Sample Info: HS22061645-05;HS22061645-05;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070623.D Page 2

Date : 06-JUL-2022 23:56

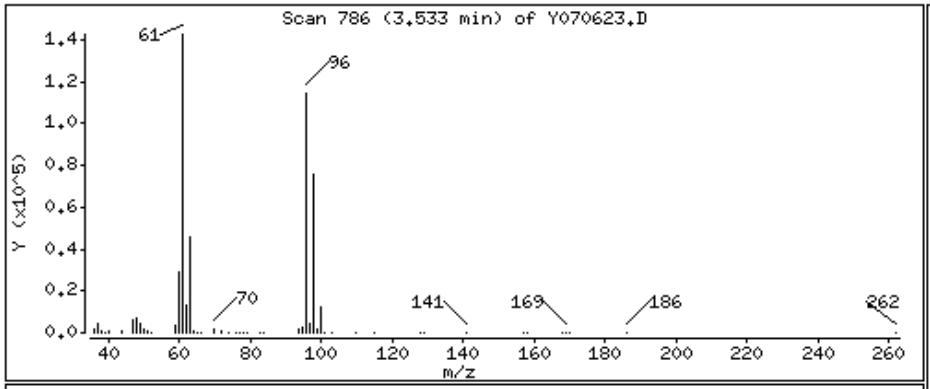
Client ID: HS22061645-05 Instrument: voa6.i

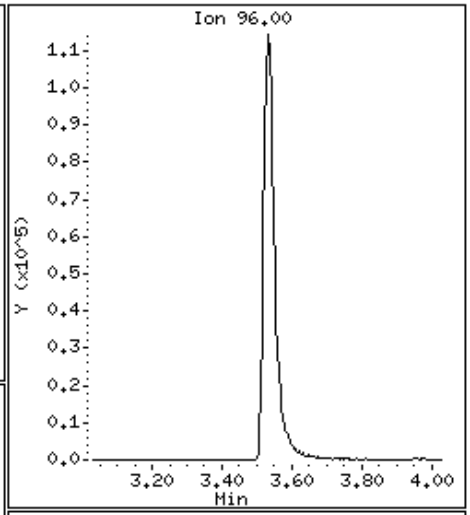
Sample Info: HS22061645-05;HS22061645-05;;;

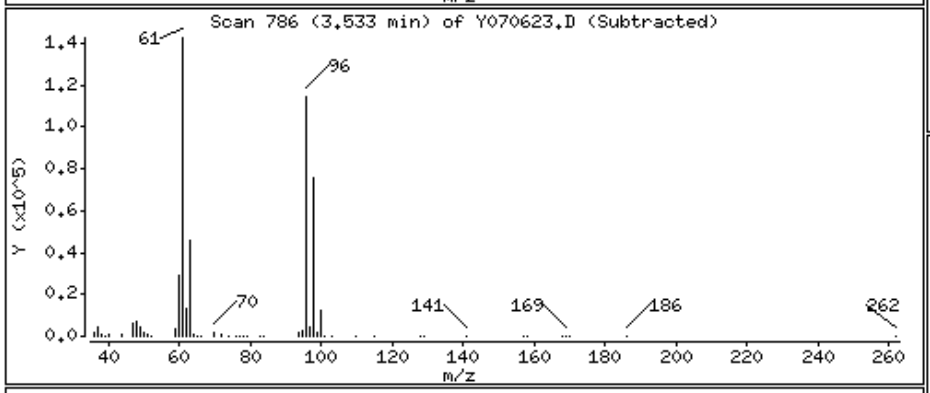
Purge Volume: 5.0 Operator: PC

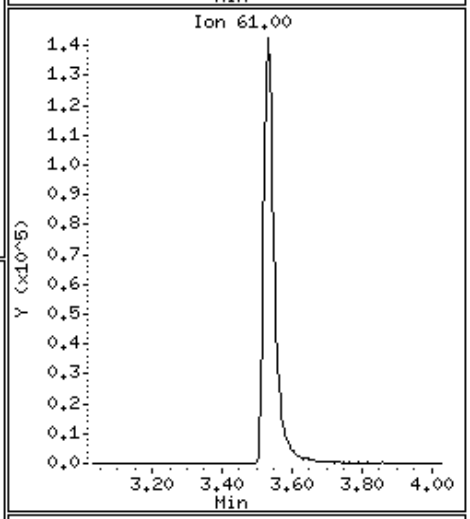
Column phase: DB624 Column diameter: 0.18

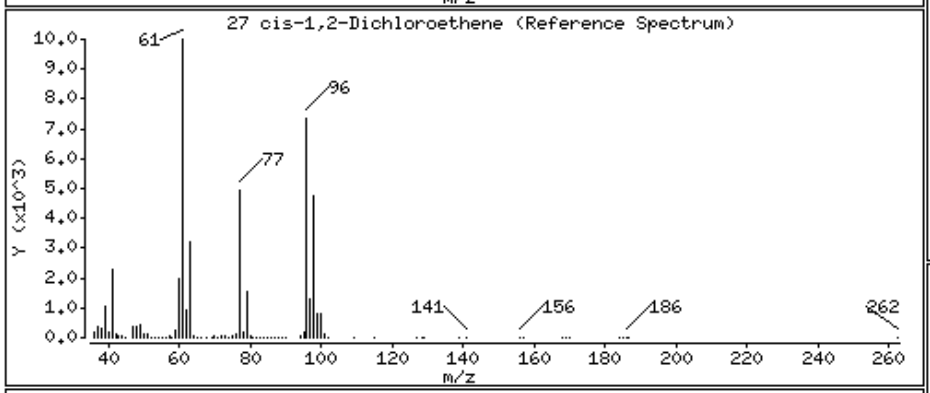
27 cis-1,2-Dichloroethene Concentration: 3772.06 ug/l

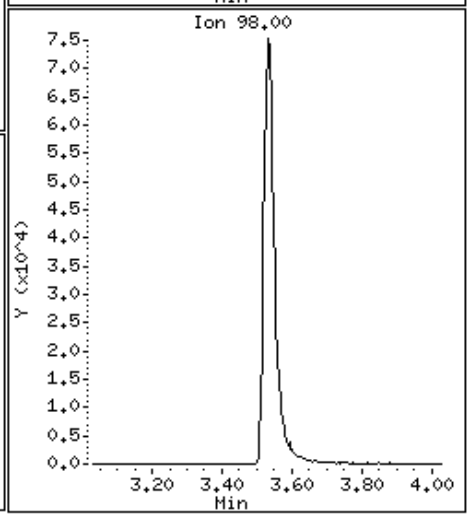


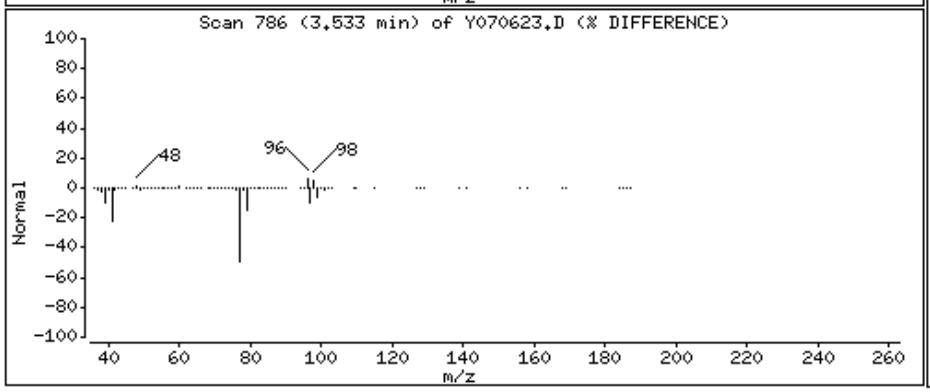












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070623.D

Date : 06-JUL-2022 23:56

Client ID: HS22061645-05

Instrument: voa6.i

Sample Info: HS22061645-05;HS22061645-05;;;

Purge Volume: 5.0

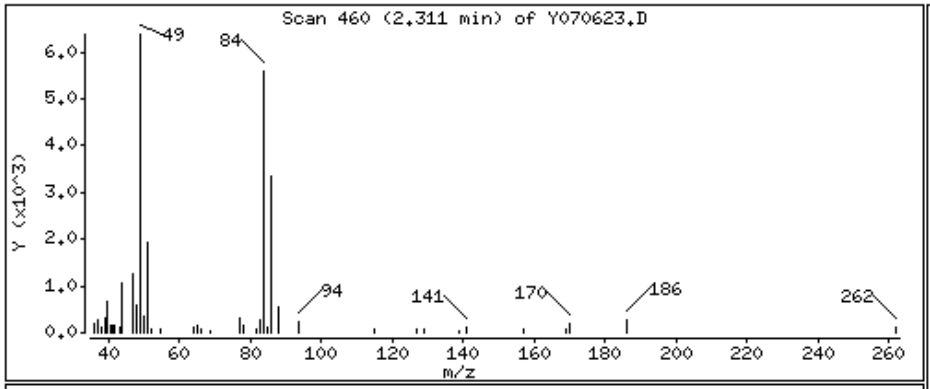
Operator: PC

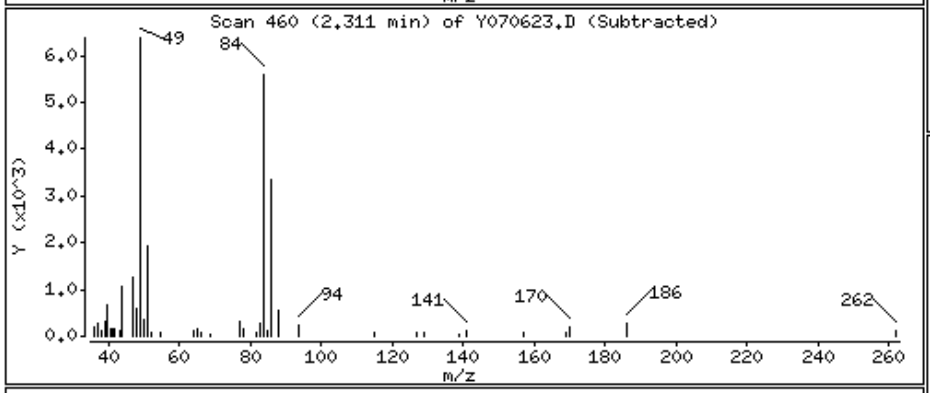
Column phase: DB624

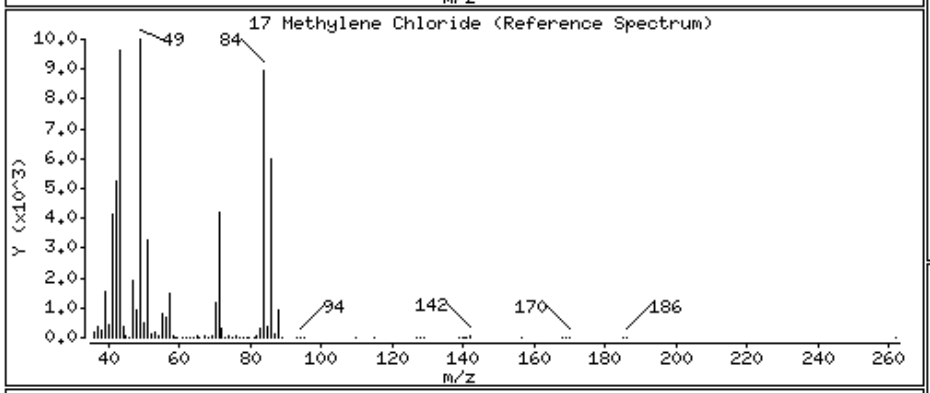
Column diameter: 0.18

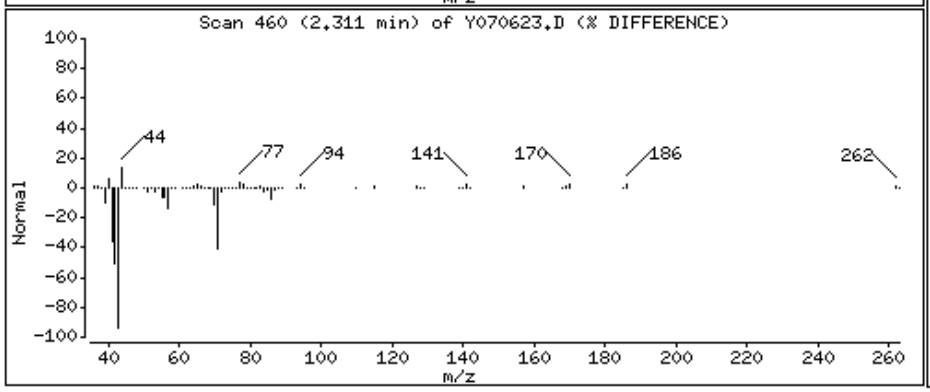
17 Methylene Chloride

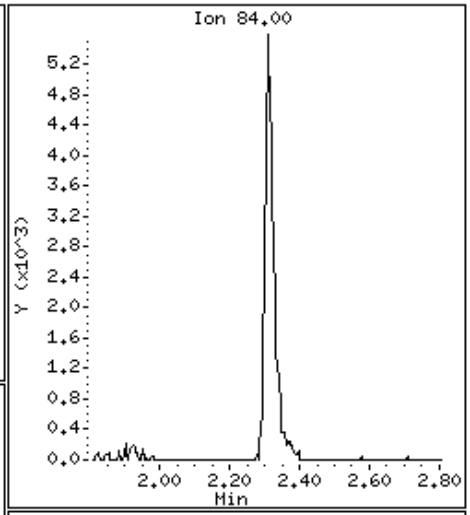
Concentration: 200.87 ug/l

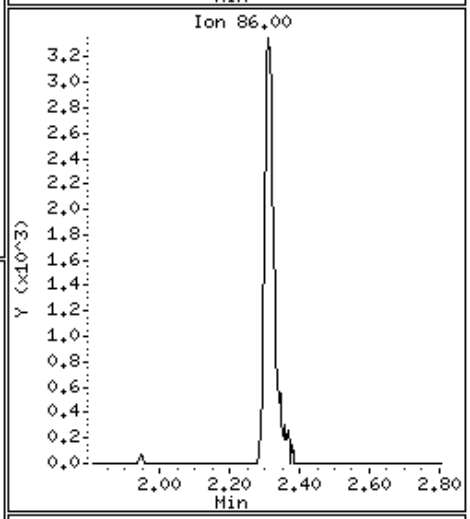


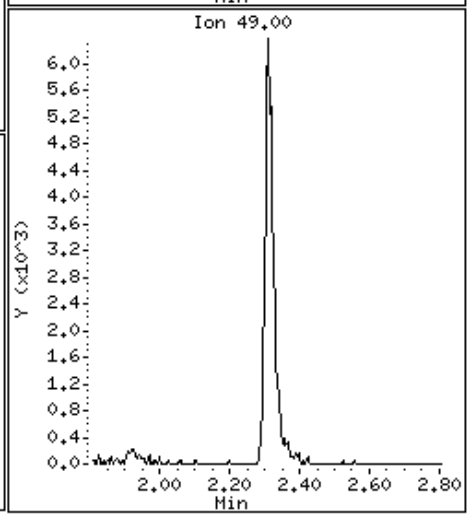












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070623.D Page 4

Date : 06-JUL-2022 23:56

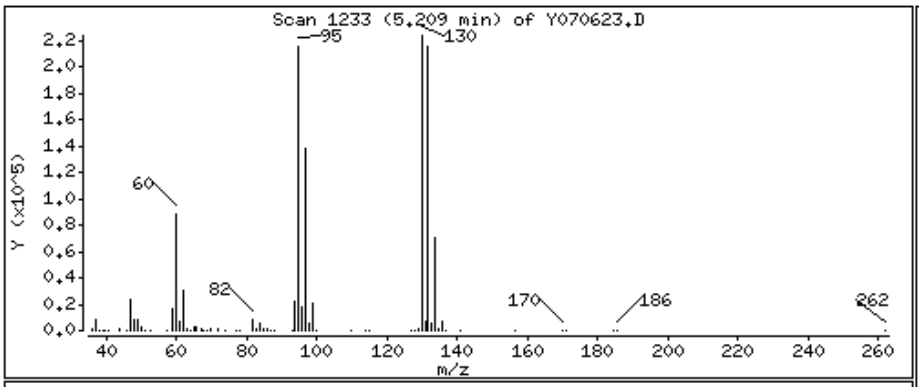
Client ID: HS22061645-05 Instrument: voa6.i

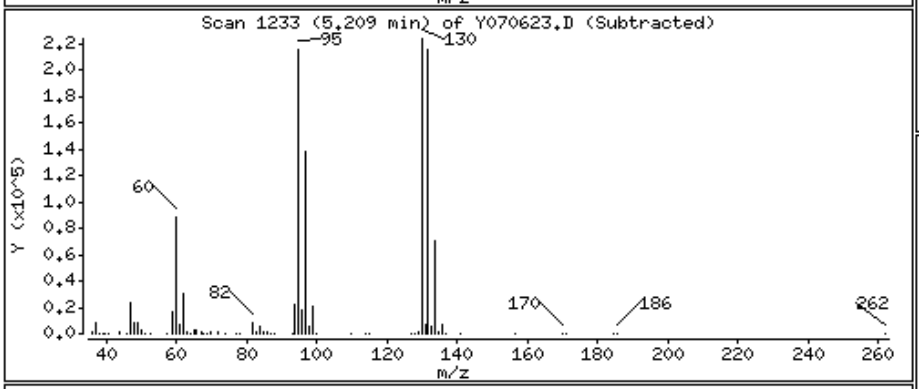
Sample Info: HS22061645-05;HS22061645-05;;;

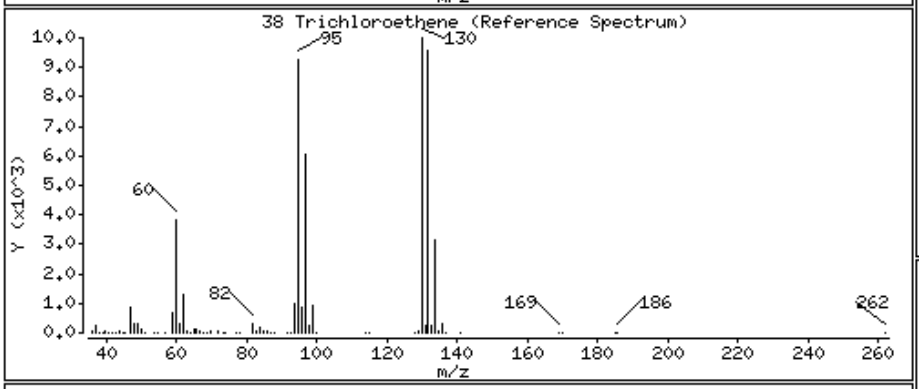
Purge Volume: 5.0 Operator: PC

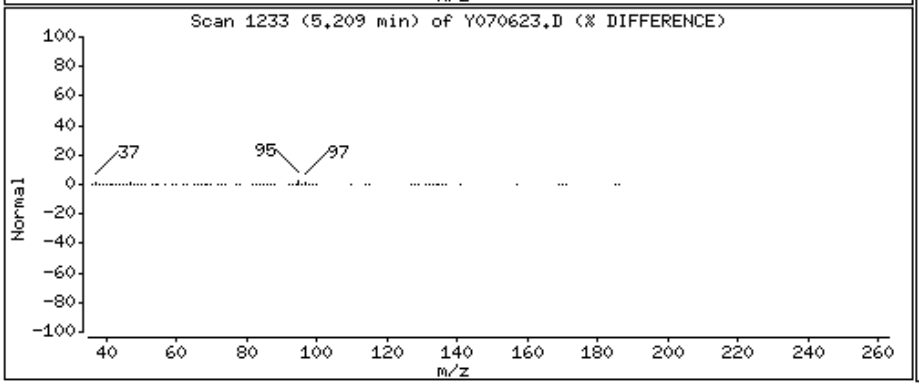
Column phase: DB624 Column diameter: 0.18

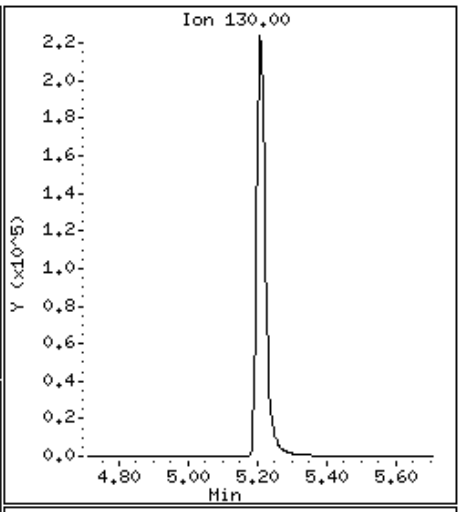
38 Trichloroethene Concentration: 6234.35 ug/l

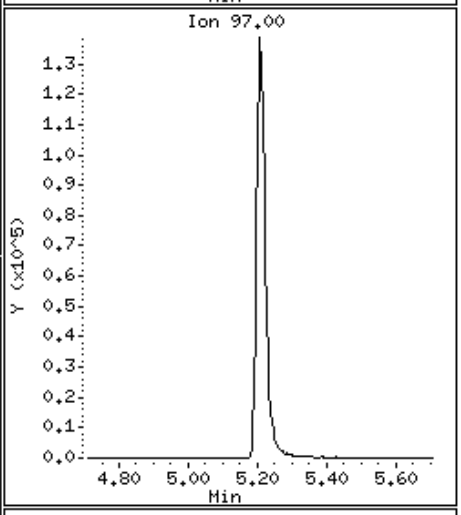


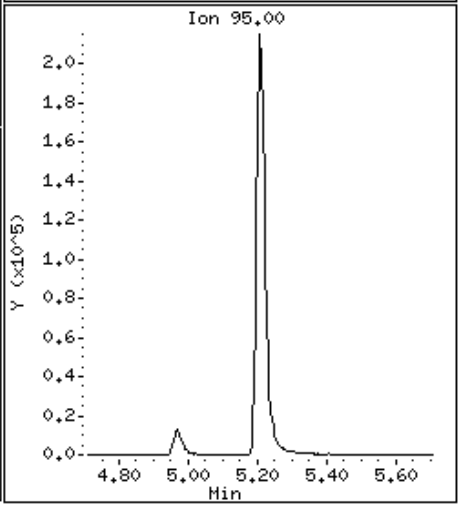












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070623.D Page 5

Date : 06-JUL-2022 23:56

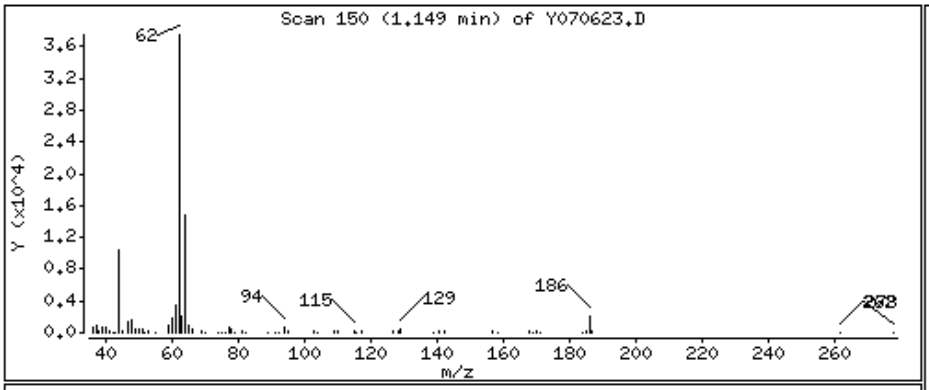
Client ID: HS22061645-05 Instrument: voa6.i

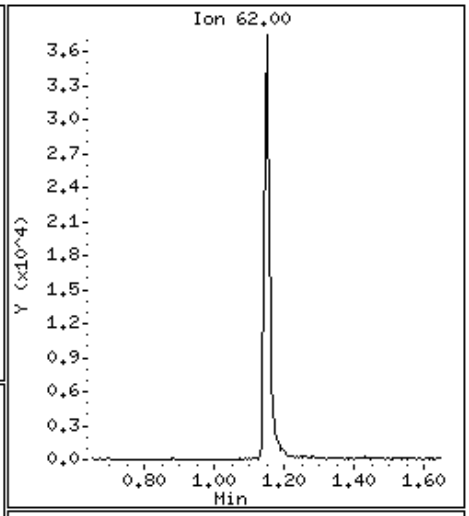
Sample Info: HS22061645-05;HS22061645-05;;;

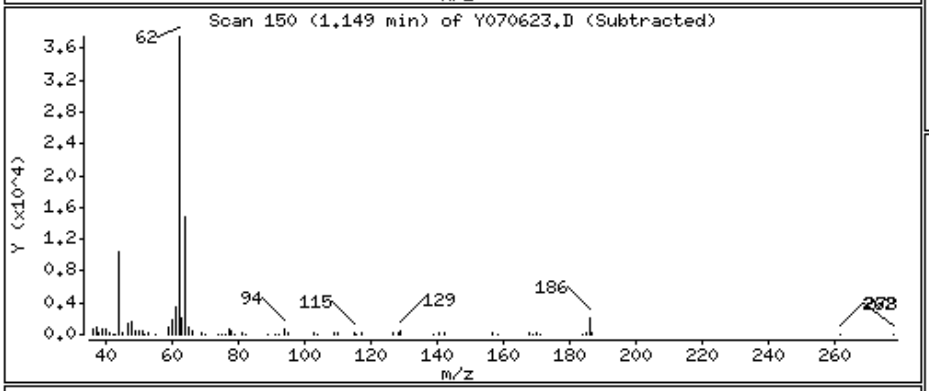
Purge Volume: 5.0 Operator: PC

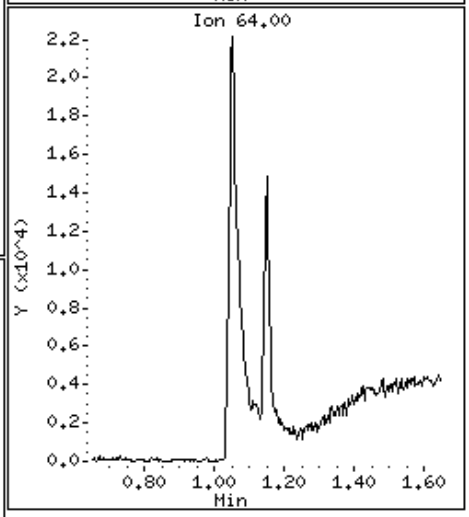
Column phase: DB624 Column diameter: 0.18

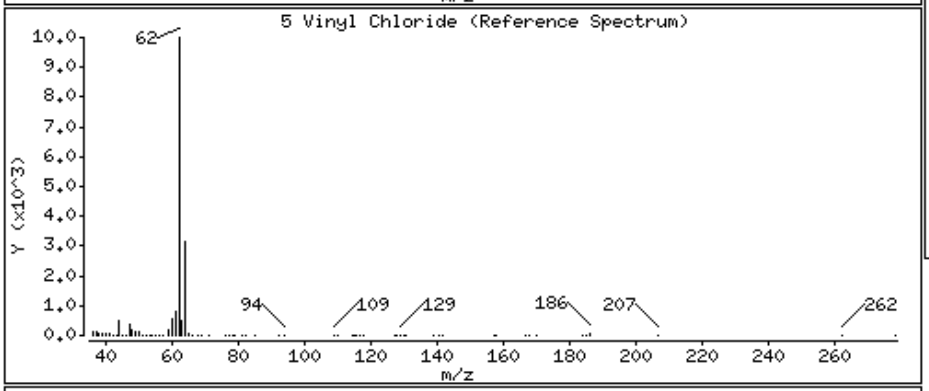
5 Vinyl Chloride Concentration: 540.08 ug/l

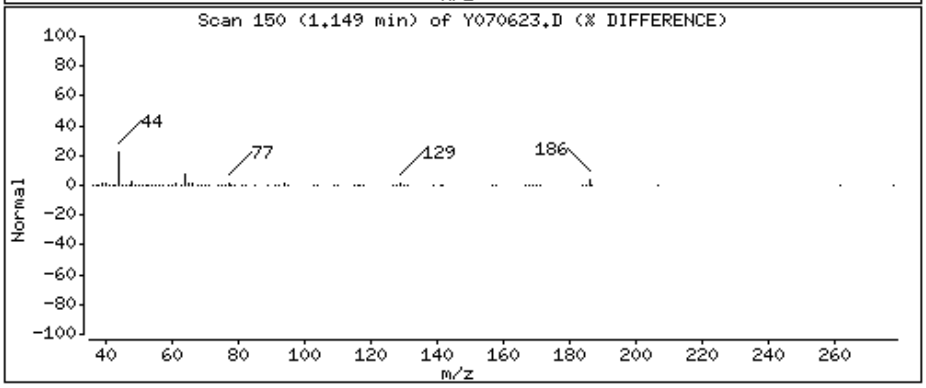












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070623.D
Inj Date : 06-JUL-2022 23:56
InstruID : voa6.i
LabSampID : HS22061645-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070624.D Page 1
Report Date: 15-Jul-2022 14:31

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070624.D
Lab Smp Id: HS22061645-06 Client Smp ID: HS22061645-06
Inj Date : 07-JUL-2022 00:17
Operator : PC Inst ID: voa6.i
Smp Info : HS22061645-06;HS22061645-06;;;
Misc Info : HS22052000V6;WATER;0;10;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 37
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

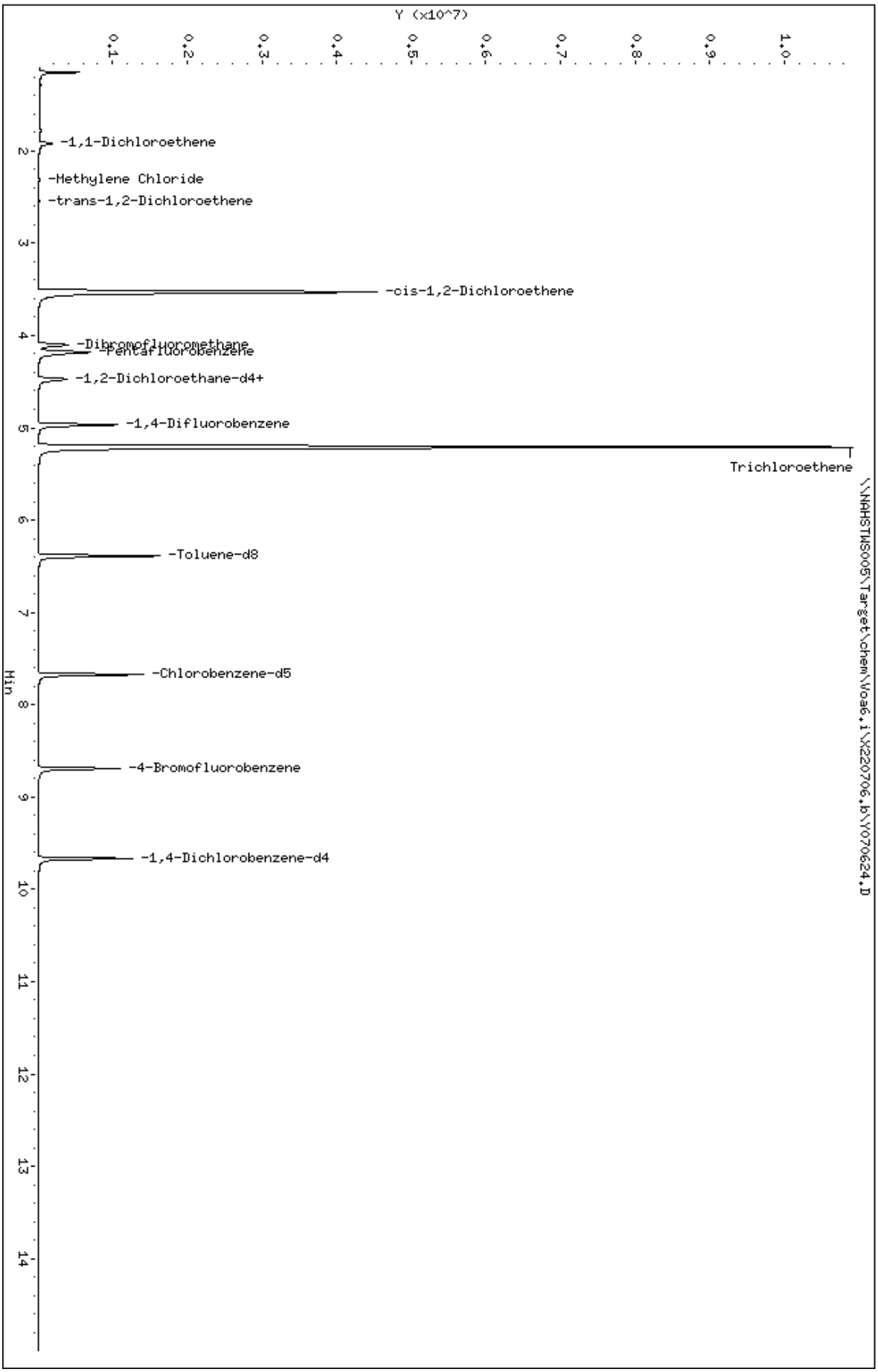
Name	Value	Description
DF	10.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	613585	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	894615	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	769686	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.666	(1.000)	346190	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	298927	52.0643	52.06
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	340611	50.9319	50.93
$ 30 Dibromofluoromethane	113	4.099	4.103	(0.979)	279368	49.3620	49.36
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1028024	53.7866	53.78
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	12205	2.07925	20.79(a)
33 1,2-Dichloroethane	62	4.571	4.560	(0.920)	4367	0.58906	5.89(a)
27 cis-1,2-Dichloroethene	96	3.529	3.533	(0.843)	2366651	333.248	3332.47(A)
17 Methylene Chloride	84	2.311	2.311	(0.552)	10299	2.05148	20.51(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	3633319	542.338	5423.38(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	348309	44.3819	443.81

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

A - Target compound detected but, quantitated amount exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070624.D
Date : 07-JUL-2022 00:17
Client ID: HS22061645-06
Sample Info: HS22061645-06;HS22061645-06;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070624.D

Date : 07-JUL-2022 00:17

Client ID: HS22061645-06

Instrument: voa6.i

Sample Info: HS22061645-06;HS22061645-06;;;

Purge Volume: 5.0

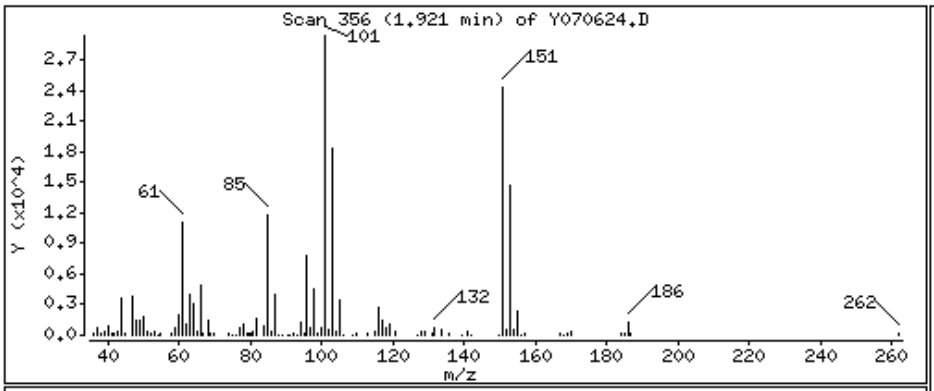
Operator: PC

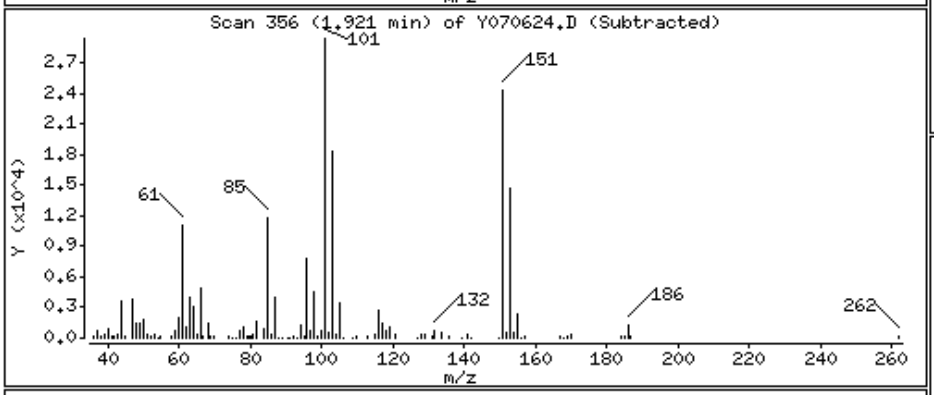
Column phase: DB624

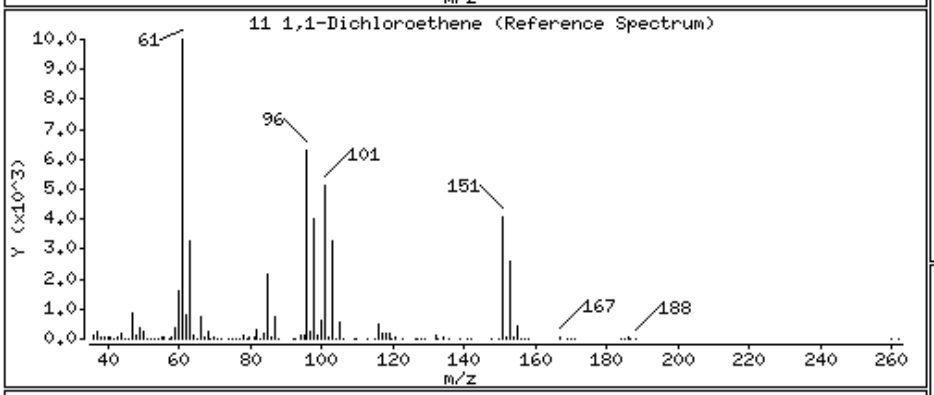
Column diameter: 0.18

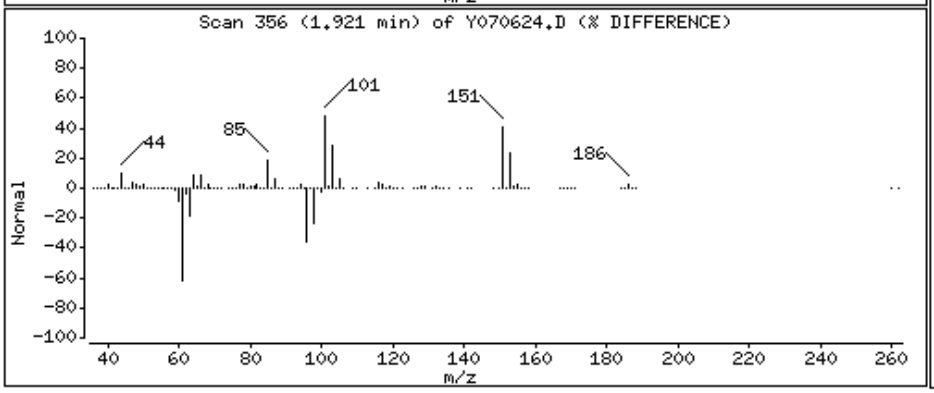
11 1,1-Dichloroethene

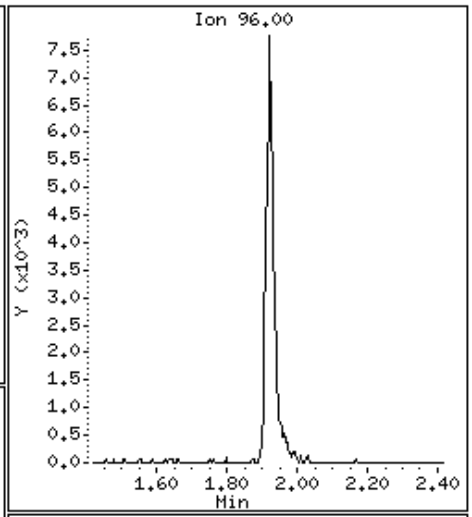
Concentration: 20.79 ug/l

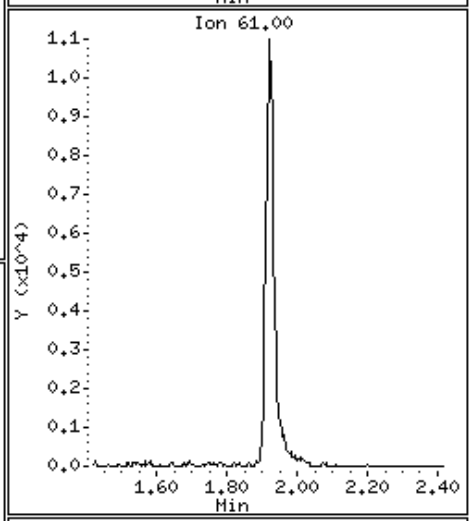


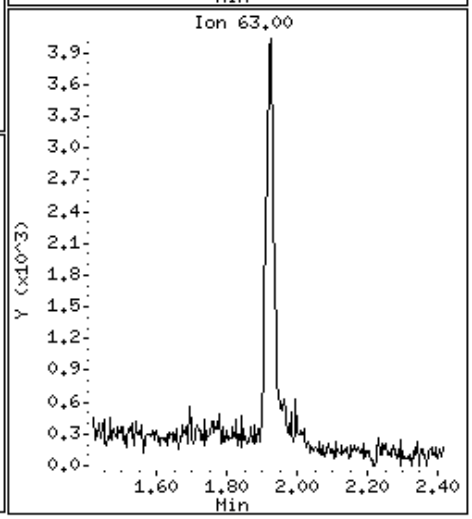












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070624.D Page 3

Date : 07-JUL-2022 00:17

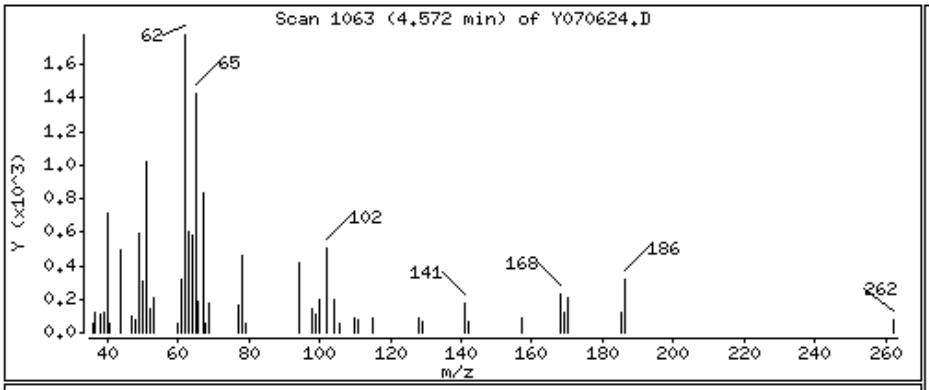
Client ID: HS22061645-06 Instrument: voa6.i

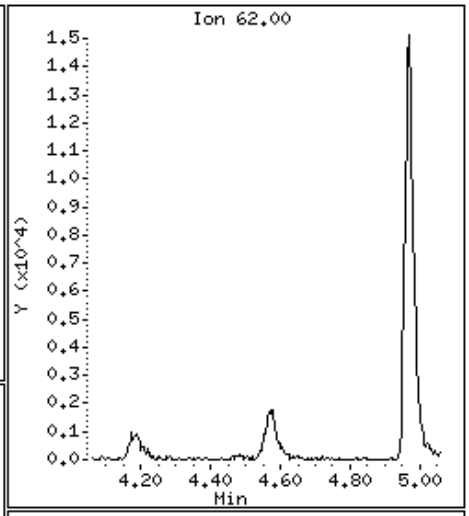
Sample Info: HS22061645-06;HS22061645-06;;;

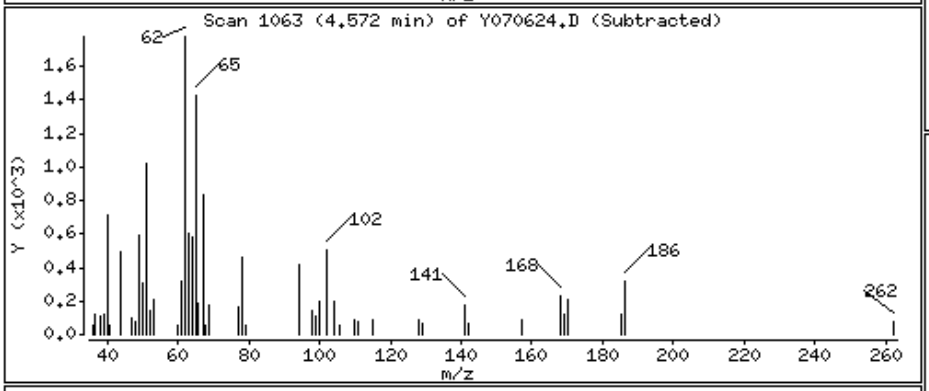
Purge Volume: 5.0 Operator: PC

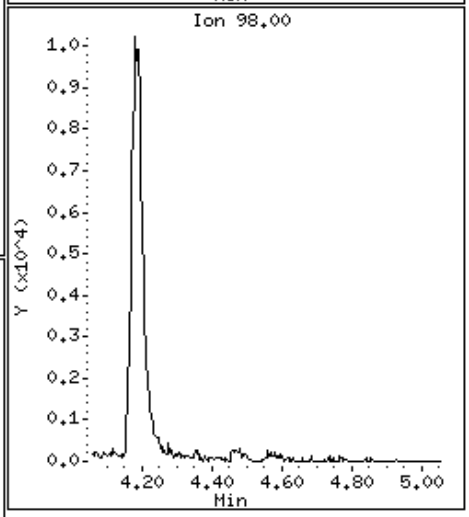
Column phase: DB624 Column diameter: 0.18

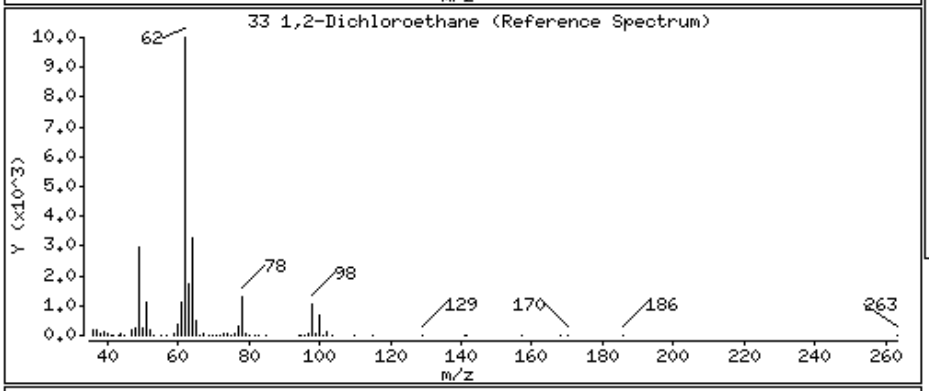
33 1,2-Dichloroethane Concentration: 5.89 ug/l

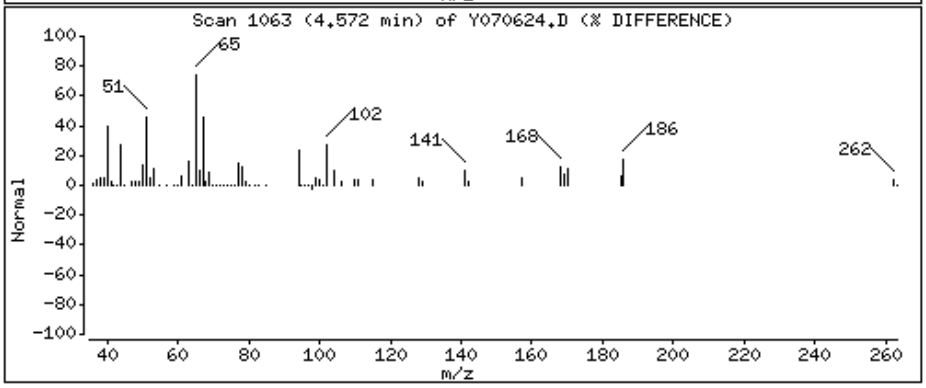












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070624.D Page 4

Date : 07-JUL-2022 00:17

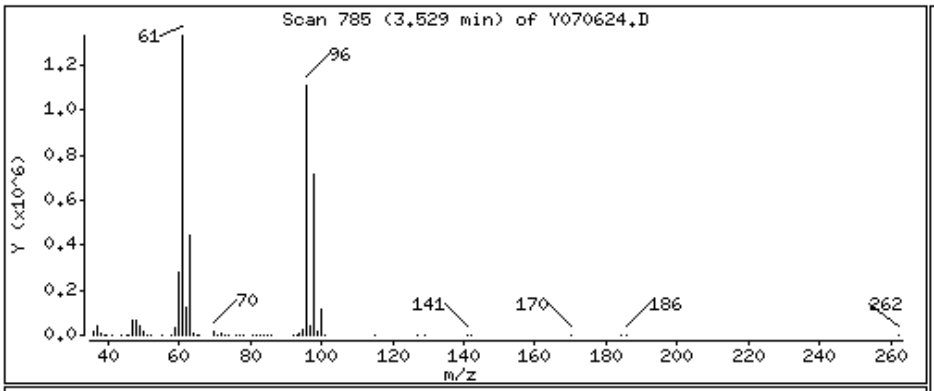
Client ID: HS22061645-06 Instrument: voa6.i

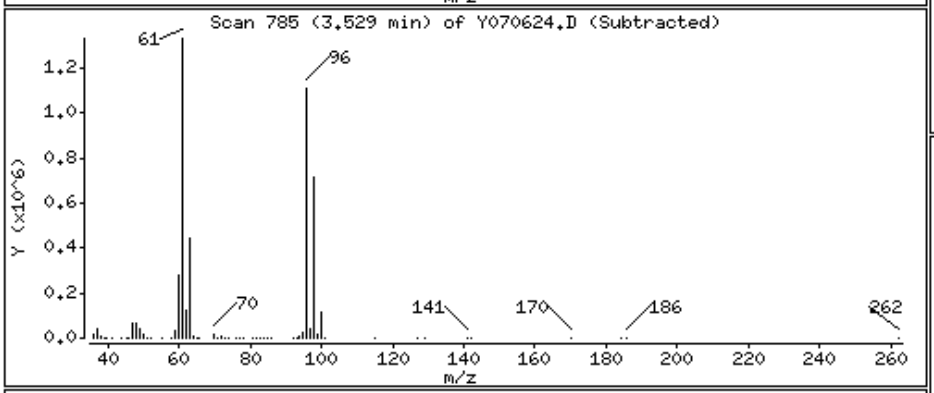
Sample Info: HS22061645-06;HS22061645-06;;;

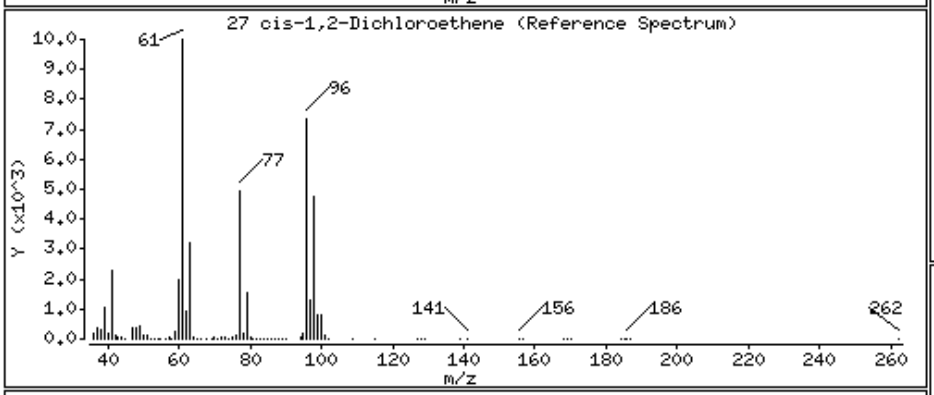
Purge Volume: 5.0 Operator: PC

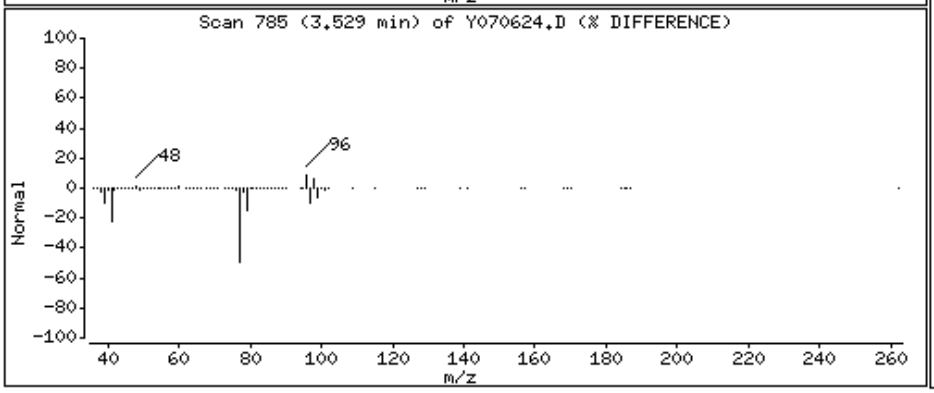
Column phase: DB624 Column diameter: 0.18

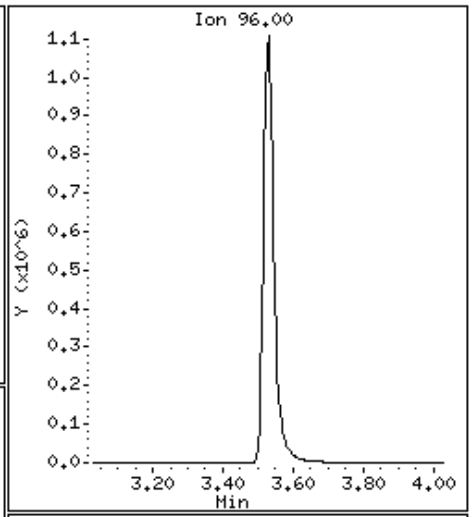
27 cis-1,2-Dichloroethene Concentration: 3332.47 ug/l

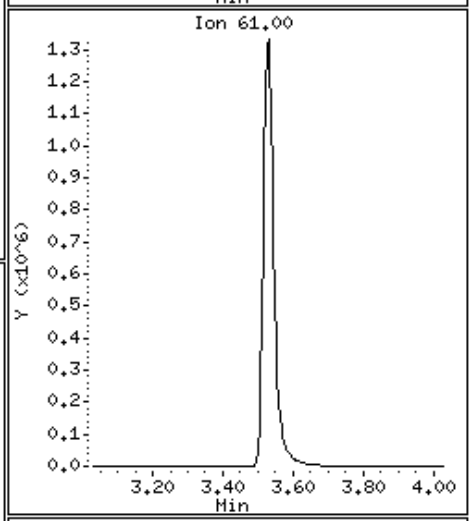


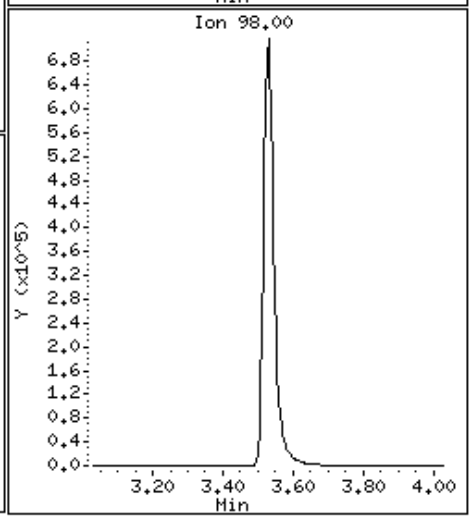












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070624.D Page 5

Date : 07-JUL-2022 00:17

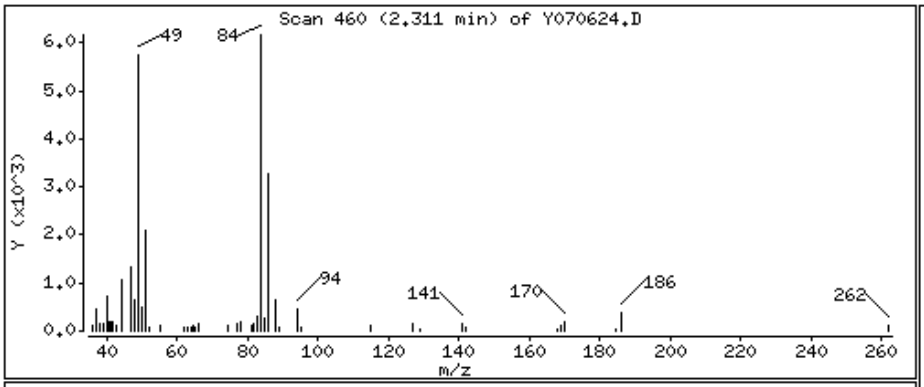
Client ID: HS22061645-06 Instrument: voa6.i

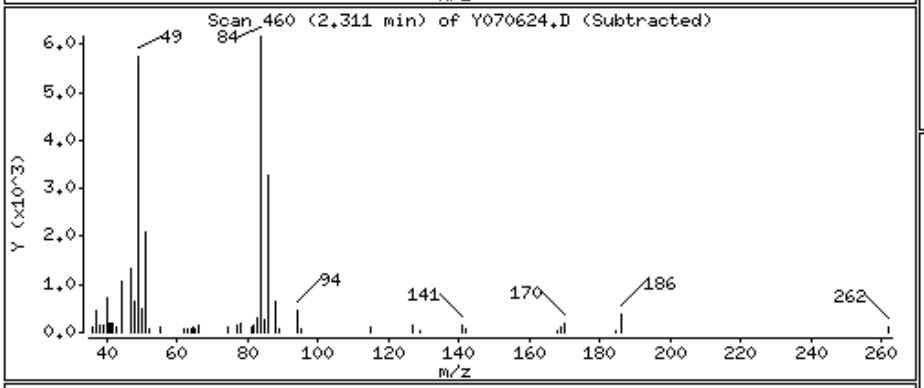
Sample Info: HS22061645-06;HS22061645-06;;;

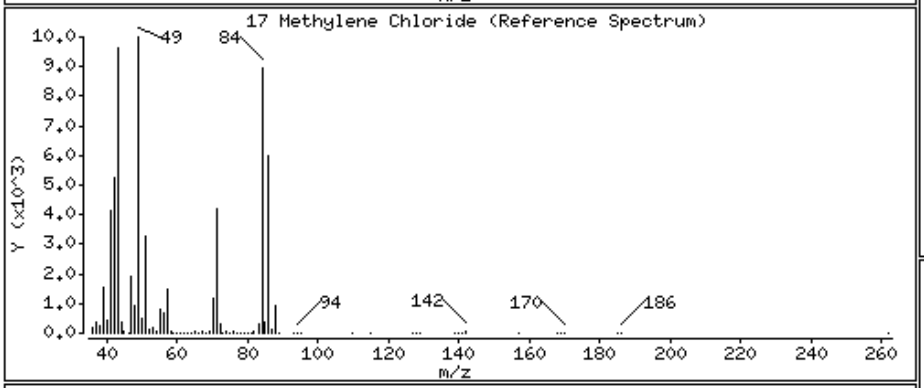
Purge Volume: 5.0 Operator: PC

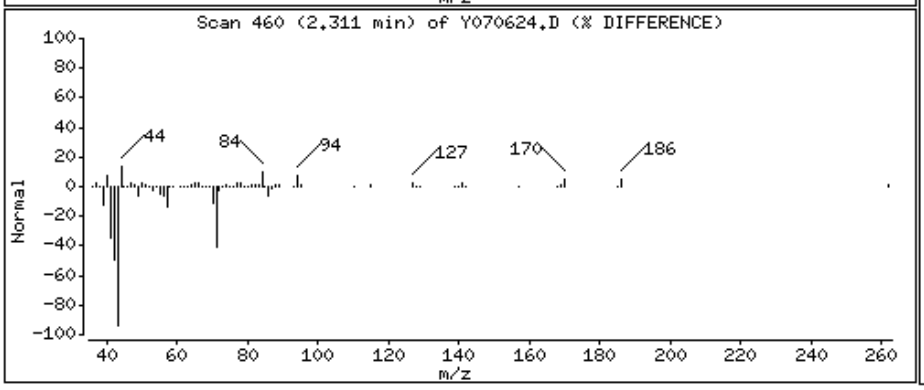
Column phase: DB624 Column diameter: 0.18

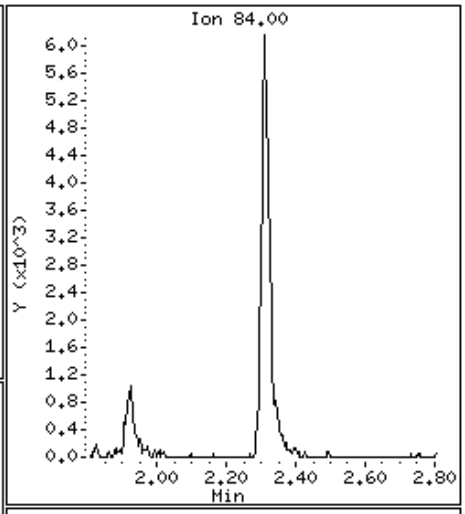
17 Methylene Chloride Concentration: 20.51 ug/l

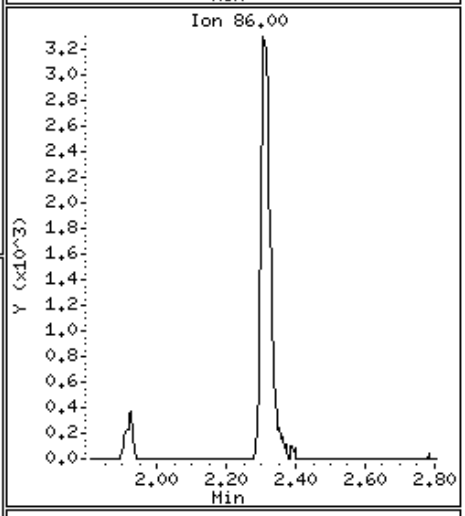


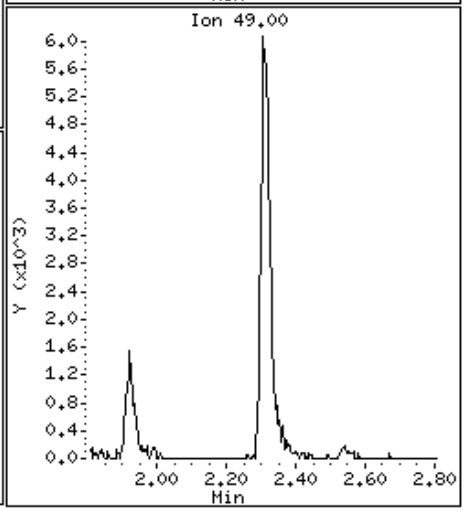












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070624.D Page 6

Date : 07-JUL-2022 00:17

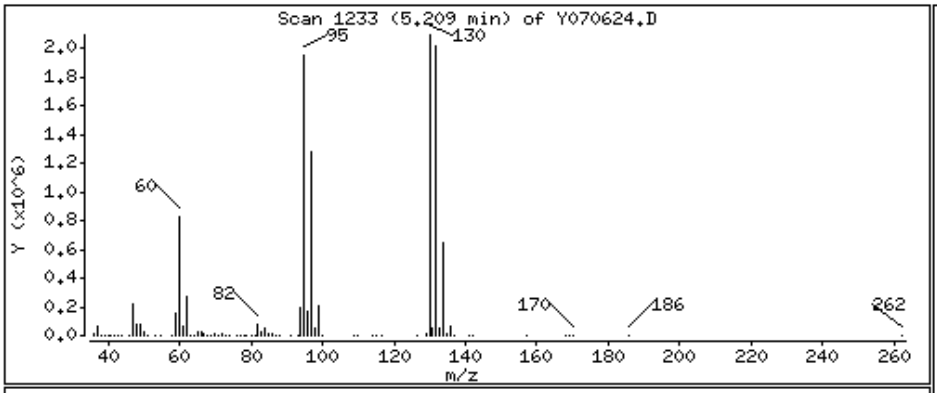
Client ID: HS22061645-06 Instrument: voa6.i

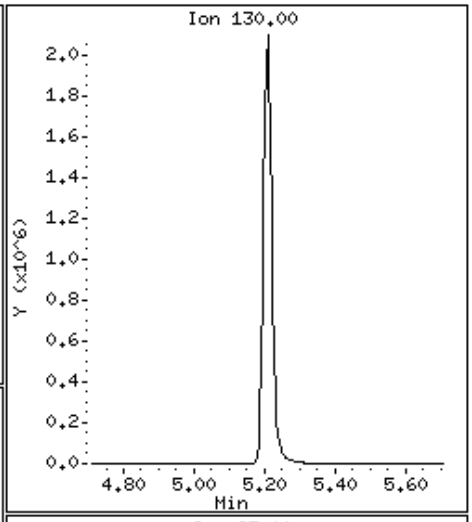
Sample Info: HS22061645-06;HS22061645-06;;;

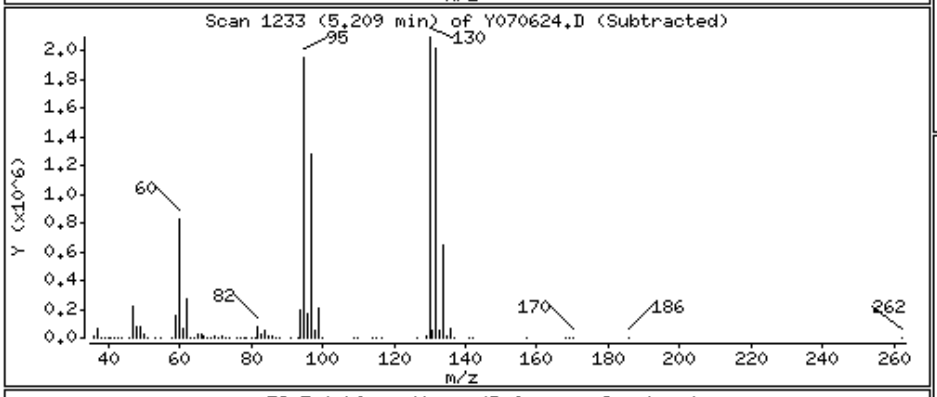
Purge Volume: 5.0 Operator: PC

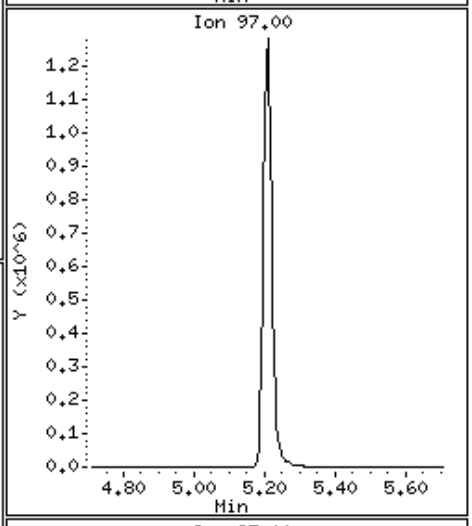
Column phase: DB624 Column diameter: 0.18

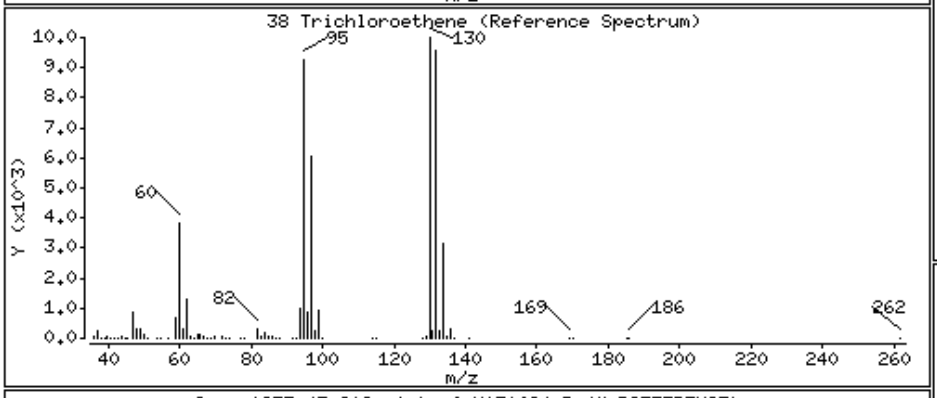
38 Trichloroethene Concentration: 5423.38 ug/l

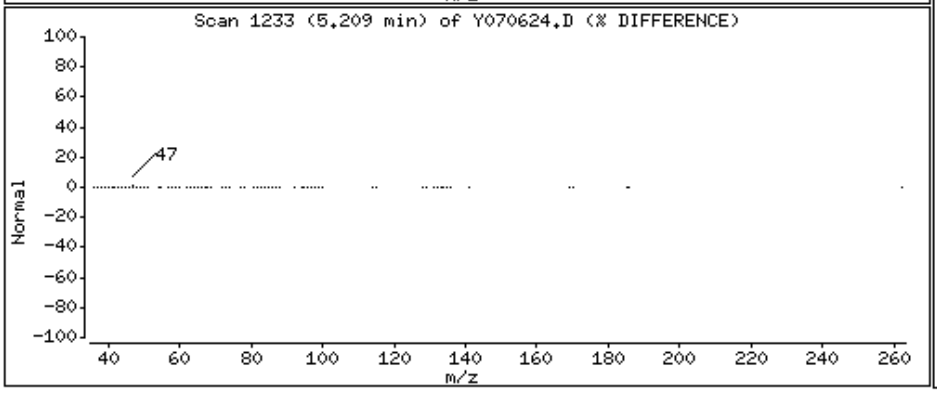


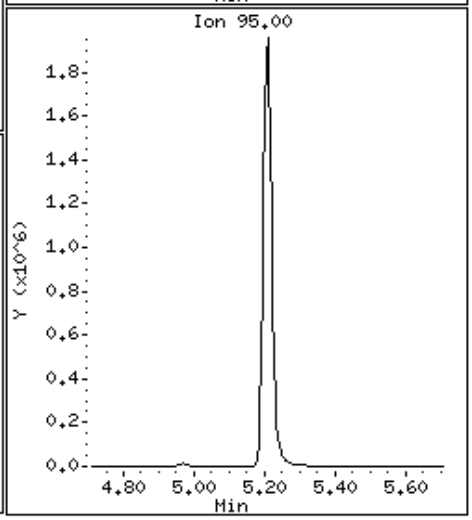












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070624.D

Date : 07-JUL-2022 00:17

Client ID: HS22061645-06

Instrument: voa6.i

Sample Info: HS22061645-06;HS22061645-06;;;

Purge Volume: 5.0

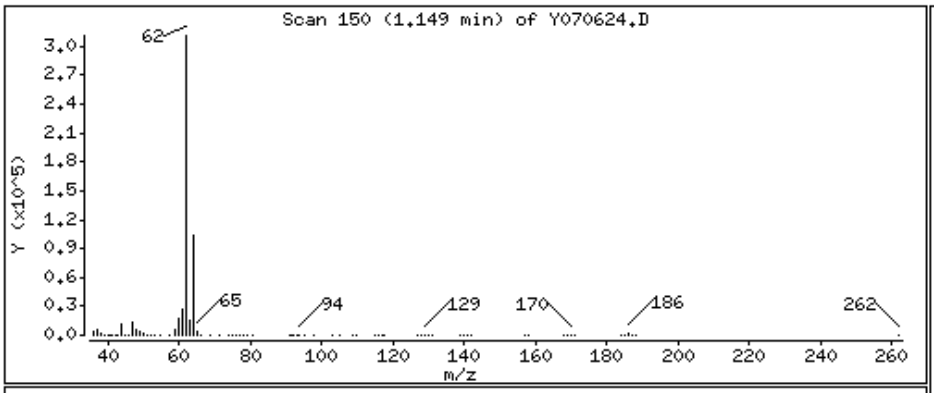
Operator: PC

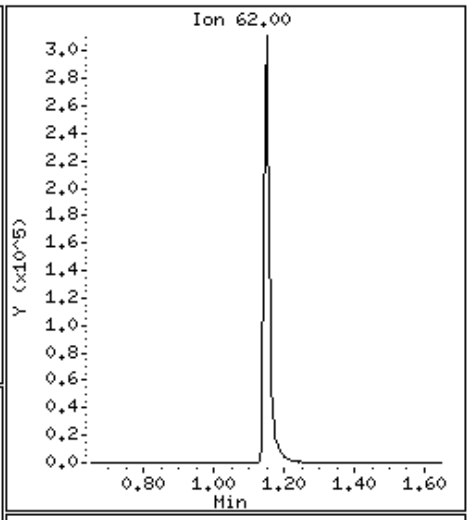
Column phase: DB624

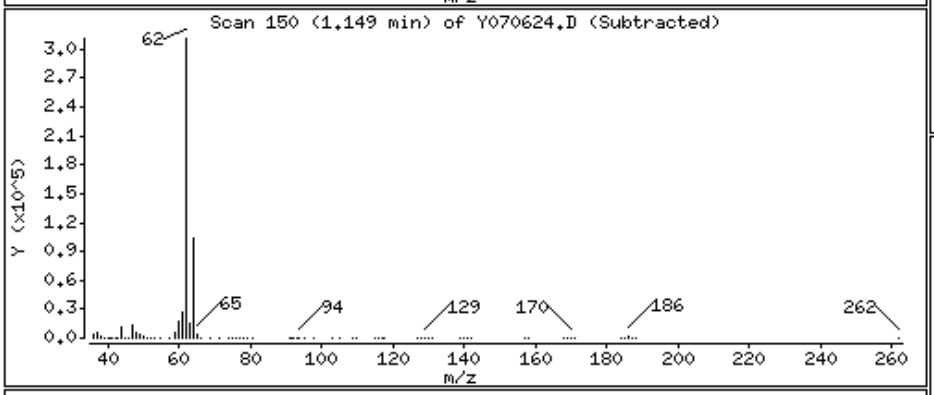
Column diameter: 0.18

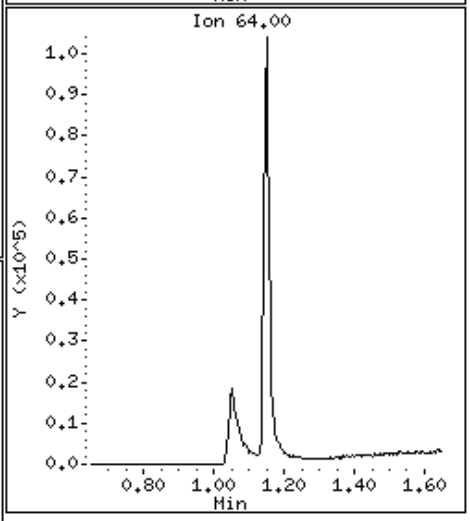
5 Vinyl Chloride

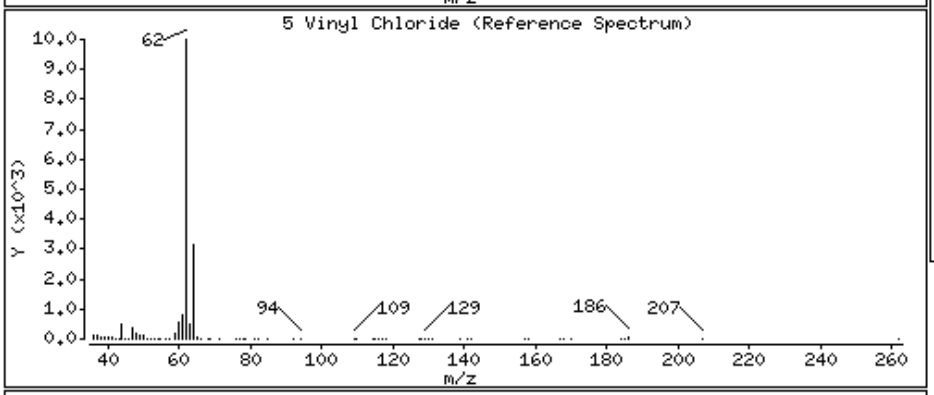
Concentration: 443.81 ug/l

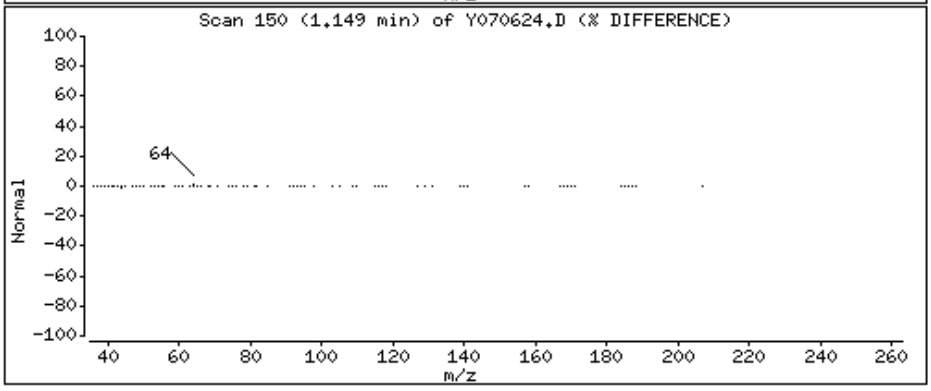












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070624.D
Inj Date : 07-JUL-2022 00:17
InstruID : voa6.i
LabSampID : HS22061645-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070625.D Page 1
Report Date: 15-Jul-2022 14:31

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070625.D
Lab Smp Id: HS22061645-06 Client Smp ID: HS22061645-06
Inj Date : 07-JUL-2022 00:39
Operator : PC Inst ID: voa6.i
Smp Info : HS22061645-06;HS22061645-06;;;
Misc Info : HS22052000V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 38
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

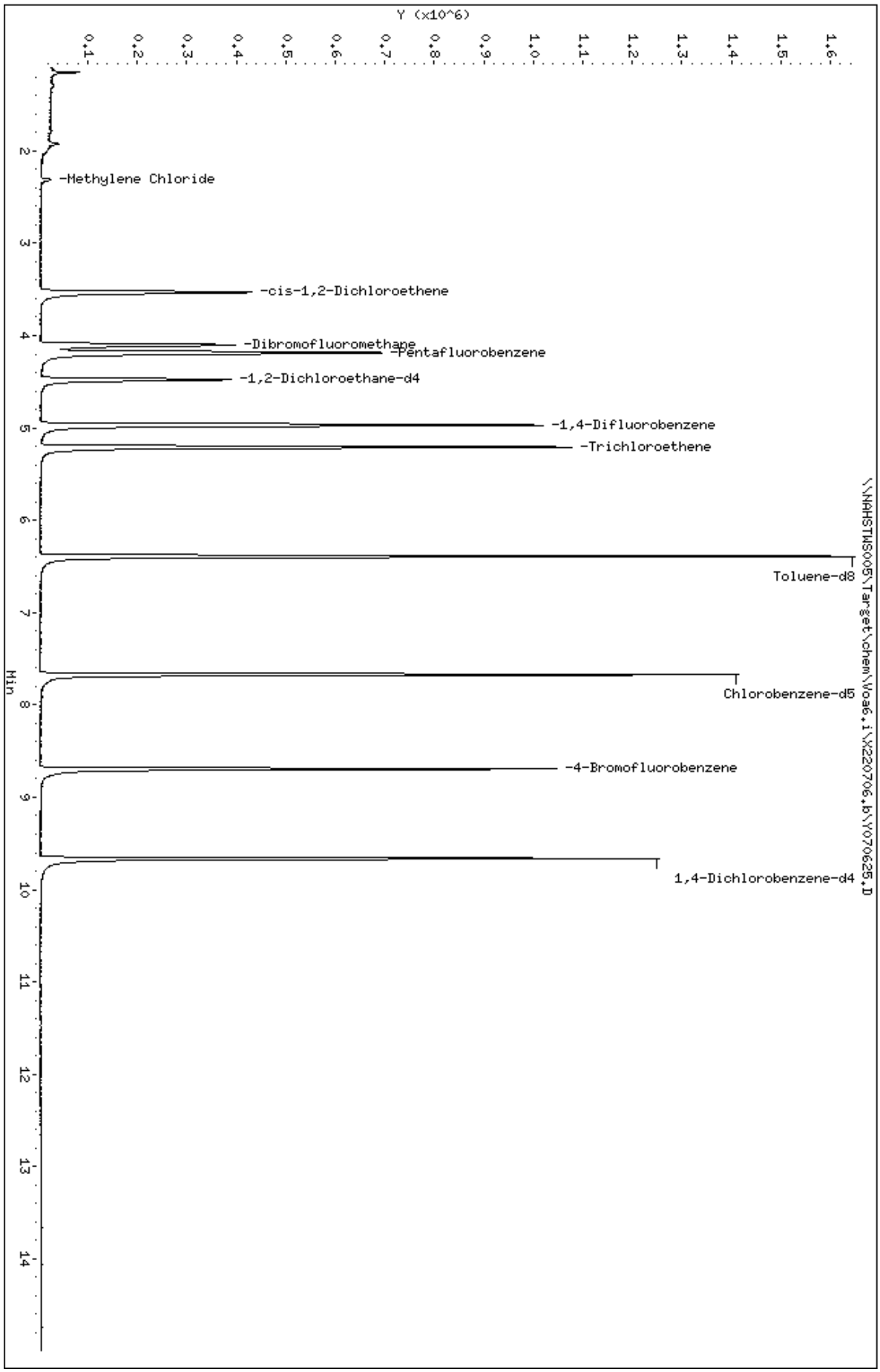
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	100.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	619502	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	882965	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	751101	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	337355	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	296727	51.1679	51.16
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	333434	51.0934	51.09
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	281267	49.2220	49.22
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1029897	55.2179	55.21
27 cis-1,2-Dichloroethene	96	3.529	3.533	(0.843)	234321	32.6796	3267.95
17 Methylene Chloride	84	2.311	2.311	(0.552)	10249	2.03100	203.10(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	377643	57.1138	5711.37
5 Vinyl Chloride	62	1.149	1.149	(0.275)	36852	4.65087	465.08(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070625.D
Date : 07-JUL-2022 00:39
Client ID: HS22061645-06
Sample Info: HS22061645-06;HS22061645-06;;;
Purge Volume: 5.0
Column phase: DB624
Instrument: voa6.i
Operator: PC
Column diameter: 0.18
Page 1
Y (x10^6)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
2
3
4
5
6
7
8
9
10
11
12
13
14
Min
-Methylene Chloride
-cis-1,2-Dichloroethene
-Dibromofluoromethane
-Pentafluorobenzene
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene
-Trichloroethene
Toluene-d8
Chlorobenzene-d5
-4-Bromofluorobenzene
1,4-Dichlorobenzene-d4
\\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070625.D

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070625.D

Date : 07-JUL-2022 00:39

Client ID: HS22061645-06

Instrument: voa6.i

Sample Info: HS22061645-06;HS22061645-06;;;

Purge Volume: 5.0

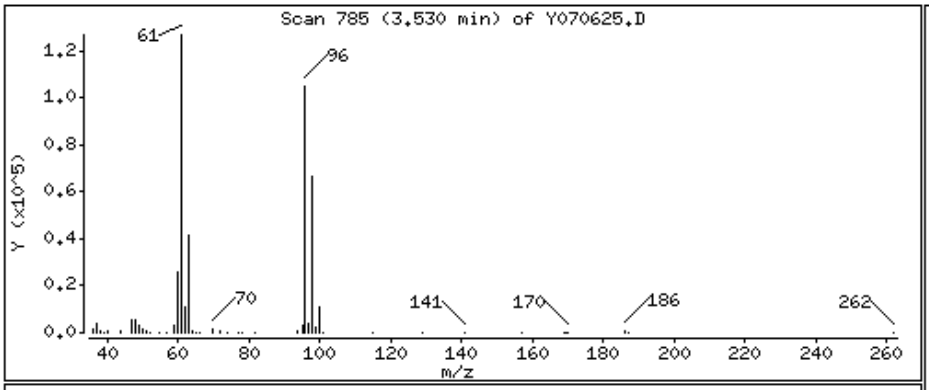
Operator: PC

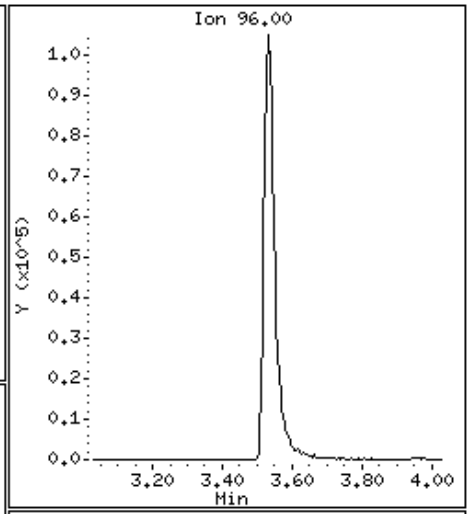
Column phase: DB624

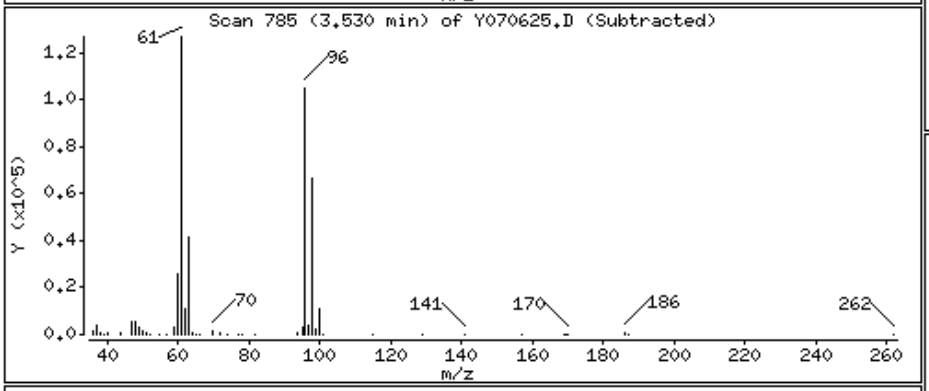
Column diameter: 0.18

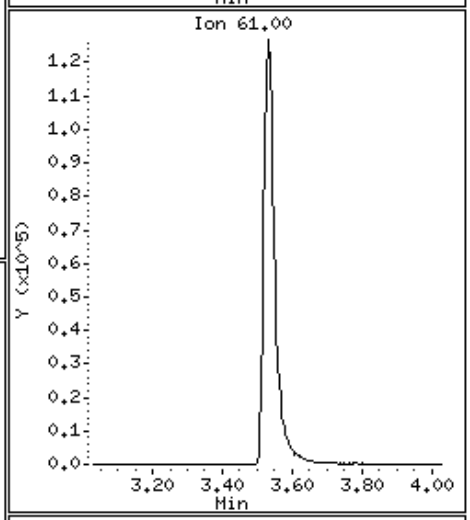
27 cis-1,2-Dichloroethene

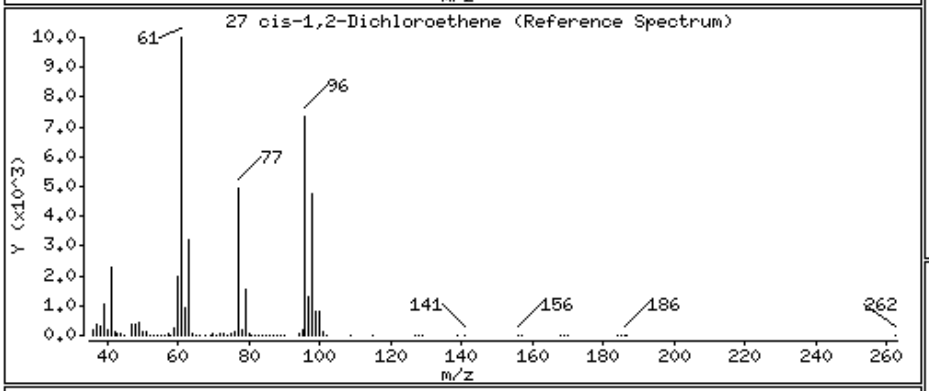
Concentration: 3267.95 ug/l

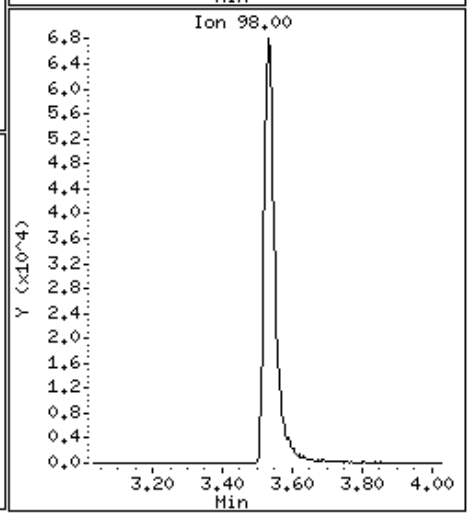


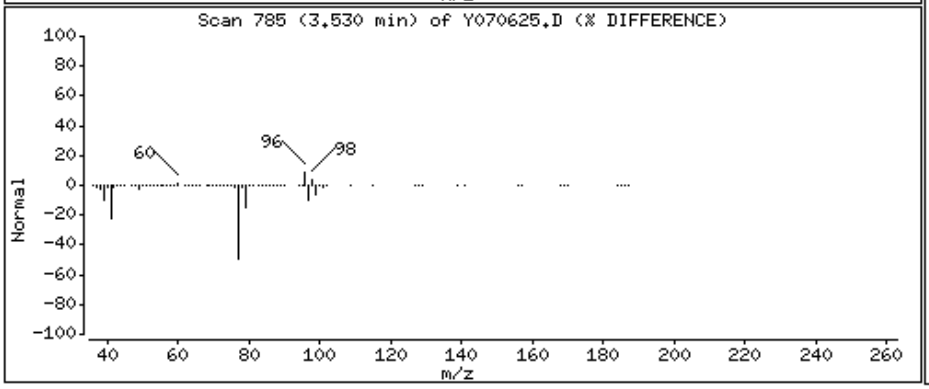












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070625.D Page 3

Date : 07-JUL-2022 00:39

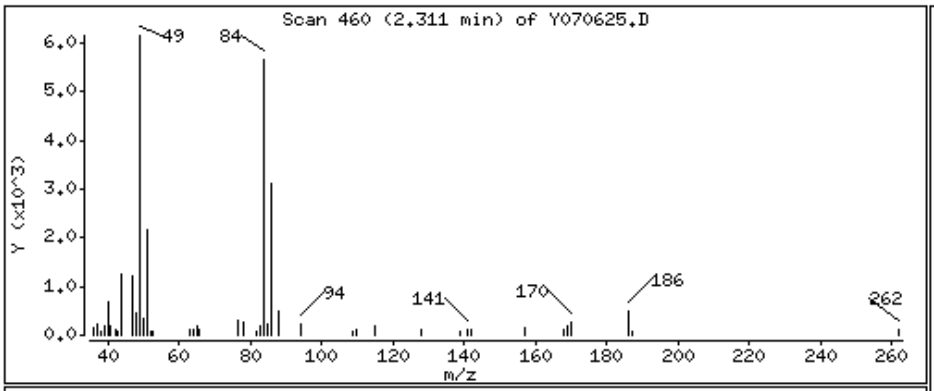
Client ID: HS22061645-06 Instrument: voa6.i

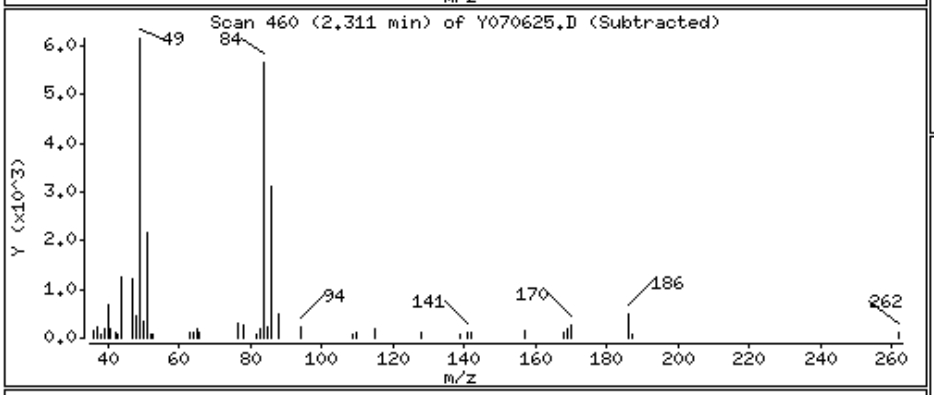
Sample Info: HS22061645-06;HS22061645-06;;;

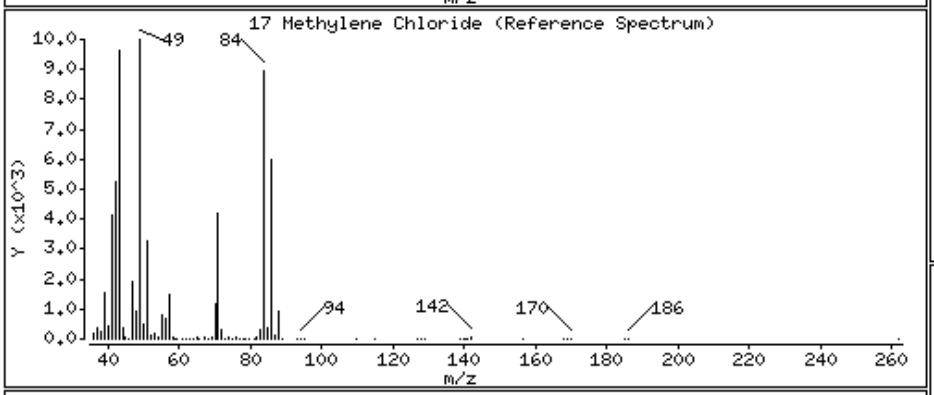
Purge Volume: 5.0 Operator: PC

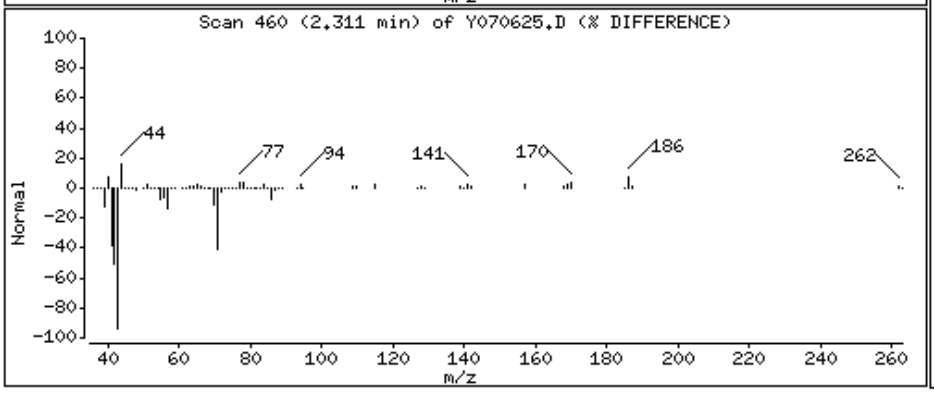
Column phase: DB624 Column diameter: 0.18

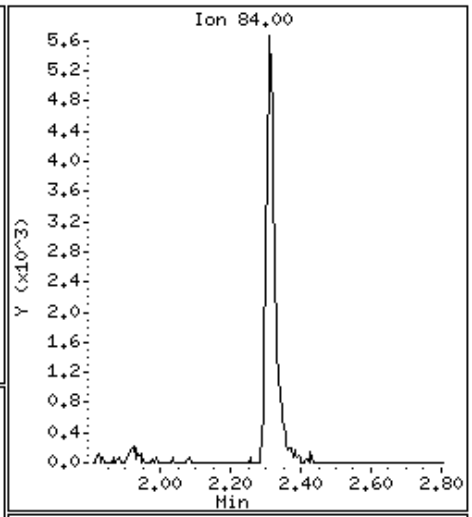
17 Methylene Chloride Concentration: 203.10 ug/l

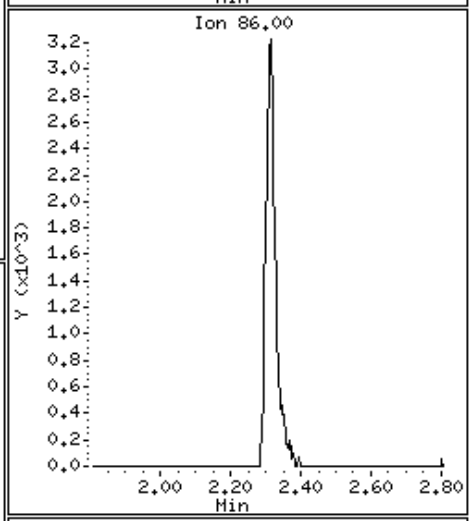


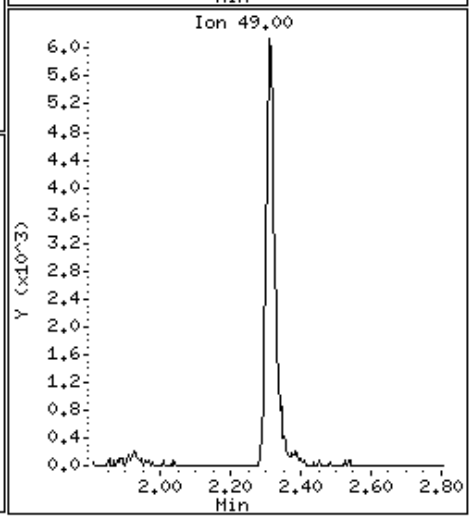












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070625.D

Date : 07-JUL-2022 00:39

Client ID: HS22061645-06

Instrument: voa6.i

Sample Info: HS22061645-06;HS22061645-06;;;

Purge Volume: 5.0

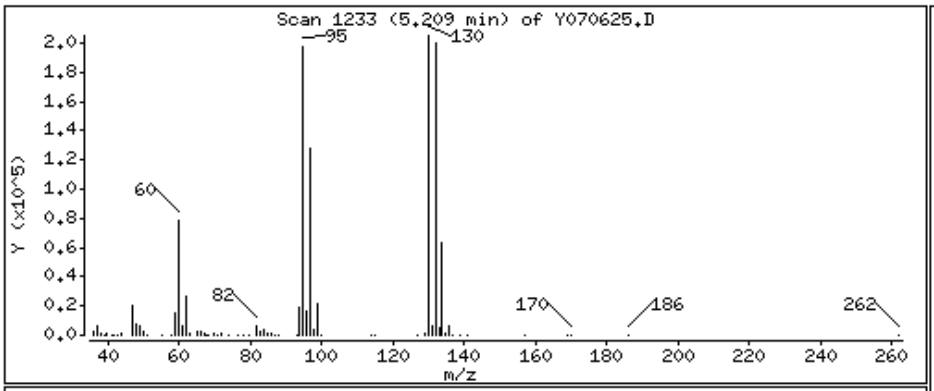
Operator: PC

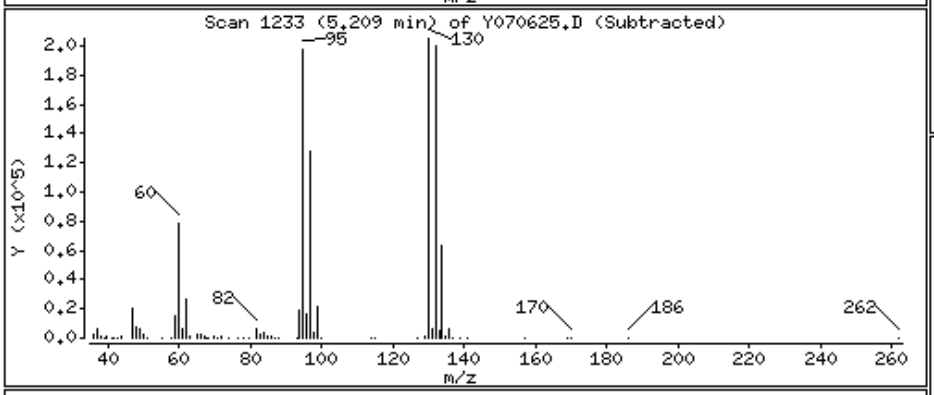
Column phase: DB624

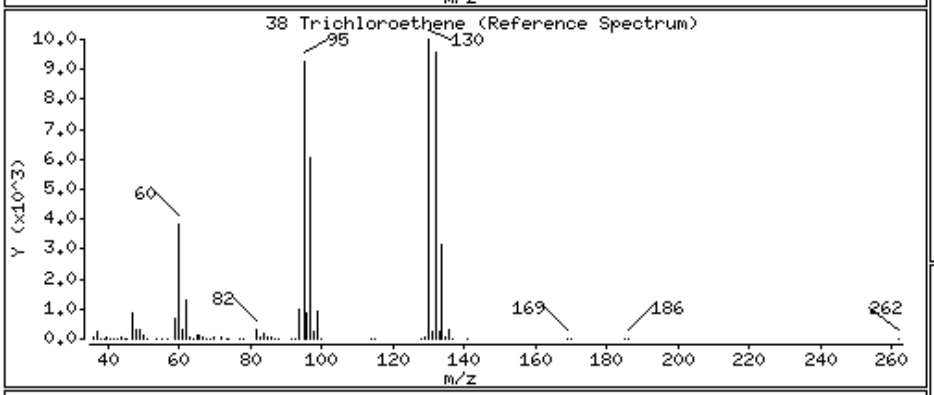
Column diameter: 0.18

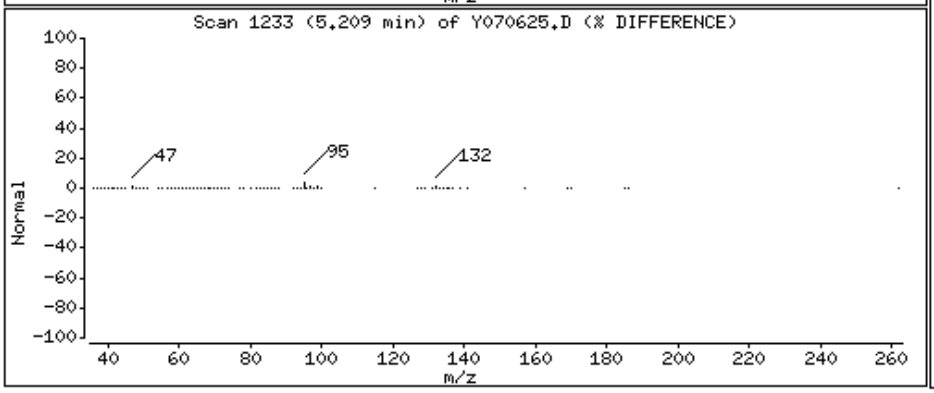
38 Trichloroethene

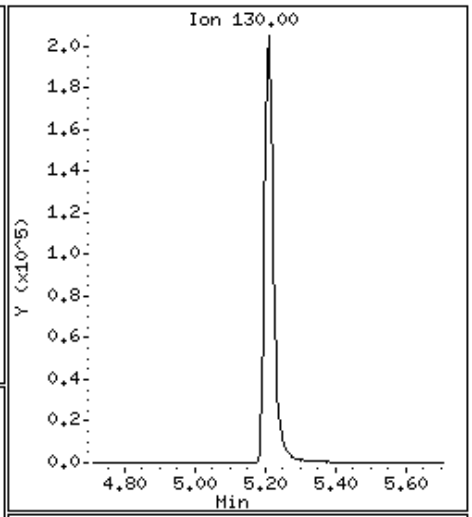
Concentration: 5711.37 ug/l

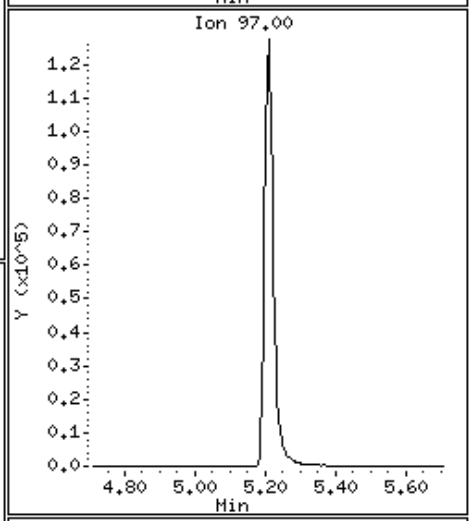


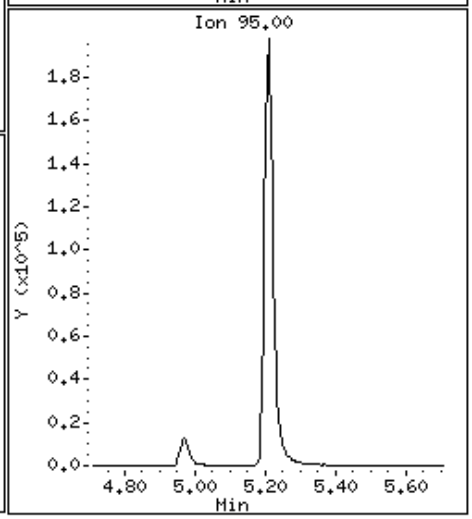












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070625.D Page 5

Date : 07-JUL-2022 00:39

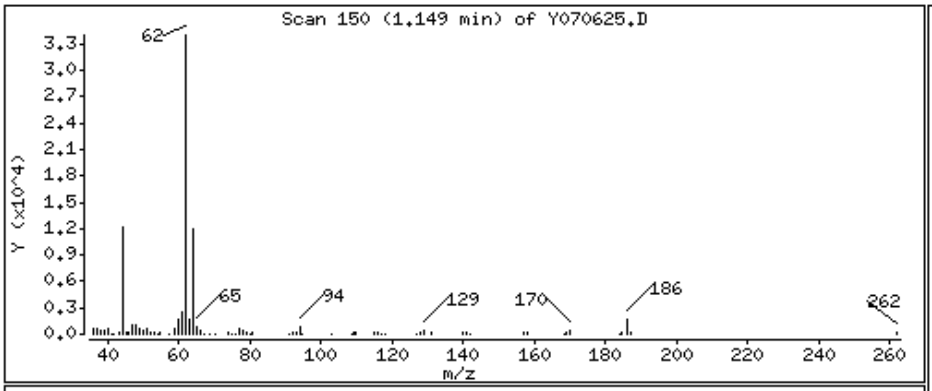
Client ID: HS22061645-06 Instrument: voa6.i

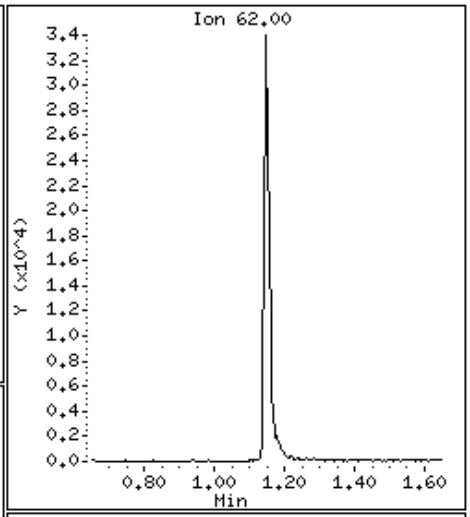
Sample Info: HS22061645-06;HS22061645-06;;;

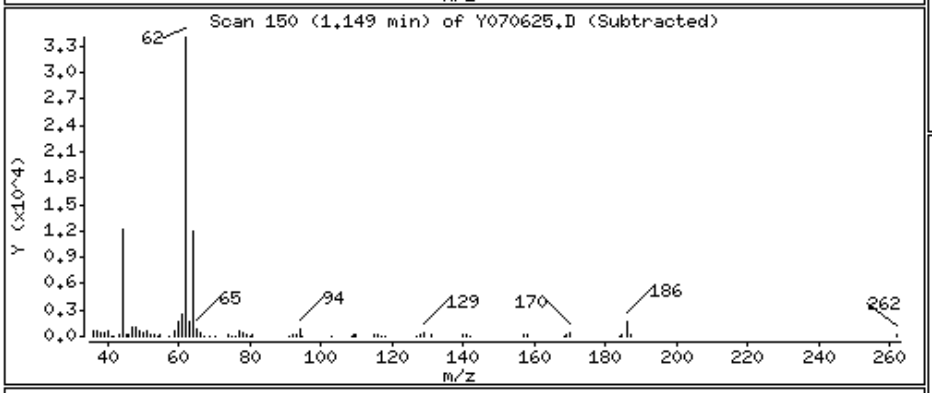
Purge Volume: 5.0 Operator: PC

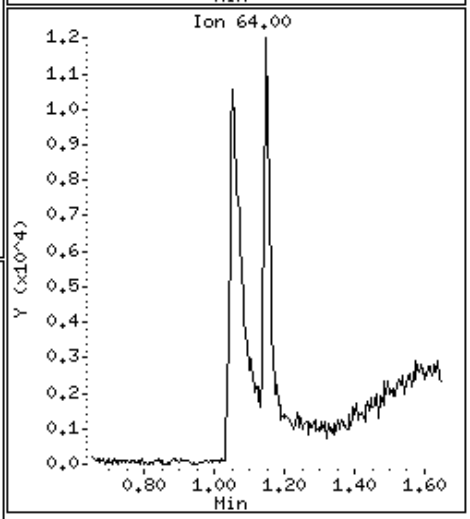
Column phase: DB624 Column diameter: 0.18

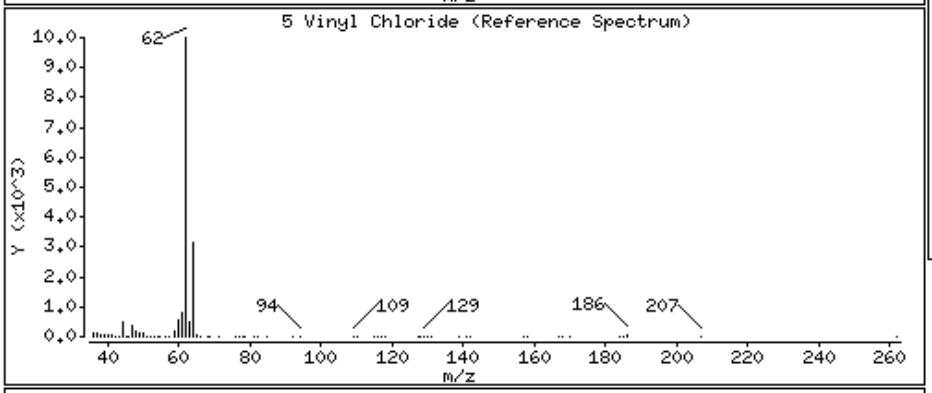
5 Vinyl Chloride Concentration: 465.08 ug/l

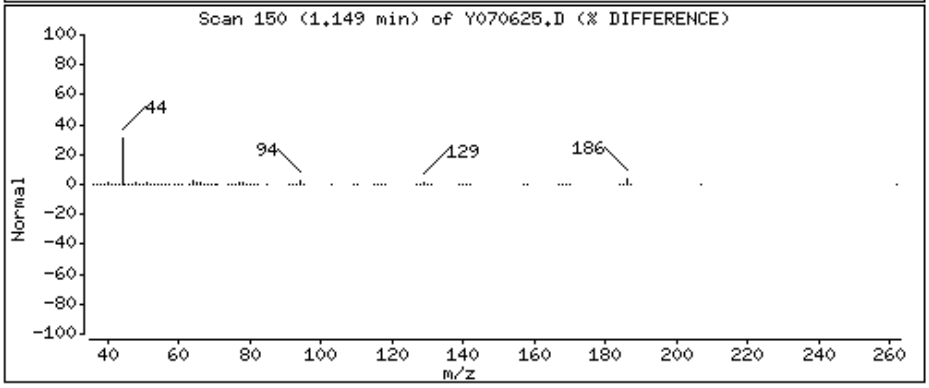












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070625.D
Inj Date : 07-JUL-2022 00:39
InstruID : voa6.i
LabSampID : HS22061645-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070628.D Page 1
Report Date: 15-Jul-2022 14:31

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070628.D
Lab Smp Id: HS22061645-10 Client Smp ID: HS22061645-10
Inj Date : 07-JUL-2022 01:42
Operator : PC Inst ID: voa6.i
Smp Info : HS22061645-10;HS22061645-10;;;
Misc Info : HS22052000V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 41
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

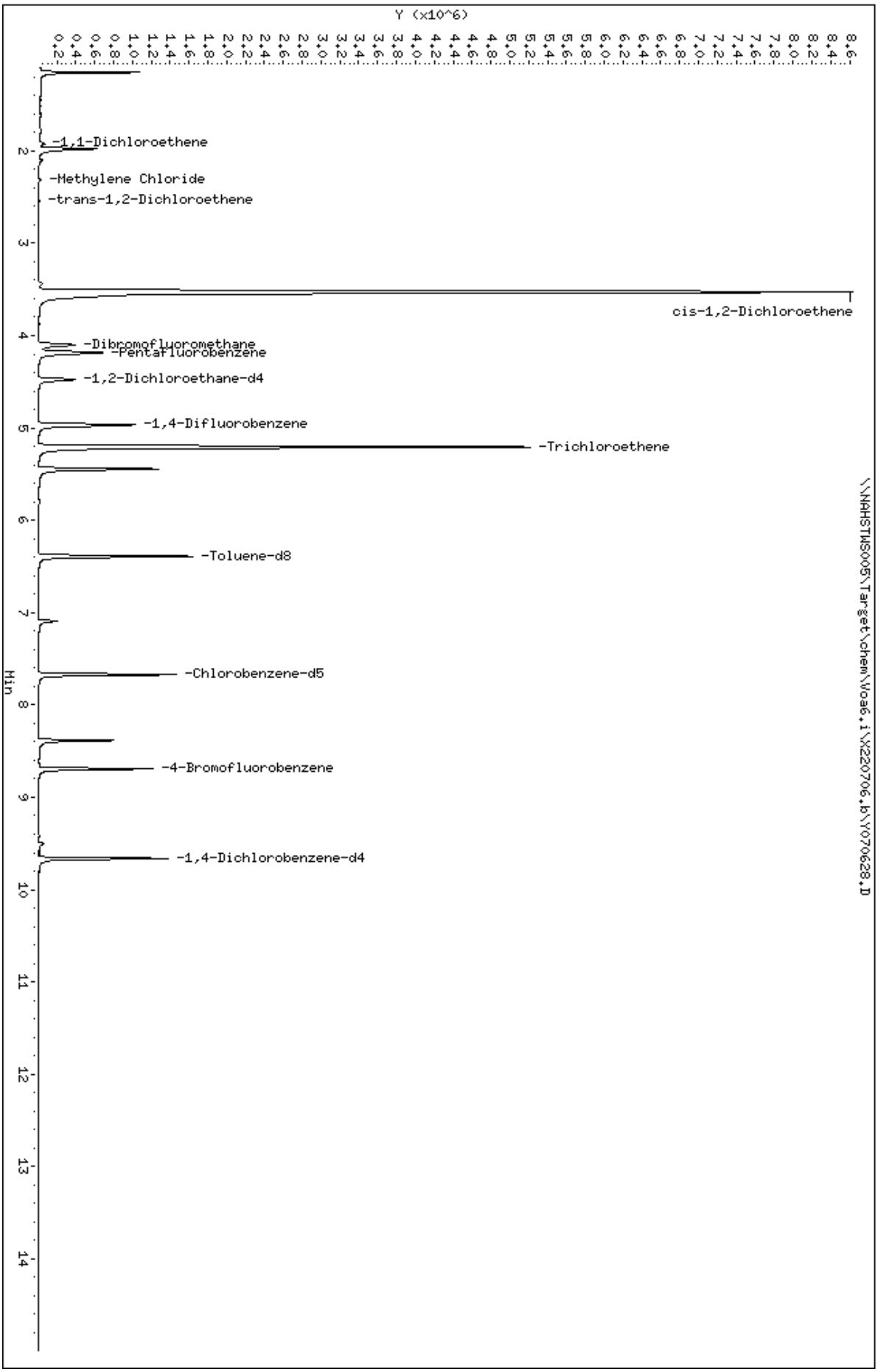
Name	Value	Description
DF	25.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	615231	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	879995	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	779223	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	360876	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	293449	50.9490	50.94
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	351290	51.8917	51.89
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	274650	48.3929	48.39
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1034363	53.4559	53.45
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	10392	1.76565	44.14(a)
27 cis-1,2-Dichloroethene	96	3.529	3.533	(0.843)	4534641	636.814	15920.35(A)
17 Methylene Chloride	84	2.311	2.311	(0.552)	9636	1.95611	48.90(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	1776533	269.585	6739.62(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	715867	90.9725	2274.31

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\Woa6.i\X220706.b\Y070628.D
Date : 07-JUL-2022 01:42
Client ID: HS2206l645-10
Sample Info: HS2206l645-10;HS2206l645-10;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: woa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070628.D Page 2

Date : 07-JUL-2022 01:42

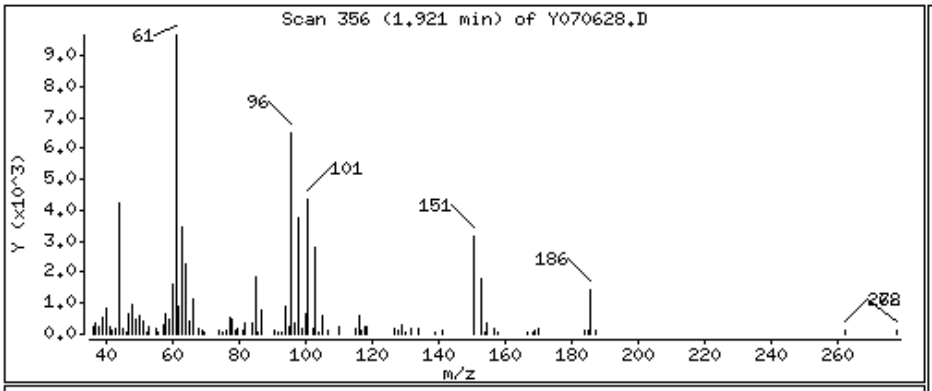
Client ID: HS22061645-10 Instrument: voa6.i

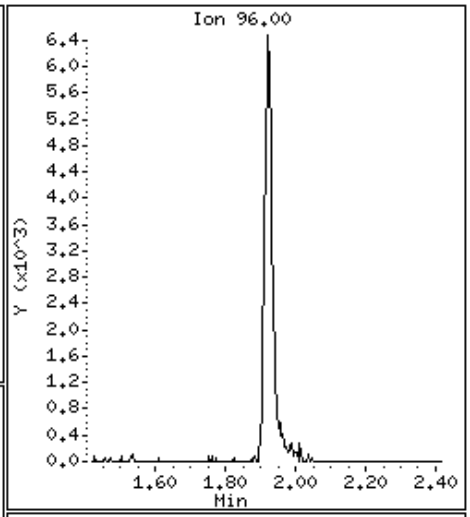
Sample Info: HS22061645-10;HS22061645-10;;;

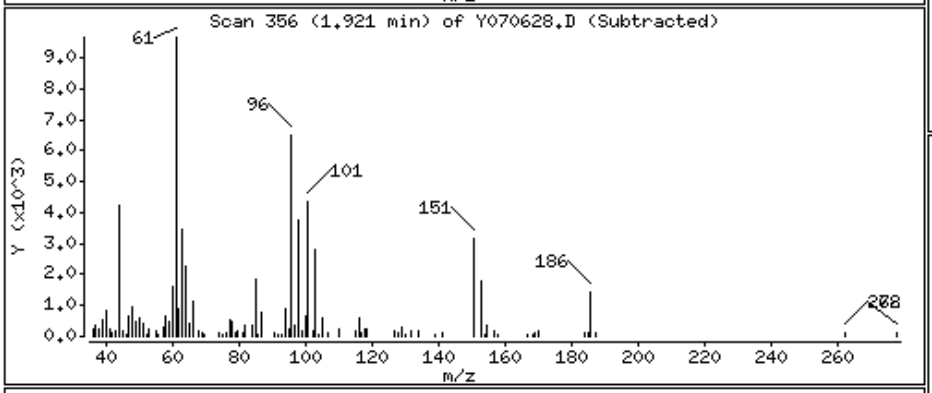
Purge Volume: 5.0 Operator: PC

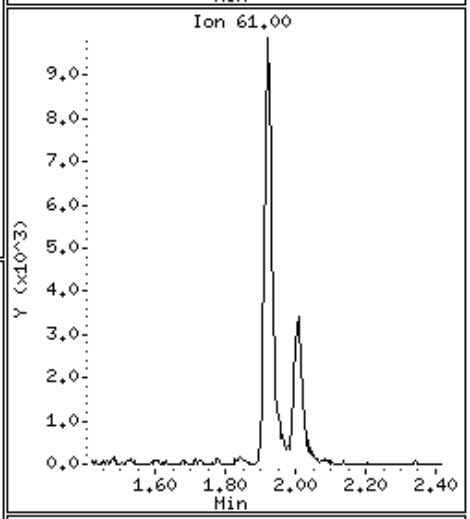
Column phase: DB624 Column diameter: 0.18

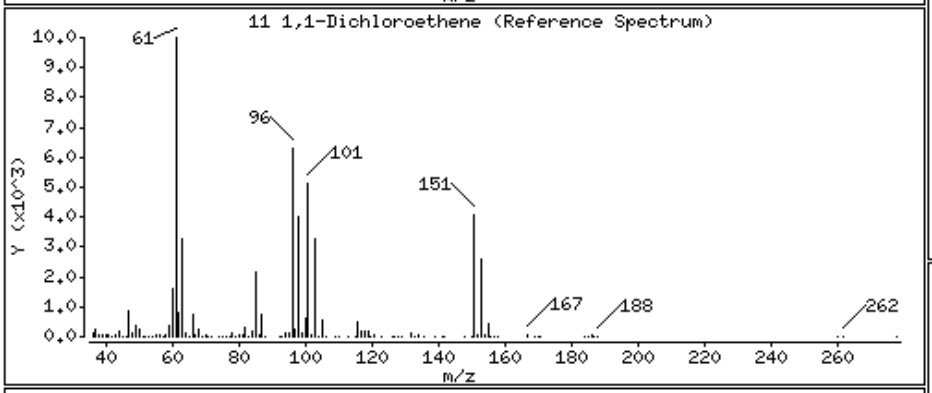
11 1,1-Dichloroethene Concentration: 44.14 ug/l

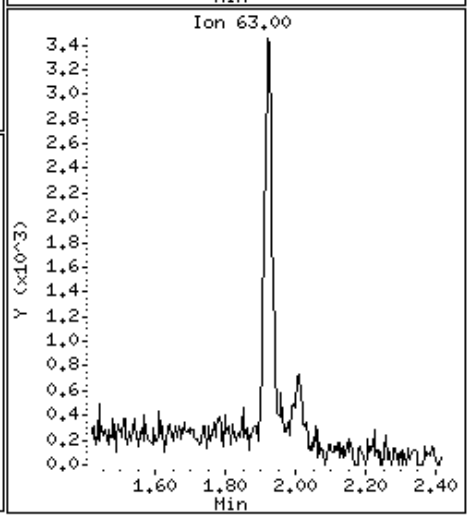


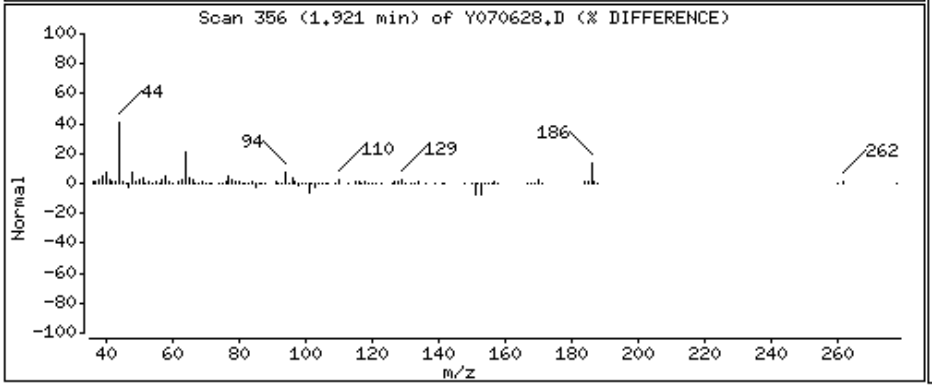












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070628.D Page 3

Date : 07-JUL-2022 01:42

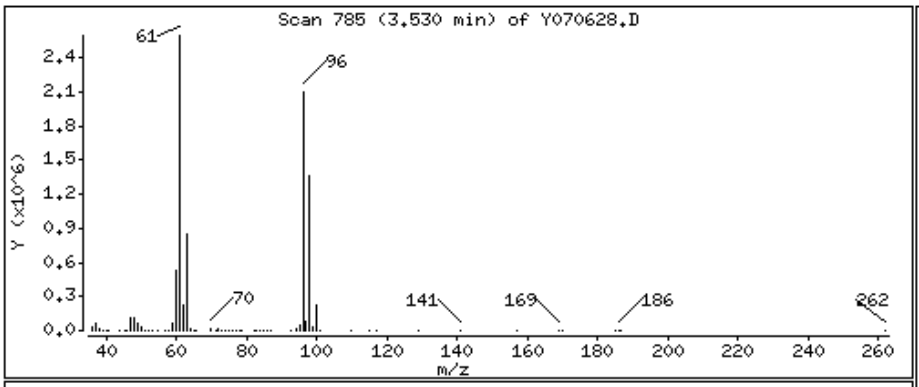
Client ID: HS22061645-10 Instrument: voa6.i

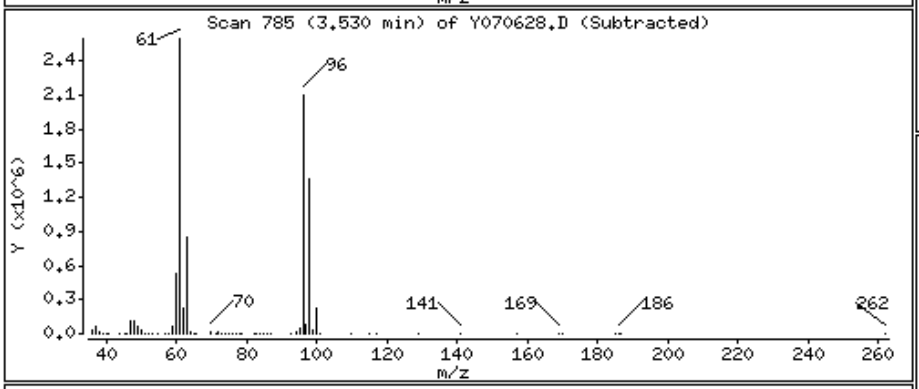
Sample Info: HS22061645-10;HS22061645-10;;;

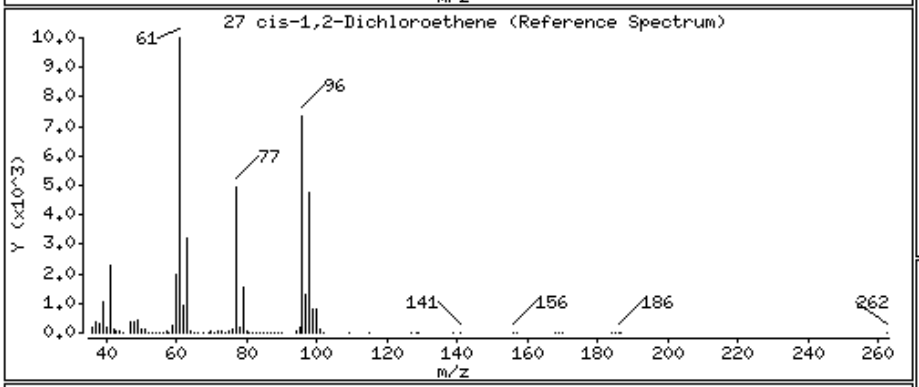
Purge Volume: 5.0 Operator: PC

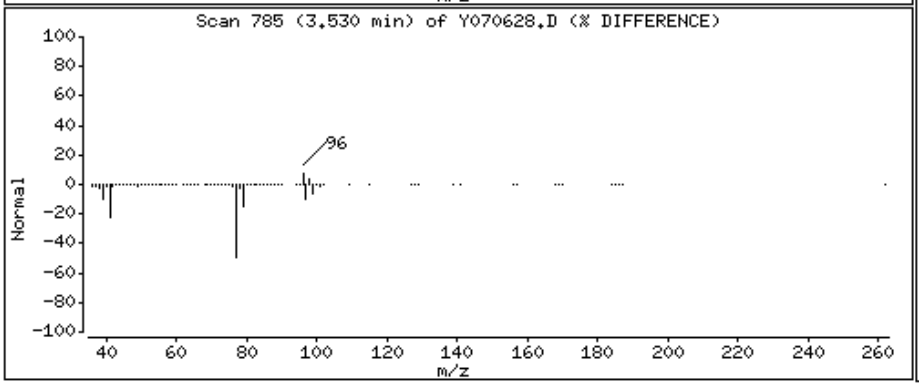
Column phase: DB624 Column diameter: 0.18

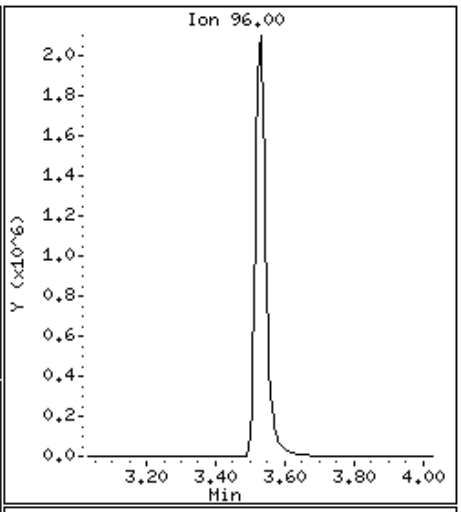
27 cis-1,2-Dichloroethene Concentration: 15920.35 ug/l

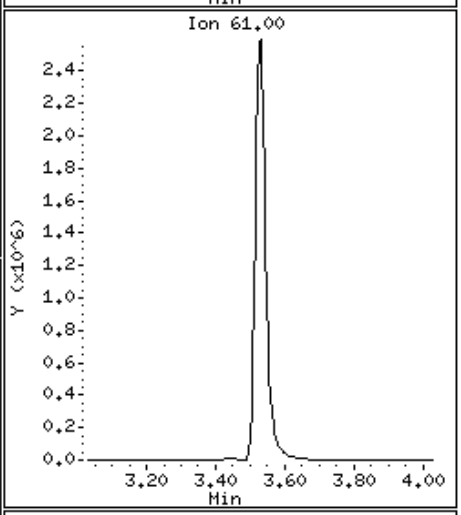


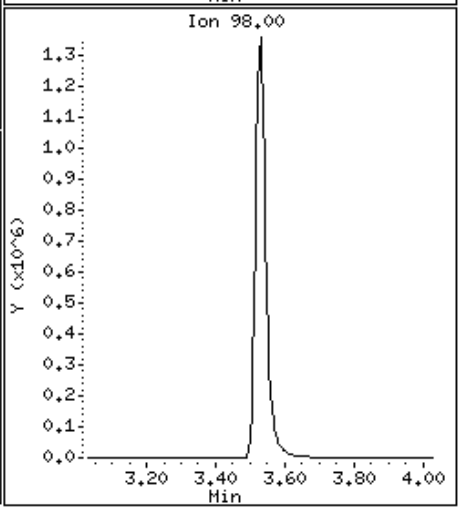












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070628.D

Date : 07-JUL-2022 01:42

Client ID: HS22061645-10

Instrument: voa6.i

Sample Info: HS22061645-10;HS22061645-10;;;

Purge Volume: 5.0

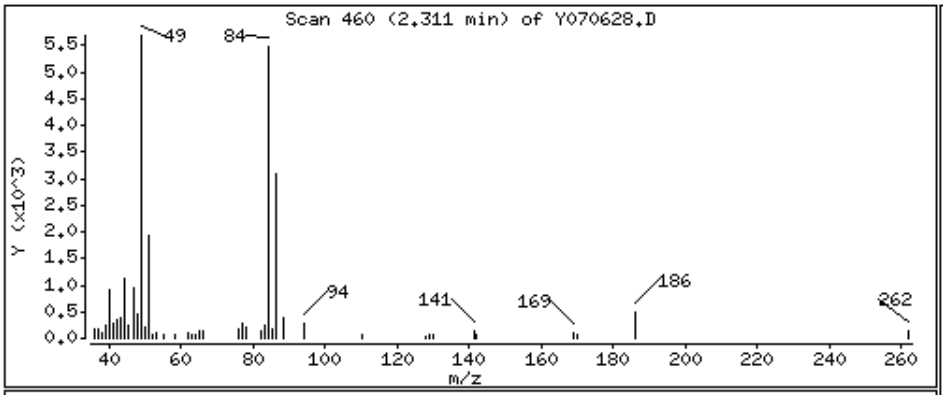
Operator: PC

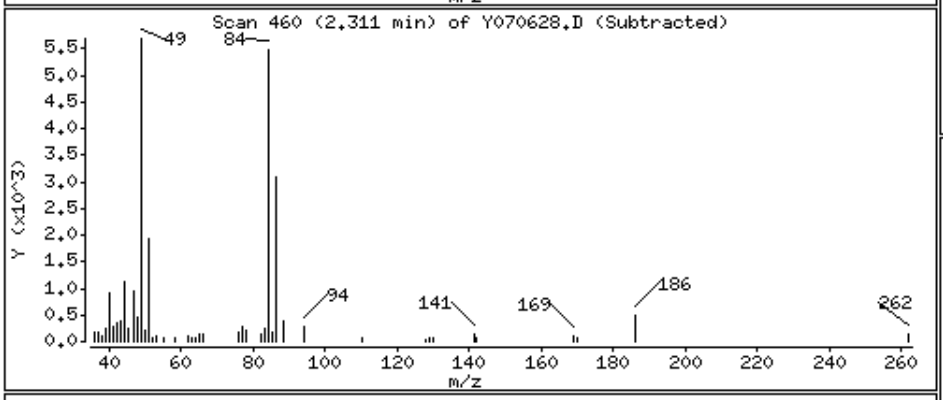
Column phase: DB624

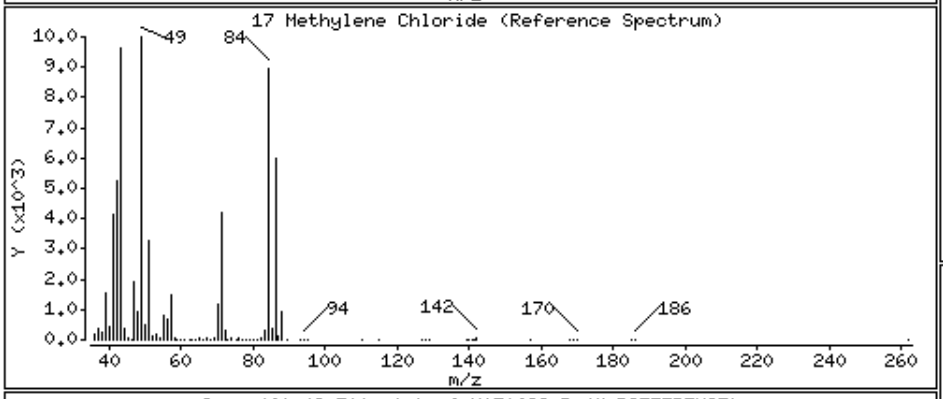
Column diameter: 0.18

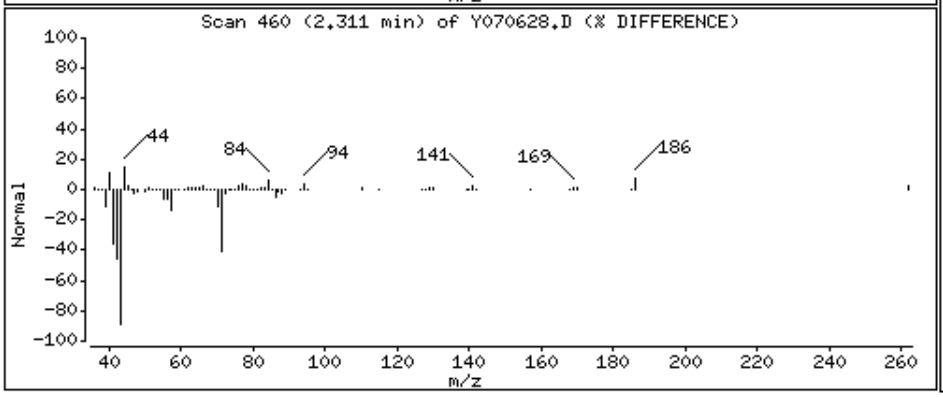
17 Methylene Chloride

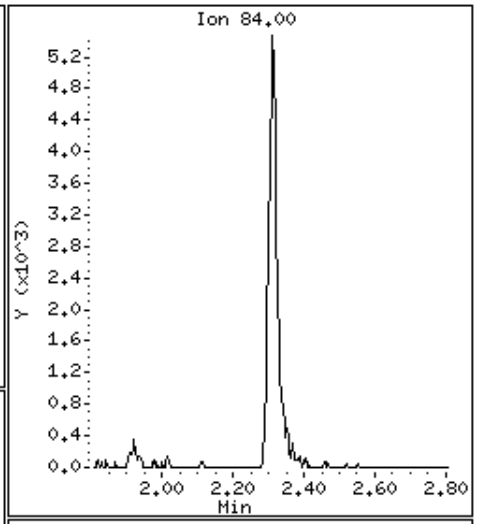
Concentration: 48.90 ug/l

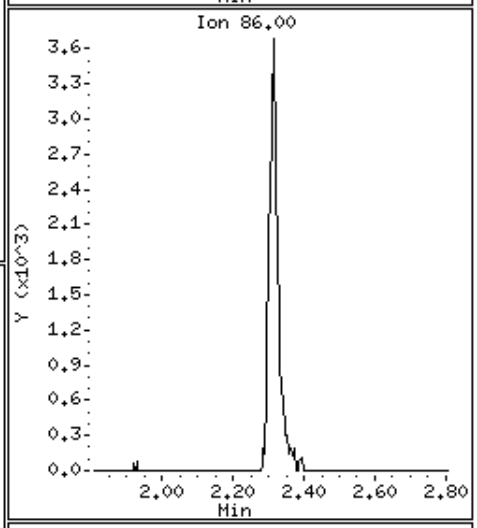


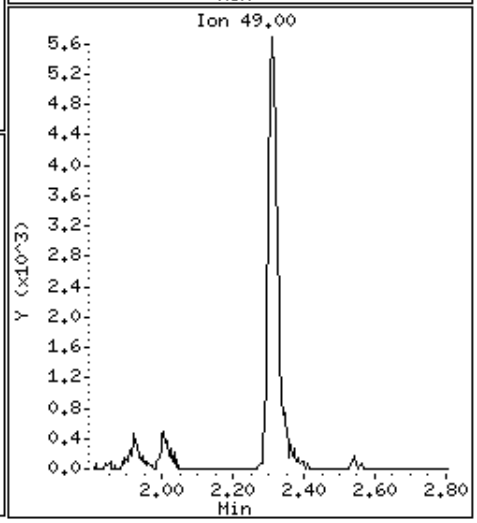












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070628.D Page 5

Date : 07-JUL-2022 01:42

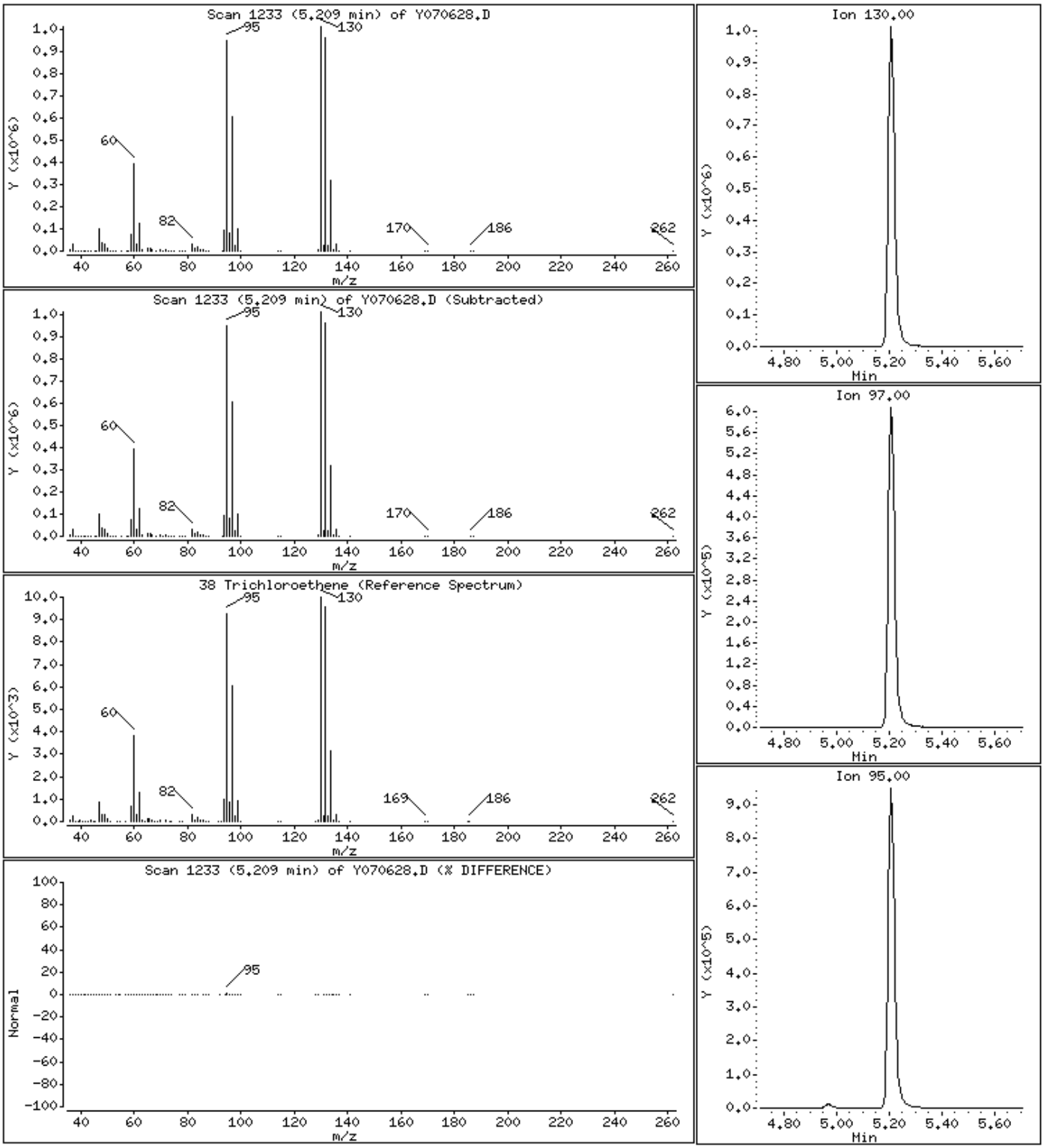
Client ID: HS22061645-10 Instrument: voa6.i

Sample Info: HS22061645-10;HS22061645-10;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

38 Trichloroethene Concentration: 6739.62 ug/l



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070628.D Page 6

Date : 07-JUL-2022 01:42

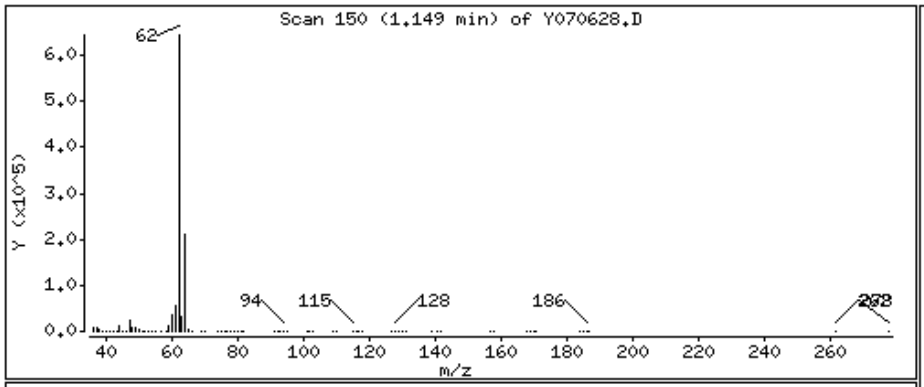
Client ID: HS22061645-10 Instrument: voa6.i

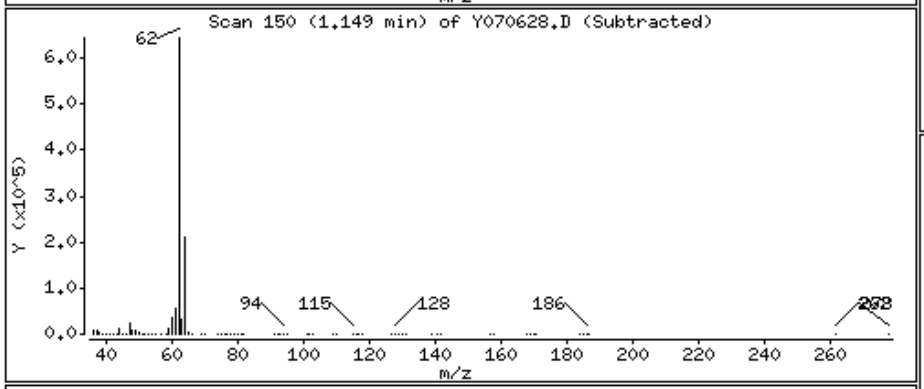
Sample Info: HS22061645-10;HS22061645-10;;;

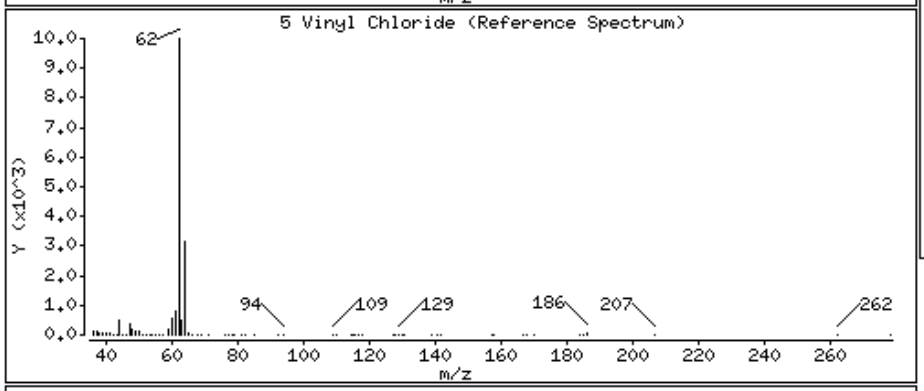
Purge Volume: 5.0 Operator: PC

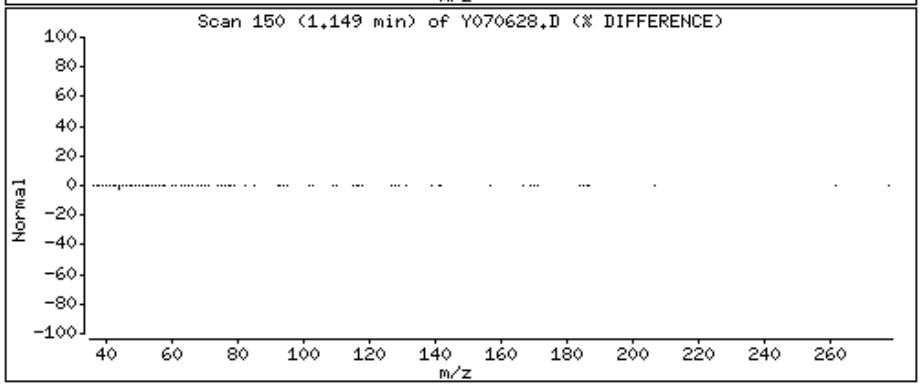
Column phase: DB624 Column diameter: 0.18

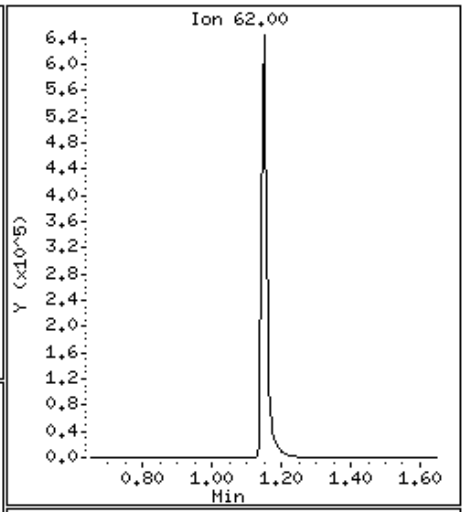
5 Vinyl Chloride Concentration: 2274.31 ug/l

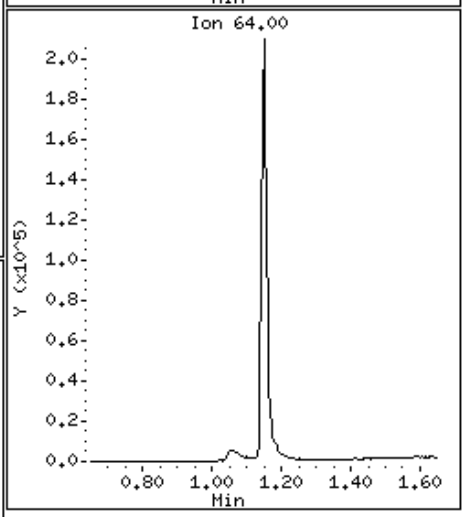












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Inj Date : 07-JUL-2022 01:42
InstruID : voa6.i
LabSampID : HS22061645-10

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070629.D Page 1
Report Date: 15-Jul-2022 14:31

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070629.D
Lab Smp Id: HS22061645-10 Client Smp ID: HS22061645-10
Inj Date : 07-JUL-2022 02:03
Operator : PC Inst ID: voa6.i
Smp Info : HS22061645-10;HS22061645-10;;;
Misc Info : HS22052000V6;WATER;0;250;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 42
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

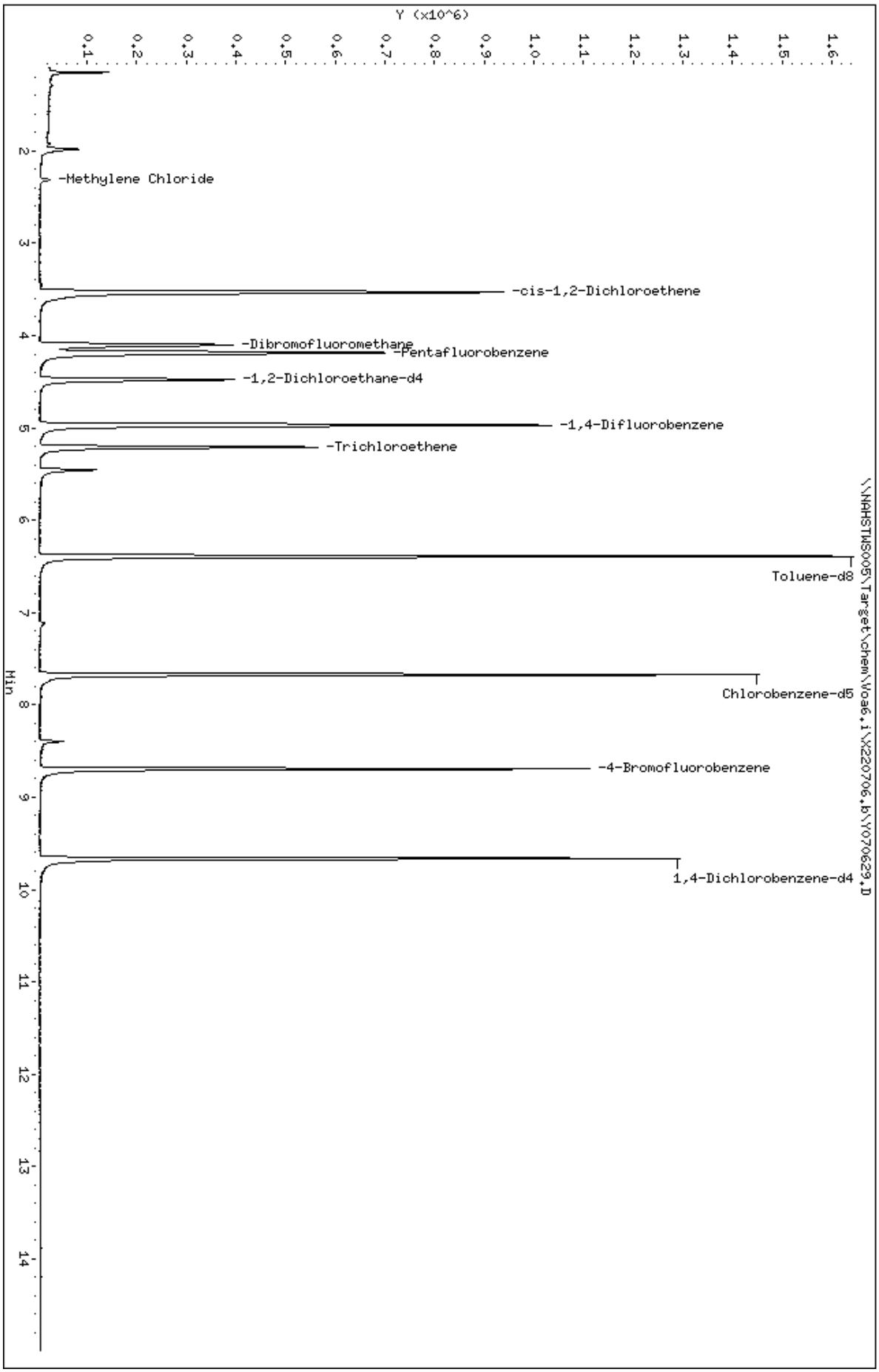
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	250.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	626838	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	898075	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	771253	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	348852	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.478	4.474	(1.070)	297294	50.6542	50.65
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	340692	50.8399	50.83
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	281105	48.6144	48.61
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1047911	54.7157	54.71
27 cis-1,2-Dichloroethene	96	3.529	3.533	(0.843)	500034	68.9211	17230.27
17 Methylene Chloride	84	2.315	2.311	(0.553)	9659	1.93459	483.64(a)
38 Trichloroethene	130	5.209	5.208	(1.048)	196978	29.2892	7322.30
5 Vinyl Chloride	62	1.149	1.149	(0.275)	78266	9.76188	2440.47

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070629.D
Date : 07-JUL-2022 02:03
Client ID: HS22061645-10
Sample Info: HS22061645-10;HS22061645-10;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070629.D Page 2

Date : 07-JUL-2022 02:03

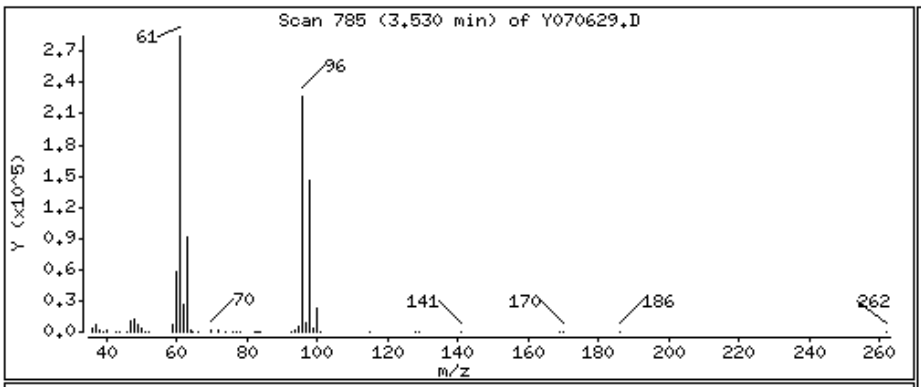
Client ID: HS22061645-10 Instrument: voa6.i

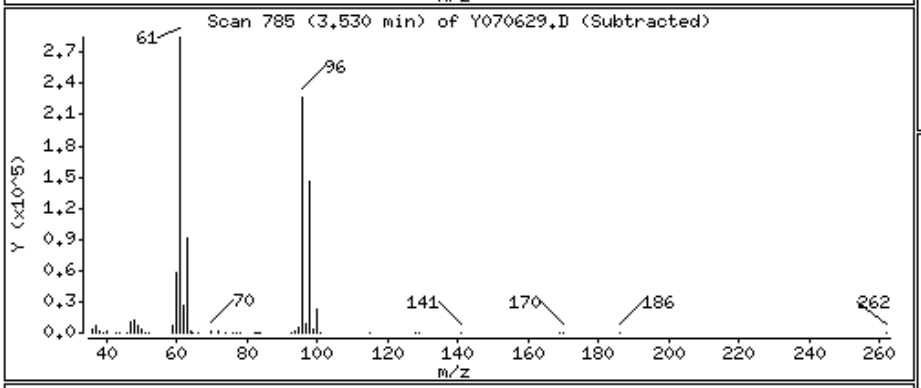
Sample Info: HS22061645-10;HS22061645-10;;;

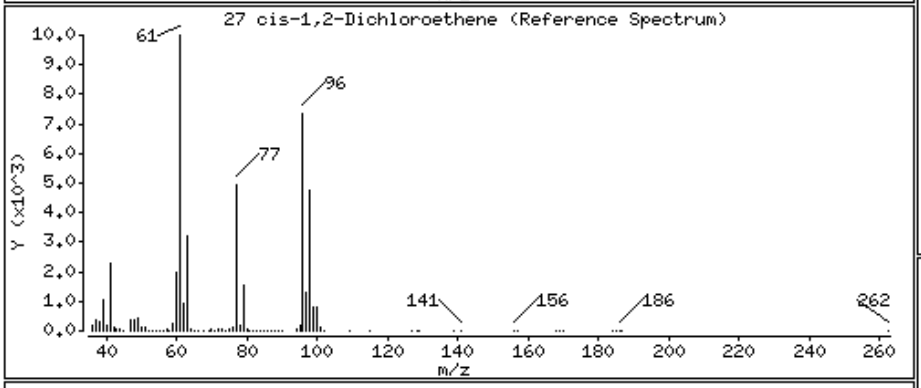
Purge Volume: 5.0 Operator: PC

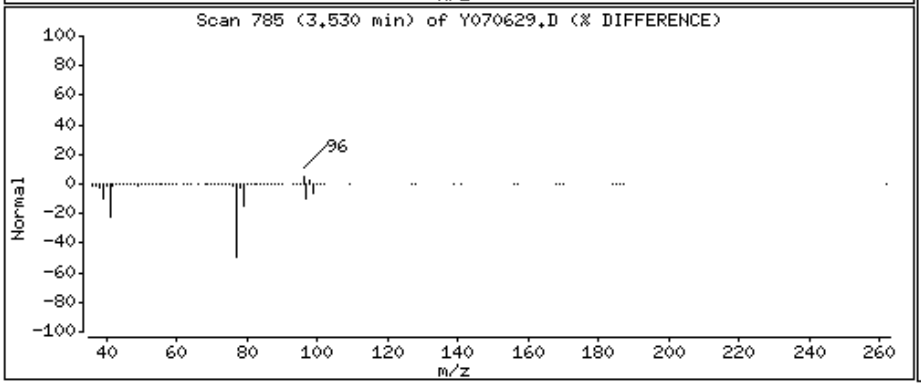
Column phase: DB624 Column diameter: 0.18

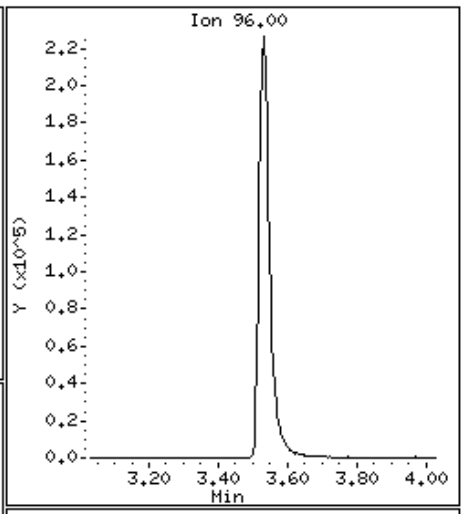
27 cis-1,2-Dichloroethene Concentration: 17230.27 ug/l

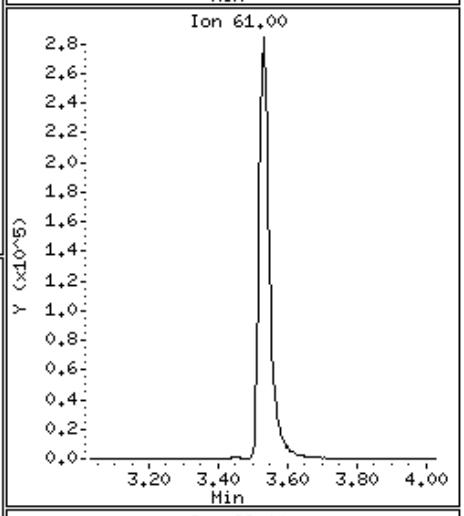


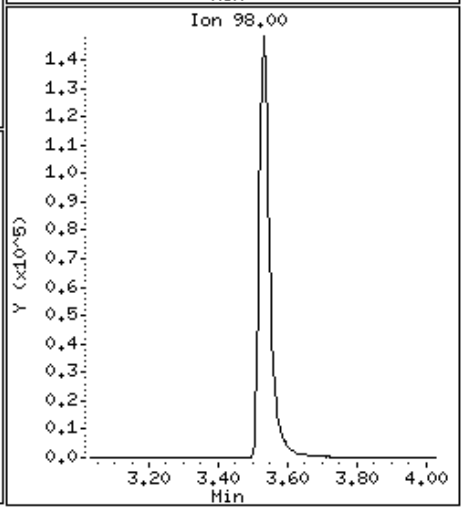












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070629.D Page 3

Date : 07-JUL-2022 02:03

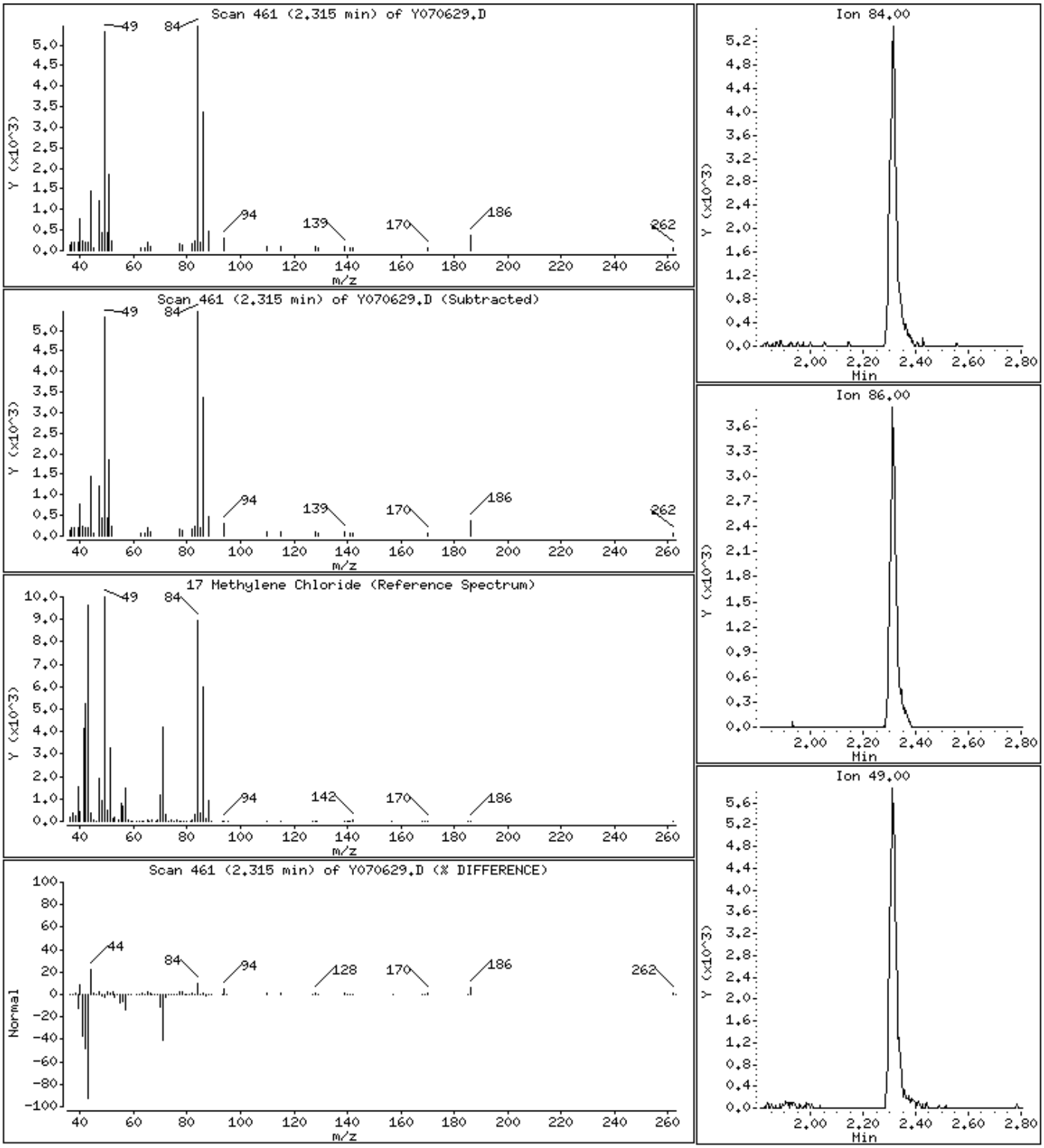
Client ID: HS22061645-10 Instrument: voa6.i

Sample Info: HS22061645-10;HS22061645-10;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

17 Methylene Chloride Concentration: 483.64 ug/l



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070629.D Page 4

Date : 07-JUL-2022 02:03

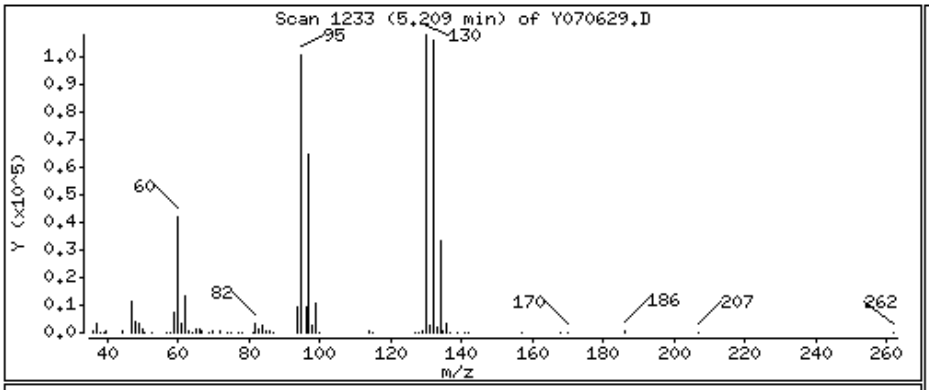
Client ID: HS22061645-10 Instrument: voa6.i

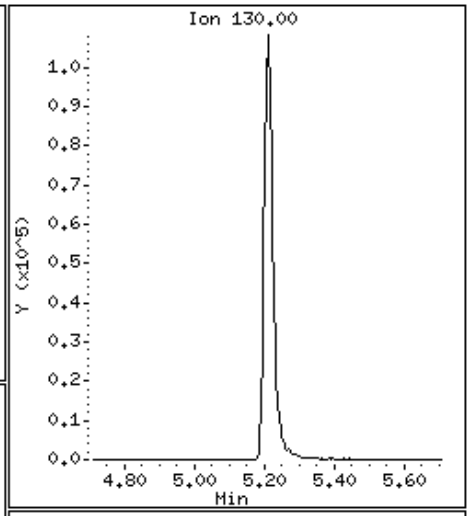
Sample Info: HS22061645-10;HS22061645-10;;;

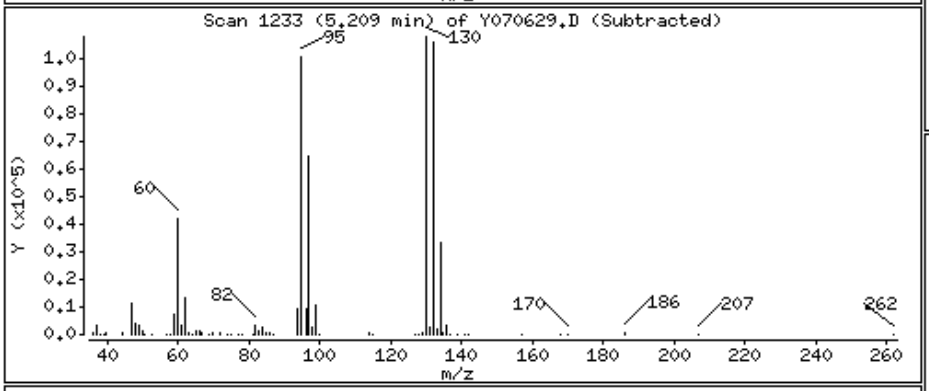
Purge Volume: 5.0 Operator: PC

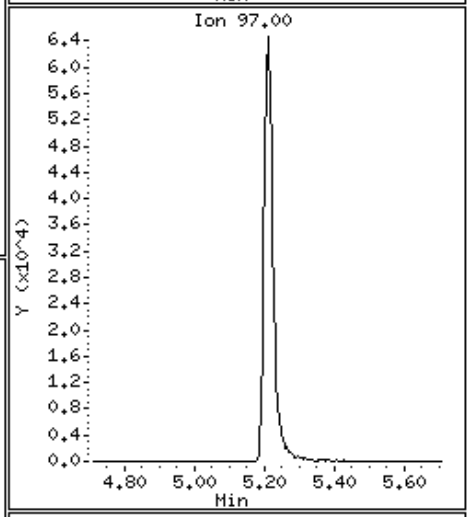
Column phase: DB624 Column diameter: 0.18

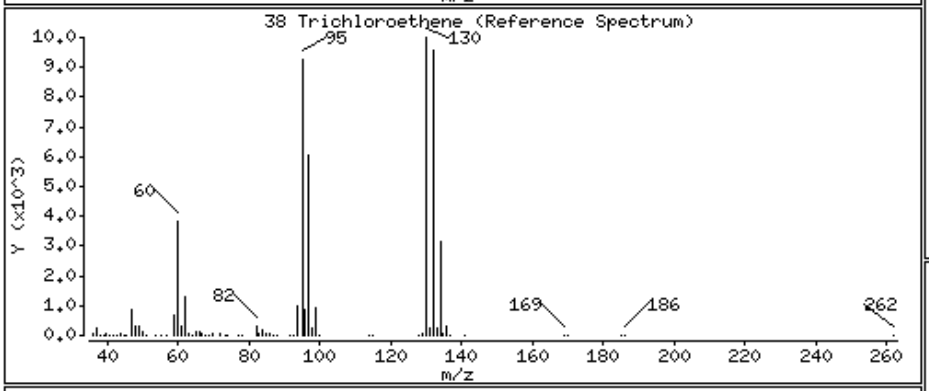
38 Trichloroethene Concentration: 7322.30 ug/l

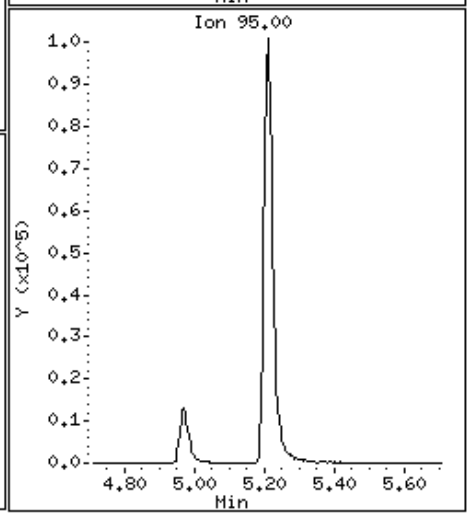


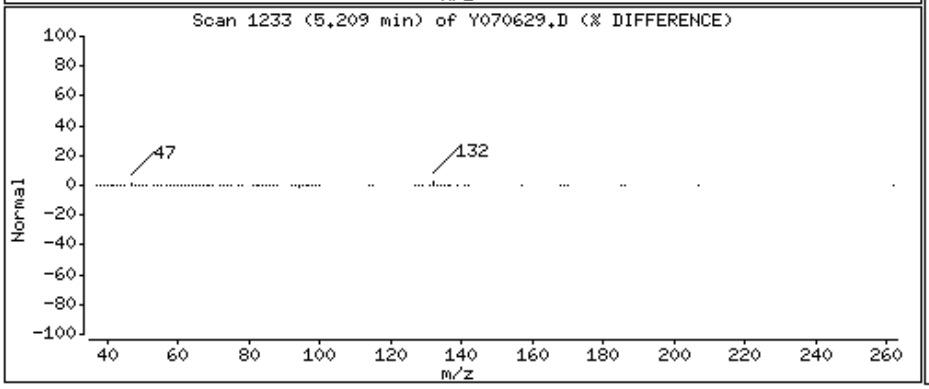












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Date : 07-JUL-2022 02:03

Client ID: HS22061645-10

Instrument: voa6.i

Sample Info: HS22061645-10;HS22061645-10;;;

Purge Volume: 5.0

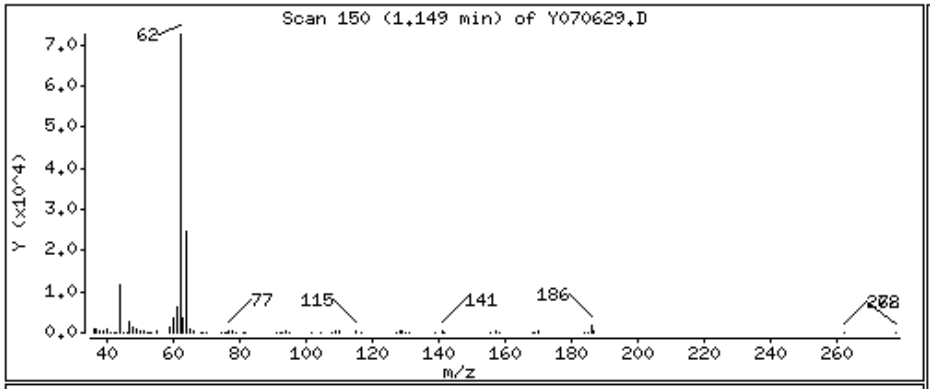
Operator: PC

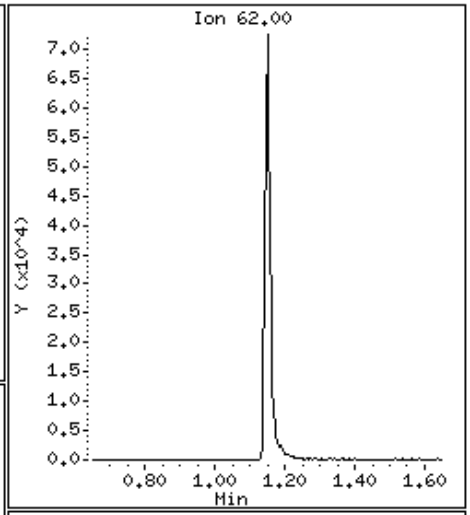
Column phase: DB624

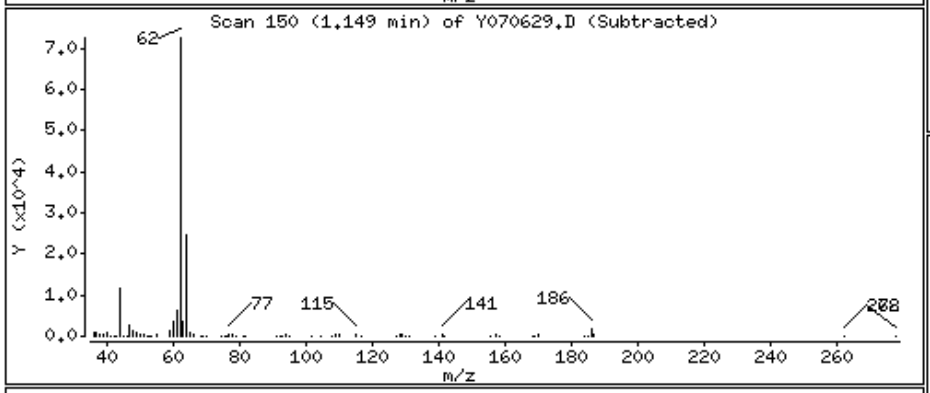
Column diameter: 0.18

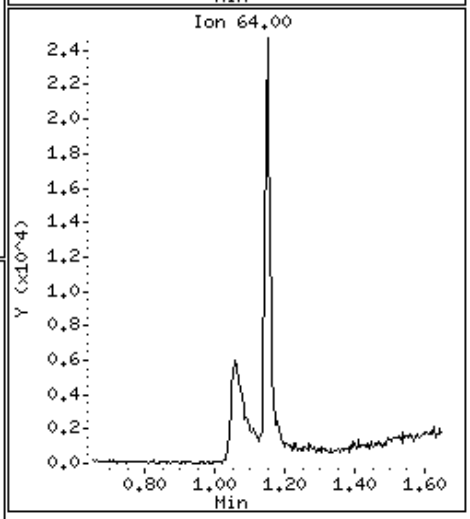
5 Vinyl Chloride

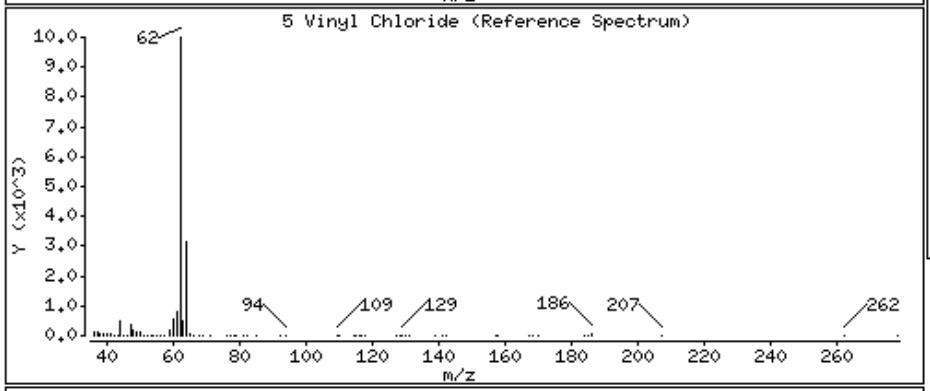
Concentration: 2440.47 ug/l

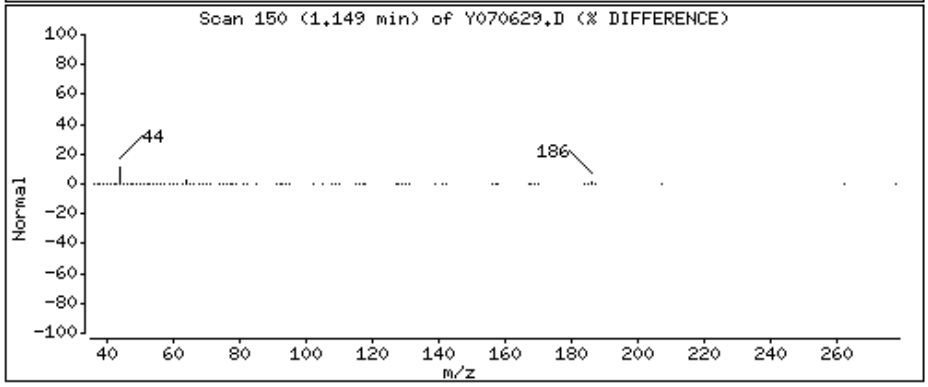












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070629.D
Inj Date : 07-JUL-2022 02:03
InstruID : voa6.i
LabSampID : HS22061645-10

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070632.D Page 1
Report Date: 15-Jul-2022 14:31

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070632.D
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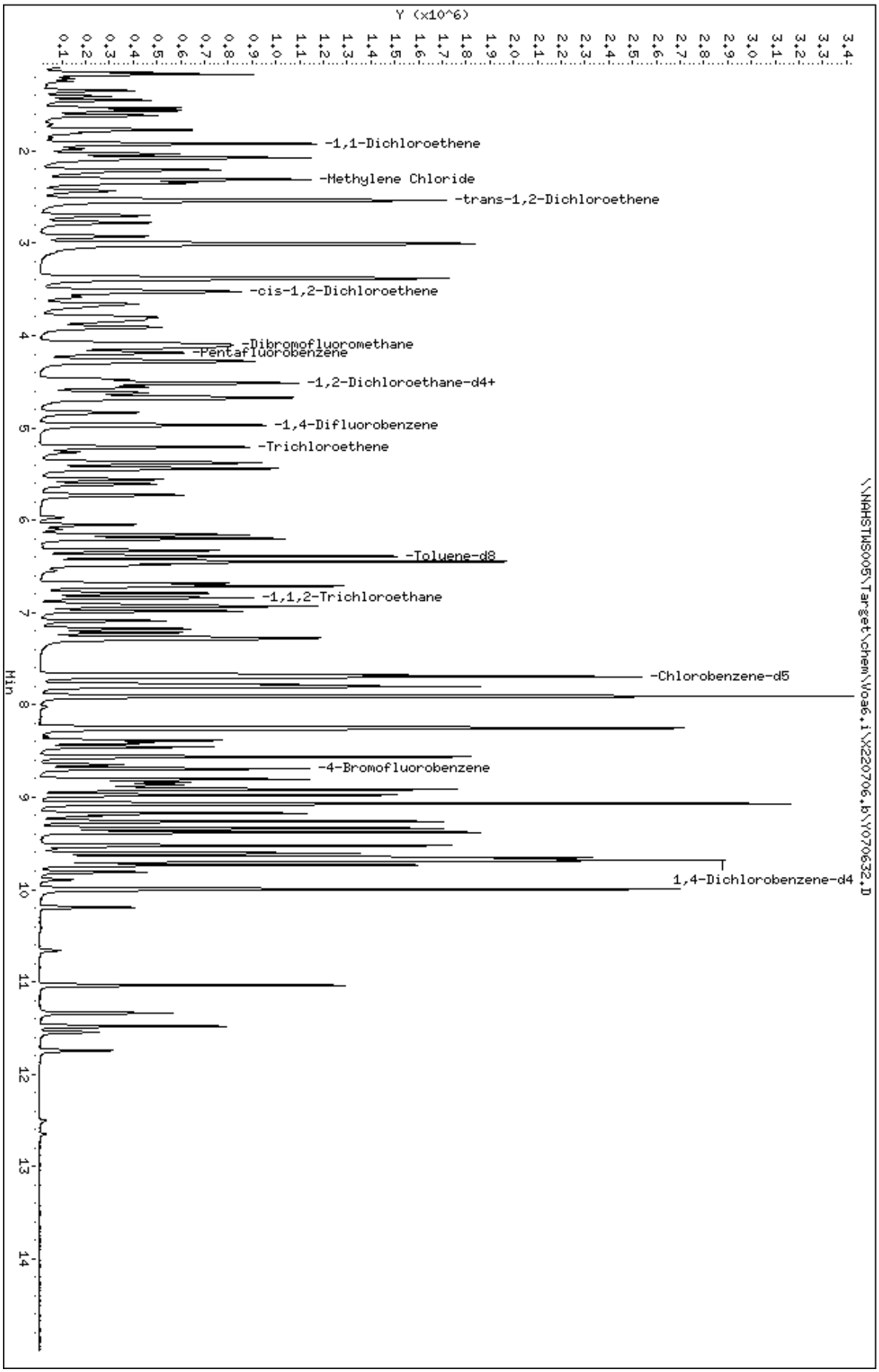
Inj Date : 07-JUL-2022 03:06
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:31 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 45 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	520784	50.0000	
*	36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	808784	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	704431	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	342987	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	270248	50.0000	55.53
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	315884	50.0000	51.61
$	30 Dibromofluoromethane	113	4.103	4.103	(0.980)	255239	50.0000	53.15
$	48 Toluene-d8	98	6.389	6.389	(0.833)	926908	50.0000	52.98
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	203397	50.0000	50.78
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	229643	50.0000	46.09
	33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	341994	50.0000	51.02
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	299897	50.0000	49.75
	17 Methylene Chloride	84	2.311	2.311	(0.552)	285499	50.0000	47.19
	38 Trichloroethene	130	5.209	5.209	(1.048)	305520	50.0000	50.44
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	309857	50.0000	46.51



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070632.D
Date : 07-JUL-2022 03:06
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Page 1

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070632.D
Inj Date : 07-JUL-2022 03:06
InstruID : voa6.i
LabSampID : CCV-END

NO MANUAL INTEGRATIONS

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right partner.

Raw Data VOA6 412413

Volatiles Organics by Method 8260C

Wokorder

HS22061645

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 June 2022

07/20/2022

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070701.D Page 1
Report Date: 07-Jul-2022 10:57

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070701.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 07-JUL-2022 10:17
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\bfb.m
Meth Date : 14-Jun-2022 12:47 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.691	8.889	(0.000)	95	133952			0.00- 100.00	100.00
8.691	8.889	(0.000)	50	20880			15.00- 40.00	15.59
8.691	8.889	(0.000)	75	59344			30.00- 60.00	44.30
8.691	8.889	(0.000)	96	8646			5.00- 9.00	6.45
8.691	8.889	(0.000)	173	1130			0.00- 2.00	0.93
8.691	8.889	(0.000)	174	121776			50.00- 0.00	90.91
8.691	8.889	(0.000)	175	8970			5.00- 9.00	7.37
8.691	8.889	(0.000)	176	118560			95.00- 101.00	97.36
8.691	8.889	(0.000)	177	7619			5.00- 9.00	6.43

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.59
75	30.00 - 60.00% of mass 95	44.30
96	5.00 - 9.00% of mass 95	6.45
173	Less than 2.00% of mass 174	0.84 (0.93)
174	Greater than 50.00% of mass 95	90.91
175	5.00 - 9.00% of mass 174	6.70 (7.37)
176	95.00 - 101.00% of mass 174	88.51 (97.36)
177	5.00 - 9.00% of mass 176	5.69 (6.43)

Data File: X070701.D
Spectrum: Scan 2162 (8.69)
Location of Maximum: 95.00
Number of points: 106

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	826	65.00	139	95.00	133952	140.90	859
37.10	4355	65.80	140	96.00	8646	142.00	69
38.00	3929	66.90	307	97.00	348	142.90	873
39.00	1717	68.00	12236	98.00	534	145.50	121
39.90	727	69.00	12407	103.00	137	146.90	60
41.00	405	70.10	1108	103.90	328	148.00	238
41.90	645	71.00	120	104.70	333	148.80	107
43.10	604	72.10	845	105.90	562	149.90	96
44.00	989	73.10	4843	107.00	225	152.00	61
45.00	939	74.10	17824	112.80	89	152.80	76
46.10	55	75.00	59344	114.90	277	153.90	164
47.00	1356	76.10	4850	116.00	296	154.90	360
48.10	477	76.90	1220	116.90	747	156.70	249
49.10	4281	77.90	755	117.90	383	158.80	201
50.10	20880	78.90	2202	118.80	449	160.80	117
51.00	6077	79.90	570	119.90	60	170.00	148
52.00	298	80.90	2134	124.10	61	173.00	1130
53.80	52	81.80	601	126.80	76	174.00	121776
55.00	1495	83.00	177	127.80	439	175.00	8970
56.00	1701	85.20	55	129.00	263	176.00	118560
57.00	2962	85.70	149	129.80	383	176.90	7619
57.80	254	87.00	6388	130.90	291	177.90	178
60.10	1129	88.00	5850	134.90	184	185.90	396
61.10	5222	90.70	447	135.90	57	261.90	110
62.00	4913	92.00	3334	136.80	192	277.90	61
63.10	3587	93.00	4340	138.90	60		
64.10	253	94.00	12925	140.00	103		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070701.D Page 1

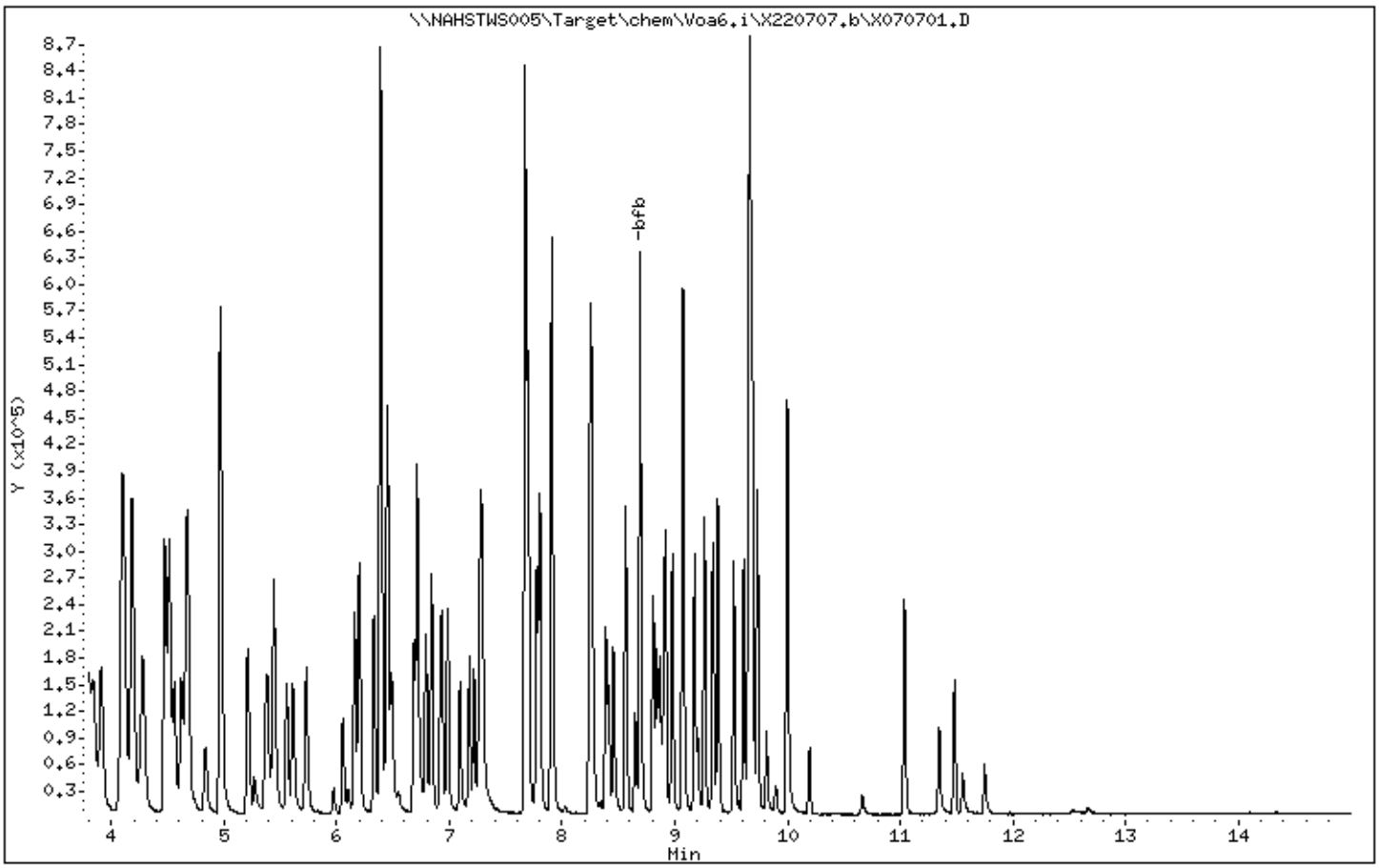
Date : 07-JUL-2022 10:17

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070701.D

Date : 07-JUL-2022 10:17

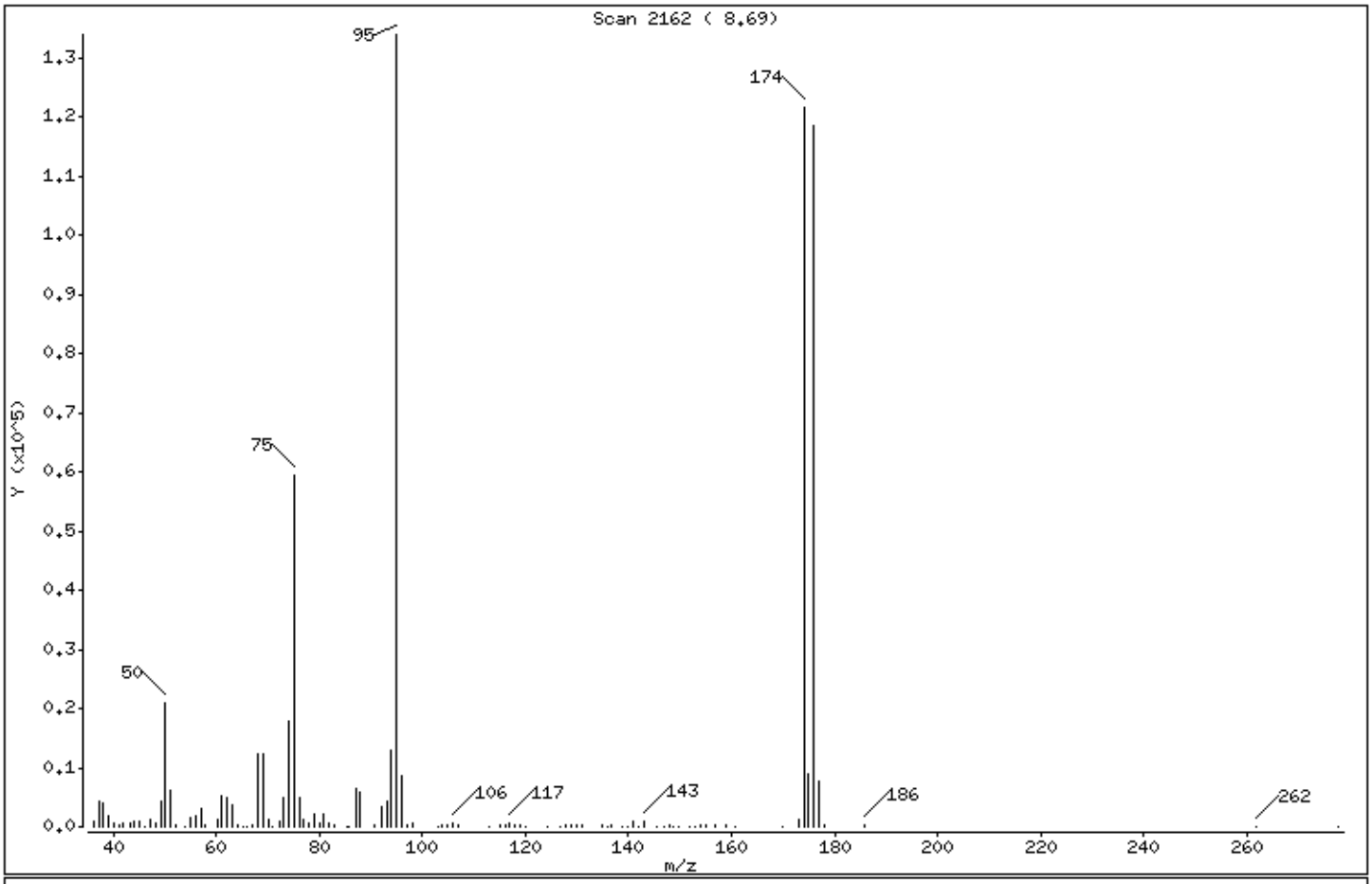
Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.59
75	30.00 - 60.00% of mass 95	44.30
96	5.00 - 9.00% of mass 95	6.45
173	Less than 2.00% of mass 174	0.84 (0.93)
174	Greater than 50.00% of mass 95	90.91
175	5.00 - 9.00% of mass 174	6.70 (7.37)
176	95.00 - 101.00% of mass 174	88.51 (97.36)
177	5.00 - 9.00% of mass 176	5.69 (6.43)

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070701.D

Date : 07-JUL-2022 10:17

Client ID: BFB

Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25

Data File: X070701.D
Spectrum: Scan 2162 (8.69)
Location of Maximum: 95.00
Number of points: 106

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	826	65.00	139	95.00	133952	140.90	859
37.10	4355	65.80	140	96.00	8646	142.00	69
38.00	3929	66.90	307	97.00	348	142.90	873
39.00	1717	68.00	12236	98.00	534	145.50	121
39.90	727	69.00	12407	103.00	137	146.90	60
41.00	405	70.10	1108	103.90	328	148.00	238
41.90	645	71.00	120	104.70	333	148.80	107
43.10	604	72.10	845	105.90	562	149.90	96
44.00	989	73.10	4843	107.00	225	152.00	61
45.00	939	74.10	17824	112.80	89	152.80	76
46.10	55	75.00	59344	114.90	277	153.90	164
47.00	1356	76.10	4850	116.00	296	154.90	360
48.10	477	76.90	1220	116.90	747	156.70	249
49.10	4281	77.90	755	117.90	383	158.80	201
50.10	20880	78.90	2202	118.80	449	160.80	117
51.00	6077	79.90	570	119.90	60	170.00	148
52.00	298	80.90	2134	124.10	61	173.00	1130
53.80	52	81.80	601	126.80	76	174.00	121776
55.00	1495	83.00	177	127.80	439	175.00	8970
56.00	1701	85.20	55	129.00	263	176.00	118560
57.00	2962	85.70	149	129.80	383	176.90	7619
57.80	254	87.00	6388	130.90	291	177.90	178
60.10	1129	88.00	5850	134.90	184	185.90	396
61.10	5222	90.70	447	135.90	57	261.90	110
62.00	4913	92.00	3334	136.80	192	277.90	61
63.10	3587	93.00	4340	138.90	60		
64.10	253	94.00	12925	140.00	103		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070702.D Page 1
Report Date: 19-Jul-2022 13:44

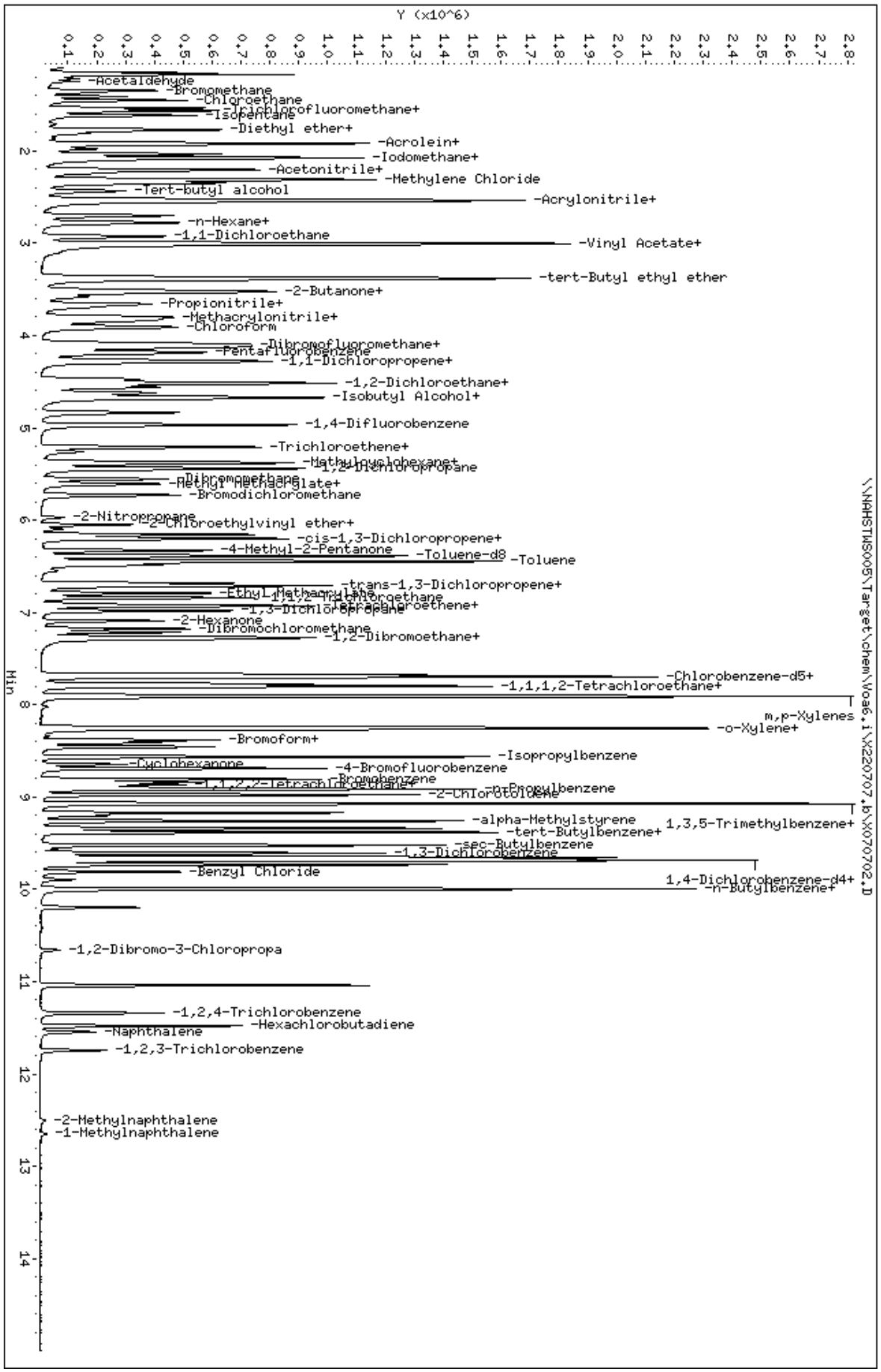
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070702.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 07-JUL-2022 10:38
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:44 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	501061	50.0000	
*	36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	742502	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	617814	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	300342	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	241289	50.0000	51.44
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	276173	50.0000	51.45
$	30 Dibromofluoromethane	113	4.103	4.103	(0.980)	235740	50.0000	51.01
$	48 Toluene-d8	98	6.389	6.389	(0.833)	784876	50.0000	51.15
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	171361	50.0000	48.78
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	218219	50.0000	45.52
	33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	313807	50.0000	51.00
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	281533	50.0000	48.54
	17 Methylene Chloride	84	2.311	2.311	(0.552)	273104	50.0000	46.93
	38 Trichloroethene	130	5.208	5.208	(1.048)	267057	50.0000	48.02
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	301388	50.0000	47.02



Data File: \\NAHSTMS005\Target\chem\Voa6.i\X220707.b\X070702.D
Date : 07-JUL-2022 10:38
Client ID: CCV
Sample Info: CCV,CCV,2,,
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070702.D
Inj Date : 07-JUL-2022 10:38
InstruID : voa6.i
LabSampID : CCV

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070704.D Page 1
Report Date: 07-Jul-2022 20:45

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070704.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 07-JUL-2022 11:20
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220707.b\8260W.m
Meth Date : 07-Jul-2022 20:44 pcabasca Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	525828	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	221786	45.7065	45.70
$ 35 1,2-Dichloroethane-d4	65	4.478	4.474	(1.070)	220747	44.7028	44.70
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	738935	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	711577	50.0000	
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	881429	49.8827	49.88
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	343543	55.5940	55.59
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	333635	50.0000	

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070705.D Page 1
Report Date: 19-Jul-2022 13:44

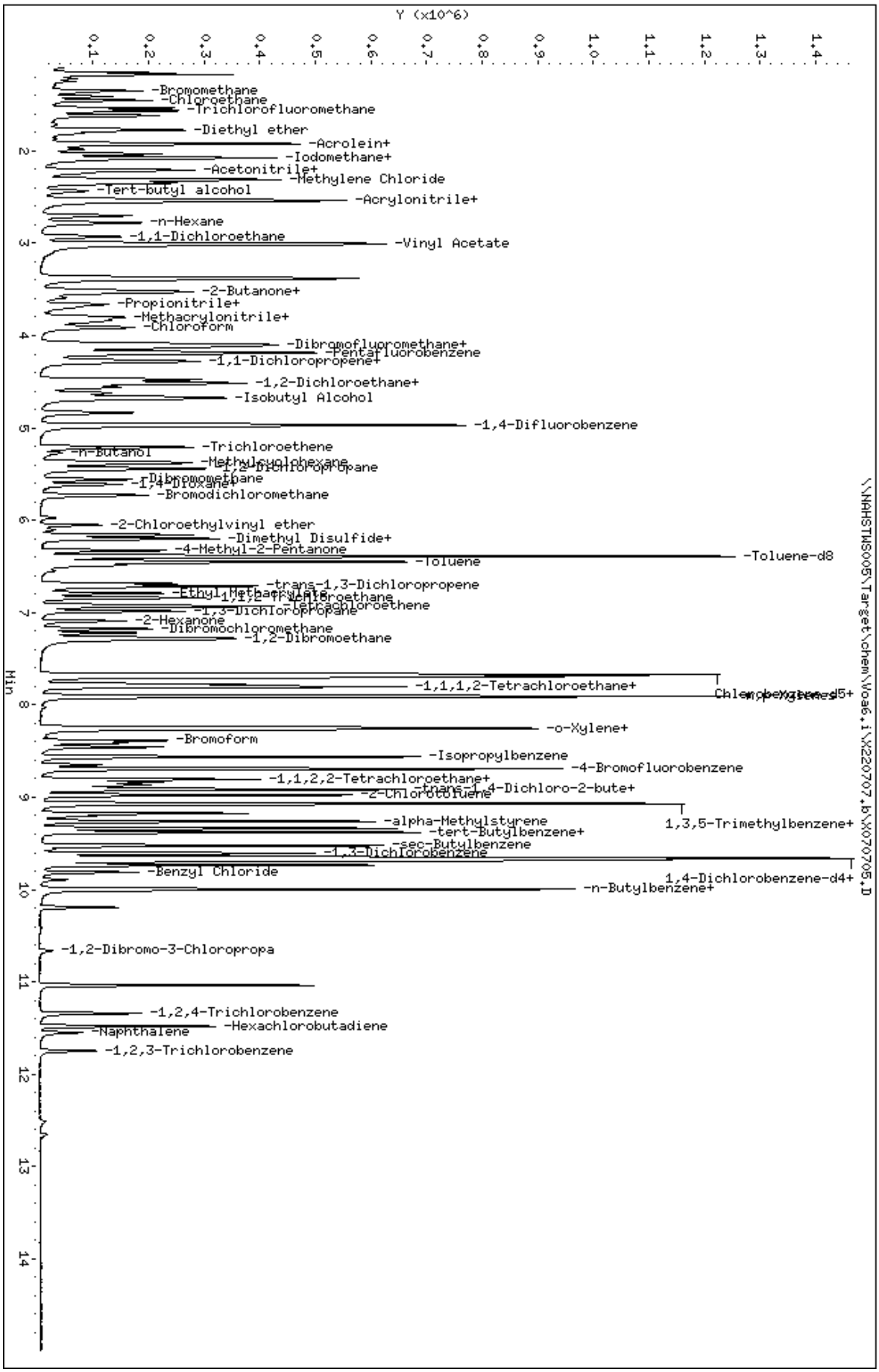
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070705.D
Lab Smp Id: VLCSW-220707 Client Smp ID: VLCSW-220707
Inj Date : 07-JUL-2022 11:41
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-220707;VLCSW-220707;3;;LCS
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:44 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	443226	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	664479	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	610892	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	292724	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	200897	48.3580	48.35
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	272639	51.3678	51.36
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	202667	49.5746	49.57
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	770241	50.7746	50.77
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	66712	19.2084	19.20
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	87352	20.6011	20.60
33 1,2-Dichloroethane	62	4.564	4.560	(0.919)	107360	19.4971	19.49
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	98304	19.1626	19.16
17 Methylene Chloride	84	2.307	2.311	(0.551)	103672	20.4971	20.49
38 Trichloroethene	130	5.212	5.208	(1.049)	100950	20.2875	20.28
5 Vinyl Chloride	62	1.149	1.149	(0.275)	117866	20.7912	20.79



Data File: \\NAHSTMS005\Target\chem\Voa6.i\X220707.b\X070705.D
Date : 07-JUL-2022 11:41
Client ID: VLCSW-220707
Sample Info: VLCSW-220707;VLCSW-220707;3;;LCS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070705.D
Inj Date : 07-JUL-2022 11:41
InstruID : voa6.i
LabSampID : VLCSW-220707

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070707.D Page 1
Report Date: 19-Jul-2022 13:44

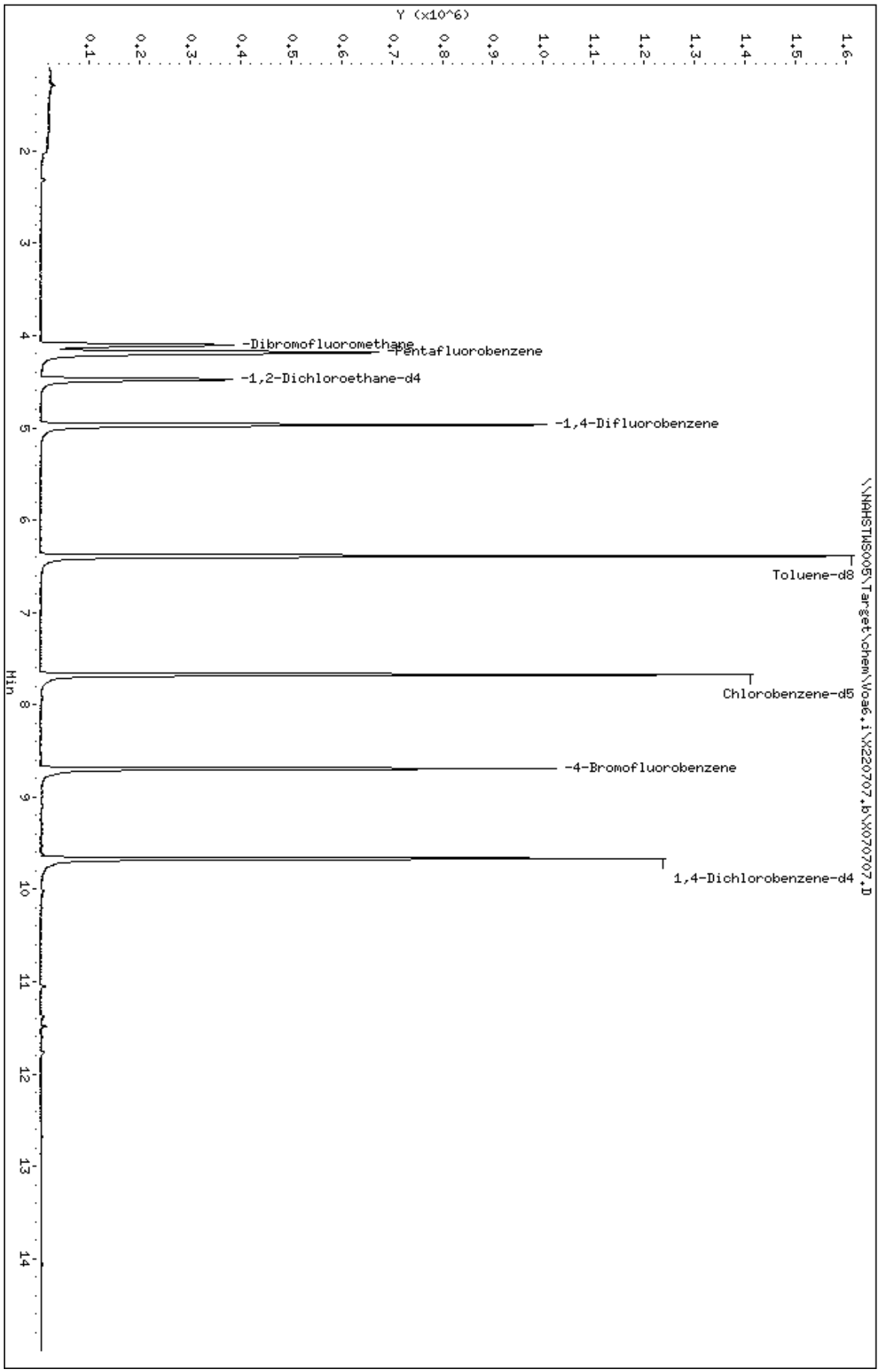
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070707.D
Lab Smp Id: VBLKW-220707 Client Smp ID: VBLKW-220707
Inj Date : 07-JUL-2022 12:23
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-220707;VBLKW-220707;3;;BLANK
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:44 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	600072	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	871359	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	749639	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	330561	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	291889	51.9815	51.98
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	330514	50.7425	50.74
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	275884	49.8470	49.84
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1021248	54.8609	54.86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Date : 07-JUL-2022 12:23
Client ID: VBLKW-220707
Sample Info: VBLKW-220707;VBLKW-220707;3;;BLANK
Purge Volume: 5.0
Column phase: DB624
Instrument: voa6.i
Operator: PC
Column diameter: 0.18
Page 1
Y (x10^6)
Min
-Dibromofluoromethane
-Pentafluorobenzene
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene
Toluene-d8
Chlorobenzene-d5
-4-Bromofluorobenzene
1,4-Dichlorobenzene-d4
\\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070707.D

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070707.D
Inj Date : 07-JUL-2022 12:23
InstruID : voa6.i
LabSampID : VBLKW-220707

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070715.D Page 1
Report Date: 19-Jul-2022 13:45

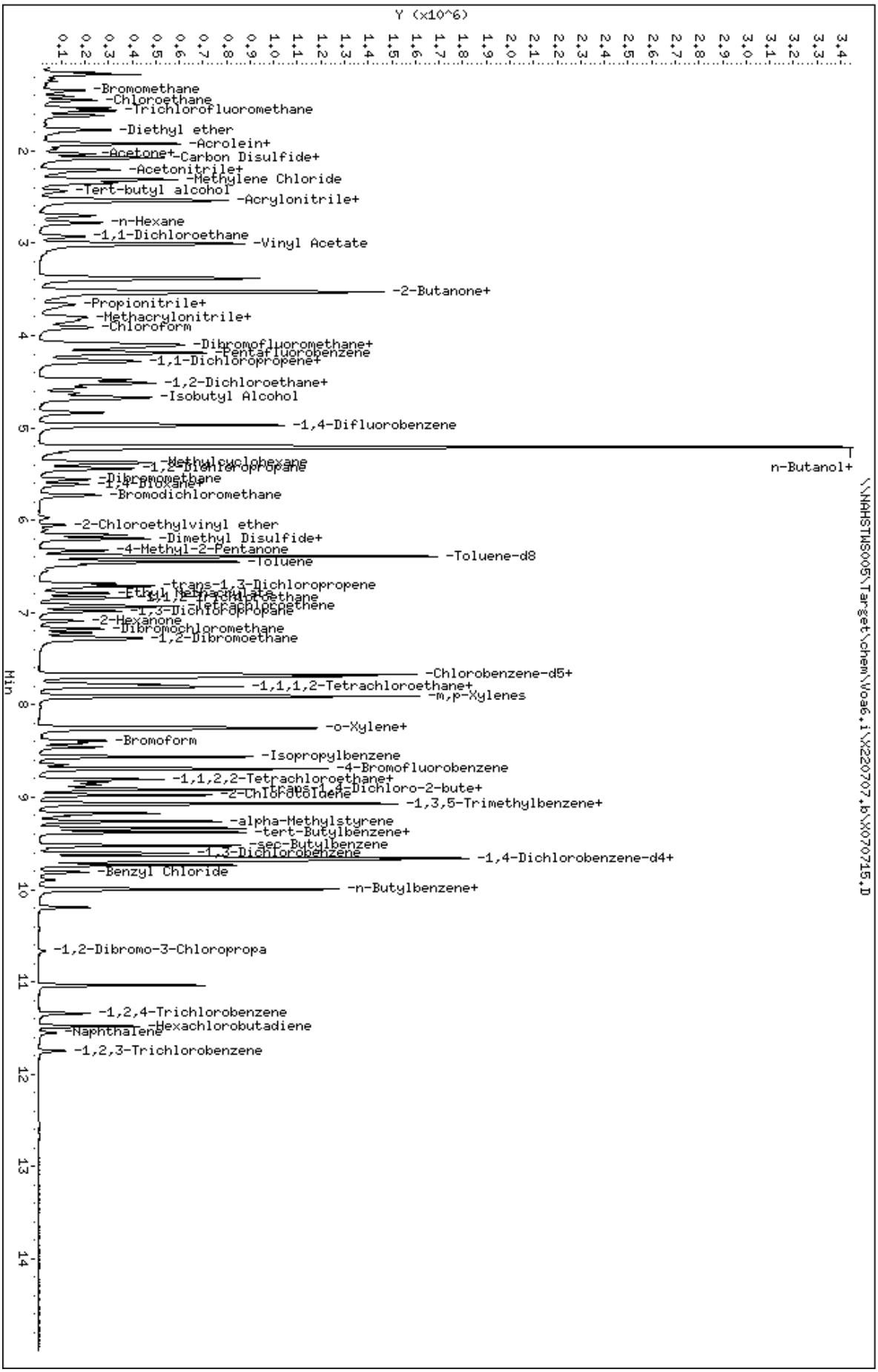
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070715.D
Lab Smp Id: HS22070020-01MS Client Smp ID: HS22070020-01MS
Inj Date : 07-JUL-2022 15:06
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-01MS;HS22070020-01MS;3;;MS
Misc Info : HS22052000V6;WATER;0;250;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:44 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 14 QC Sample: MS
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	250.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	628349	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	893831	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	773639	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	348111	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	299514	50.9156	50.91
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	347573	51.7121	51.71
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	278992	48.1301	48.13
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1041943	54.2363	54.23
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	87824	19.9676	4991.90
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	111445	18.5397	4634.92
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	149637	20.2019	5050.48
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	689434	94.7981	23699.52
17 Methylene Chloride	84	2.311	2.311	(0.552)	127576	17.8745	4468.63
38 Trichloroethene	130	5.208	5.208	(1.048)	1180000	176.291	44072.68
5 Vinyl Chloride	62	1.149	1.149	(0.275)	142625	17.7464	4436.60



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Date : 07-JUL-2022 15:06
Client ID: HS220700Z0-01HS
Sample Info: HS220700Z0-01HS;HS220700Z0-01HS;3;;HS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070715.D
Inj Date : 07-JUL-2022 15:06
InstruID : voa6.i
LabSampID : HS22070020-01MS

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070716.D Page 1
Report Date: 19-Jul-2022 13:45

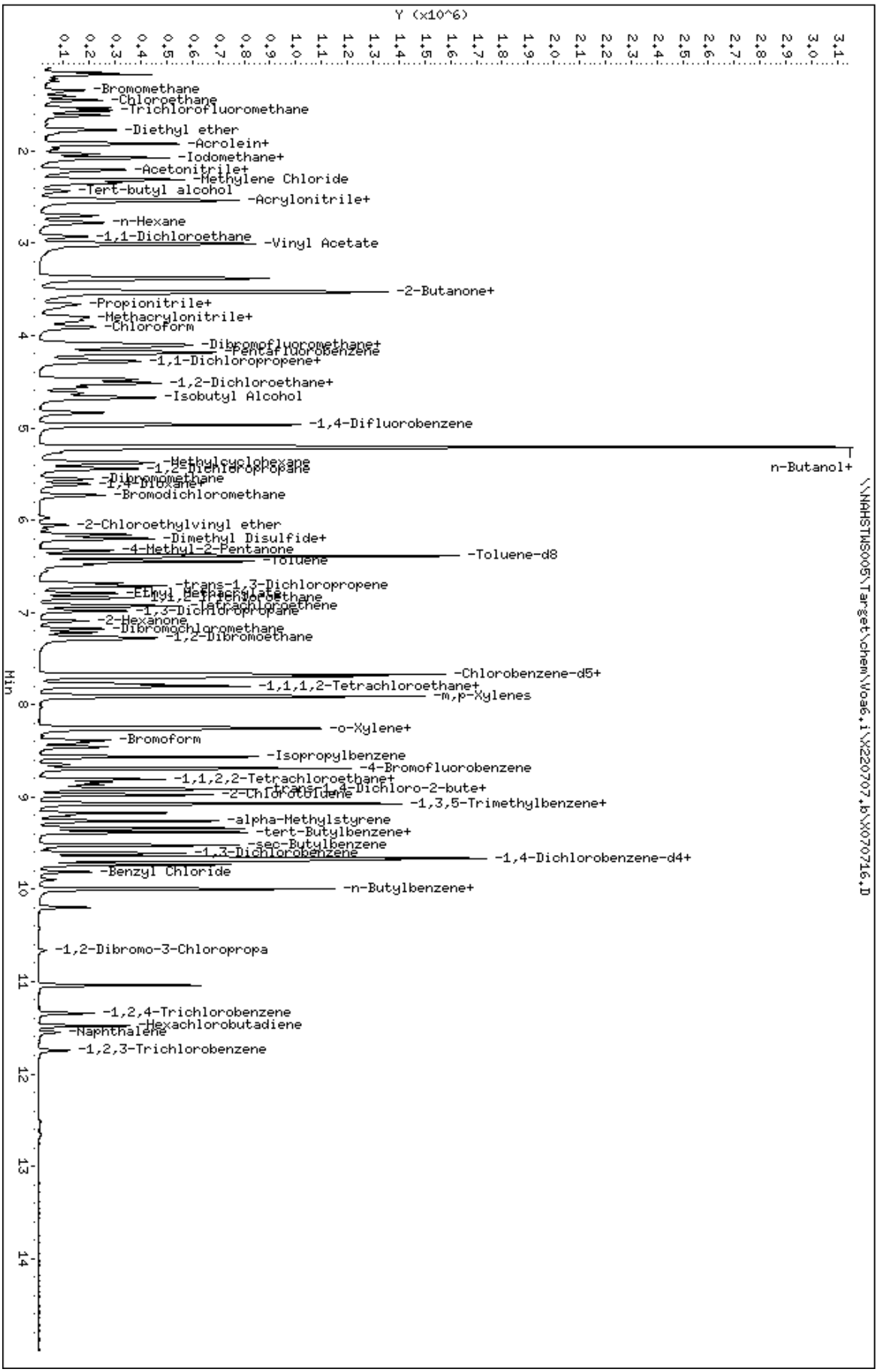
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070716.D
Lab Smp Id: HS22070020-01MSD Client Smp ID: HS22070020-01MSD
Inj Date : 07-JUL-2022 15:27
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-01MSD;HS22070020-01MSD;3;;MSD
Misc Info : HS22052000V6;WATER;0;250;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:44 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 14 QC Sample: MSD
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	250.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	610592	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	866659	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	744549	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	332978	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	290345	50.7895	50.78
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	338224	52.2908	52.29
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	272292	48.3416	48.34
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1015547	54.9276	54.92
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	84051	19.8564	4964.11
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	102490	17.5458	4386.44
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	146340	20.3762	5094.06
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	649212	91.8636	22965.89
17 Methylene Chloride	84	2.307	2.311	(0.551)	120238	17.3552	4338.79
38 Trichloroethene	130	5.208	5.208	(1.048)	1081006	166.565	41641.15
5 Vinyl Chloride	62	1.149	1.149	(0.275)	143470	18.3707	4592.67



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Date : 07-JUL-2022 15:27
Client ID: HS220700Z0-01MSD
Sample Info: HS220700Z0-01MSD;HS220700Z0-01MSD;3;;MSD
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070716.D
Inj Date : 07-JUL-2022 15:27
InstruID : voa6.i
LabSampID : HS22070020-01MSD

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070718.D Page 1
Report Date: 19-Jul-2022 13:45

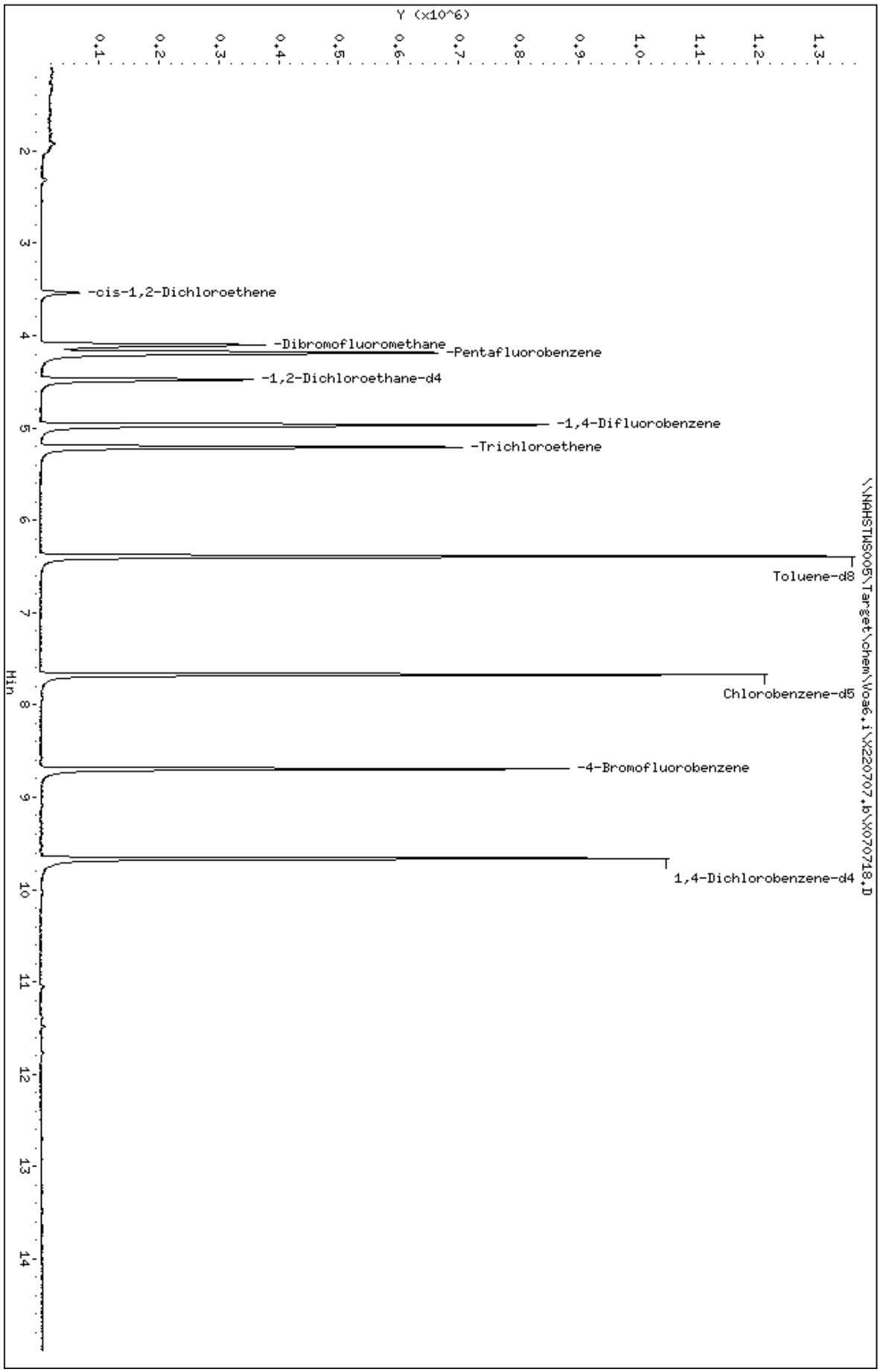
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070718.D
Lab Smp Id: HS22061645-08 Client Smp ID: HS22061645-08
Inj Date : 07-JUL-2022 16:09
Operator : PC Inst ID: voa6.i
Smp Info : HS22061645-08;HS22061645-08;;;
Misc Info : HS22052000V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:44 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 16
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	5.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	603450	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	755677	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	651965	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	293447	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	265696	46.9413	46.94
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	290331	51.2543	51.25
$ 30 Dibromofluoromethane	113	4.102	4.103	(0.980)	264358	47.4834	47.48
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	891265	55.0512	55.05
27 cis-1,2-Dichloroethene	96	3.536	3.529	(0.845)	36804	5.26941	26.34
38 Trichloroethene	130	5.208	5.208	(1.048)	254783	45.0233	225.11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Date : 07-JUL-2022 16:09
Client ID: HS22061645-08
Sample Info: HS22061645-08;HS22061645-08;;;
Purge Volume: 5.0
Column phase: DB624
Instrument: voa6.i
Operator: PC
Column diameter: 0.18
Page 1
Y (x10^6)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
2
3
4
5
6
7
8
9
10
11
12
13
14
Min
-cis-1,2-Dichloroethene
-Dibromofluoromethane
-Pentafluorobenzene
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene
-Trichloroethene
Toluene-d8
Chlorobenzene-d5
-4-Bromofluorobenzene
1,4-Dichlorobenzene-d4
\\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070718.D

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070718.D Page 2

Date : 07-JUL-2022 16:09

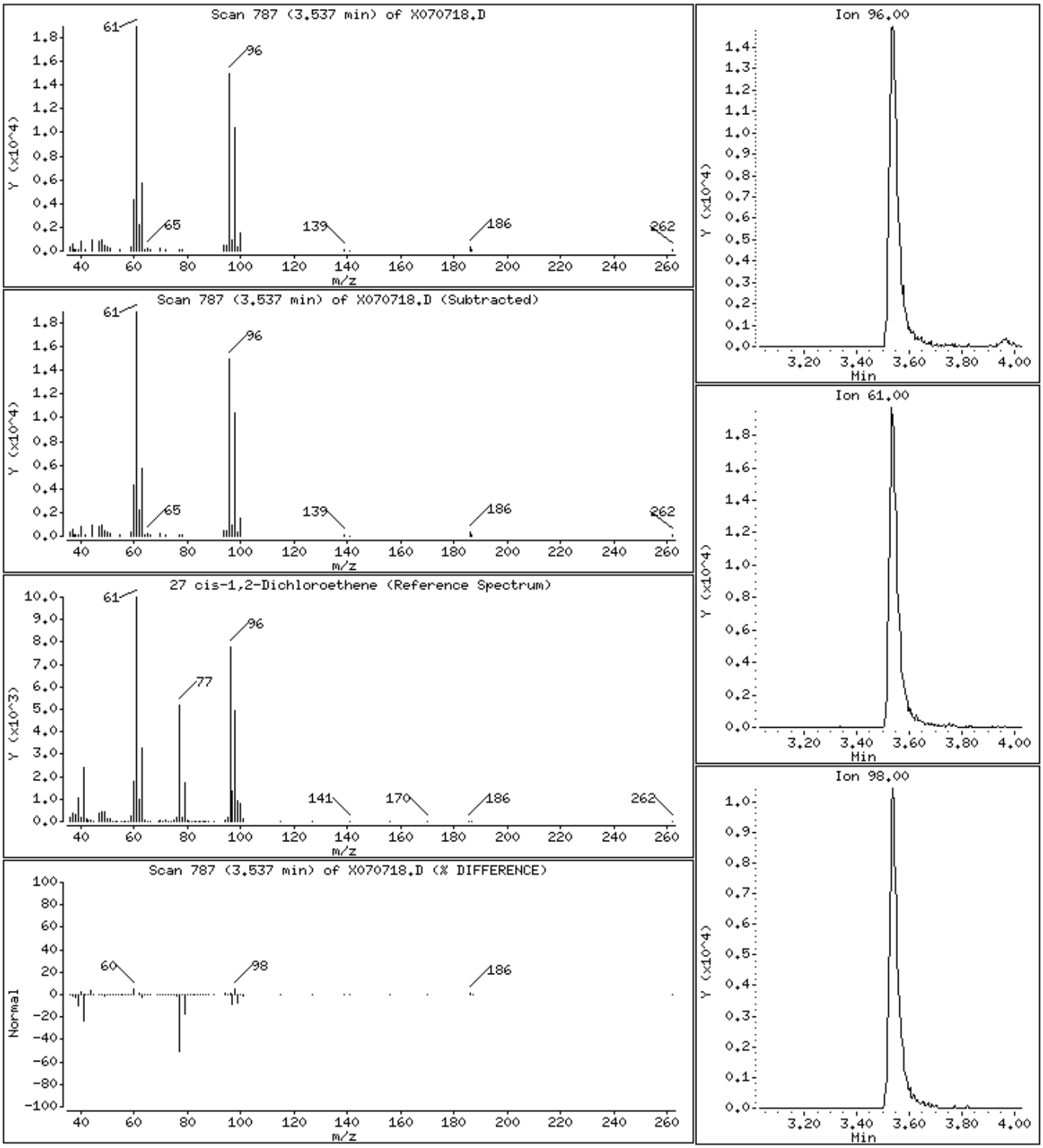
Client ID: HS22061645-08 Instrument: voa6.i

Sample Info: HS22061645-08;HS22061645-08;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

27 cis-1,2-Dichloroethene Concentration: 26.34 ug/l



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Date : 07-JUL-2022 16:09

Client ID: HS22061645-08

Instrument: voa6.i

Sample Info: HS22061645-08;HS22061645-08;;;

Purge Volume: 5.0

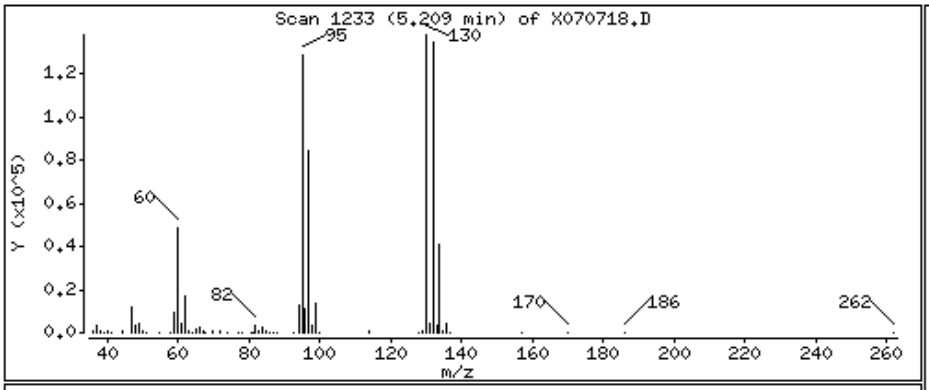
Operator: PC

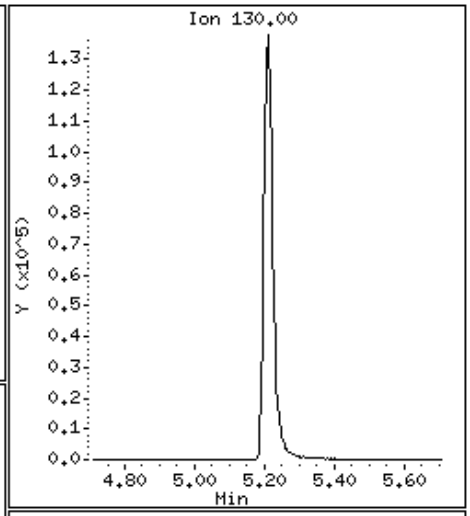
Column phase: DB624

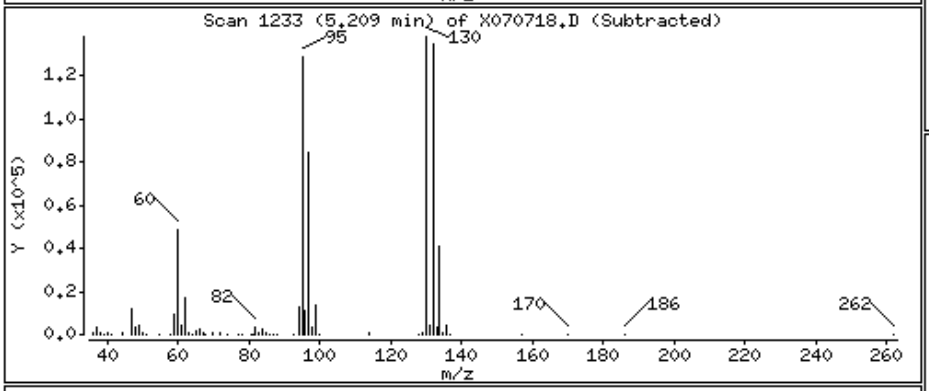
Column diameter: 0.18

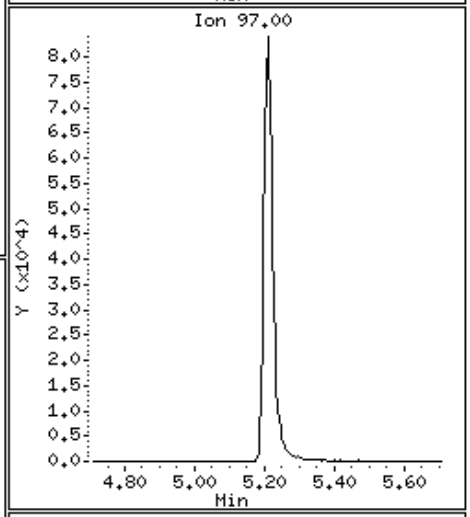
38 Trichloroethene

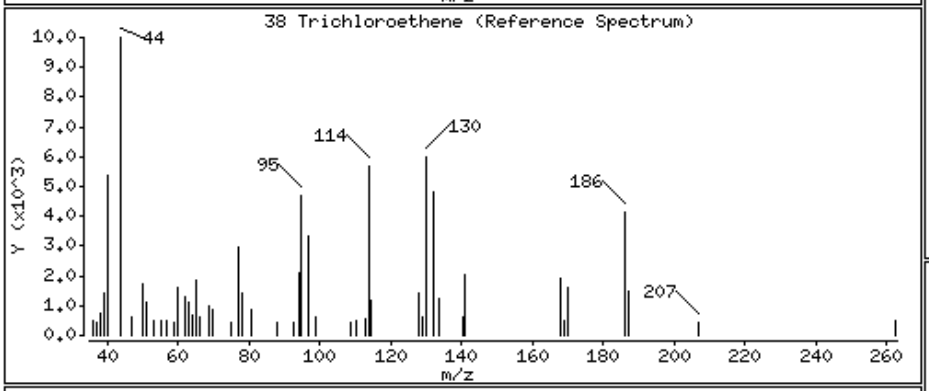
Concentration: 225.11 ug/l

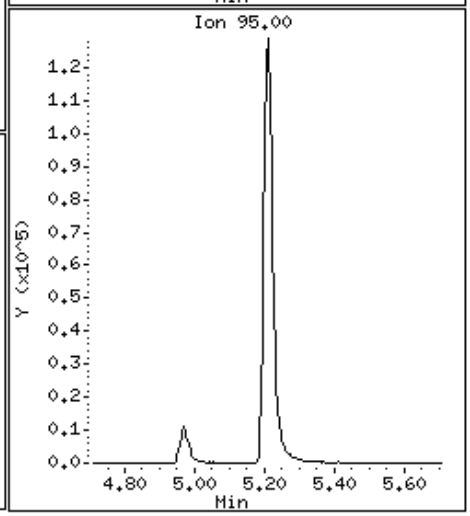


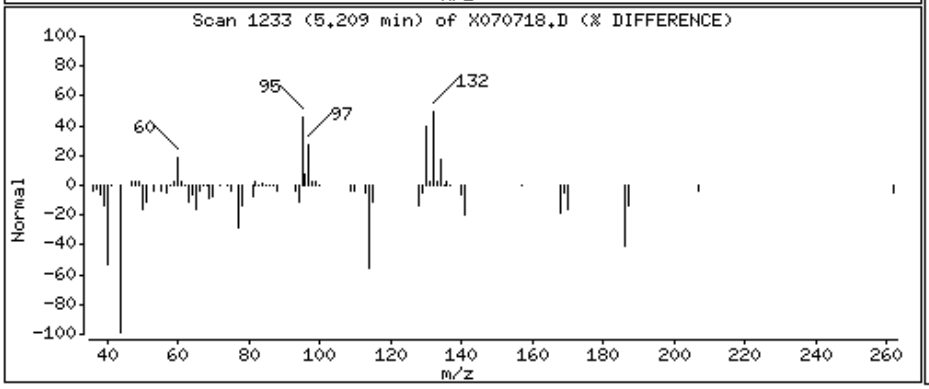












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InstruID : voa6.i
LabSampID : HS22061645-08

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070720.D Page 1
Report Date: 19-Jul-2022 13:45

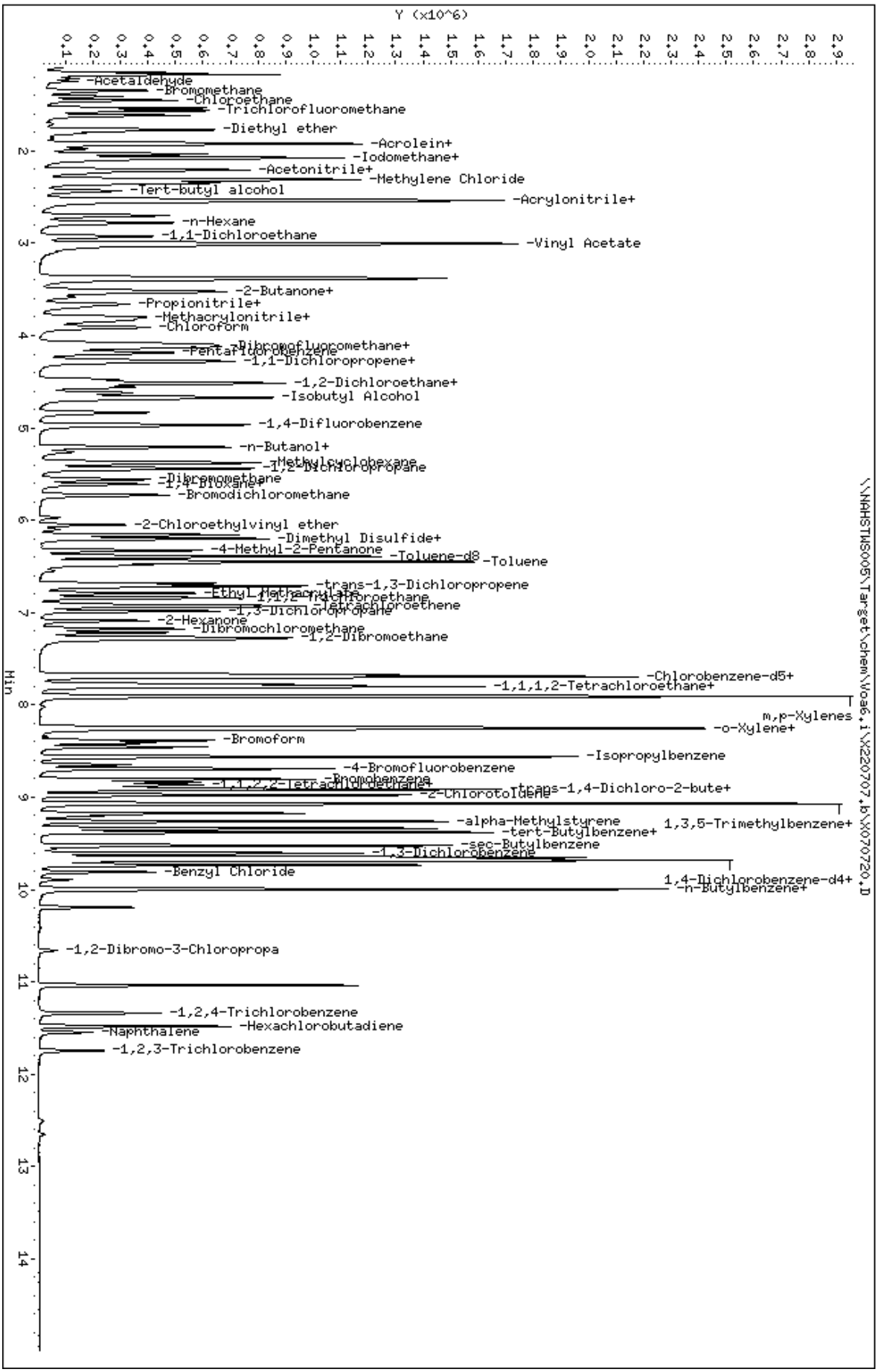
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070720.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 07-JUL-2022 16:51
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:45 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	437090	50.0000	
*	36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	662385	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	603418	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	289877	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	202629	50.0000	49.48
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	306578	50.0000	58.52
$	30 Dibromofluoromethane	113	4.102	4.102	(0.980)	202533	50.0000	50.24
$	48 Toluene-d8	98	6.389	6.389	(0.833)	762968	50.0000	50.91
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	168081	50.0000	48.99
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	226406	50.0000	54.14
	33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	260015	50.0000	47.36
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	245901	50.0000	48.60
	17 Methylene Chloride	84	2.307	2.307	(0.551)	271939	50.0000	53.48
	38 Trichloroethene	130	5.208	5.208	(1.048)	244754	50.0000	49.34
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	296104	50.0000	52.96



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220707.b\X070720.D
Date : 07-JUL-2022 16:51
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070720.D
Inj Date : 07-JUL-2022 16:51
InstruID : voa6.i
LabSampID : CCV-END

NO MANUAL INTEGRATIONS

HS22061645 RSK175

ALS WO# HS22061645

FID04 -Logbook

Batch: 26730 **Analyst:** Nosa Izekor

Date: 01-24-2017 **Reviewer:**

Method: RSK 175 ICAL **Laboratory:** Houston

Comments: Target Sequence 170124

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	p
1	ICAL1	CALIB_1	01-24-2017 09:06 am	1.00	0.00 mL	0.00 mL	001.D	Liquid	Y	N
2	ICAL2	CALIB_2	01-24-2017 09:30 am	1.00	0.00 mL	0.00 mL	002.D	Liquid	Y	N
3	ICAL3	CALIB_3	01-24-2017 09:59 am	1.00	0.00 mL	0.00 mL	003.D	Liquid	Y	N
4	ICAL4	CALIB_4	01-24-2017 10:15 am	1.00	0.00 mL	0.00 mL	004.D	Liquid	Y	N
5	ICAL5	CALIB_5	01-24-2017 10:39 am	1.00	0.00 mL	0.00 mL	005.D	Liquid	Y	N
6	ICAL6	CALIB_6	01-24-2017 10:57 am	1.00	0.00 mL	0.00 mL	006.D	Liquid	Y	N
7	ICAL7	CALIB_7	01-24-2017 11:13 am	1.00	0.00 mL	0.00 mL	007.D	Liquid	Y	N
8	ICV	METHSPIKI	01-24-2017 12:05 pm	1.00	0.00 mL	0.00 mL	008.D	Liquid	Y	N
9	LCS-170124	LCS	01-24-2017 12:24 pm	1.00	0.00 mL	0.00 mL	009.D	Liquid	Y	N
10	LCSD-170124	LCSD	01-24-2017 12:40 pm	1.00	0.00 mL	0.00 mL	010.D	Liquid	Y	N
11	MBLK-170124	MBLK	01-24-2017 12:57 pm	1.00	0.00 mL	0.00 mL	011.D	Liquid	Y	N
12	HS17010778-01	SAMP	01-24-2017 01:14 pm	1.00	0.00 mL	0.00 mL	012.D	Liquid	Y	N
13	HS17010779-01	SAMP	01-24-2017 01:31 pm	1.00	0.00 mL	0.00 mL	013.D	Liquid	Y	N
14	HS17010779-01DUP	SAMP	01-24-2017 01:47 pm	1.00	0.00 mL	0.00 mL	014.D	Liquid	Y	N
15	CCV	CCV	01-24-2017 02:01 pm	1.00	0.00 mL	0.00 mL	015.D	Liquid	Y	N

Chemical	Value
ICAL STD ID	30010700217
ICV STD ID	30010700610

FORM 3
WATER GASES METHOD SPIKE RECOVERY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22061645

Matrix Spike - ENG SC Sample No.: ICV

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE AMOUNT ()	% REC #	QC. LIMITS REC.
Ethene	16.800	19.090	114	75-125
Methane	9.647	9.597	99	75-125
Ethane	18.043	19.657	109	75-125
Propane	26.463	27.238	103	75-125
N-Butane	34.955	36.010	103	75-125

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

_____

FORM III GASES

FORM 6
GASES INITIAL CALIBRATION DATA

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22061645

Instrument ID: FID-4 Calibration Date(s): 01/24/17 01/24/17

Column: RTX-PLOT ID: 0.53 (mm) Calibration Time(s): 0906 1113

LAB FILE ID: RF10: 001 RF25: 002 RF50: 003
RF100: 004 RF250: 005 RF500: 006

COMPOUND	RF10	RF25	RF50	RF100	RF250	RF500
Ethene	535.608	567.359	564.985	516.024	665.282	425.678
Methane	968.912	978.238	1019.699	880.798	960.713	930.704
Ethane	602.493	670.177	658.908	597.201	808.513	817.630
Propane	500	1279	2602	4785	18294	38286
N-Butane	438	936	2034	3864	18446	42817

FORM VI GASES

FORM 6
GASES INITIAL CALIBRATION DATA

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS2206164

Instrument ID: FID-4 Calibration Date(s): 01/24/17 01/24/17

Column: RTX-PLOT ID: 0.53 (mm) Calibration Time(s): 0906 1113

RF1000: 007

COMPOUND	RF1000	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MA
Ethene	828.858	AVRG		586.256273		21.932	
Methane	1081.580	AVRG		974.377787		6.550	
Ethane	999.335	AVRG		736.322546		19.885	
Propane	96509	2ORDR	0.97987006	1.529e-003	-4.58e-009	0.9991365	(
N-Butane	114164	2ORDR	2.46870151	1.834e-003	-5.54e-009	0.9980766	(

FORM VI GASES

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\001.D
Lab Smp Id: ICAL1 Client Smp ID: ICAL1
Inj Date : 24-JAN-2017 09:06
Operator : JA Inst ID: FID-4.i
Smp Info : ICAL1;ICAL1;;;
Misc Info :
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:06 Cal File: 001.D
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.030	0.013	374	0.38600	0.383(a)
2 Ethene	1.553	1.556	-0.003	361	0.67400	0.615(a)
3 Ethane	1.716	1.723	-0.007	435	0.72200	0.590(a)
4 Propane	4.073	4.113	-0.040	500	1.05900	1.743
5 N-Butane	7.640	7.690	-0.050	438	1.39800	3.271

QC Flag Legend

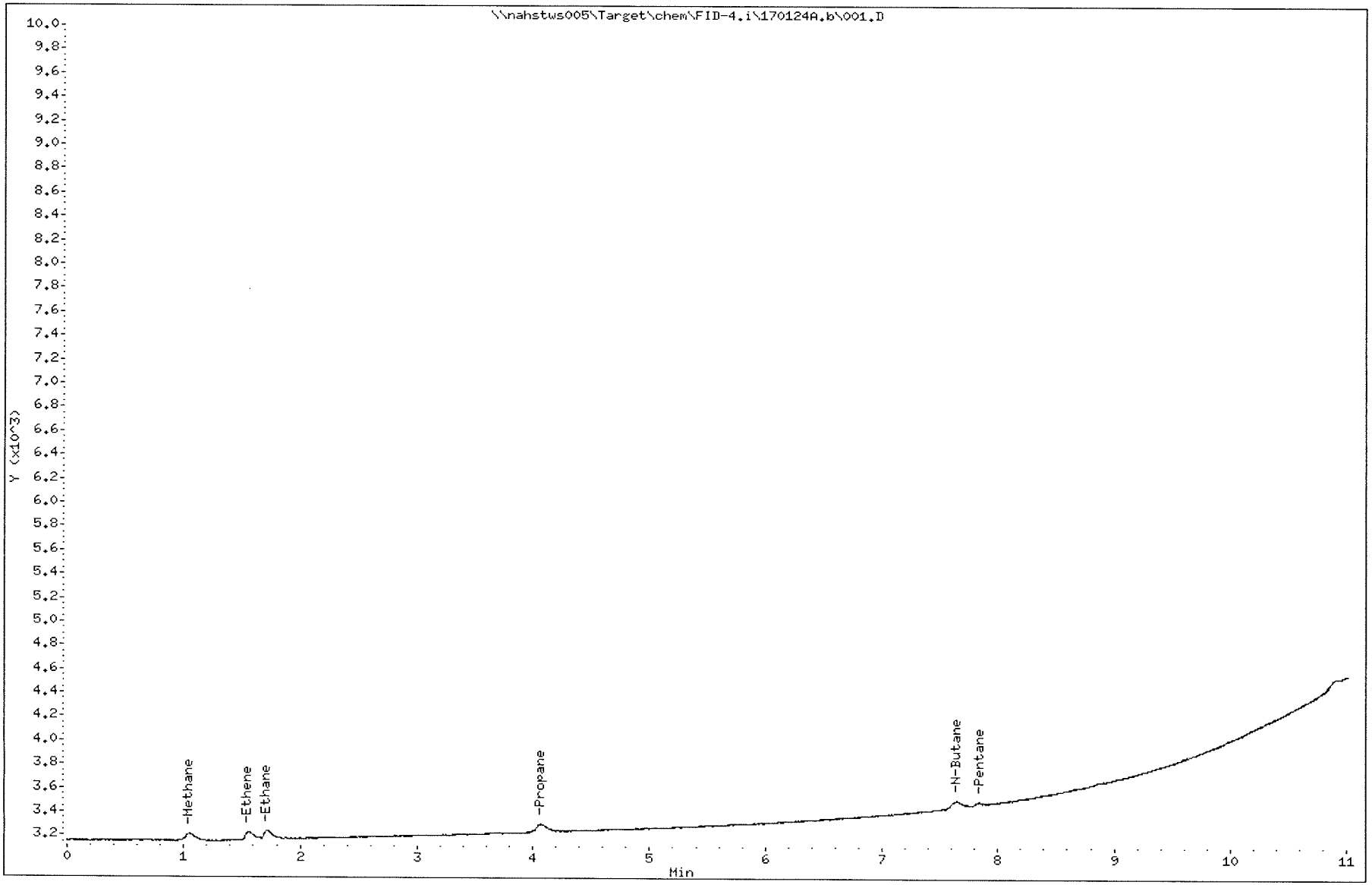
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\001.D
Date : 24-JAN-2017 09:06
Client ID: ICAL1
Sample Info: ICAL1;ICAL1;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: JA
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\002.D
Lab Smp Id: ICAL2 Client Smp ID: ICAL2
Inj Date : 24-JAN-2017 09:30
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL2;ICAL2;;;
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:59 Cal File: 003.D
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

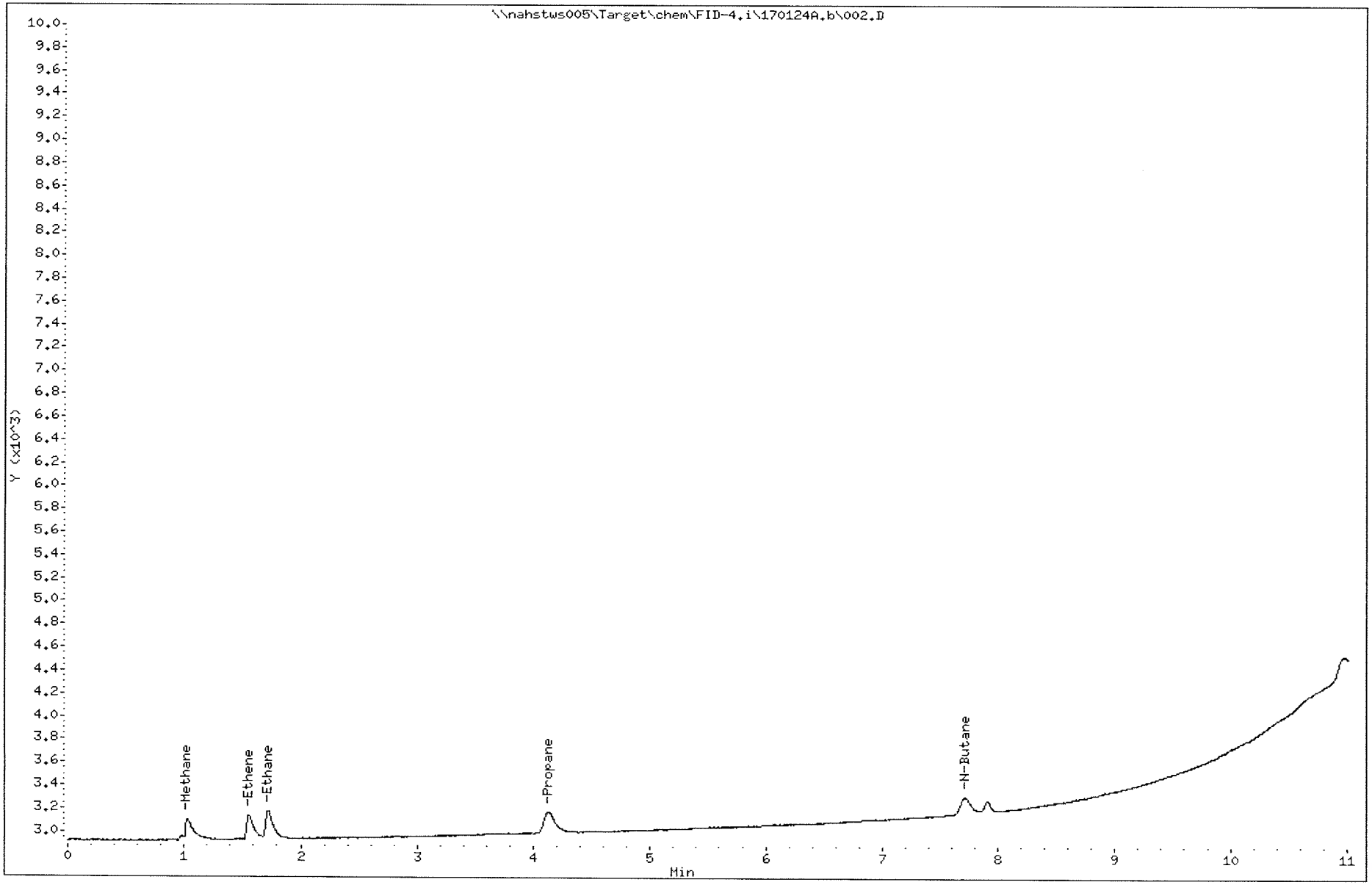
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.023	1.030	-0.007	944	0.96500	0.968
2 Ethene	1.560	1.556	0.004	956	1.68500	1.630
3 Ethane	1.723	1.723	0.000	1209	1.80400	1.641
4 Propane	4.123	4.113	0.010	1279	2.64600	2.927
5 N-Butane	7.716	7.690	0.026	936	3.49600	4.180

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\002.D
Date : 24-JAN-2017 09:30
Client ID: ICAL2
Sample Info: ICAL2;ICAL2;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\003.D
Lab Smp Id: ICAL3 Client Smp ID: ICAL3
Inj Date : 24-JAN-2017 09:59
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL3;ICAL3;;;
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 3 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

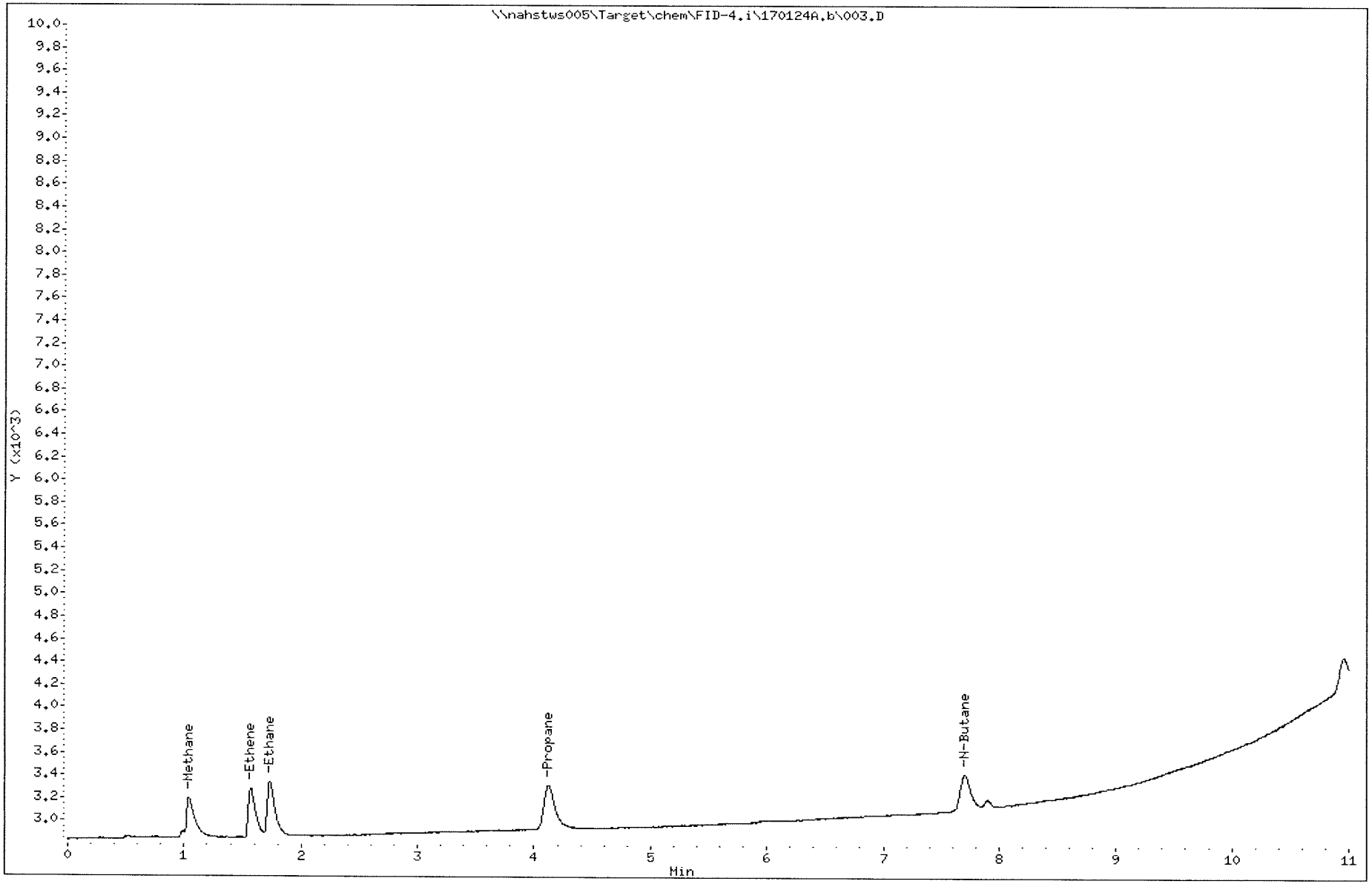
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	1.043	1.030	0.013	1967	1.92900	2.018
2 Ethene	1.570	1.556	0.014	1904	3.37000	3.247
3 Ethane	1.736	1.723	0.013	2378	3.60900	3.229
4 Propane	4.123	4.113	0.010	2602	5.29300	4.926
5 N-Butane	7.703	7.690	0.013	2034	6.99100	6.176

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\003.D
Date : 24-JAN-2017 09:59
Client ID: ICAL3
Sample Info: ICAL3;ICAL3;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\004.D
Lab Smp Id: ICAL4 Client Smp ID: ICAL4
Inj Date : 24-JAN-2017 10:15
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL4;ICAL4;;;
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:30 Cal File: 002.D
Als bottle: 4 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.033	1.030	0.003	3399	3.85900	3.488
2 Ethene	1.563	1.556	0.007	3478	6.74000	5.932
3 Ethane	1.726	1.723	0.003	4310	7.21700	5.853
4 Propane	4.120	4.113	0.007	4785	10.5850	8.190
5 N-Butane	7.703	7.690	0.013	3864	13.9820	9.473(M)

QC Flag Legend

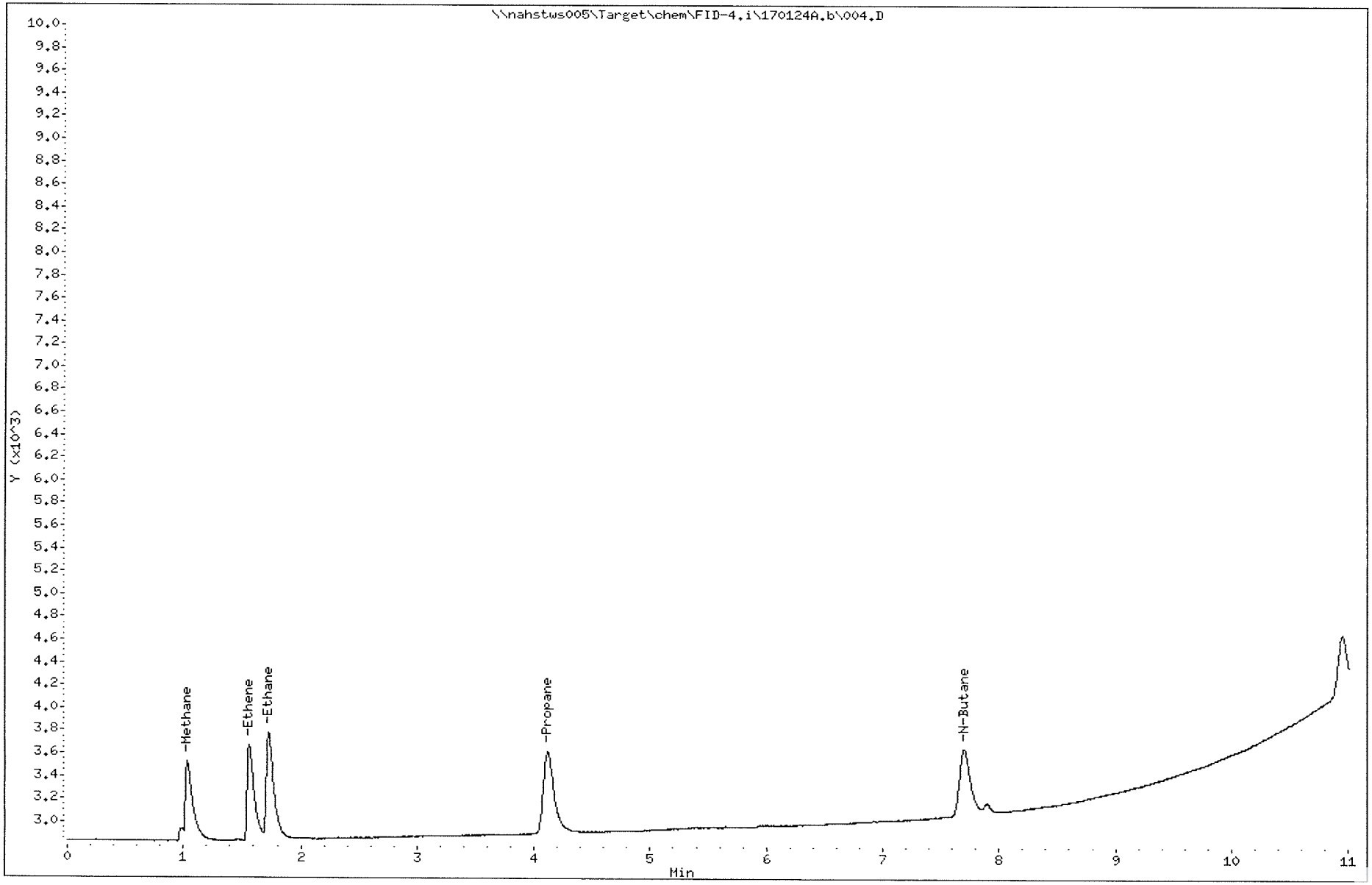
M - Compound response manually integrated.

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\004.D
Date : 24-JAN-2017 10:15
Client ID: ICAL4
Sample Info: ICAL4;ICAL4;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\005.D
Lab Smp Id: ICAL5 Client Smp ID: ICAL5
Inj Date : 24-JAN-2017 10:39
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL5;ICAL5;;;
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:39 Cal File: 005.D
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	1.043	1.030	0.013	9268	9.64700	9.511
2 Ethene	1.570	1.556	0.014	11210	16.8500	19.121
3 Ethane	1.733	1.723	0.010	14588	18.0430	19.811
4 Propane	4.120	4.113	0.007	18294	26.4630	27.415
5 N-Butane	7.700	7.690	0.010	18446	34.9550	34.419(M)

QC Flag Legend

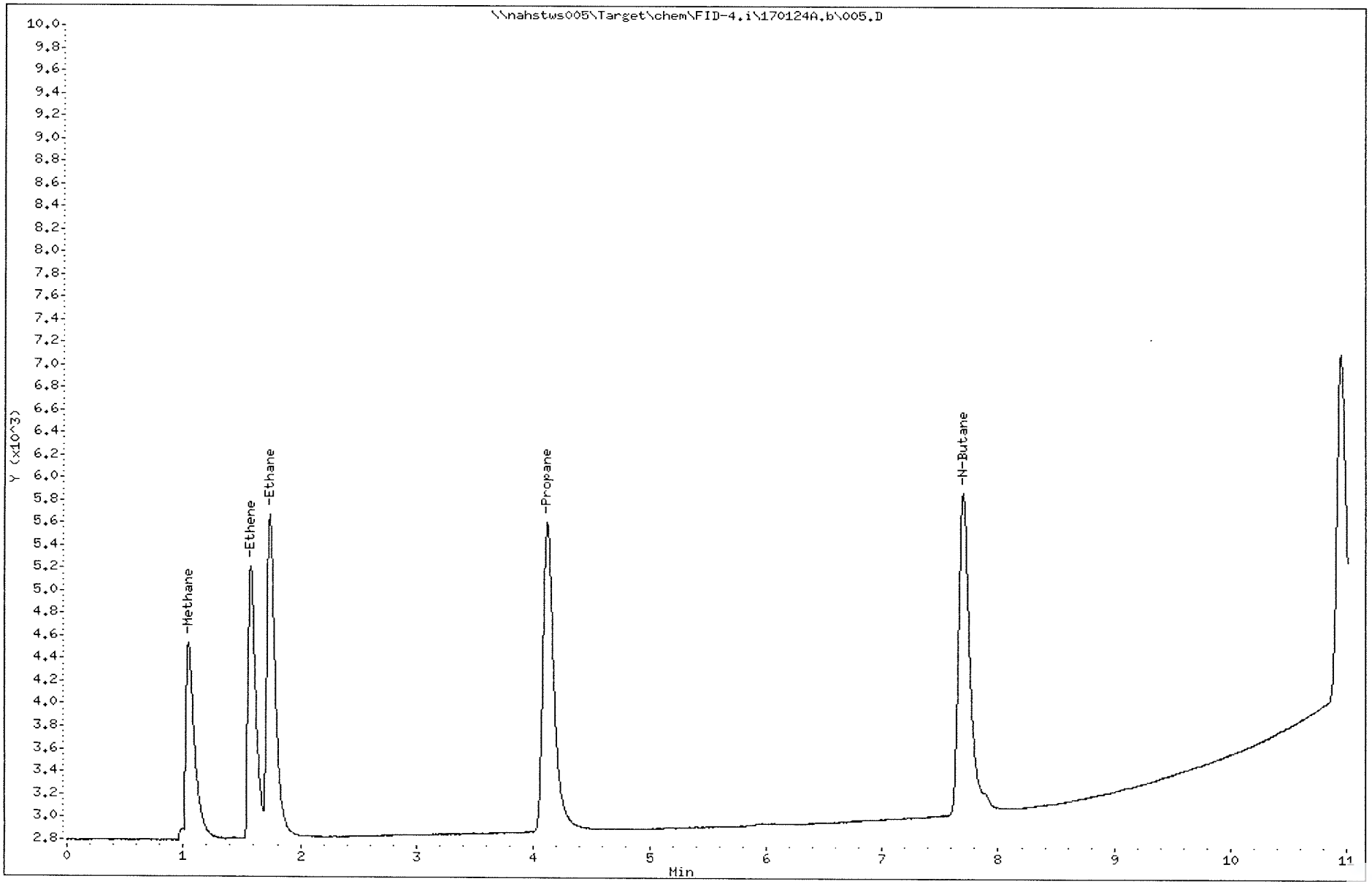
M - Compound response manually integrated.

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\005.D
Date : 24-JAN-2017 10:39
Client ID: ICAL5
Sample Info: ICAL5;ICAL5;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA
Column diameter: 0.53



Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\006.D Page 1
Report Date: 27-Dec-2021 13:16

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\006.D
Lab Smp Id: ICAL6 Client Smp ID: ICAL6
Inj Date : 24-JAN-2017 10:57
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL6;ICAL6;;;
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:39 Cal File: 005.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

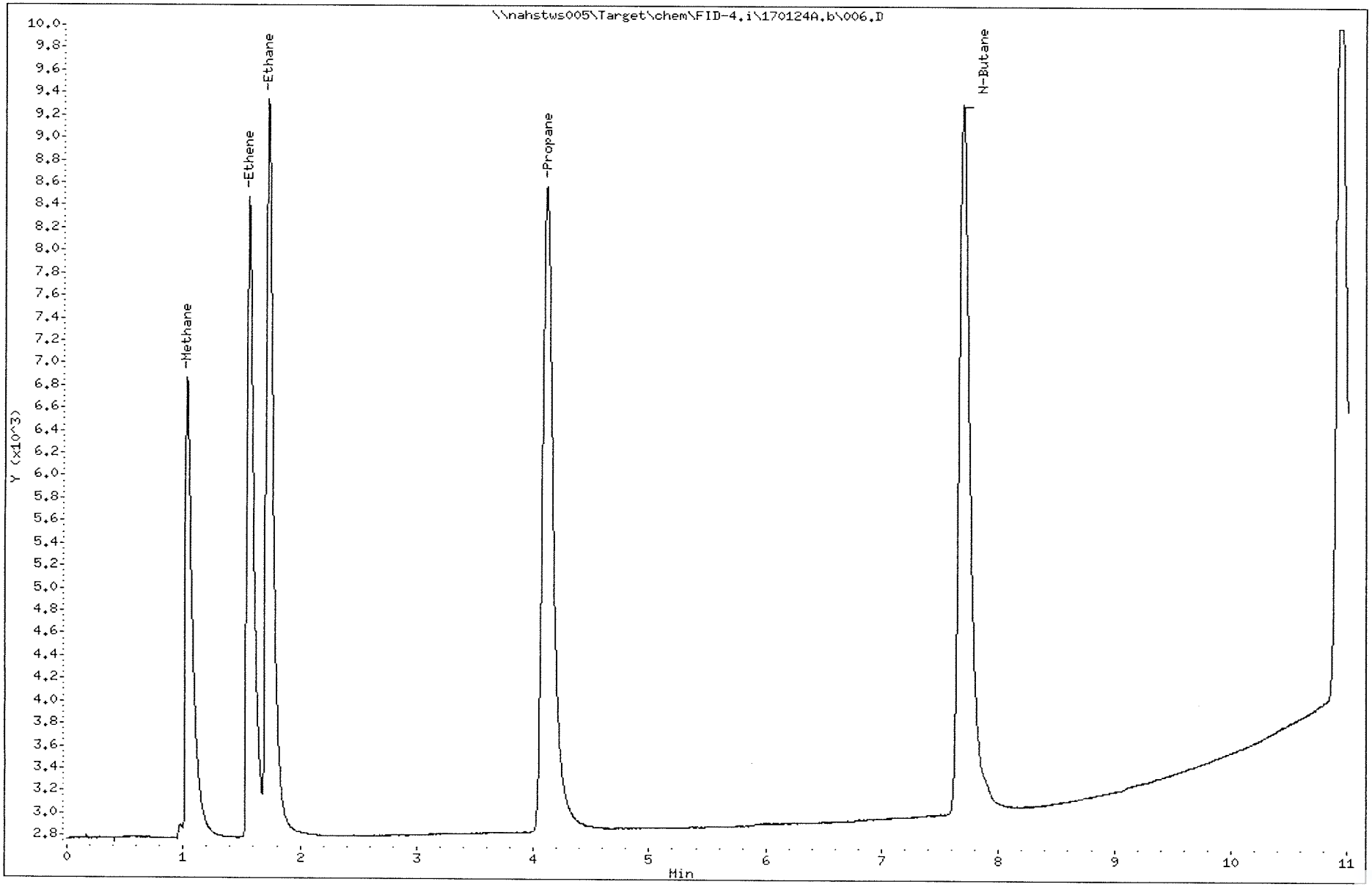
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	1.023	1.030	-0.007	17957	19.2940	18.429
2 Ethene	1.550	1.556	-0.006	22910	53.8200	39.078
3 Ethane	1.716	1.723	-0.007	29505	36.0860	40.070
4 Propane	4.110	4.113	-0.003	38286	52.9260	52.796
5 N-Butane	7.696	7.690	0.006	42817	69.9110	70.855

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\006.D
Date : 24-JAN-2017 10:57
Client ID: ICAL6
Sample Info: ICAL6;ICAL6;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\007.D
Lab Smp Id: ICAL7 Client Smp ID: ICAL7
Inj Date : 24-JAN-2017 11:13
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL7;ICAL7;;;
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:57 Cal File: 006.D
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	1.030	1.030	0.000	41736	38.5880	42.833(A)
2 Ethene	1.556	1.556	0.000	55865	67.4000	95.291(A)
3 Ethane	1.723	1.723	0.000	72124	72.1720	97.951(A)
4 Propane	4.113	4.113	0.000	96509	105.852	105.844
5 N-Butane	7.690	7.690	0.000	114164	139.821	139.707

QC Flag Legend

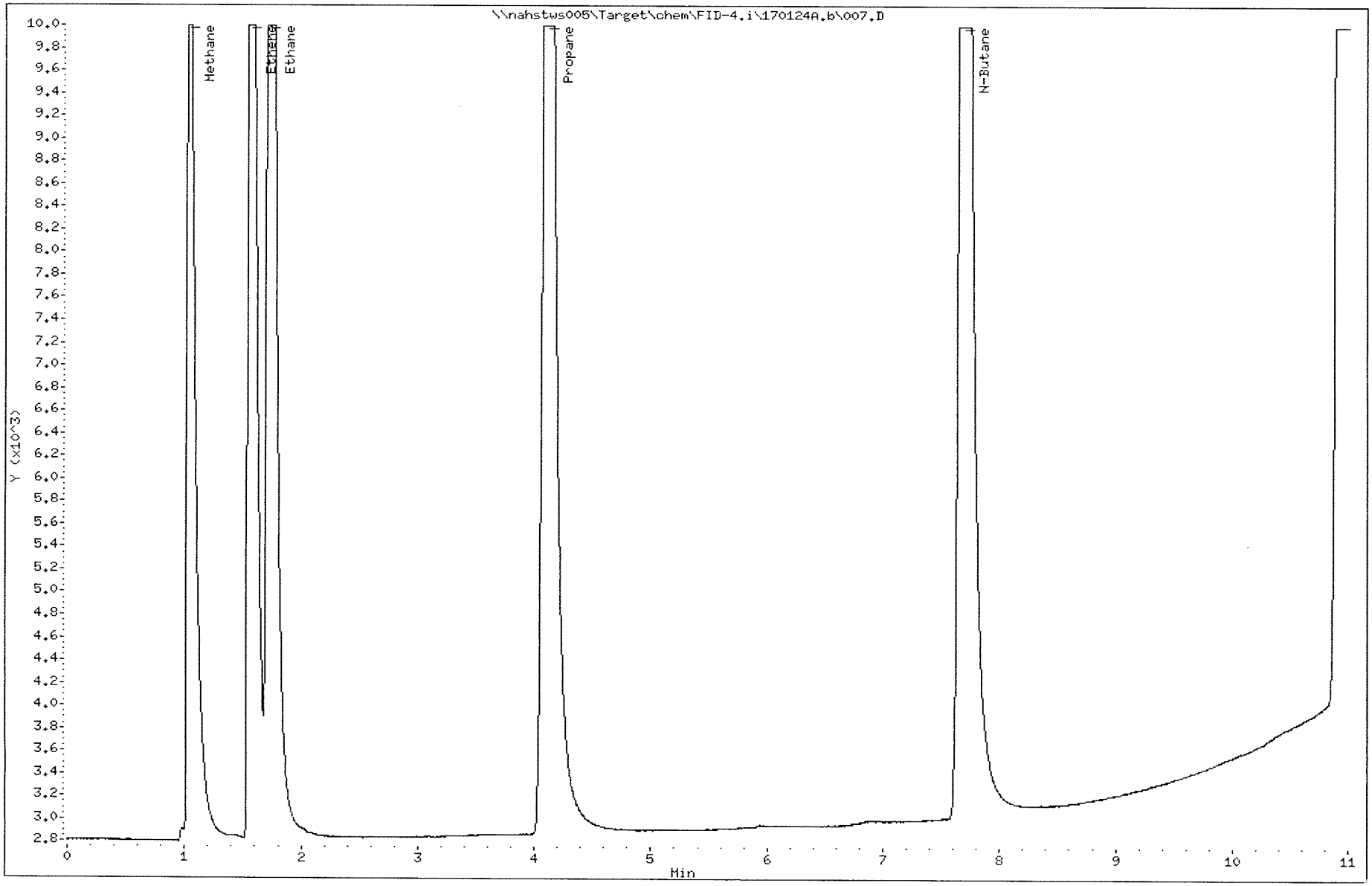
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\007.D
Date : 24-JAN-2017 11:13
Client ID: ICAL7
Sample Info: ICAL7;ICAL7;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\008.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 24-JAN-2017 12:05
Operator : MA Inst ID: FID-4.i
Smp Info : ICV;ICV;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 8 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

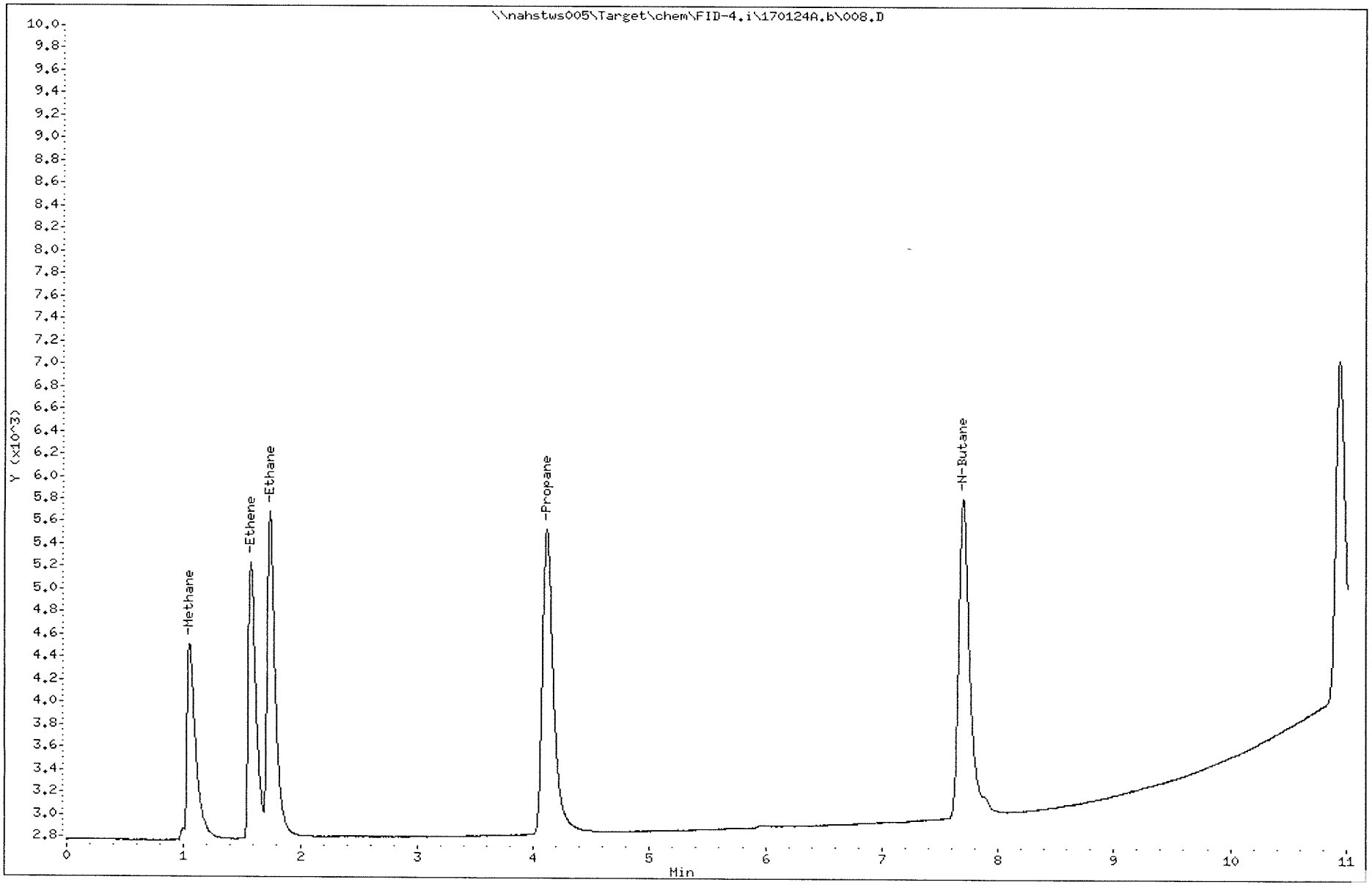
					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	1.046	1.030	0.016	9352	9.59792	9.597
2 Ethene	1.573	1.556	0.017	11192	19.0906	19.090
3 Ethane	1.736	1.723	0.013	14474	19.6571	19.657
4 Propane	4.116	4.113	0.003	18164	27.2381	27.238
5 N-Butane	7.696	7.690	0.006	19425	36.0103	36.010

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\008.D
Date : 24-JAN-2017 12:05
Client ID: ICV
Sample Info: ICV;ICV;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA
Column diameter: 0.53



FID04 -Logbook

Batch: 50295 **Analyst:** Purvi Lad

Date: 07-11-2022 **Reviewer:**

Method: RSK175 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	RSK-CCV	CCV	07-11-2022 08:51 am	1.00	0.00 mL	0.00 mL	001.D	Liquid	Y	NA
2	MBLK-220711	MBLK	07-11-2022 09:00 am	1.00	0.00 mL	0.00 mL	002.D	Liquid	Y	NA
3	LCS-220711	LCS	07-11-2022 09:10 am	1.00	0.00 mL	0.00 mL	003.D	Liquid	Y	NA
4	HS22061645-01	SAMP	07-11-2022 09:19 am	1.00	0.00 mL	0.00 mL	004.D	Liquid	Y	<2
5	HS22061645-02	SAMP	07-11-2022 09:27 am	1.00	0.00 mL	0.00 mL	005.D	Liquid	Y	<2
6	HS22061645-03	SAMP	07-11-2022 09:36 am	1.00	0.00 mL	0.00 mL	006.D	Liquid	Y	<2
7	HS22061645-04	SAMP	07-11-2022 09:46 am	1.00	0.00 mL	0.00 mL	007.D	Liquid	Y	<2
8	HS22061645-05	SAMP	07-11-2022 09:56 am	1.00	0.00 mL	0.00 mL	008.D	Liquid	Y	<2
9	HS22061645-06	SAMP	07-11-2022 10:05 am	1.00	0.00 mL	0.00 mL	009.D	Liquid	Y	<2
10	HS22061645-10	SAMP	07-11-2022 10:15 am	1.00	0.00 mL	0.00 mL	010.D	Liquid	Y	<2
11	RSK-CCV	CCV	07-11-2022 10:26 am	1.00	0.00 mL	0.00 mL	011.D	Liquid	Y	NA
12	HS22061645-01	SAMP	07-11-2022 10:37 am	100.0(	0.00 mL	0.00 mL	012.D	Liquid	Y	<2
13	HS22061645-02	SAMP	07-11-2022 10:45 am	20.00	0.00 mL	0.00 mL	013.D	Liquid	Y	<2
14	HS22061645-03	SAMP	07-11-2022 10:54 am	20.00	0.00 mL	0.00 mL	014.D	Liquid	Y	<2
15	HS22061645-04	SAMP	07-11-2022 11:04 am	200.0(	0.00 mL	0.00 mL	015.D	Liquid	Y	<2
16	HS22061645-10	SAMP	07-11-2022 11:17 am	400.0(	0.00 mL	0.00 mL	016.D	Liquid	Y	<2
17	HS22070020-01	SAMP	07-11-2022 11:28 am	1.00	0.00 mL	0.00 mL	017.D	Liquid	Y	<2
18	HS22070020-01MS	MS	07-11-2022 11:36 am	1.00	0.00 mL	0.00 mL	018.D	Liquid	Y	NA
19	HS22070020-01MSD	MSD	07-11-2022 11:53 am	1.00	0.00 mL	0.00 mL	019.D	Liquid	Y	NA
20	HS22070020-02	SAMP	07-11-2022 12:02 pm	1.00	0.00 mL	0.00 mL	020.D	Liquid	Y	<2
21	HS22070020-04	SAMP	07-11-2022 12:10 pm	1.00	0.00 mL	0.00 mL	021.D	Liquid	Y	<2
22	RSK-CCV	CCV	07-11-2022 12:24 pm	1.00	0.00 mL	0.00 mL	022.D	Liquid	Y	NA
23	HS22070020-01	SAMP	07-11-2022 12:36 pm	100.0(	0.00 mL	0.00 mL	023.D	Liquid	Y	<2
24	HS22070020-02	SAMP	07-11-2022 12:46 pm	10.00	0.00 mL	0.00 mL	024.D	Liquid	Y	<2
25	HS22070326-03	SAMP	07-11-2022 12:58 pm	1.00	0.00 mL	0.00 mL	025.D	Liquid	Y	<2
26	HS22070326-04	SAMP	07-11-2022 01:06 pm	1.00	0.00 mL	0.00 mL	026.D	Liquid	Y	<2
27	HS22070326-05	SAMP	07-11-2022 01:17 pm	1.00	0.00 mL	0.00 mL	027.D	Liquid	Y	<2
28	HS22070326-07	SAMP	07-11-2022 01:25 pm	1.00	0.00 mL	0.00 mL	028.D	Liquid	Y	<2
29	HS22070326-07MS	MS	07-11-2022 01:35 pm	1.00	0.00 mL	0.00 mL	029.D	Liquid	Y	NA
30	HS22070326-07MSD	MSD	07-11-2022 01:43 pm	1.00	0.00 mL	0.00 mL	030.D	Liquid	Y	NA
31	HS22070326-11	SAMP	07-11-2022 01:53 pm	1.00	0.00 mL	0.00 mL	031.D	Liquid	Y	<2
32	HS22070326-03	SAMP	07-11-2022 02:02 pm	100.0(	0.00 mL	0.00 mL	032.D	Liquid	Y	<2
33	RSK-CCV	CCV	07-11-2022 02:23 pm	1.00	0.00 mL	0.00 mL	033.D	Liquid	Y	NA
34	HS22070326-04	SAMP	07-11-2022 02:34 pm	50.00	0.00 mL	0.00 mL	034.D	Liquid	Y	<2
35	HS22070326-05	SAMP	07-11-2022 02:42 pm	50.00	0.00 mL	0.00 mL	035.D	Liquid	Y	<2
36	HS22070326-07	SAMP	07-11-2022 02:52 pm	100.0(	0.00 mL	0.00 mL	036.D	Liquid	Y	<2
37	HS22070326-11	SAMP	07-11-2022 03:05 pm	10.00	0.00 mL	0.00 mL	037.D	Liquid	Y	<2
38	RSK-CCV	CCV	07-11-2022 03:16 pm	1.00	0.00 mL	0.00 mL	038.D	Liquid	Y	NA

FID04 -Logbook

Chemical	Value
pH Paper	300107067-03
CCV/LC/LSD/MS/MSD	300107064-16/63-06

FORM 7B
GASES CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22061645

Instrument ID: FID-4 Calibration Date: 07/11/22 Time: 0851

Lab File ID: 001 Init. Calib. Date(s): 01/24/17 01/24/17

Init. Calib. Times: 0906 1113

GC Column: RTX-PLOT ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF250.00 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Ethane	719.48900	811.22873	0.01	-12.75	20.00	AVRG
Methane	974.99200	857.98694	0.01	12.00	20.00	AVRG
Ethene	585.76000	682.49258	0.01	-16.51	20.00	AVRG

FORM VII GASES

FORM 7B
GASES CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22061645

Instrument ID: FID-4 Calibration Date: 07/11/22 Time: 1026

Lab File ID: 011 Init. Calib. Date(s): 01/24/17 01/24/17

Init. Calib. Times: 0906 1113

GC Column: RTX-PLOT ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF250.00 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Ethane	719.48900	833.23172	0.01	-15.81	20.00	AVRG
Methane	974.99200	1032.3417	0.01	-5.88	20.00	AVRG
Ethene	585.76000	676.08309	0.01	-15.42	20.00	AVRG

FORM VII GASES

FORM 7B
GASES CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22061645

Instrument ID: FID-4 Calibration Date: 07/11/22 Time: 1224

Lab File ID: 022 Init. Calib. Date(s): 01/24/17 01/24/17

Init. Calib. Times: 0906 1113

GC Column: RTX-PLOT ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF250.00 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Ethane	719.48900	799.58987	0.01	-11.13	20.00	AVRG
Methane	974.99200	841.19415	0.01	13.72	20.00	AVRG
Ethene	585.76000	664.80712	0.01	-13.49	20.00	AVRG

FORM VII GASES

FORM 7B
GASES CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22061645

Instrument ID: FID-4 Calibration Date: 07/11/22 Time: 1423

Lab File ID: 033 Init. Calib. Date(s): 01/24/17 01/24/17

Init. Calib. Times: 0906 1113

GC Column: RTX-PLOT ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF250.00 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Ethane	719.48900	786.84254	0.01	-9.36	20.00	AVRG
Methane	974.99200	964.54856	0.01	1.07	20.00	AVRG
Ethene	585.76000	689.67359	0.01	-17.74	20.00	AVRG

FORM VII GASES

FORM 7B
GASES CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22061645

Instrument ID: FID-4 Calibration Date: 07/11/22 Time: 1516

Lab File ID: 038 Init. Calib. Date(s): 01/24/17 01/24/17

Init. Calib. Times: 0906 1113

GC Column: RTX-PLOT ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF250.00 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Ethane	719.48900	744.38841	0.01	-3.46	20.00	AVRG
Methane	974.99200	886.28589	0.01	9.10	20.00	AVRG
Ethene	585.76000	623.62018	0.01	-6.46	20.00	AVRG

FORM VII GASES

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\001.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 08:51
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

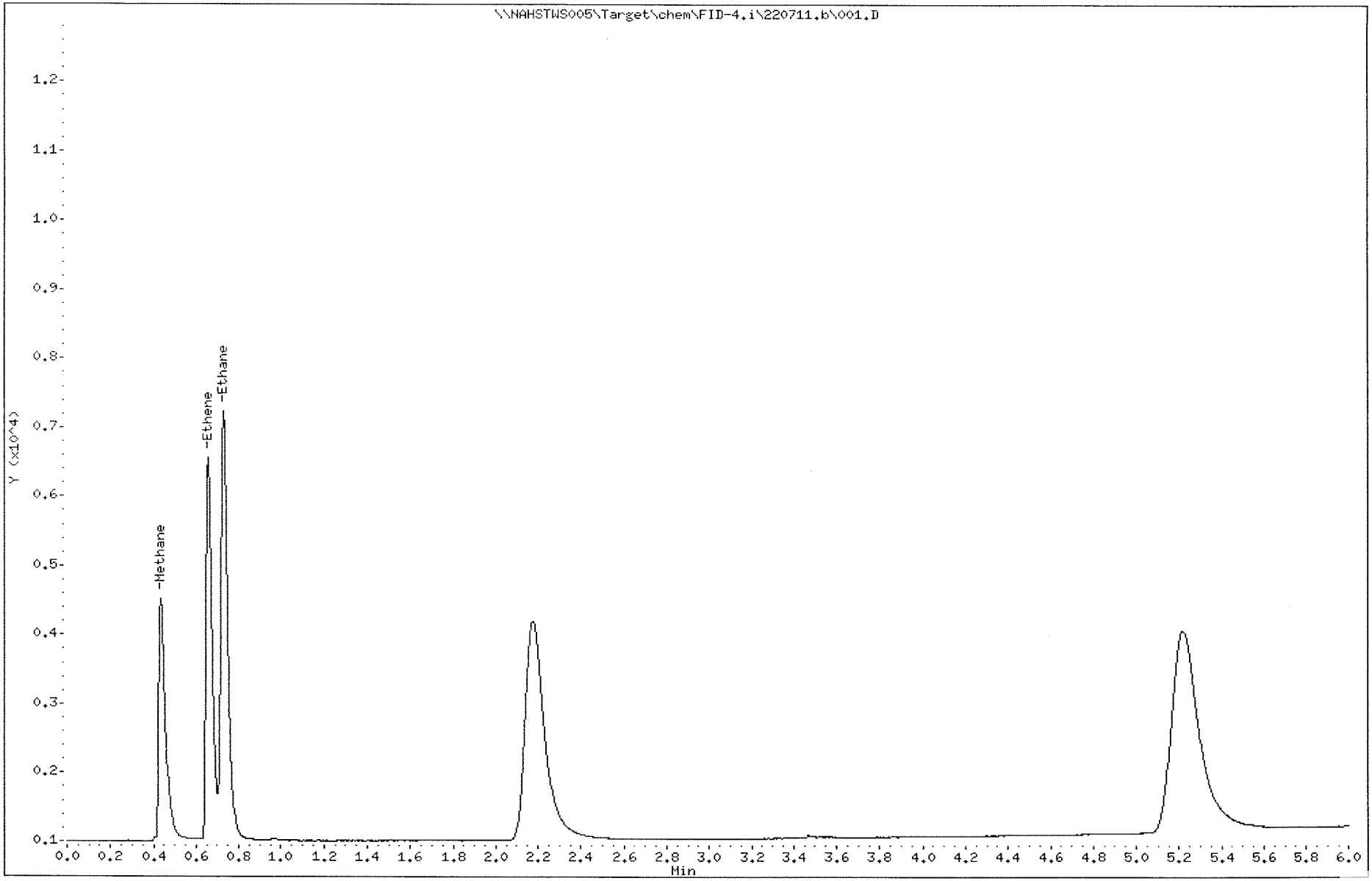
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.433	0.436	-0.003	8277	9.64700	8.489
2 Ethene	0.656	0.656	0.000	11500	16.8500	19.632
3 Ethane	0.730	0.733	-0.003	14637	18.0430	20.343

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\001.D
Date : 11-JUL-2022 08:51
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\002.D
Lab Smp Id: MBLK-220711 Client Smp ID: MBLK-220711
Inj Date : 11-JUL-2022 09:00
Operator : PL Inst ID: FID-4.i
Smp Info : MBLK-220711;MBLK-220711;3;;BLANK
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

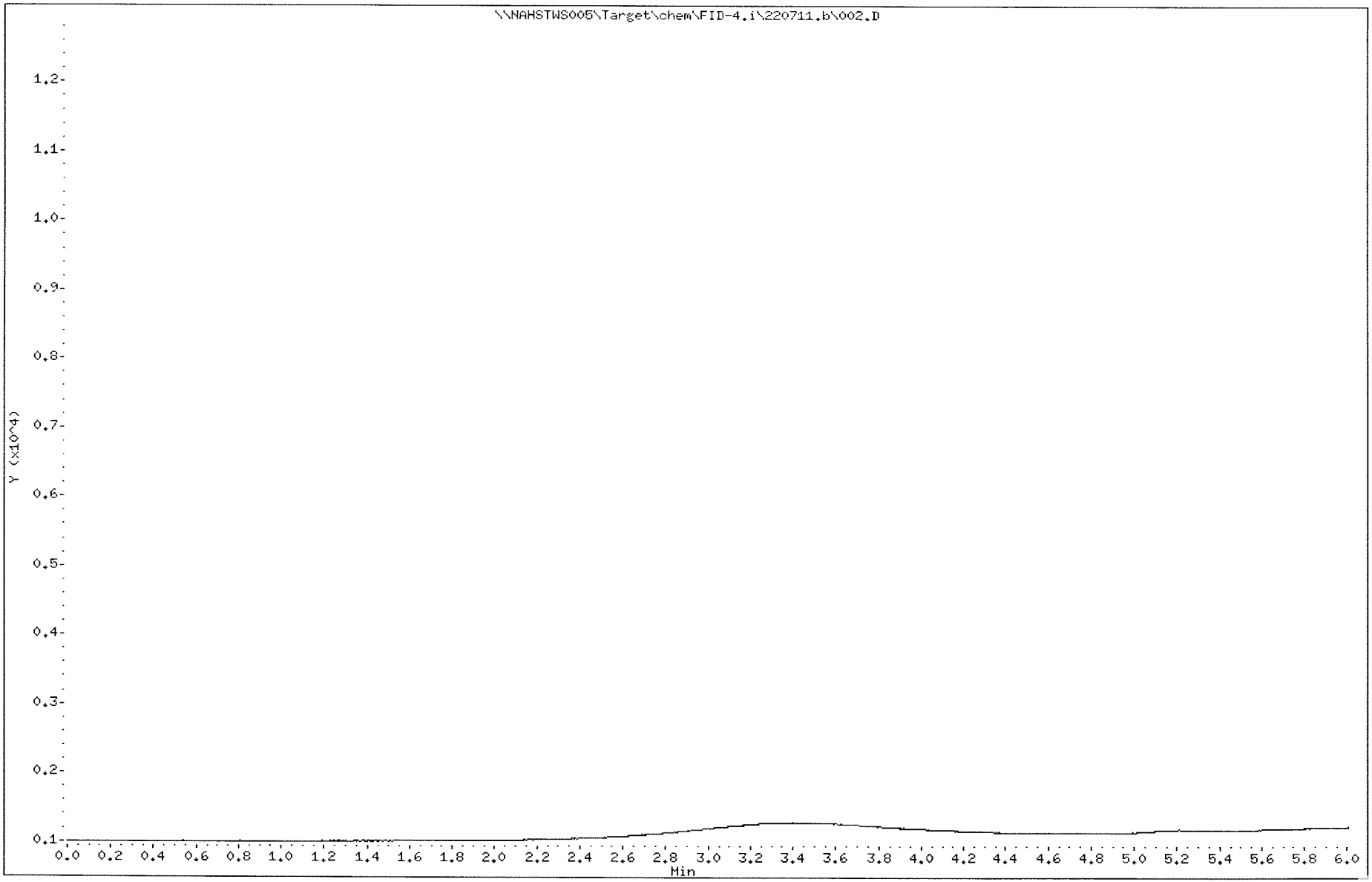
					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
==========	====	========	========	========	=======	=======

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\002.D
Date : 11-JUL-2022 09:00
Client ID: MBLK-220711
Sample Info: MBLK-220711;MBLK-220711;3;;BLANK

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\003.D
Lab Smp Id: LCS-220711 Client Smp ID: LCS-220711
Inj Date : 11-JUL-2022 09:10
Operator : PL Inst ID: FID-4.i
Smp Info : LCS-220711;LCS-220711;3;;LCS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

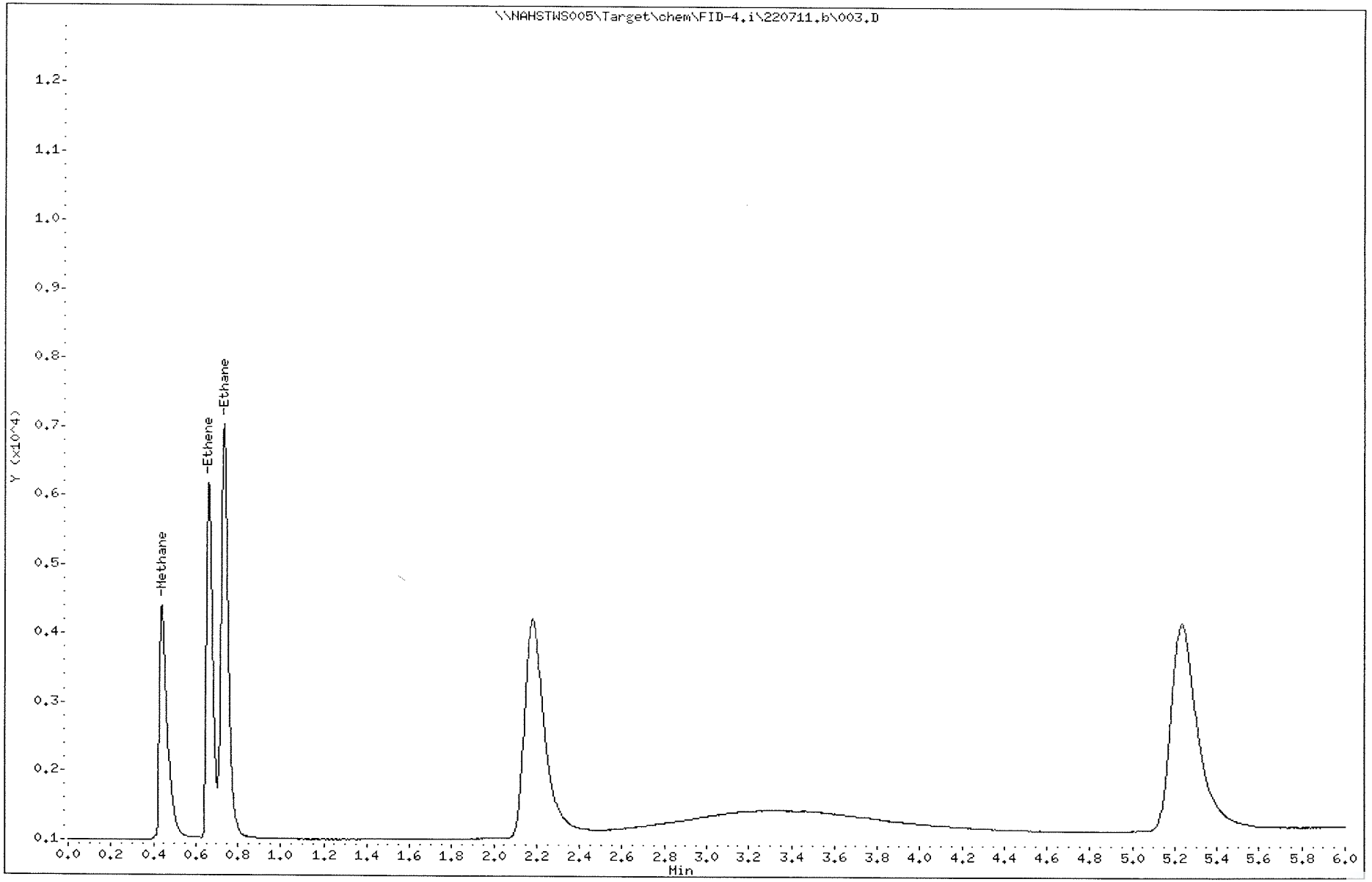
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.440	0.436	0.004	9129	9.36315	9.363
2 Ethene	0.660	0.656	0.004	11090	18.9327	18.932
3 Ethane	0.733	0.733	0.000	14796	20.5646	20.564

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\003.D
Date : 11-JUL-2022 09:10
Client ID: LCS-220711
Sample Info: LCS-220711;LCS-220711;3;;LCS

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



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Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\004.D
Lab Smp Id: HS22061645-01 Client Smp ID: HS22061645-01
Inj Date : 11-JUL-2022 09:19
Operator : PL Inst ID: FID-4.i
Smp Info : HS22061645-01;HS22061645-01
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.440	0.436	0.004	2377992	2438.99	2438.985(A)
2 Ethene	0.656	0.656	0.000	401036	684.642	684.641(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\004.D

Date : 11-JUL-2022 09:19

Client ID: HS22061645-01

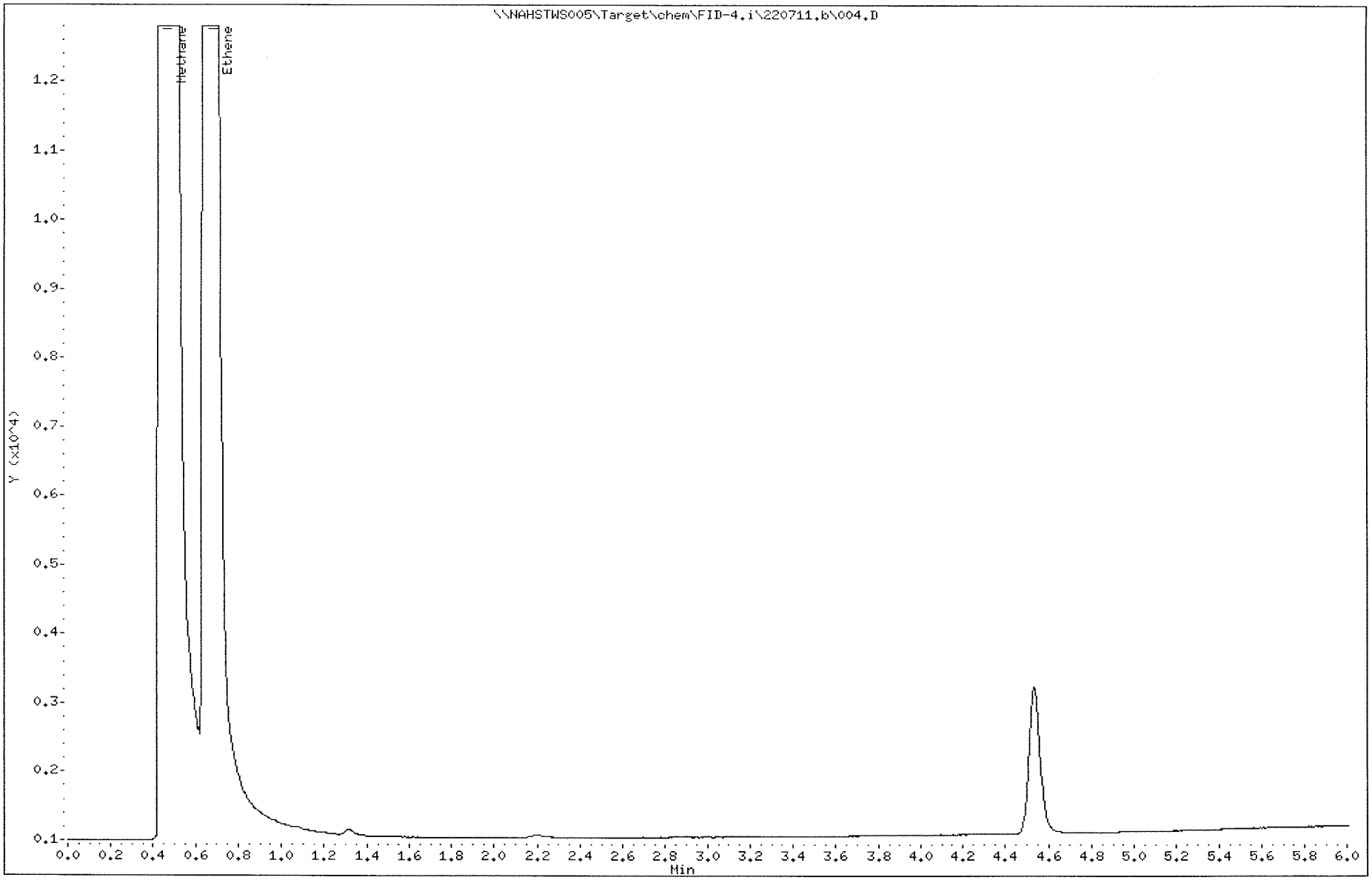
Instrument: FID-4.i

Sample Info: HS22061645-01;HS22061645-01

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\005.D Page 1
Report Date: 19-Jul-2022 14:17

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\005.D
Lab Smp Id: HS22061645-02 Client Smp ID: HS22061645-02
Inj Date : 11-JUL-2022 09:27
Operator : PL Inst ID: FID-4.i
Smp Info : HS22061645-02;HS22061645-02
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.436	0.436	0.000	199205	204.314	204.314(A)
2 Ethene	0.656	0.656	0.000	238977	407.977	407.977(A)

QC Flag Legend

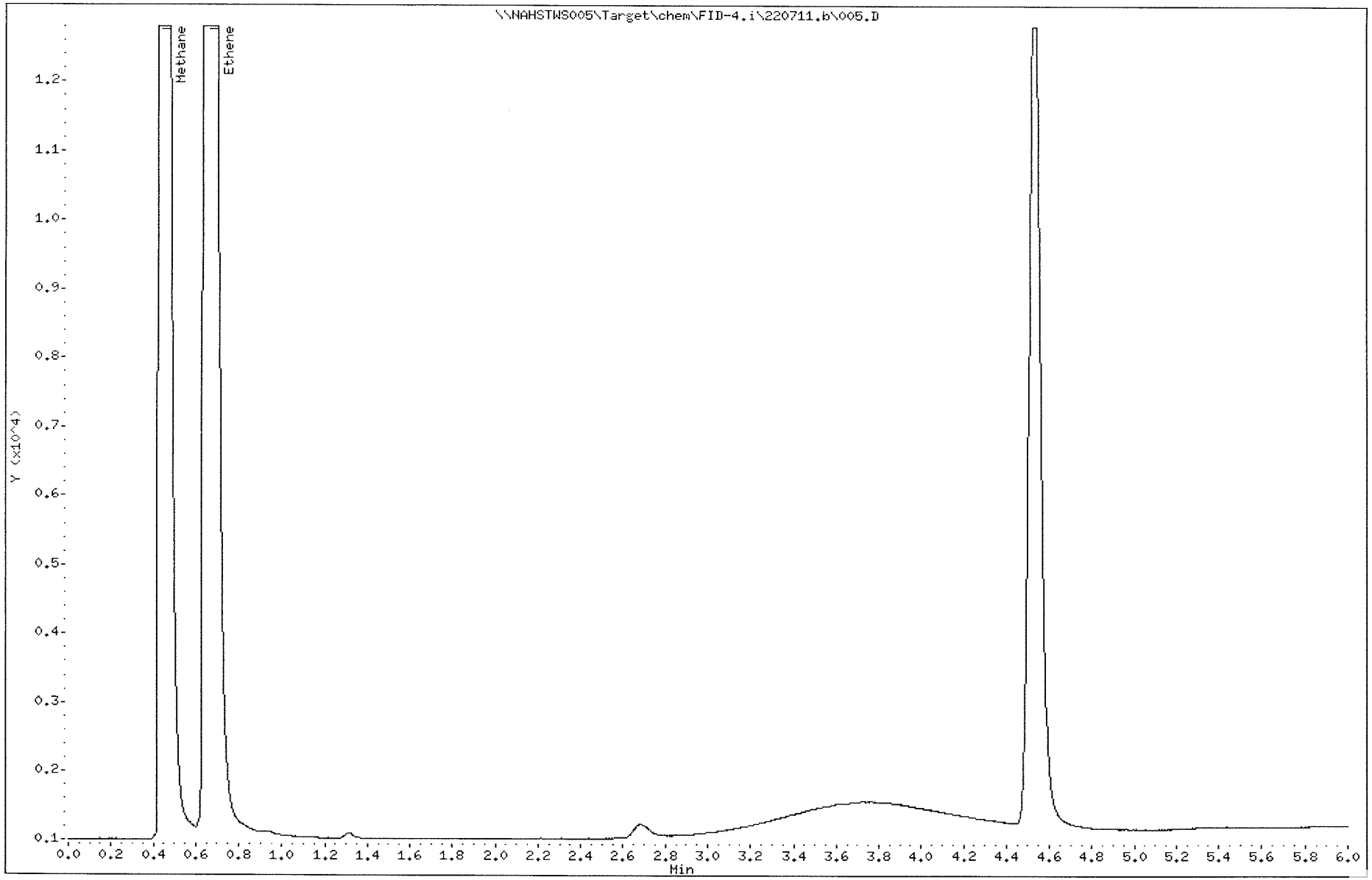
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\005.D
Date : 11-JUL-2022 09:27
Client ID: HS22061645-02
Sample Info: HS22061645-02;HS22061645-02

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\006.D Page 1
Report Date: 19-Jul-2022 14:17

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\006.D
Lab Smp Id: HS22061645-03 Client Smp ID: HS22061645-03
Inj Date : 11-JUL-2022 09:36
Operator : PL Inst ID: FID-4.i
Smp Info : HS22061645-03;HS22061645-03
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.436	0.000	200384	205.524	205.523(A)
2 Ethene	0.656	0.656	0.000	240175	410.023	410.022(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\006.D

Date : 11-JUL-2022 09:36

Client ID: HS22061645-03

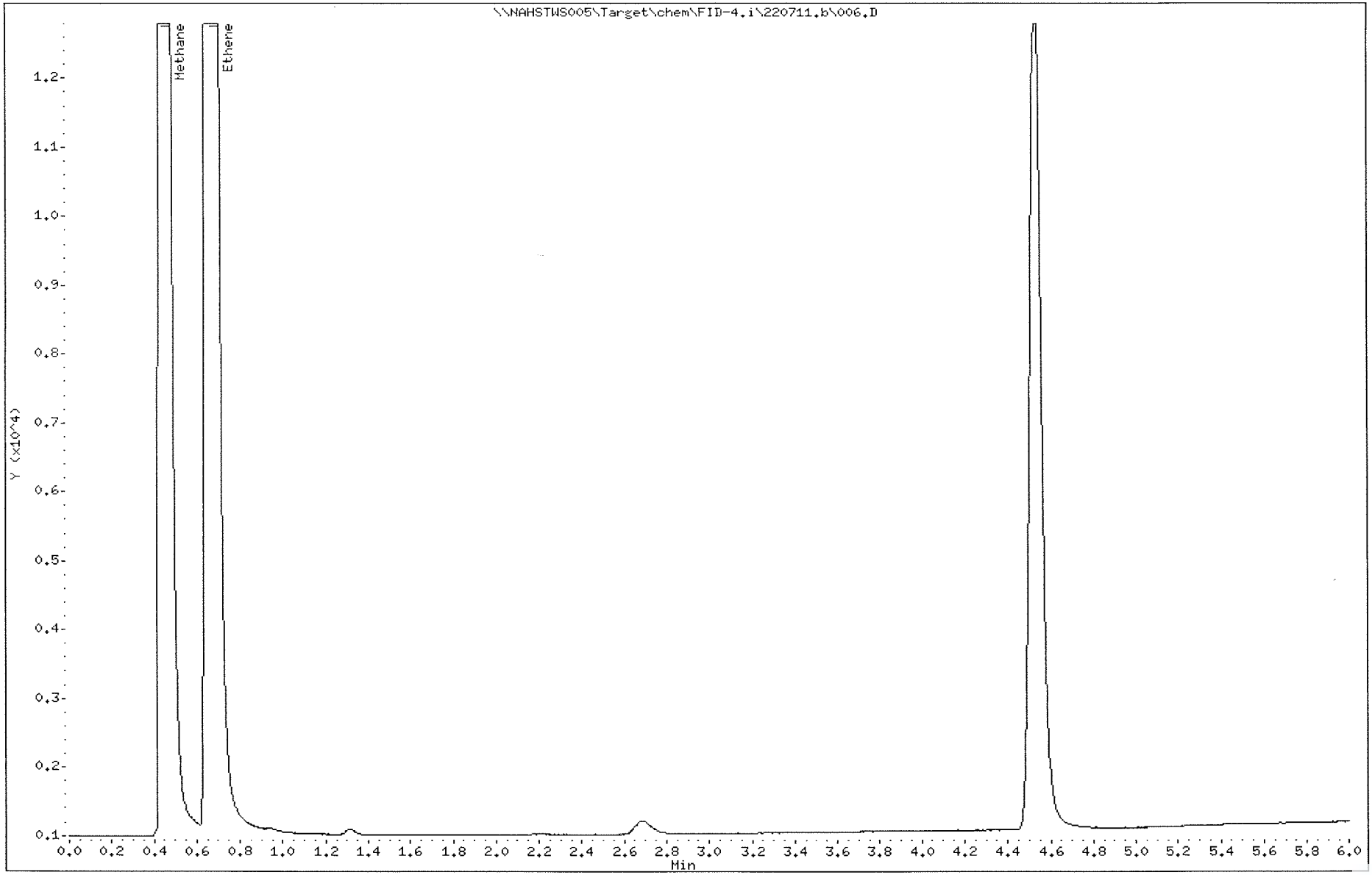
Instrument: FID-4.i

Sample Info: HS22061645-03;HS22061645-03

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\007.D
Lab Smp Id: HS22061645-04 Client Smp ID: HS22061645-04
Inj Date : 11-JUL-2022 09:46
Operator : PL Inst ID: FID-4.i
Smp Info : HS22061645-04;HS22061645-04
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.436	0.000	3729265	3824.92	3824.917(A)
2 Ethene	0.650	0.656	-0.006	20367	34.7702	34.770(M)

QC Flag Legend

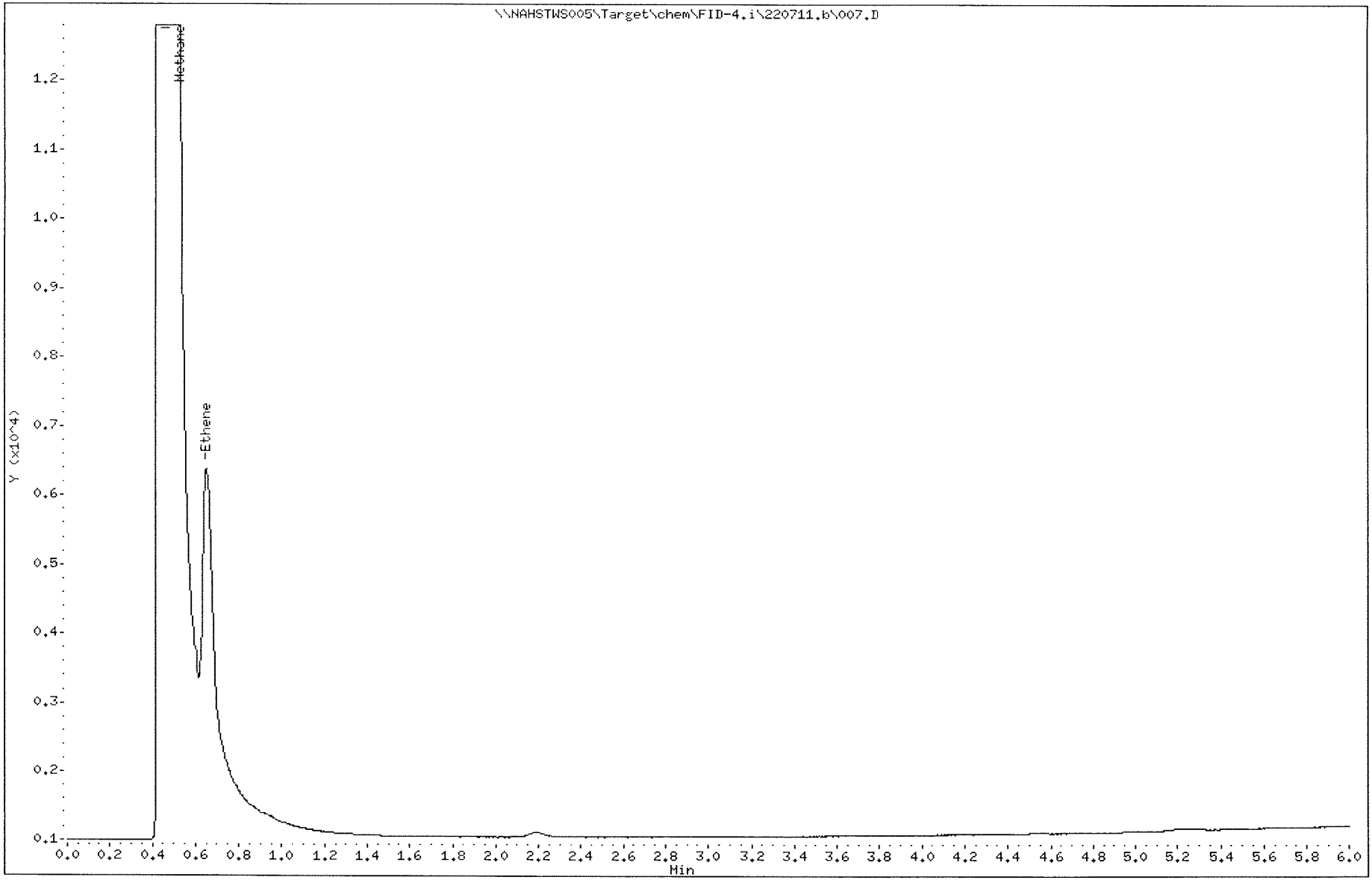
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\007.D
Date : 11-JUL-2022 09:46
Client ID: HS22061645-04
Sample Info: HS22061645-04;HS22061645-04

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\007.D
Lab Smp Id: HS22061645-04 Client Smp ID: HS22061645-04
Inj Date : 11-JUL-2022 09:46
Operator : PL Inst ID: FID-4.i
Smp Info : HS22061645-04;HS22061645-04
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.436	0.436	0.000	3729265	3824.92	3824.917(A)
2 Ethene	0.650	0.656	-0.006	33337	56.9123	56.912

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\007.D

Date : 11-JUL-2022 09:46

Client ID: HS22061645-04

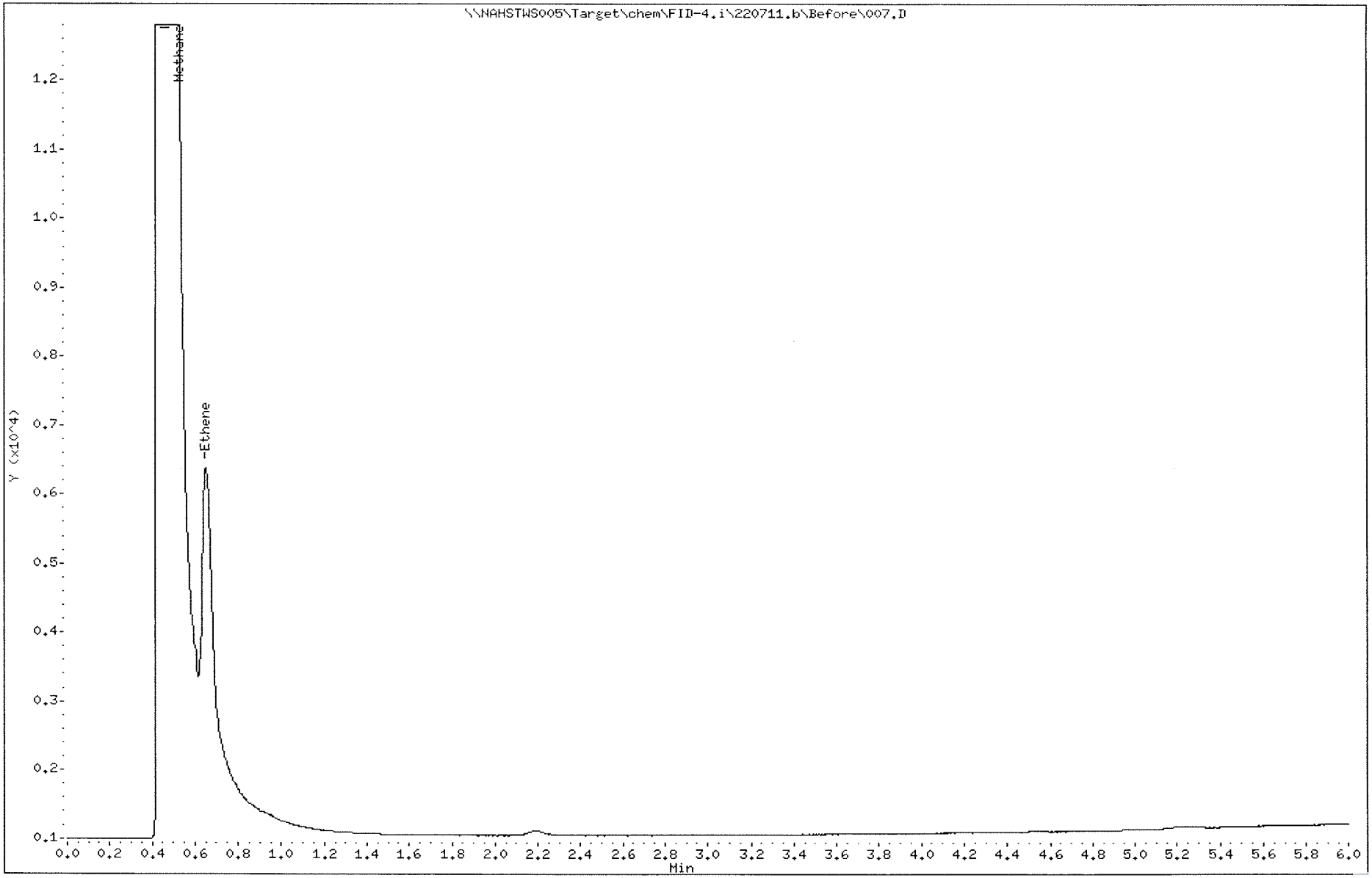
Instrument: FID-4.i

Sample Info: HS22061645-04;HS22061645-04

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\008.D
Lab Smp Id: HS22061645-05 Client Smp ID: HS22061645-05
Inj Date : 11-JUL-2022 09:56
Operator : PL Inst ID: FID-4.i
Smp Info : HS22061645-05;HS22061645-05
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.436	0.000	22961	23.5499	23.549
2 Ethene	0.653	0.656	-0.003	20213	34.5073	34.507

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\008.D

Date : 11-JUL-2022 09:56

Client ID: HS22061645-05

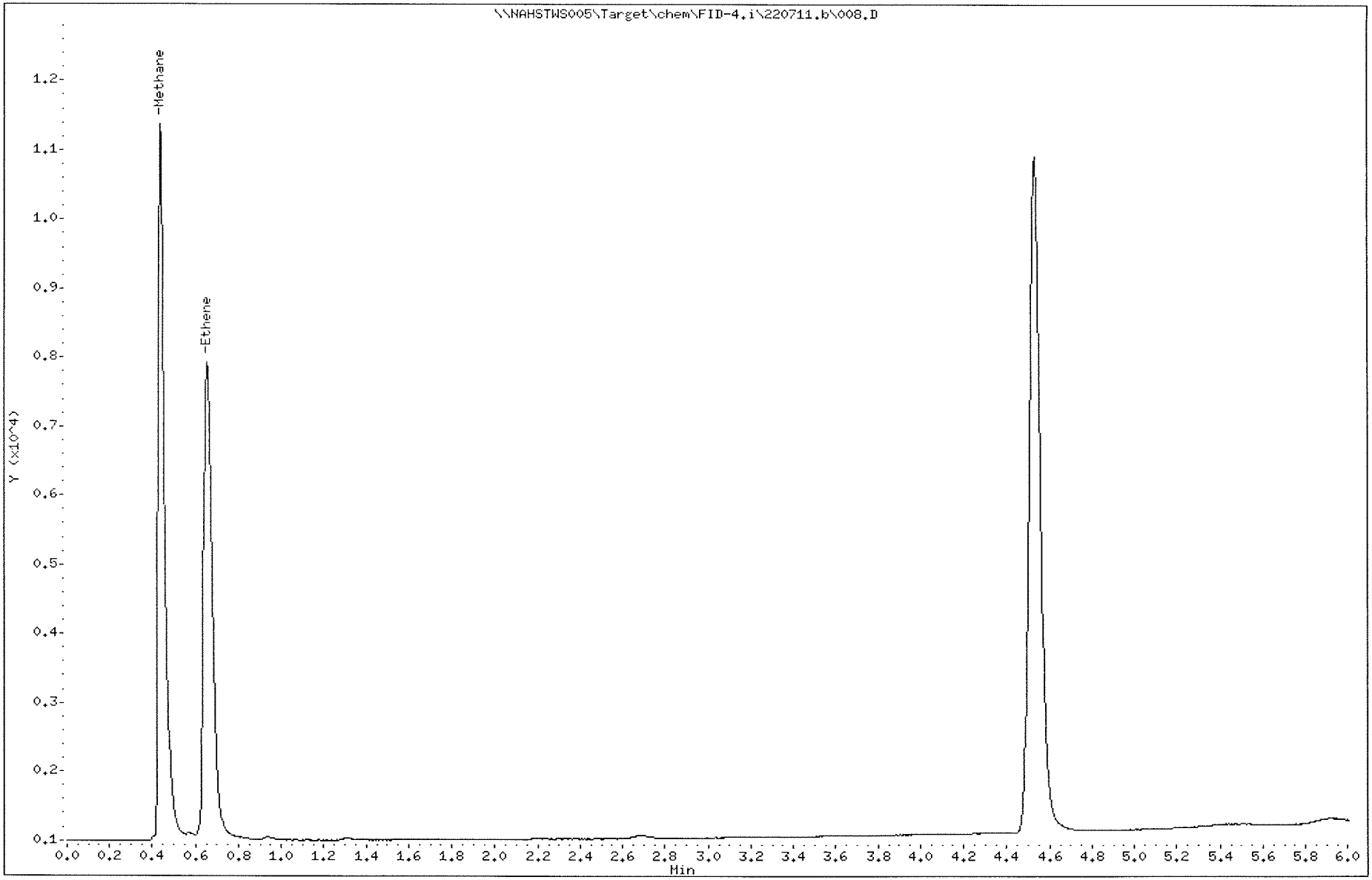
Sample Info: HS22061645-05;HS22061645-05

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL

Column diameter: 0.53



Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\009.D Page 1
Report Date: 19-Jul-2022 14:17

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\009.D
Lab Smp Id: HS22061645-06 Client Smp ID: HS22061645-06
Inj Date : 11-JUL-2022 10:05
Operator : PL Inst ID: FID-4.i
Smp Info : HS22061645-06;HS22061645-06
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.436	0.000	22706	23.2884	23.288(M)
2 Ethene	0.653	0.656	-0.003	19613	33.4830	33.482

QC Flag Legend

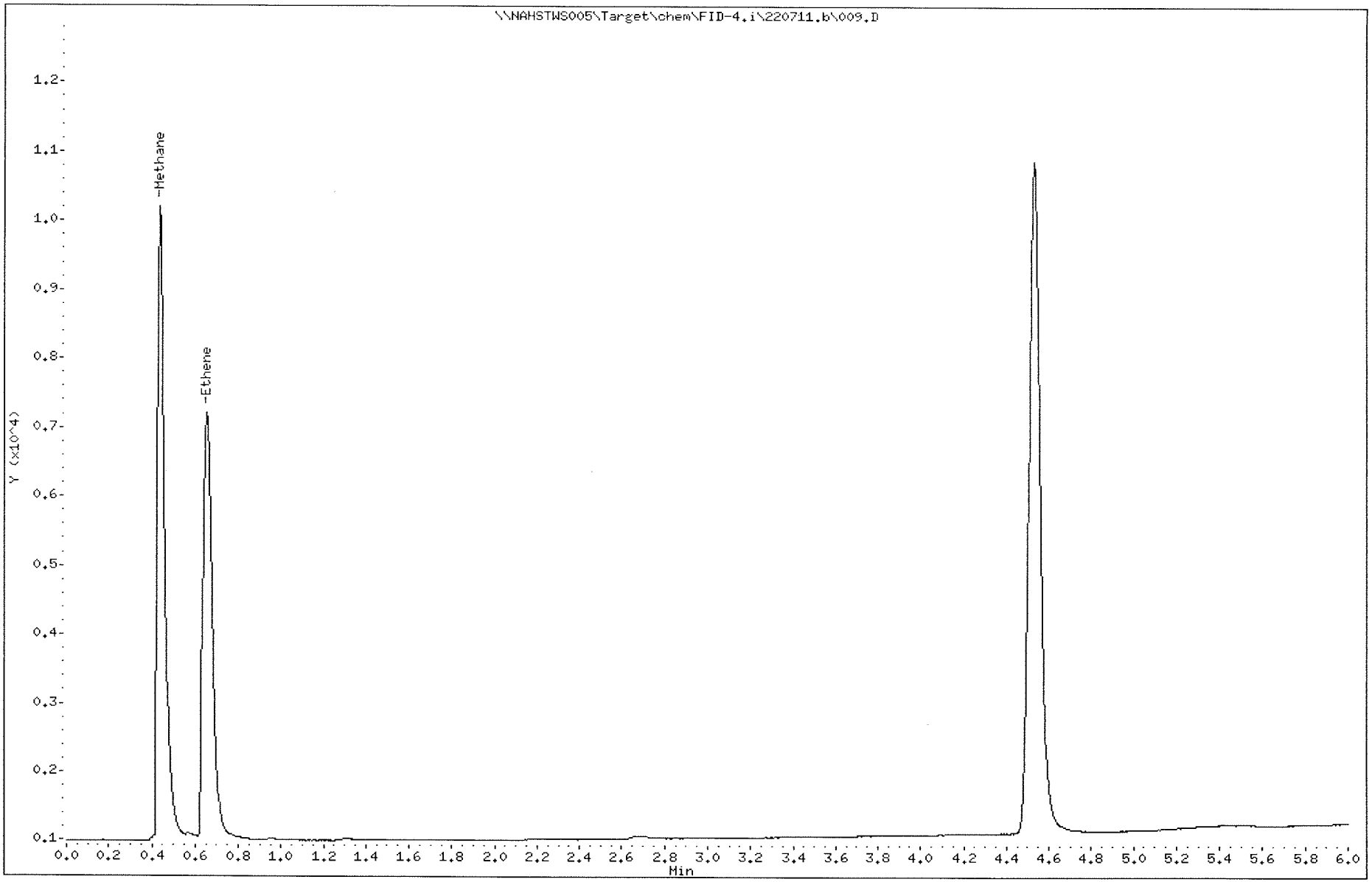
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\009.D
Date : 11-JUL-2022 10:05
Client ID: HS22061645-06
Sample Info: HS22061645-06;HS22061645-06

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\009.D
Lab Smp Id: HS22061645-06 Client Smp ID: HS22061645-06
Inj Date : 11-JUL-2022 10:05
Operator : PL Inst ID: FID-4.i
Smp Info : HS22061645-06;HS22061645-06
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.436	0.436	0.000	22784	23.3684	23.368
2 Ethene	0.653	0.656	-0.003	19214	32.8018	32.801

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\009.D

Date : 11-JUL-2022 10:05

Client ID: HS22061645-06

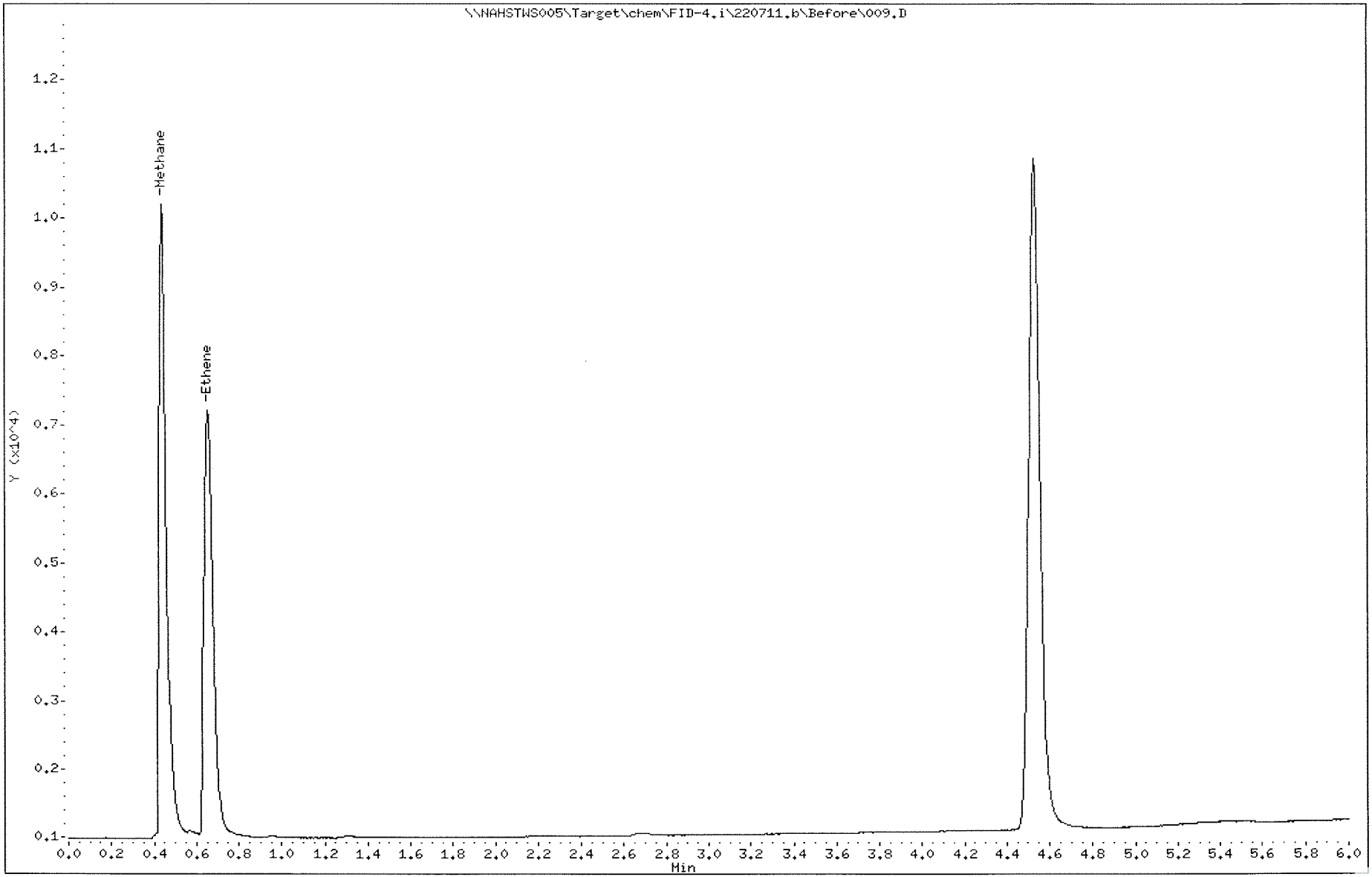
Instrument: FID-4.i

Sample Info: HS22061645-06;HS22061645-06

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\010.D
Lab Smp Id: HS22061645-10 Client Smp ID: HS22061645-10
Inj Date : 11-JUL-2022 10:15
Operator : PL Inst ID: FID-4.i
Smp Info : HS22061645-10;HS22061645-10
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.440	0.436	0.004	4463257	4577.74	4577.735(A)
2 Ethene	0.660	0.656	0.004	636083	1085.91	1085.909(A)

QC Flag Legend

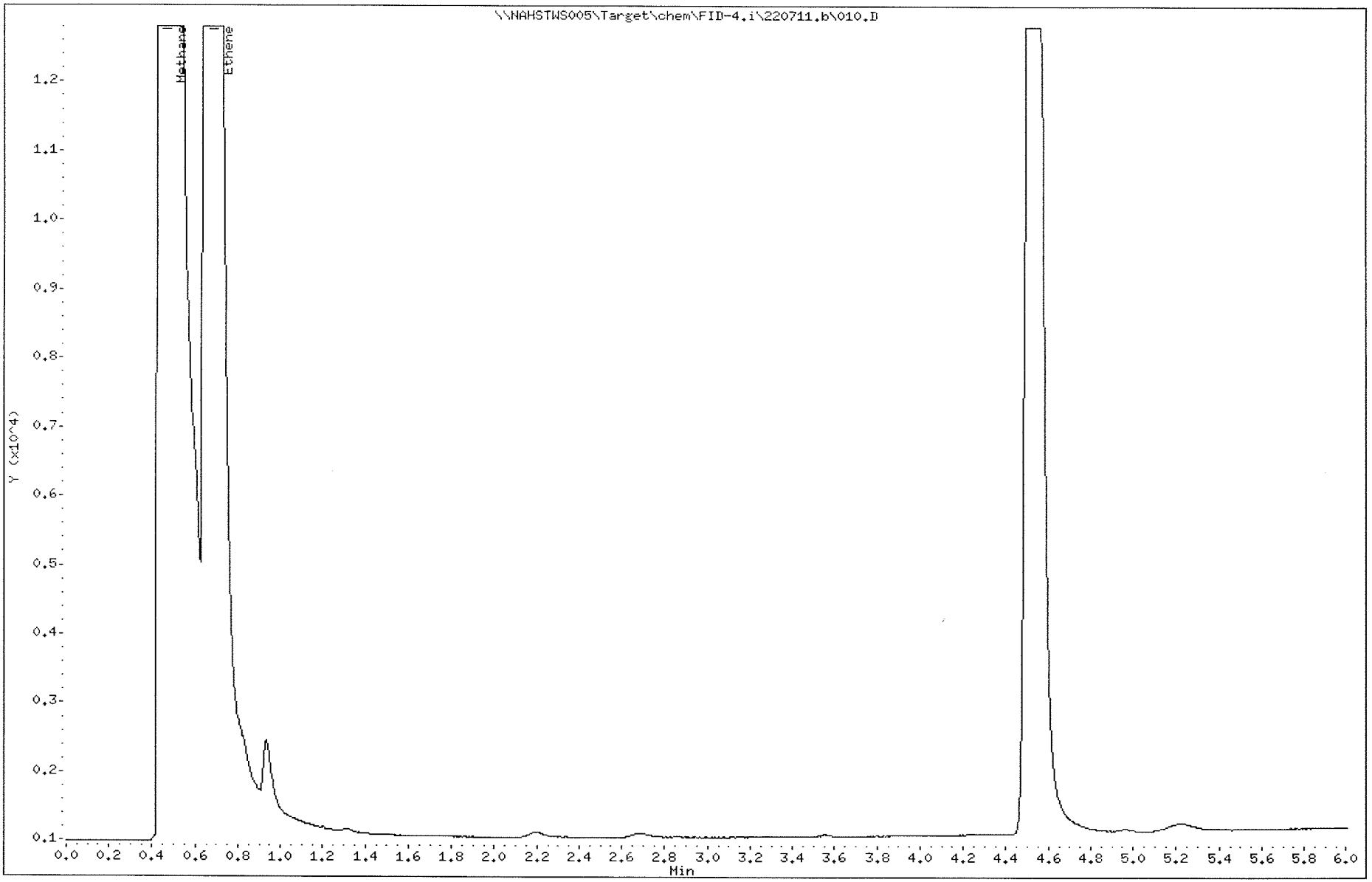
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\010.D
Date : 11-JUL-2022 10:15
Client ID: HS22061645-10
Sample Info: HS22061645-10;HS22061645-10

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\011.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 10:26
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

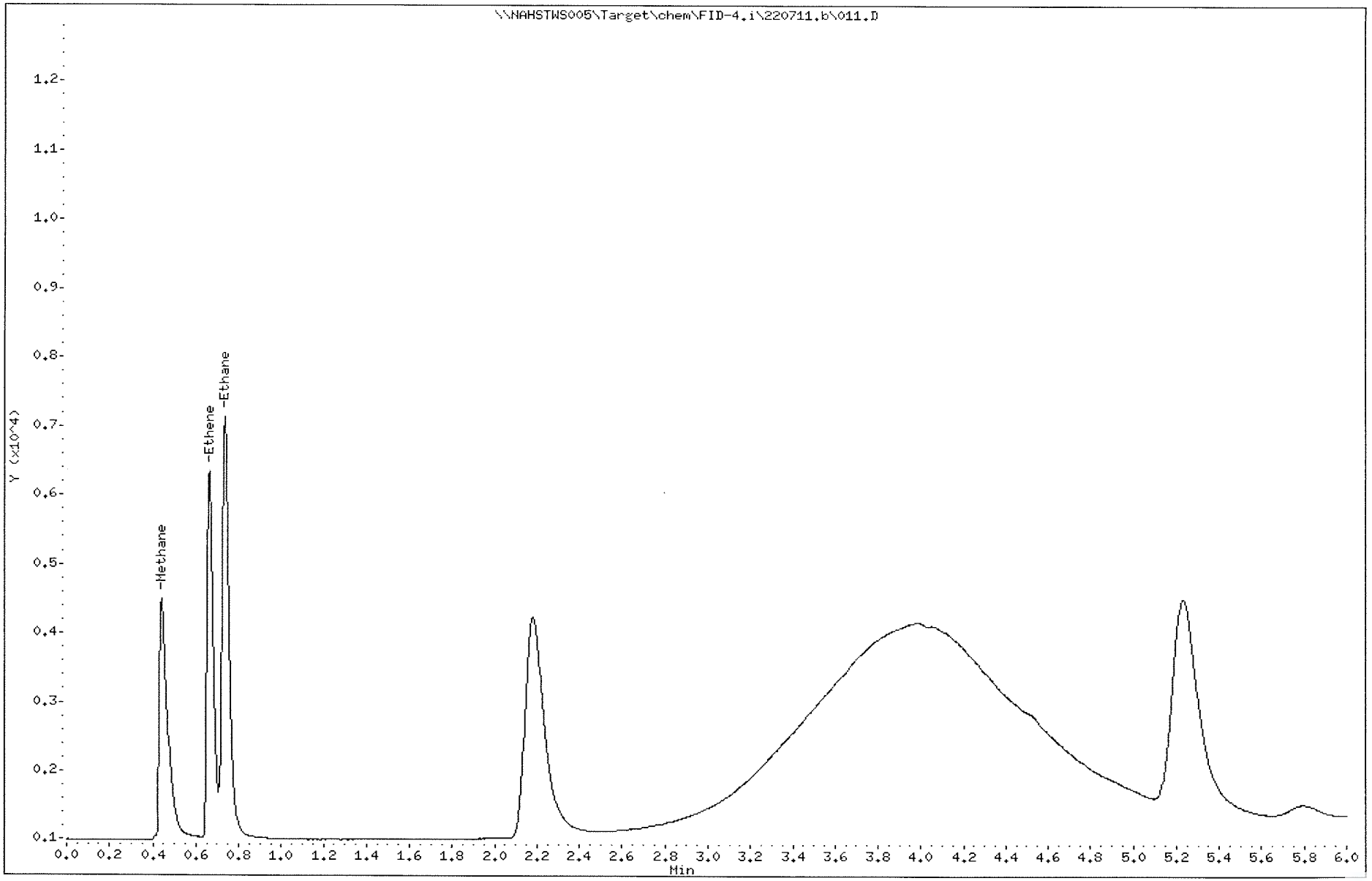
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.440	0.436	0.004	9959	9.64700	10.214
2 Ethene	0.663	0.656	0.007	11392	16.8500	19.448
3 Ethane	0.733	0.733	0.000	15034	18.0430	20.895

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\011.D
Date : 11-JUL-2022 10:26
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\012.D
Lab Smp Id: HS22061645-01 Client Smp ID: HS22061645-01
Inj Date : 11-JUL-2022 10:37
Operator : PL Inst ID: FID-4.i
Smp Info : HS22061645-01;HS22061645-01
Misc Info : ;1;0;100
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 12
Dil Factor: 100.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

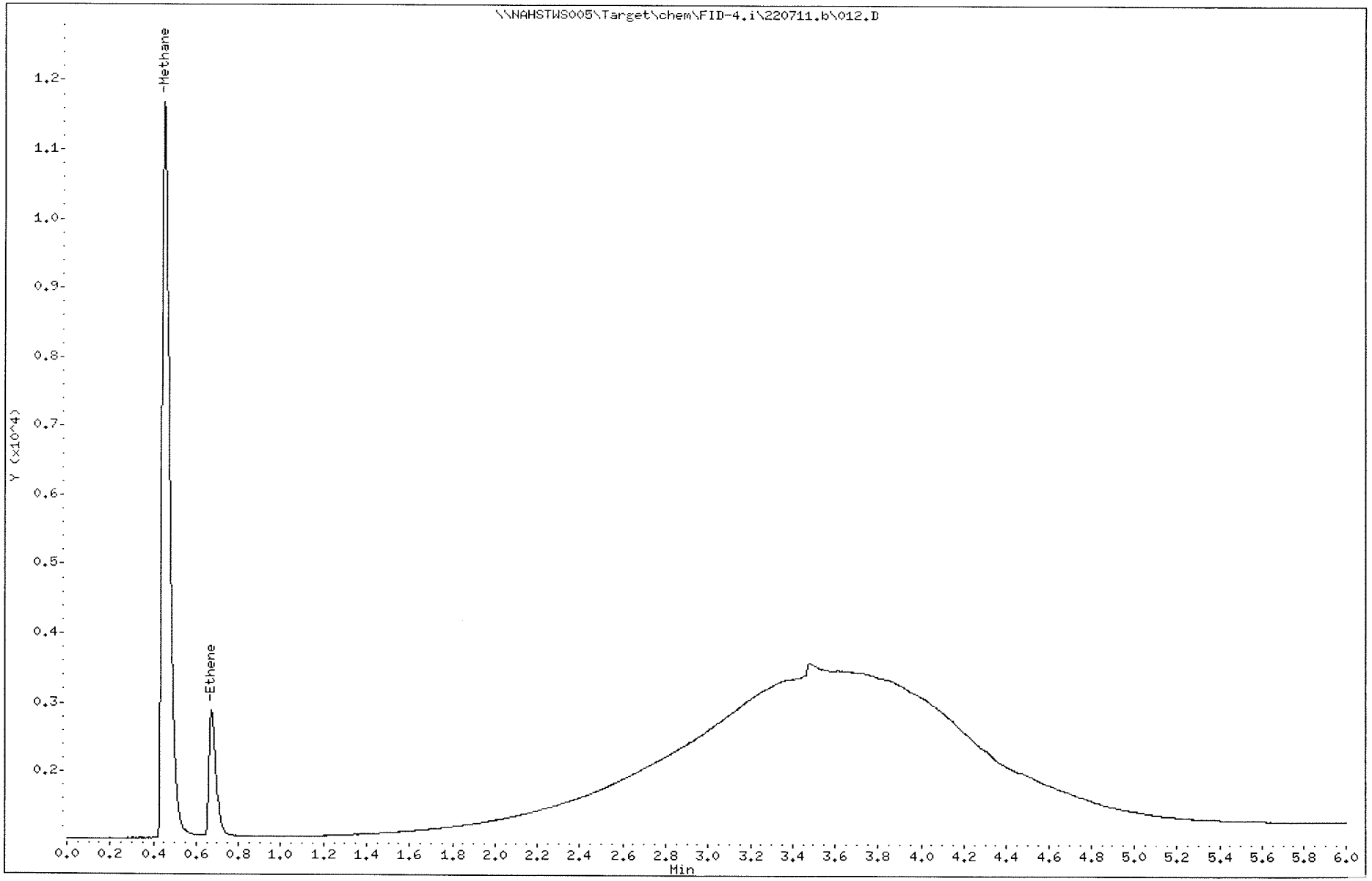
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.450	0.436	0.014	26747	27.4330	2743.303
2 Ethene	0.673	0.656	0.017	4588	7.83255	783.255

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\012.D
Date : 11-JUL-2022 10:37
Client ID: HS22061645-01
Sample Info: HS22061645-01;HS22061645-01

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\013.D
Lab Smp Id: HS22061645-02 Client Smp ID: HS22061645-02
Inj Date : 11-JUL-2022 10:45
Operator : PL Inst ID: FID-4.i
Smp Info : HS22061645-02;HS22061645-02
Misc Info : ;1;0;20
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 13
Dil Factor: 20.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.446	0.436	0.010	11509	11.8042	236.083
2 Ethene	0.673	0.656	0.017	13671	23.3389	466.777(M)

QC Flag Legend

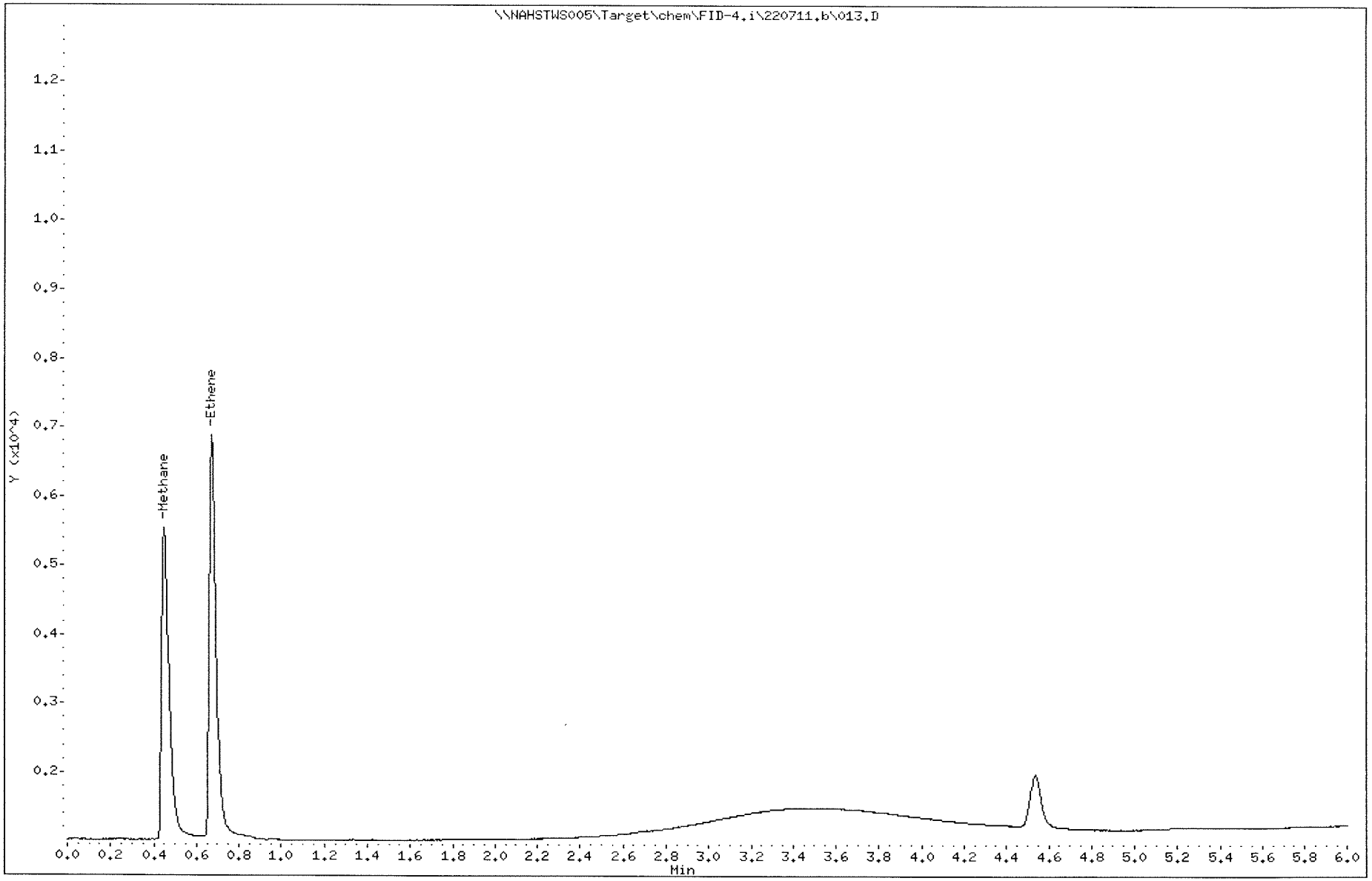
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\013.D
Date : 11-JUL-2022 10:45
Client ID: HS22061645-02
Sample Info: HS22061645-02;HS22061645-02

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\013.D
Lab Smp Id: HS22061645-02 Client Smp ID: HS22061645-02
Inj Date : 11-JUL-2022 10:45
Operator : PL Inst ID: FID-4.i
Smp Info : HS22061645-02;HS22061645-02
Misc Info : ;1;0;20
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 13
Dil Factor: 20.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.446	0.436	0.010	11509	11.8042	236.083
2 Ethene	0.673	0.656	0.017	14167	24.1857	483.713

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\013.D

Date : 11-JUL-2022 10:45

Client ID: HS22061645-02

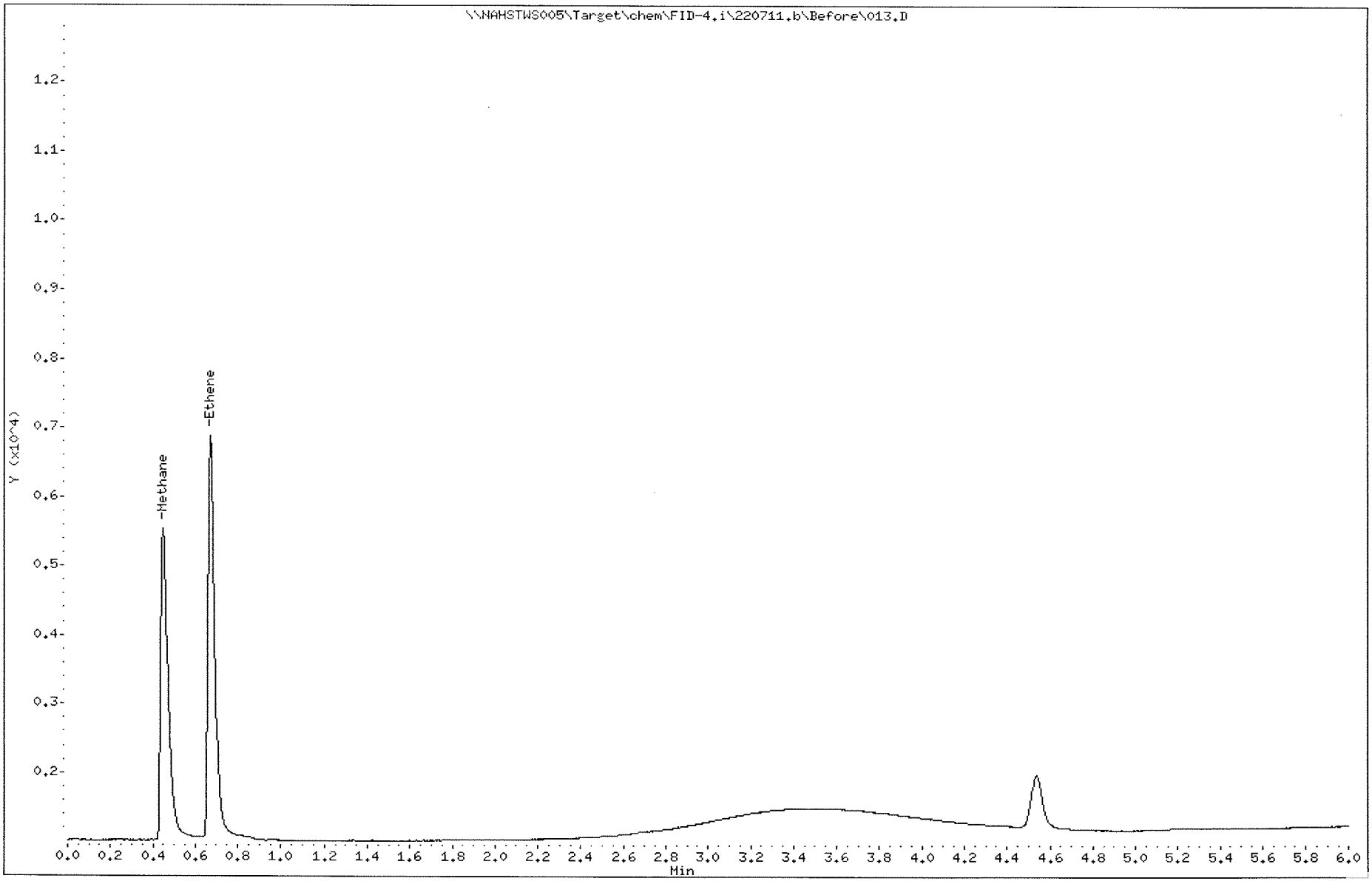
Sample Info: HS22061645-02;HS22061645-02

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\014.D
Lab Smp Id: HS22061645-03 Client Smp ID: HS22061645-03
Inj Date : 11-JUL-2022 10:54
Operator : PL Inst ID: FID-4.i
Smp Info : HS22061645-03;HS22061645-03
Misc Info : ;1;0;20
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 14
Dil Factor: 20.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.450	0.436	0.014	9477	9.72008	194.401(M)
2 Ethene	0.670	0.656	0.014	12531	21.3927	427.854(M)

QC Flag Legend

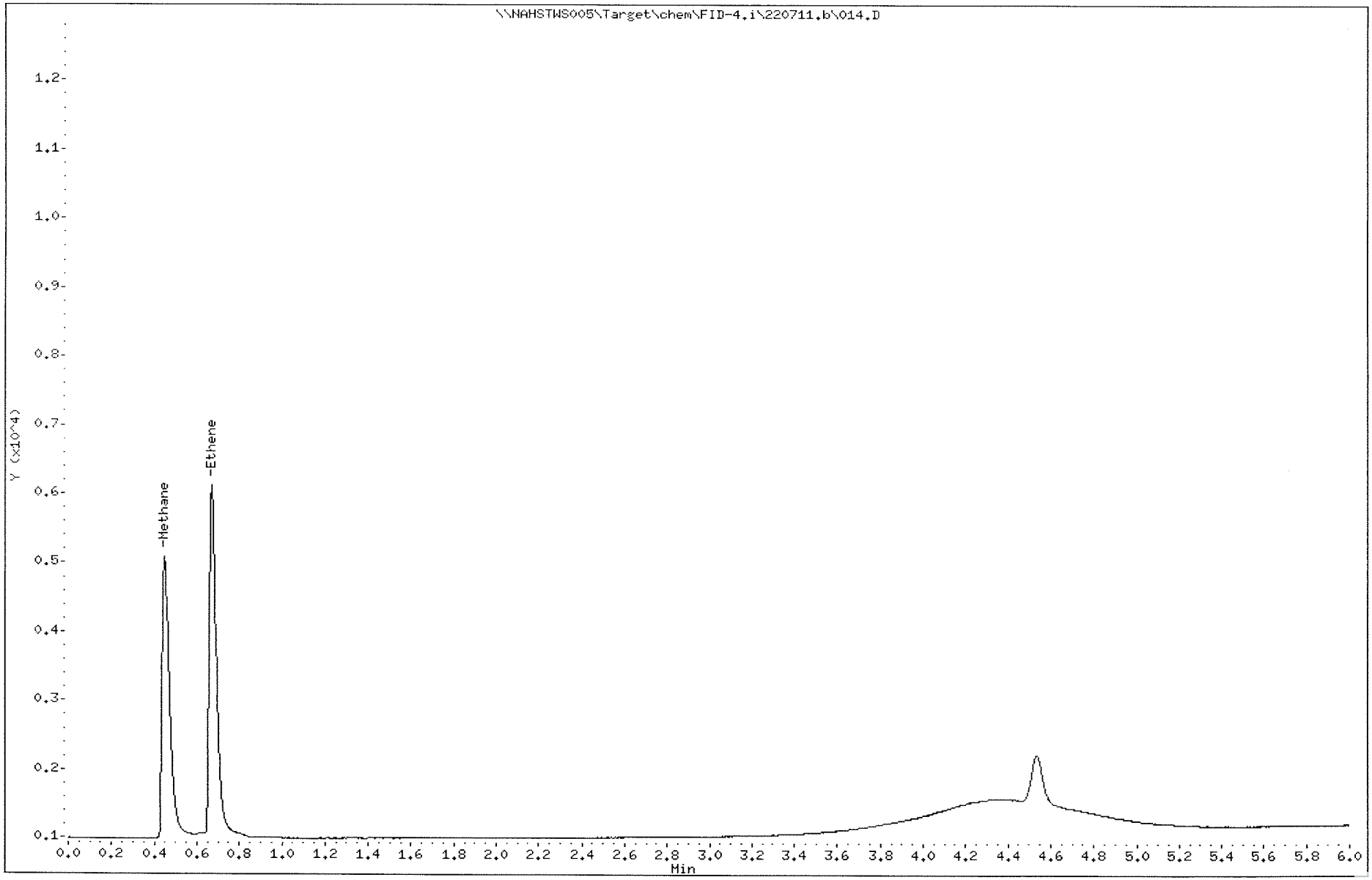
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\014.D
Date : 11-JUL-2022 10:54
Client ID: HS22061645-03
Sample Info: HS22061645-03;HS22061645-03

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\014.D
Lab Smp Id: HS22061645-03 Client Smp ID: HS22061645-03
Inj Date : 11-JUL-2022 10:54
Operator : PL Inst ID: FID-4.i
Smp Info : HS22061645-03;HS22061645-03
Misc Info : ;1;0;20
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 14
Dil Factor: 20.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.450	0.436	0.014	10290	10.5539	211.078
2 Ethene	0.670	0.656	0.014	12756	21.7768	435.536

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\014.D

Date : 11-JUL-2022 10:54

Client ID: HS22061645-03

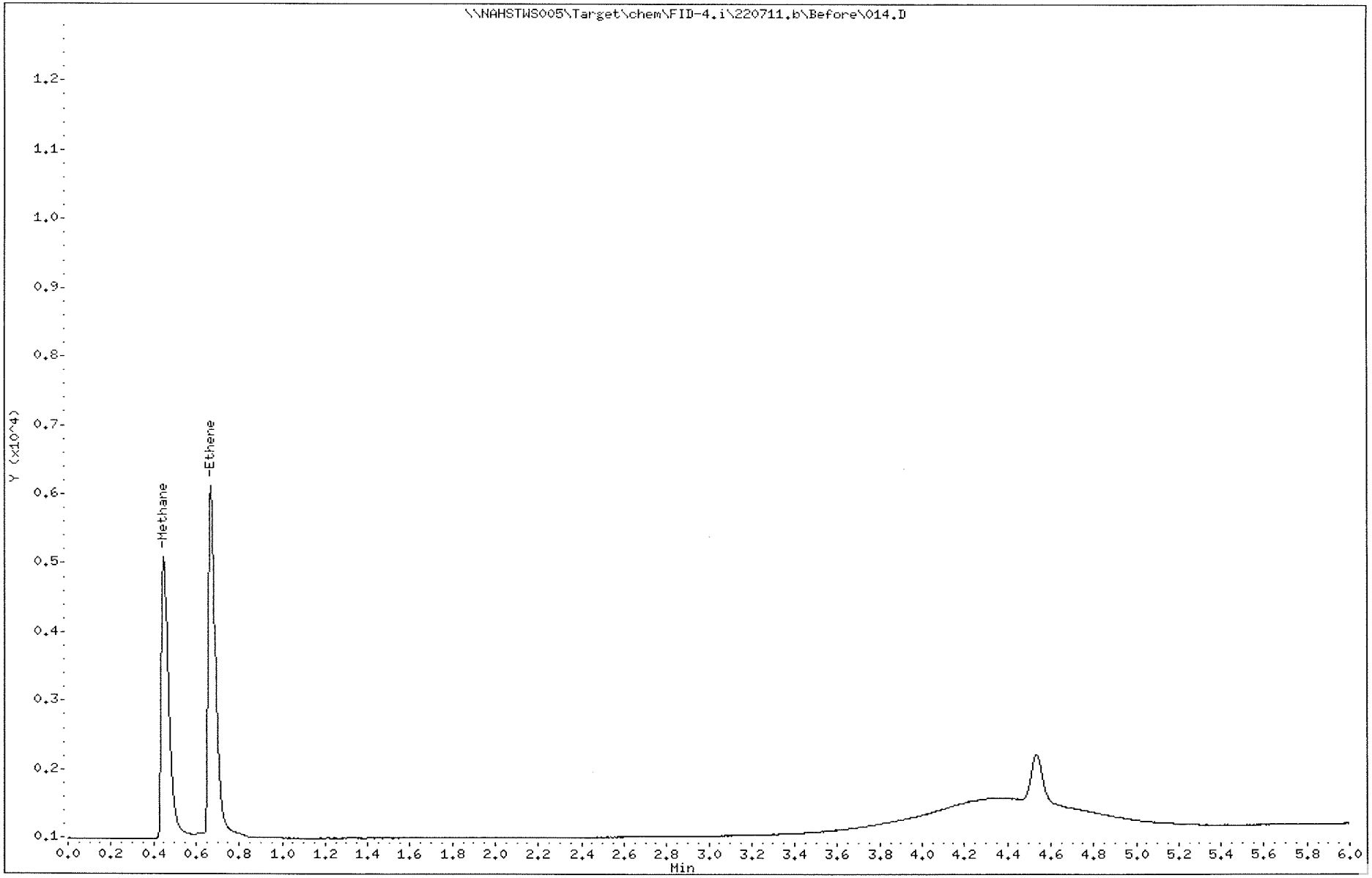
Instrument: FID-4.i

Sample Info: HS22061645-03;HS22061645-03

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\015.D
Lab Smp Id: HS22061645-04 Client Smp ID: HS22061645-04
Inj Date : 11-JUL-2022 11:04
Operator : PL Inst ID: FID-4.i
Smp Info : HS22061645-04;HS22061645-04
Misc Info : ;1;0;200
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 15
Dil Factor: 200.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.453	0.436	0.017	18162	18.6278	3725.567(M)

QC Flag Legend

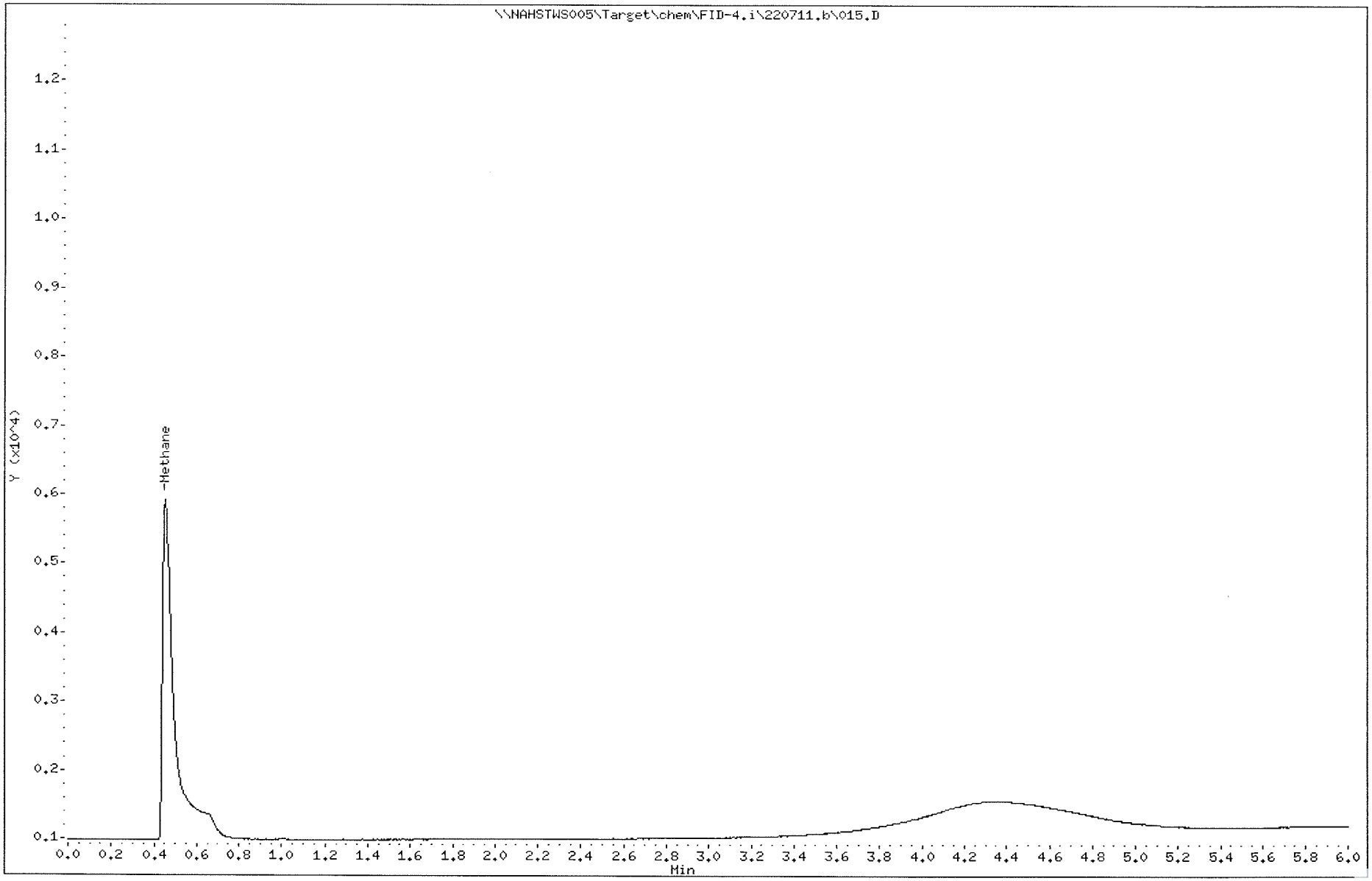
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\015.D
Date : 11-JUL-2022 11:04
Client ID: HS22061645-04
Sample Info: HS22061645-04;HS22061645-04

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\015.D
Lab Smp Id: HS22061645-04 Client Smp ID: HS22061645-04
Inj Date : 11-JUL-2022 11:04
Operator : PL Inst ID: FID-4.i
Smp Info : HS22061645-04;HS22061645-04
Misc Info : ;1;0;200
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 15
Dil Factor: 200.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.453	0.436	0.017	19766	20.2730	4054.595

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\015.D

Date : 11-JUL-2022 11:04

Client ID: HS22061645-04

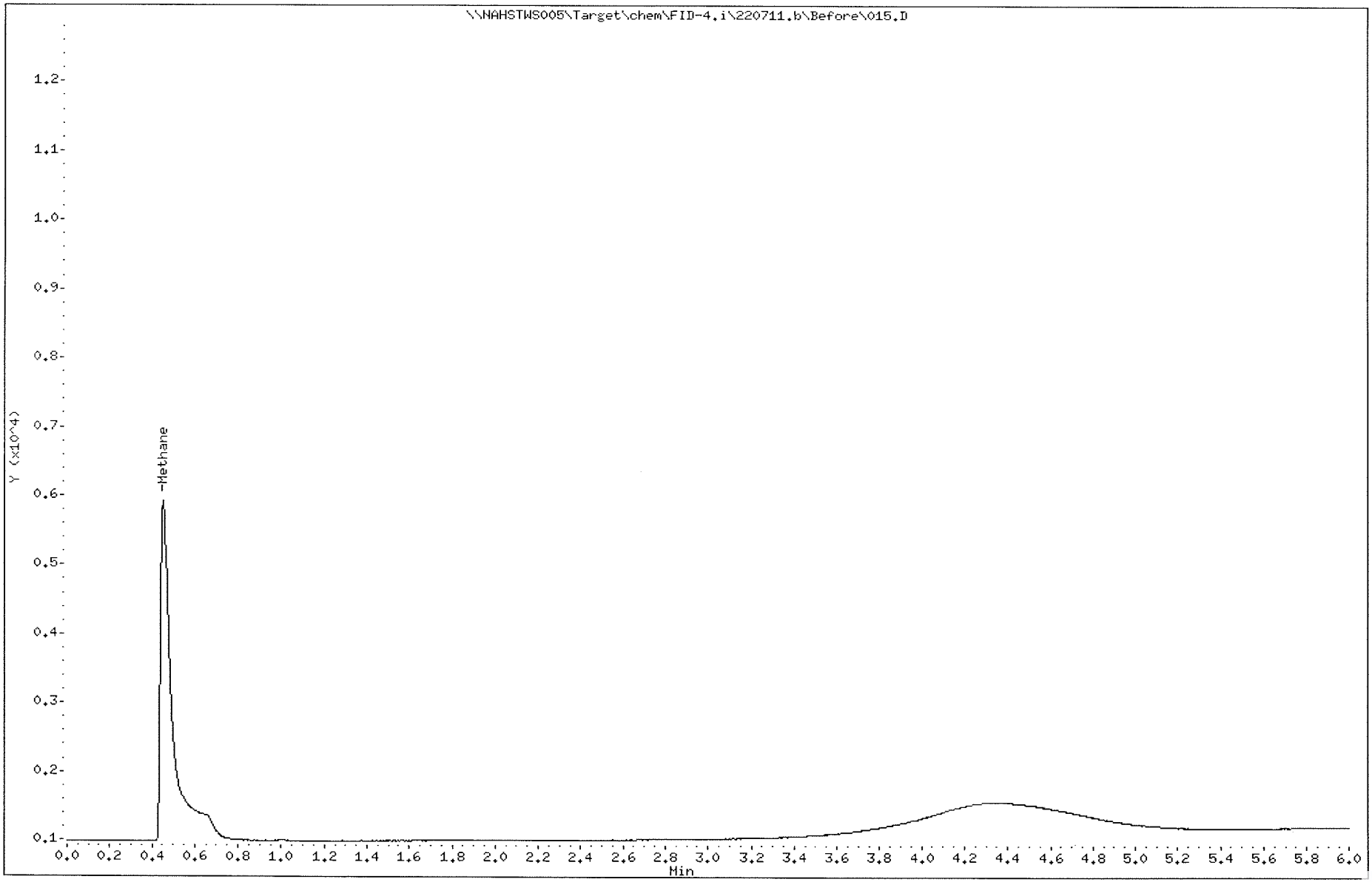
Instrument: FID-4.i

Sample Info: HS22061645-04;HS22061645-04

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\016.D
Lab Smp Id: HS22061645-10 Client Smp ID: HS22061645-10
Inj Date : 11-JUL-2022 11:17
Operator : PL Inst ID: FID-4.i
Smp Info : HS22061645-10;HS22061645-10
Misc Info : ;1;0;400
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 16
Dil Factor: 400.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.453	0.436	0.017	16568	16.9930	6797.181
2 Ethene	0.676	0.656	0.020	2064	3.52362	1409.449(M)

QC Flag Legend

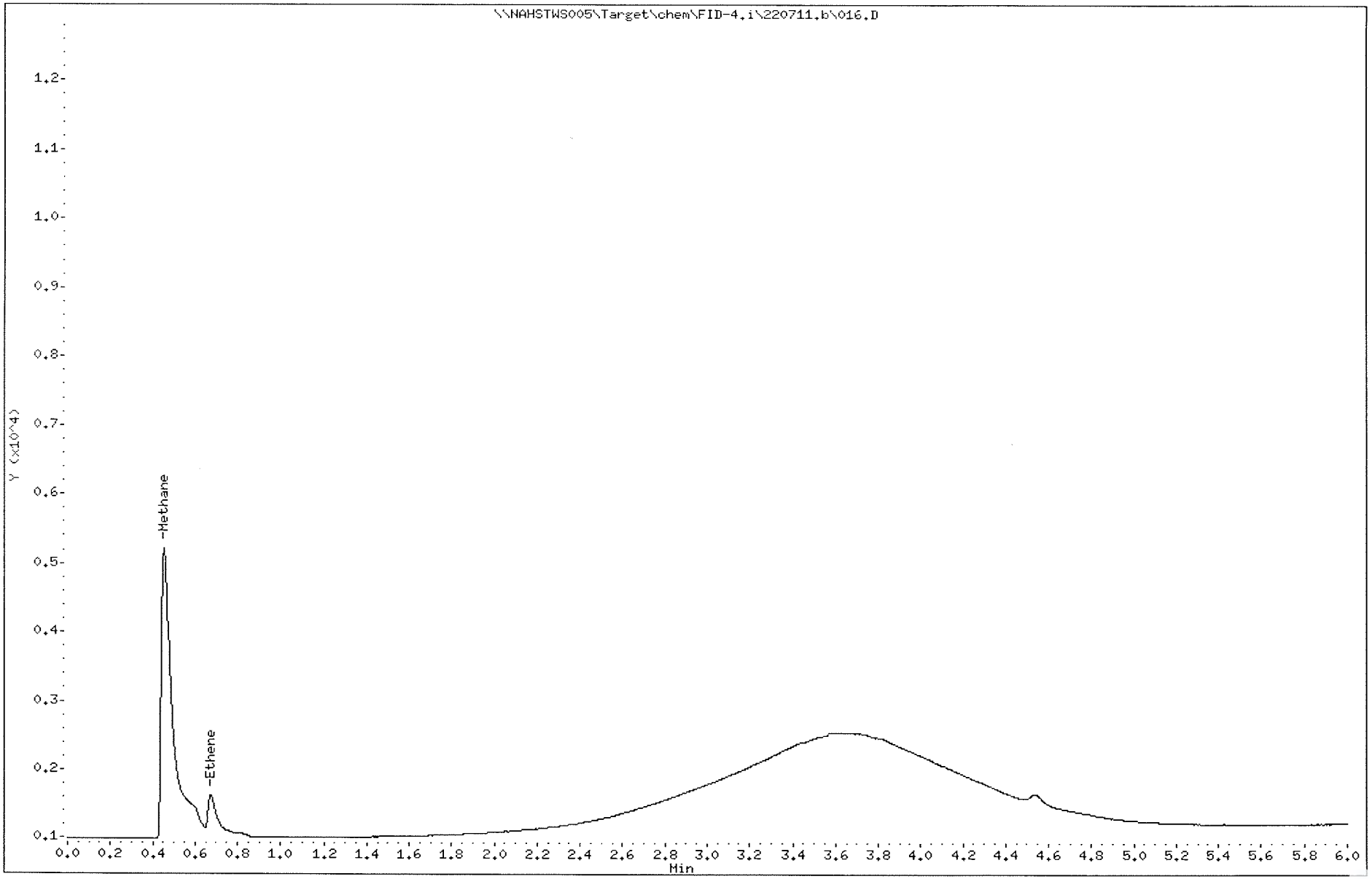
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\016.D
Date : 11-JUL-2022 11:17
Client ID: HS22061645-10
Sample Info: HS22061645-10;HS22061645-10

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\016.D
Lab Smp Id: HS22061645-10 Client Smp ID: HS22061645-10
Inj Date : 11-JUL-2022 11:17
Operator : PL Inst ID: FID-4.i
Smp Info : HS22061645-10;HS22061645-10
Misc Info : ;1;0;400
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 16
Dil Factor: 400.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.453	0.436	0.017	16568	16.9930	6797.181
2 Ethene	0.676	0.656	0.020	2590	4.42160	1768.641

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\016.D

Date : 11-JUL-2022 11:17

Client ID: HS22061645-10

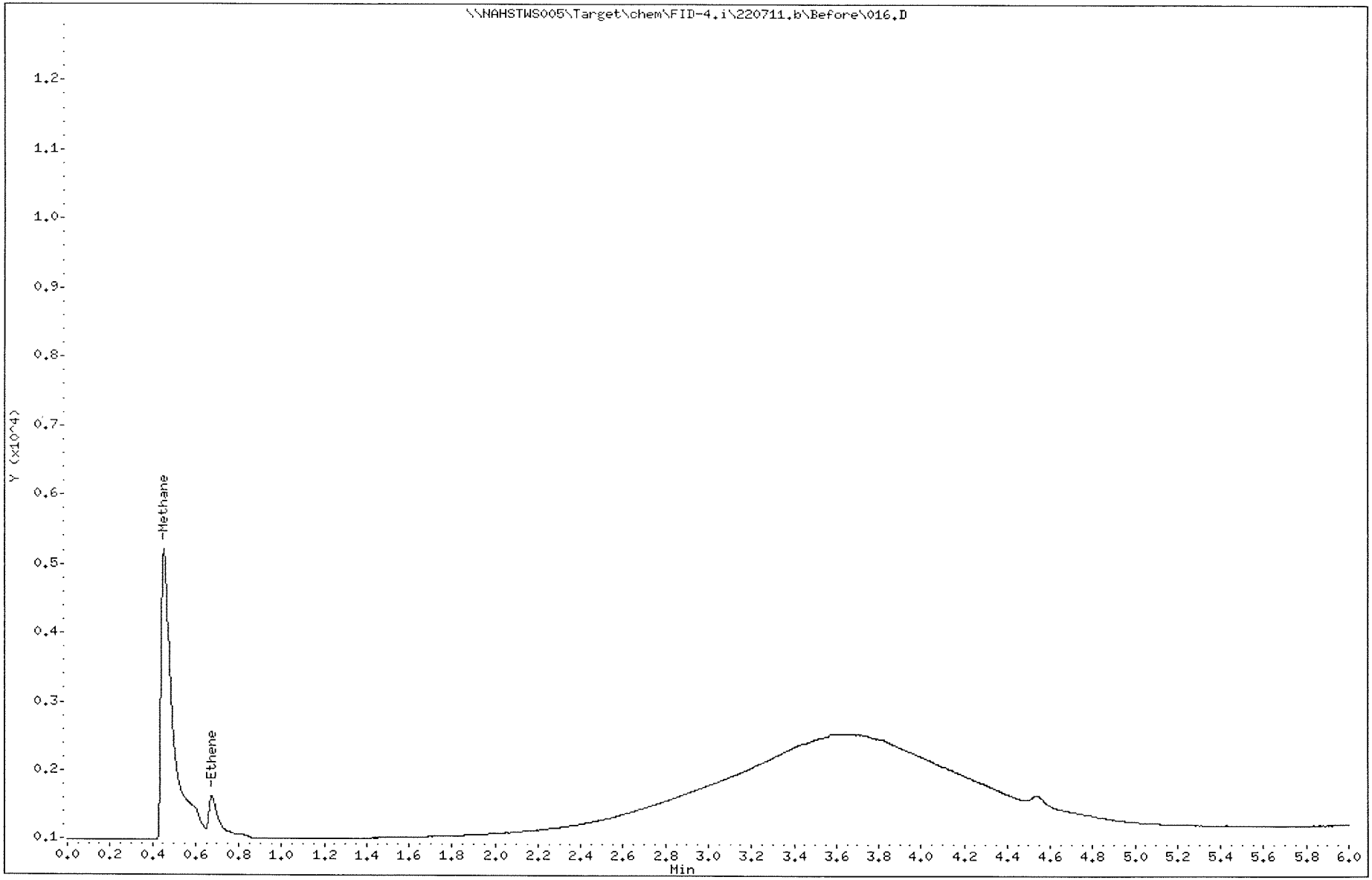
Instrument: FID-4.i

Sample Info: HS22061645-10;HS22061645-10

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\018.D
Lab Smp Id: HS22070020-01MS Client Smp ID: HS22070020-01MS
Inj Date : 11-JUL-2022 11:36
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-01MS;HS22070020-01MS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 18 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.436	0.000	1228226	1259.73	1259.728(AR)
2 Ethene	0.656	0.656	0.000	15372	26.2428	26.242(R)
3 Ethane	0.730	0.733	-0.003	18317	25.4583	25.458(RM)

QC Flag Legend

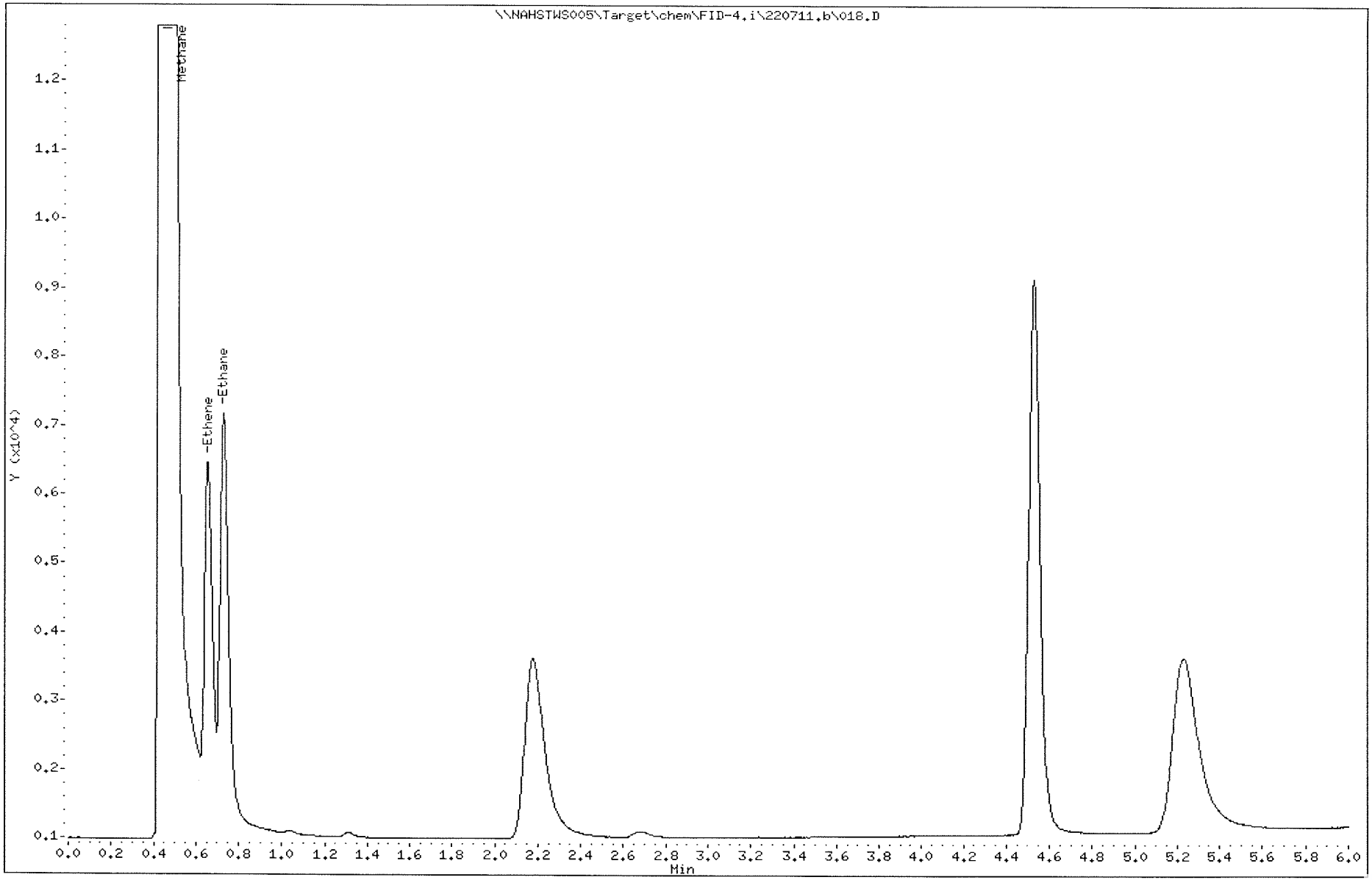
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\018.D
Date : 11-JUL-2022 11:36
Client ID: HS22070020-01MS
Sample Info: HS22070020-01MS;HS22070020-01MS

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\018.D
Lab Smp Id: HS22070020-01MS Client Smp ID: HS22070020-01MS
Inj Date : 11-JUL-2022 11:36
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-01MS;HS22070020-01MS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 18 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.436	0.000	1228226	1259.73	1259.728(AR)
2 Ethene	0.656	0.656	0.000	15372	26.2428	26.242(R)
3 Ethane	0.730	0.733	-0.003	20237	28.1269	28.126(R)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\018.D

Date : 11-JUL-2022 11:36

Client ID: HS22070020-01MS

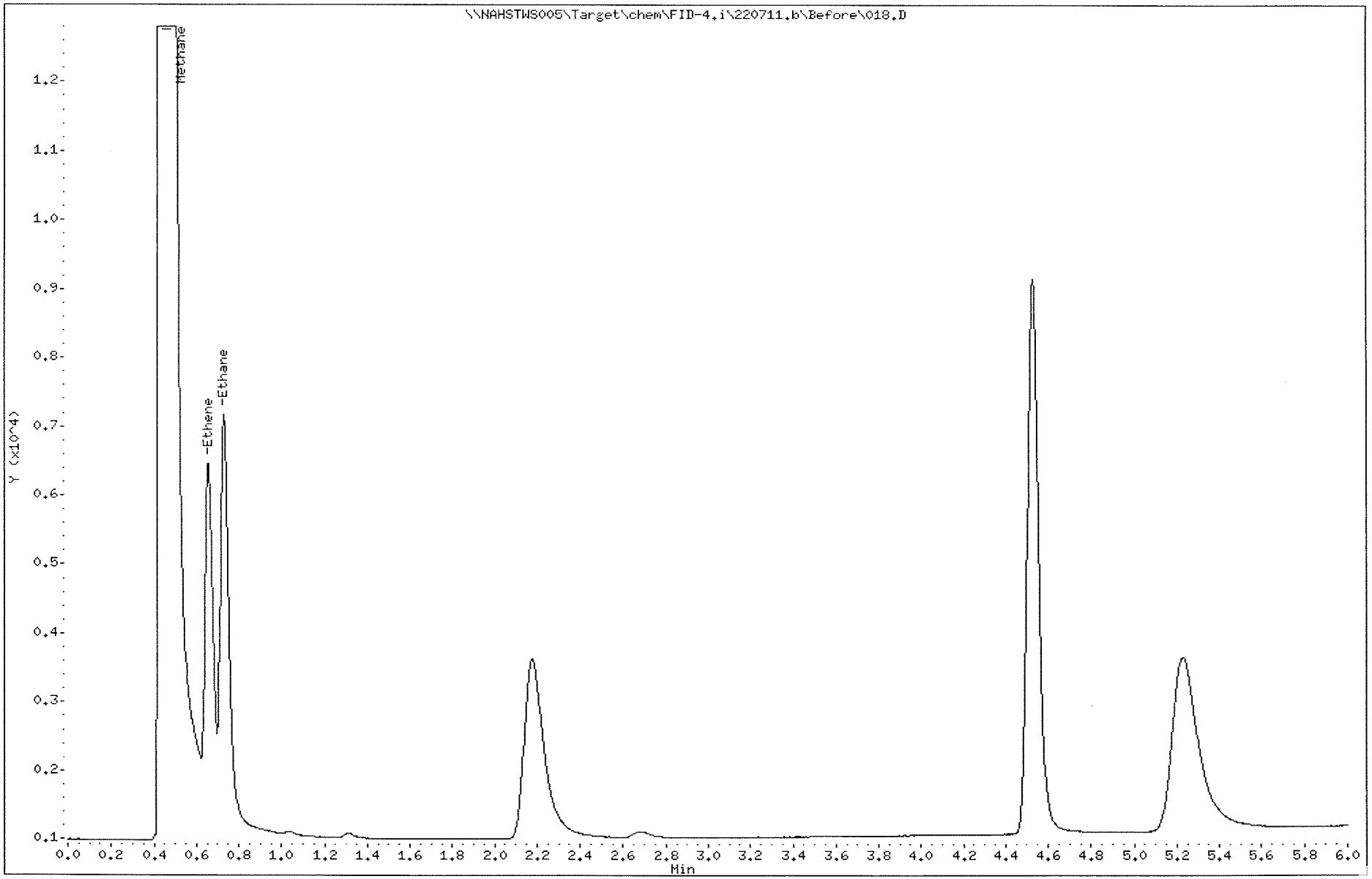
Instrument: FID-4.i

Sample Info: HS22070020-01MS;HS22070020-01MS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\019.D
Lab Smp Id: HS22070020-01MSD Client Smp ID: HS22070020-01MSD
Inj Date : 11-JUL-2022 11:53
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-01MSD;HS22070020-01MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 19 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.440	0.436	0.004	1247365	1279.36	1279.358(AR)
2 Ethene	0.656	0.656	0.000	15798	26.9701	26.970(RM)
3 Ethane	0.730	0.733	-0.003	16788	23.3332	23.333(RM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\019.D

Date : 11-JUL-2022 11:53

Client ID: HS22070020-01MSD

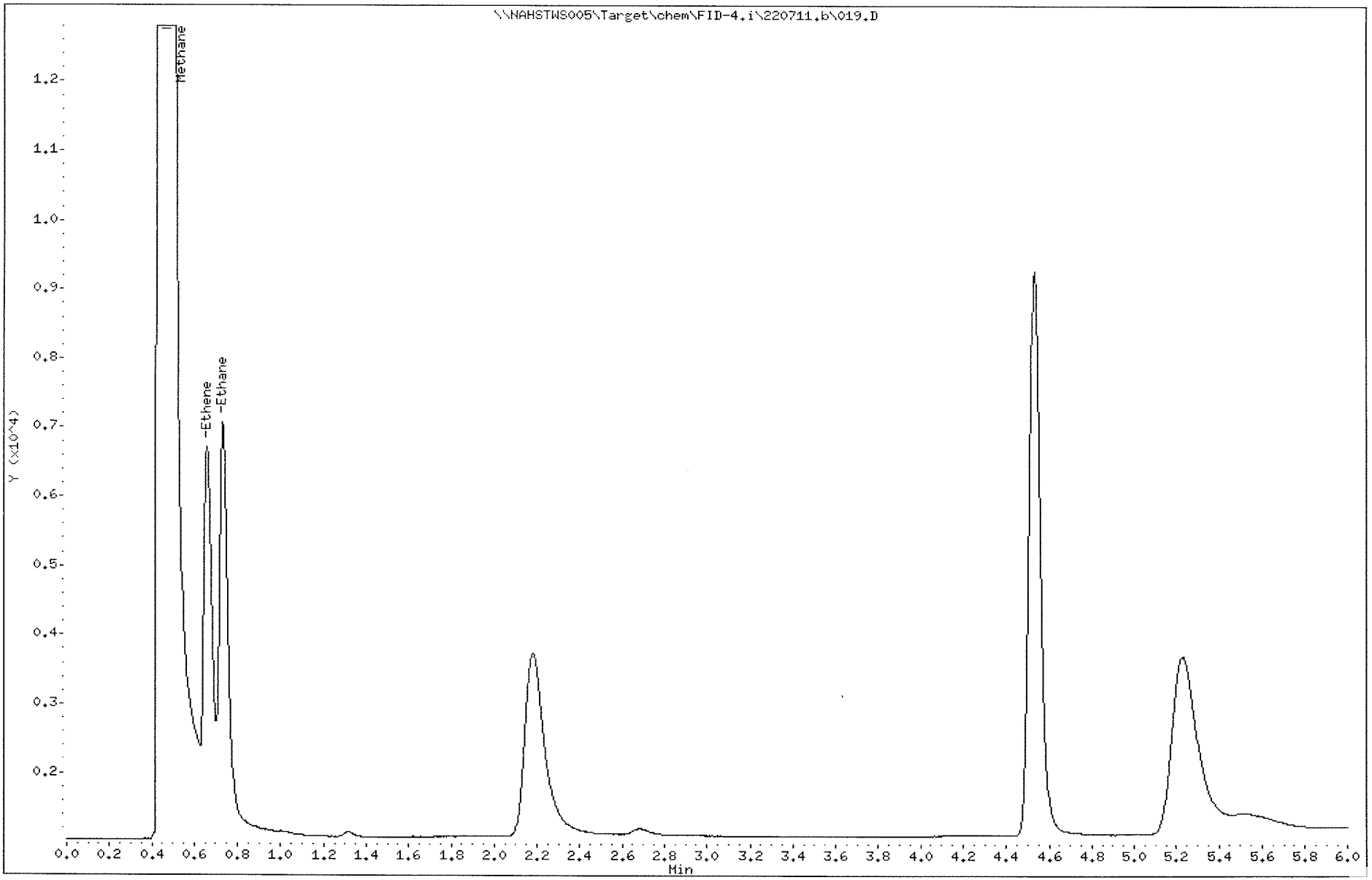
Instrument: FID-4.i

Sample Info: HS22070020-01MSD;HS22070020-01MSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\019.D
Lab Smp Id: HS22070020-01MSD Client Smp ID: HS22070020-01MSD
Inj Date : 11-JUL-2022 11:53
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-01MSD;HS22070020-01MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 19 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.440	0.436	0.004	1247365	1279.36	1279.358(AR)
2 Ethene	0.656	0.656	0.000	32140	54.8688	54.868(R)

QC Flag Legend

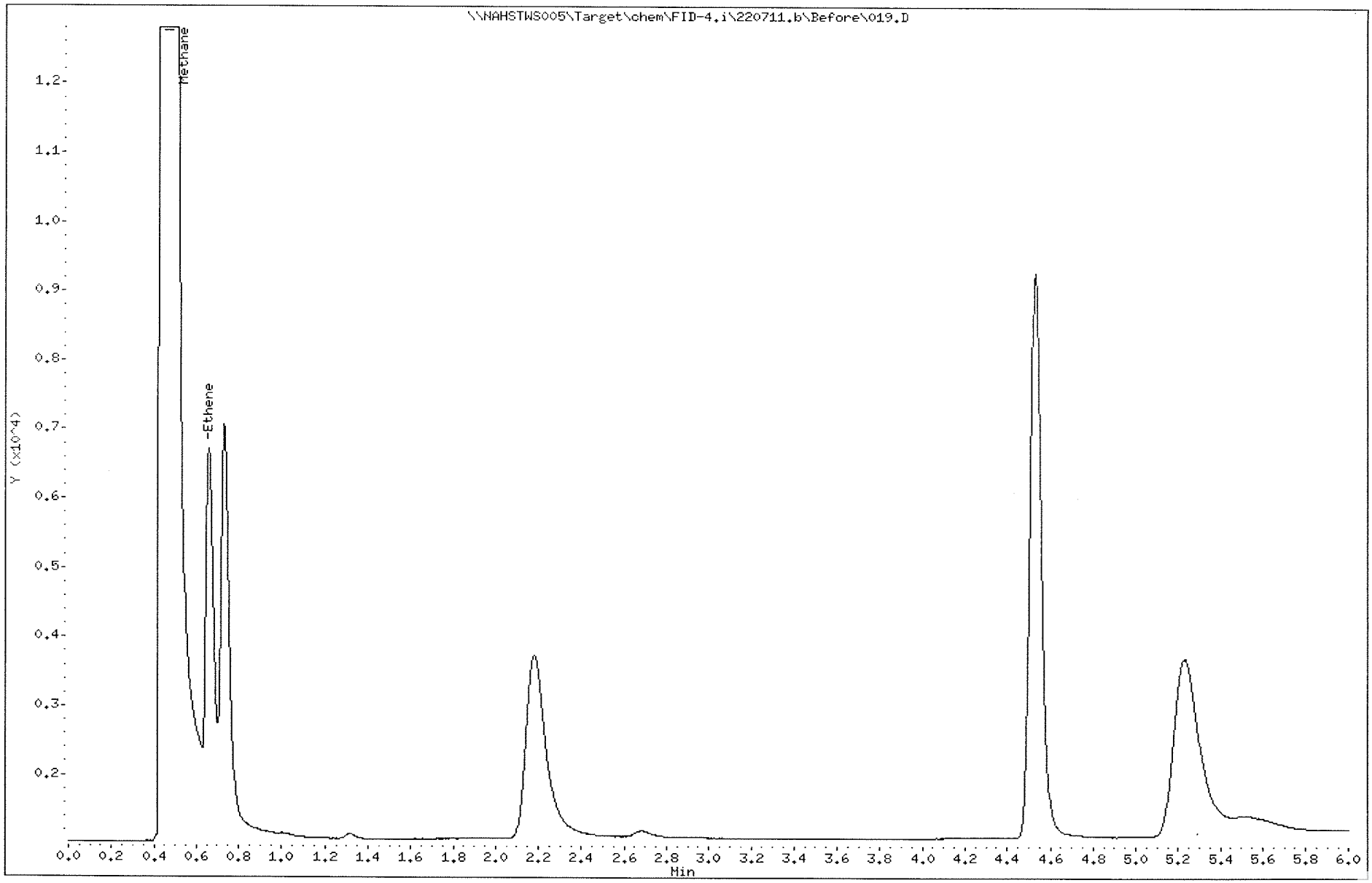
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\019.D
Date : 11-JUL-2022 11:53
Client ID: HS22070020-01MSD
Sample Info: HS22070020-01MSD;HS22070020-01MSD

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\022.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 12:24
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.436	0.436	0.000	8115	9.64700	8.323
2 Ethene	0.660	0.656	0.004	11202	16.8500	19.123(M)
3 Ethane	0.730	0.733	-0.003	14427	18.0430	20.051(M)

QC Flag Legend

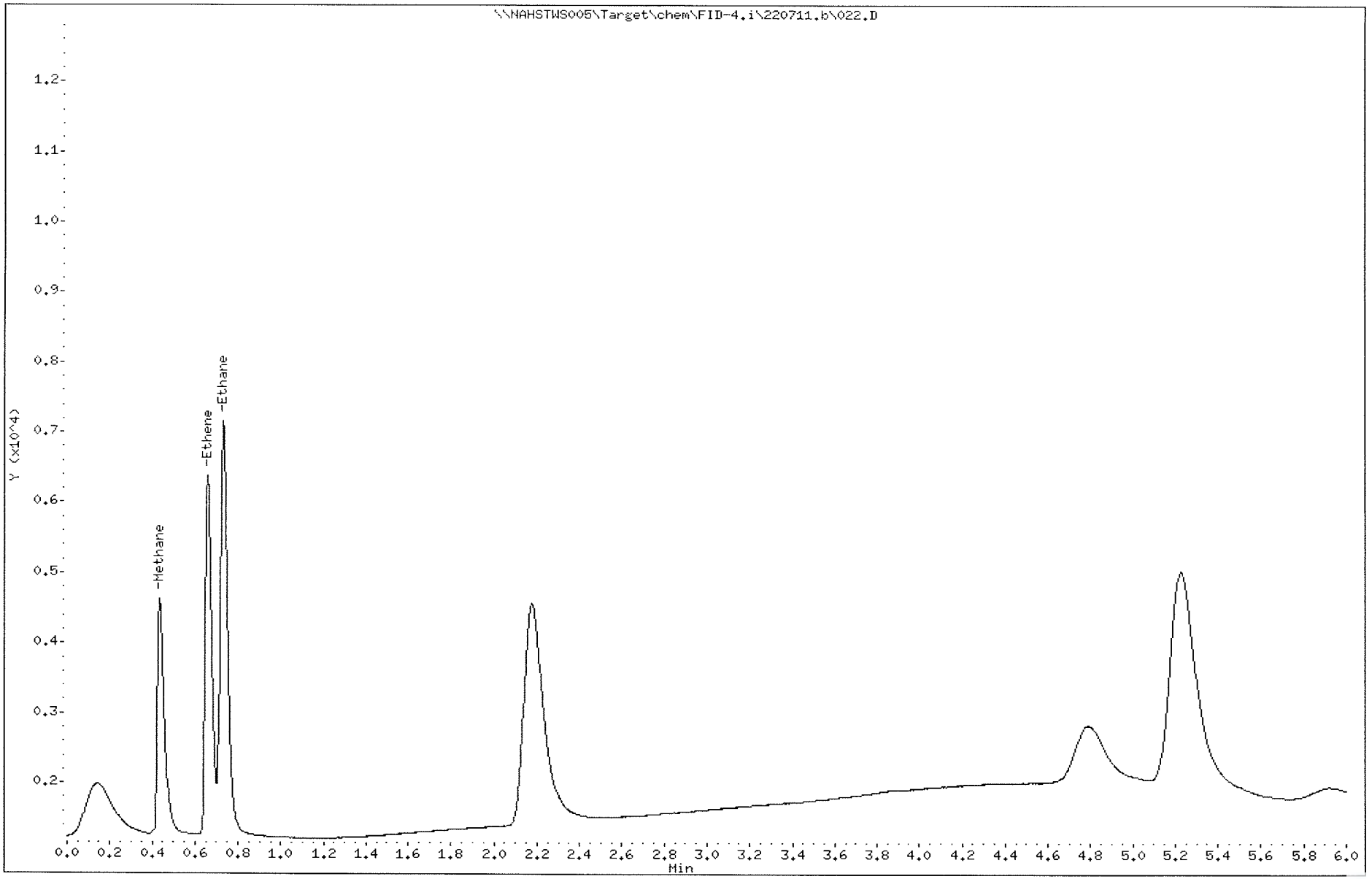
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\022.D
Date : 11-JUL-2022 12:24
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\022.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 12:24
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

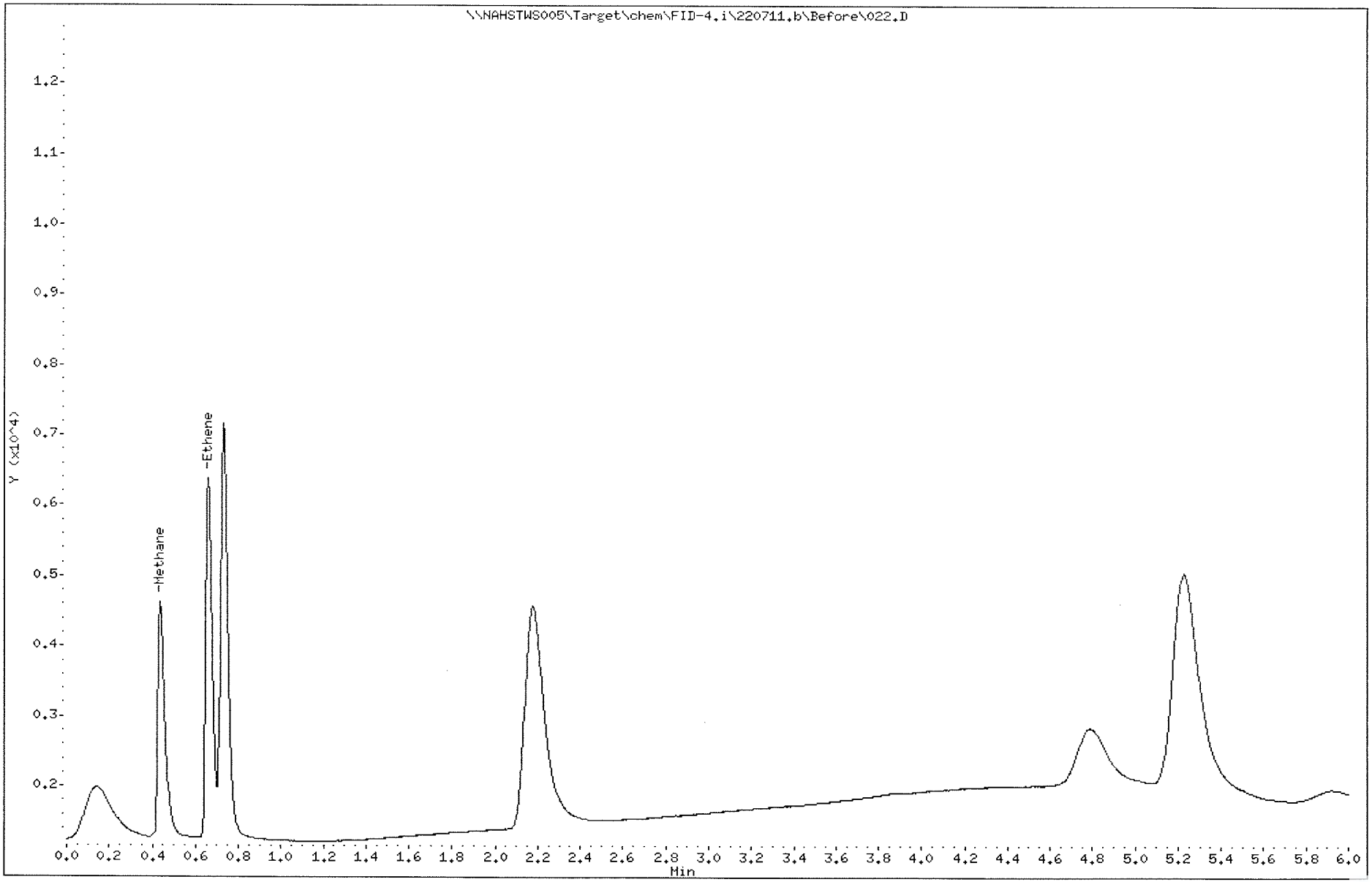
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	0.436	0.436	0.000	8115	9.64700	8.323
2 Ethene	0.660	0.656	0.004	25473	16.8500	43.487

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\022.D
Date : 11-JUL-2022 12:24
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\029.D
Lab Smp Id: HS22070326-07MS Client Smp ID: HS22070326-07MS
Inj Date : 11-JUL-2022 13:35
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-07MS;HS22070326-07MS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 29 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.440	0.436	0.004	729952	748.675	748.674(AR)
2 Ethene	0.660	0.656	0.004	14188	24.2215	24.221(R)
3 Ethane	0.733	0.733	0.000	16168	22.4715	22.471(M)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\029.D

Date : 11-JUL-2022 13:35

Client ID: HS22070326-07MS

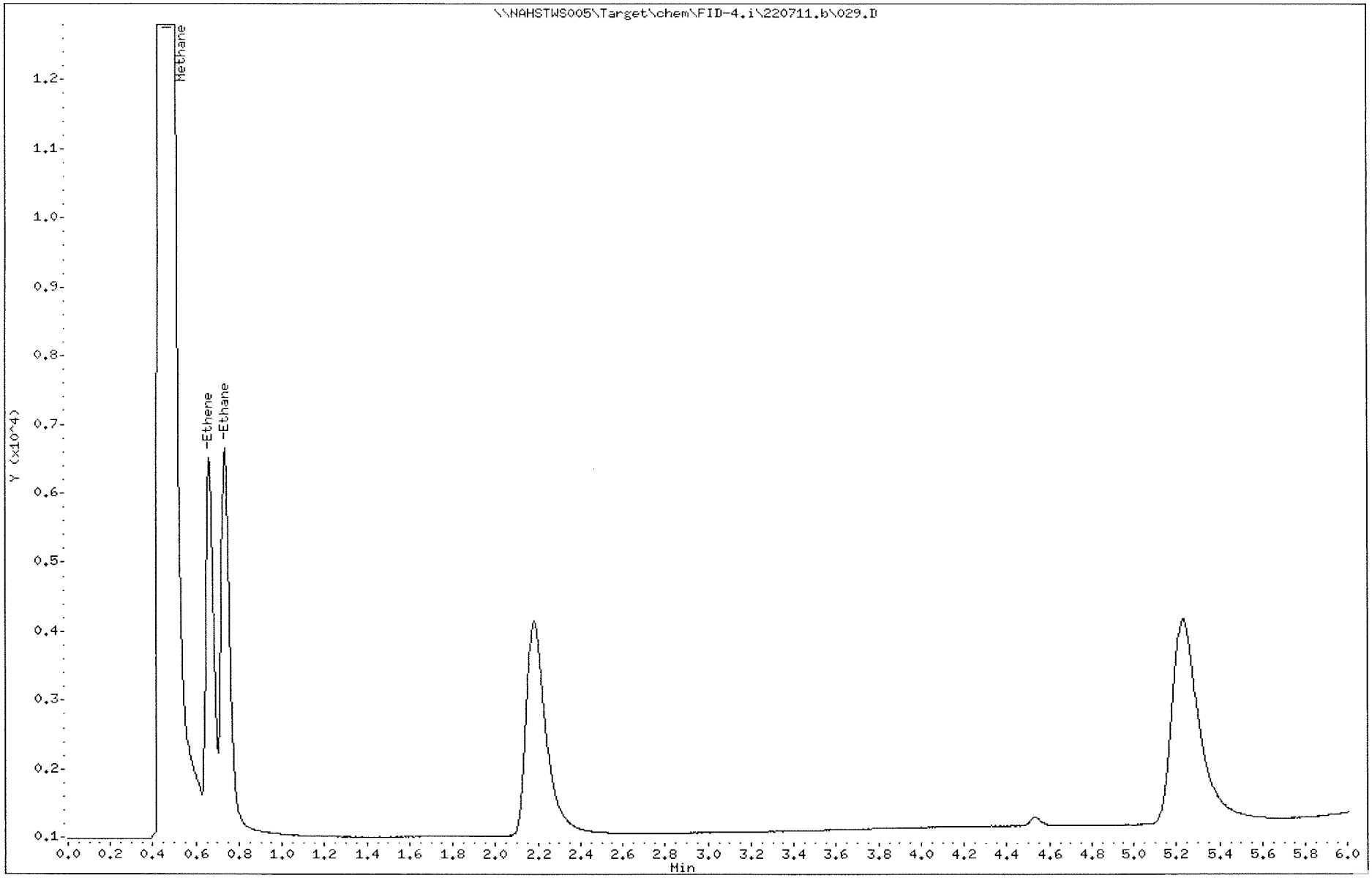
Instrument: FID-4.i

Sample Info: HS22070326-07MS;HS22070326-07MS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\029.D
Lab Smp Id: HS22070326-07MS Client Smp ID: HS22070326-07MS
Inj Date : 11-JUL-2022 13:35
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-07MS;HS22070326-07MS
Misc Info : ;1;0;1
Comment   :
Method   : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 29 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.440	0.436	0.004	729952	748.675	748.674(AR)
2 Ethene	0.660	0.656	0.004	14188	24.2215	24.221(R)
3 Ethane	0.733	0.733	0.000	17158	23.8475	23.847(R)

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\029.D

Date : 11-JUL-2022 13:35

Client ID: HS22070326-07MS

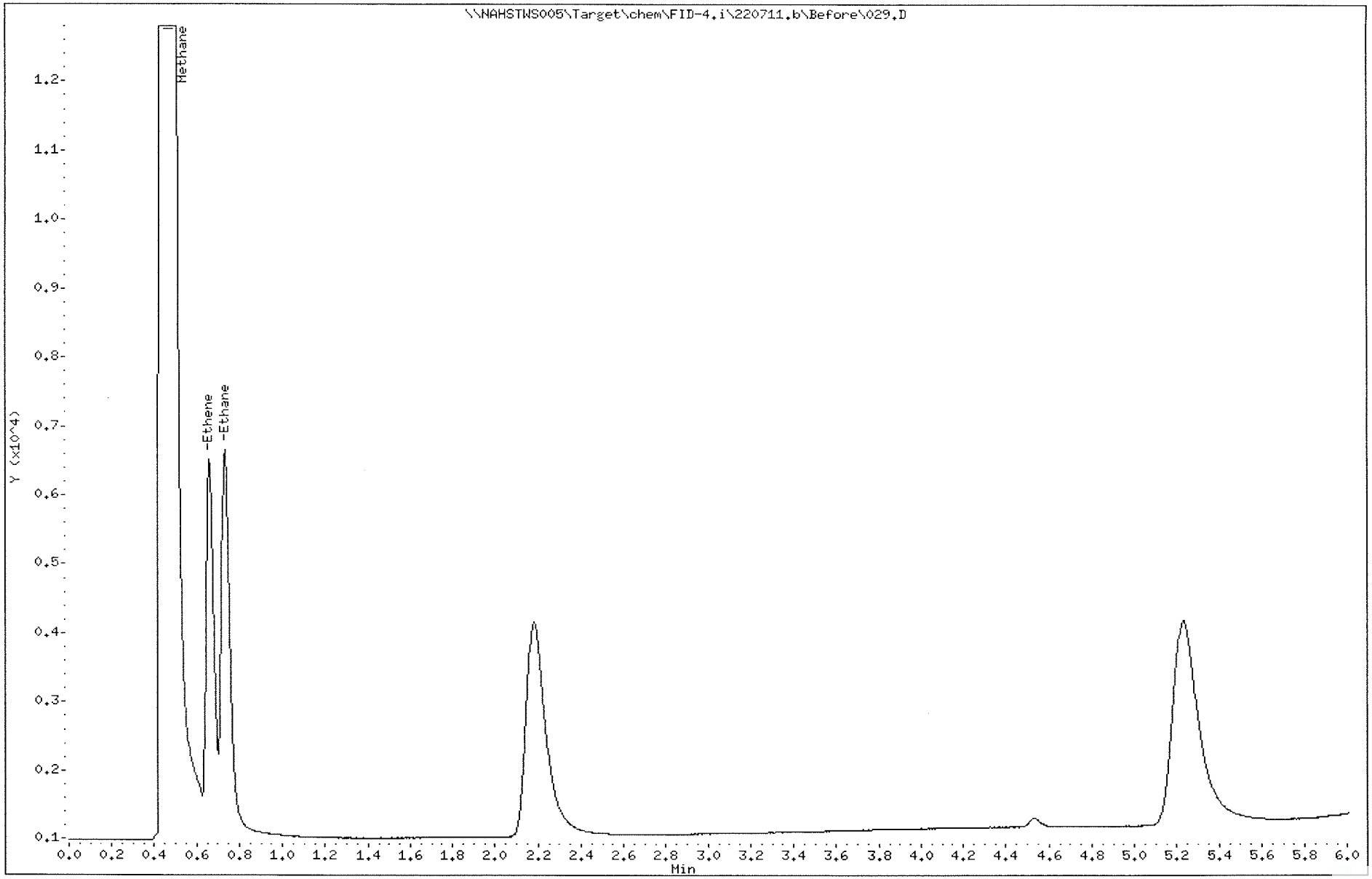
Instrument: FID-4.i

Sample Info: HS22070326-07MS;HS22070326-07MS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\030.D Page 1
Report Date: 19-Jul-2022 14:17

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\030.D
Lab Smp Id: HS22070326-07MSD Client Smp ID: HS22070326-07MSD
Inj Date : 11-JUL-2022 13:43
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-07MSD;HS22070326-07MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 30 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.436	0.436	0.000	838460	859.966	859.965(AR)
2 Ethene	0.660	0.656	0.004	13646	23.2962	23.296(RM)
3 Ethane	0.733	0.733	0.000	14618	20.3172	20.317(M)

QC Flag Legend

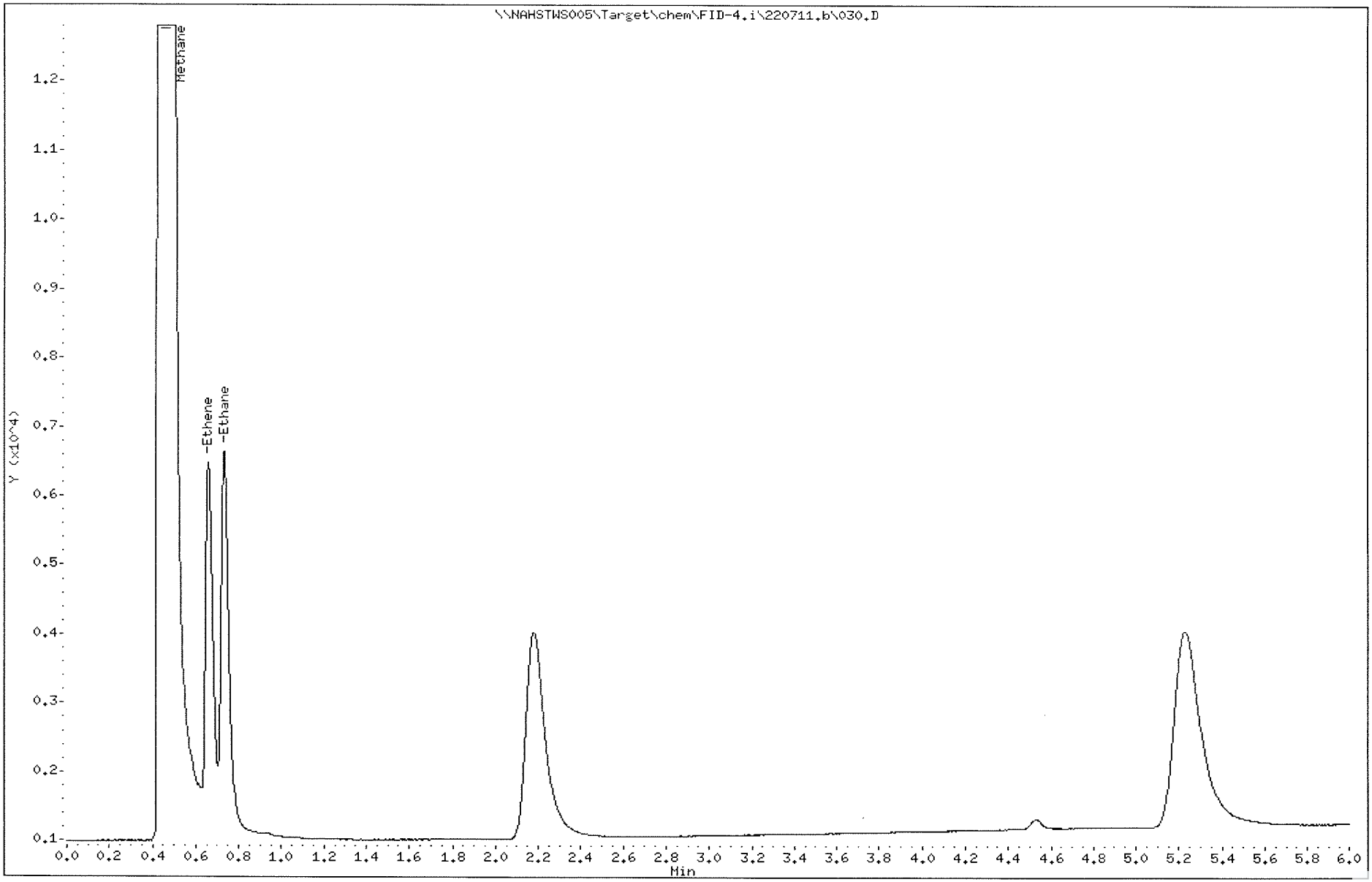
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\030.D
Date : 11-JUL-2022 13:43
Client ID: HS22070326-07MSD
Sample Info: HS22070326-07MSD;HS22070326-07MSD

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\030.D
Lab Smp Id: HS22070326-07MSD Client Smp ID: HS22070326-07MSD
Inj Date : 11-JUL-2022 13:43
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-07MSD;HS22070326-07MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 30 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.436	0.000	838460	859.966	859.965(AR)
2 Ethene	0.660	0.656	0.004	27996	47.7943	47.794(R)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\030.D

Date : 11-JUL-2022 13:43

Client ID: HS22070326-07MSD

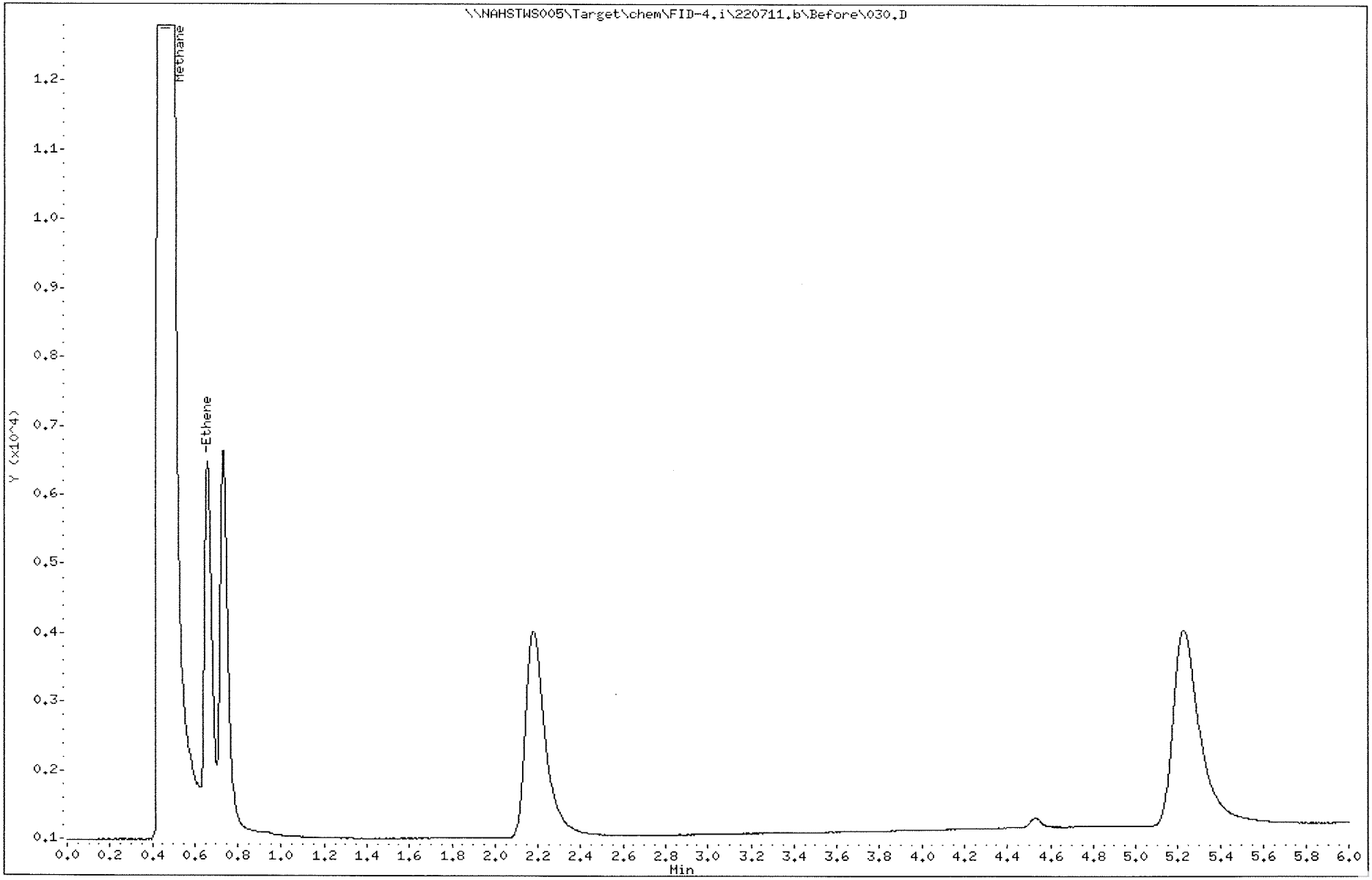
Instrument: FID-4.i

Sample Info: HS22070326-07MSD;HS22070326-07MSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\033.D Page 1
Report Date: 19-Jul-2022 14:17

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\033.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 14:23
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	0.436	0.436	0.000	9305	9.64700	9.543
2 Ethene	0.660	0.656	0.004	11621	16.8500	19.839(M)
3 Ethane	0.730	0.733	-0.003	14197	18.0430	19.732(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\033.D

Date : 11-JUL-2022 14:23

Client ID: RSK-CCV

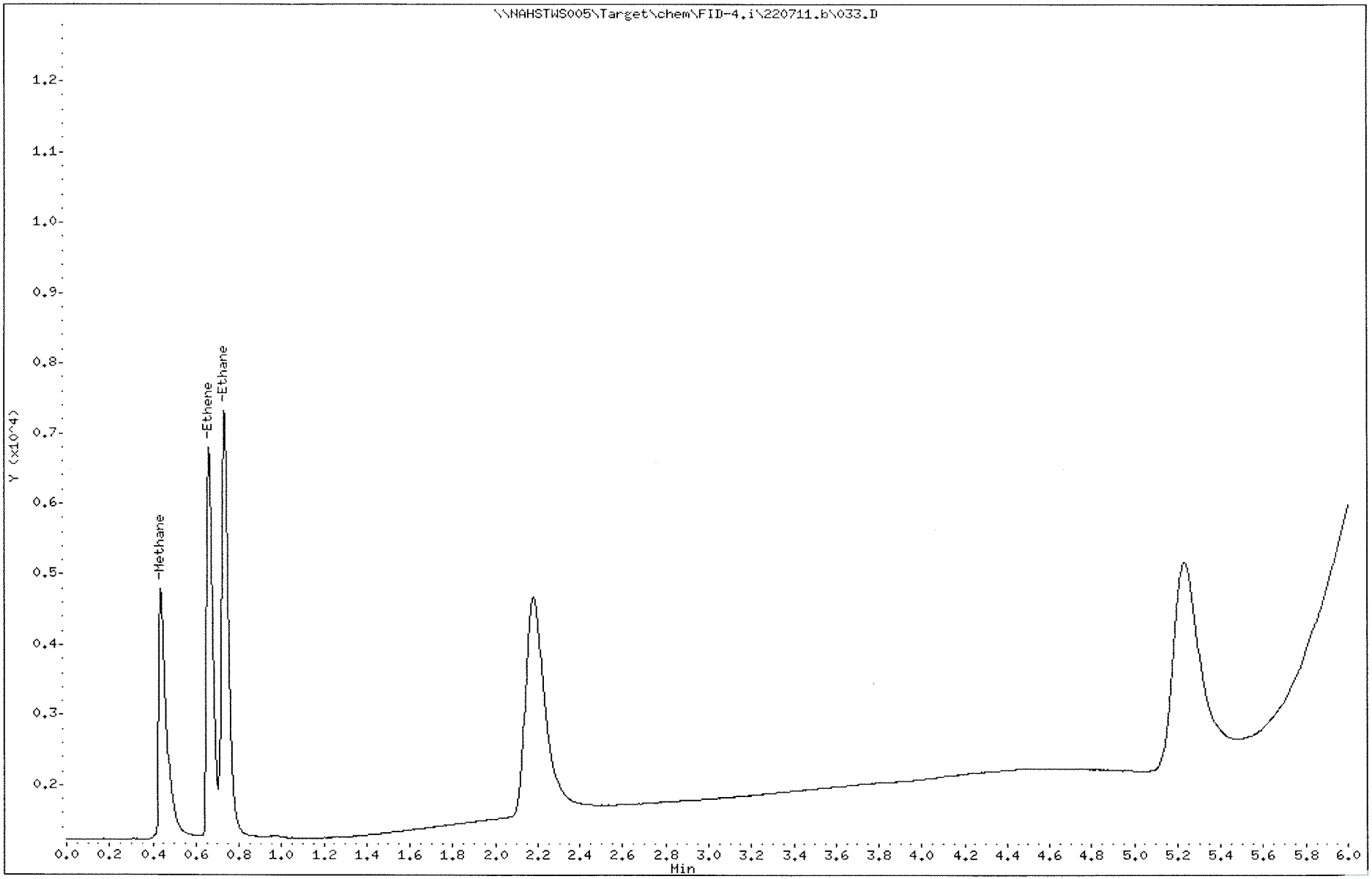
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\033.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 14:23
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.436	0.436	0.000	9305	9.64700	9.543
2 Ethene	0.660	0.656	0.004	25675	16.8500	43.831

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\033.D

Date : 11-JUL-2022 14:23

Client ID: RSK-CCV

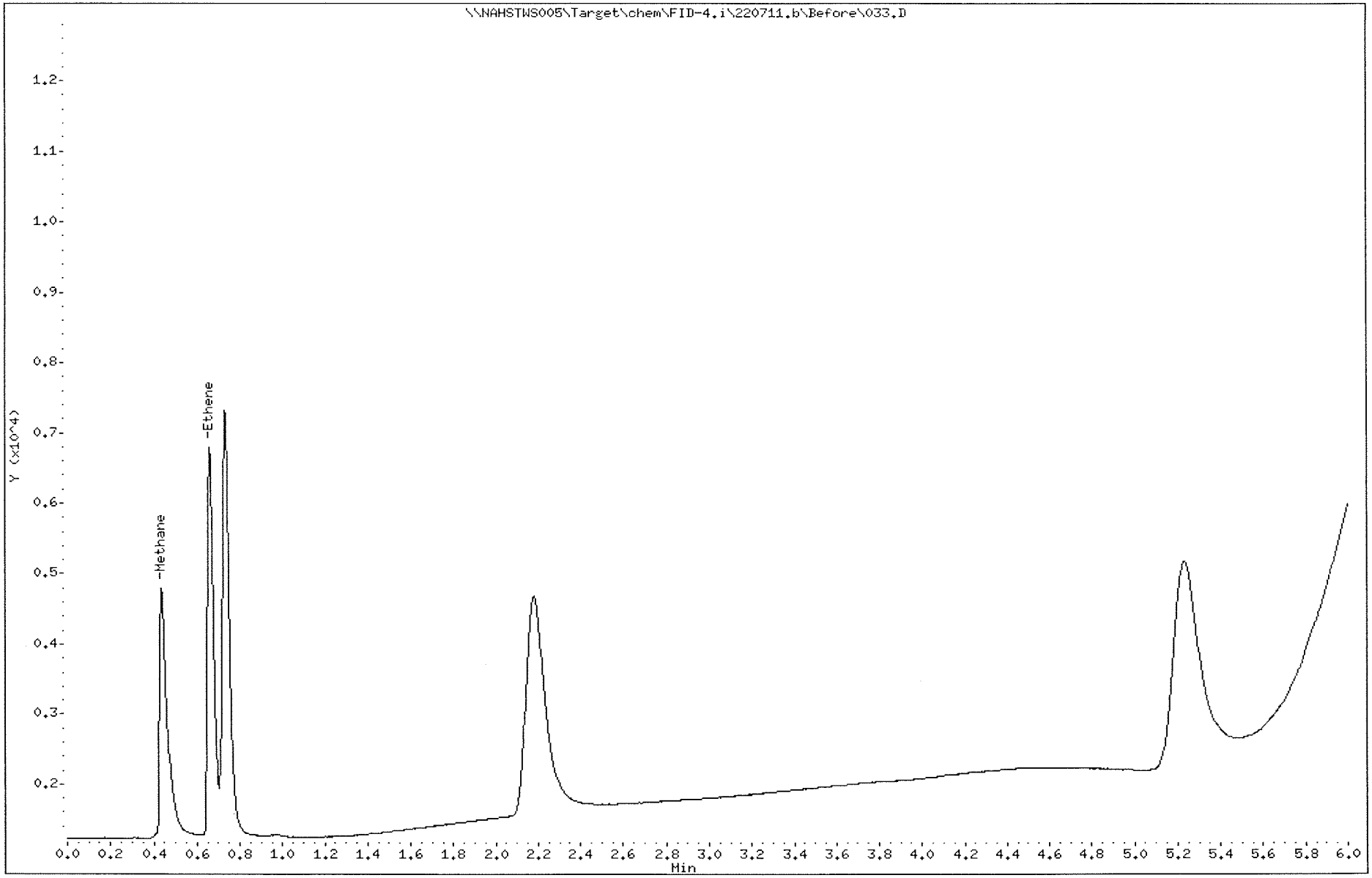
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\038.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 15:16
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 38 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.436	0.436	0.000	8550	9.64700	8.769
2 Ethene	0.656	0.656	0.000	10508	16.8500	17.939(M)
3 Ethane	0.730	0.733	-0.003	13431	18.0430	18.667(M)

QC Flag Legend

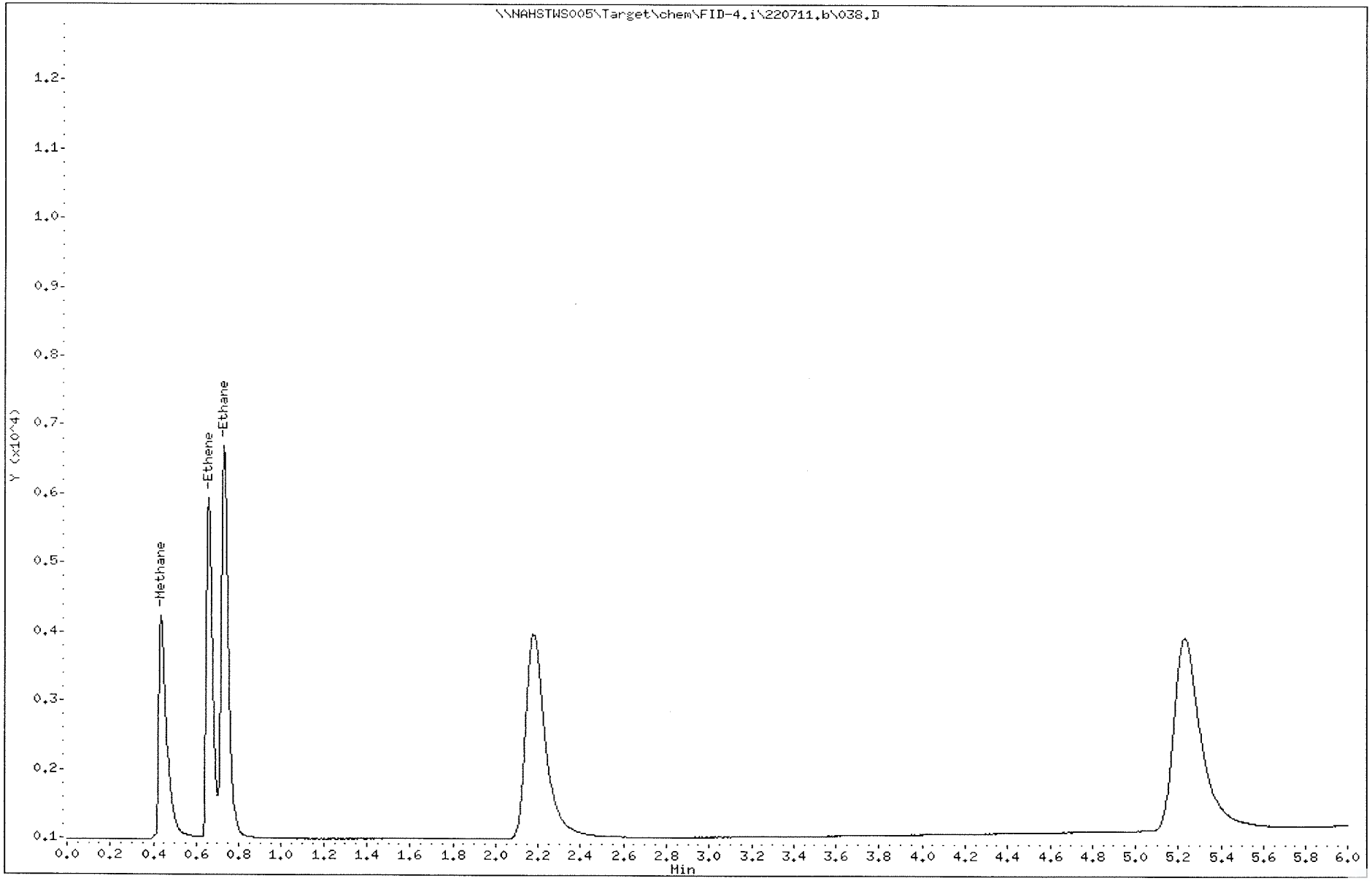
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\038.D
Date : 11-JUL-2022 15:16
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\038.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 15:16
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 38 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	0.436	0.436	0.000	8550	9.64700	8.769
2 Ethene	0.656	0.656	0.000	23814	16.8500	40.654

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\038.D

Date : 11-JUL-2022 15:16

Client ID: RSK-CCV

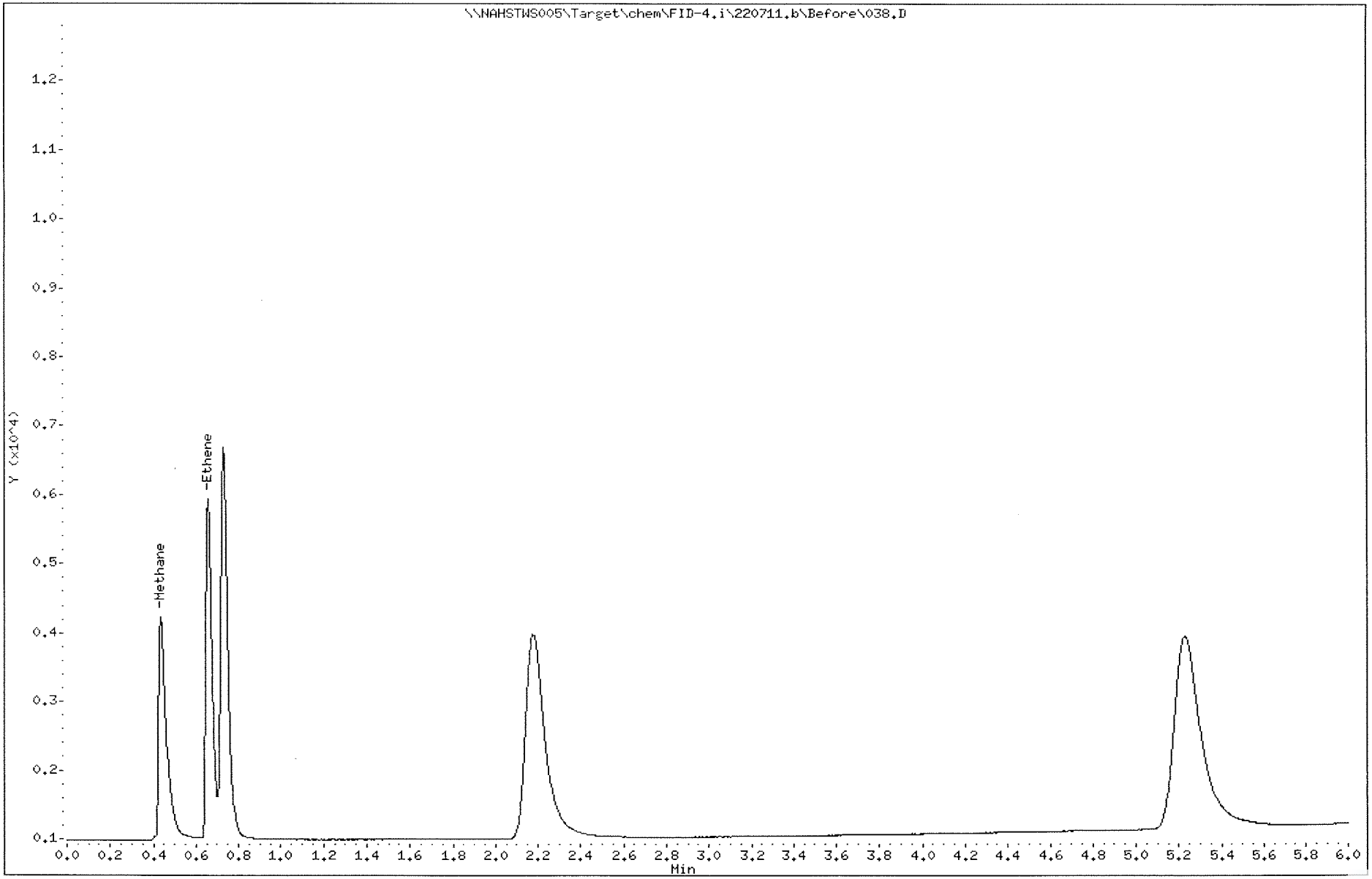
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



HS22061645 Wet Chemistry

ALS WO# HS22061645

C:\TOC-L\Data\2022_06_07_002.tlx

HS2206 1645

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Diluti	Result
1	Standard	NPOC	CAL	3100605703	06_07_2022	1.000	
2	Unknown	NPOC	ICV	3100605711	06_07_2022	1.000	NPOC:9.599mg/L
3	Unknown	NPOC	ICB		06_07_2022	1.000	NPOC:0.1185mg/

C:\TOC-L\Data\2022_06_07_002.tlx

	Notes	Status	Date / Time	Vial
1		Completed	6/7/2022 6:42:31 PM	1, 2, 3, 4, 5,
2		Completed	6/7/2022 6:53:59 PM	8
3		Completed	6/7/2022 7:04:57 PM	9

TOC-Control L Report

2022_06_07_002.tlx

Instr.Information

Instrument Options	TOC/ASI/IC Unit/
Catalyst	Regular Sensitivity

Cal. Curve

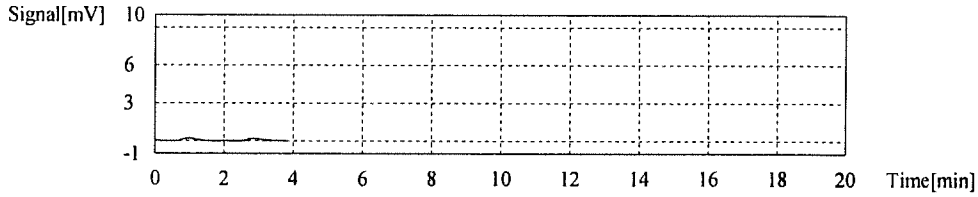
Sample Name:	CAL
Sample ID:	3100605703
Cal. Curve:	06_07_2022_CAL.2022_06_07_17_25_51.cal
Status	Completed

Type	Analyte
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.5059	50uL	1.000	*******		6/7/2022 5:33:20 PM
2	0.4436	50uL	1.000	*******		6/7/2022 5:36:04 PM

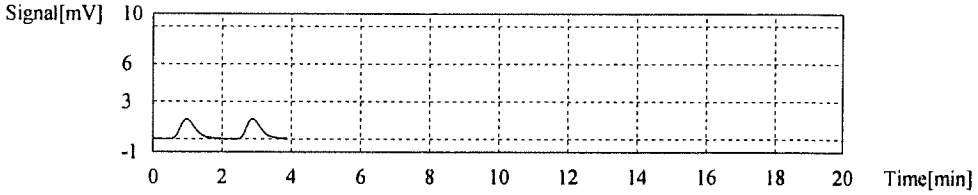
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	0.4748



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	4.733	50uL	1.000	*******		6/7/2022 5:44:04 PM
2	4.778	50uL	1.000	*******		6/7/2022 5:46:49 PM

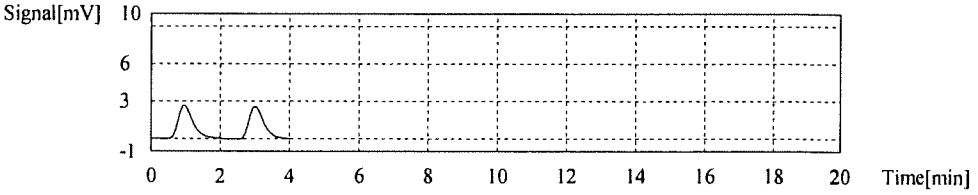
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	4.756



Conc: 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	7.782	50uL	1.000	*******		6/7/2022 5:54:55 PM
2	7.707	50uL	1.000	*******		6/7/2022 5:57:36 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	7.745



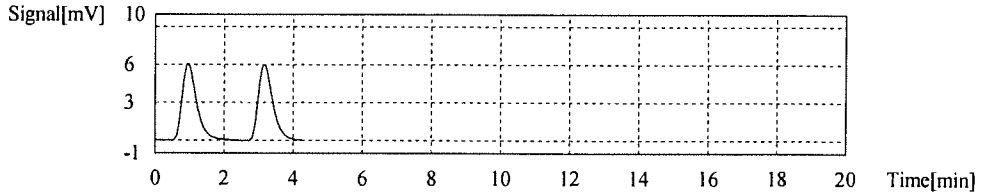
TOC-Control L Report

2022_06_07_002.tlx

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	17.83	50uL	1.000	*******		6/7/2022 6:05:52 PM
2	17.74	50uL	1.000	*******		6/7/2022 6:08:28 PM

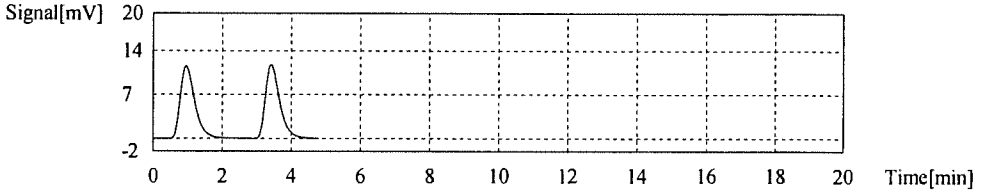
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 17.79



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	34.34	50uL	1.000	*******		6/7/2022 6:17:00 PM
2	34.33	50uL	1.000	*******		6/7/2022 6:19:35 PM

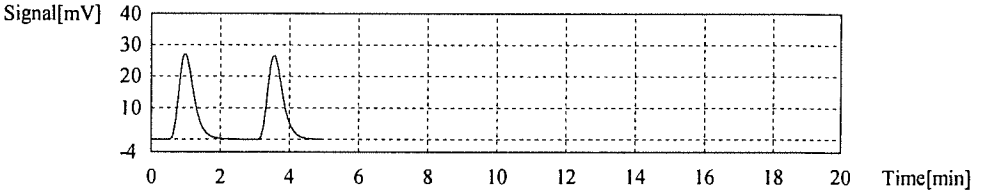
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 34.34



Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	84.01	50uL	1.000	*******		6/7/2022 6:28:26 PM
2	83.63	50uL	1.000	*******		6/7/2022 6:31:03 PM

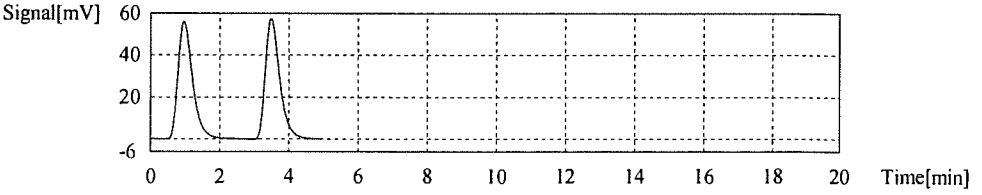
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 83.82



Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	167.5	50uL	1.000	*******		6/7/2022 6:39:49 PM
2	169.4	50uL	1.000	*******		6/7/2022 6:42:31 PM

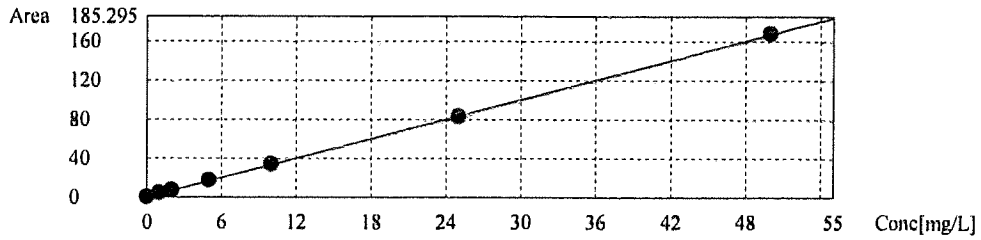
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 168.4



TOC-Control L Report

2022_06_07_002.tlx

Slope:	3.345
Intercept	0.000
r^2	1.0000
r	1.0000
RSE(%)	N/A
Zero Shift	Yes



Sample

Sample Name:	ICV
Sample ID:	3100605711
Origin:	06_07_2022_CAL.cal
Status	Completed
Chk. Result	

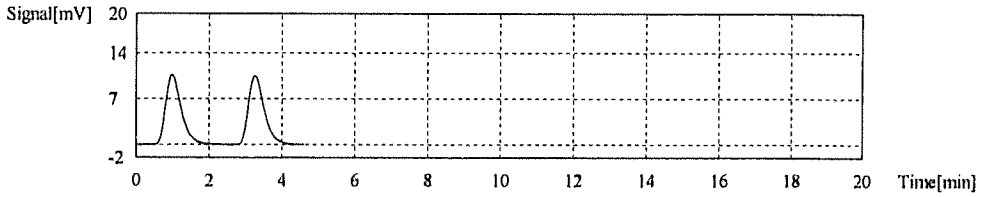
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.599mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.11	9.601mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	6/7/2022 6:50:57 PM
2	32.10	9.598mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	6/7/2022 6:53:59 PM

Mean Area	32.11
Mean Conc.	9.599mg/L



Sample

Sample Name:	ICB
Sample ID:	
Origin:	06_07_2022_CAL.cal
Status	Completed
Chk. Result	

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1185mg/L

1. Det

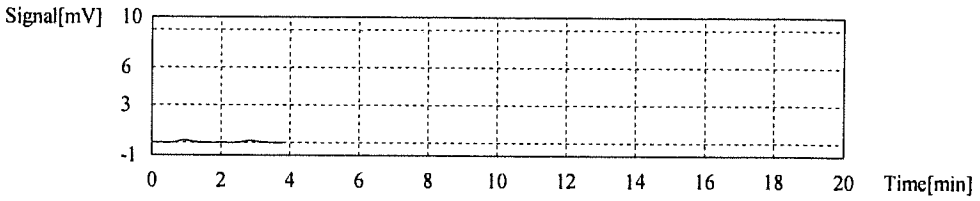
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3661	0.1095mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	6/7/2022 7:01:57 PM
2	0.4267	0.1276mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	6/7/2022 7:04:57 PM

TOC-Control L Report

2022_06_07_002.tlx

Mean Area	0.3964
Mean Conc.	0.1185mg/L



C:\TOC-L\Data\2022_07_13_002.tlx

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Diluti	Result
1	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.72mg/L
2	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.3061mg/
3	Unknown	NPOC	MBLK-07132022		06_07_2022	1.000	NPOC:0.2627mg/
4	Unknown	NPOC	LCS-07132022	3100605711	06_07_2022	1.000	NPOC:9.906mg/L
5	Unknown	NPOC	LCSD-07132022		06_07_2022	1.000	NPOC:9.902mg/L
6	Unknown	NPOC	HS22070605-01		06_07_2022	1.000	NPOC:0.9504mg/
7	Unknown	NPOC	HS22070605-01MS		06_07_2022	1.000	NPOC:10.81mg/L
8	Unknown	NPOC	HS22070605-02	TOC_W 5310B	06_07_2022	1.000	NPOC:2.568mg/L
9	Unknown	NPOC	HS22070605-03		06_07_2022	1.000	NPOC:1.537mg/L
10	Unknown	NPOC	HS22070605-04		06_07_2022	1.000	NPOC:2.686mg/L
11	Unknown	NPOC	HS22070605-05		06_07_2022	1.000	NPOC:2.486mg/L
12	Unknown	NPOC	HS22070605-06		06_07_2022	1.000	NPOC:1.376mg/L
13	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.38mg/L
14	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.3423mg/
15	Unknown	NPOC	HS22070605-07		06_07_2022	1.000	NPOC:1.503mg/L
16	Unknown	NPOC	HS22070605-08		06_07_2022	1.000	NPOC:1.420mg/L
17	Unknown	NPOC	HS22070605-09		06_07_2022	1.000	NPOC:1.295mg/L
18	Unknown	NPOC	HS22070605-10		06_07_2022	1.000	NPOC:1.045mg/L
19	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.32mg/L
20	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.3527mg/
21	Unknown	NPOC	MBLK2-07132022		06_07_2022	1.000	NPOC:0.2882mg/
22	Unknown	NPOC	LCS2-07132022		06_07_2022	1.000	NPOC:9.894mg/L
23	Unknown	NPOC	LCSD2-07132022		06_07_2022	1.000	NPOC:9.863mg/L
24	Unknown	NPOC	HS22070252-01		06_07_2022	1.000	NPOC:15.48mg/L
25	Unknown	NPOC	HS22061655-01	TOC_W	06_07_2022	1.000	NPOC:19.43mg/L
26	Unknown	NPOC	HS22070155-01		06_07_2022	1.000	NPOC:15.99mg/L
27	Unknown	NPOC	HS22070155-01MS		06_07_2022	1.000	NPOC:25.27mg/L
28	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.46mg/L
29	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.2971mg/
30	Unknown	NPOC	MBLK3-07132022		06_07_2022	1.000	NPOC:0.3378mg/
31	Unknown	NPOC	LCS3-07132022		06_07_2022	1.000	NPOC:9.819mg/L
32	Unknown	NPOC	LCSD3-07132022		06_07_2022	1.000	NPOC:9.821mg/L
33	Unknown	NPOC	HS22070261-07		06_07_2022	1.000	NPOC:0.9851mg/
34	Unknown	NPOC	HS22070286-01		06_07_2022	1.000	NPOC:9.035mg/L
35	Unknown	NPOC	HS22070286-01MS		06_07_2022	1.000	NPOC:18.46mg/L
36	Unknown	NPOC	HS22070327-01	TOC_W 5310B	06_07_2022	1.000	NPOC:5.822mg/L
37	Unknown	NPOC	HS22070327-02		06_07_2022	1.000	NPOC:32.16mg/L
38	Unknown	NPOC	HS22070327-03		06_07_2022	1.000	NPOC:22.84mg/L
39	Unknown	NPOC	HS22070327-04		06_07_2022	1.000	NPOC:172.3mg/L
40	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:26.24mg/L
41	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.6437mg/
42	Unknown	NPOC	HS22070327-05		06_07_2022	1.000	NPOC:36.67mg/L
43	Unknown	NPOC	HS22070327-06		06_07_2022	1.000	NPOC:57.82mg/L
44	Unknown	NPOC	HS22070327-07		06_07_2022	1.000	NPOC:77.00mg/L
45	Unknown	NPOC	HS22070327-08DF10		06_07_2022	1.000	NPOC:58.99mg/L
46	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:25.11mg/L
47	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.4698mg/
48	Unknown	NPOC	MBLK-407132022		06_07_2022	1.000	NPOC:0.3751mg/
49	Unknown	NPOC	LCS4-07132022		06_07_2022	1.000	NPOC:9.951mg/L
50	Unknown	NPOC	LCSD4-07132022		06_07_2022	1.000	NPOC:9.987mg/L
51	Unknown	NPOC	HS22070327-09DF10		06_07_2022	1.000	NPOC:49.53mg/L

C:\TOC-L\Data\2022_07_13_002.tlx

	Notes	Status	Date / Time	Vial
1		Completed	7/13/2022 6:03:42 PM	1
2		Completed	7/13/2022 6:16:00 PM	2
3		Completed	7/13/2022 6:28:18 PM	3
4		Completed	7/13/2022 6:41:46 PM	4
5		Completed	7/13/2022 6:55:08 PM	5
6		Completed	7/13/2022 7:07:26 PM	6
7		Completed	7/13/2022 7:21:14 PM	7
8		Completed	7/13/2022 7:34:02 PM	8
9		Completed	7/13/2022 7:46:25 PM	9
10		Completed	7/13/2022 7:58:50 PM	10
11		Completed	7/13/2022 8:11:26 PM	11
12		Completed	7/13/2022 8:23:46 PM	12
13		Completed	7/13/2022 8:38:00 PM	1
14		Completed	7/13/2022 8:50:19 PM	2
15		Completed	7/13/2022 9:02:42 PM	13
16		Completed	7/13/2022 9:15:01 PM	14
17		Completed	7/13/2022 9:27:25 PM	15
18		Completed	7/13/2022 9:39:50 PM	16
19		Completed	7/13/2022 9:53:47 PM	1
20		Completed	7/13/2022 10:06:04 PM	2
21		Completed	7/13/2022 10:18:21 PM	3
22		Completed	7/13/2022 10:31:47 PM	4
23		Completed	7/13/2022 10:45:09 PM	5
24		Completed	7/13/2022 10:59:03 PM	17
25		Completed	7/13/2022 11:13:06 PM	18
26		Completed	7/13/2022 11:27:22 PM	19
27		Completed	7/13/2022 11:41:39 PM	20
28		Completed	7/13/2022 11:56:02 PM	1
29		Completed	7/14/2022 12:08:19 AM	2
30		Completed	7/14/2022 12:20:36 AM	3
31		Completed	7/14/2022 12:34:06 AM	4
32		Completed	7/14/2022 12:47:21 AM	5
33		Completed	7/14/2022 12:59:55 AM	21
34		Completed	7/14/2022 1:13:31 AM	22
35		Completed	7/14/2022 1:27:29 AM	23
36		Completed	7/14/2022 1:40:42 AM	24
37		Completed	7/14/2022 1:55:01 AM	25
38		Completed	7/14/2022 2:08:17 AM	26
39		Completed	7/14/2022 2:23:37 AM	27
40		Completed	7/14/2022 2:37:38 AM	28
41		Completed	7/14/2022 2:49:59 AM	29
42		Completed	7/14/2022 3:04:20 AM	30
43		Completed	7/14/2022 3:18:08 AM	31
44		Completed	7/14/2022 3:31:45 AM	32
45		Completed	7/14/2022 3:46:07 AM	33
46		Completed	7/14/2022 4:00:23 AM	28
47		Completed	7/14/2022 4:12:44 AM	29
48		Completed	7/14/2022 4:25:21 AM	3
49		Completed	7/14/2022 4:38:44 AM	4
50		Completed	7/14/2022 4:52:16 AM	5
51		Completed	7/14/2022 5:06:31 AM	34

C:\TOC-L\Data\2022_07_13_002.tlx

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Diluti	Result
52	Unknown	NPOC	HS22070327-10DF10	TOC_W 5310B	06_07_2022	1.000	NPOC:12.62mg/L
53	Unknown	NPOC	HS22070287-01		06_07_2022	1.000	NPOC:6.097mg/L
54	Unknown	NPOC	HS22070287-01MS		06_07_2022	1.000	NPOC:16.21mg/L
55	Unknown	NPOC	HS22061645-01		06_07_2022	1.000	NPOC:15.82mg/L
56	Unknown	NPOC	HS22061645-02		06_07_2022	1.000	NPOC:10.00mg/L
57	Unknown	NPOC	HS22061645-03		06_07_2022	1.000	NPOC:9.674mg/L
58	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.85mg/L
59	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.5061mg/
60	Unknown	NPOC	HS22061645-04		06_07_2022	1.000	NPOC:113.3mg/L
61	Unknown	NPOC	HS22061645-05		06_07_2022	1.000	NPOC:46.68mg/L
62	Unknown	NPOC	HS22061645-06		06_07_2022	1.000	NPOC:46.22mg/L
63	Unknown	NPOC	HS22061645-10		06_07_2022	1.000	NPOC:1565mg/L
64	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:28.64mg/L
65	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.9933mg/

C:\TOC-L\Data\2022_07_13_002.tlx

	Notes	Status	Date / Time	Vial
52		Completed	7/14/2022 5:20:04 AM	35
53		Completed	7/14/2022 5:33:20 AM	36
54		Completed	7/14/2022 5:47:16 AM	37
55		Completed	7/14/2022 6:01:27 AM	38
56		Completed	7/14/2022 6:14:51 AM	39
57		Completed	7/14/2022 6:28:32 AM	40
58		Completed	7/14/2022 6:42:36 AM	28
59		Completed	7/14/2022 6:54:57 AM	29
60		Completed	7/14/2022 7:09:33 AM	41
61		Completed	7/14/2022 7:24:08 AM	42
62		Completed	7/14/2022 7:38:41 AM	43
63		Completed	7/14/2022 7:57:49 AM	44
64		Completed	7/14/2022 8:11:51 AM	45
65		Completed	7/14/2022 8:24:09 AM	46

TOC-Control L Report

2022_07_13_002.tlx

Instrument Information

Instrument Options: TOC/ASI/IC Unit/
Catalyst: Regular Sensitivity

Sample

Sample Name: CCV
Sample ID: 320016206
Origin: 06_07_2022_CAL.cal
Status: Completed
Chk. Result:

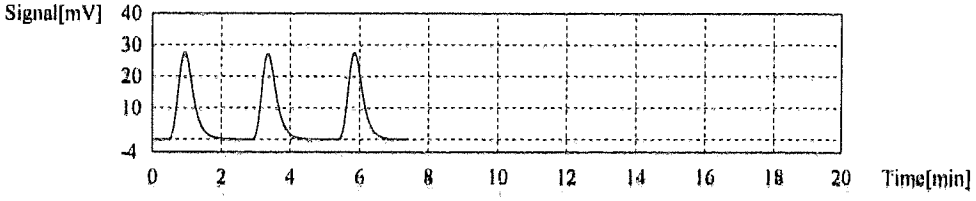
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.11mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	85.40	25.53mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 3:54:55 AM
2	83.35	24.92mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 3:57:39 AM
3	83.15	24.86mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 4:00:23 AM

Mean Area: 83.97
Mean Conc.: 25.11mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06_07_2022_CAL.cal
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4698mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.012	0.6016mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 4:08:28 AM
2	1.380	0.4126mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 4:10:36 AM
3	1.322	0.3953mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 4:12:44 AM

TOC-Control L Report

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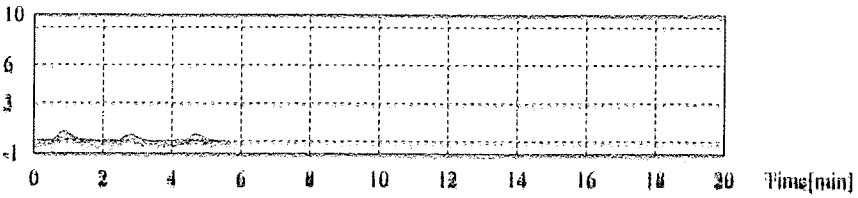
Mean Area 1.871
Mean Conc. 0.4698mg/L



Sample

Sample Name: MBLK-407132022
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

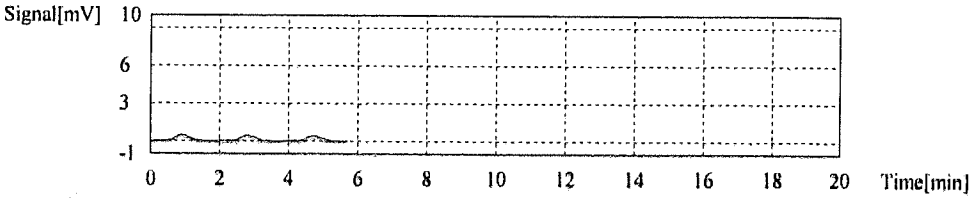
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3751mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	EX	Cal. Curve	Date/Time
1	1.272	0.3803mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 4:21:05 AM
2	1.322	0.3953mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 4:23:13 AM
3	1.170	0.3498mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 4:25:21 AM

Mean Area 1.255
Mean Conc. 0.3751mg/L



Sample

Sample Name: LCS4-07132022
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.951mg/L

1. Det

Anal.: NPOC

TOC-Control L Report

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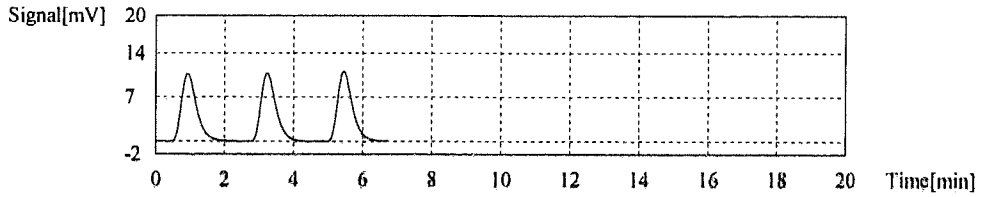
No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.14	9.909mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 4:33:50 AM
2	33.08	9.891mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 4:36:18 AM
3	33.63	10.06mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 4:38:44 AM

Mean Area 33.28
Mean Conc. 9.951mg/L



Sample

Sample Name: LCSD4.07133022
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

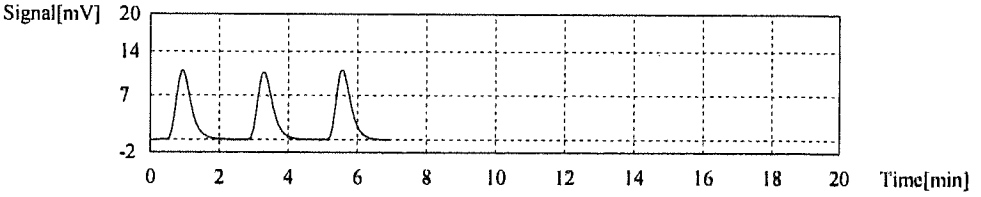
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.987mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.35	9.971mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 4:47:15 AM
2	33.17	9.918mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 4:49:47 AM
3	33.69	10.07mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 4:52:16 AM

Mean Area 33.40
Mean Conc. 9.987mg/L



Sample

Sample Name: HS22070287-01
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.097mg/L

1. Det

TOC-Control L Report

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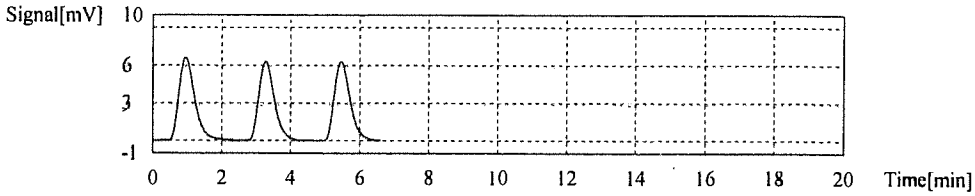
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	21.23	6.348mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 5:28:34 AM
2	19.88	5.944mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 5:31:00 AM
3	20.07	6.001mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 5:33:20 AM

Mean Area 20.39
Mean Conc. 6.097mg/L



Sample

Sample Name: HS22070287-01MS
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

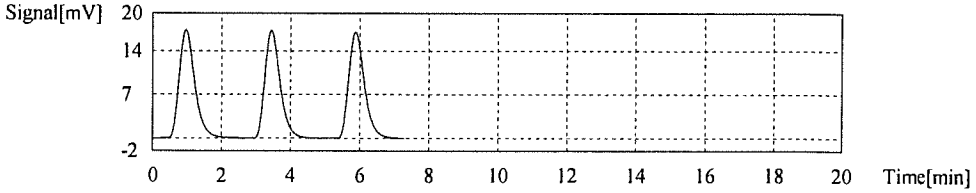
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:16.21mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	55.11	16.48mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 5:42:00 AM
2	53.38	15.96mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 5:44:39 AM
3	54.12	16.18mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 5:47:16 AM

Mean Area 54.20
Mean Conc. 16.21mg/L



Sample

Sample Name: HS22061645-01
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.82mg/L

TOC-Control L Report

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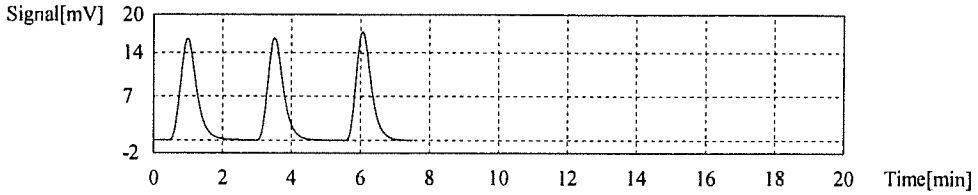
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.04	15.86mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 5:55:59 AM
2	52.09	15.57mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 5:58:49 AM
3	53.64	16.04mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 6:01:27 AM

Mean Area 52.92
Mean Conc. 15.82mg/L



Sample

Sample Name: HS22061645-02
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

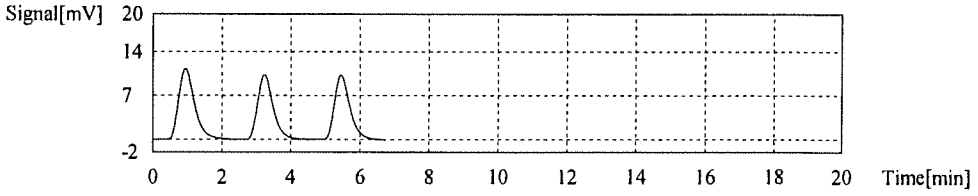
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.00mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.24	10.84mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 6:09:53 AM
2	32.22	9.634mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 6:12:22 AM
3	31.91	9.541mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 6:14:51 AM

Mean Area 33.46
Mean Conc. 10.00mg/L



Sample

Sample Name: HS22061645-03
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

TOC-Control L Report

2022_07_13_002.tlx

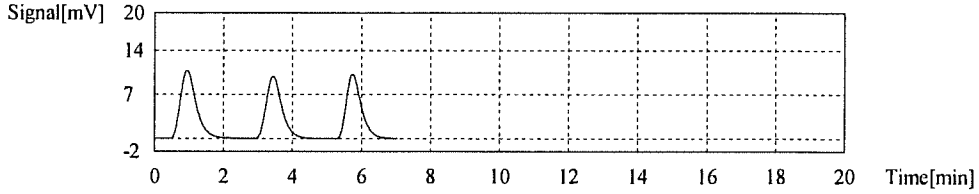
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.674mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.68	10.37mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 6:23:29 AM
2	31.30	9.358mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 6:26:04 AM
3	31.09	9.296mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 6:28:32 AM

Mean Area 32.36
Mean Conc. 9.674mg/L



Sample

Sample Name: CCV
Sample ID: 320016206
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

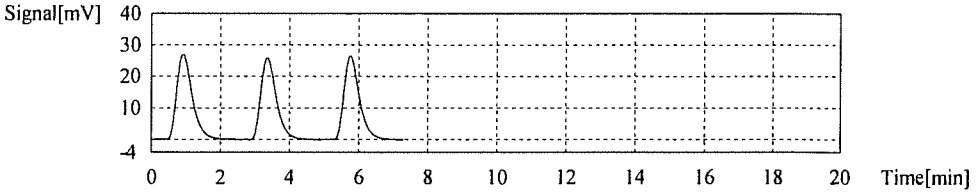
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.85mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	84.97	25.41mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 6:37:14 AM
2	81.64	24.41mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 6:39:55 AM
3	82.69	24.72mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 6:42:36 AM

Mean Area 83.10
Mean Conc. 24.85mg/L



Sample

TOC-Control L Report

2022_07_13_002.tlx

Sample Name: CCB
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

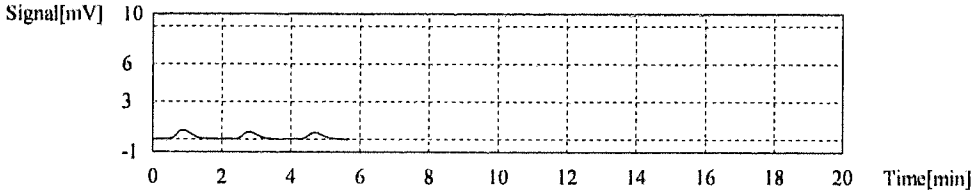
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5061mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.967	0.5881mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 6:50:41 AM
2	1.651	0.4936mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 6:52:49 AM
3	1.460	0.4365mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 6:54:57 AM

Mean Area 1.693
Mean Conc. 0.5061mg/L



Sample

Sample Name: HS22061645-04
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

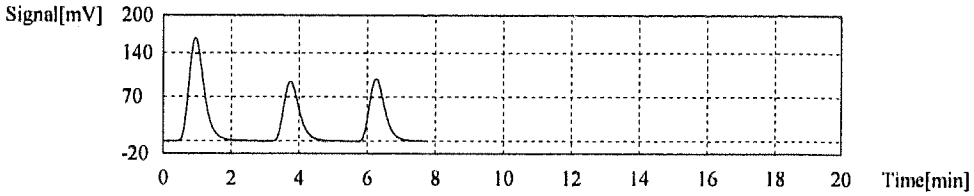
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:113.3mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	511.4	152.9mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 7:04:04 AM
2	309.6	92.57mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 7:06:50 AM
3	315.4	94.30mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 7:09:33 AM

Mean Area 378.8
Mean Conc. 113.3mg/L



TOC-Control L Report

2022_07_13_002.tlx

Sample

Sample Name: H822061645-05
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

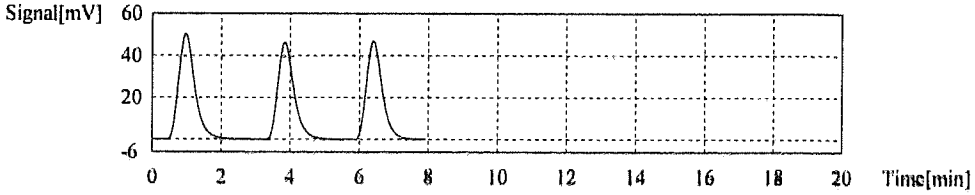
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:46.68mg/L

1. Det

Anal.: NPOC

No	Area	Conc.	Inj. Vol	Aut. Dil.	Ex	Cal. Curve	Date / Time
1	165.9	49.60mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 7:18:35 AM
2	152.0	45.45mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 7:21:24 AM
3	150.5	45.00mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 7:24:08 AM

Mean Area 156.1
Mean Conc. 46.68mg/L



Sample

Sample Name: H822061645-06
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

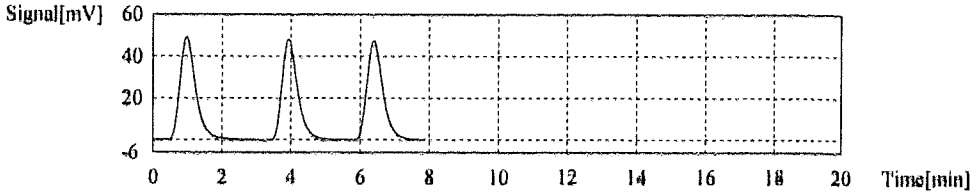
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:46.22mg/L

1. Det

Anal.: NPOC

No	Area	Conc.	Inj. Vol	Aut. Dil.	Ex	Cal. Curve	Date / Time
1	158.5	47.39mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 7:33:16 AM
2	152.3	45.54mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 7:35:58 AM
3	153.0	45.75mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 7:38:41 AM

Mean Area 154.6
Mean Conc. 46.22mg/L



TOC-Control L Report

2022_07_13_002.tlx

Sample

Sample Name: [illegible]
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

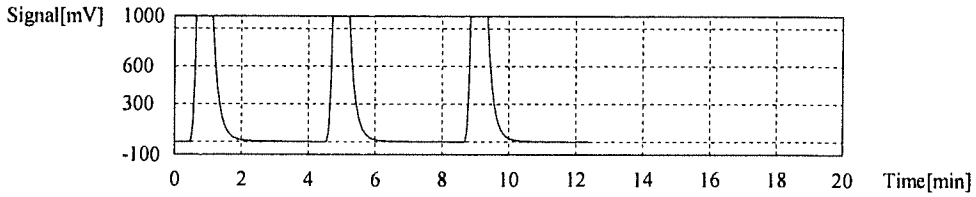
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1565mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5226	1563mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 7:48:56 AM
2	5231	1564mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 7:53:20 AM
3	5244	1568mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 7:57:49 AM

Mean Area 5234
Mean Conc. 1565mg/L



Sample

Sample Name: CCV
Sample ID: 320016206
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

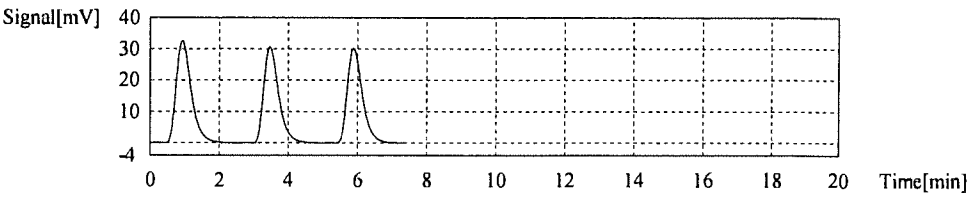
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.64mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	99.99	29.90mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 8:06:31 AM
2	93.71	28.02mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 8:09:11 AM
3	93.69	28.01mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 8:11:51 AM

Mean Area 95.80
Mean Conc. 28.64mg/L



TOC-Control L Report

2022_07_13_002.tlx

Sample

Sample Name: CCB
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

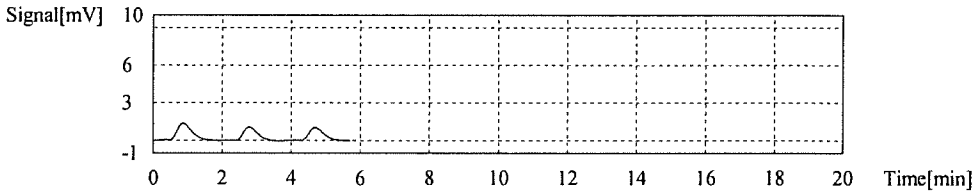
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.9933mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.013	1.200mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 8:19:55 AM
2	2.967	0.8871mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 8:22:02 AM
3	2.986	0.8928mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 8:24:09 AM

Mean Area 3.322
Mean Conc. 0.9933mg/L



C:\TOC-L\Data\2022_07_14_001.tlx

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Diluti	Result
1	Unknown	NPOC	RINSE		06_07_2022	1.000	NPOC:0.4891mg/
2	Unknown	NPOC	RINSE		06_07_2022	1.000	NPOC:0.3951mg/
3	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.52mg/L
4	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.3756mg/
5	Unknown	NPOC	MBLK-07142022		06_07_2022	1.000	NPOC:0.4139mg/
6	Unknown	NPOC	LCS-07142022	3100605711	06_07_2022	1.000	NPOC:9.782mg/L
7	Unknown	NPOC	LCSD-07142022		06_07_2022	1.000	NPOC:9.891mg/L
8	Unknown	NPOC	HS22070327-04DF10		06_07_2022	1.000	NPOC:16.97mg/L
9	Unknown	NPOC	HS22070327-06DF5		06_07_2022	1.000	NPOC:16.52mg/L
10	Unknown	NPOC	HS22070327-06MSDF5	TOC_W 5310B	06_07_2022	1.000	NPOC:27.47mg/L
11	Unknown	NPOC	HS22070327-07DF10		06_07_2022	1.000	NPOC:26.25mg/L
12	Unknown	NPOC	HS22070327-08DF20		06_07_2022	1.000	NPOC:33.07mg/L
13	Unknown	NPOC	HS22061561-01		06_07_2022	1.000	NPOC:1644mg/L
14	Unknown	NPOC	HS22061561-01DF100		06_07_2022	1.000	NPOC:22.40mg/L
15	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:25.02mg/L
16	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.3165mg/
17	Unknown	NPOC	MBLK2-07142022		06_07_2022	1.000	NPOC:0.3588mg/
18	Unknown	NPOC	LCS2-07142022		06_07_2022	1.000	NPOC:9.613mg/L
19	Unknown	NPOC	LCSD2-07142022		06_07_2022	1.000	NPOC:9.869mg/L
20	Unknown	NPOC	HS22070404-01		06_07_2022	1.000	NPOC:1.885mg/L
21	Unknown	NPOC	HS22070404-01MS	TOC_ W DISS 5310B	06_07_2022	1.000	NPOC:11.47mg/L
22	Unknown	NPOC	HS22070404-02		06_07_2022	1.000	NPOC:10.82mg/L
23	Unknown	NPOC	HS22070404-03		06_07_2022	1.000	NPOC:1.395mg/L
24	Unknown	NPOC	HS22070404-04		06_07_2022	1.000	NPOC:1.533mg/L
25	Unknown	NPOC	HS22070404-05		06_07_2022	1.000	NPOC:1.490mg/L
26	Unknown	NPOC	HS22070404-06		06_07_2022	1.000	NPOC:1.238mg/L
27	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.85mg/L
28	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.3832mg/
29	Unknown	NPOC	HS22070404-07		06_07_2022	1.000	NPOC:1.047mg/L
30	Unknown	NPOC	HS22070404-08		06_07_2022	1.000	NPOC:0.9851mg/
31	Unknown	NPOC	HS22070404-09		06_07_2022	1.000	NPOC:0.7786mg/
32	Unknown	NPOC	HS22070404-10		06_07_2022	1.000	NPOC:0.6404mg/
33	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.29mg/L
34	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.4193mg/
35	Unknown	NPOC	MBLK3-07142022		06_07_2022	1.000	NPOC:0.4361mg/
36	Unknown	NPOC	LCS3-07142022		06_07_2022	1.000	NPOC:9.646mg/L
37	Unknown	NPOC	LCSD3-07142022		06_07_2022	1.000	NPOC:9.822mg/L
38	Unknown	NPOC	HS22070404-11		06_07_2022	1.000	NPOC:4.107mg/L
39	Unknown	NPOC	HS22070404-12		06_07_2022	1.000	NPOC:1.970mg/L
40	Unknown	NPOC	HS22070404-12MS		06_07_2022	1.000	NPOC:11.47mg/L
41	Unknown	NPOC	HS22070404-13DF10	TOC_ W DISS 5310B	06_07_2022	1.000	NPOC:0.3505mg/
42	Unknown	NPOC	HS22070404-14DF10		06_07_2022	1.000	NPOC:0.7366mg/
43	Unknown	NPOC	HS22070477-01		06_07_2022	1.000	NPOC:0.8012mg/
44	Unknown	NPOC	HS22070477-02		06_07_2022	1.000	NPOC:2.186mg/L
45	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.25mg/L
46	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.3729mg/
47	Unknown	NPOC	HS22070477-03		06_07_2022	1.000	NPOC:0.8929mg/
48	Unknown	NPOC	HS22070477-04		06_07_2022	1.000	NPOC:2.316mg/L
49	Unknown	NPOC	HS22070477-05		06_07_2022	1.000	NPOC:1.456mg/L
50	Unknown	NPOC	HS22070477-06		06_07_2022	1.000	NPOC:1.170mg/L
51	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.69mg/L

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	Notes	Status	Date / Time	Vial
1		Completed	7/14/2022 10:13:23 AM	35
2		Completed	7/14/2022 10:24:54 AM	35
3		Completed	7/14/2022 10:39:14 AM	1
4		Completed	7/14/2022 10:51:34 AM	2
5		Completed	7/14/2022 11:03:54 AM	3
6		Completed	7/14/2022 11:17:39 AM	4
7		Completed	7/14/2022 11:31:08 AM	5
8		Completed	7/14/2022 11:45:10 AM	6
9		Completed	7/14/2022 11:59:04 AM	7
10		Completed	7/14/2022 12:13:20 PM	8
11		Completed	7/14/2022 12:27:20 PM	9
12		Completed	7/14/2022 12:41:45 PM	10
13		Completed	7/14/2022 3:34:37 PM	41
14		Completed	7/14/2022 3:56:56 PM	41
15		Completed	7/14/2022 12:56:10 PM	1
16		Completed	7/14/2022 1:08:30 PM	2
17		Completed	7/14/2022 1:20:50 PM	3
18		Completed	7/14/2022 1:34:29 PM	4
19		Completed	7/14/2022 1:47:57 PM	5
20		Completed	7/14/2022 2:00:43 PM	11
21		Completed	7/14/2022 2:14:38 PM	12
22		Completed	7/14/2022 2:33:39 PM	13
23		Completed	7/14/2022 2:45:56 PM	14
24		Completed	7/14/2022 2:58:14 PM	15
25		Completed	7/14/2022 5:59:15 PM	16
26		Completed	7/14/2022 6:11:36 PM	17
27		Completed	7/14/2022 6:25:47 PM	1
28		Completed	7/14/2022 6:38:07 PM	2
29		Completed	7/14/2022 6:50:44 PM	18
30		Completed	7/14/2022 7:03:03 PM	19
31		Completed	7/14/2022 7:15:22 PM	20
32		Completed	7/14/2022 7:27:42 PM	21
33		Completed	7/14/2022 7:41:54 PM	1
34		Completed	7/14/2022 7:54:14 PM	2
35		Completed	7/14/2022 8:06:33 PM	3
36		Completed	7/14/2022 8:20:11 PM	4
37		Completed	7/14/2022 8:33:28 PM	5
38		Completed	7/14/2022 8:46:26 PM	22
39		Completed	7/14/2022 8:58:55 PM	23
40		Completed	7/14/2022 9:12:40 PM	24
41		Completed	7/14/2022 9:24:57 PM	25
42		Completed	7/14/2022 9:37:14 PM	26
43		Completed	7/14/2022 9:49:32 PM	27
44		Completed	7/14/2022 10:02:04 PM	28
45		Completed	7/14/2022 10:15:57 PM	29
46		Completed	7/14/2022 10:28:15 PM	30
47		Completed	7/14/2022 10:40:33 PM	31
48		Completed	7/14/2022 10:53:25 PM	32
49		Completed	7/14/2022 11:05:44 PM	33
50		Completed	7/14/2022 11:18:02 PM	34
51		Completed	7/14/2022 11:32:05 PM	35

C:\TOC-L\Data\2022_07_14_001.tlx

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Diluti	Result
52	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.2107mg/
53	Unknown	NPOC	MBLK3-07142022		06_07_2022	1.000	NPOC:0.3649mg/
54	Unknown	NPOC	LCS3-07142022		06_07_2022	1.000	NPOC:9.559mg/L
55	Unknown	NPOC	LCSD3-07142022		06_07_2022	1.000	NPOC:9.761mg/L
56	Unknown	NPOC	HS22061645-04DF10		06_07_2022	1.000	NPOC:8.579mg/L
57	Unknown	NPOC	HS22061645-05	TOC_W 5310B	06_07_2022	1.000	NPOC:43.82mg/L
58	Unknown	NPOC	HS22061645-06		06_07_2022	1.000	NPOC:46.29mg/L
59	Unknown	NPOC	HS22061645-10DF100		06_07_2022	1.000	NPOC:22.32mg/L
60	Unknown	NPOC	HS22070354-01		06_07_2022	1.000	NPOC:17.30mg/L
61	Unknown	NPOC	HS22070379-01		06_07_2022	1.000	NPOC:3.592mg/L
62	Unknown	NPOC	HS22070379-01MS		06_07_2022	1.000	NPOC:13.28mg/L
63	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.54mg/L
64	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.3848mg/
65	Unknown	NPOC	HS22070404-13DF10		06_07_2022	1.000	NPOC:0.3627mg/
66	Unknown	NPOC	HS22070404-14DF10		06_07_2022	1.000	NPOC:0.3174mg/
67	Unknown	NPOC	HS22070517-01		06_07_2022	1.000	NPOC:0.1664mg/
68	Unknown	NPOC	HS22070517-04		06_07_2022	1.000	NPOC:0.1716mg/
69	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.54mg/L
70	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.2705mg/
71	Unknown	NPOC	CCV		TOC_W 906	1.000	NPOC:24.47mg/L
72	Unknown	NPOC	CCB		TOC_W 906	1.000	NPOC:0.2679mg/
73	Unknown	NPOC	MBLK4-07142022		TOC_W 906	1.000	NPOC:0.2928mg/
74	Unknown	NPOC	LCS4-07142022		TOC_W 906	1.000	NPOC:9.528mg/L
75	Unknown	NPOC	LCSD4-07142022		TOC_W 906	1.000	NPOC:9.762mg/L
76	Unknown	NPOC	HS22061590-01		TOC_W 906	1.000	NPOC:3.366mg/L
77	Unknown	NPOC	HS22061590-01MS		TOC_W 906	1.000	NPOC:13.73mg/L
78	Unknown	NPOC	CCV		TOC_W 906	1.000	NPOC:24.60mg/L
79	Unknown	NPOC	CCB		TOC_W 906	1.000	NPOC:0.3118mg/

C:\TOC-L\Data\2022_07_14_001.tlx

	Notes	Status	Date / Time	Vial
52		Completed	7/14/2022 11:44:23 PM	36
53		Completed	7/14/2022 11:56:51 PM	3
54		Completed	7/15/2022 12:10:32 AM	4
55		Completed	7/15/2022 12:24:08 AM	5
56		Completed	7/15/2022 12:37:35 AM	37
57		Completed	7/15/2022 12:52:20 AM	38
58		Completed	7/15/2022 1:06:57 AM	39
59		Completed	7/15/2022 1:20:28 AM	40
60		Completed	7/15/2022 1:33:59 AM	41
61		Completed	7/15/2022 1:46:41 AM	42
62		Completed	7/15/2022 2:00:36 AM	43
63		Completed	7/15/2022 2:14:43 AM	29
64		Completed	7/15/2022 2:27:04 AM	30
65		Completed	7/15/2022 2:39:33 AM	44
66		Completed	7/15/2022 2:51:51 AM	45
67		Completed	7/15/2022 3:04:09 AM	46
68		Completed	7/15/2022 3:16:27 AM	47
69		Completed	7/15/2022 3:30:22 AM	35
70		Completed	7/15/2022 3:42:40 AM	36
71		Completed	7/15/2022 3:59:30 AM	35
72		Completed	7/15/2022 4:13:58 AM	36
73		Completed	7/15/2022 4:28:36 AM	3
74		Completed	7/15/2022 4:44:46 AM	4
75		Completed	7/15/2022 5:00:48 AM	5
76		Completed	7/15/2022 5:15:53 AM	6
77		Completed	7/15/2022 5:32:33 AM	7
78		Completed	7/15/2022 5:49:23 AM	35
79		Completed	7/15/2022 6:03:47 AM	36

TOC-Control L Report

2022_07_14_001.tlx

Instrument Information

Instrument Options: TOC/ASI/IC Unit/
Catalyst: Regular Sensitivity

Sample

Sample Name: CCV
Sample ID: 330016aab
Origin: 06_07_2022_CAL.cal
Status: Completed
Chk. Result:

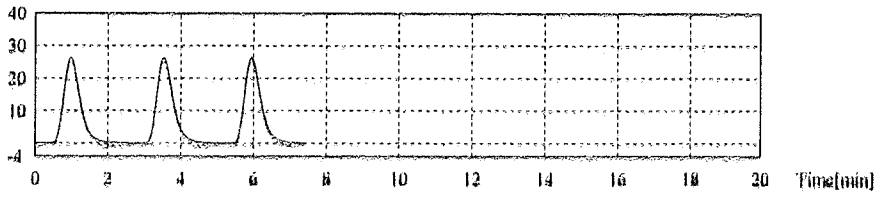
Type	Analyte	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.69mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	82.27	24.60mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 11:26:47 PM
2	82.64	24.71mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 11:29:27 PM
3	82.86	24.77mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 11:32:05 PM

Mean Area: 82.59
Mean Conc.: 24.69mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06_07_2022_CAL.cal
Status: Completed
Chk. Result:

Type	Analyte	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2107mg/L

1. Det

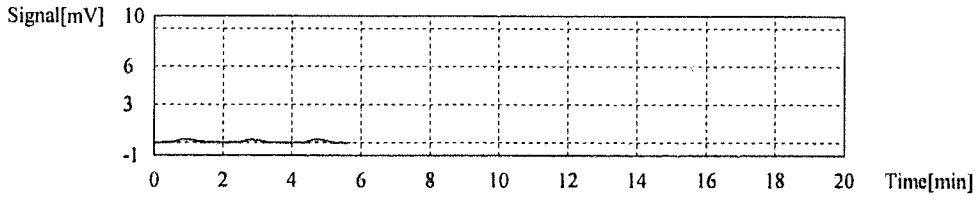
Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	0.7573	0.2264mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 11:40:09 PM
2	0.6153	0.1840mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 11:42:16 PM
3	0.7410	0.2216mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 11:44:23 PM

TOC-Control L Report

2022_07_14_001.tlx

Mean Area 0.7045
Mean Conc. 0.2107mg/L



Sample

Sample Name: MBLK3-07142022
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

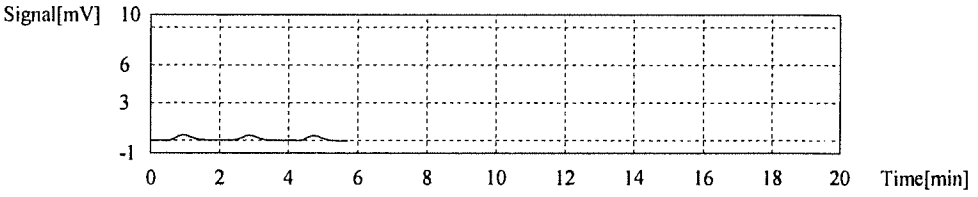
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3649mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.365	0.4081mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 11:52:37 PM
2	1.117	0.3340mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 11:54:44 PM
3	1.179	0.3525mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/14/2022 11:56:51 PM

Mean Area 1.220
Mean Conc. 0.3649mg/L



Sample

Sample Name: LCS3-07142022
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.559mg/L

1. Det

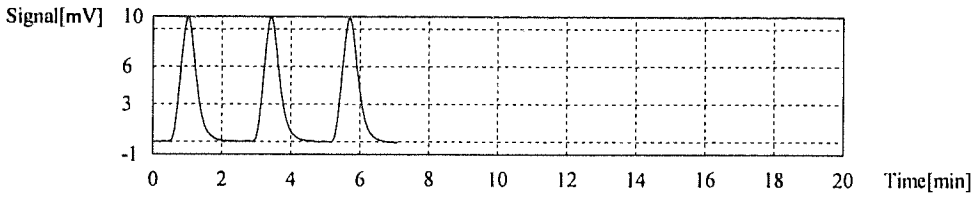
Anal.: NPOC

TOC-Control L Report

2022_07_14_001.tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	31.86	9.526mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:05:25 AM
2	31.66	9.466mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:07:55 AM
3	32.39	9.684mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:10:32 AM

Mean Area 31.97
Mean Conc. 9.559mg/L



Sample

Sample Name: LCSD3-07142022
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

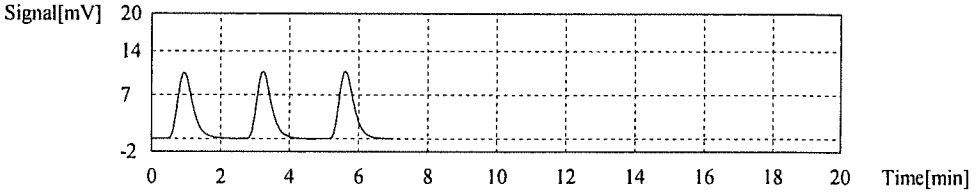
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.761mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.61	9.750mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:18:58 AM
2	32.64	9.759mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:21:36 AM
3	32.69	9.774mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:24:08 AM

Mean Area 32.65
Mean Conc. 9.761mg/L



Sample

Sample Name: HS22061645-04DF10
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.579mg/L

1. Det

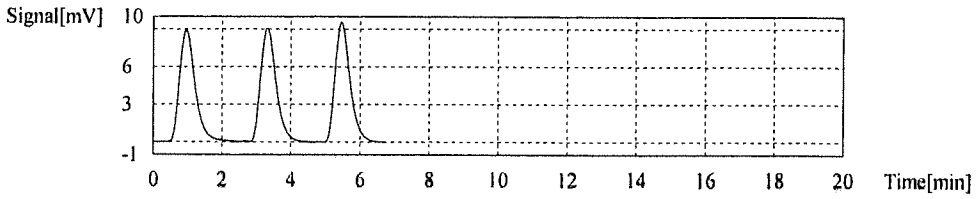
TOC-Control L Report

2022_07_14_001.tlx

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	28.41	8.494mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:32:43 AM
2	28.47	8.512mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:35:07 AM
3	29.20	8.731mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:37:35 AM

Mean Area 28.69
Mean Conc. 8.579mg/L



Sample

Sample Name: HS22061645-05
Sample ID: TOC_W 5310B
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

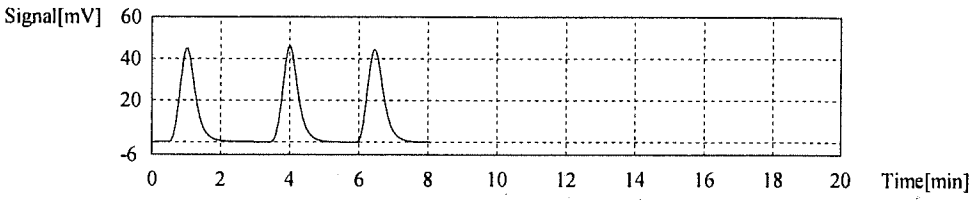
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:43.82mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	145.3	43.44mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:46:43 AM
2	146.7	43.86mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:49:28 AM
3	147.7	44.16mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:52:20 AM

Mean Area 146.6
Mean Conc. 43.82mg/L



Sample

Sample Name: HS22061645-06
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:46.29mg/L

TOC-Control L Report

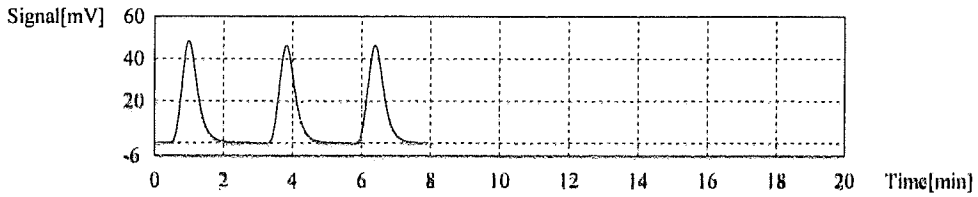
2022_07_14_001.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	157.8	47.18mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:01:19 AM
2	152.4	45.57mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:04:08 AM
3	154.3	46.13mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:06:57 AM

Mean Area 154.8
Mean Conc. 46.29mg/L



Sample

Sample Name: HS22061645-10DF100
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

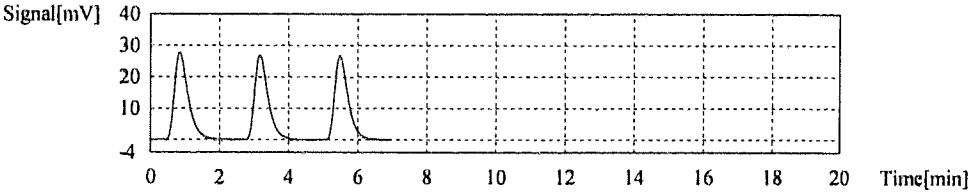
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:22.32mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	78.20	23.38mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:15:26 AM
2	73.27	21.91mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:18:00 AM
3	72.46	21.67mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:20:28 AM

Mean Area 74.64
Mean Conc. 22.32mg/L



Sample

Sample Name: HS22070379-01
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

TOC-Control L Report

2022_07_14_001.tlx

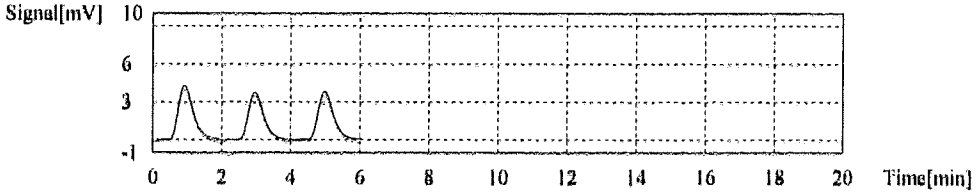
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.592mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	12.87	3.848mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:42:10 AM
2	11.41	3.412mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:44:24 AM
3	11.76	3.516mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:46:41 AM

Mean Area 12.01
Mean Conc. 3.592mg/L



Sample

Sample Name: HS22070379-01MS
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

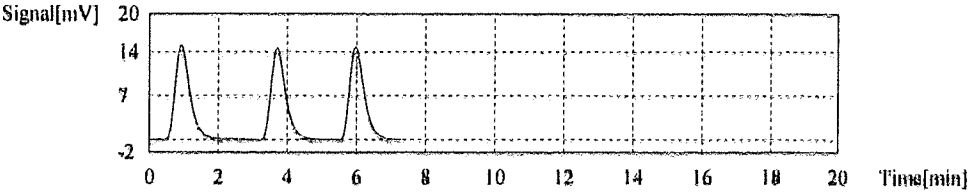
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:13.28mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	45.45	13.59mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:55:37 AM
2	43.75	13.08mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:58:09 AM
3	44.09	13.18mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 2:00:36 AM

Mean Area 44.43
Mean Conc. 13.28mg/L



Sample

TOC-Control L Report

2022_07_14_001.tlx

Sample Name: CCV
Sample ID: 320016206
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

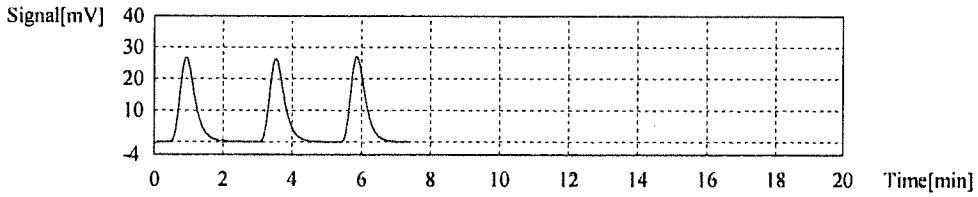
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.54mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.95	24.80mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 2:09:26 AM
2	80.83	24.17mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 2:12:02 AM
3	82.42	24.64mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 2:14:43 AM

Mean Area 82.07
Mean Conc. 24.54mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

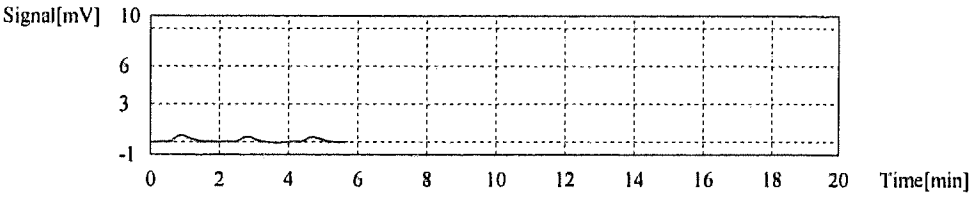
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3848mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.536	0.4593mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 2:22:47 AM
2	1.227	0.3669mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 2:24:55 AM
3	1.098	0.3283mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 2:27:04 AM

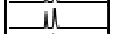
Mean Area 1.287
Mean Conc. 0.3848mg/L



HS22061645 9056_W IC

ALS WO# HS22061645

Sequence: 063022
Last Update Operator: alshs.nouser

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method	Processing Method	Volume	Status	Inject Time
	STD1		Calibratio	RA1	1.00	1	Anions Program IS	Anions Processing M	5.0	Finished	6/12/2022 7:43:36 PM -05:00
	STD2		Calibratio	RA2	1.00	2	Anions Program IS	Anions Processing M	5.0	Finished	6/12/2022 7:48:55 PM -05:00
	STD3		Calibratio	RA3	1.00	3	Anions Program IS	Anions Processing M	5.0	Finished	6/12/2022 7:54:13 PM -05:00
	STD4		Calibratio	RA4	1.00	4	Anions Program IS	Anions Processing M	5.0	Finished	6/12/2022 7:59:31 PM -05:00
	STD5		Calibratio	RA5	1.00	5	Anions Program IS	Anions Processing M	5.0	Finished	6/12/2022 8:04:49 PM -05:00
	STD6		Calibratio	RA6	1.00	6	Anions Program IS	Anions Processing M	5.0	Finished	6/12/2022 8:10:07 PM -05:00
	ICV		Unknown	RA7	1.00		Anions Program IS	Anions Processing M	5.0	Finished	6/12/2022 8:15:25 PM -05:00
	ICB		Unknown	R7	1.00		Anions Program IS	Anions Processing M	5.0	Finished	6/12/2022 8:26:02 PM -05:00
	CCV1		Unknown	R3	1.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 2:58:11 PM -05:00
	CCB		Unknown	R7	1.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 3:08:47 PM -05:00
	MBLK	9056-SH	Unknown	R5	1.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 3:14:05 PM -05:00
	LCS		Unknown	R2	1.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 3:19:23 PM -05:00
	HS22061645-04		Unknown	BA1	1.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 3:24:42 PM -05:00
	HS22061645-01DF5		Unknown	BA2	5.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 3:30:00 PM -05:00
	HS22061645-02DF5		Unknown	BA3	5.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 3:35:18 PM -05:00
	HS22061645-03DF5		Unknown	BA4	5.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 3:40:36 PM -05:00
	HS22061645-05DF10		Unknown	BA5	10.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 3:45:54 PM -05:00
	HS22061645-06DF10		Unknown	BA6	10.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 3:51:12 PM -05:00
	HS22061645-10DF2		Unknown	BA7	2.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 3:56:30 PM -05:00
	CCV		Unknown	R1	1.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 4:17:42 PM -05:00
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	HS22061645-04MS		Unknown	BA8	1.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 4:38:54 PM -05:00
	HS22061645-04MSD		Unknown	BB1	1.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 4:44:12 PM -05:00
	HS22061645-04DF10		Unknown	BB2	10.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 4:49:30 PM -05:00
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	HS22061645-02DF50		Unknown	BB6	50.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 5:10:42 PM -05:00
	HS22061645-03DF2		Unknown	BB7	2.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 5:16:00 PM -05:00
	HS22061645-03DF50		Unknown	BB8	50.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 5:21:19 PM -05:00
	CCV1		Unknown	R3	1.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 5:37:13 PM -05:00
	CCB		Unknown	R7	1.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 5:47:49 PM -05:00
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	HS22061645-06DF200		Unknown	BC2	200.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 5:58:25 PM -05:00
	HS22061645-10	9056-SH	Unknown	BC3	1.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 6:03:43 PM -05:00
	CCV		Unknown	R1	1.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 6:56:43 PM -05:00
	CCB		Unknown	R4	1.00		Anions Program IS	Anions Processing M	5.0	Finished	6/30/2022 7:07:20 PM -05:00

Sequence: 061522
Injection #6: STD6

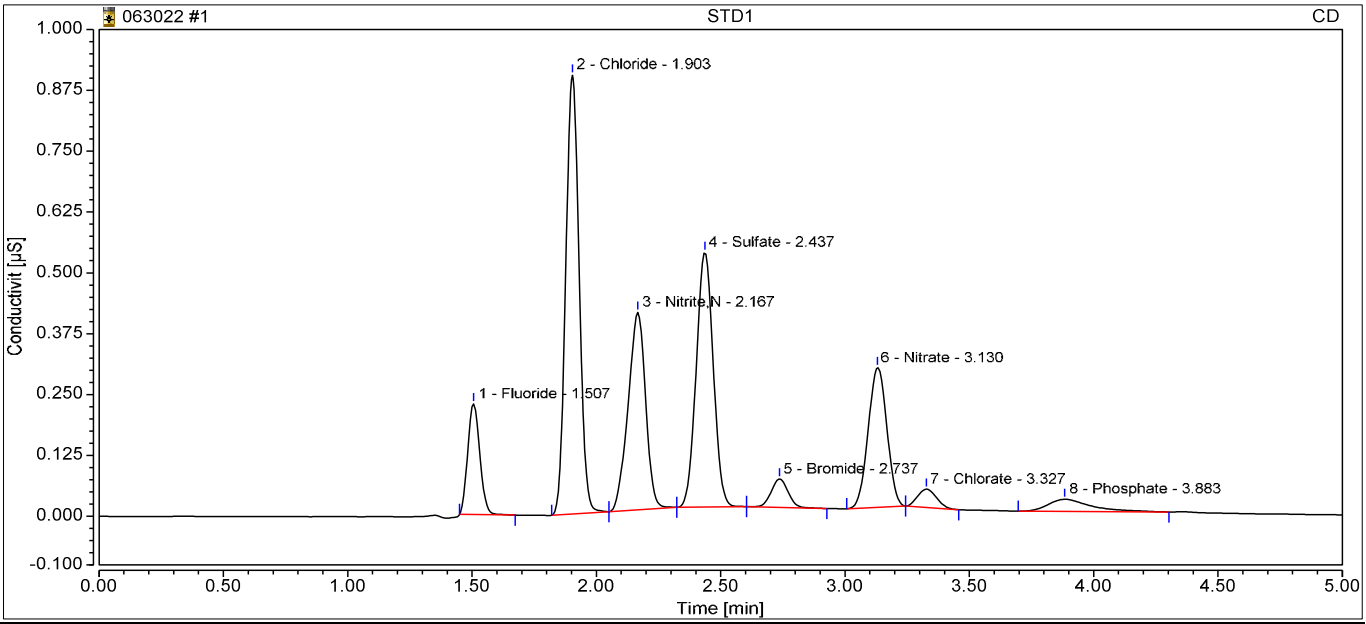
Calibration

Peak No.	Peak Name	Cal.Type	Eval.Type	Number of Points	Rel.Std.Dev. %	Coeff.of Determination	C0 (Offset)	C1 (Slope)	C2 (Curve)
1	***Fluoride***	***Lin, WithOffset, 1/***	***Area***	***6***	***26.4691***	***0.99701***	***-0.0097***	***0.2161***	***0.0000***
2	Chloride	Lin, WithOffset, 1/	Area	6	5.8427	0.99984	-0.0218	0.1418	0.0000
3	Nitrite,N	Lin, WithOffset, 1/	Area	6	26.3006	0.99568	0.0108	0.2746	0.0000
4	Sulfate	Lin, WithOffset, 1/	Area	6	5.9882	0.99984	-0.0169	0.1061	0.0000
5	Bromide	Lin, WithOffset, 1/	Area	6	19.1083	0.99846	-0.0030	0.0626	0.0000
6	Nitrate	Lin, WithOffset, 1/	Area	6	7.6223	0.99974	-0.0112	0.3307	0.0000
7	Chlorate	Lin, WithOffset, 1/	Area	6	16.8078	0.99862	-0.0007	0.0400	0.0000
8	Phosphate	Quad, WithOffset,	Area	6	20.1620	0.99899	-0.0094	0.1193	0.0006
Maximum					**26.4691**	0.99984			
Minimum					5.8427	**0.99568**			

1 STD1

Sample Name:	**STD1**	*Injection Volume:*	**5.00**
Vial Number:	**RA1**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/12/2022 19:43**	*Sample Weight:*	**1.0000**

Run Time:



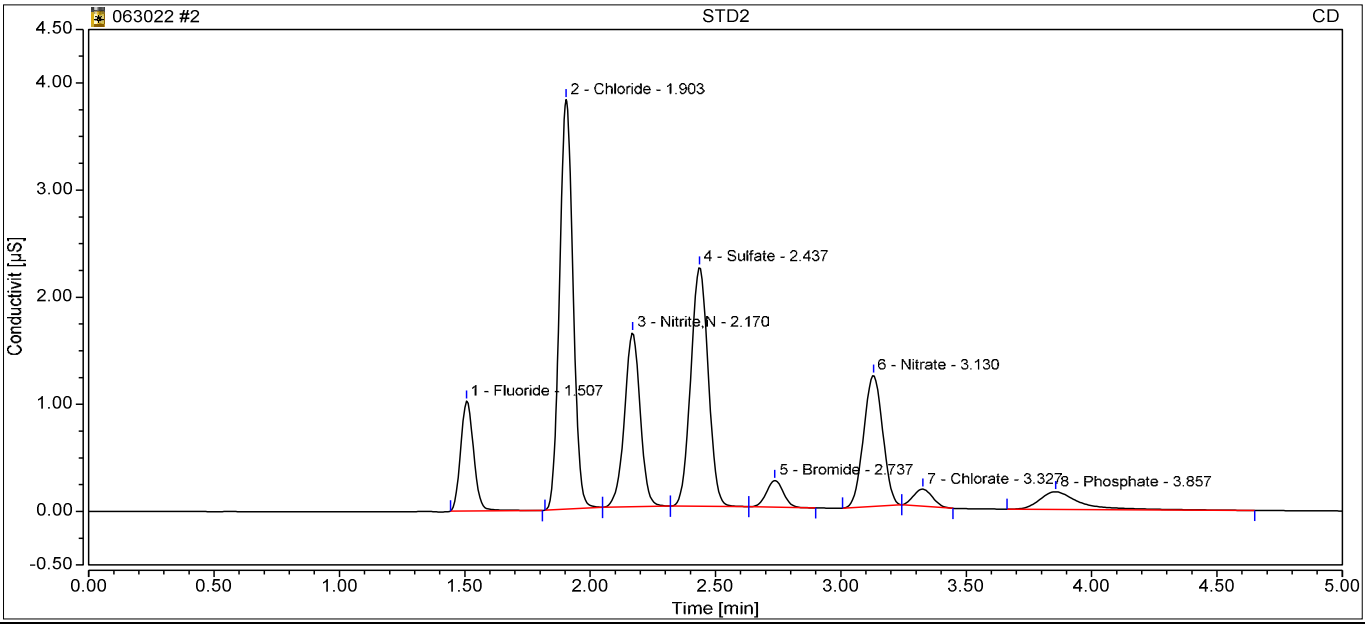
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.013	0.1044	0.1044	1.0000
2	1.90	Chloride	BMB	0.056	0.5484	0.5484	1.0000
3	2.17	Nitrite,N	BMB	0.033	0.0810	0.0810	1.0000
4	2.44	Sulfate	BMB	0.042	0.5504	0.5504	1.0000
5	2.74	Bromide	BMB	0.005	0.1216	0.1216	1.0000
6	3.13	Nitrate	BMB	0.025	0.1097	0.1097	1.0000
7	3.33	Chlorate	BMB	0.003	0.1000	0.1000	1.0000
8	3.88	Phosphate	BMB	0.005	0.1206	0.1206	1.0000
Total:			**0.000**	**0.181**		**1.74**	

2 STD2

Sample Name:	**STD2**	*Injection Volume:*	**5.00**
Vial Number:	**RA2**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/12/2022 19:48**	*Sample Weight:*	**1.0000**

Run Time:



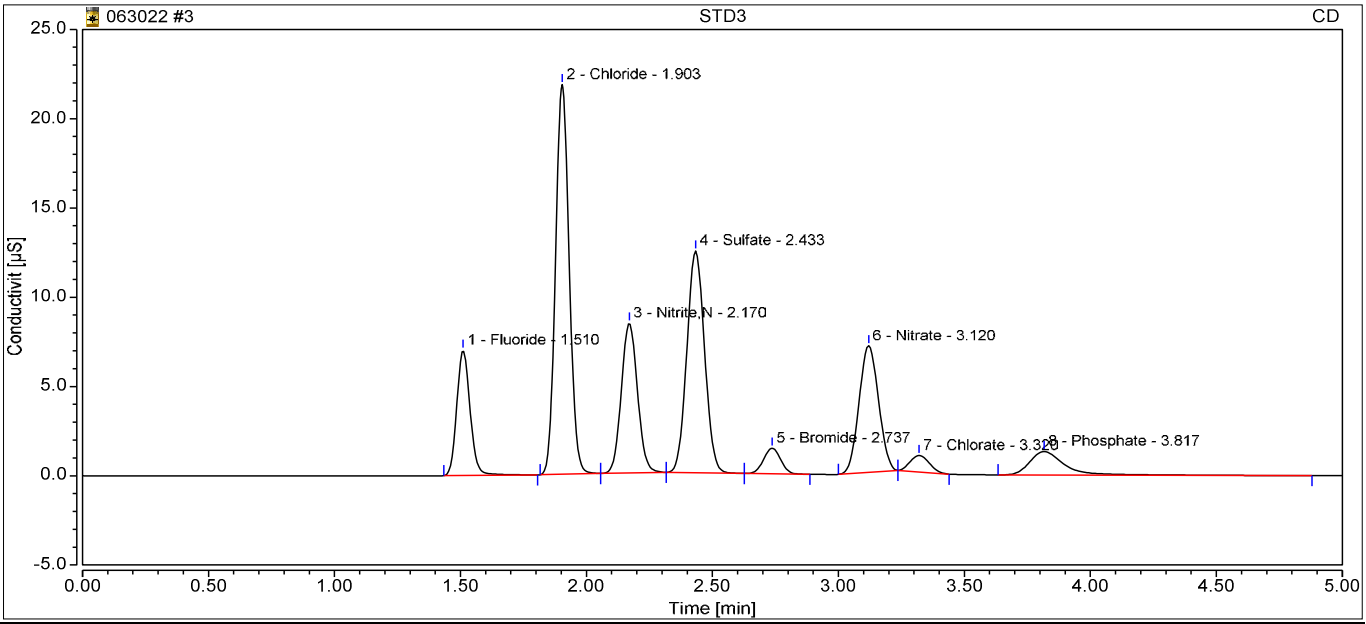
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.062	0.3309	0.3309	1.0000
2	1.90	Chloride	BMB	0.237	1.8250	1.8250	1.0000
3	2.17	Nitrite,N	BMB	0.118	0.3914	0.3914	1.0000
4	2.44	Sulfate	BMB	0.180	1.8530	1.8530	1.0000
5	2.74	Bromide	BMB	0.019	0.3561	0.3561	1.0000
6	3.13	Nitrate	BMB	0.108	0.3602	0.3602	1.0000
7	3.33	Chlorate	BMB	0.014	0.3632	0.3632	1.0000
8	3.86	Phosphate	BMB	0.031	0.3376	0.3376	1.0000
Total:			**0.000**	**0.769**		**5.82**	

3 STD3

Sample Name:	**STD3**	*Injection Volume:*	**5.00**
Vial Number:	**RA3**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/12/2022 19:54**	*Sample Weight:*	**1.0000**

Run Time:



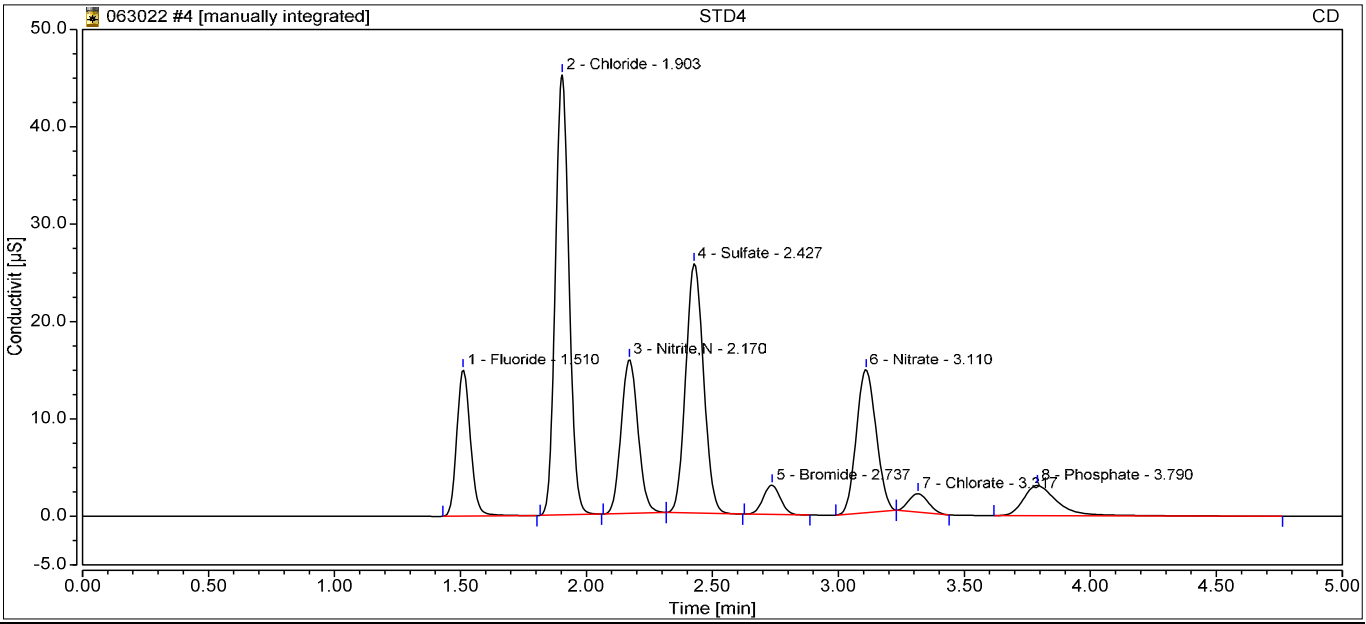
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.433	2.0503	2.0503	1.0000
2	1.90	Chloride	BMB	1.366	9.7882	9.7882	1.0000
3	2.17	Nitrite,N	BMB	0.624	2.2318	2.2318	1.0000
4	2.43	Sulfate	BMB	1.012	9.6989	9.6989	1.0000
5	2.74	Bromide	BMB	0.113	1.8543	1.8543	1.0000
6	3.12	Nitrate	BMB	0.635	1.9555	1.9555	1.0000
7	3.32	Chlorate	BMB	0.081	2.0522	2.0522	1.0000
8	3.82	Phosphate	BMB	0.211	1.8314	1.8314	1.0000
Total:			**0.000**	**4.476**		**31.46**	

4 STD4

Sample Name:	**STD4**	*Injection Volume:*	**5.00**
Vial Number:	**RA4**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/12/2022 19:59**	*Sample Weight:*	**1.0000**

Run Time:



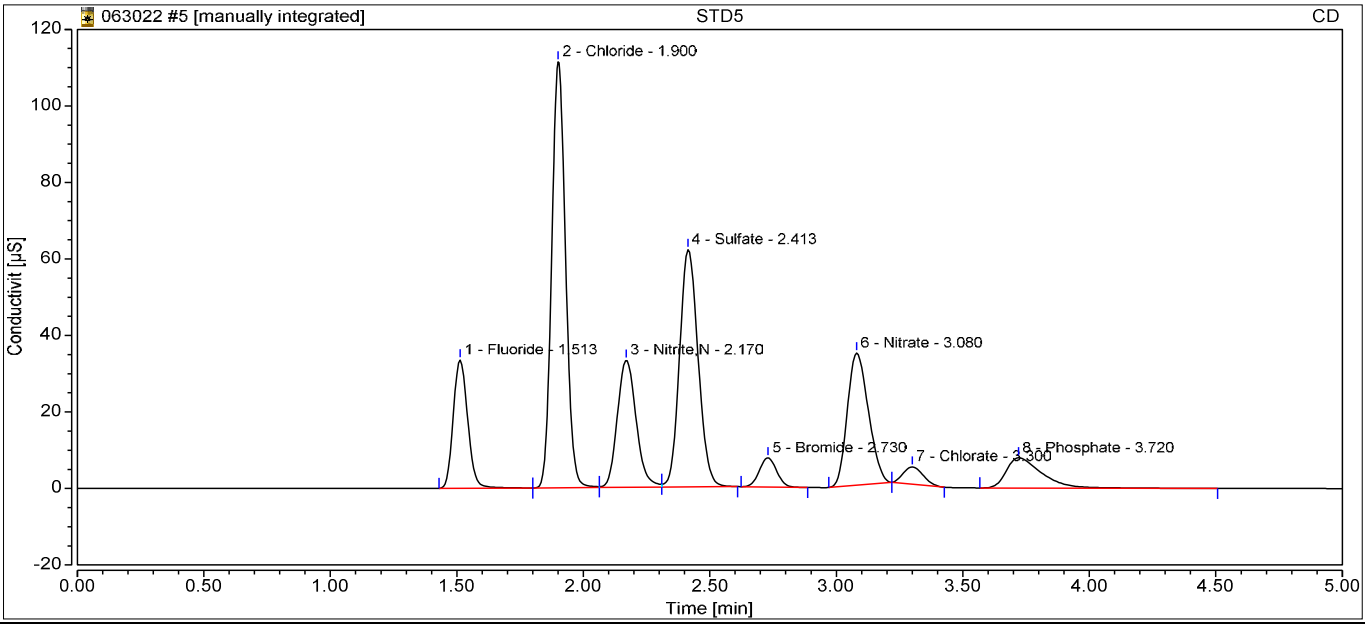
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.947	4.4264	4.4264	1.0000
2	1.90	Chloride	BMB	2.841	20.1942	20.1942	1.0000
3	2.17	Nitrite,N	BMb*	1.227	4.4291	4.4291	1.0000
4	2.43	Sulfate	bMB*	2.105	19.9970	19.9970	1.0000
5	2.74	Bromide	BMB	0.239	3.8700	3.8700	1.0000
6	3.11	Nitrate	BMB	1.337	4.0782	4.0782	1.0000
7	3.32	Chlorate	BMB	0.170	4.2596	4.2596	1.0000
8	3.79	Phosphate	BMB	0.484	4.0508	4.0508	1.0000
Total:			**0.000**	**9.351**		**65.31**	

5 STD5

Sample Name:	**STD5**	*Injection Volume:*	**5.00**
Vial Number:	**RA5**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/12/2022 20:04**	*Sample Weight:*	**1.0000**

Run Time:



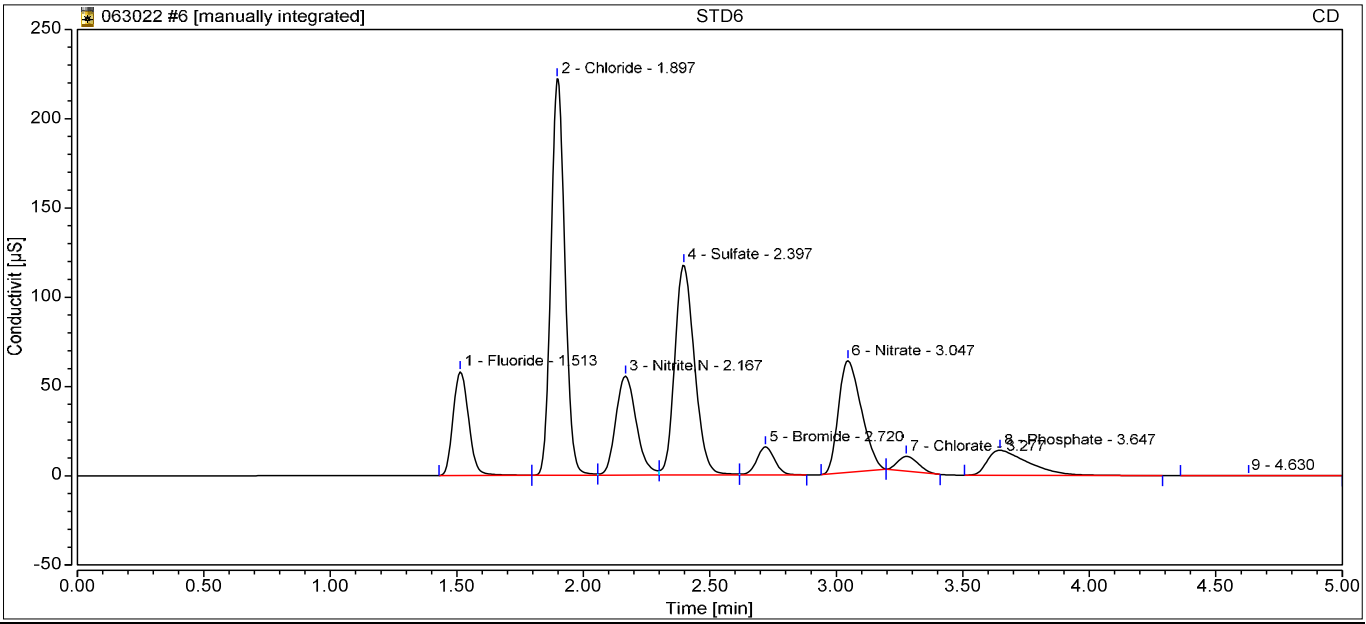
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMb*	2.229	10.3595	10.3595	1.0000
2	1.90	Chloride	bM *	7.078	50.0739	50.0739	1.0000
3	2.17	Nitrite,N	M *	2.867	10.4035	10.4035	1.0000
4	2.41	Sulfate	MB*	5.277	49.8959	49.8959	1.0000
5	2.73	Bromide	BMB	0.604	9.6932	9.6932	1.0000
6	3.08	Nitrate	BMB	3.328	10.0976	10.0976	1.0000
7	3.30	Chlorate	BMB	0.412	10.2967	10.2967	1.0000
8	3.72	Phosphate	BMB	1.283	10.2769	10.2769	1.0000
Total:			**0.000**	**23.078**		**161.10**	

6 STD6

Sample Name:	**STD6**	*Injection Volume:*	**5.00**
Vial Number:	**RA6**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/12/2022 20:10**	*Sample Weight:*	**1.0000**

Run Time:



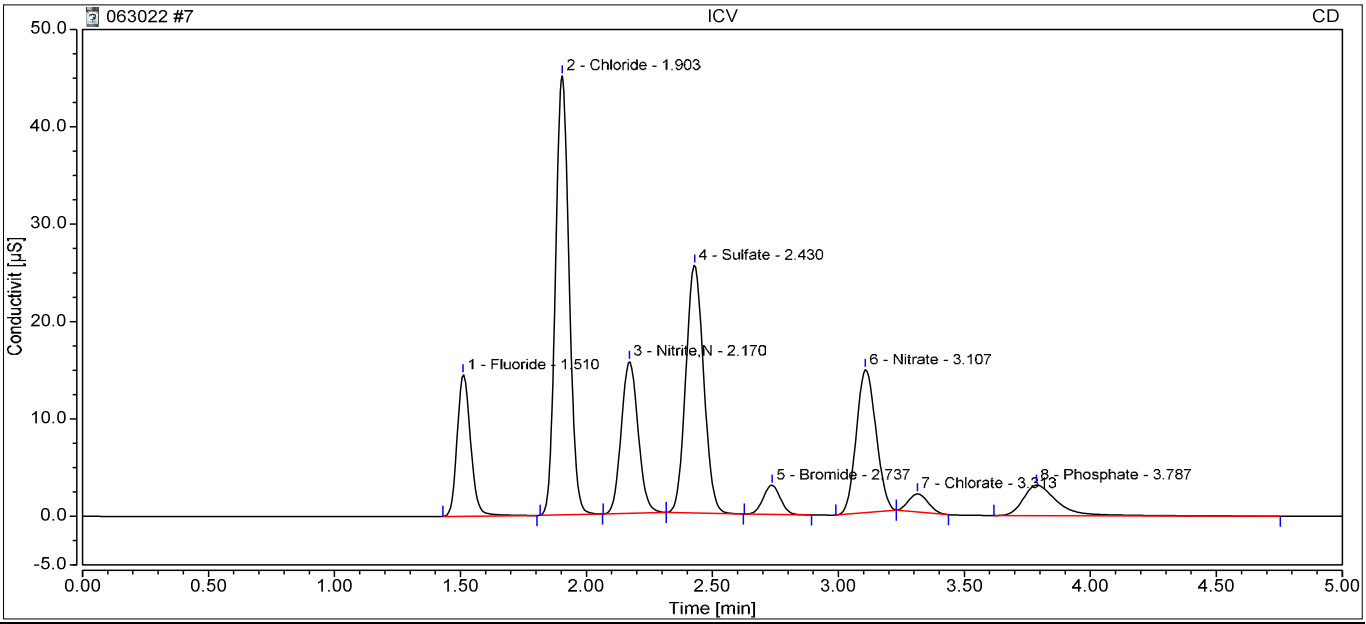
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMb*	4.146	19.2286	19.2286	1.0000
2	1.90	Chloride	bM *	14.167	100.0702	100.0702	1.0000
3	2.17	Nitrite,N	M *	5.217	18.9633	18.9633	1.0000
4	2.40	Sulfate	M *	10.646	100.5049	100.5049	1.0000
5	2.72	Bromide	MB*	1.287	20.6049	20.6049	1.0000
6	3.05	Nitrate	BMB	6.569	19.8987	19.8987	1.0000
7	3.28	Chlorate	BMB	0.777	19.4282	19.4282	1.0000
8	3.65	Phosphate	BMB	2.612	19.8798	19.8798	1.0000
Total:			**0.000**	**45.421**		**318.58**	

7 *ICV*

Sample Name:	**ICV**	*Injection Volume:*	**5.00**
Vial Number:	**RA7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/12/2022 20:15**	*Sample Weight:*	**1.0000**

Run Time:



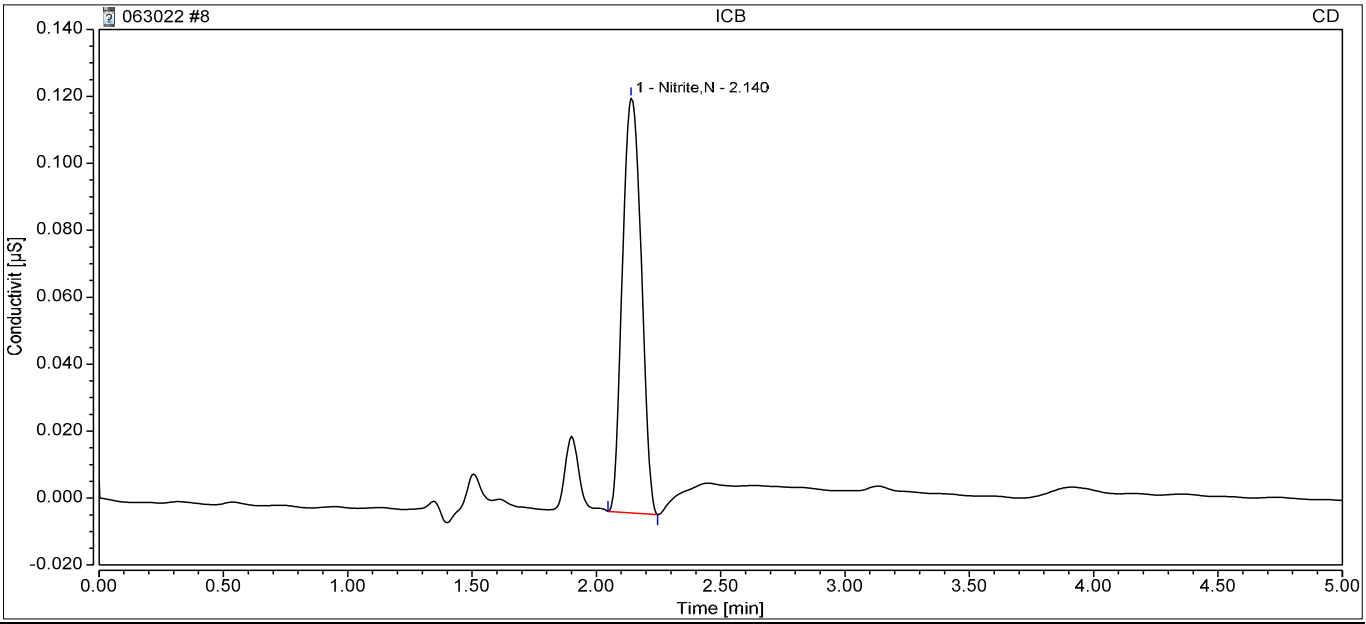
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.906	4.2360	4.2360	1.0000
2	1.90	Chloride	BMB	2.829	20.1029	20.1029	1.0000
3	2.17	Nitrite,N	BMB	1.206	4.3541	4.3541	1.0000
4	2.43	Sulfate	BMB	2.088	19.8413	19.8413	1.0000
5	2.74	Bromide	BMB	0.236	3.8269	3.8269	1.0000
6	3.11	Nitrate	BMB	1.333	4.0636	4.0636	1.0000
7	3.31	Chlorate	BMB	0.166	4.1702	4.1702	1.0000
8	3.79	Phosphate	BMB	0.491	4.1057	4.1057	1.0000
Total:			**0.000**	**9.255**		**64.70**	

8 ICB

Sample Name:	**ICB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/12/2022 20:26**	*Sample Weight:*	**1.0000**

Run Time:

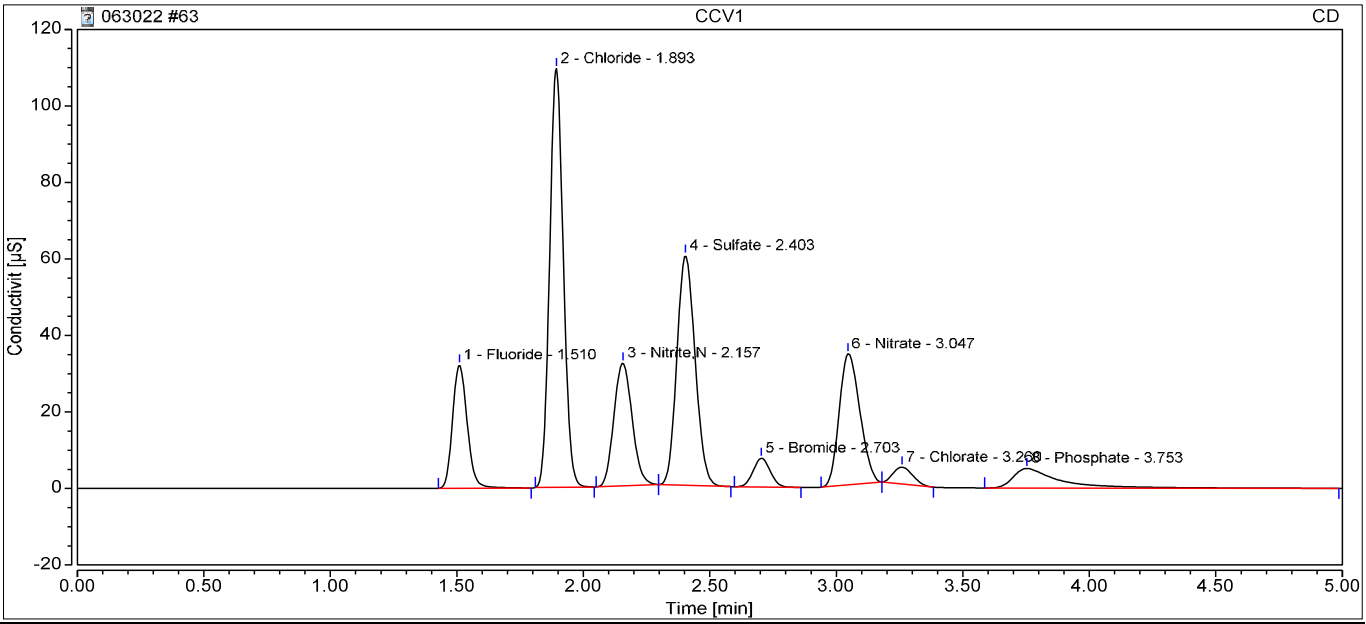


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
1	2.14	Nitrite,N	BMB	0.011	0.0002	0.0002	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.011**		**0.00**	

63 CCV1			
Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**R3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/30/2022 14:58**	*Sample Weight:*	**1.0000**

Run Time:



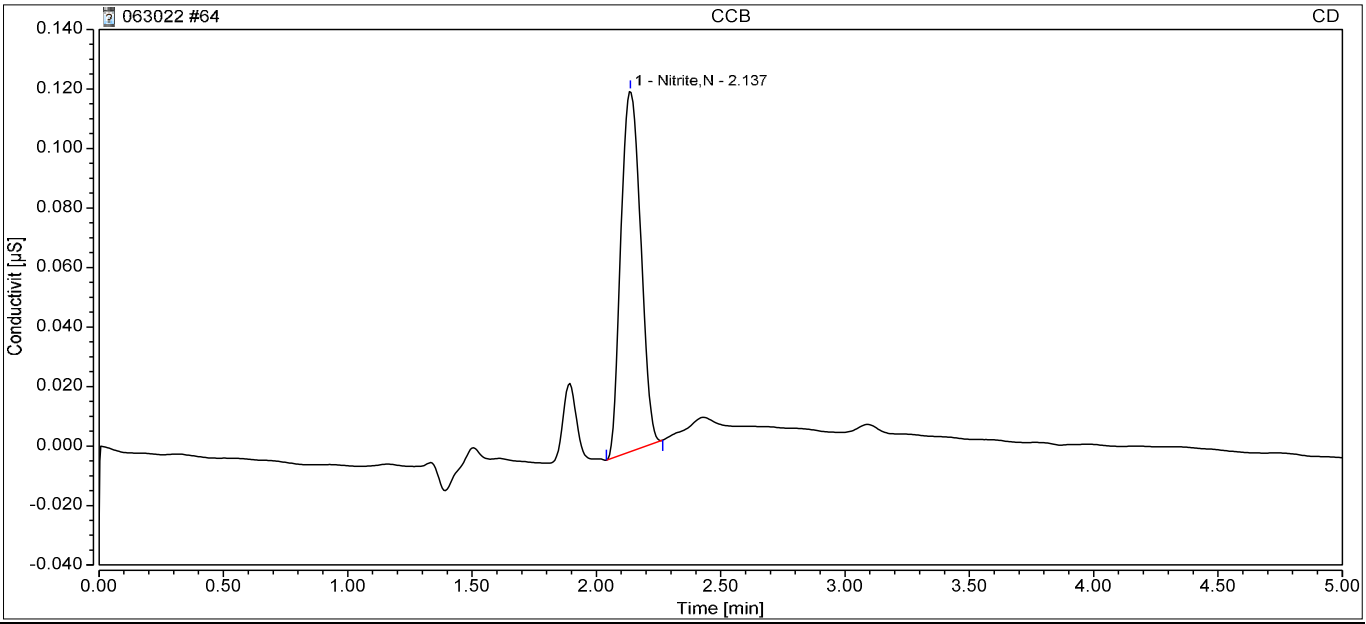
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	2.167	10.0719	10.0719	1.0000
2	1.89	Chloride	BMB	6.842	48.4124	48.4124	1.0000
3	2.16	Nitrite,N	BMB	2.685	9.7398	9.7398	1.0000
4	2.40	Sulfate	BMB	5.024	47.5126	47.5126	1.0000
5	2.70	Bromide	BMB	0.588	9.4393	9.4393	1.0000
6	3.05	Nitrate	BMB	3.238	9.8271	9.8271	1.0000
7	3.26	Chlorate	BMB	0.395	9.8823	9.8823	1.0000
8	3.75	Phosphate	BMB	1.087	8.7802	8.7802	1.0000
Total:			**0.000**	**22.026**		**153.67**	

64 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/30/2022 15:08**	*Sample Weight:*	**1.0000**

Run Time:



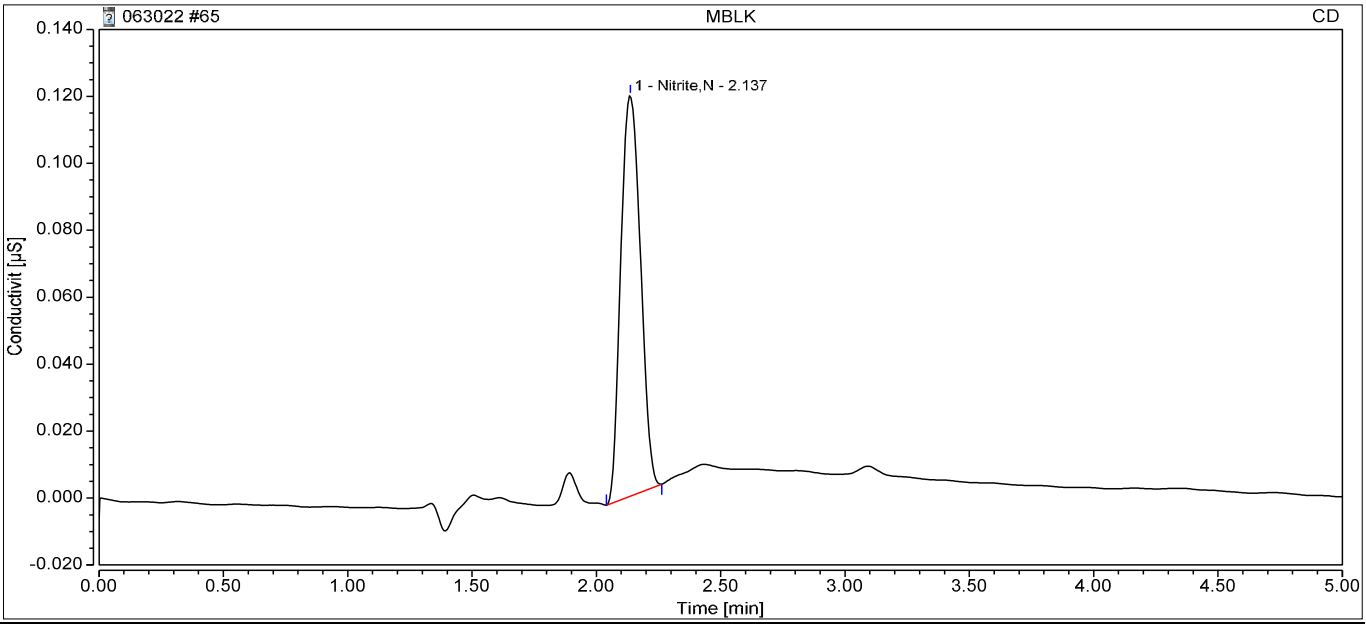
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
1	2.14	Nitrite,N	BMB	0.011	0.0014	0.0014	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.011**		**0.00**	

65 MBLK

Sample Name:	**MBLK**	*Injection Volume:*	**5.00**
Vial Number:	**R5**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/30/2022 15:14**	*Sample Weight:*	**1.0000**

Run Time:



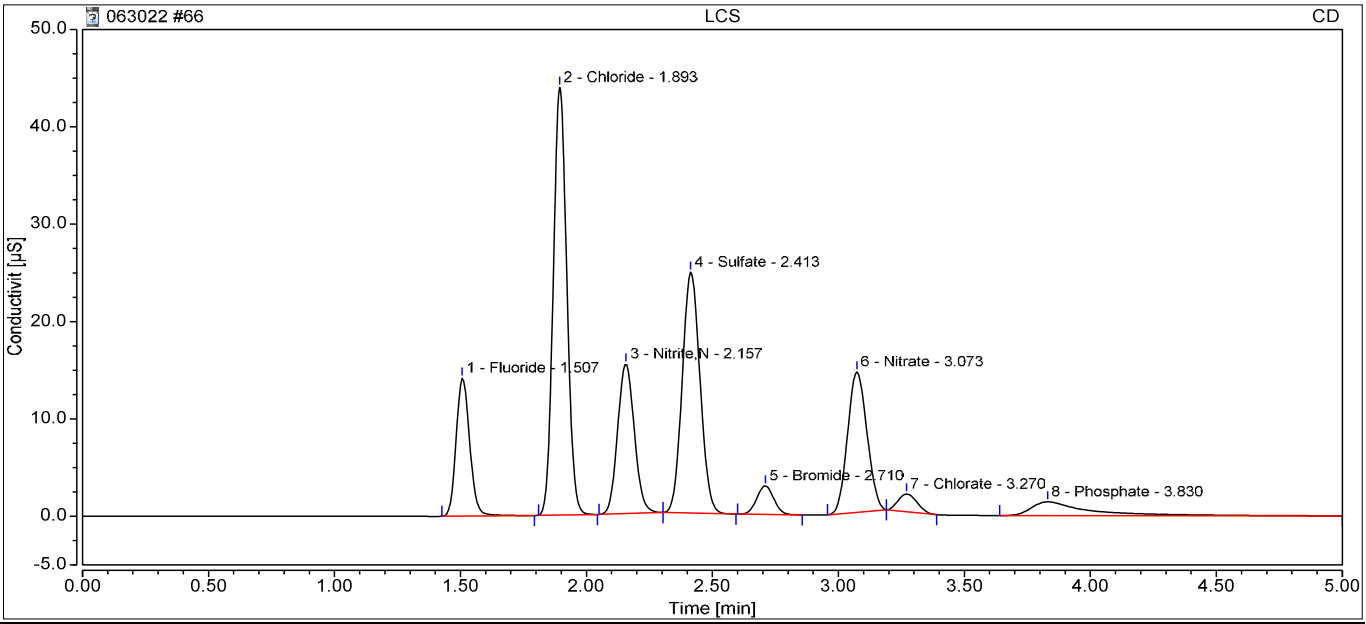
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
1	2.14	Nitrite,N	BMB	0.011	0.0006	0.0006	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.011**		**0.00**	

66 LCS

Sample Name:	**LCS**	*Injection Volume:*	**5.00**
Vial Number:	**R2**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/30/2022 15:19**	*Sample Weight:*	**1.0000**

Run Time:



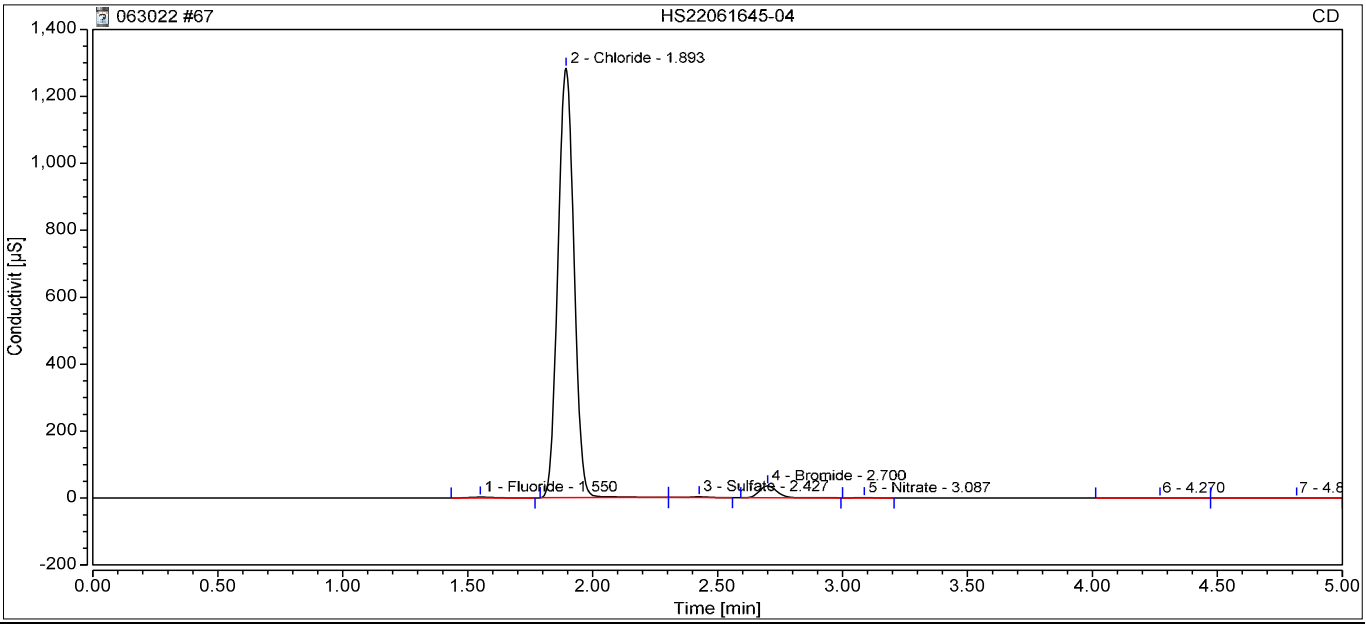
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.890	4.1622	4.1622	1.0000
2	1.89	Chloride	BMB	2.735	19.4435	19.4435	1.0000
3	2.16	Nitrite,N	BMB	1.184	4.2716	4.2716	1.0000
4	2.41	Sulfate	BMB	2.023	19.2316	19.2316	1.0000
5	2.71	Bromide	BMB	0.230	3.7155	3.7155	1.0000
6	3.07	Nitrate	BMB	1.288	3.9303	3.9303	1.0000
7	3.27	Chlorate	BMB	0.160	4.0055	4.0055	1.0000
8	3.83	Phosphate	BMB	0.377	3.1879	3.1879	1.0000
Total:			**0.000**	**8.887**		**61.95**	

67 HS22061645-04

Sample Name:	**HS22061645-04**	*Injection Volume:*	**5.00**
Vial Number:	**BA1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/30/2022 15:24**	*Sample Weight:*	**1.0000**

Run Time:



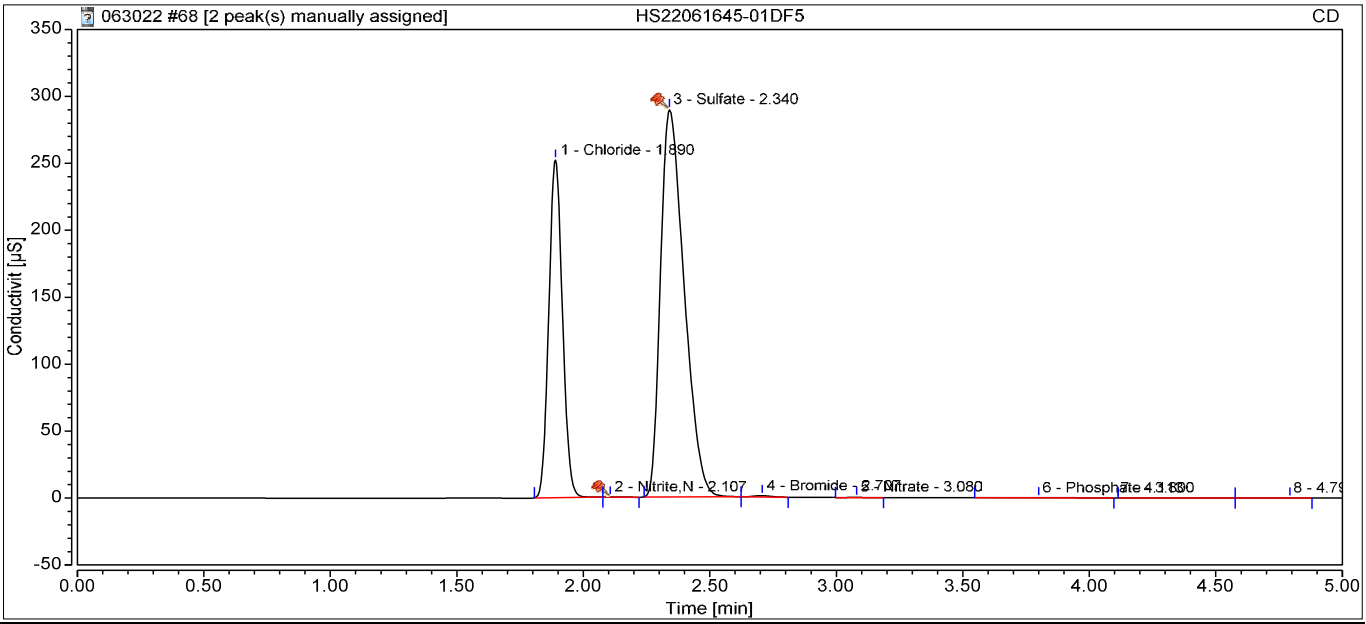
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.55	Fluoride	BMB	0.326	1.5523	1.5523	1.0000
2	1.89	Chloride	BMB	95.593	674.3590	674.3590	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
3	2.43	Sulfate	BMB	0.191	1.9576	1.9576	1.0000
4	2.70	Bromide	BMB	2.896	46.3134	46.3134	1.0000
5	3.09	Nitrate	BMB	0.010	0.0655	0.0655	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**99.016**		**724.25**	

68 HS22061645-01DF5

Sample Name:	**HS22061645-01DF5**	*Injection Volume:*	**5.00**
Vial Number:	**BA2**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**06/30/2022 15:30**	*Sample Weight:*	**1.0000**

Run Time:



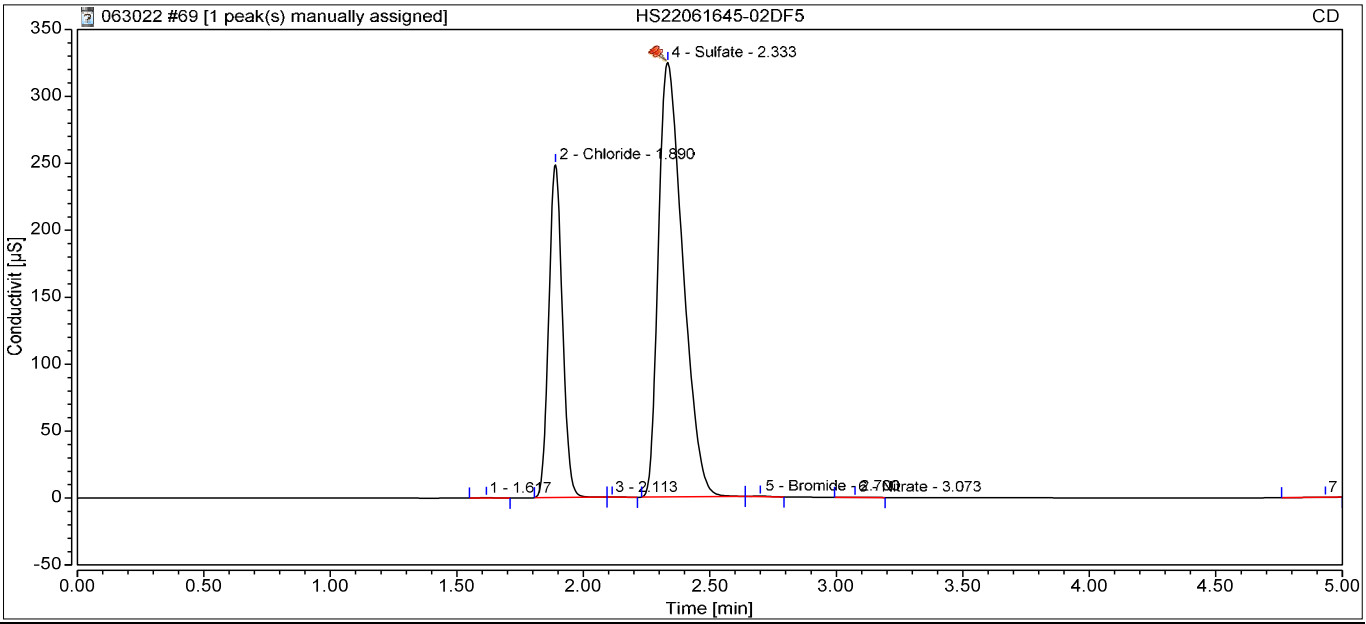
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	5.0000
1	1.89	Chloride	BMB	15.714	110.9797	554.8984	5.0000
2	2.11	Nitrite,N	BMB^	0.006	n.a.	n.a.	5.0000
3	2.34	Sulfate	BMB^	31.240	294.6135	1473.0677	5.0000
4	2.71	Bromide	BMB	0.073	1.2087	6.0436	5.0000
5	3.08	Nitrate	BMB	0.005	0.0495	0.2475	5.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	5.0000
6	3.80	Phosphate	BMB	0.042	0.4315	2.1576	5.0000
Total:			**0.000**	**47.079**		**2036.41**	

69 HS22061645-02DF5

Sample Name:	**HS22061645-02DF5**	*Injection Volume:*	**5.00**
Vial Number:	**BA3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**06/30/2022 15:35**	*Sample Weight:*	**1.0000**

Run Time:



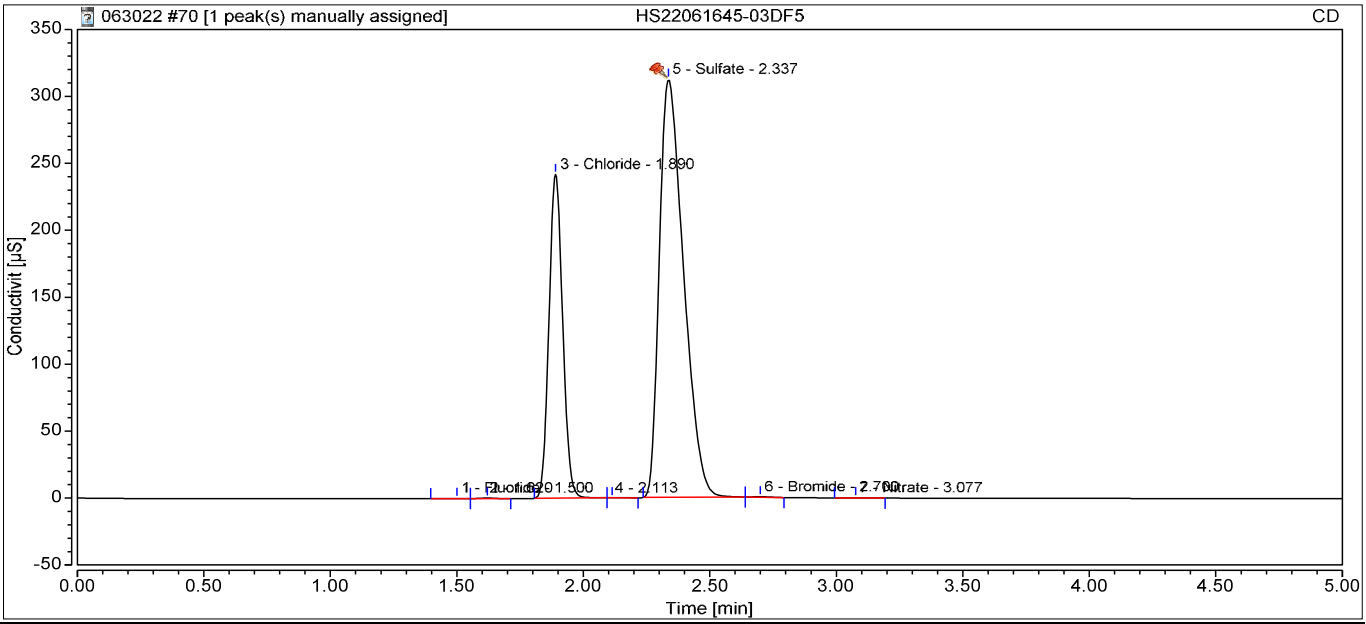
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	5.0000
2	1.89	Chloride	BMB	15.528	109.6729	548.3645	5.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	5.0000
4	2.33	Sulfate	BMB^	36.307	342.3690	1711.8452	5.0000
5	2.70	Bromide	BMB	0.028	0.4886	2.4430	5.0000
6	3.07	Nitrate	BMB	0.006	0.0525	0.2625	5.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**51.869**		**2262.92**	

70 HS22061645-03DF5

Sample Name:	**HS22061645-03DF5**	*Injection Volume:*	**5.00**
Vial Number:	**BA4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**06/30/2022 15:40**	*Sample Weight:*	**1.0000**

Run Time:



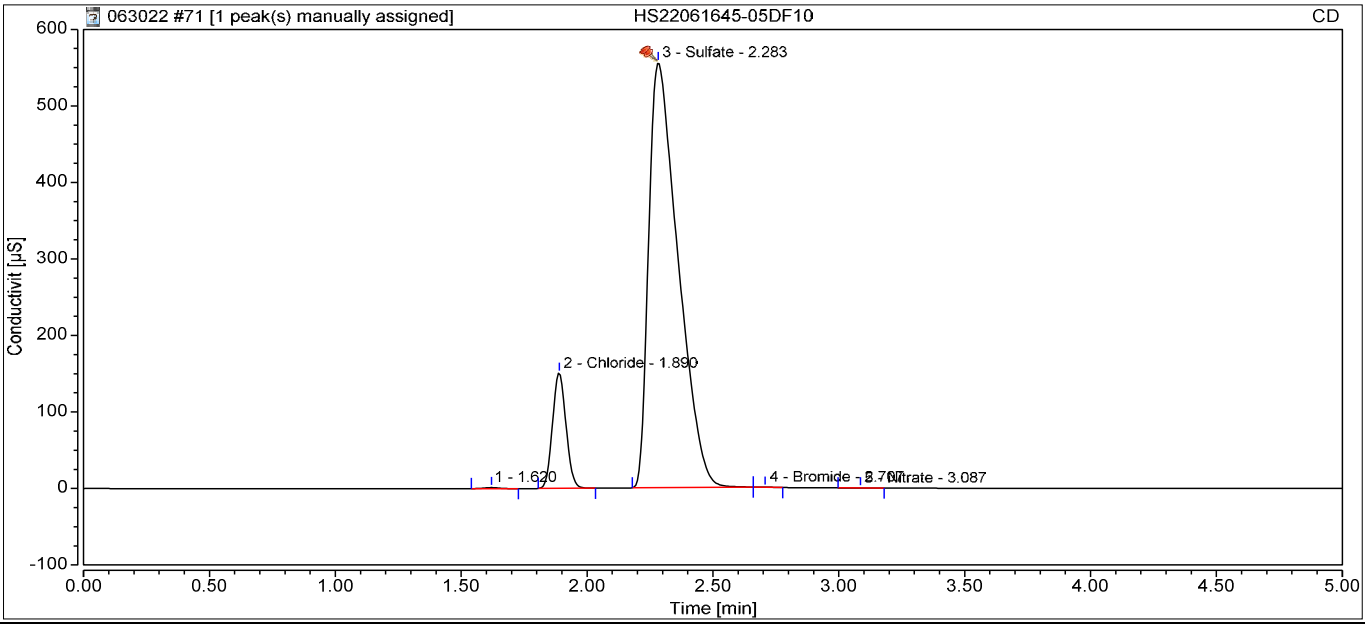
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.50	Fluoride	BMB	0.004	0.0618	0.3089	5.0000
3	1.89	Chloride	BMB	15.114	106.7495	533.7474	5.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	5.0000
5	2.34	Sulfate	BMB^	34.548	325.7962	1628.9808	5.0000
6	2.70	Bromide	BMB	0.027	0.4825	2.4127	5.0000
7	3.08	Nitrate	BMB	0.006	0.0513	0.2565	5.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**49.699**		**2165.71**	

71 HS22061645-05DF10

Sample Name:	**HS22061645-05DF10**	*Injection Volume:*	**5.00**
Vial Number:	**BA5**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**10.0000**
Recording Time:	**06/30/2022 15:45**	*Sample Weight:*	**1.0000**

Run Time:



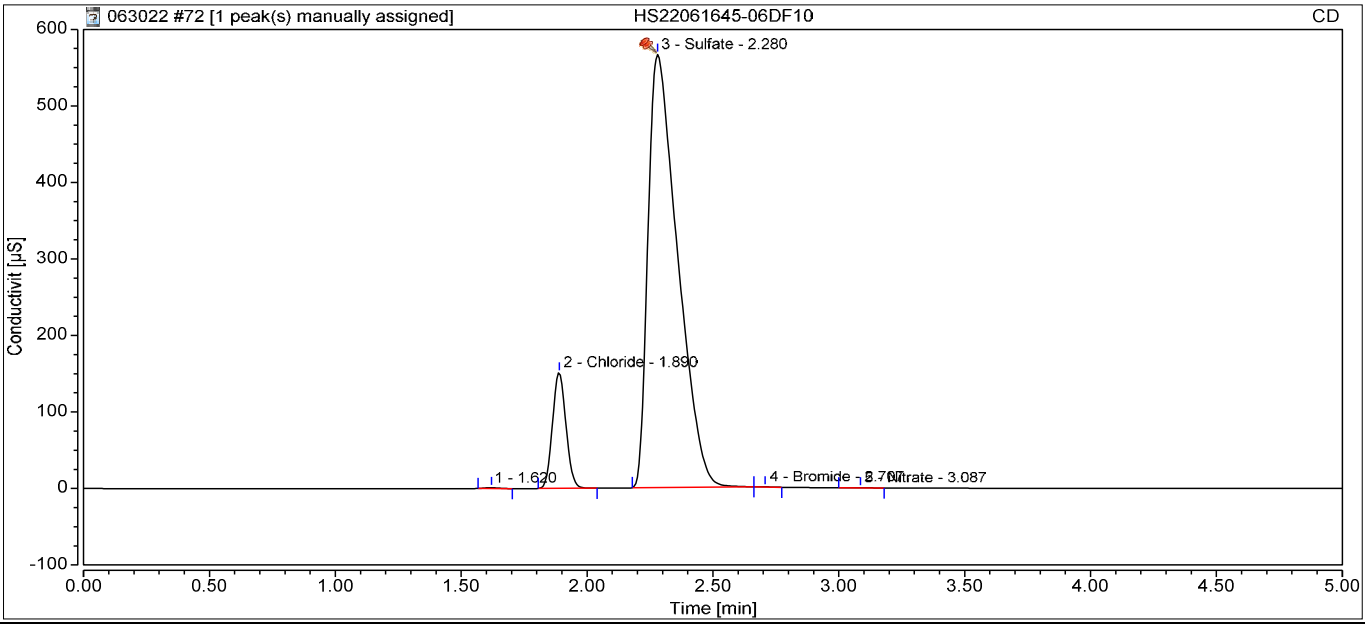
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	10.0000
2	1.89	Chloride	BMB	9.358	66.1526	661.5258	10.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	10.0000
3	2.28	Sulfate	BMB^	74.924	706.3599	7063.5986	10.0000
4	2.71	Bromide	BMB	0.011	0.2194	2.1939	10.0000
5	3.09	Nitrate	BMB	0.005	0.0498	0.4984	10.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	10.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	10.0000
Total:			**0.000**	**84.298**		**7727.82**	

72 HS22061645-06DF10

Sample Name:	**HS22061645-06DF10**	*Injection Volume:*	**5.00**
Vial Number:	**BA6**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**10.0000**
Recording Time:	**06/30/2022 15:51**	*Sample Weight:*	**1.0000**

Run Time:

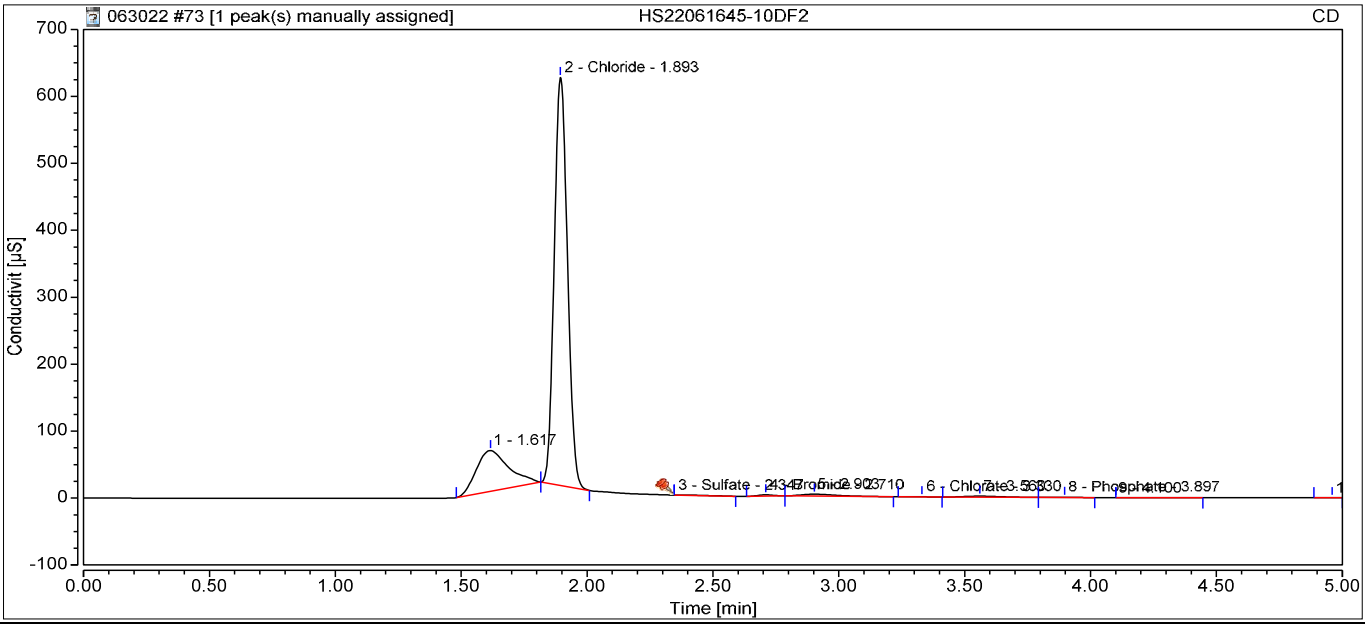


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	10.0000
2	1.89	Chloride	BMB	9.378	66.2986	662.9855	10.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	10.0000
3	2.28	Sulfate	BMB^	76.847	724.4861	7244.8607	10.0000
4	2.71	Bromide	BMB	0.009	0.1931	1.9315	10.0000
5	3.09	Nitrate	BMB	0.005	0.0498	0.4984	10.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	10.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	10.0000
Total:			**0.000**	**86.240**		**7910.28**	

73	*HS22061645-10DF2*		
Sample Name:	**HS22061645-10DF2**	*Injection Volume:*	**5.00**
Vial Number:	**BA7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**2.0000**
Recording Time:	**06/30/2022 15:56**	*Sample Weight:*	**1.0000**

Run Time:



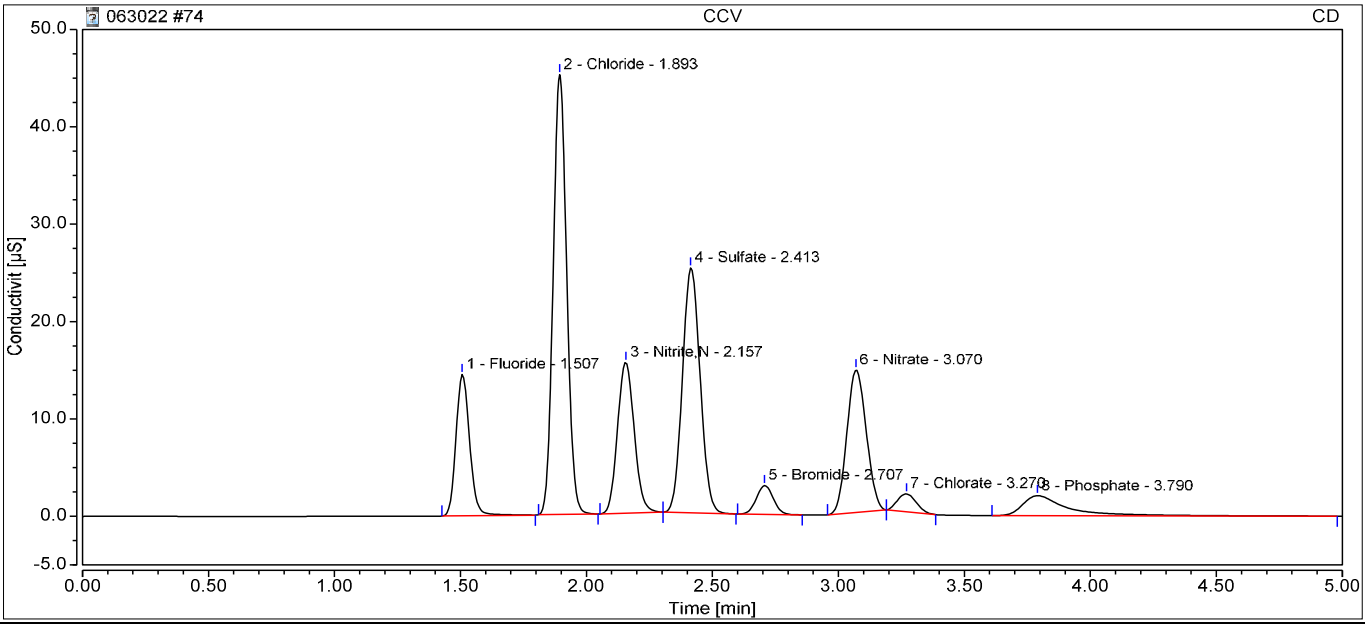
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	2.0000
2	1.89	Chloride	BMB	37.080	261.6739	523.3479	2.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	2.0000
3	2.35	Sulfate	BMB^	0.056	0.6880	1.3759	2.0000
4	2.71	Bromide	BMB	0.132	2.1627	4.3254	2.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	2.0000
6	3.33	Chlorate	BMB	0.008	0.2276	0.4553	2.0000
8	3.90	Phosphate	BMB	0.008	0.1488	0.2976	2.0000
Total:			**0.000**	**37.285**		**529.80**	

74 CCV

Sample Name:	**CCV**	*Injection Volume:*	**5.00**
Vial Number:	**R1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/30/2022 16:17**	*Sample Weight:*	**1.0000**

Run Time:



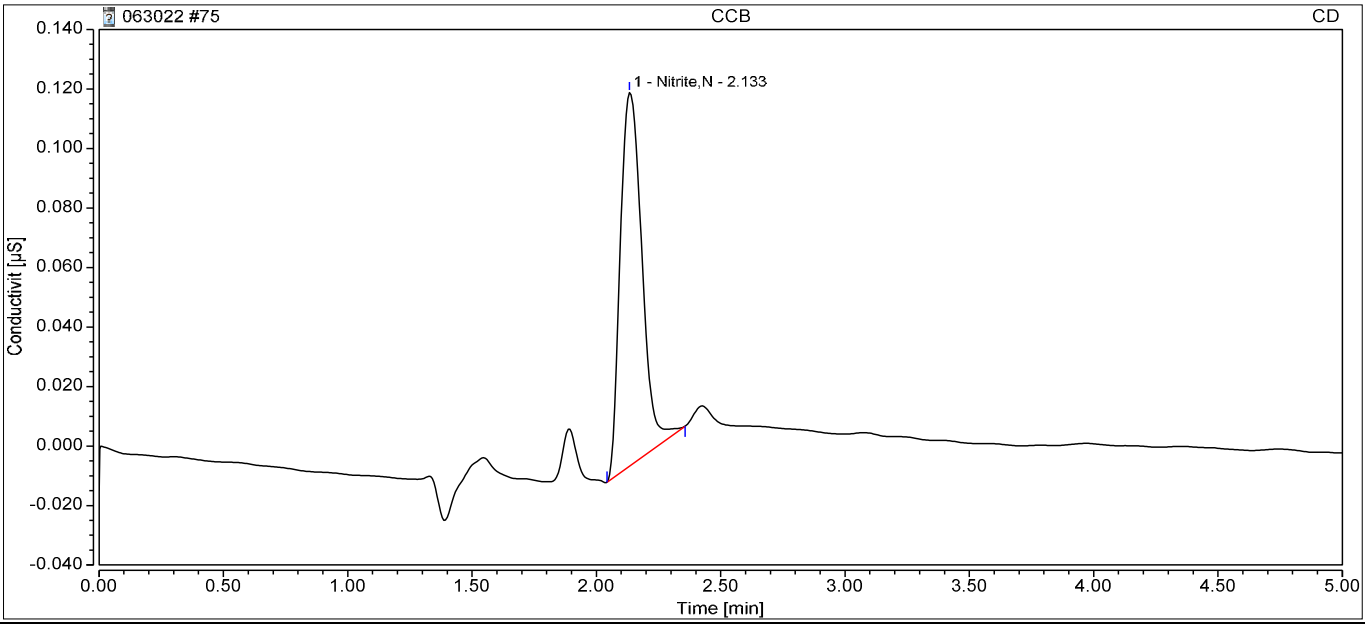
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.914	4.2748	4.2748	1.0000
2	1.89	Chloride	BMB	2.808	19.9549	19.9549	1.0000
3	2.16	Nitrite,N	BMB	1.190	4.2963	4.2963	1.0000
4	2.41	Sulfate	BMB	2.047	19.4528	19.4528	1.0000
5	2.71	Bromide	BMB	0.230	3.7248	3.7248	1.0000
6	3.07	Nitrate	BMB	1.305	3.9793	3.9793	1.0000
7	3.27	Chlorate	BMB	0.160	4.0064	4.0064	1.0000
8	3.79	Phosphate	BMB	0.426	3.5831	3.5831	1.0000
Total:			**0.000**	**9.080**		**63.27**	

75 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/30/2022 16:28**	*Sample Weight:*	**1.0000**

Run Time:

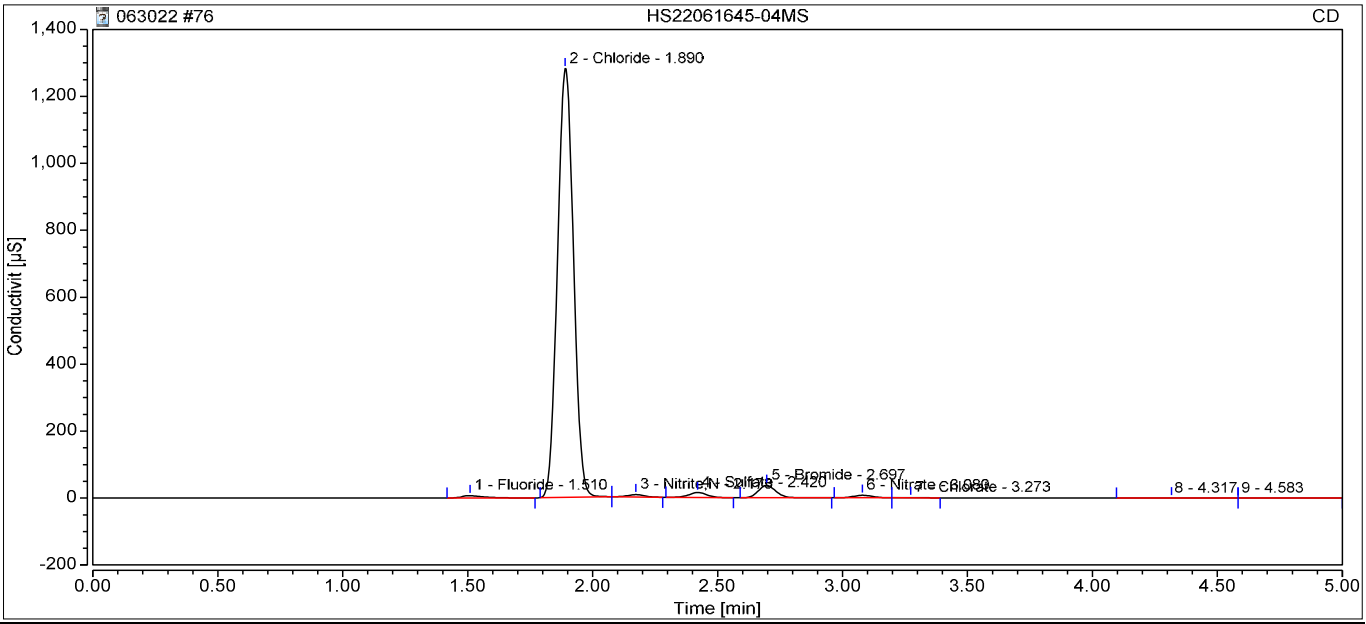


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
1	2.13	Nitrite,N	BMB	0.013	0.0066	0.0066	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.013**		**0.01**	

76	*HS22061645-04MS*		
Sample Name:	**HS22061645-04MS**	*Injection Volume:*	**5.00**
Vial Number:	**BA8**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/30/2022 16:38**	*Sample Weight:*	**1.0000**

Run Time:



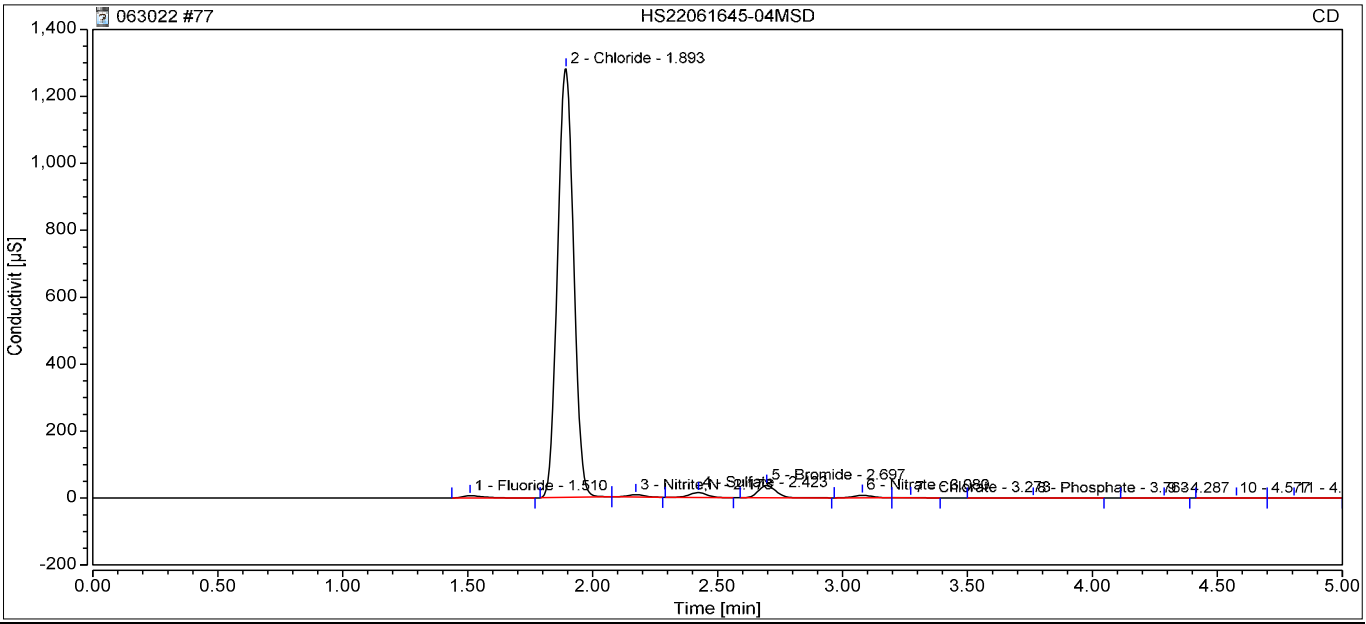
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.733	3.4359	3.4359	1.0000
2	1.89	Chloride	BMB	95.034	670.4169	670.4169	1.0000
3	2.17	Nitrite,N	BMB	0.508	1.8119	1.8119	1.0000
4	2.42	Sulfate	BMB	1.213	11.5933	11.5933	1.0000
5	2.70	Bromide	BMB	2.967	47.4474	47.4474	1.0000
6	3.08	Nitrate	BMB	0.655	2.0150	2.0150	1.0000
7	3.27	Chlorate	BMB	0.074	1.8594	1.8594	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**101.184**		**738.58**	

77 HS22061645-04MSD

Sample Name:	**HS22061645-04MSD**	*Injection Volume:*	**5.00**
Vial Number:	**BB1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/30/2022 16:44**	*Sample Weight:*	**1.0000**

Run Time:

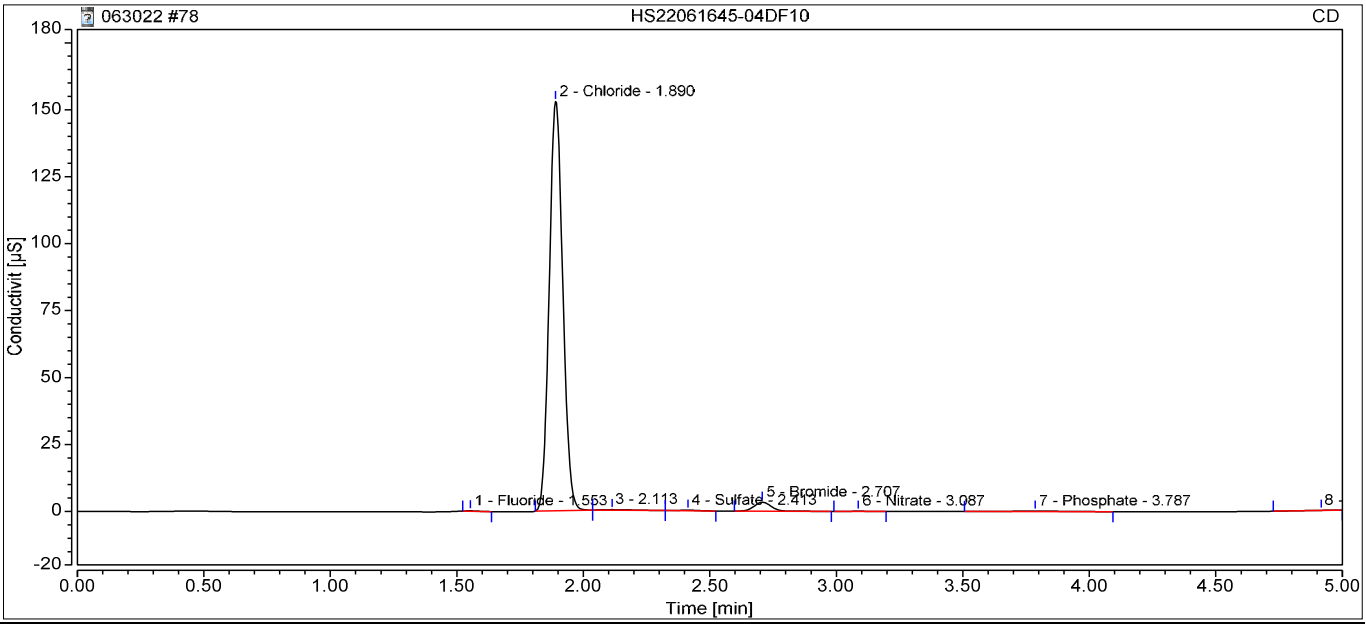


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.688	3.2279	3.2279	1.0000
2	1.89	Chloride	BMB	95.318	672.4213	672.4213	1.0000
3	2.17	Nitrite,N	BMB	0.505	1.8014	1.8014	1.0000
4	2.42	Sulfate	BMB	1.208	11.5490	11.5490	1.0000
5	2.70	Bromide	BMB	2.975	47.5863	47.5863	1.0000
6	3.08	Nitrate	BMB	0.645	1.9844	1.9844	1.0000
7	3.27	Chlorate	BMB	0.075	1.9012	1.9012	1.0000
8	3.76	Phosphate	BMB	0.041	0.4251	0.4251	1.0000
Total:			**0.000**	**101.457**		**740.90**	

78 HS22061645-04DF10			
Sample Name:	**HS22061645-04DF10**	*Injection Volume:*	**5.00**
Vial Number:	**BB2**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**10.0000**
Recording Time:	**06/30/2022 16:49**	*Sample Weight:*	**1.0000**

Run Time:



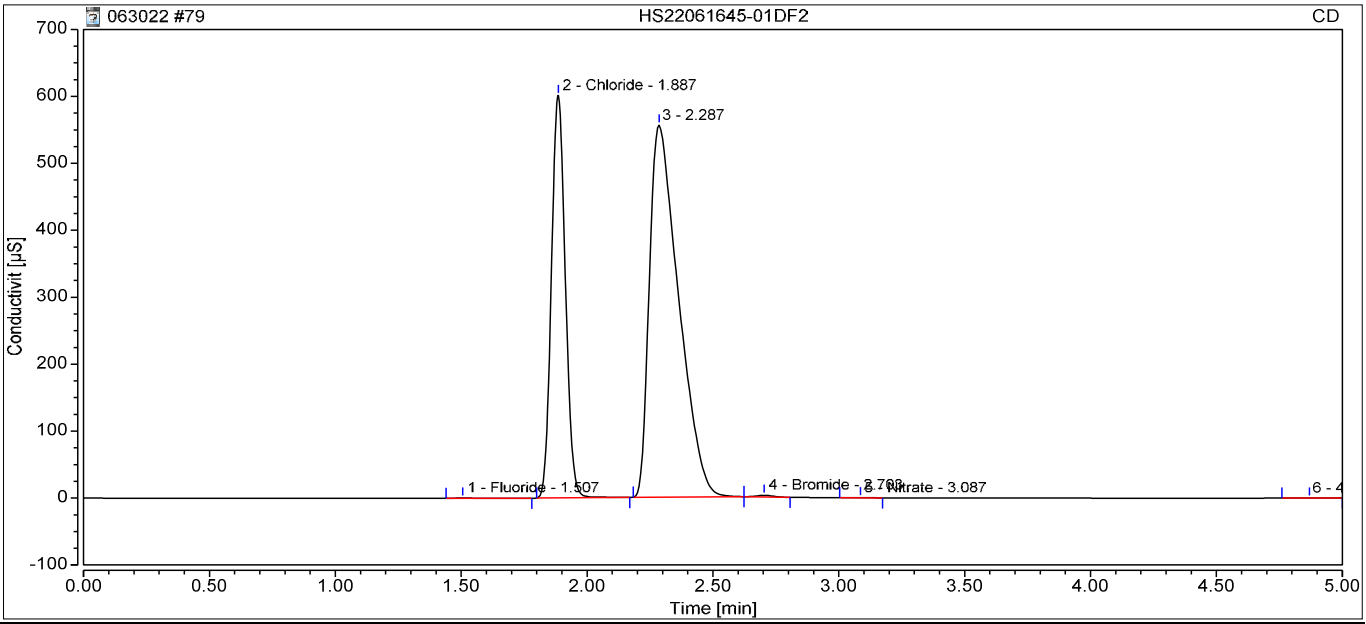
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.55	Fluoride	BMB	0.007	0.0773	0.7734	10.0000
2	1.89	Chloride	BMB	9.492	67.0988	670.9875	10.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	10.0000
4	2.41	Sulfate	BMB	0.018	0.3252	3.2517	10.0000
5	2.71	Bromide	BMB	0.262	4.2350	42.3496	10.0000
6	3.09	Nitrate	BMB	0.005	0.0486	0.4857	10.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	10.0000
7	3.79	Phosphate	BMB	0.044	0.4475	4.4751	10.0000
Total:			**0.000**	**9.827**		**722.32**	

79 HS22061645-01DF2

Sample Name:	**HS22061645-01DF2**	*Injection Volume:*	**5.00**
Vial Number:	**BB3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**2.0000**
Recording Time:	**06/30/2022 16:54**	*Sample Weight:*	**1.0000**

Run Time:



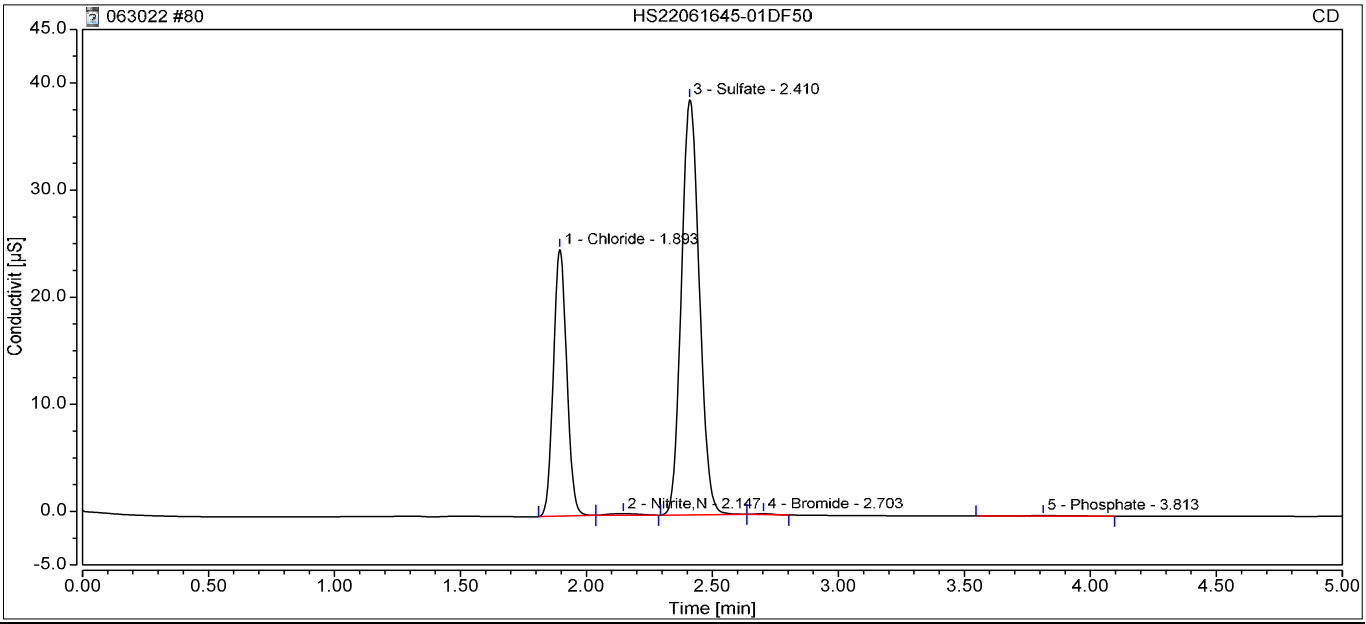
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.037	0.2140	0.4280	2.0000
2	1.89	Chloride	BMB	38.495	271.6552	543.3104	2.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	2.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	2.0000
4	2.70	Bromide	BMB	0.181	2.9409	5.8818	2.0000
5	3.09	Nitrate	BMB	0.005	0.0492	0.0984	2.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	2.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	2.0000
Total:			**0.000**	**38.718**		**549.72**	

80 HS22061645-01DF50

Sample Name:	**HS22061645-01DF50**	*Injection Volume:*	**5.00**
Vial Number:	**BB4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**50.0000**
Recording Time:	**06/30/2022 17:00**	*Sample Weight:*	**1.0000**

Run Time:



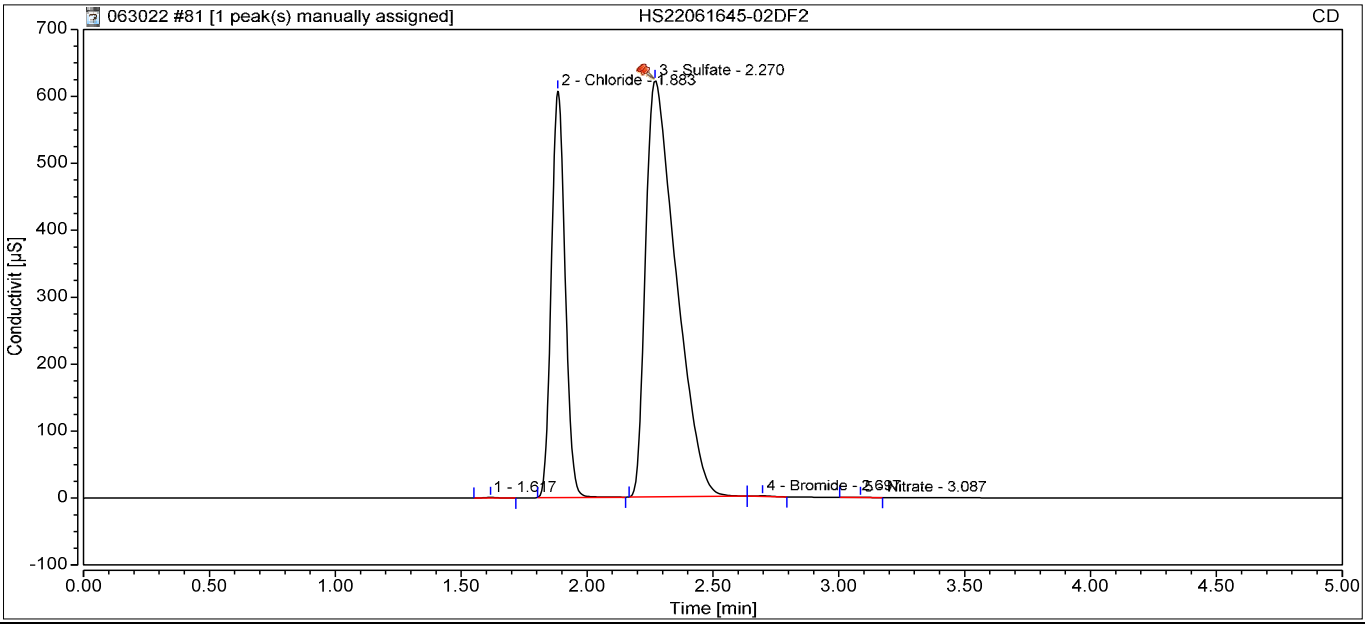
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	50.0000
1	1.89	Chloride	BMB	1.531	10.9512	547.5612	50.0000
2	2.15	Nitrite,N	BMB	0.022	0.0395	1.9753	50.0000
3	2.41	Sulfate	BMB	3.201	30.3337	1516.6835	50.0000
4	2.70	Bromide	BMB	0.006	0.1426	7.1314	50.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	50.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	50.0000
5	3.81	Phosphate	BMB	0.009	0.1568	7.8386	50.0000
Total:			**0.000**	**4.769**		**2081.19**	

81 HS22061645-02DF2

Sample Name:	**HS22061645-02DF2**	*Injection Volume:*	**5.00**
Vial Number:	**BB5**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**2.0000**
Recording Time:	**06/30/2022 17:05**	*Sample Weight:*	**1.0000**

Run Time:



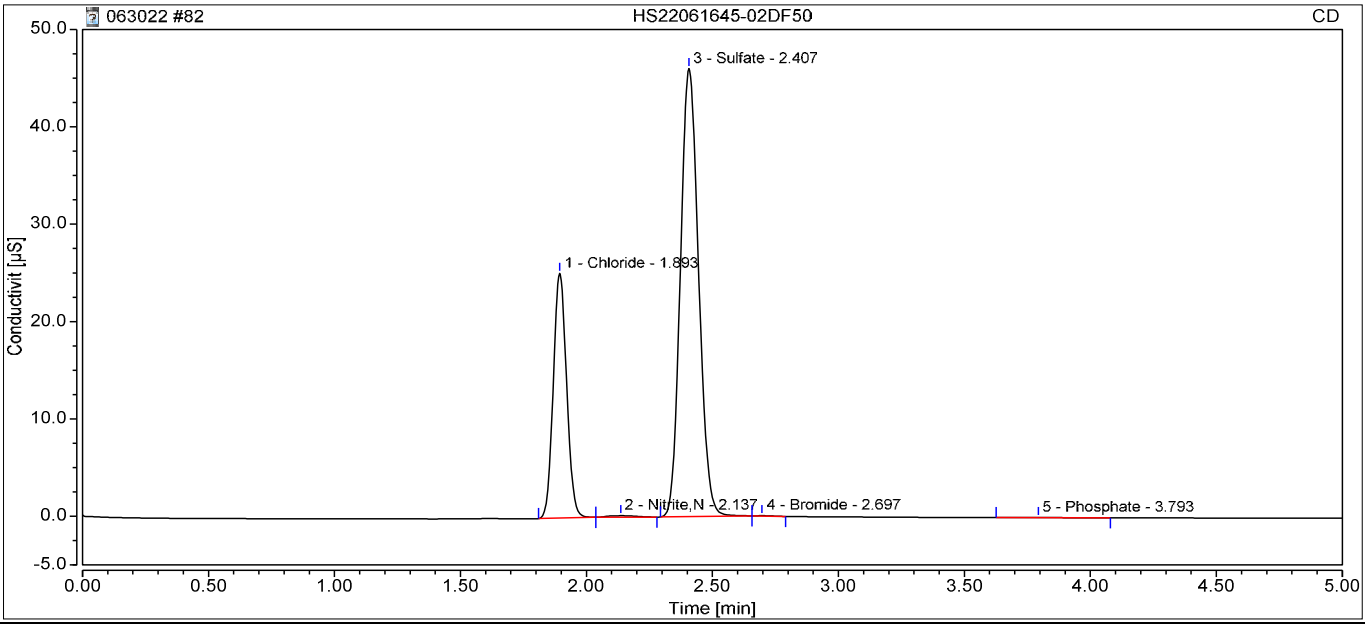
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	2.0000
2	1.88	Chloride	BMB	38.520	271.8330	543.6660	2.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	2.0000
3	2.27	Sulfate	BMB^	87.050	820.6563	1641.3126	2.0000
4	2.70	Bromide	BMB	0.070	1.1619	2.3238	2.0000
5	3.09	Nitrate	BMB	0.005	0.0488	0.0976	2.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	2.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	2.0000
Total:			**0.000**	**125.645**		**2187.40**	

82 HS22061645-02DF50

Sample Name:	**HS22061645-02DF50**	*Injection Volume:*	**5.00**
Vial Number:	**BB6**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**50.0000**
Recording Time:	**06/30/2022 17:10**	*Sample Weight:*	**1.0000**

Run Time:



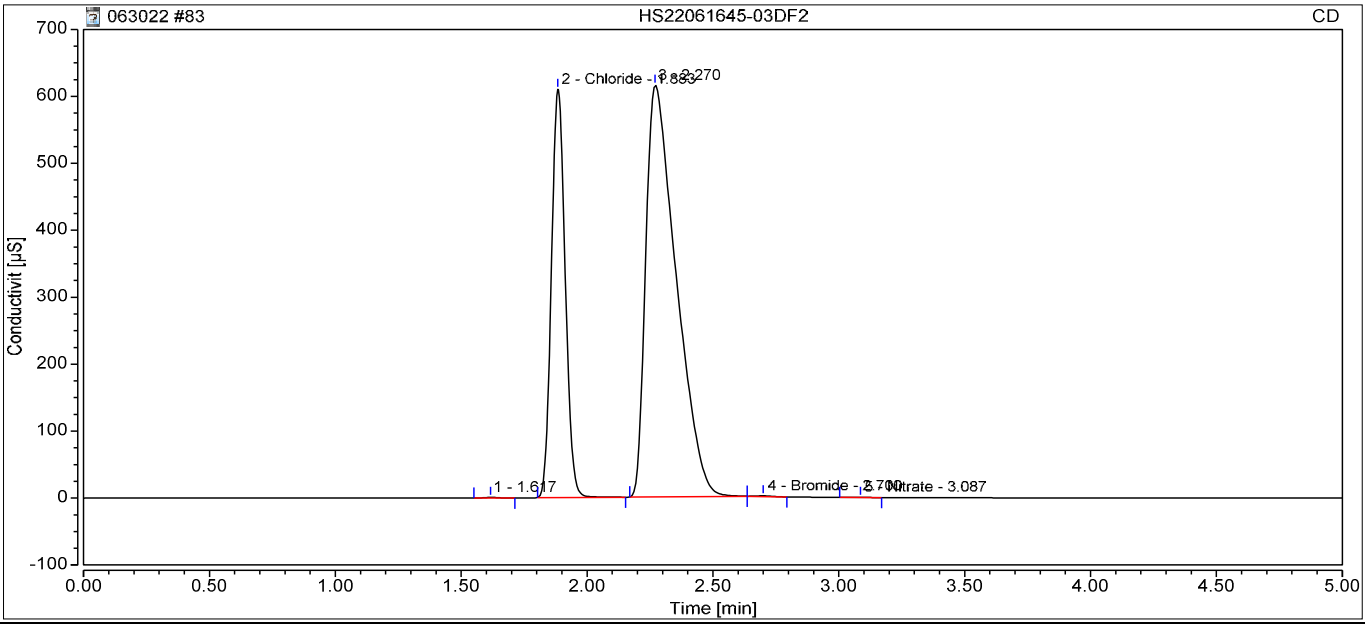
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	50.0000
1	1.89	Chloride	BMB	1.540	11.0180	550.9016	50.0000
2	2.14	Nitrite,N	BMB	0.021	0.0354	1.7684	50.0000
3	2.41	Sulfate	BMB	3.841	36.3624	1818.1193	50.0000
4	2.70	Bromide	BMB	0.002	0.0806	4.0317	50.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	50.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	50.0000
5	3.79	Phosphate	BMB	0.002	0.0988	4.9380	50.0000
Total:			**0.000**	**5.406**		**2379.76**	

83 HS22061645-03DF2

Sample Name:	**HS22061645-03DF2**	*Injection Volume:*	**5.00**
Vial Number:	**BB7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**2.0000**
Recording Time:	**06/30/2022 17:16**	*Sample Weight:*	**1.0000**

Run Time:



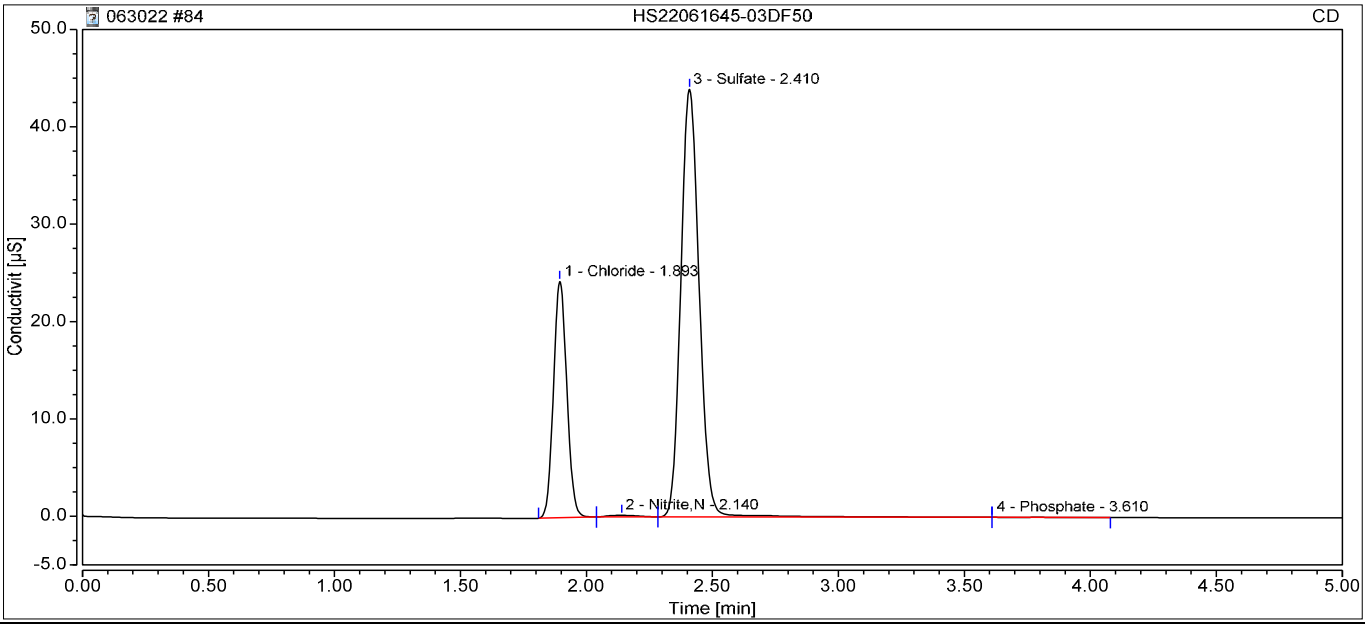
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	2.0000
2	1.88	Chloride	BMB	38.704	273.1247	546.2495	2.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	2.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	2.0000
4	2.70	Bromide	BMB	0.072	1.1971	2.3943	2.0000
5	3.09	Nitrate	BMB	0.005	0.0489	0.0978	2.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	2.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	2.0000
Total:			**0.000**	**38.780**		**548.74**	

84 HS22061645-03DF50

Sample Name:	**HS22061645-03DF50**	*Injection Volume:*	**5.00**
Vial Number:	**BB8**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**50.0000**
Recording Time:	**06/30/2022 17:21**	*Sample Weight:*	**1.0000**

Run Time:



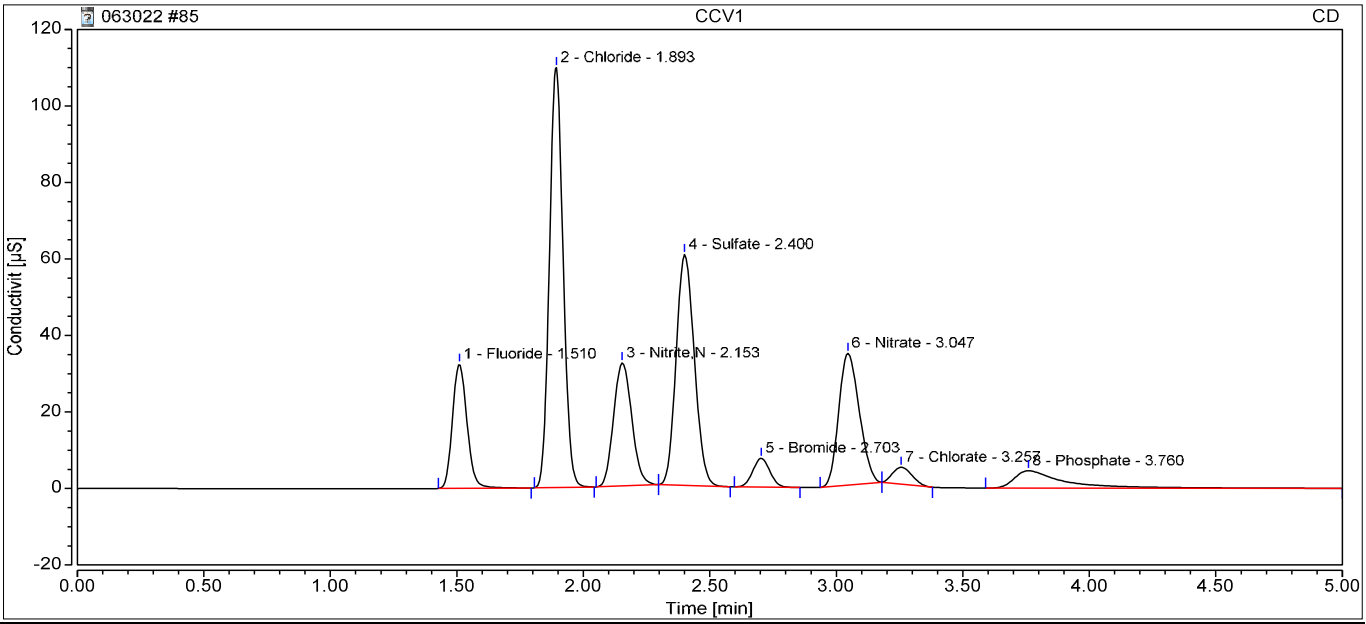
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	50.0000
1	1.89	Chloride	BMB	1.489	10.6547	532.7363	50.0000
2	2.14	Nitrite,N	BMB	0.022	0.0389	1.9436	50.0000
3	2.41	Sulfate	BMB	3.732	35.3368	1766.8405	50.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	50.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	50.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	50.0000
4	3.61	Phosphate	BMB	0.002	0.0982	4.9106	50.0000
Total:			**0.000**	**5.245**		**2306.43**	

85 CCV1

Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**R3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/30/2022 17:37**	*Sample Weight:*	**1.0000**

Run Time:



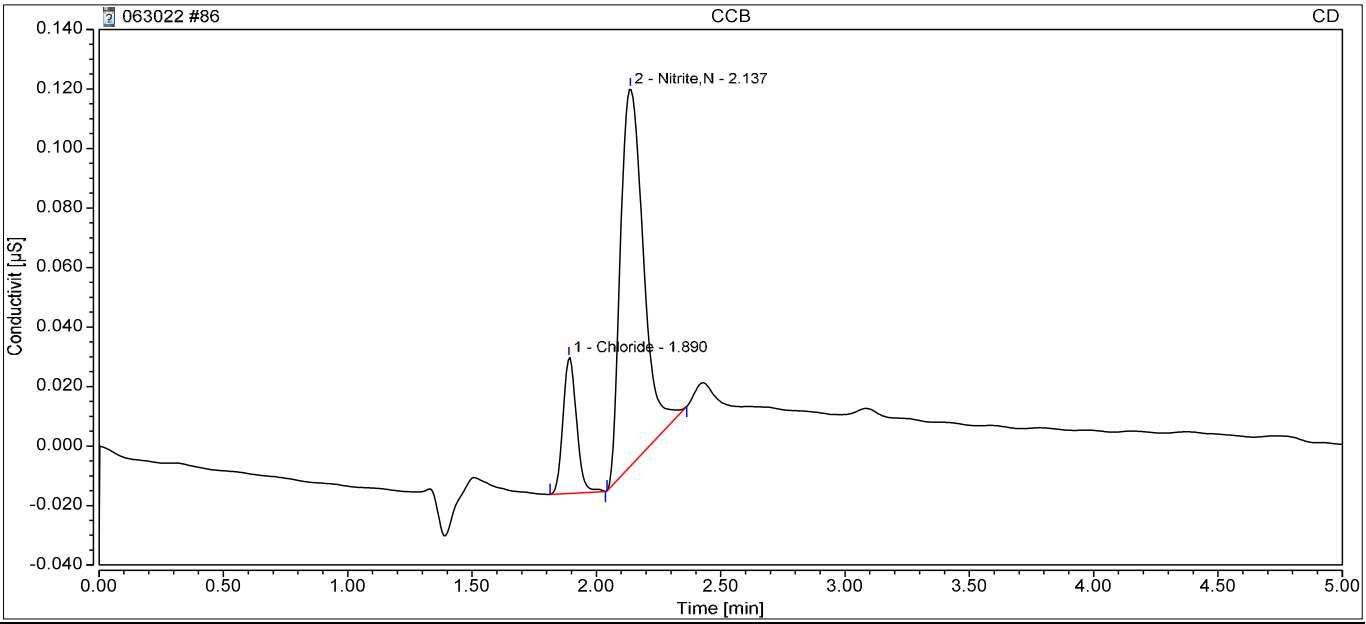
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	2.172	10.0957	10.0957	1.0000
2	1.89	Chloride	BMB	6.859	48.5306	48.5306	1.0000
3	2.15	Nitrite,N	BMB	2.681	9.7240	9.7240	1.0000
4	2.40	Sulfate	BMB	5.033	47.5944	47.5944	1.0000
5	2.70	Bromide	BMB	0.586	9.4072	9.4072	1.0000
6	3.05	Nitrate	BMB	3.242	9.8381	9.8381	1.0000
7	3.26	Chlorate	BMB	0.393	9.8226	9.8226	1.0000
8	3.76	Phosphate	BMB	1.038	8.4089	8.4089	1.0000
Total:			**0.000**	**22.003**		**153.42**	

86 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/30/2022 17:47**	*Sample Weight:*	**1.0000**

Run Time:



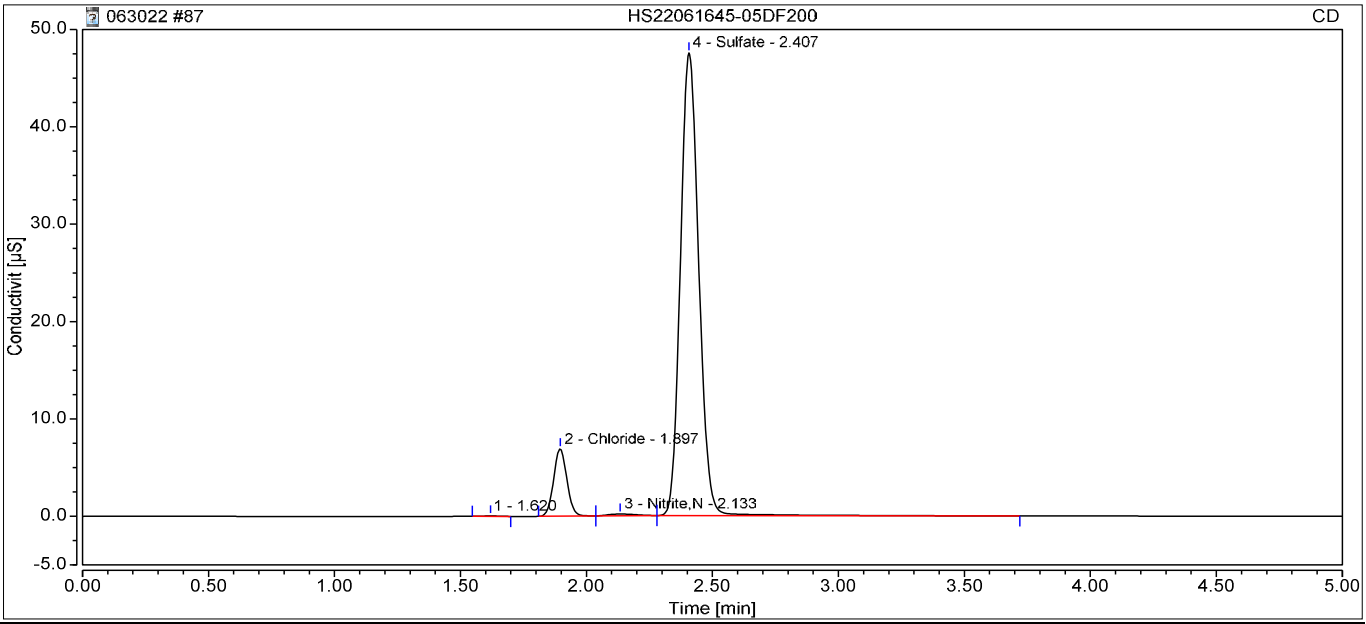
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.89	Chloride	BMB	0.003	0.1739	0.1739	1.0000
2	2.14	Nitrite,N	BMB	0.014	0.0102	0.0102	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.017**		**0.18**	

87 HS22061645-05DF200

Sample Name:	**HS22061645-05DF200**	*Injection Volume:*	**5.00**
Vial Number:	**BC1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**200.0000**
Recording Time:	**06/30/2022 17:53**	*Sample Weight:*	**1.0000**

Run Time:



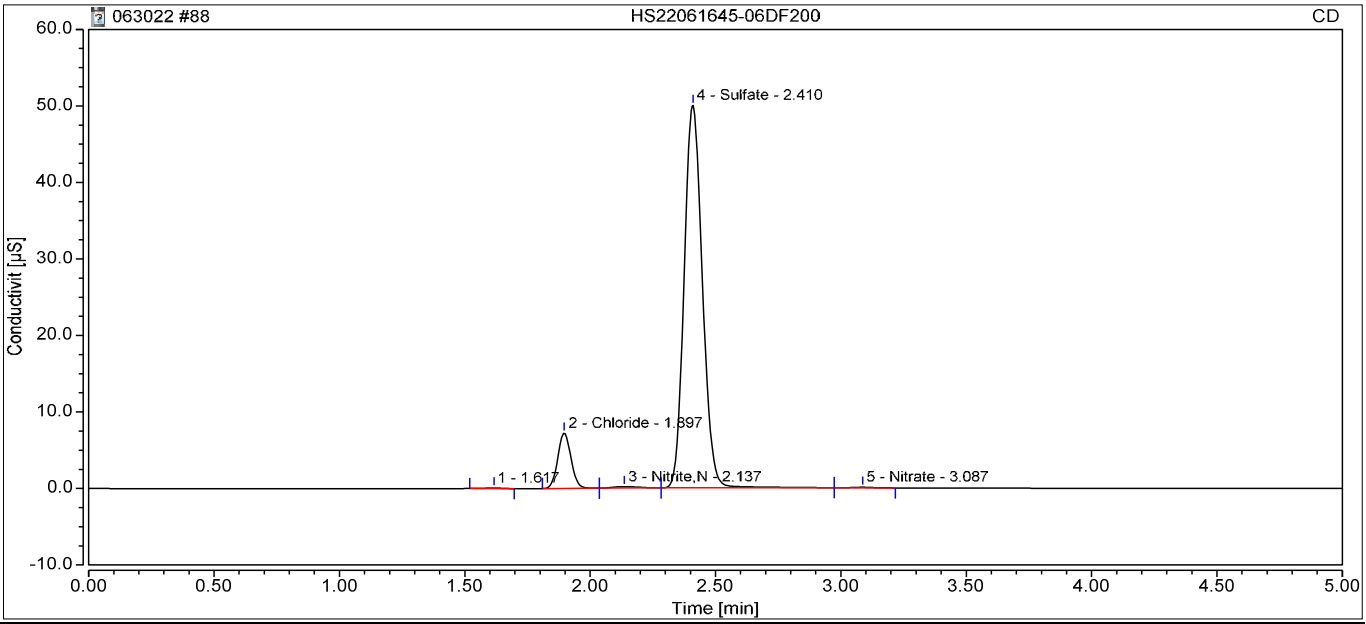
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	200.0000
2	1.90	Chloride	BMB	0.421	3.1226	624.5255	200.0000
3	2.13	Nitrite,N	BMB	0.021	0.0370	7.3913	200.0000
4	2.41	Sulfate	BMB	4.020	38.0535	7610.6980	200.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	200.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	200.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	200.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	200.0000
Total:			**0.000**	**4.462**		**8242.61**	

88 HS22061645-06DF200

Sample Name:	**HS22061645-06DF200**	*Injection Volume:*	**5.00**
Vial Number:	**BC2**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**200.0000**
Recording Time:	**06/30/2022 17:58**	*Sample Weight:*	**1.0000**

Run Time:



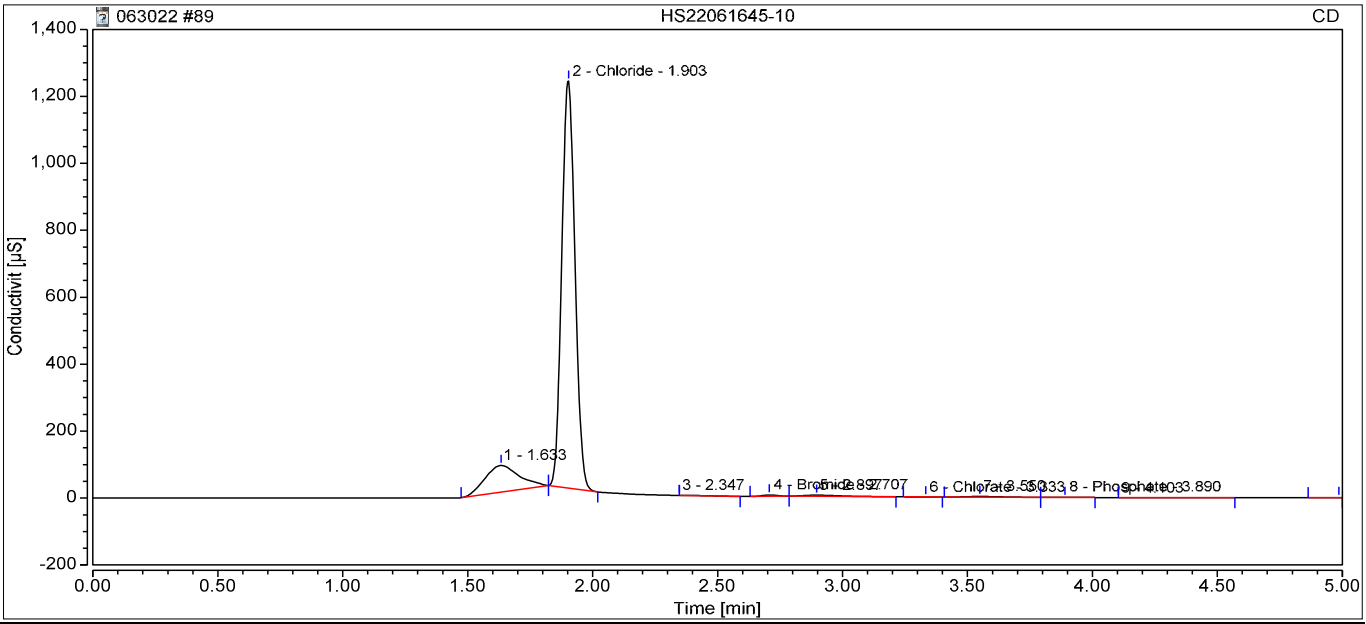
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	200.0000
2	1.90	Chloride	BMB	0.441	3.2652	653.0318	200.0000
3	2.14	Nitrite,N	BMB	0.022	0.0396	7.9170	200.0000
4	2.41	Sulfate	BMB	4.213	39.8721	7974.4245	200.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	200.0000
5	3.09	Nitrate	BMB	0.006	0.0526	10.5273	200.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	200.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	200.0000
Total:			**0.000**	**4.682**		**8645.90**	

89 HS22061645-10

Sample Name:	**HS22061645-10**	*Injection Volume:*	**5.00**
Vial Number:	**BC3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/30/2022 18:03**	*Sample Weight:*	**1.0000**

Run Time:



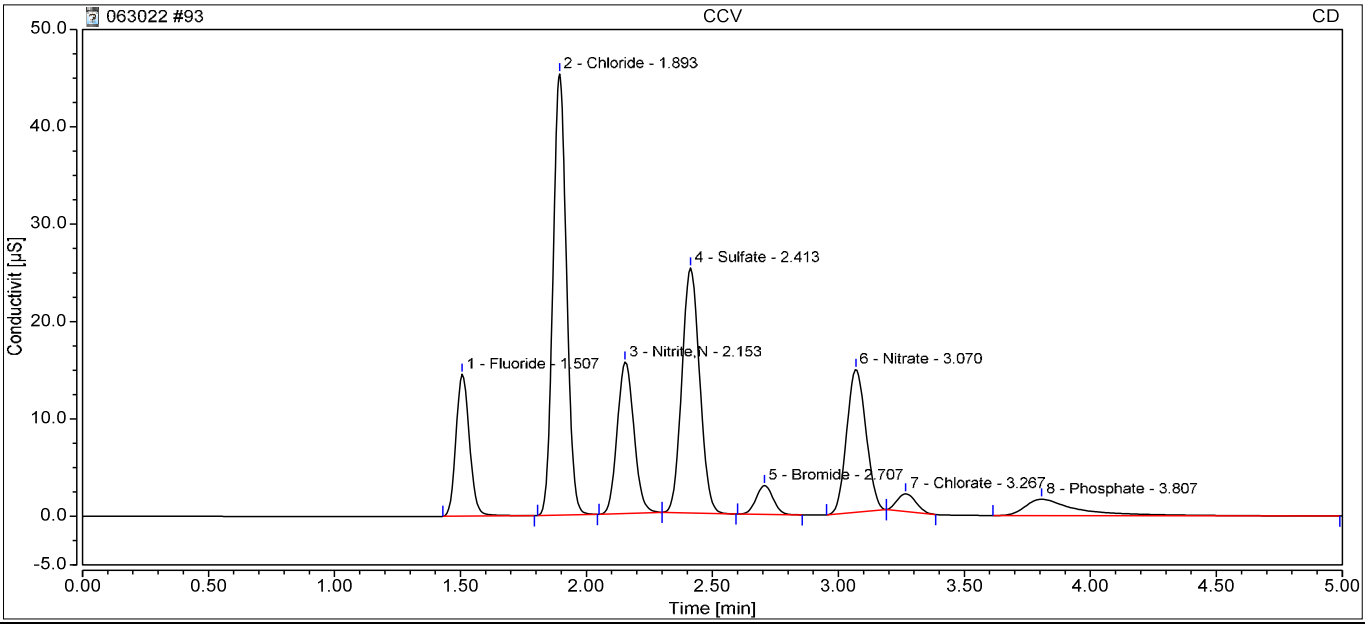
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
2	1.90	Chloride	BMB	74.392	524.8312	524.8312	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
4	2.71	Bromide	BMB	0.275	4.4429	4.4429	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
6	3.33	Chlorate	BMB	0.008	0.2124	0.2124	1.0000
8	3.89	Phosphate	BMB	0.012	0.1810	0.1810	1.0000
Total:			**0.000**	**74.687**		**529.67**	

93 CCV

Sample Name:	**CCV**	*Injection Volume:*	**5.00**
Vial Number:	**R1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/30/2022 18:56**	*Sample Weight:*	**1.0000**

Run Time:



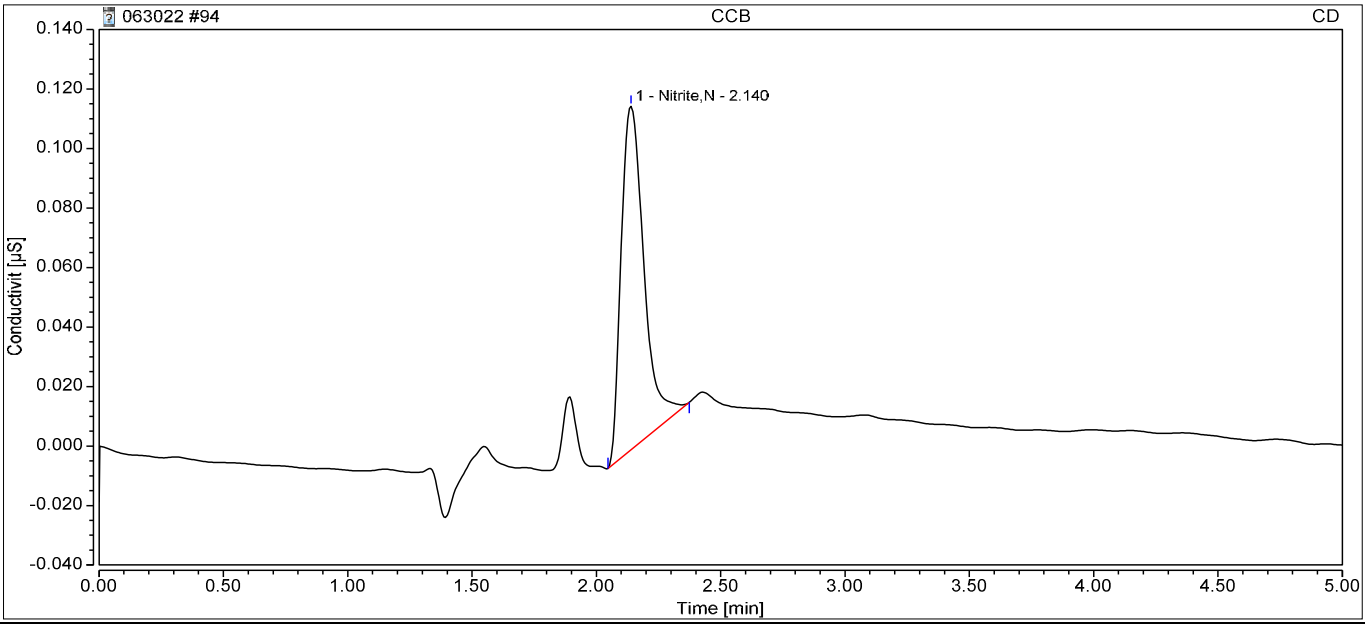
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.909	4.2518	4.2518	1.0000
2	1.89	Chloride	BMB	2.816	20.0165	20.0165	1.0000
3	2.15	Nitrite,N	BMB	1.196	4.3168	4.3168	1.0000
4	2.41	Sulfate	BMB	2.056	19.5358	19.5358	1.0000
5	2.71	Bromide	BMB	0.231	3.7417	3.7417	1.0000
6	3.07	Nitrate	BMB	1.306	3.9828	3.9828	1.0000
7	3.27	Chlorate	BMB	0.159	3.9842	3.9842	1.0000
8	3.81	Phosphate	BMB	0.410	3.4553	3.4553	1.0000
Total:			**0.000**	**9.083**		**63.28**	

94 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/30/2022 19:07**	*Sample Weight:*	**1.0000**

Run Time:



Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
1	2.14	Nitrite,N	BMB	0.012	0.0052	0.0052	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.012**		**0.01**	

HS22061645 SUB Pace Lab Level IV Report 222070229

ALS WO# HS22061645

Pace Analytical®

LELAP CERTIFICATE NUMBER: 01955
DOD-ELAP ACCREDITATION NUMBER: 74960

ANALYTICAL RESULTS

PERFORMED BY

Pace Analytical Gulf Coast
7979 Innovation Park Dr.
Baton Rouge, LA 70820
(225) 769-4900

Report Date 07/15/2022

Report # 222070229

Project HS22061645

Samples Collected 6/29/22

Deliver To	***Additional Recipients***
Dane Wacasey ALS 10450 Stancliff Rd., Ste 210 Houston, TX 770994338	Jumoke Lawal, ALS Houston

PJLA Testing DoD ELAP

ISO 17025

NELAP ACCREDITED TNI LABORATORY

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with Pace Gulf Coast's Standard Operating Procedures.

Common Abbreviations that may be Utilized in this Report

ND	Indicates the result was Not Detected at the specified reporting limit
NO	Indicates the sample did not ignite when preliminary test performed for EPA Method 1030
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
DL	Detection Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
RE	Re-analysis
CF	HPLC or GC Confirmation
00:01	Reported as a time equivalent to 12:00 AM

Reporting Flags that may be Utilized in this Report

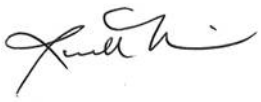
J or I	Indicates the result is between the MDL and LOQ
J	DOD flag on analyte in the parent sample for MS/MSD outside acceptance criteria
U	Indicates the compound was analyzed for but not detected
B or V	Indicates the analyte was detected in the associated Method Blank
Q	Indicates a non-compliant QC Result (See Q Flag Application Report)
*****	Indicates a non-compliant or not applicable QC recovery or RPD – see narrative
E	Organics - The result is estimated because it exceeded the instrument calibration range
E	Metals - % diference for the serial dilution is > 10%
L	Reporting Limits adjusted to meet risk-based limit.
P	RPD between primary and confirmation result is greater than 40
DL	Diluted analysis – when appended to Client Sample ID

Sample receipt at Pace Gulf Coast is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of Pace Gulf Coast. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with The NELAC Institute (TNI) Standard 2009 and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.



Authorized Signature
Pace Gulf Coast Report 222070229

Certifications

Certification	Certification Number
DOD ELAP	74960
Alabama	01955
Arkansas	88-0655
Colorado	01955
Delaware	01955
Florida	E87854
Georgia	01955
Hawaii	01955
Idaho	01955
Illinois	200048
Indiana	01955
Kansas	E-10354
Kentucky	95
Louisiana	01955
Maryland	01955
Massachusetts	01955
Michigan	01955
Mississippi	01955
Missouri	01955
Montana	N/A
Nebraska	01955
New Mexico	01955
North Carolina	618
North Dakota	R-195
Oklahoma	9403
South Carolina	73006001
South Dakota	01955
Tennessee	01955
Texas	T104704178
Vermont	01955
Virginia	460215
Washington	C929
USDA Soil Permit	P330-16-00234

Case Narrative

Client: ALS Environmental - Houston, TX **Report:** 222070229

Pace Analytical Gulf Coast received and analyzed the sample(s) listed
on the Report Sample Summary page of this report. Receipt of the sample(s) is documented
by the attached chain of custody. This applies only to the sample(s) listed in this report.
No sample integrity or quality control exceptions were identified unless noted below.

This report was completed in accordance with DOD QSM 5.3 as specified in the contract.

No anomalies were found for the analyzed sample(s).

Sample Summary

Lab ID	Client ID	Matrix	Collect Date	Receive Date
22207022901	16EW03-220629	Water	6/29/22 07:05	7/01/22 10:00
22207022902	16EW02-220629	Water	6/29/22 07:50	7/01/22 10:00
22207022903	16EW02-220629-FD	Water	6/29/22 07:50	7/01/22 10:00
22207022904	16IW26-20629	Water	6/29/22 08:40	7/01/22 10:00
22207022905	16WW41-220629	Water	6/29/22 09:30	7/01/22 10:00
22207022906	16WW41-220629-FD	Water	6/29/22 09:30	7/01/22 10:00
22207022907	16IW03-220629	Water	6/29/22 12:40	7/01/22 10:00

Test Summary

EPA RSK-175					
Lab ID	**Client ID**	**Matrix**	**Batch**	**Instru**	**RunDate**
22207022901	16EW03-220629	Water	745070	GCV8B	7/11/22 13:51
22207022902	16EW02-220629	Water	745070	GCV8B	7/11/22 13:57
22207022903	16EW02-220629-FD	Water	745070	GCV8B	7/11/22 14:04
22207022904	16IW26-20629	Water	745070	GCV8B	7/11/22 14:22
22207022905	16WW41-220629	Water	745070	GCV8B	7/11/22 14:47
22207022906	16WW41-220629-FD	Water	745070	GCV8B	7/11/22 15:03
22207022907	16IW03-220629	Water	745070	GCV8B	7/11/22 15:12

Manual Integrations

Manual Integrations for LC and IC (if performed) are documented in the raw data.
No other manual integrations were performed by Pace Gulf Coast.

Q Flag Summary

NO Q FLAGS FOR THIS WORKORDER

Detect Summary

Results and Detection Limits are adjusted for dilution and moisture when applicable

EPA RSK-175						
Lab ID	**Client ID**	**Parameter**	**Units**	**Result**	**Dil.**	**%Moist**
22207022901	16EW03-220629	Carbon Dioxide	ug/L	462000	30	NA
22207022902	16EW02-220629	Carbon Dioxide	ug/L	390000	30	NA
22207022903	16EW02-220629-FD	Carbon Dioxide	ug/L	367000	30	NA
22207022904	16IW26-20629	Carbon Dioxide	ug/L	465000	50	NA
22207022905	16WW41-220629	Carbon Dioxide	ug/L	462000	30	NA
22207022906	16WW41-220629-FD	Carbon Dioxide	ug/L	418000	30	NA
22207022907	16IW03-220629	Carbon Dioxide	ug/L	497000	30	NA

EPA RSK-175

Form 1D

Results

1D

ORGANICS ANALYSIS DATA SHEET

Report No:	222070229	Client Sample ID:	16EW03-220629
Collect Date:	06/29/22 Time: 0705	GCAL Sample ID:	22207022901
Matrix:	Water % Moisture: NA	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8011
Injection Vol.:	1 (µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	30 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1351
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

CONCENTRATION UNITS: ug/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
124-38-9	Carbon Dioxide	462000		3810	11600	27000

FORM I ORG-1

Data File: /var/chem/gcv8b.i/2220711p.b/v8011.d Page 1
Report Date: 11-Jul-2022 14:01

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8011.d
Lab Smp Id: 22207022901
Inj Date : 11-JUL-2022 13:51
Operator : BDP Inst ID: gcv8b.i
Smp Info : 22207022901*30
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 13:58 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1
Dil Factor: 30.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Carbon Dioxide	1.002	1.014	-0.012	58090847	15399.0	462000

Data File: /var/chem/gcv8b.i/2220711p.b/v8011.d

Date : 11-JUL-2022 13:51

Client ID:

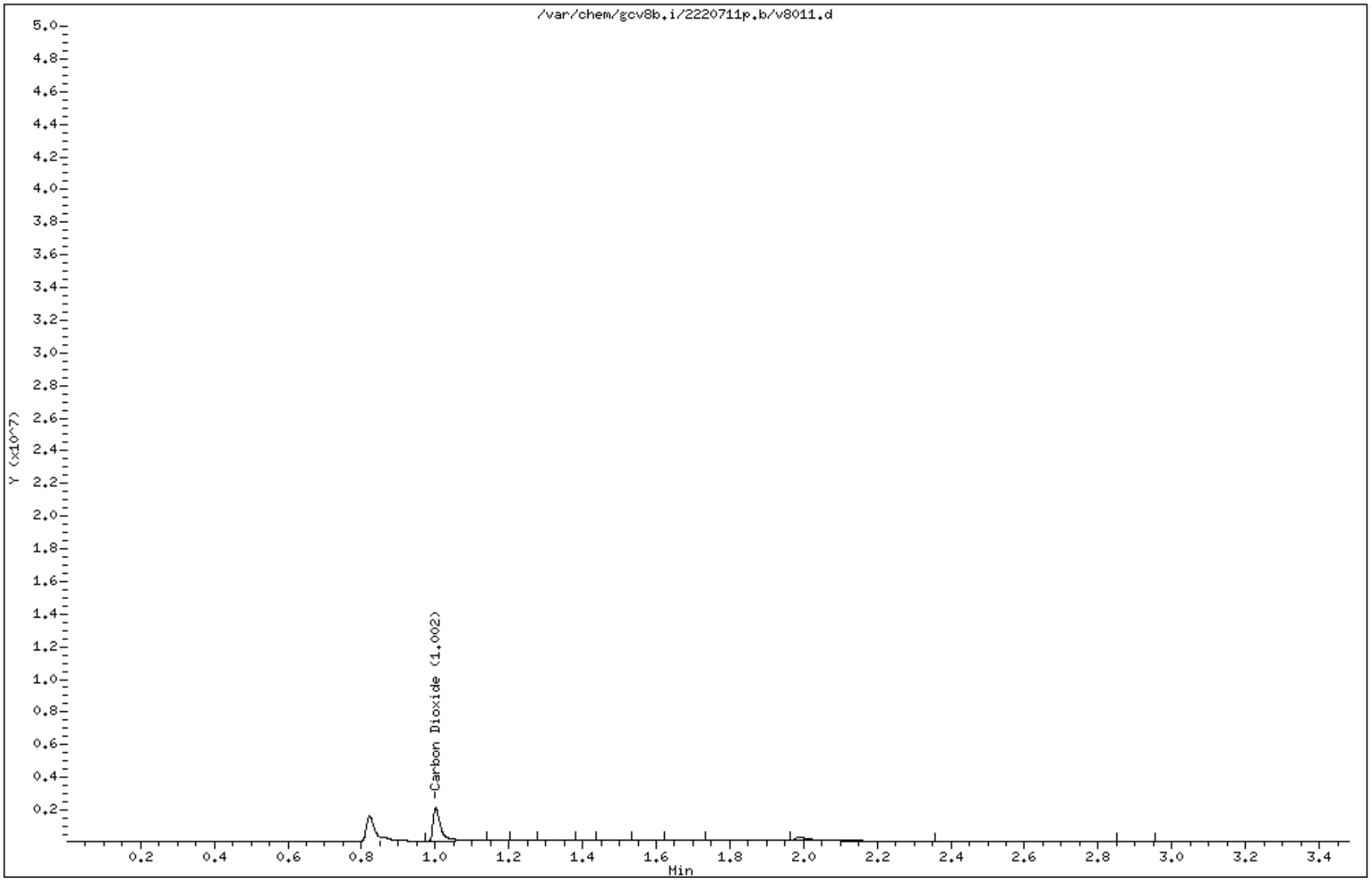
Instrument: gcv8b.i

Sample Info: 22207022901*30

Operator: BDP

Column phase: GS-Q-30

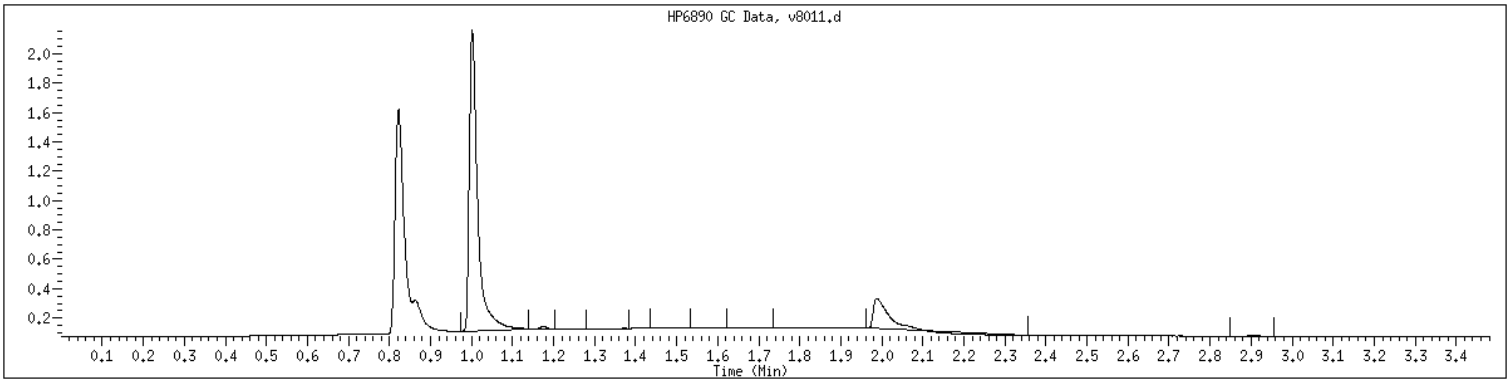
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8011.d Page: 1
Report Date: 07/11/2022 14:01

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 22207022901 SampleType : SAMPLE
Injection Date: 07/11/2022 13:51 Instrument : gcv8b.i
Operator : BDP
Sample Info : 22207022901*30
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 30.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Report No:	222070229	Client Sample ID:	16EW02-220629
Collect Date:	06/29/22 Time: 0750	GCAL Sample ID:	22207022902
Matrix:	Water % Moisture: NA	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8012
Injection Vol.:	1 (µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	30 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1357
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

CONCENTRATION UNITS: ug/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
124-38-9	Carbon Dioxide	390000		3810	11600	27000

FORM I ORG-1

Data File: /var/chem/gcv8b.i/2220711p.b/v8012.d Page 1
Report Date: 11-Jul-2022 14:08

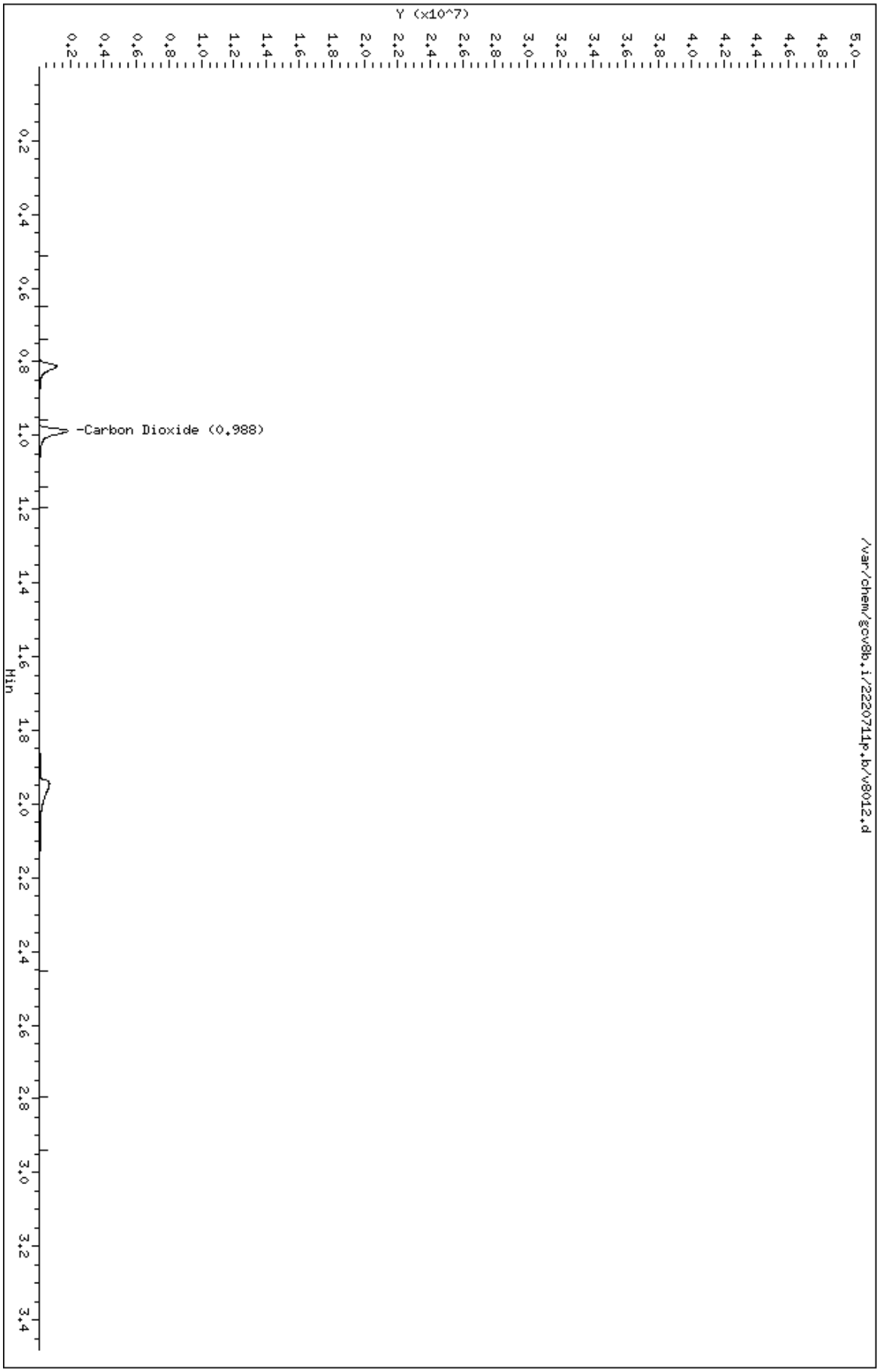
GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8012.d
Lab Smp Id: 22207022902
Inj Date : 11-JUL-2022 13:57
Operator : BDP Inst ID: gcv8b.i
Smp Info : 22207022902*30
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 13:58 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1
Dil Factor: 30.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

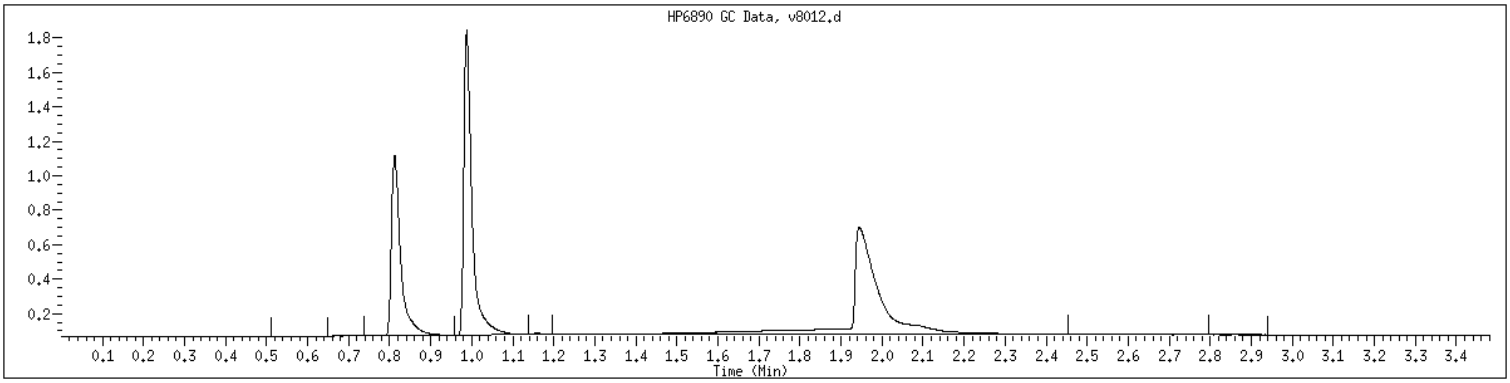
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Carbon Dioxide	0.988	1.014	-0.026	49073995	13008.8	390000


Data File: /var/chem/gcv8b.i/2220711p.b/v8012.d
Date : 11-JUL-2022 13:57
Client ID:
Sample Info: 222070229@2*30
Column phase: GS-Q-30
Instrument: gcv8b.i
Operator: BDP
Column diameter: 0.53
Page 1
/var/chem/gcv8b.i/2220711p.b/v8012.d
Y (x10^7)
-Carbon Dioxide (0.988)
Min

Data file : /var/chem/gcv8b.i/2220711p.b/v8012.d Page: 1
Report Date: 07/11/2022 14:08

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 22207022902 SampleType : SAMPLE
Injection Date: 07/11/2022 13:57 Instrument : gcv8b.i
Operator : BDP
Sample Info : 22207022902*30
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 30.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Report No:	222070229	Client Sample ID:	16EW02-220629-FD
Collect Date:	06/29/22 Time: 0750	GCAL Sample ID:	22207022903
Matrix:	Water % Moisture: NA	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8013
Injection Vol.:	1 (µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	30 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1404
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

CONCENTRATION UNITS: ug/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
124-38-9	Carbon Dioxide	367000		3810	11600	27000

FORM I ORG-1

Data File: /var/chem/gcv8b.i/2220711p.b/v8013.d Page 1
Report Date: 11-Jul-2022 14:14

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8013.d
Lab Smp Id: 22207022903
Inj Date : 11-JUL-2022 14:04
Operator : BDP Inst ID: gcv8b.i
Smp Info : 22207022903*30
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 13:58 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1
Dil Factor: 30.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Carbon Dioxide	1.000	1.014	-0.014	46106733	12222.2	367000

Data File: /var/chem/gcv8b.i/2220711p.b/v8013.d

Date : 11-JUL-2022 14:04

Client ID:

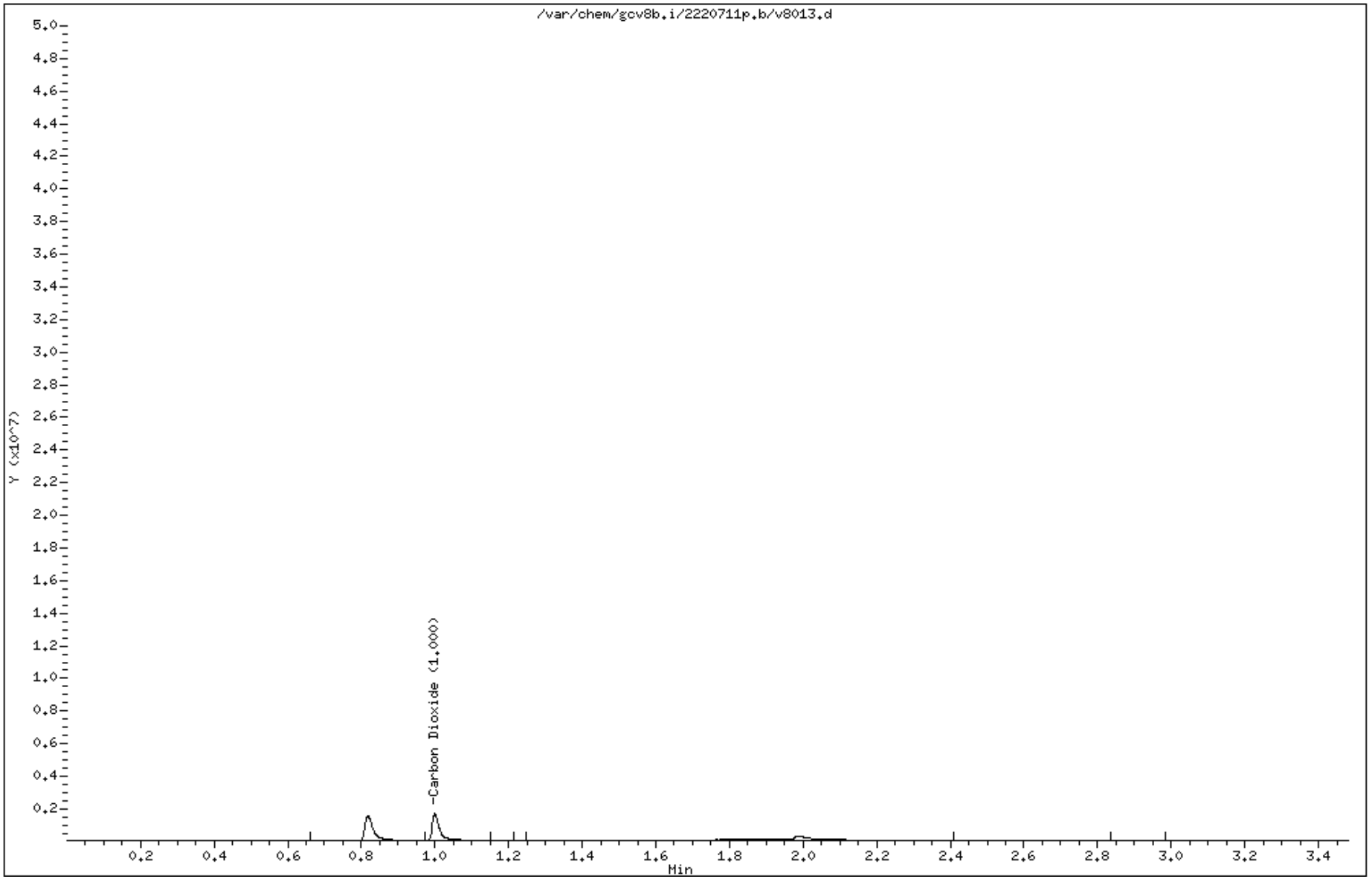
Instrument: gcv8b.i

Sample Info: 22207022903*30

Operator: BDP

Column phase: GS-Q-30

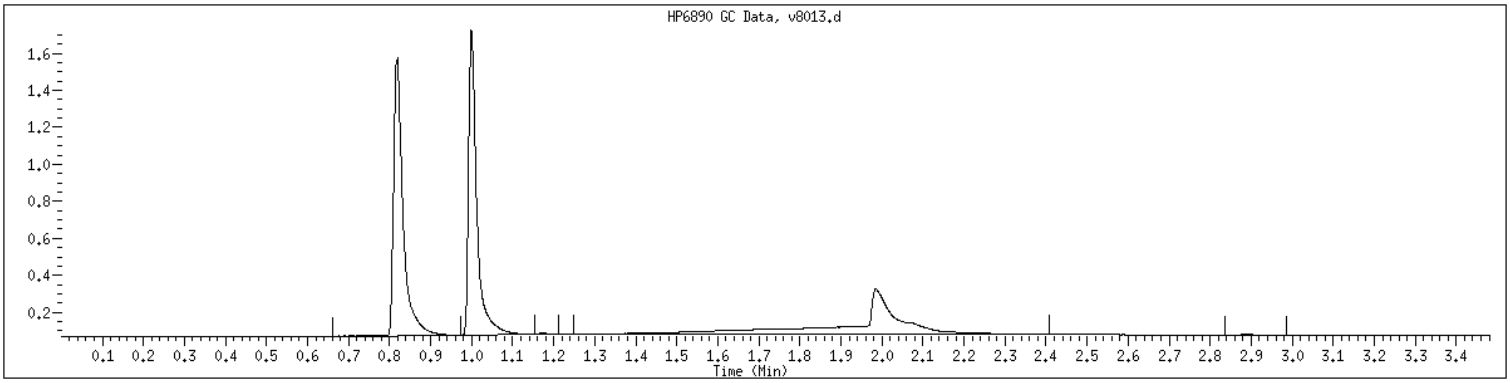
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8013.d Page: 1
Report Date: 07/11/2022 14:14

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 22207022903 SampleType : SAMPLE
Injection Date: 07/11/2022 14:04 Instrument : gcv8b.i
Operator : BDP
Sample Info : 22207022903*30
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 30.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Report No:	222070229	Client Sample ID:	16IW26-20629
Collect Date:	06/29/22 Time: 0840	GCAL Sample ID:	22207022904
Matrix:	Water % Moisture: NA	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8015
Injection Vol.:	1 (µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	50 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1422
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

CONCENTRATION UNITS: ug/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
124-38-9	Carbon Dioxide	465000		6350	19300	45000

FORM I ORG-1

Data File: /var/chem/gcv8b.i/2220711p.b/v8015.d Page 1
Report Date: 11-Jul-2022 14:47

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8015.d
Lab Smp Id: 22207022904
Inj Date : 11-JUL-2022 14:22
Operator : BDP Inst ID: gcv8b.i
Smp Info : 22207022904*50
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 13:58 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1
Dil Factor: 50.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Carbon Dioxide	0.992	1.014	-0.022	35063959	9294.92	465000

Data File: /var/chem/gcv8b.i/2220711p.b/v8015.d

Page 1

Date : 11-JUL-2022 14:22

Client ID:

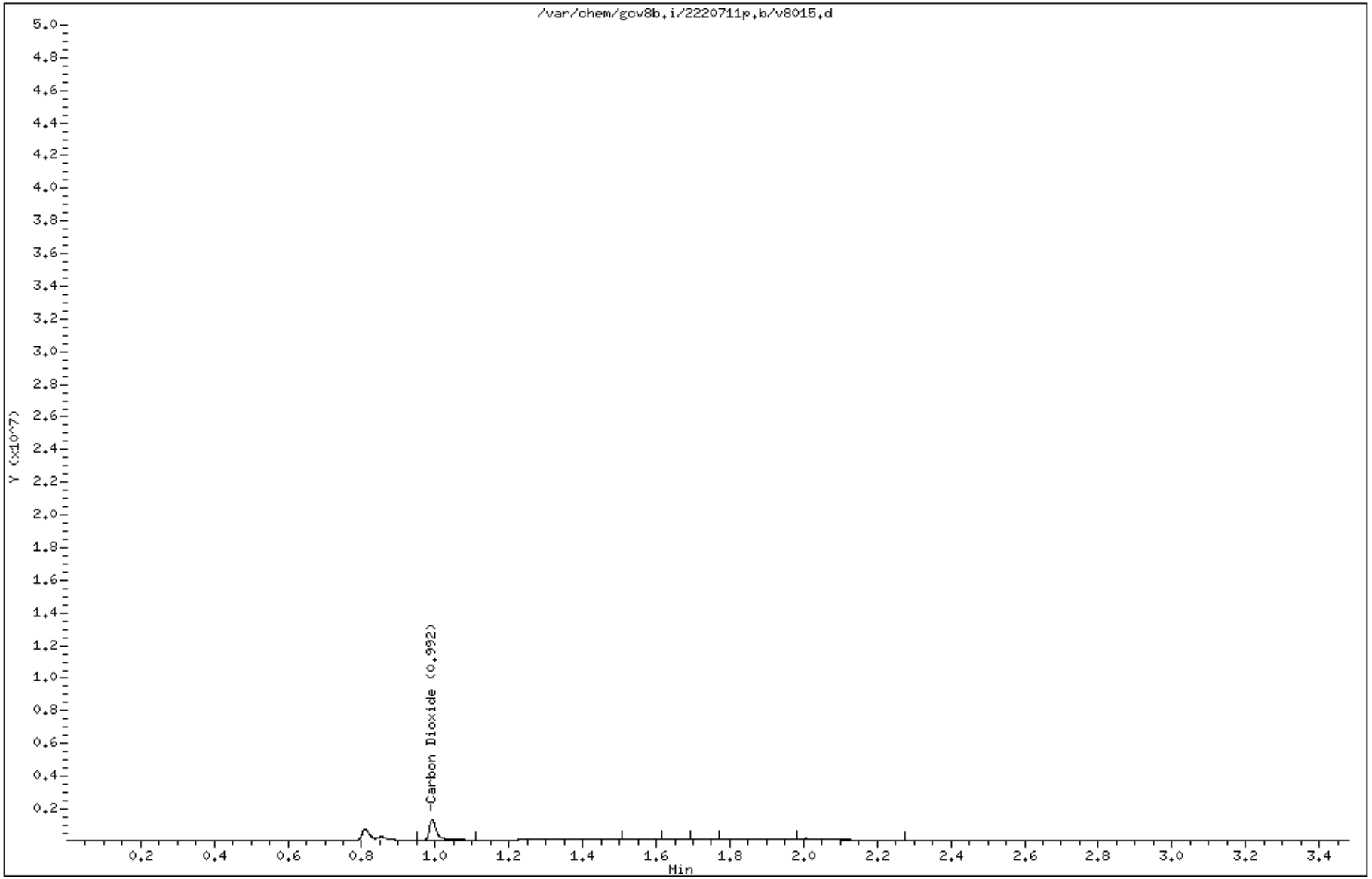
Instrument: gcv8b.i

Sample Info: 22207022904*50

Operator: BDP

Column phase: GS-Q-30

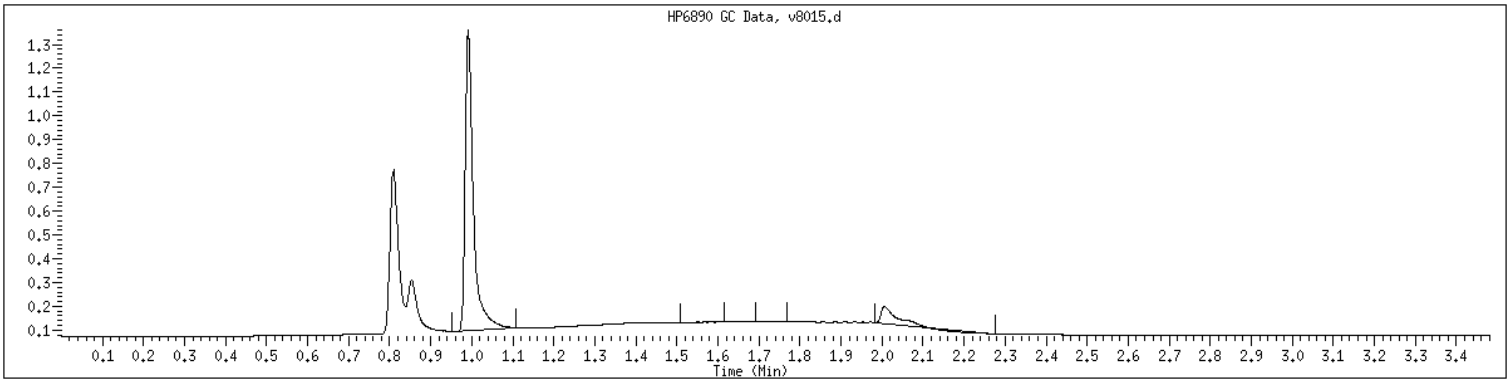
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8015.d Page: 1
Report Date: 07/11/2022 14:47

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 22207022904 SampleType : SAMPLE
Injection Date: 07/11/2022 14:22 Instrument : gcv8b.i
Operator : BDP
Sample Info : 22207022904*50
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 50.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Report No:	222070229	Client Sample ID:	16WW41-220629
Collect Date:	06/29/22 Time: 0930	GCAL Sample ID:	22207022905
Matrix:	Water % Moisture: NA	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8016
Injection Vol.:	1 (µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	30 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1447
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

CONCENTRATION UNITS: ug/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
124-38-9	Carbon Dioxide	462000		3810	11600	27000

FORM I ORG-1

Data File: /var/chem/gcv8b.i/2220711p.b/v8016.d Page 1
Report Date: 11-Jul-2022 15:02

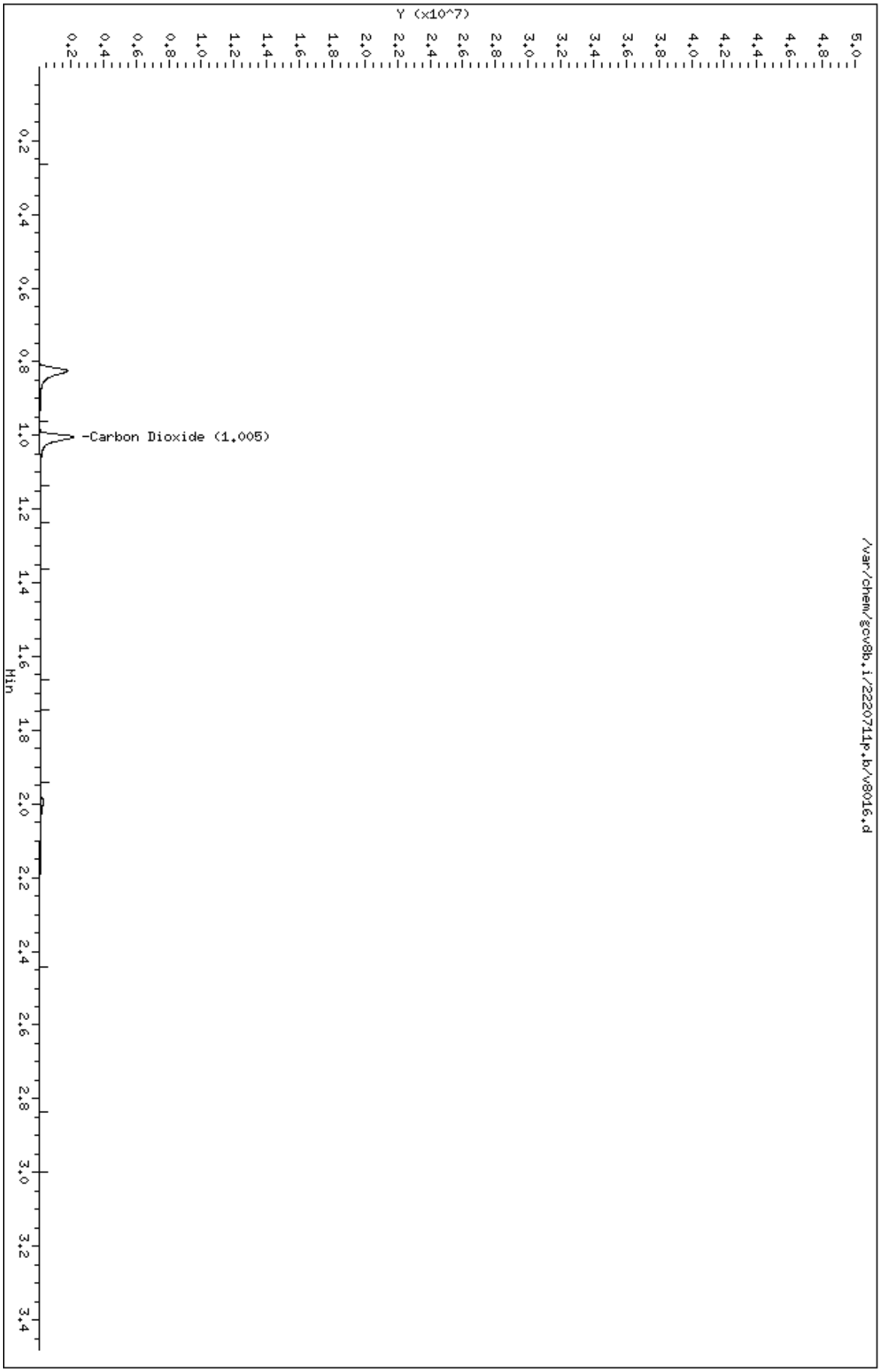
GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8016.d
Lab Smp Id: 22207022905
Inj Date : 11-JUL-2022 14:47
Operator : BDP Inst ID: gcv8b.i
Smp Info : 22207022905*30
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 13:58 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1
Dil Factor: 30.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

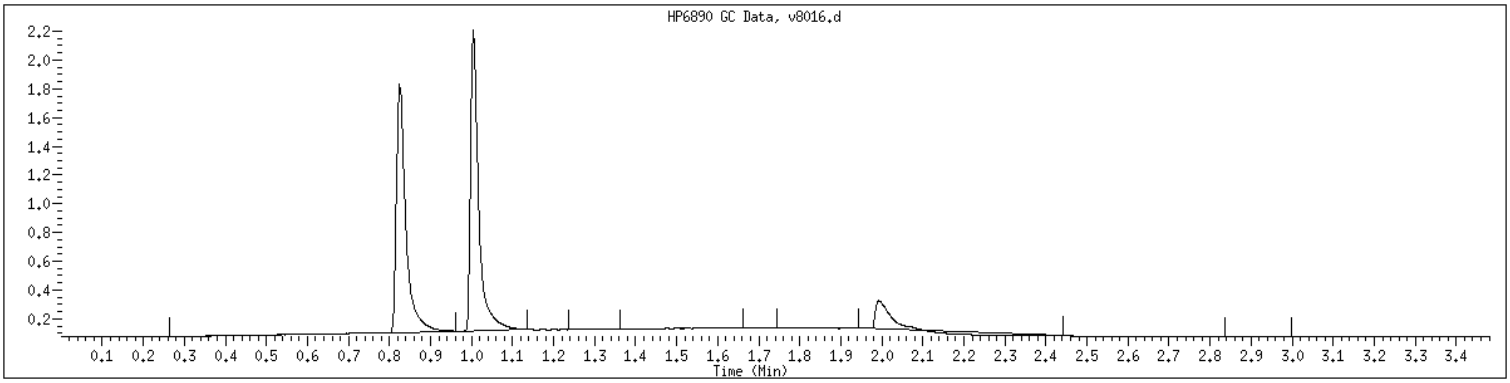
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Carbon Dioxide	1.005	1.014	-0.009	58073956	15394.5	462000


Data File: /var/chem/gcv8b.i/2220711p.b/v8016.d
Date : 11-JUL-2022 14:47
Client ID:
Sample Info: 222070229@5*30
Column phase: GS-Q-30
Instrument: gcv8b.i
Operator: BDP
Column diameter: 0.53
Page 1
Y (x10^7)
-Carbon Dioxide (1.005)
/var/chem/gcv8b.i/2220711p.b/v8016.d
Min

Data file : /var/chem/gcv8b.i/2220711p.b/v8016.d Page: 1
Report Date: 07/11/2022 15:02

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 22207022905 SampleType : SAMPLE
Injection Date: 07/11/2022 14:47 Instrument : gcv8b.i
Operator : BDP
Sample Info : 22207022905*30
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 30.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Report No:	222070229	Client Sample ID:	16WW41-220629-FD
Collect Date:	06/29/22 Time: 0930	GCAL Sample ID:	22207022906
Matrix:	Water % Moisture: NA	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8017
Injection Vol.:	1 (µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	30 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1503
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

CONCENTRATION UNITS: ug/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
124-38-9	Carbon Dioxide	418000		3810	11600	27000

FORM I ORG-1

Data File: /var/chem/gcv8b.i/2220711p.b/v8017.d Page 1
Report Date: 11-Jul-2022 15:15

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8017.d
Lab Smp Id: 22207022906
Inj Date : 11-JUL-2022 15:03
Operator : BDP Inst ID: gcv8b.i
Smp Info : 22207022906*30
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 13:58 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1
Dil Factor: 30.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Carbon Dioxide	1.003	1.014	-0.011	52542412	13928.2	418000

Data File: /var/chem/gcv8b.i/2220711p.b/v8017.d

Date : 11-JUL-2022 15:03

Client ID:

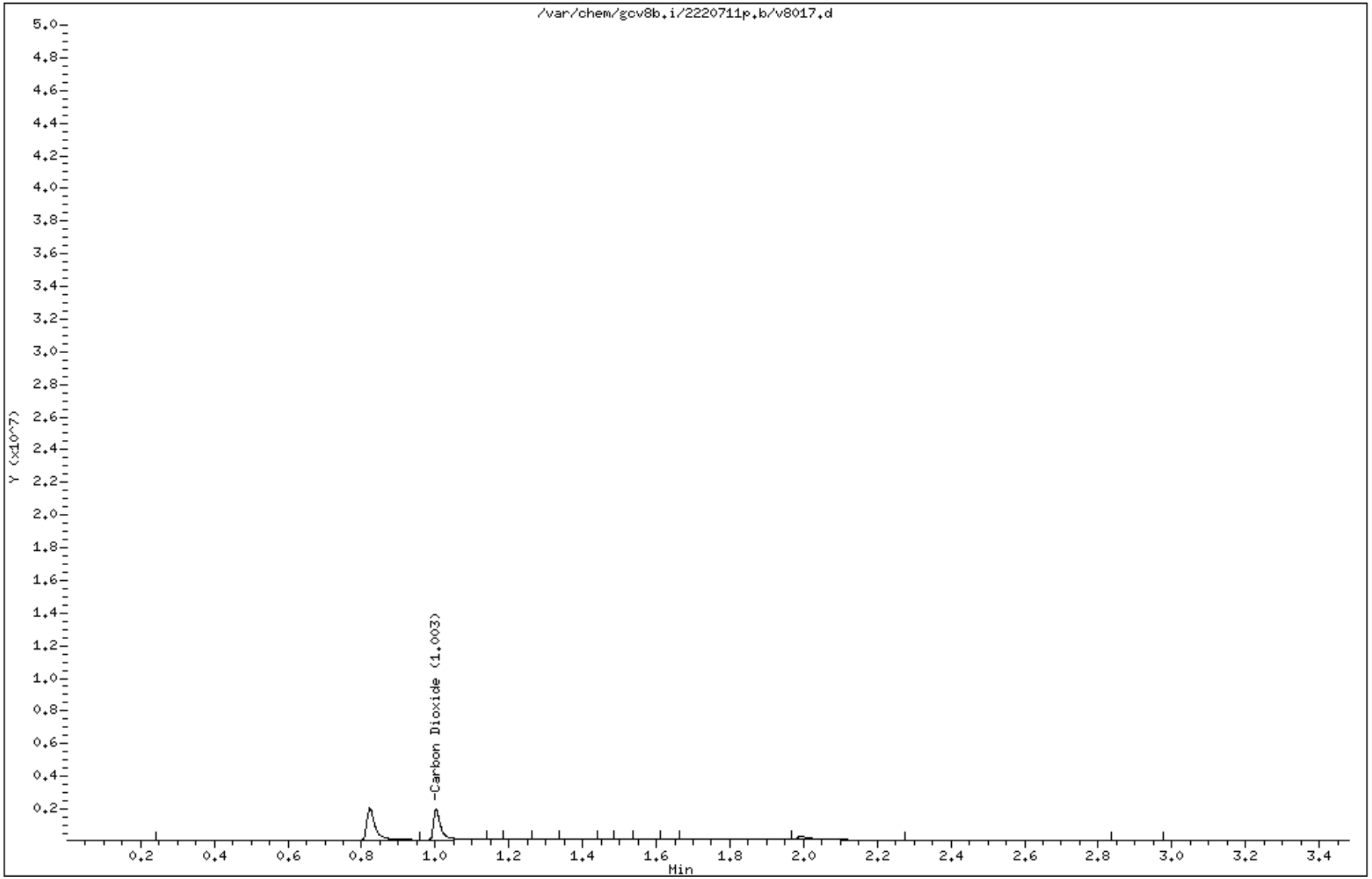
Instrument: gcv8b.i

Sample Info: 22207022906*30

Operator: BDP

Column phase: GS-Q-30

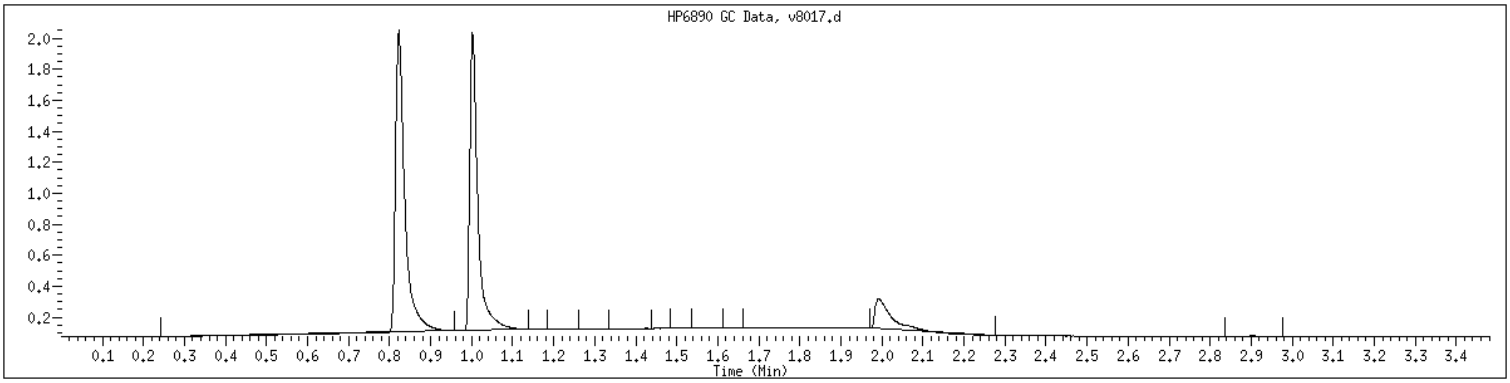
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8017.d Page: 1
Report Date: 07/11/2022 15:15

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 22207022906 SampleType : SAMPLE
Injection Date: 07/11/2022 15:03 Instrument : gcv8b.i
Operator : BDP
Sample Info : 22207022906*30
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 30.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Report No:	222070229	Client Sample ID:	16IW03-220629
Collect Date:	06/29/22 Time: 1240	GCAL Sample ID:	22207022907
Matrix:	Water % Moisture: NA	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8018
Injection Vol.:	1 (µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	30 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1512
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

CONCENTRATION UNITS: ug/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
124-38-9	Carbon Dioxide	497000		3810	11600	27000

FORM I ORG-1

Data File: /var/chem/gcv8b.i/2220711p.b/v8018.d Page 1
Report Date: 11-Jul-2022 15:26

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8018.d
Lab Smp Id: 22207022907
Inj Date : 11-JUL-2022 15:12
Operator : BDP Inst ID: gcv8b.i
Smp Info : 22207022907*30
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 13:58 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1
Dil Factor: 30.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Carbon Dioxide	1.001	1.014	-0.013	62498971	16567.5	497000

Data File: /var/chem/gcv8b.i/2220711p.b/v8018.d

Date : 11-JUL-2022 15:12

Client ID:

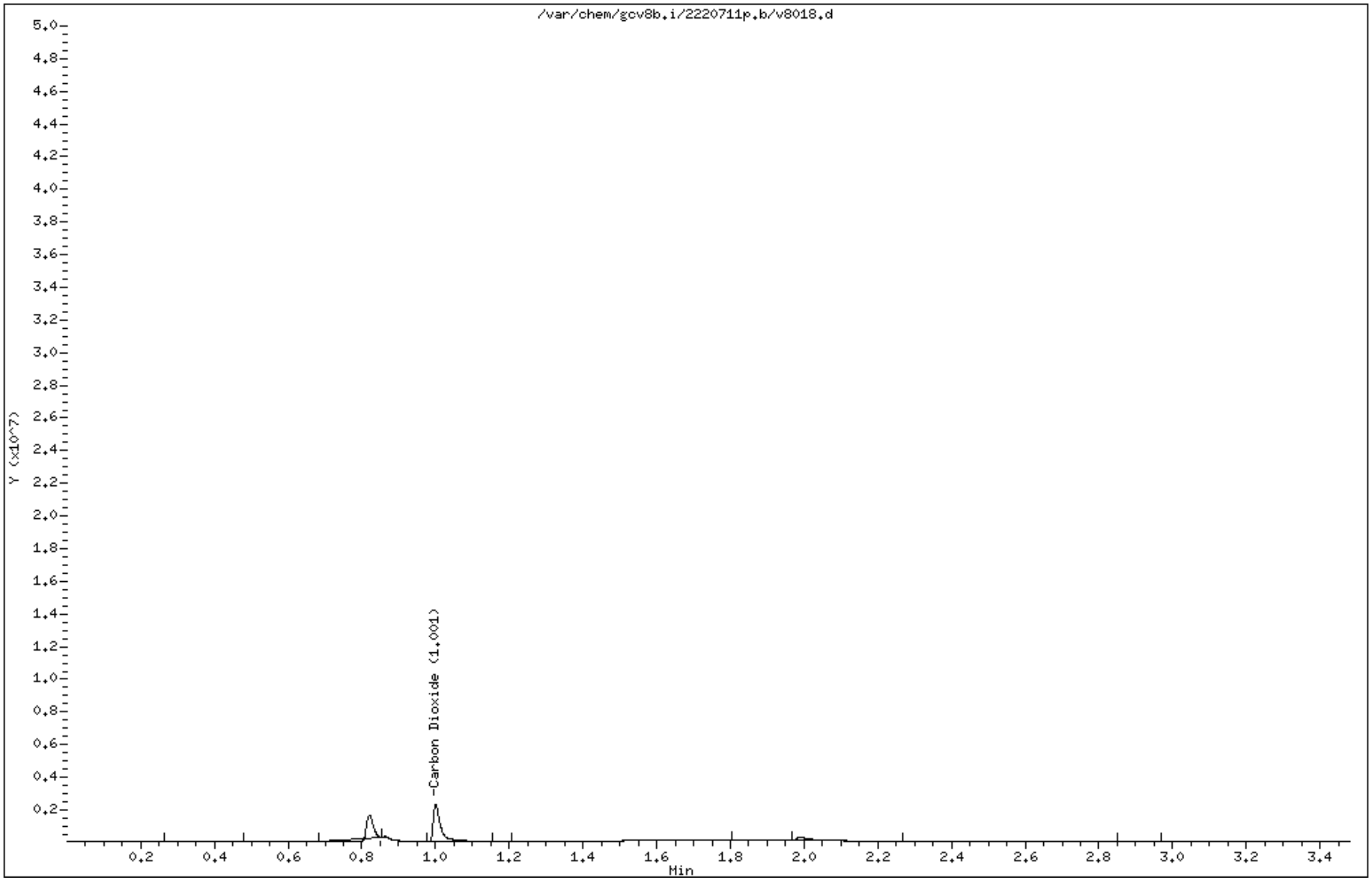
Instrument: gcv8b.i

Sample Info: 22207022907*30

Operator: BDP

Column phase: GS-Q-30

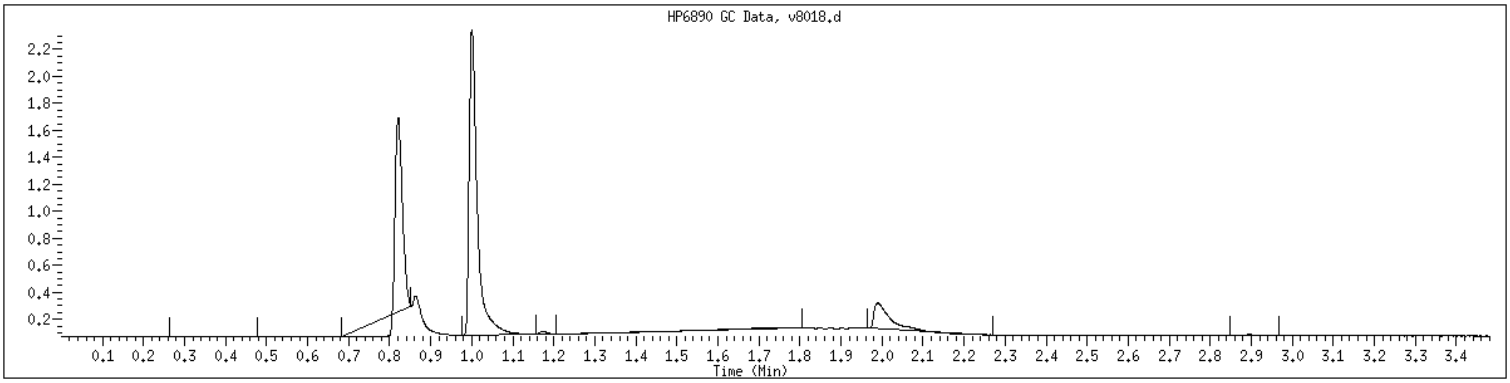
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8018.d Page: 1
Report Date: 07/11/2022 15:26

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 22207022907 SampleType : SAMPLE
Injection Date: 07/11/2022 15:12 Instrument : gcv8b.i
Operator : BDP
Sample Info : 22207022907*30
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 30.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Report No:	222070229	Client Sample ID:	MB2369016
Collect Date:	NA Time: NA	GCAL Sample ID:	2369016
Matrix:	Water % Moisture: NA	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8010
Injection Vol.:	1 (µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	1 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1339
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

CONCENTRATION UNITS: ug/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
124-38-9	Carbon Dioxide	386	U	127	386	900

FORM I ORG-1

Data File: /var/chem/gcv8b.i/2220711p.b/v8010.d Page 1
Report Date: 11-Jul-2022 16:03

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8010.d
Lab Smp Id: 2369016
Inj Date : 11-JUL-2022 13:39
Operator : BDP Inst ID: gcv8b.i
Smp Info : BLANK
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 15:46 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)

Data File: /var/chem/gcv8b.i/2220711p.b/v8010.d

Date : 11-JUL-2022 13:39

Client ID:

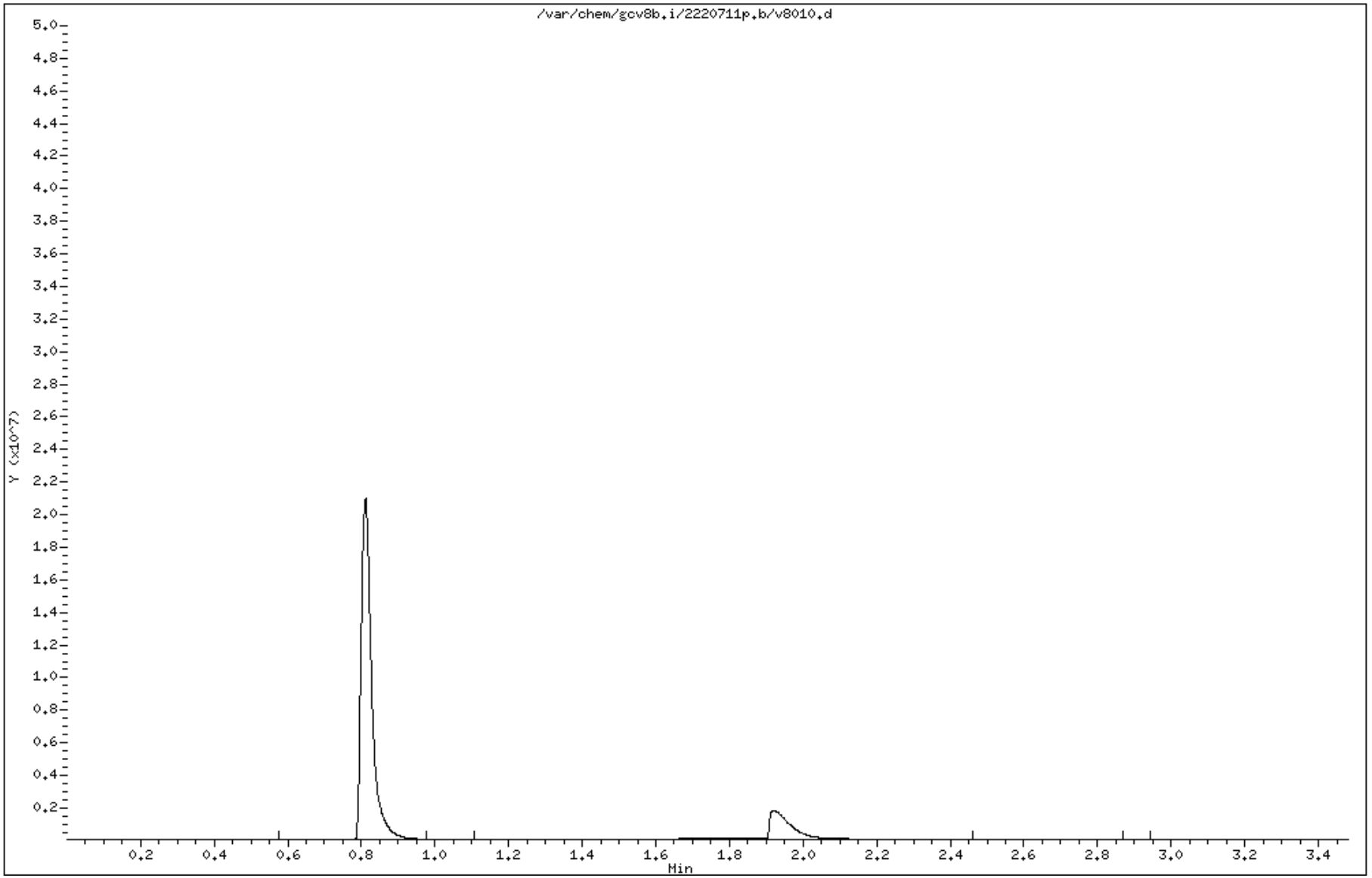
Instrument: gcv8b.i

Sample Info: BLANK

Operator: BDP

Column phase: GS-Q-30

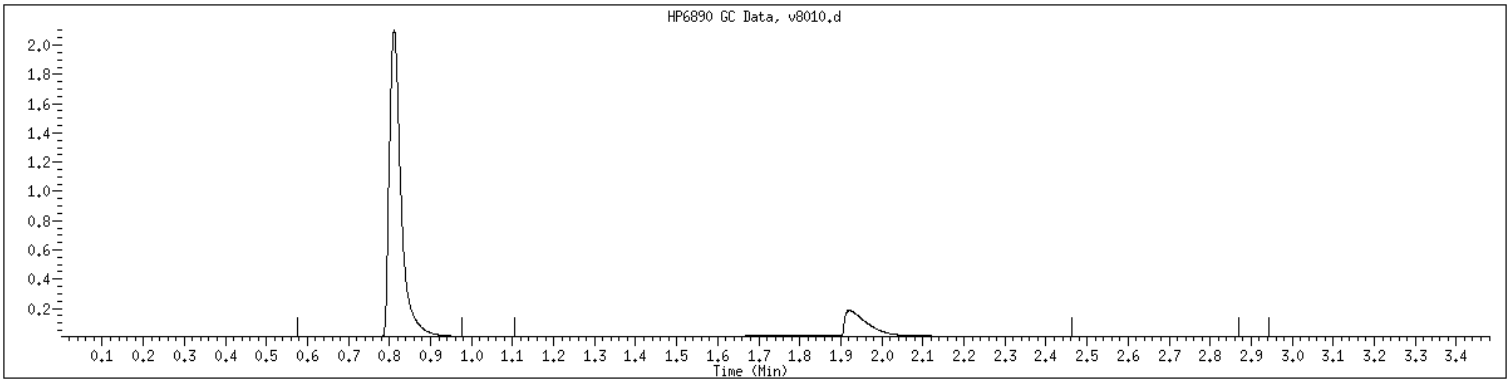
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8010.d Page: 1
Report Date: 07/11/2022 16:03

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 2369016	SampleType	: BLANK
Injection Date	: 07/11/2022 13:39	Instrument	: gcv8b.i
Operator	: BDP		
Sample Info	: BLANK		
Misc Info	: 2131877		
Method	: /var/chem/gcv8b.i/2220711p.b/CO2h.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: co2



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Report No:	222070229	Client Sample ID:	LCS2369017
Collect Date:	NA Time: NA	GCAL Sample ID:	2369017
Matrix:	Water % Moisture: NA	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8008
Injection Vol.:	1 (µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	1 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1325
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

CONCENTRATION UNITS: ug/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
124-38-9	Carbon Dioxide	9190		127	386	900

FORM I ORG-1

Data File: /var/chem/gcv8b.i/2220711p.b/v8008.d Page 1
Report Date: 11-Jul-2022 13:58

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8008.d
Lab Smp Id: 2369017
Inj Date : 11-JUL-2022 13:25
Operator : BDP Inst ID: gcv8b.i
Smp Info : LCS
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 13:58 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Carbon Dioxide	0.989	1.014	-0.025	34652282	9185.79	9180

Data File: /var/chem/gcv8b.i/2220711p.b/v8008.d

Date : 11-JUL-2022 13:25

Client ID:

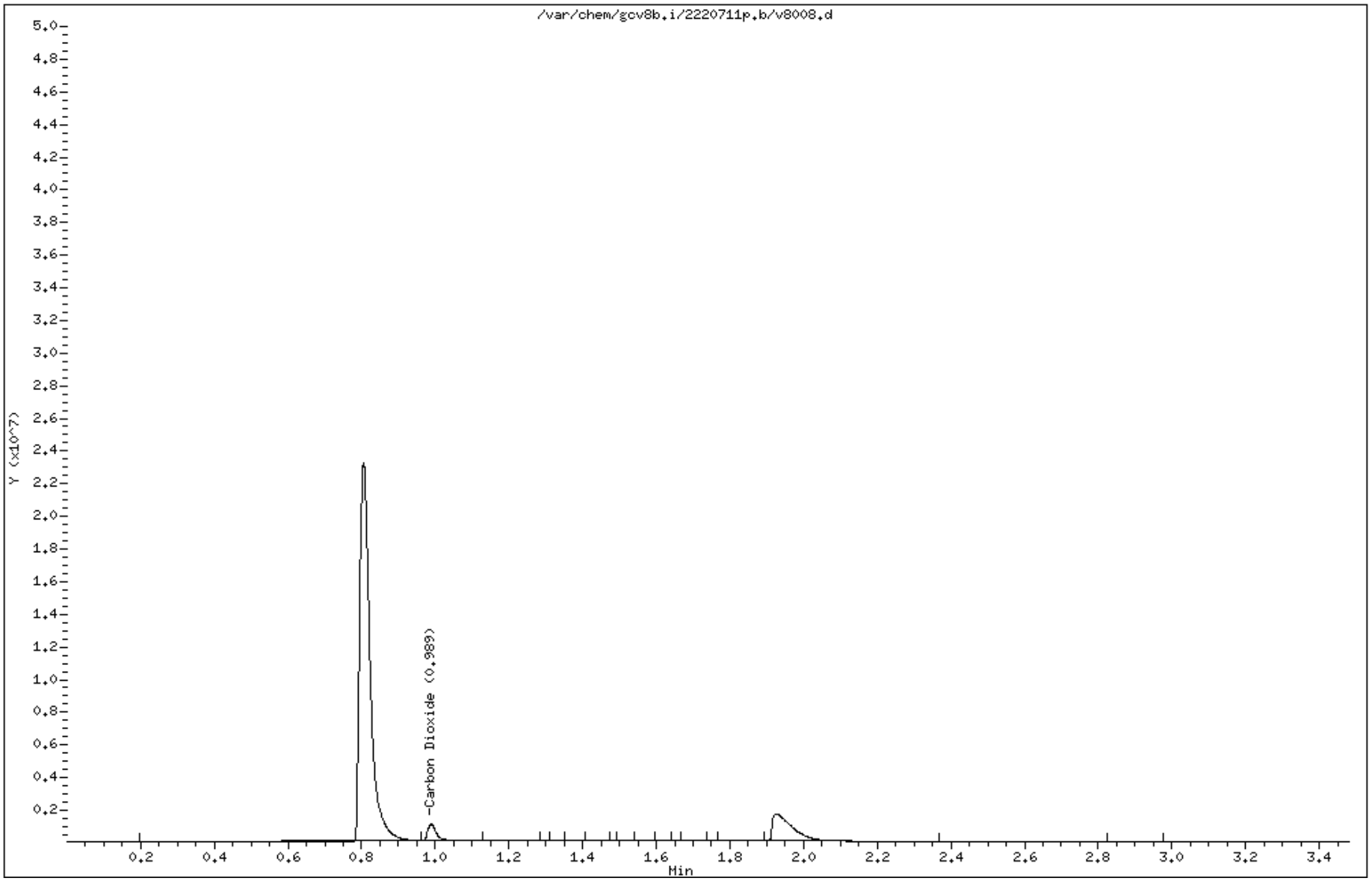
Instrument: gcv8b.i

Sample Info: LCS

Operator: BDP

Column phase: GS-Q-30

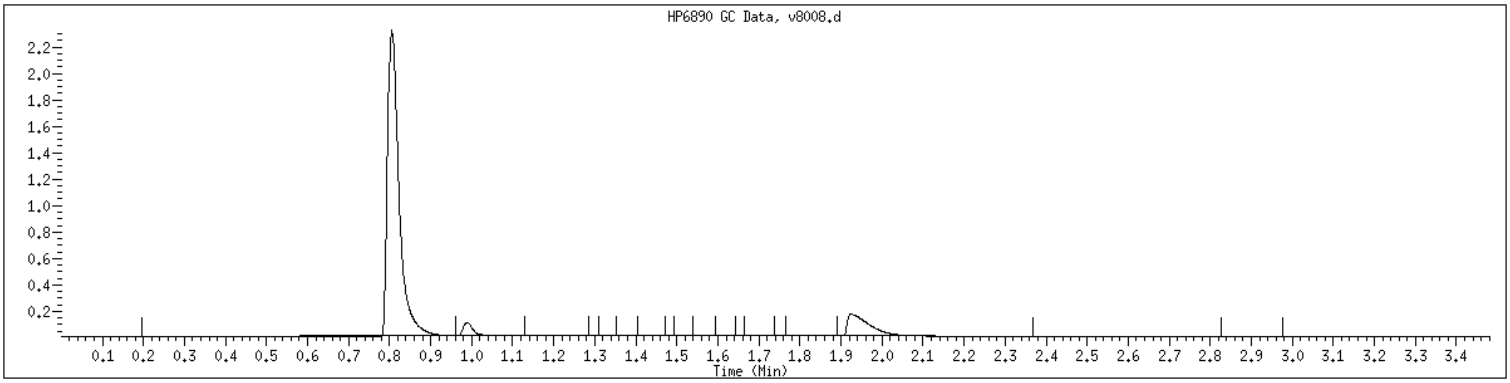
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8008.d Page: 1
Report Date: 07/11/2022 13:58

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 2369017	SampleType	: LCS
Injection Date	: 07/11/2022 13:25	Instrument	: gcv8b.i
Operator	: BDP		
Sample Info	: LCS		
Misc Info	: 2131877		
Method	: /var/chem/gcv8b.i/2220711p.b/CO2h.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: co2



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Report No:	222070229	Client Sample ID:	LCSD2369018
Collect Date:	NA Time: NA	GCAL Sample ID:	2369018
Matrix:	Water % Moisture: NA	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8009
Injection Vol.:	1 (µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	1 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1331
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

CONCENTRATION UNITS: ug/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
124-38-9	Carbon Dioxide	9360		127	386	900

FORM I ORG-1

Data File: /var/chem/gcv8b.i/2220711p.b/v8009.d Page 1
Report Date: 11-Jul-2022 13:58

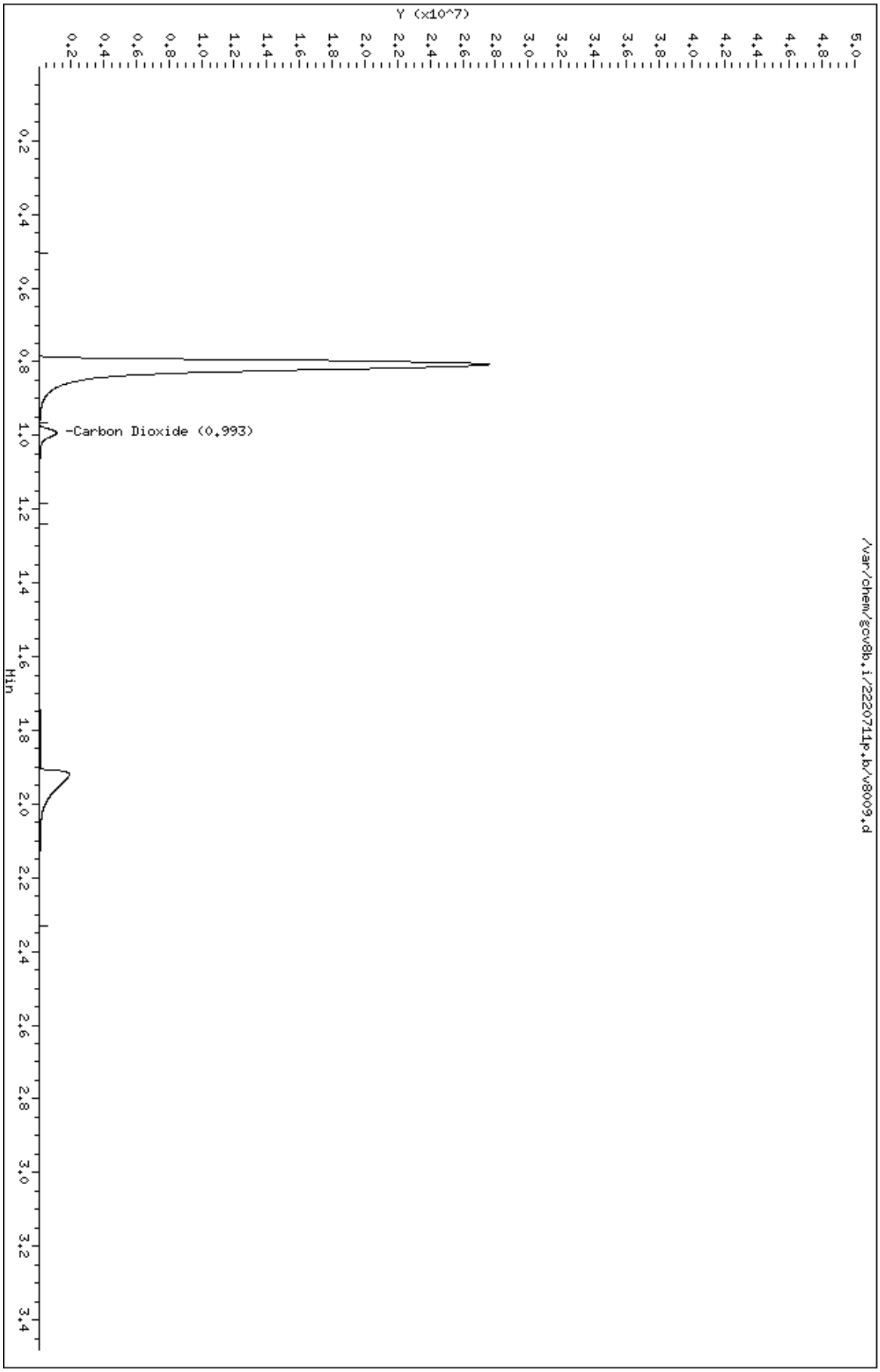
GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8009.d
Lab Smp Id: 2369018
Inj Date : 11-JUL-2022 13:31
Operator : BDP Inst ID: gcv8b.i
Smp Info : LCSD
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 13:58 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

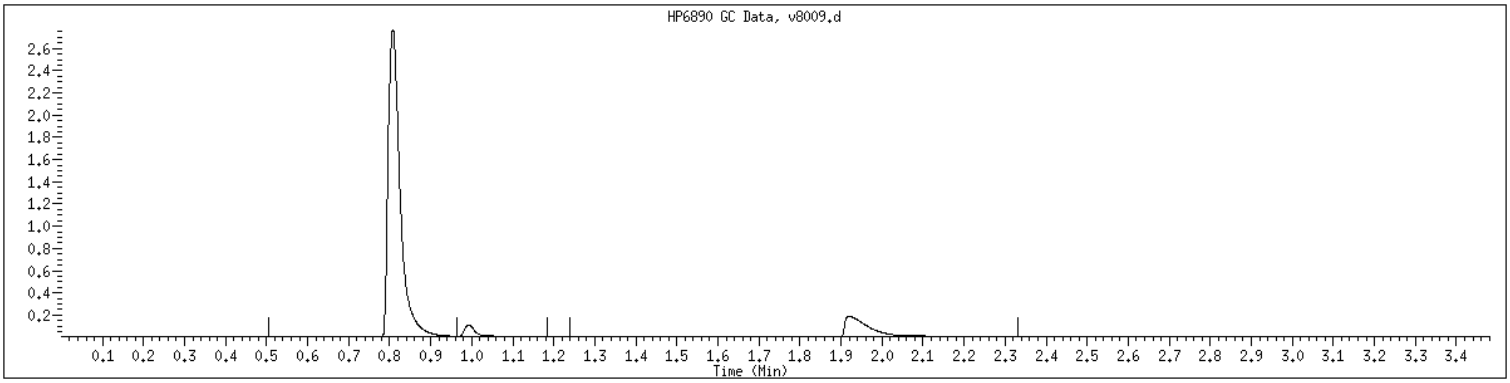
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Carbon Dioxide	0.993	1.014	-0.021	35296803	9356.64	9360


Data File: /var/chem/gcv8b.i/2220711p.b/v8009.d
Date : 11-JUL-2022 13:31
Client ID:
Sample Info: LCSD
Column phase: GS-Q-30
Instrument: gcv8b.i
Operator: BDP
Column diameter: 0.53
Page 1
Y (x10^7)
-Carbon Dioxide (0.993)
/var/chem/gcv8b.i/2220711p.b/v8009.d
Min

Data file : /var/chem/gcv8b.i/2220711p.b/v8009.d Page: 1
Report Date: 07/11/2022 13:58

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 2369018	SampleType	: LCSD
Injection Date	: 07/11/2022 13:31	Instrument	: gcv8b.i
Operator	: BDP		
Sample Info	: LCSD		
Misc Info	: 2131877		
Method	: /var/chem/gcv8b.i/2220711p.b/CO2h.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: co2



NO MANUAL INTEGRATIONS

EPA RSK-175

Form 3E

Spikes

3E

WATER ORGANICS LCS/LCSD RECOVERY

Report No: 222070229

Prep Method: NA | Prep Batch: NA

Analytical Method: RSK-175 | Analytical Batch: 745070

GCAL QC ID: 2369017

ANALYTE	UNITS	SPIKE ADDED	SAMPLE RESULT	LCS RESULT	LCS % REC	#	QC LIMITS
Carbon Dioxide	ug/L	8700	0	9190	106		38 - 147

GCAL QC ID: 2369018

ANALYTE	UNITS	SPIKE ADDED	LCSD RESULT	LCSD % REC	#	% RPD	#	QC LIMITS REC	QC LIMITS RPD
Carbon Dioxide	ug/L	8700	9360	108		2		38 - 147	0 - 40

RPD : 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

FORM III ORG-1

EPA RSK-175

Form 4C

Method Blanks

4C

ORGANIC METHOD BLANK SUMMARY

Report No:	222070229	Method Blank ID:	2369016
Matrix:	Water	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8010
Injection Vol.:	(µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	1 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1339
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

	CLIENT SAMPLE ID	GCAL SAMPLE ID	DATE ANALYZED	TIME ANALYZED	INSTRUMENT ID
1.	LCS2369017	2369017	07/11/22	1325	GCV8B
2.	LCSD2369018	2369018	07/11/22	1331	GCV8B
3.	16EW03-220629	22207022901	07/11/22	1351	GCV8B
4.	16EW02-220629	22207022902	07/11/22	1357	GCV8B
5.	16EW02-220629-FD	22207022903	07/11/22	1404	GCV8B
6.	16IW26-20629	22207022904	07/11/22	1422	GCV8B
7.	16WW41-220629	22207022905	07/11/22	1447	GCV8B
8.	16WW41-220629-FD	22207022906	07/11/22	1503	GCV8B
9.	16IW03-220629	22207022907	07/11/22	1512	GCV8B

EPA RSK-175

Form 6E

Calibrations

6E

ORGANICS INITIAL CALIBRATION DATA

				LabQC ID - FileID - Conc	1201 ~ 2220711p/v8006 ~ mix	
Report No:	222070229	Instrument ID:	GCV8B	1202 ~ 2220711p/v8002 ~ mix	1203 ~ 2220711p/v8003 ~ mix	
GC Column:	GS-Q-30 ID .53 (mm)	Analyst:	BDP	1204 ~ 2220711p/v8004 ~ mix	1205 ~ 2220711p/v8005 ~ mix	
Calib. Date 1:	07/11/22 Time 1: 1112	Analytical Batch:	745070			
Calib. Date 2:	07/11/22 Time 2: 1151	Analytical Method:	RSK-175			

ANALYTE	*1201*	*1202*	*1203*	*1204*	*1205*	*1206*	*1207*	*1208*	*1209*	*$\overline{RF}$ / m / A*	*b / B*	*C*	*FIT*	*TYPE*
Carbon Dioxide	2973	3081	4170	4306	4333					3772			18.14	A

FIT = %RSD for Average Curve and the Coefficient of Determination (r2) for Linear and Quadratic

Curve Types: A - Averaged, L - Linear Regression, W - Weighted Linear, Q - Quadratic

For curve types L and Q, the RRF and RSP (Response) are shown on separate lines to allow for evaluation against minimum RRF

$\overline{RF}$ = Mean Response Factor For Average Curve

m,b = Slope and Intercept For Linear Curve

A,B,C = Coefficents For Quadratic Curve

FORM V I SVOA

Data File: /var/chem/gcv8b.i/2220711p.b/v8006.d Page 1
Report Date: 11-Jul-2022 16:07

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8006.d
Lab Smp Id: 1201
Inj Date : 11-JUL-2022 11:51
Operator : BDP Inst ID: gcv8b.i
Smp Info : 1201
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 16:07 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Carbon Dioxide	1.014	1.014	0.000	2568676	864.000	681

Data File: /var/chem/gcv8b.i/2220711p.b/v8006.d

Date : 11-JUL-2022 11:51

Client ID:

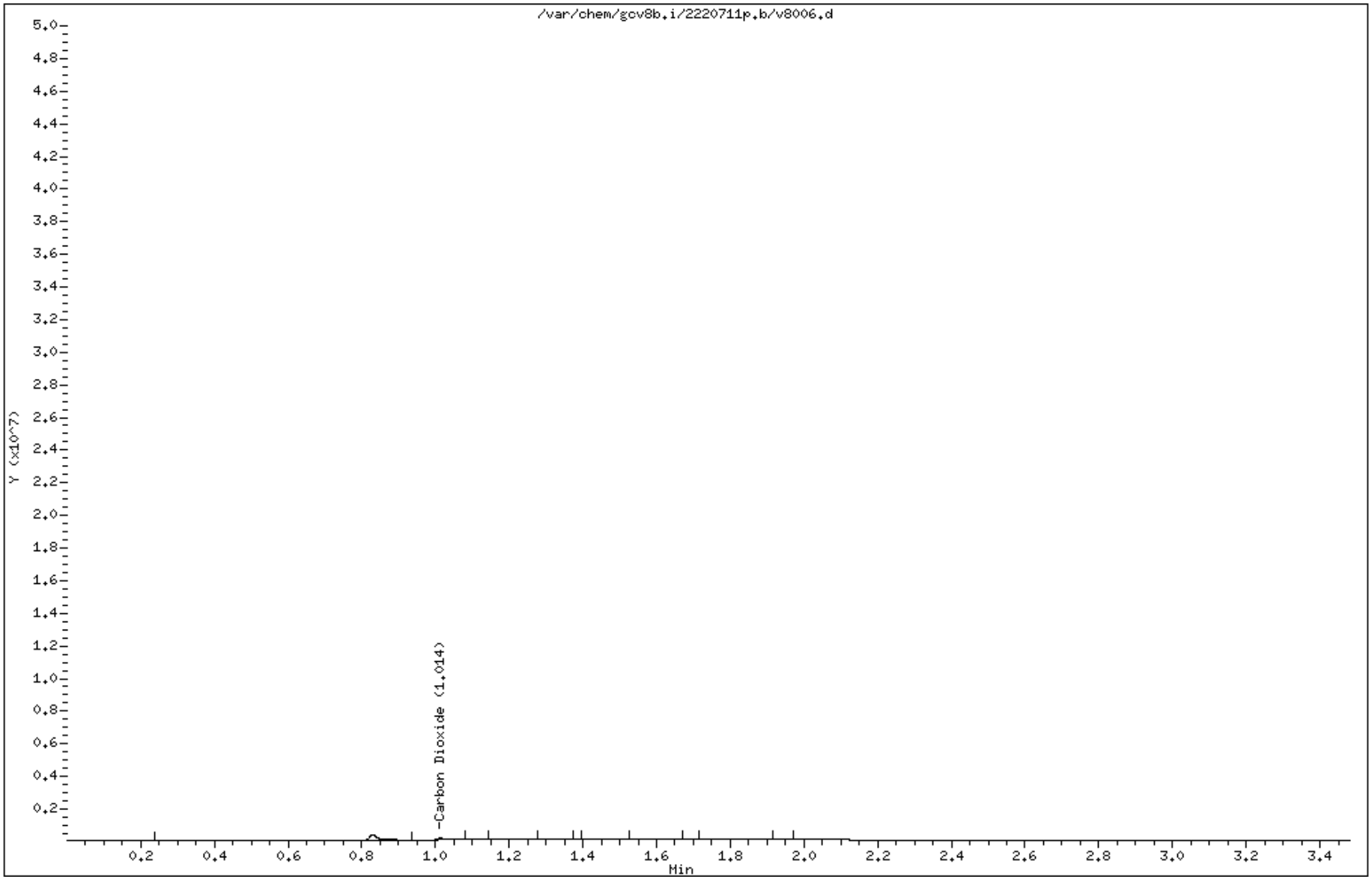
Instrument: gcv8b.i

Sample Info: 1201

Operator: BDP

Column phase: GS-Q-30

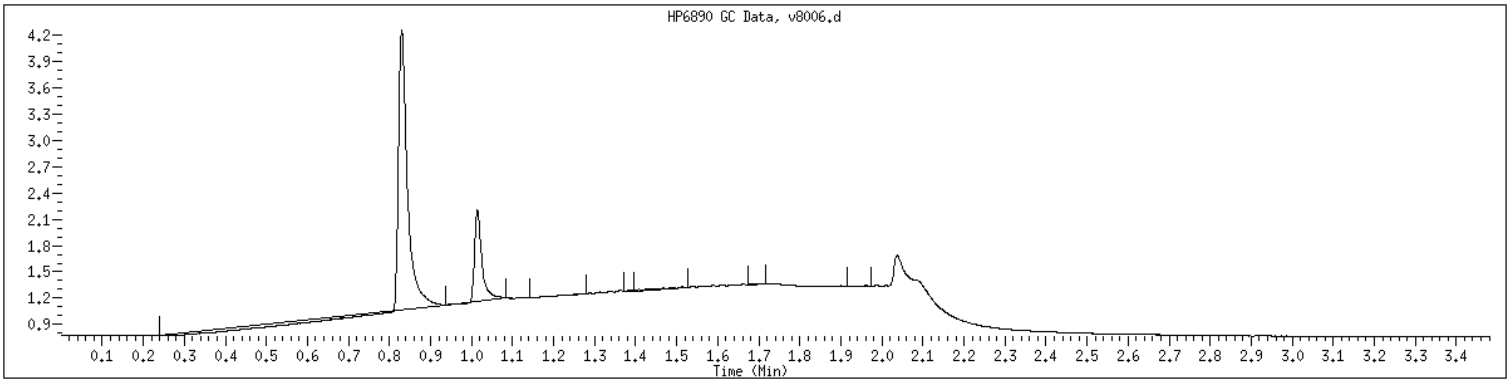
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8006.d Page: 1
Report Date: 07/11/2022 16:07

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 1201 SampleType : CALIB_1
Injection Date: 07/11/2022 11:51 Instrument : gcv8b.i
Operator : BDP
Sample Info : 1201
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 1.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

Data File: /var/chem/gcv8b.i/2220711p.b/v8002.d Page 1
Report Date: 11-Jul-2022 16:07

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8002.d
Lab Smp Id: 1202
Inj Date : 11-JUL-2022 11:12
Operator : BDP Inst ID: gcv8b.i
Smp Info : 1202
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 16:07 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:12 Cal File: v8002.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Carbon Dioxide	1.022	1.022	0.000	5329358	1730.00	1410

Data File: /var/chem/gcv8b.i/2220711p.b/v8002.d

Date : 11-JUL-2022 11:12

Client ID:

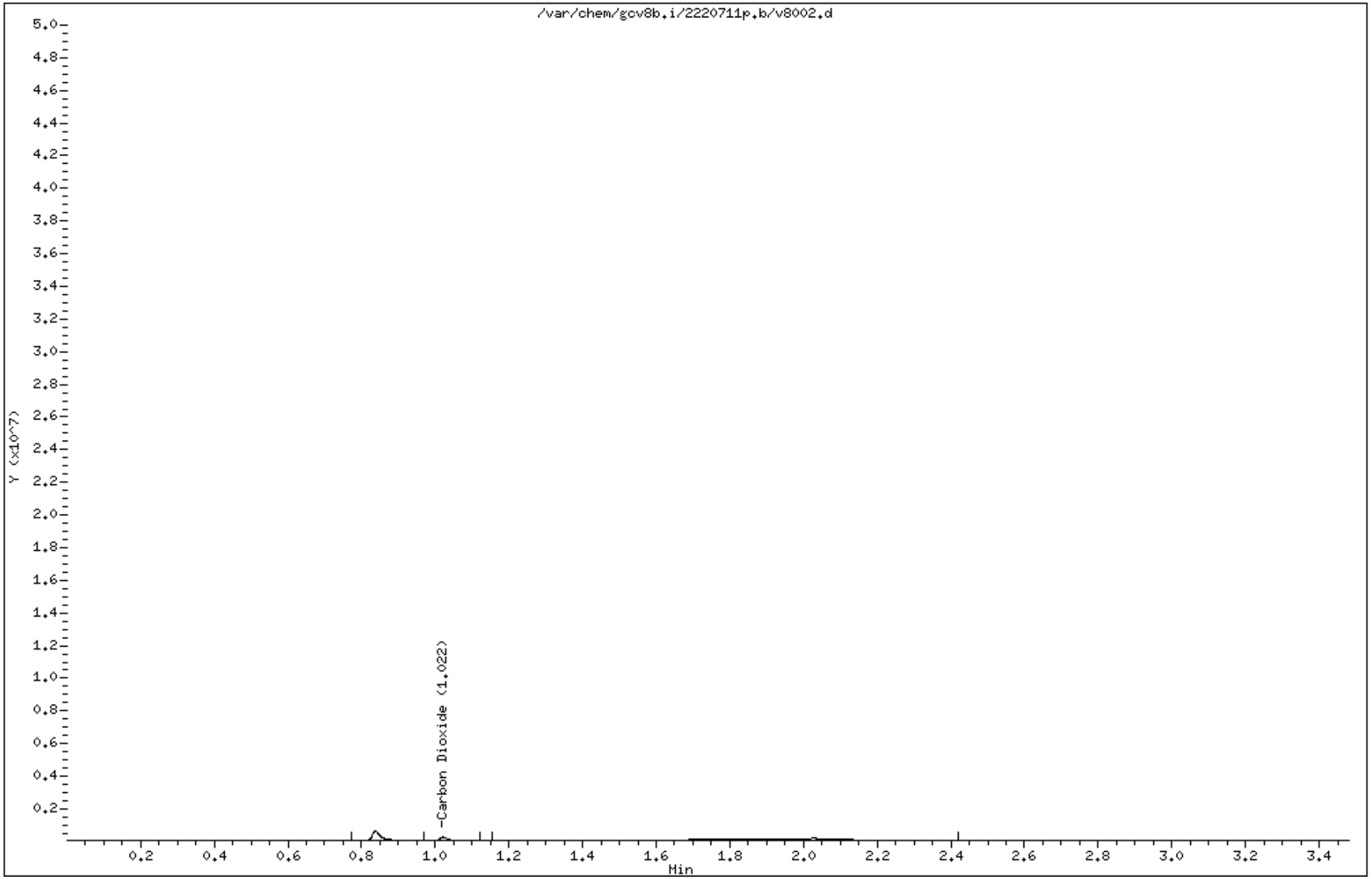
Instrument: gcv8b.i

Sample Info: 1202

Operator: BDP

Column phase: GS-Q-30

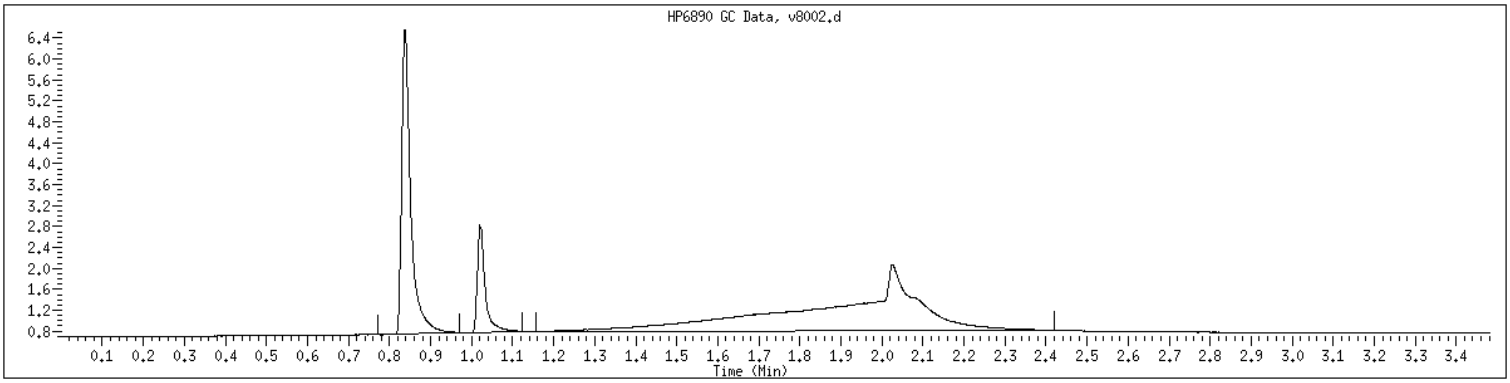
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8002.d Page: 1
Report Date: 07/11/2022 16:07

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 1202 SampleType : CALIB_2
Injection Date: 07/11/2022 11:12 Instrument : gcv8b.i
Operator : BDP
Sample Info : 1202
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 1.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

Data File: /var/chem/gcv8b.i/2220711p.b/v8003.d Page 1
Report Date: 11-Jul-2022 16:07

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8003.d
Lab Smp Id: 1203
Inj Date : 11-JUL-2022 11:20
Operator : BDP Inst ID: gcv8b.i
Smp Info : 1203
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 16:07 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:20 Cal File: v8003.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Carbon Dioxide	1.019	1.019	0.000	36025080	8640.00	9550

Data File: /var/chem/gcv8b.i/2220711p.b/v8003.d

Page 1

Date : 11-JUL-2022 11:20

Client ID:

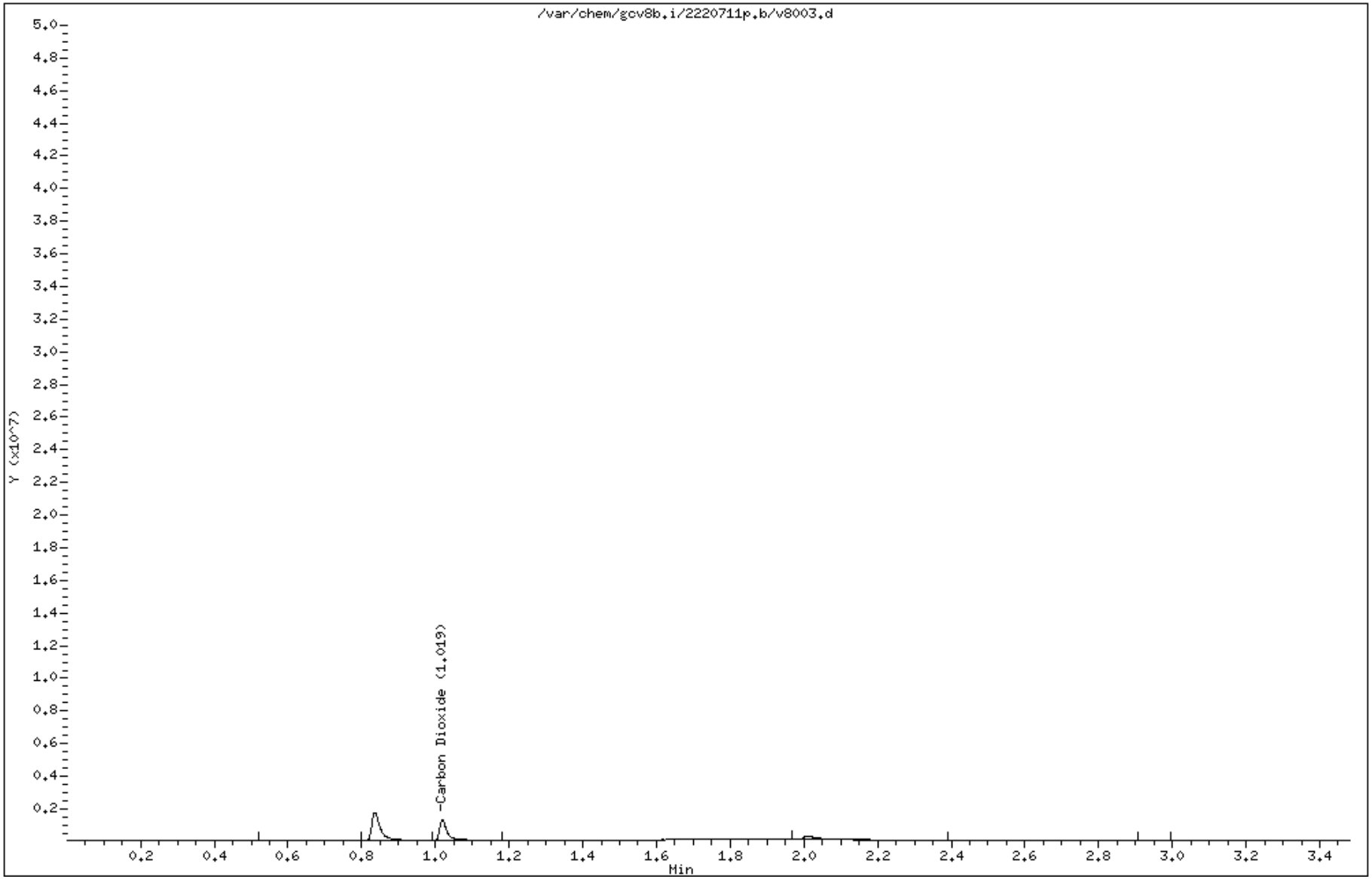
Instrument: gcv8b.i

Sample Info: 1203

Operator: BDP

Column phase: GS-Q-30

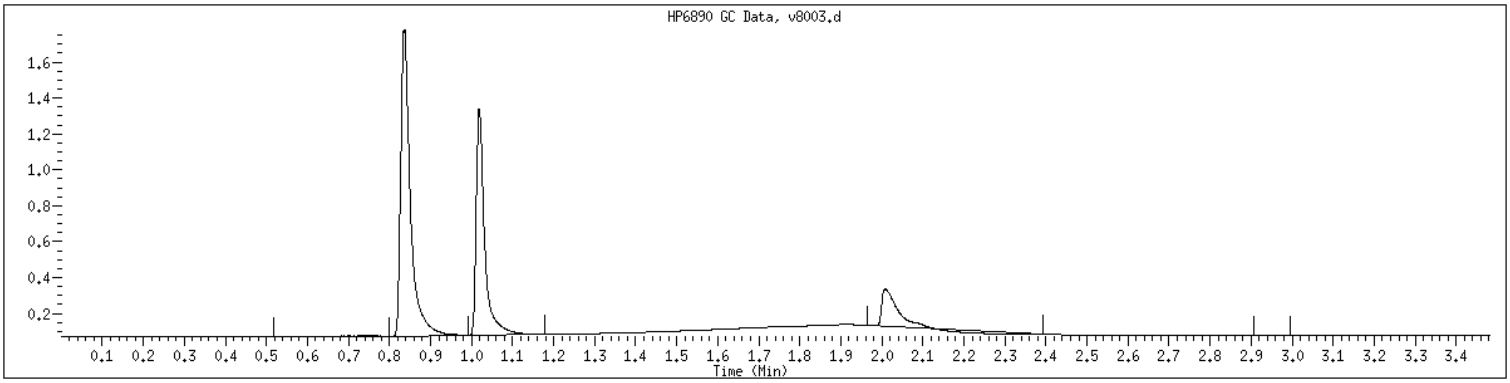
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8003.d Page: 1
Report Date: 07/11/2022 16:07

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 1203 SampleType : CALIB_3
Injection Date: 07/11/2022 11:20 Instrument : gcv8b.i
Operator : BDP
Sample Info : 1203
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 1.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

Data File: /var/chem/gcv8b.i/2220711p.b/v8004.d Page 1
Report Date: 11-Jul-2022 16:07

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8004.d
Lab Smp Id: 1204
Inj Date : 11-JUL-2022 11:27
Operator : BDP Inst ID: gcv8b.i
Smp Info : 1204
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 16:07 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:27 Cal File: v8004.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Carbon Dioxide	1.018	1.018	0.000	59417265	13800.0	15800

Data File: /var/chem/gcv8b.i/2220711p.b/v8004.d

Page 1

Date : 11-JUL-2022 11:27

Client ID:

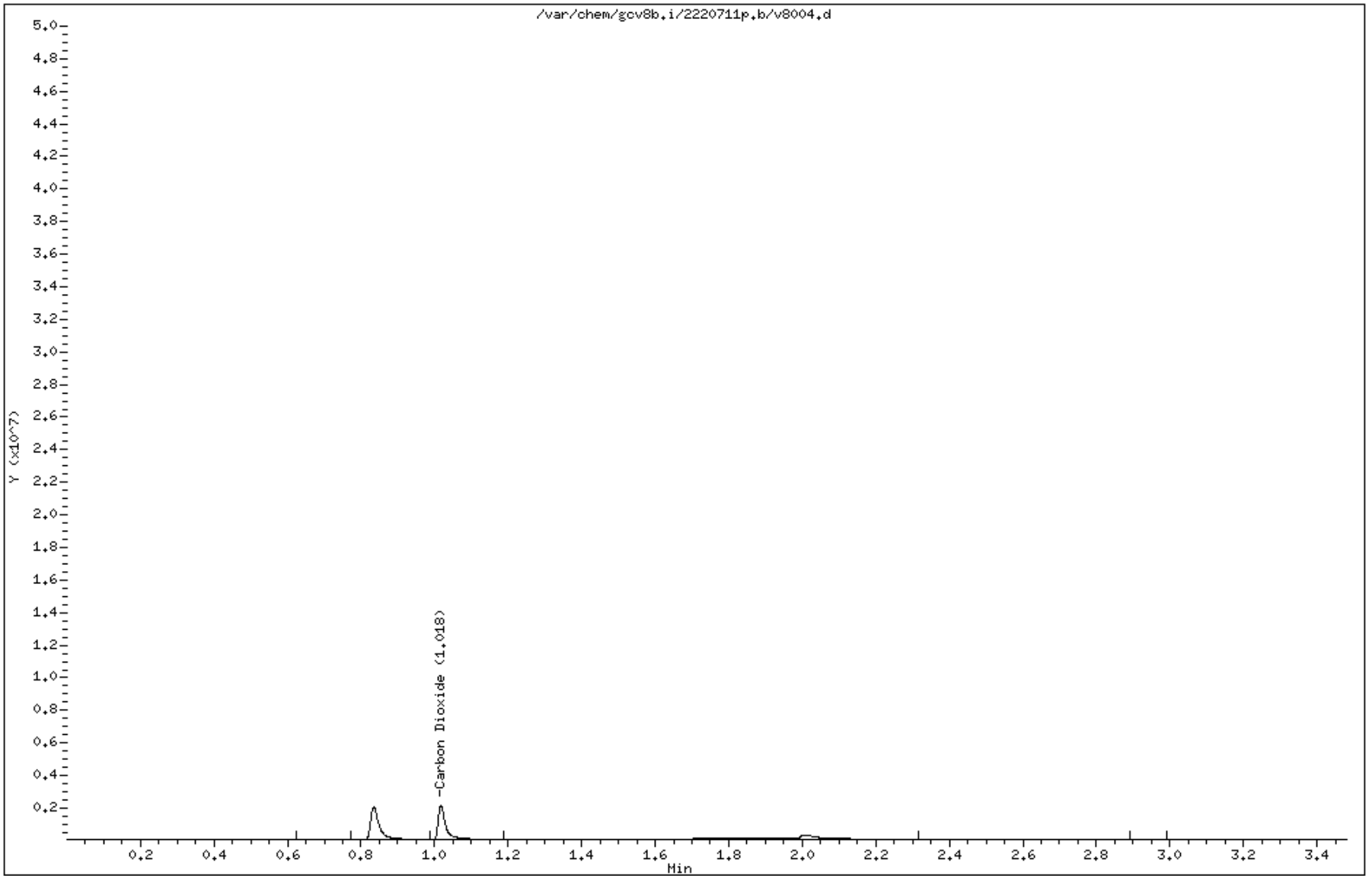
Instrument: gcv8b.i

Sample Info: 1204

Operator: BDP

Column phase: GS-Q-30

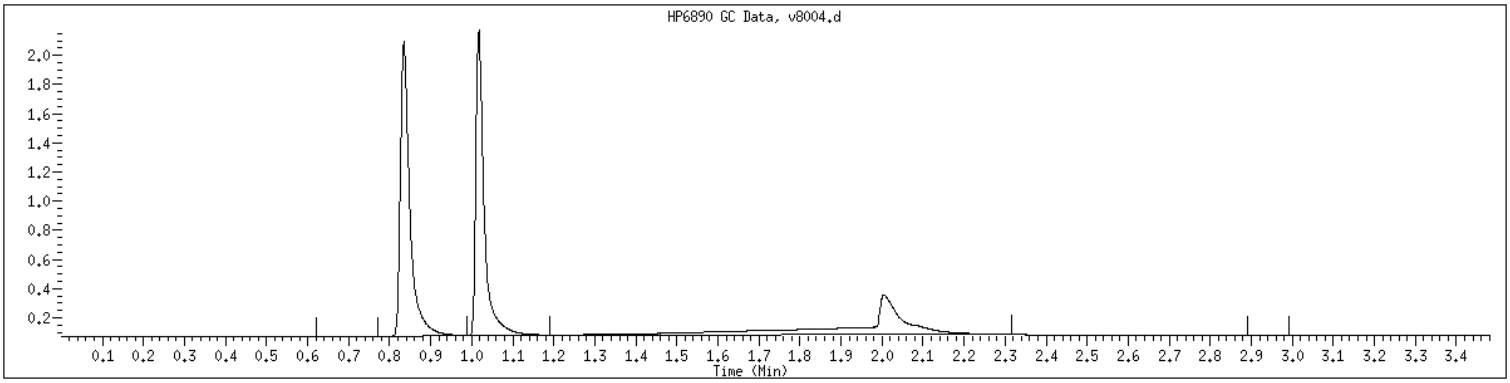
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8004.d Page: 1
Report Date: 07/11/2022 16:07

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1204	SampleType	: CALIB_4
Injection Date	: 07/11/2022 11:27	Instrument	: gcv8b.i
Operator	: BDP		
Sample Info	: 1204		
Misc Info	: 2131877		
Method	: /var/chem/gcv8b.i/2220711p.b/CO2h.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: co2



NO MANUAL INTEGRATIONS

Data File: /var/chem/gcv8b.i/2220711p.b/v8005.d Page 1
Report Date: 11-Jul-2022 16:07

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8005.d
Lab Smp Id: 1205
Inj Date : 11-JUL-2022 11:33
Operator : BDP Inst ID: gcv8b.i
Smp Info : 1205
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 16:07 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:33 Cal File: v8005.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Carbon Dioxide	1.010	1.010	0.000	74963821	17300.0	19900

Data File: /var/chem/gcv8b.i/2220711p.b/v8005.d

Date : 11-JUL-2022 11:33

Client ID:

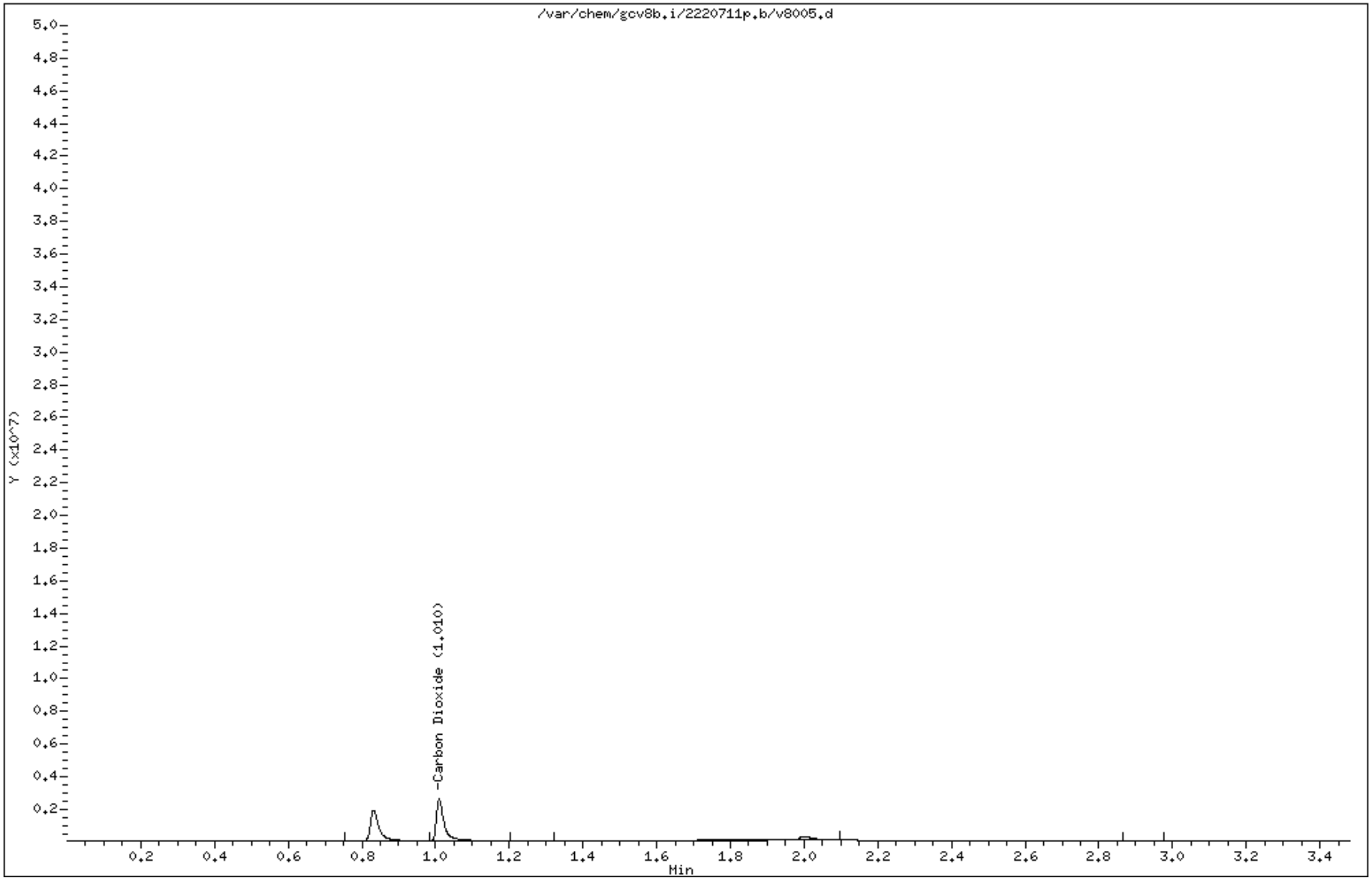
Instrument: gcv8b.i

Sample Info: 1205

Operator: BDP

Column phase: GS-Q-30

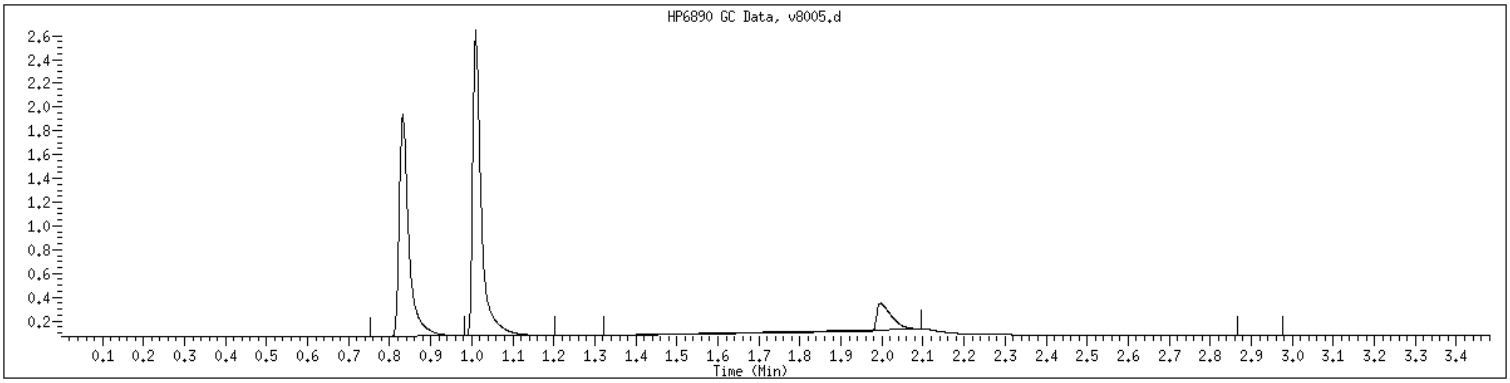
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8005.d Page: 1
Report Date: 07/11/2022 16:07

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 1205 SampleType : CALIB_5
Injection Date: 07/11/2022 11:33 Instrument : gcv8b.i
Operator : BDP
Sample Info : 1205
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 1.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

EPA RSK-175

Form 6I

ICAL Verifications

6I

ORGANICS INITIAL CALIBRATION VERIFICATION

Report No:	222070229	Instrument ID:	GCV8B
Analysis Date:	07/11/22 1159	Lab File ID:	2220711p/v8007
Analytical Method:	EPA RSK-175	Analytical Batch:	745070

ANALYTE	*UNITS*	*TRUE*	*FOUND*	*%REC*	*LCL*	*UCL*	*Q*
Carbon Dioxide	ug/L	8700	10000	115	80	120	

Data File: /var/chem/gcv8b.i/2220711p.b/v8007.d Page 1
Report Date: 11-Jul-2022 16:07

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8007.d
Lab Smp Id: 1600
Inj Date : 11-JUL-2022 11:59
Operator : BDP Inst ID: gcv8b.i
Smp Info : 1600
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 16:07 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Carbon Dioxide	1.016	1.014	0.002	37802793	10020.9	10000

Data File: /var/chem/gcv8b.i/2220711p.b/v8007.d

Page 1

Date : 11-JUL-2022 11:59

Client ID:

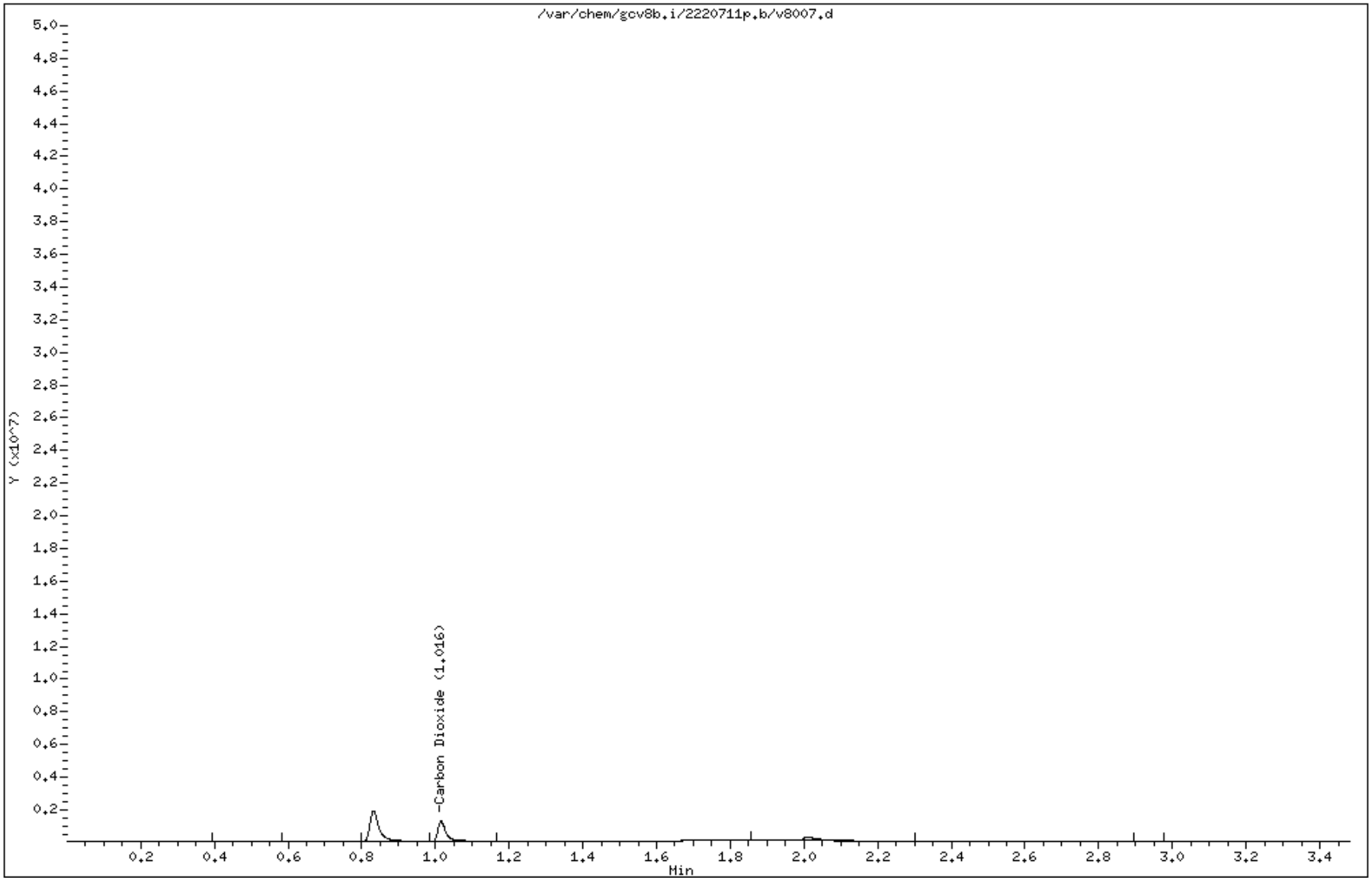
Instrument: gcv8b.i

Sample Info: 1600

Operator: BDP

Column phase: GS-Q-30

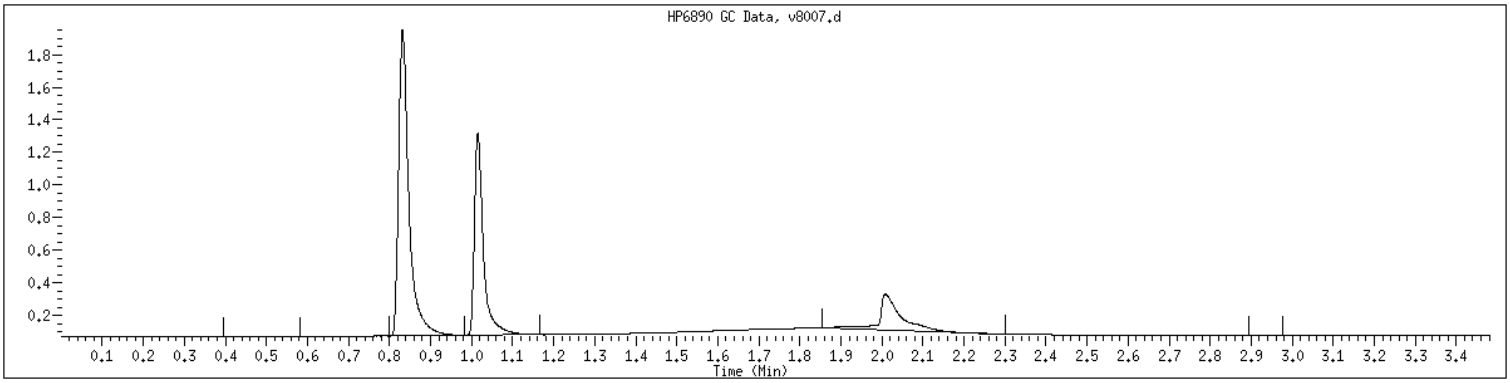
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8007.d Page: 1
Report Date: 07/11/2022 16:07

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1600	SampleType	: LCS
Injection Date	: 07/11/2022 11:59	Instrument	: gcv8b.i
Operator	: BDP		
Sample Info	: 1600		
Misc Info	: 2131877		
Method	: /var/chem/gcv8b.i/2220711p.b/CO2h.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: co2



NO MANUAL INTEGRATIONS

EPA RSK-175

Form 7E

CCAL Verifications

7E

ORGANICS CONTINUING CALIBRATION CHECK

Report No:	222070229			CCAL ID:	1400
GC Column:	GS-Q-30	ID .53	(mm)	Instrument ID:	GCV8B
Injection Vol.:	1.0		(µL)	Lab File ID:	2220711p/v8021
Init. Calib. Date 1:	07/11/22	Time 1: 1112		Analyst:	BDP
Init. Calib. Date 2:	07/11/22	Time 2: 1151		Analytical Batch:	745070
Analysis Date:	07/11/22	Time: 1535		Analytical Method:	RSK-175

ANALYTE	*RRF*	*RRF CCV*	*%D/%Drift*	*Max %D/ % Drift*	*TYPE*	*Q*
Carbon Dioxide	3772	4464	-18.3	20	A	

FORM V II SV

Data File: /var/chem/gcv8b.i/2220711p.b/v8021.d Page 1
Report Date: 11-Jul-2022 15:46

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8021.d
Lab Smp Id: 1400
Inj Date : 11-JUL-2022 15:35
Operator : BDP Inst ID: gcv8b.i
Smp Info : 1400
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 15:46 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
==========	==	======	======	========	=======	=======
1 Carbon Dioxide	0.996	0.996	0.000	38564970	8640.00	10200

Data File: /var/chem/gcv8b.i/2220711p.b/v8021.d

Date : 11-JUL-2022 15:35

Client ID:

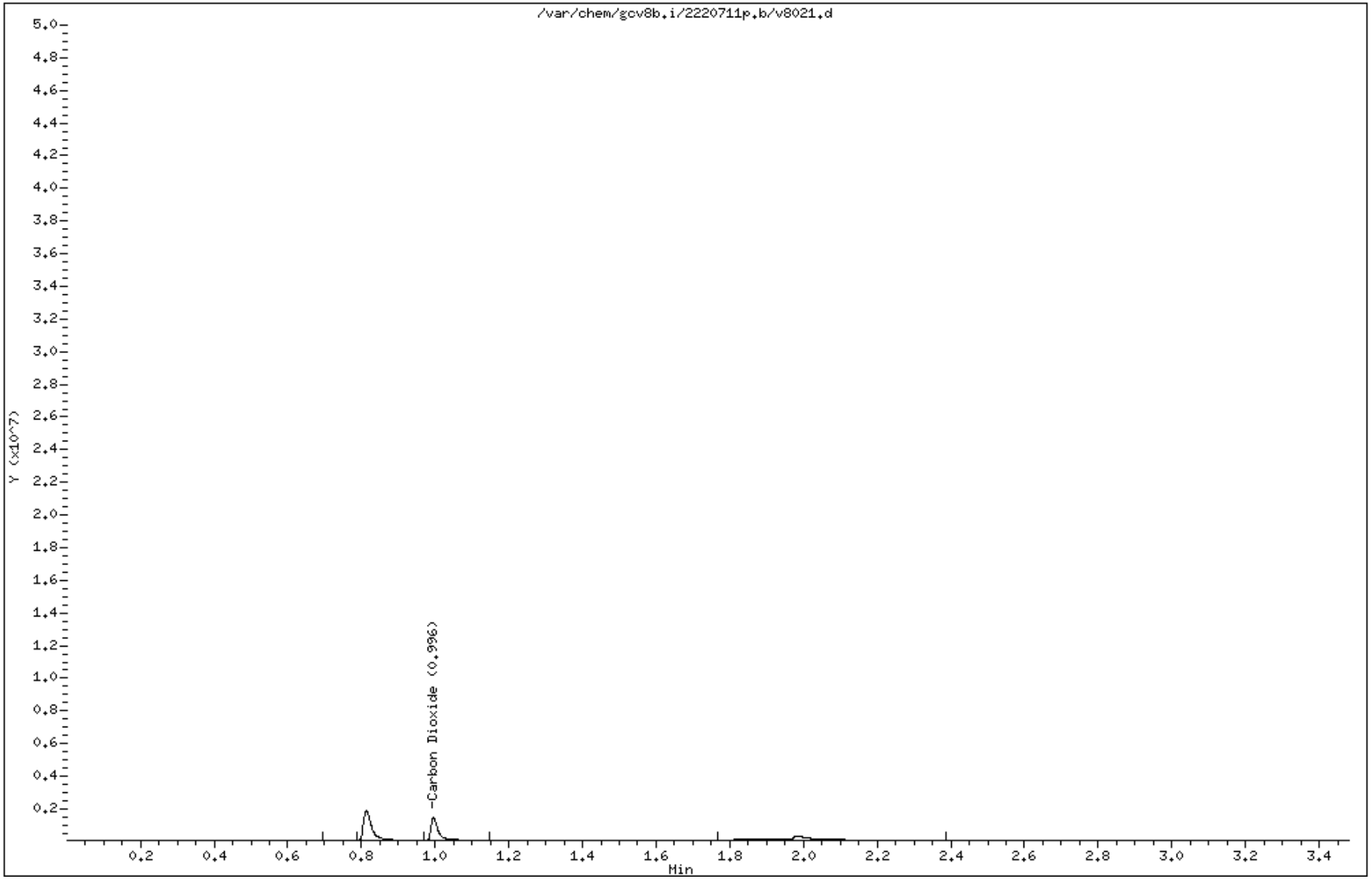
Instrument: gcv8b.i

Sample Info: 1400

Operator: BDP

Column phase: GS-Q-30

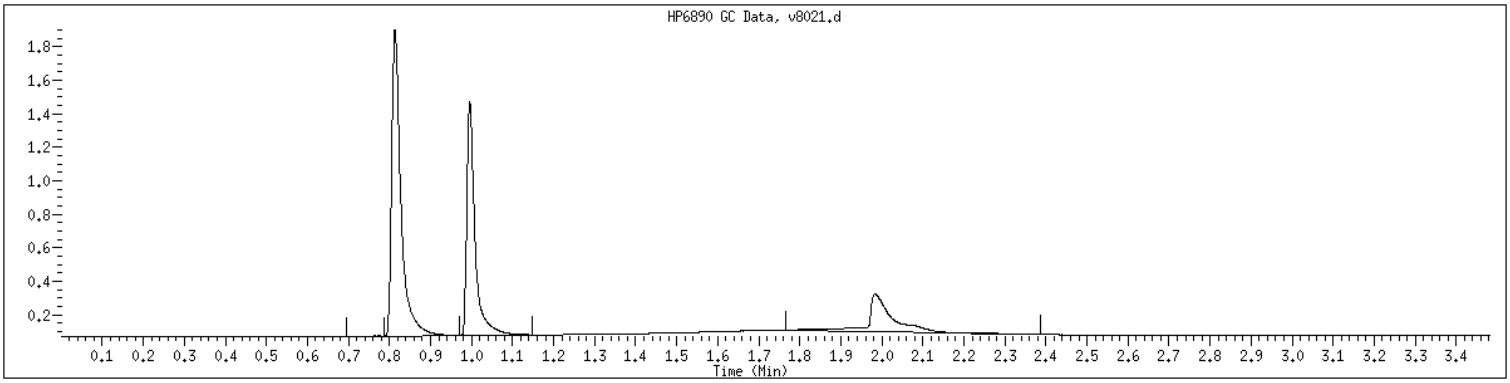
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8021.d Page: 1
Report Date: 07/11/2022 15:46

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 1400 SampleType : CCALIB_3
Injection Date: 07/11/2022 15:35 Instrument : gcv8b.i
Operator : BDP
Sample Info : 1400
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 1.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

7E

ORGANICS CONTINUING CALIBRATION CHECK

Report No:	222070229			CCAL ID:	1400
GC Column:	GS-Q-30	ID .53	(mm)	Instrument ID:	GCV8B
Injection Vol.:	1.0		(µL)	Lab File ID:	2220711p/v8025
Init. Calib. Date 1:	07/11/22	Time 1: 1112		Analyst:	BDP
Init. Calib. Date 2:	07/11/22	Time 2: 1151		Analytical Batch:	745070
Analysis Date:	07/11/22	Time: 1607		Analytical Method:	RSK-175

ANALYTE	*$\overline{RRF}$*	*RRF CCV*	*%D/%Drift*	*Max %D/ % Drift*	*TYPE*	*Q*
Carbon Dioxide	3772	4326	-14.6	20	A	

FORM V II SV

Data File: /var/chem/gcv8b.i/2220711p.b/v8025.d Page 1
Report Date: 11-Jul-2022 16:17

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8025.d
Lab Smp Id: 1400
Inj Date : 11-JUL-2022 16:07
Operator : BDP Inst ID: gcv8b.i
Smp Info : 1400
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 16:17 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Carbon Dioxide	0.995	0.995	0.000	37379809	8640.00	9910

Data File: /var/chem/gcv8b.i/2220711p.b/v8025.d

Page 1

Date : 11-JUL-2022 16:07

Client ID:

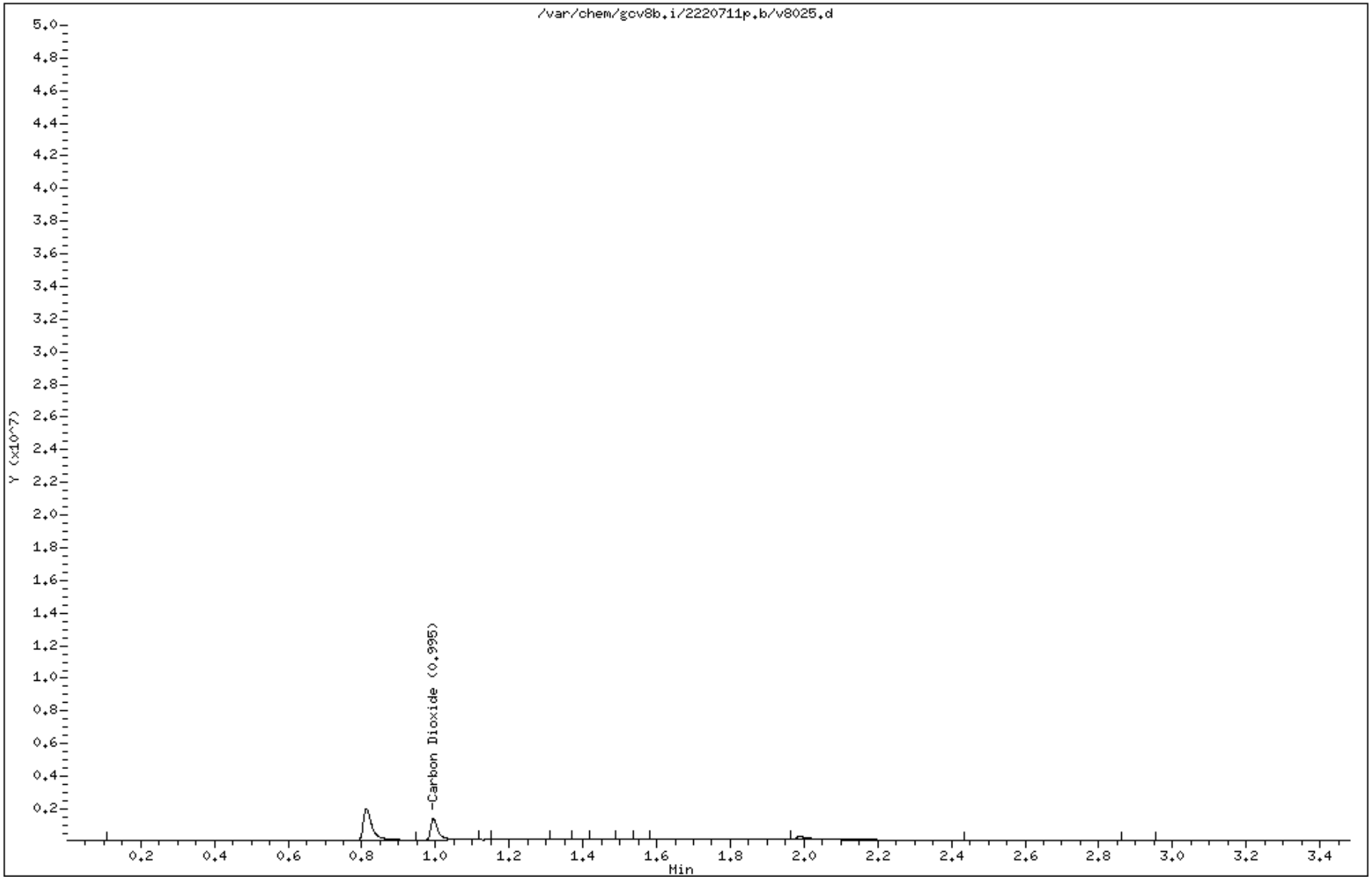
Instrument: gcv8b.i

Sample Info: 1400

Operator: BDP

Column phase: GS-Q-30

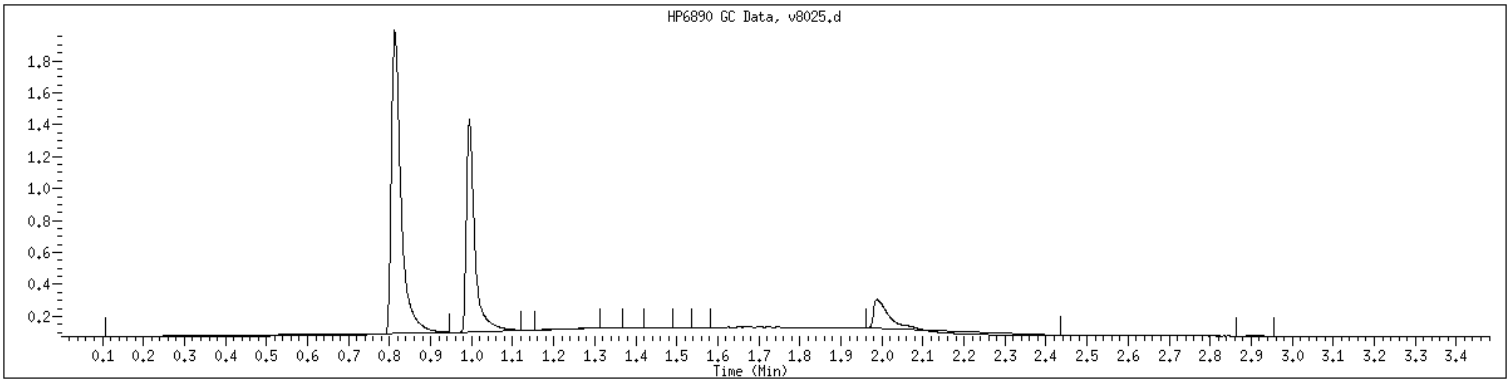
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8025.d Page: 1
Report Date: 07/11/2022 16:17

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 1400 SampleType : CCALIB_3
Injection Date: 07/11/2022 16:07 Instrument : gcv8b.i
Operator : BDP
Sample Info : 1400
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 1.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

EPA RSK-175

RunLog

LABORATORY CHRONICLE: GCV DEPARTMENT

Date: 07/11/2022
Instrument: gcv8b.i
Method File: /var/chem/gcv8b.i/2220711p.b/CO2h.m
Batch: /var/chem/gcv8b.i/2220711p.b
Column-Detector: GS-Q-30

Sample ID	Method	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
1201	CO2h.m	v8001.d	0.00 ml	11-JUL-2022 11:05	1.0	BDP	1	co2
1202	CO2h.m	v8002.d	0.00 ml	11-JUL-2022 11:12	1.0	BDP	1	co2
1203	CO2h.m	v8003.d	0.00 ml	11-JUL-2022 11:20	1.0	BDP	1	co2
1204	CO2h.m	v8004.d	0.00 ml	11-JUL-2022 11:27	1.0	BDP	1	co2
1205	CO2h.m	v8005.d	0.00 ml	11-JUL-2022 11:33	1.0	BDP	1	co2
1201	CO2h.m	v8006.d	0.00 ml	11-JUL-2022 11:51	1.0	BDP	1	co2
1600	CO2h.m	v8007.d	0.00 ml	11-JUL-2022 11:59	1.0	BDP	1	co2
2369017	CO2h.m	v8008.d	0.00 ml	11-JUL-2022 13:25	1.0	BDP	1	co2
2369018	CO2h.m	v8009.d	0.00 ml	11-JUL-2022 13:31	1.0	BDP	1	co2
2369016	CO2h.m	v8010.d	0.00 ml	11-JUL-2022 13:39	1.0	BDP	1	co2
22207022901	CO2h.m	v8011.d	0.00 ml	11-JUL-2022 13:51	30.0	BDP	1	co2
22207022902	CO2h.m	v8012.d	0.00 ml	11-JUL-2022 13:57	30.0	BDP	1	co2
22207022903	CO2h.m	v8013.d	0.00 ml	11-JUL-2022 14:04	30.0	BDP	1	co2
22207022904	CO2h.m	v8014.d	0.00 ml	11-JUL-2022 14:10	30.0	BDP	1	co2
22207022904	CO2h.m	v8015.d	0.00 ml	11-JUL-2022 14:22	50.0	BDP	1	co2
22207022905	CO2h.m	v8016.d	0.00 ml	11-JUL-2022 14:47	30.0	BDP	1	co2
22207022906	CO2h.m	v8017.d	0.00 ml	11-JUL-2022 15:03	30.0	BDP	1	co2
22207022907	CO2h.m	v8018.d	0.00 ml	11-JUL-2022 15:12	30.0	BDP	1	co2
22207075701	CO2h.m	v8019.d	0.00 ml	11-JUL-2022 15:22	30.0	BDP	1	co2
22207075702	CO2h.m	v8020.d	0.00 ml	11-JUL-2022 15:29	30.0	BDP	1	co2
1400	CO2h.m	v8021.d	0.00 ml	11-JUL-2022 15:35	1.0	BDP	1	co2
22207075703	CO2h.m	v8022.d	0.00 ml	11-JUL-2022 15:43	30.0	BDP	1	co2
22207075704	CO2h.m	v8023.d	0.00 ml	11-JUL-2022 15:49	30.0	BDP	1	co2
22207075705	CO2h.m	v8024.d	0.00 ml	11-JUL-2022 15:55	30.0	BDP	1	co2
1400	CO2h.m	v8025.d	0.00 ml	11-JUL-2022 16:07	1.0	BDP	1	co2

Client ID: ALS Houston - ALS Environmental - Houston, TX

SDG: 222070229

PM: RWe

Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 19093

SUBCONTRACT TO:

Pace Analytical
7979 Innovation Park Drive
Baton Rouge, LA 70820

Phone: +1 225 769 4900

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	Dane J. Wacasey
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	Dane.Wacasey@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS22061645
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE	
	ANALYSIS REQUESTED			DUE DATE	
1.	**HS22061645-01**	**16EW03-220629**	**Groundwater**	**29 Jun 2022 07:05**	1
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			15 Jul 2022	
2.	**HS22061645-02**	**16EW02-220629**	**Groundwater**	**29 Jun 2022 07:50**	2
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			15 Jul 2022	
3.	**HS22061645-03**	**16EW02-220629-FD**	**Groundwater**	**29 Jun 2022 07:50**	3
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			15 Jul 2022	
4.	**HS22061645-04**	**16IW262-220629**	**Groundwater**	**29 Jun 2022 08:40**	4
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			15 Jul 2022	
5.	**HS22061645-05**	**16WW41-220629**	**Groundwater**	**29 Jun 2022 09:30**	5
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			15 Jul 2022	
6.	**HS22061645-06**	**16WW41-220629-FD**	**Groundwater**	**29 Jun 2022 09:30**	6
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			15 Jul 2022	
7.	**HS22061645-10**	**16IW03-220629**	**Groundwater**	**29 Jun 2022 12:40**	7
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			15 Jul 2022	

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **19093**

QC Level: DOD IV (DoD Data Package)

Client ID: ALS Houston - ALS Environmental - Houston, TX

SDG: 222070229

PM: RWe

5789 5.6 EHR
1995
0893

Relinquished By: _____ Date/Time: 6/30/2022 1800

Received By: ~~Fed Ex~~ Date/Time: _____

Cooler ID(s): _____ Temperature(s): _____

Fed Ex
Brianna Nelson

~~6/30/22~~ 7/1/22 1000
~~6/30/22~~ 7/1/22 1000

Pace Analytical®

SAMPLE RECEIVING CHECKLIST

222070229

SAMPLE DELIVERY GROUP 222070229	
Client **PM** RWe ALS Houston - ALS Environmental - Houston, TX	**Transport Method** FEDEX
Profile Number 294458	**Received By** Roberts, George S.
Line Item(s) 1 - CO2	**Receive Date(s)** 07/01/22

CHECKLIST	YES	NO
Samples received with proper thermal preservation?	☑	☐
Radioactivity is <1600 cpm? If no, record cpm value in notes section.	☑	☐
COC relinquished and complete (including sampleIDs, collect times, and sampler)?	☑	☐
All containers received in good condition and within hold time?	☑	☐
All sample labels and containers received match the chain of custody?	☑	☐
Preservative added to any containers?	☐	☑
If received, was headspace for VOC water containers < 6mm?	☑	☐
Samples collected in containers provided by Pace Gulf Coast?	☑	☐

COOLERS

Airbill	Thermometer ID: E42	Temp °C
578919950893		5.6

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

Revision 1.6

Page 1 of 1

HS22061645 - Sub Perch IV Report (E2200638)

ALS WO# HS22061645

July 25, 2022 Service Request No:E2200638

Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

Laboratory Results for: HS22061645

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory June 30, 2022
For your reference, these analyses have been assigned our service request number **E2200638.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Corey Grandits
Project Manager

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental

Certificate of Analysis

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Environmental

Client:	ALS	**Service Request No.:**	E2200638
Project:	HS22061645	**Date Received:**	06/30/22
Sample Matrix:	GW		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Ten samples were received for analysis at ALS Environmental in Houston on 06/30/22.

The samples were received in good condition and are consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2200276: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in addition to a MS/MSD for this extraction batch. The LCS-DLCS recoveries met acceptance criteria. The MS/MSD was performed on an unrelated sample.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: ALS Environmental - US **Service Request:**E2200638
Project: HS22061645

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2200638-001	16EW03-220629	6/29/2022	0705
E2200638-002	16EW02-220629	6/29/2022	0750
E2200638-003	16EW02-220629-FD	6/29/2022	0750
E2200638-004	16IW26-220629	6/29/2022	0840
E2200638-005	16WW41-220629	6/29/2022	0930
E2200638-006	16WW41-220629-FD	6/29/2022	0930
E2200638-007	16WW22-220629	6/29/2022	1025
E2200638-008	16WW39-220629	6/29/2022	1110
E2200638-009	16WW49-220629	6/29/2022	1155
E2200638-010	16IW03-220629	6/29/2022	1240

Service Request Summary

Folder #: **E2200638**
Client Name: ALS Environmental - US
Project Name: HS22061645
Project Number:

Report To: Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-575-2190
Cell Number:
Fax Number: 281-530-5887
E-mail: dane.wacasey@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 06/30/22
Internal Due Date: 7/15/2022
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS22061645
EDD: EQUIS
EFWEDD_LHAAP

10 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2200638-001	16EW03-220629	Water	06/29/22 0705	**IV**
E2200638-002	16EW02-220629	Water	06/29/22 0750	**IV**
E2200638-003	16EW02-220629-FD	Water	06/29/22 0750	**IV**
E2200638-004	16IW26-220629	Water	06/29/22 0840	**IV**
E2200638-005	16WW41-220629	Water	06/29/22 0930	**IV**
E2200638-006	16WW41-220629-FD	Water	06/29/22 0930	**IV**
E2200638-007	16WW22-220629	Water	06/29/22 1025	**IV**
E2200638-008	16WW39-220629	Water	06/29/22 1110	**IV**
E2200638-009	16WW49-220629	Water	06/29/22 1155	**IV**
E2200638-010	16IW03-220629	Water	06/29/22 1240	**IV**

Service Request Summary

Folder #: **E2200638**
Client Name: ALS Environmental - US
Project Name: HS22061645
Project Number:

Report To: Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-575-2190
Cell Number:
Fax Number: 281-530-5887
E-mail: dane.wacasey@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 06/30/22
Internal Due Date: 7/15/2022
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS22061645
EDD: EQUIS
EFWEDD_LHAAP

10 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Test Comments:

Group	Test/Method	Samples	Comments
Semivoa GCMS	ClO4 DOD/6850	10	IV Due 7/22

Data Qualifiers

Lab Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	Internal standard not within the specified limits. See case narrative.
J	Estimated Value. Concentration found below MRL.
K	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	Analyte was detected above the method reporting limit prior to normalization.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
L1	Laboratory control sample recovery outside the specified limits; results may be biased high.
L2	Laboratory control sample recovery outside the specified limits; results may be biased low.
L3	Laboratory control sample recovery outside the specified limits.
M	Matrix interference; results may be biased high.
M	The duplicate injection precision not met.
M1	Matrix interference due to coelution with a non-target compound; results may be biased high.

Data Qualifiers

Lab Standard

N	Presumptive evidence of a compound for TICs that have been identified based on a mass spectral library search.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
P	Pesticide/Aroclor target analyte > 40% difference for detected concentrations between GC columns
Q	Indicates as estimated value because the P and P + 2 theoretical abundance ratio does not meet method criteria.
R	Duplicate Precision not met.
R1	Duplicate precision not within the specified limits; however, the results are below the MRL and considered estimated.
S	Surrogate recovery not within specified limits.
S	The reported value was determined by the Method of Standard Additions (MSA).
T	Analyte is a tentatively identified compound, result is estimated.
U	Compound was analyzed for, but was not detected (ND).
V1	The continuing calibration verification standard was outside (biased high) the specified limits for this compound.
V2	The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
W	Result quantified, but the corresponding peak was detected outside the generated retention time window.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
X	See case narrative.
Y	Recovery outside limits
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

10450 Stancliff Rd, Houston, TX 77099 | 281-530-5656 | www.alsglobal.com

ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793	5/27/2023
California Department of Health Services	2919-2023	4/30/2023
Department of Defense	L22-90	3/31/2024
Florida Department of Health	E87611-35	6/30/2023
Florida Department of Health	E87611-35	6/30/2023
Florida Department of Health	E87611-35	6/30/2023
Florida Department of Health	E87611-35	6/30/2023
Hawaii Department of Health	2022	4/30/2023
Illinois Environmental Protection Agency	2000322022-9	5/9/2023
Kansas Department of Health and Environment	E-10352 2022	7/31/2022
Louisiana Department of Environmental Quality	03087-2022	6/30/2023
Louisiana Department of Health and Hospitals	LA028	12/31/2022
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343	6/30/2023
Michigan Depratment of Environmental Quality	9971-2022	4/30/2023
Minnesota Department of Health	2228443	12/31/2022
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2023
Nevada Department of Concervation and Natural Resources	TX026932022-1	7/31/2022
New Hampshire Environmental Laboratory Accreditation Program	209422	4/24/2023
New Jersey Department of Environmental Protection	TX008-2023	6/30/2023
New York Department of Health	11707	3/31/2023
Oklahoma Department of Environmental Quality	2021-080	8/31/2022
Oregon Environmental Laboratory Accreditation Program	TX200002	5/15/2023
Pennsylvania Department of Environmental Protection	68-03441-016	6/30/2023
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	04016-2022	4/30/2023
Texas Commision on Environmental Quality	T104704231-22-29	4/30/2023
United States Department of Agriculture	P330-19-00299	10/10/2022
Utah Department of Health Environmental Laboratory Certification	TX026932021-12	7/31/2022
Washington Department of Health	C819-2022	11/14/2022

Chain of Custody

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Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **19094**

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	Dane J. Wacasey
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	Dane.Wacasey@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS22061645
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS22061645-01**	**16EW03-220629**	**Groundwater**	**29 Jun 2022 07:05**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022
2.	**HS22061645-02**	**16EW02-220629**	**Groundwater**	**29 Jun 2022 07:50**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022
3.	**HS22061645-03**	**16EW02-220629-FD**	**Groundwater**	**29 Jun 2022 07:50**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022
4.	**HS22061645-04**	**16IW262-220629** N/A	**Groundwater**	**29 Jun 2022 08:40**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022
5.	**HS22061645-05**	**16WW41-220629**	**Groundwater**	**29 Jun 2022 09:30**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022
6.	**HS22061645-06**	**16WW41-220629-FD**	**Groundwater**	**29 Jun 2022 09:30**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022
7.	**HS22061645-07**	**16WW22-220629**	**Groundwater**	**29 Jun 2022 10:25**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022
8.	**HS22061645-08**	**16WW39-220629**	**Groundwater**	**29 Jun 2022 11:10**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 19094**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022
9.	**HS22061645-09**	**16WW49-220629**	**Groundwater**	**29 Jun 2022 11:55**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022
10.	**HS22061645-10**	**16IW03-220629**	**Groundwater**	**29 Jun 2022 12:40**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			15 Jul 2022

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: COREY G Date/Time: 6-30-22 1200

Cooler ID(s): _____ Temperature(s): _____

ALS Environmental

Cooler Receipt Form

Project Chemist CG

Client/Project ALS-H

Thermometer ID IR#1

Date/Time Received: 6.30.22 Initials: CG

Date/Time Logged in: 6.30.22 Initials CG

1. Method of delivery: ○ US Mail ○ Fed Ex ○ UPS ○ DHL ☒ Courier (ALS) ○ Client

2. Samples received in: ☒ Cooler ○ Box ○ Envelope ○ Other

3. Were custody seals on coolers? ○ Yes ☒ No

If yes, how many and where?

Were they intact? ○ Yes ○ No ☒ N/A

Were they signed and dated? ○ Yes ○ No ☒ N/A

4. Packing Material: ○ Inserts ☒ Baggies ○ Bubble Wrap ○ Gel Packs ☒ Wet Ice ○ Sleeves ○ Other

5. Foreign or Regulated Soil? ○ Yes ○ No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		6.30.22	1200	CG	4.0	☒
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ☒ Yes ○ No

7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ☒ Yes ○ No

8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ☒ Yes ○ No

9. Were appropriate bottles/containers and volumes received for the requested tests? ☒ Yes ○ No

10. Did sample labels and tags agree with custody documents? ☒ Yes ○ No

Notes, Discrepancies, & Resolutions:

Service request Label:

HS-HRMSCoolerReceipt R1.0

ALS Environmental - Houston HRMS

10450 Stancliff Rd., Suite 210
Houston, TX 77099
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www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6ºC.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10ºC.
- ✓ Air samples are shipped and stored cold, at 0 to 6ºC
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

Preparation Information Benchsheets

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 402384 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 7/6/22 11:12

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2200635-001	LH18/24-SP650_062822_AIX	.01	6850/ClO4 DOD			Water	10mL	
2	E2200636-001	16WW23-220627	.01	6850/ClO4 DOD			Water	10mL	
3	E2200636-002	16WW24-220627	.01	6850/ClO4 DOD			Water	10mL	
4	E2200636-003	16WW27-220627	.01	6850/ClO4 DOD			Water	10mL	
5	E2200636-004	16WW43-220627	.01	6850/ClO4 DOD			Water	10mL	
6	E2200636-005	16RW05-220627	.01	6850/ClO4 DOD			Water	10mL	
7	E2200636-006	16PM09-220627	.01	6850/ClO4 DOD			Water	10mL	
8	E2200636-007	16PM06-220627	.01	6850/ClO4 DOD			Water	10mL	
9	E2200636-008	16PM14-220627	.01	6850/ClO4 DOD			Water	10mL	
10	E2200638-001	16EW03-220629	.01	6850/ClO4 DOD			Water	10mL	
11	E2200638-002	16EW02-220629	.01	6850/ClO4 DOD			Water	10mL	
12	E2200638-003	16EW02-220629-FD	.01	6850/ClO4 DOD			Water	10mL	
13	E2200638-004	16IW26-220629	.01	6850/ClO4 DOD			Water	10mL	
14	E2200638-005	16WW41-220629	.01	6850/ClO4 DOD			Water	10mL	
15	E2200638-006	16WW41-220629-FD	.01	6850/ClO4 DOD			Water	10mL	
16	E2200638-007	16WW22-220629	.01	6850/ClO4 DOD			Water	10mL	
17	E2200638-008	16WW39-220629	.01	6850/ClO4 DOD			Water	10mL	
18	E2200638-009	16WW49-220629	.01	6850/ClO4 DOD			Water	10mL	
19	E2200638-010	16IW03-220629	.01	6850/ClO4 DOD			Water	10mL	
20	EQ2200276-01	MB		6850/ClO4 DOD			Liquid	10mL	
21	EQ2200276-02	LCS		6850/ClO4 DOD			Liquid	10mL	
22	EQ2200276-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
23	EQ2200276-04	16WW24-220627 MS	.02	6850/ClO4 DOD			Liquid	10mL	
24	EQ2200276-05	16WW24-220627 DMS	.02	6850/ClO4 DOD			Liquid	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 222798 Logbook Ref: Perchlorate (1st Source) Expires On: 10/29/2022

EQ2200276-02	1.00µL	EQ2200276-03	1.00µL	EQ2200276-04	1.00µL	EQ2200276-05	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 223118 Logbook Ref: Perchlorate Internal Standard Expires On: 10/31/2022

E2200635-001	100.00µL	E2200636-001	100.00µL	E2200636-002	100.00µL	E2200636-003	100.00µL	E2200636-004	100.00µL	E2200636-005	100.00µL
E2200636-006	100.00µL	E2200636-007	100.00µL	E2200636-008	100.00µL	E2200638-001	100.00µL	E2200638-002	100.00µL	E2200638-003	100.00µL
E2200638-004	100.00µL	E2200638-005	100.00µL	E2200638-006	100.00µL	E2200638-007	100.00µL	E2200638-008	100.00µL	E2200638-009	100.00µL
E2200638-010	100.00µL	EQ2200276-01	100.00µL	EQ2200276-02	100.00µL	EQ2200276-03	100.00µL	EQ2200276-04	100.00µL	EQ2200276-05	100.00µL

Preparation Information Benchsheet

Prep Run#: 402384 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 7/6/22 11:12

Preparation Materials

Water HPLC Grade	5/12/2022 Water (223055)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	537M Glass Culture Tubes	537M Glass Tubes (218064)
6850 Pipette Tips 50-1000 uL	6850 Pipette Tips (221929)	6850 Luer-Lok Syringes	Luer-Lok Syringes (221305)	6850 0.45um syringe filters	6850 Syringe Filters (222410)

Preparation Steps

Step: Preparation
Started: 7/6/22 11:12
Finished: 7/6/22 11:55
By: GRIVERA
Comments

Comments: _____

Reviewed By: GR Date: 7/6/22

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
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www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 0705
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16EW03-220629	**Units:**	µg/L
Lab Code:	E2200638-001	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/ 6/22	7/7/22 14:57	402384	769895	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 0750
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16EW02-220629	**Units:**	µg/L
Lab Code:	E2200638-002	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.240**		0.100	0.0500	0.0250	1	7/ 6/22	7/6/22 19:40	402384	769646	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 0750
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16EW02-220629-FD	**Units:**	µg/L
Lab Code:	E2200638-003	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.517**		0.100	0.0500	0.0250	1	7/ 6/22	7/6/22 19:47	402384	769646	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 0840
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16IW26-220629	**Units:**	µg/L
Lab Code:	E2200638-004	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0530**	J	0.100	0.0500	0.0250	1	7/ 6/22	7/7/22 12:34	402384	769895	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 0930
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16WW41-220629	**Units:**	µg/L
Lab Code:	E2200638-005	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**85.0**		1.00	0.500	0.250	10	7/ 6/22	7/7/22 12:42	402384	769895	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 0930
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16WW41-220629-FD	**Units:**	µg/L
Lab Code:	E2200638-006	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**64.6**		1.00	0.500	0.250	10	7/ 6/22	7/7/22 12:56	402384	769895	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 1025
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16WW22-220629	**Units:**	µg/L
Lab Code:	E2200638-007	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0564**	J	0.100	0.0500	0.0250	1	7/ 6/22	7/7/22 14:16	402384	769895	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 1110
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16WW39-220629	**Units:**	µg/L
Lab Code:	E2200638-008	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**5.56**		0.100	0.0500	0.0250	1	7/ 6/22	7/6/22 20:34	402384	769646	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 1155
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16WW49-220629	**Units:**	µg/L
Lab Code:	E2200638-009	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/ 6/22	7/6/22 20:42	402384	769646	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	6/29/22 1240
Sample Matrix:	Water	**Date Received:**	6/30/22
Sample Name:	16IW03-220629	**Units:**	µg/L
Lab Code:	E2200638-010	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.126**		0.100	0.0500	0.0250	1	7/ 6/22	7/7/22 13:12	402384	769895	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2200276-01	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/ 6/22	7/6/22 15:18	402384	769646	

Accuracy & Precision

ALS Environmental - Houston HRMS
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ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22061645
Sample Matrix: Water

Service Request: E2200638
Date Analyzed: 7/ 6/22

Lab Control Sample Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 402384

	Lab Control Sample EQ2200276-02			Duplicate Lab Control Sample EQ2200276-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.109	0.100	109	0.0951	0.100	95	84 - 119	14	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2200276-02	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.109**		0.100	0.0500	0.0250	1	7/ 6/22	7/6/22 15:51	402384	769646	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2200276-03	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0951**	J	0.100	0.0500	0.0250	1	7/ 6/22	7/6/22 15:59	402384	769646	

Initial Calibration

ALS Environmental - Houston HRMS
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www.alsglobal.com

20220601

1st Review: GRivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 6/1/2022
Cal. Std. xp: 9/4/2022
ICAL ID: **EC2200008**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100819-09 **B:** MeOH 217304

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	PERCHLORATE2		20220601_016	Perchlorate6850c.lcm	1x	☒	222804	6/1/2022 14:02
2	PERCHLORATE3		20220601_017	Perchlorate6850c.lcm	1x	☒	222806	6/1/2022 14:09
3	PERCHLORATE4		20220601_018	Perchlorate6850c.lcm	1x	☒	222807	6/1/2022 14:17
4	PERCHLORATE5		20220601_019	Perchlorate6850c.lcm	1x	☒	222808	6/1/2022 14:25
5	PERCHLORATE6		20220601_020	Perchlorate6850c.lcm	1x	☒	222809	6/1/2022 14:33
6	PERCHLORATE7		20220601_021	Perchlorate6850c.lcm	1x	☒	222810	6/1/2022 14:41
7	PERCHLORATE8		20220601_022	Perchlorate6850c.lcm	1x	☒	222811	6/1/2022 14:49
8	PERCHLORATE9		20220601_023	Perchlorate6850c.lcm	1x	☒	222812	6/1/2022 14:57
9	PERCHLORATE10		20220601_024	Perchlorate6850c.lcm	1x	☒	222813	6/1/2022 15:05
10	PERCHLORATE1		20220601_026	Perchlorate6850c.lcm	1x	☒	222805	6/1/2022 15:39
11	PERCHLORATEICV		20220601_028	Perchlorate6850c.lcm	1x	☒	222814	6/1/2022 15:55
12	IB		20220601_029	Perchlorate6850c.lcm	1x	☒		6/1/2022 16:03
13	ICS		20220601_030	Perchlorate6850c.lcm	1x	☒		6/1/2022 16:11
14	PERCHLORATE7		20220601_031	Perchlorate6850c.lcm	1x	☒	222810	6/1/2022 16:58
15	LODV		20220601_032	Perchlorate6850c.lcm	1x	☒	222817	6/1/2022 17:22
16	E2200484-001X5		20220601_033	Perchlorate6850c.lcm	5x	☒	DNU-analyze 1x	6/1/2022 17:30
17	E2200454-002X500		20220601_034	Perchlorate6850c.lcm	500x	☒		6/1/2022 17:38
18	E2200484-001		20220601_035	Perchlorate6850c.lcm	1x	☒	DNU-bad injection	6/1/2022 17:46
19	E2200454-003		20220601_036	Perchlorate6850c.lcm	1x	☒		6/1/2022 17:54
20	E2200454-004		20220601_037	Perchlorate6850c.lcm	1x	☒		6/1/2022 18:01
21	E2200454-005		20220601_038	Perchlorate6850c.lcm	1x	☒	Reanalyze- IR	6/1/2022 18:09
22	E2200454-006		20220601_039	Perchlorate6850c.lcm	1x	☒	Reanalyze- IR	6/1/2022 18:17
23	E2200454-007		20220601_040	Perchlorate6850c.lcm	1x	☒		6/1/2022 18:25
24	E2200454-008		20220601_041	Perchlorate6850c.lcm	1x	☒		6/1/2022 18:33
25	PERCHLORATE7		20220601_042	Perchlorate6850c.lcm	1x	☒	222810	6/1/2022 18:41
26	E2200470-001		20220601_043	Perchlorate6850c.lcm	1x	☒		6/1/2022 18:49
27	R2204439-003		20220601_044	Perchlorate6850c.lcm	1x	☒		6/1/2022 18:57
28	R2204439-007		20220601_045	Perchlorate6850c.lcm	1x	☒		6/1/2022 19:04
29	R2204439-009		20220601_046	Perchlorate6850c.lcm	1x	☒		6/1/2022 19:12
30	R2204582-011		20220601_047	Perchlorate6850c.lcm	1x	☒		6/1/2022 19:20
31	R2204582-030		20220601_048	Perchlorate6850c.lcm	1x	☒	Reanalyze- IR	6/1/2022 19:28
32	R2204582-035		20220601_049	Perchlorate6850c.lcm	1x	☒		6/1/2022 19:36
33	R2204616-004		20220601_050	Perchlorate6850c.lcm	1x	☒		6/1/2022 19:44
34	R2204616-011		20220601_051	Perchlorate6850c.lcm	1x	☒		6/1/2022 19:52
35	PERCHLORATE7		20220601_052	Perchlorate6850c.lcm	1x	☒	222810	6/1/2022 20:00
36	IB		20220601_053	Perchlorate6850c.lcm	1x	☒		6/1/2022 20:08
37	IB		20220601_054	Perchlorate6850c.lcm	1x	☒		6/1/2022 20:15
38	null		20220601_055	Perchlorate6850c.lcm	1x	☒		6/1/2022 20:20
39	null		20220601_056	Perchlorate6850c.lcm	1x	☒		6/1/2022 20:25

Initial Calibration - Detailed Report

Calibration ID: EC2200008 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2200008-01	PERCHLORATE2	20220601_016	06/01/2022 14:02
02	EC2200008-02	PERCHLORATE3	20220601_017	06/01/2022 14:09
03	EC2200008-03	PERCHLORATE4	20220601_018	06/01/2022 14:17
04	EC2200008-04	PERCHLORATE5	20220601_019	06/01/2022 14:25
05	EC2200008-05	PERCHLORATE6	20220601_020	06/01/2022 14:33
06	EC2200008-06	PERCHLORATE7	20220601_021	06/01/2022 14:41
07	EC2200008-07	PERCHLORATE8	20220601_022	06/01/2022 14:49
08	EC2200008-08	PERCHLORATE9	20220601_023	06/01/2022 14:57
09	EC2200008-09	PERCHLORATE10	20220601_024	06/01/2022 15:05
10	EC2200008-10	PERCHLORATE1	20220601_026	06/01/2022 15:39

Analyte **Curve Fit** **Weighting**

Perchlorate **Average RF** **RSD = 10.81** **Average RF = 0.1511**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.5000	0.1553	02	0.7000	0.1519	03	1.0000	0.1465	04	2.0000	0.1514
05	5.0000	0.1444	06	10.0000	0.1425	07	20.0000	0.1496	08	30.0000	0.1358
09	50.0000	0.1396	10	0.1000	0.1944						

Analyte

Perchlorate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.5000	0.514	2.7	02	0.7000	0.703	0.5	03	1.0000	0.969	-3.1
04	2.0000	2.00	0.2	05	5.0000	4.78	-4.4	06	10.0000	9.43	-5.7
07	20.0000	19.8	-1.0	08	30.0000	27.0	-10.2	09	50.0000	46.2	-7.7
10	0.1000	0.129	28.6								

Initial Calibration Verification Summary Report

Calibration ID:	EC2200008	**Instrument ID:**	E-LCMS-01
Datafile ID:	20220601_028	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2200008-11	T	Average RF	10	9.710	ng/mL	-2.9	<= 15

Insight Report

Printed at 6/2/2022 10:42:59 AM

Method File: I:\LCMS01\DATA\20220601\20220601.lcm
Project File: I:\LCMS01\DATA\20220601\20220601.damlp

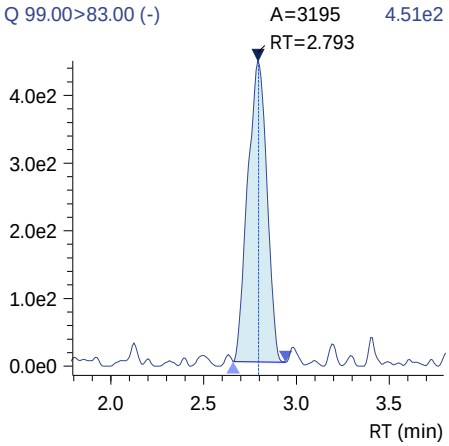
PERCHLORATE2

Sample ID: PERCHLORATE2
Date Acquired: 6/1/2022 2:02:03 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_016.lcd
Vial: 21 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.793	3195	41158	0.5136	ng/mL	27.57	18.52-34.39
Perchlorate 2	Auto	2.781	881	41158	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.777	41158	41158	1.0000	ng/mL	----	

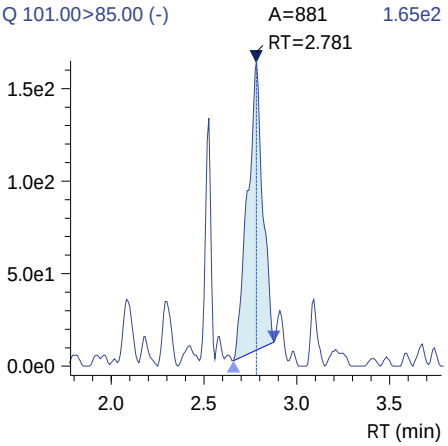
Perchlorate

Conc 0.5136



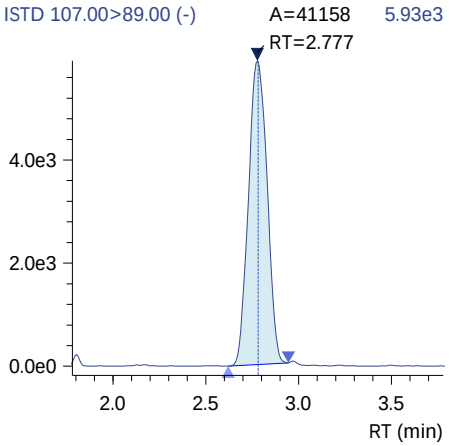
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 10:42:59 AM

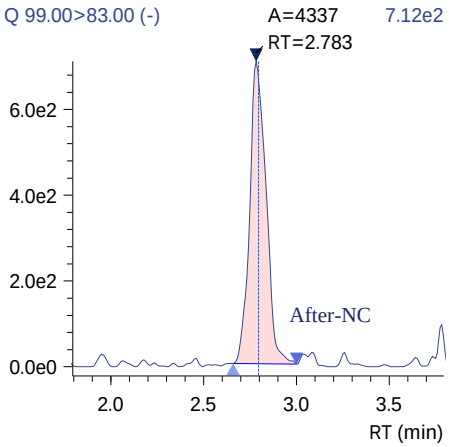
PERCHLORATE3

Sample ID: PERCHLORATE3
Date Acquired: 6/1/2022 2:09:55 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_017.lcd
Vial: 22 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI	2.783	4337	40792	0.7035	ng/mL	24.99	18.52-34.39
Perchlorate 2	M	2.843	1084	40792	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.787	40792	40792	1.0000	ng/mL	----	

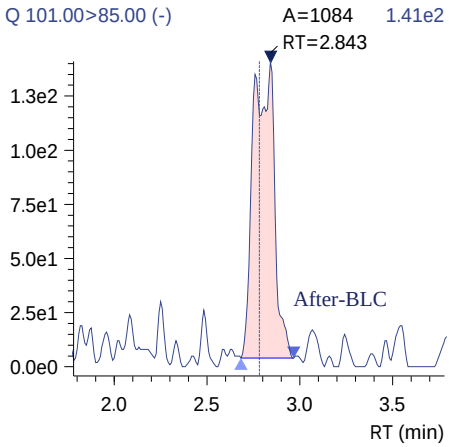
Perchlorate

Conc 0.7035



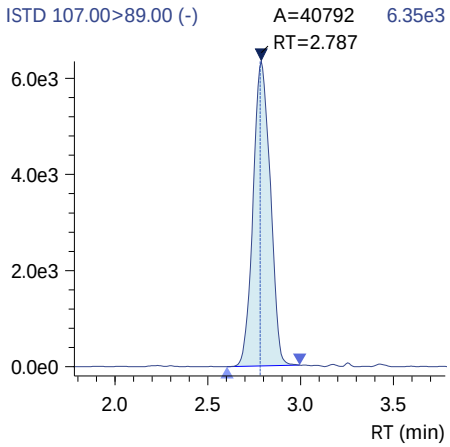
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 9:46:32 AM

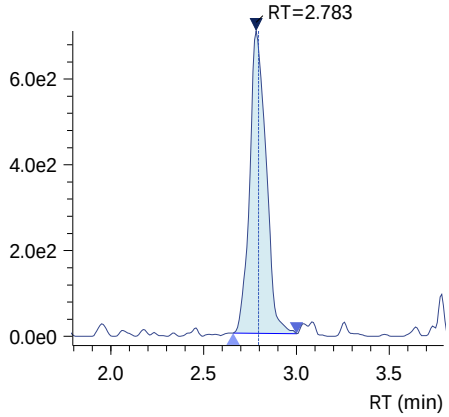
PERCHLORATE3

Sample ID: PERCHLORATE3
Date Acquired: 6/1/2022 2:09:55 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_017.lcd
Vial: 22 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 0.7205

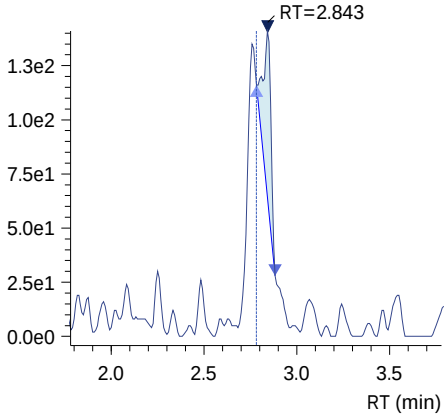
Q 99.00>83.00 (-) A=4337 7.12e2



Perchlorate 2

Conc 0.0000

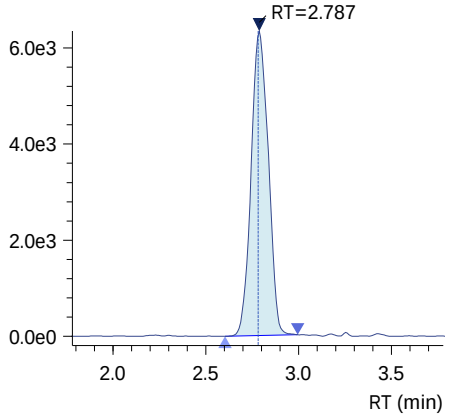
Q 101.00>85.00 (-) A=213 1.41e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=40792 6.35e3



Insight Report

Printed at 6/2/2022 10:42:59 AM

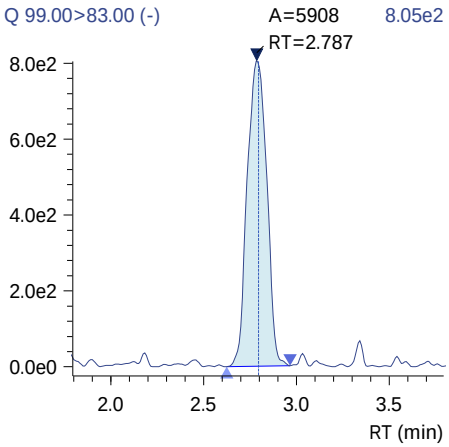
PERCHLORATE4

Sample ID: PERCHLORATE4
Date Acquired: 6/1/2022 2:17:52 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_018.lcd
Vial: 23 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.787	5908	40337	0.9691	ng/mL	25.81	18.52-34.39
Perchlorate 2	Auto	2.776	1525	40337	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.787	40337	40337	1.0000	ng/mL	----	

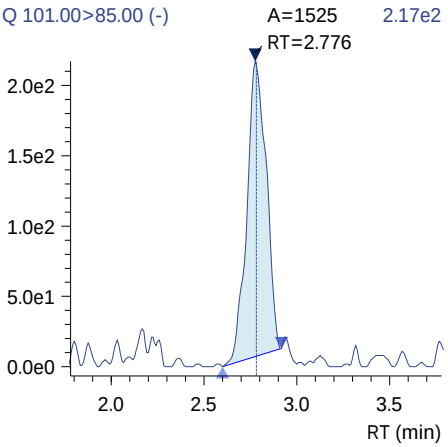
Perchlorate

Conc 0.9691



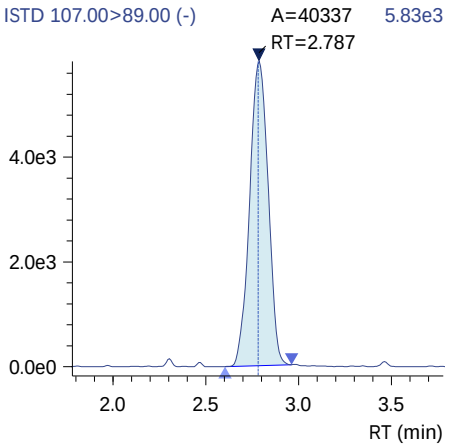
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 10:42:59 AM

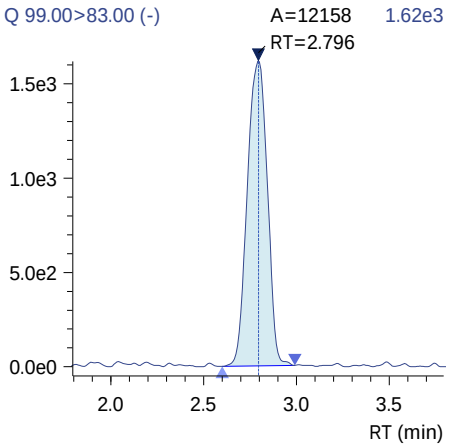
PERCHLORATE5

Sample ID: PERCHLORATE5
Date Acquired: 6/1/2022 2:25:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_019.lcd
Vial: 24 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.796	12158	40141	2.0041	ng/mL	27.57	18.52-34.39
Perchlorate 2	Auto	2.785	3352	40141	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.784	40141	40141	1.0000	ng/mL	----	

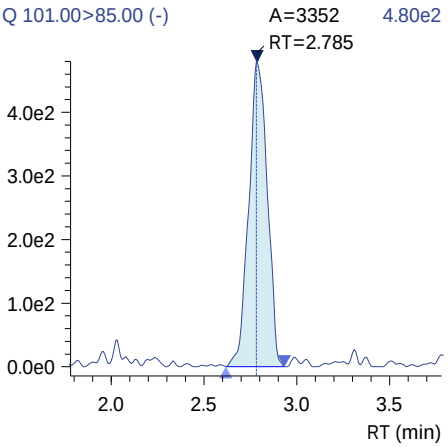
Perchlorate

Conc 2.0041



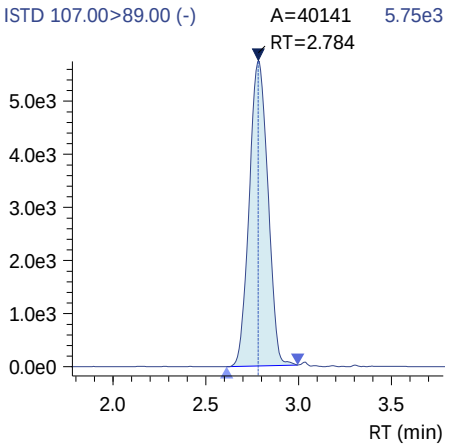
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 10:42:59 AM

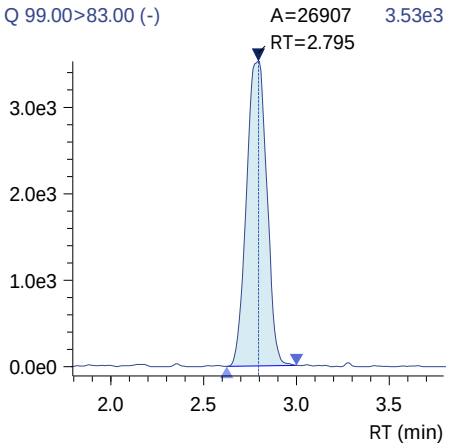
PERCHLORATE6

Sample ID: PERCHLORATE6
Date Acquired: 6/1/2022 2:33:43 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_020.lcd
Vial: 25 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.795	26907	37256	4.7788	ng/mL	24.81	18.52-34.39
Perchlorate 2	Auto	2.781	6676	37256	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.781	37256	37256	1.0000	ng/mL	----	

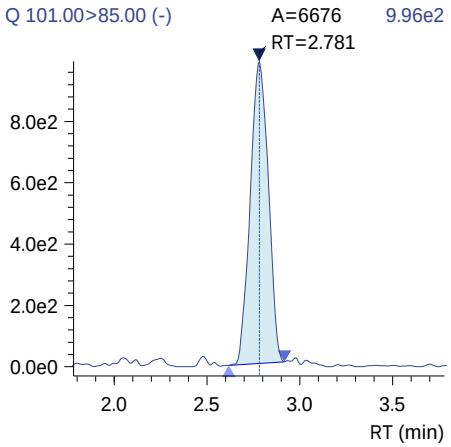
Perchlorate

Conc 4.7788



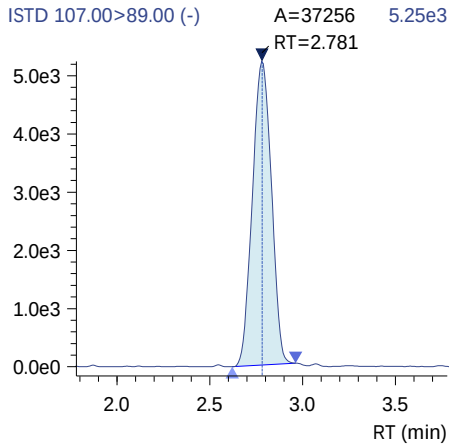
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 10:42:59 AM

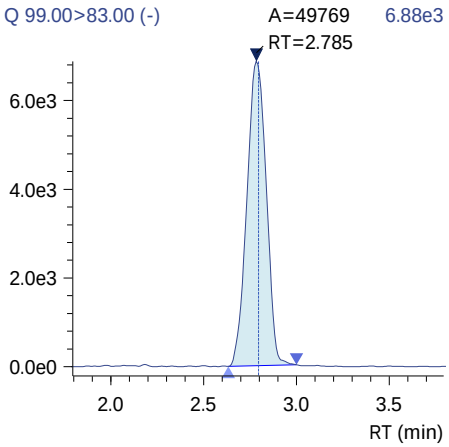
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 6/1/2022 2:41:37 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_021.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.785	49769	34931	9.4274	ng/mL	26.27	18.52-34.39
Perchlorate 2	Auto	2.789	13072	34931	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.782	34931	34931	1.0000	ng/mL	----	

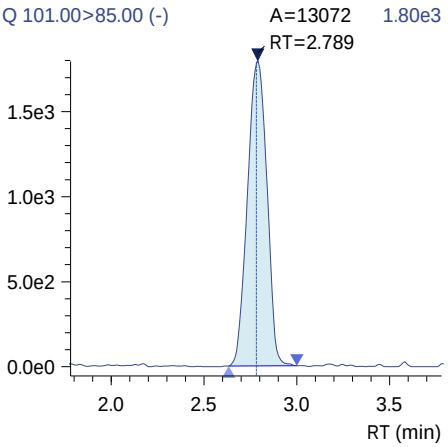
Perchlorate

Conc 9.4274



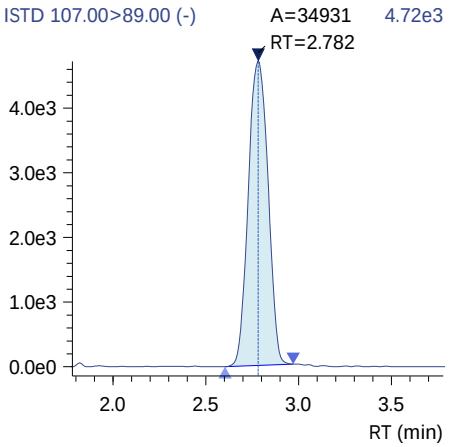
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 10:42:59 AM

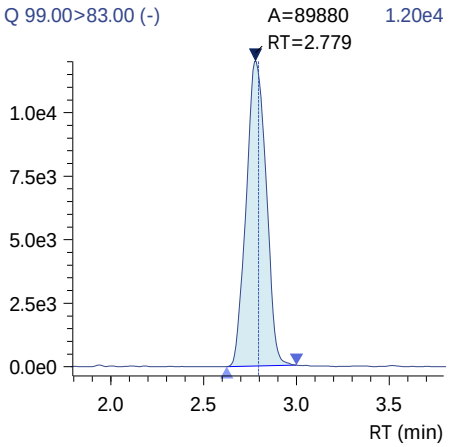
PERCHLORATE8

Sample ID: PERCHLORATE8
Date Acquired: 6/1/2022 2:49:32 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_022.lcd
Vial: 27 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.779	89880	30033	19.8021	ng/mL	26.40	18.52-34.39
Perchlorate 2	Auto	2.789	23731	30033	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.774	30033	30033	1.0000	ng/mL	----	

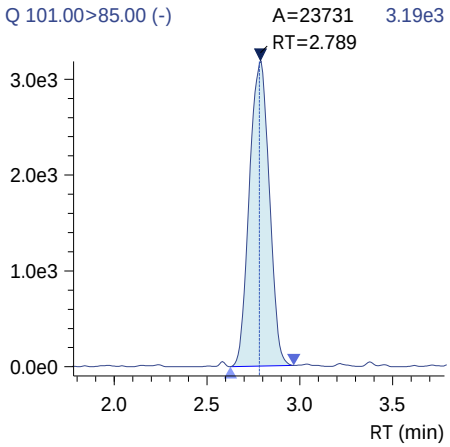
Perchlorate

Conc 19.8021



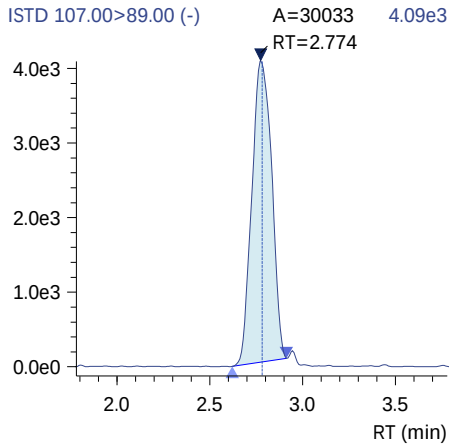
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 10:42:59 AM

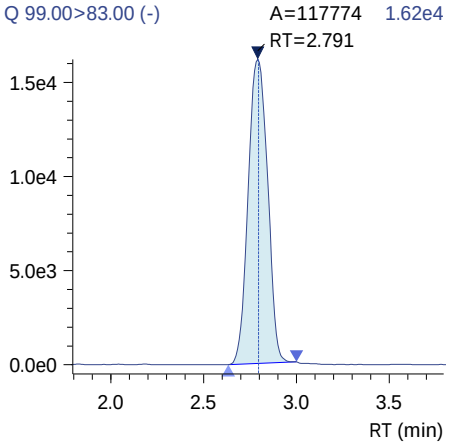
PERCHLORATE9

Sample ID: PERCHLORATE9
Date Acquired: 6/1/2022 2:57:25 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_023.lcd
Vial: 28 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.791	117774	28915	26.9509	ng/mL	26.79	18.52-34.39
Perchlorate 2	Auto	2.786	31550	28915	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.793	28915	28915	1.0000	ng/mL	----	

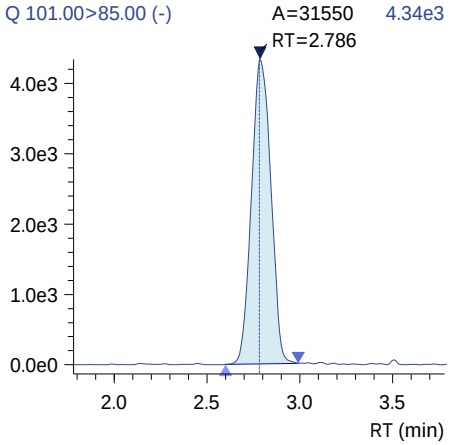
Perchlorate

Conc 26.9509



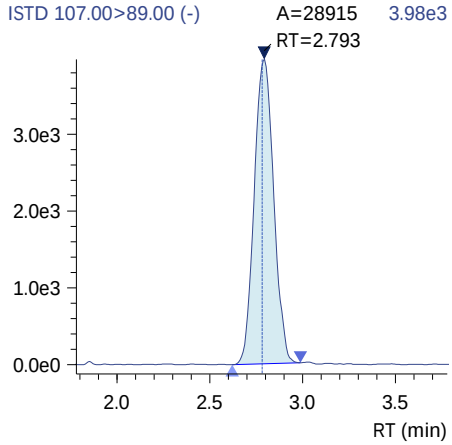
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 10:42:59 AM

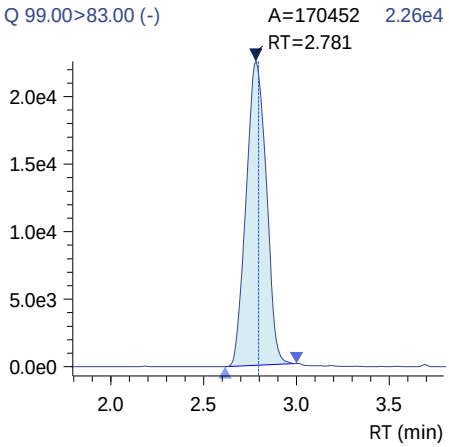
PERCHLORATE10

Sample ID: PERCHLORATE10
Date Acquired: 6/1/2022 3:05:17 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_024.lcd
Vial: 29 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.781	170452	24428	46.1701	ng/mL	25.87	18.52-34.39
Perchlorate 2	Auto	2.774	44101	24428	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.780	24428	24428	1.0000	ng/mL	----	

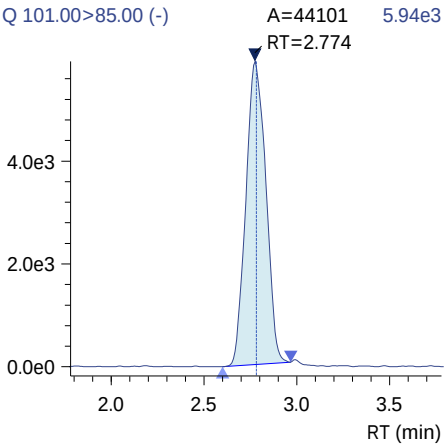
Perchlorate

Conc 46.1701



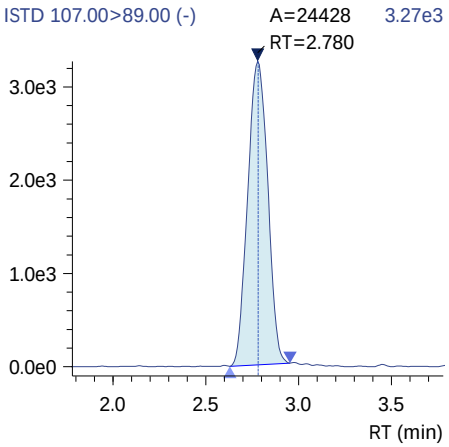
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 10:42:59 AM

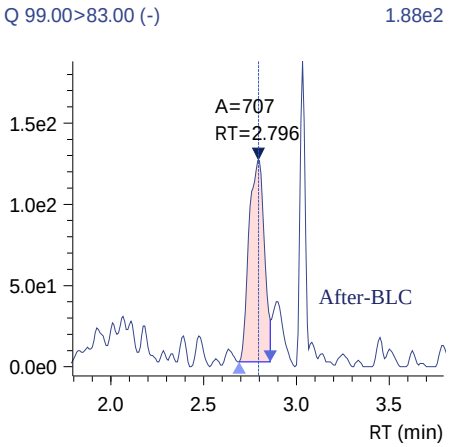
PERCHLORATE1

Sample ID: PERCHLORATE1
Date Acquired: 6/1/2022 3:39:38 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_026.lcd
Vial: 20 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	2.796	707	36372	0.1286	ng/mL	28.15	18.52-34.39
Perchlorate 2	M	2.750	199	36372	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.772	36372	36372	1.0000	ng/mL	----	

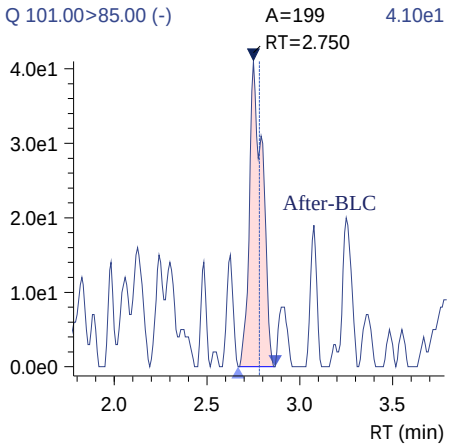
Perchlorate

Conc 0.1286



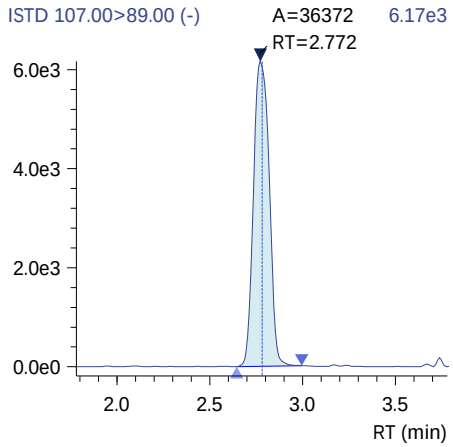
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 9:46:32 AM

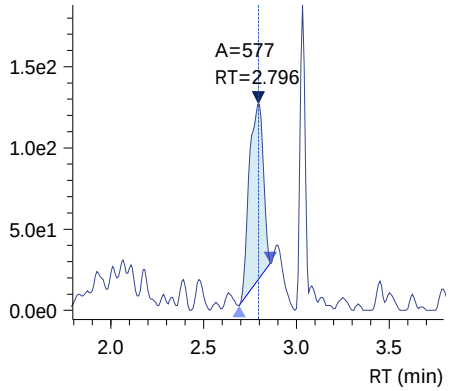
PERCHLORATE1

Sample ID: PERCHLORATE1
Date Acquired: 6/1/2022 3:39:38 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_026.lcd
Vial: 20 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 0.1075

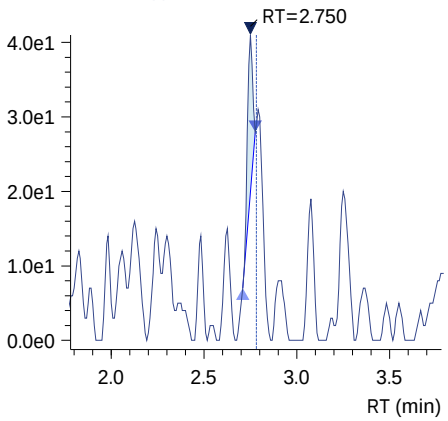
Q 99.00>83.00 (-) 1.88e2



Perchlorate 2

Conc 0.0000

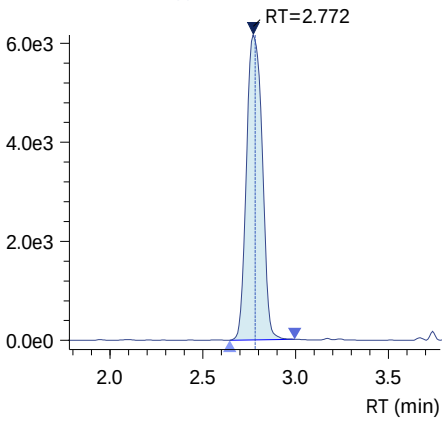
Q 101.00>85.00 (-) A=39 4.10e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=36372 6.17e3



Insight Report

Printed at 6/2/2022 10:42:59 AM

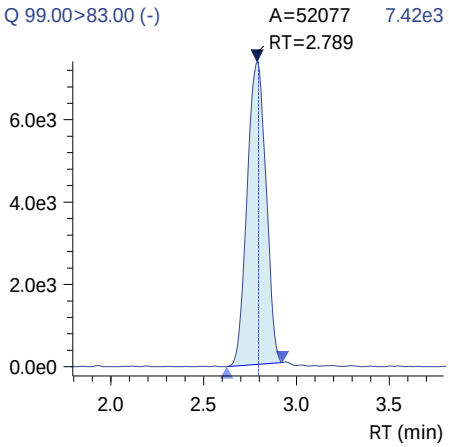
PERCHLORATEICV

Sample ID: PERCHLORATEICV
Date Acquired: 6/1/2022 3:55:25 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_028.lcd
Vial: 30 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.789	52077	35488	9.7098	ng/mL	26.93	18.52-34.39
Perchlorate 2	Auto	2.782	14023	35488	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.780	35488	35488	1.0000	ng/mL	----	

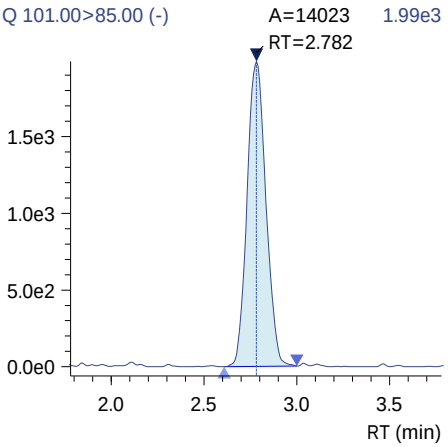
Perchlorate

Conc 9.7098



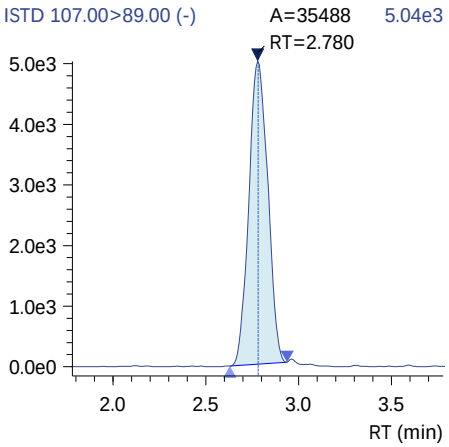
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Chromatograms and Selected Ion Monitoring

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 320, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20220706

1st Review: GRivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 6/1/2022
Cal. Std. xp: 9/4/2022
ICAL ID: **EC2200008**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100820-02 **B:** MeOH 218535

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	null		20220706_001	Perchlorate6850c.lcm	1x	☒		7/6/2022 10:39
2	null		20220706_002	Perchlorate6850c.lcm	1x	☒		7/6/2022 10:44
3	IB		20220706_003	Perchlorate6850c.lcm	1x	☒		7/6/2022 10:49
4	IB		20220706_004	Perchlorate6850c.lcm	1x	☒		7/6/2022 10:57
5	IB		20220706_005	Perchlorate6850c.lcm	1x	☒		7/6/2022 11:05
6	IB		20220706_006	Perchlorate6850c.lcm	1x	☒		7/6/2022 11:13
7	ICS		20220706_007	Perchlorate6850c.lcm	1x	☒		7/6/2022 11:21
8	LODV		20220706_008	Perchlorate6850c.lcm	1x	☒	222817	7/6/2022 12:00
9	PERCHLORATE7		20220706_009	Perchlorate6850c.lcm	1x	☒	222810	7/6/2022 12:08
10	E2200599-009		20220706_010	Perchlorate6850c.lcm	1x	☒		7/6/2022 12:16
11	E2200599-019		20220706_011	Perchlorate6850c.lcm	1x	☒	DNU-Confirmation Only	7/6/2022 12:24
12	E2200598-004		20220706_012	Perchlorate6850c.lcm	1x	☒	DNU-Confirmation Only	7/6/2022 12:32
13	E2200604-007		20220706_013	Perchlorate6850c.lcm	1x	☒		7/6/2022 12:56
14	E2200604-003		20220706_014	Perchlorate6850c.lcm	1x	☒		7/6/2022 13:52
15	E2200604-005		20220706_015	Perchlorate6850c.lcm	1x	☒		7/6/2022 14:18
16	PERCHLORATE7		20220706_016	Perchlorate6850c.lcm	1x	☒	222810	7/6/2022 14:40
17	EQ2200276-01		20220706_017	Perchlorate6850c.lcm	1x	☒		7/6/2022 15:18
18	EQ2200276-02		20220706_018	Perchlorate6850c.lcm	1x	☒		7/6/2022 15:51
19	EQ2200276-03		20220706_019	Perchlorate6850c.lcm	1x	☒		7/6/2022 15:59
20	EQ2200276-04		20220706_020	Perchlorate6850c.lcm	1x	☒		7/6/2022 16:07
21	EQ2200276-05		20220706_021	Perchlorate6850c.lcm	1x	☒		7/6/2022 16:15
22	E2200635-001		20220706_022	Perchlorate6850c.lcm	1x	☒		7/6/2022 16:23
23	PERCHLORATE7		20220706_023	Perchlorate6850c.lcm	1x	☒	222810	7/6/2022 16:31
24	EQ2200279-01		20220706_024	Perchlorate6850c.lcm	1x	☒		7/6/2022 16:38
25	EQ2200279-02		20220706_025	Perchlorate6850c.lcm	1x	☒		7/6/2022 16:46
26	EQ2200279-03		20220706_026	Perchlorate6850c.lcm	1x	☒		7/6/2022 16:54
27	E2200652-001		20220706_027	Perchlorate6850c.lcm	1x	☒		7/6/2022 17:02
28	E2200652-002		20220706_028	Perchlorate6850c.lcm	1x	☒		7/6/2022 17:10
29	E2200652-003		20220706_029	Perchlorate6850c.lcm	1x	☒		7/6/2022 17:18
30	E2200652-004		20220706_030	Perchlorate6850c.lcm	1x	☒	DNU-IR	7/6/2022 17:26
31	E2200652-005		20220706_031	Perchlorate6850c.lcm	1x	☒		7/6/2022 17:33
32	E2200652-006		20220706_032	Perchlorate6850c.lcm	1x	☒		7/6/2022 17:41
33	PERCHLORATE7		20220706_033	Perchlorate6850c.lcm	1x	☒	222810	7/6/2022 17:49
34	E2200652-007		20220706_034	Perchlorate6850c.lcm	1x	☒		7/6/2022 17:57
35	E2200652-008		20220706_035	Perchlorate6850c.lcm	1x	☒	DNU-IR	7/6/2022 18:05
36	PERCHLORATE7		20220706_036	Perchlorate6850c.lcm	1x	☒	222810	7/6/2022 18:13
37	E2200636-001		20220706_037	Perchlorate6850c.lcm	1x	☒	DNU-IR	7/6/2022 18:21
38	E2200636-002		20220706_038	Perchlorate6850c.lcm	1x	☒		7/6/2022 18:29
39	E2200636-003		20220706_039	Perchlorate6850c.lcm	1x	☒		7/6/2022 18:36
40	E2200636-004		20220706_040	Perchlorate6850c.lcm	1x	☒		7/6/2022 18:44
41	PERCHLORATE7		20220706_041	Perchlorate6850c.lcm	1x	☒	222810	7/6/2022 18:52
42	E2200636-005		20220706_042	Perchlorate6850c.lcm	1x	☒		7/6/2022 19:00
43	E2200636-006		20220706_043	Perchlorate6850c.lcm	1x	☒		7/6/2022 19:08
44	E2200636-007		20220706_044	Perchlorate6850c.lcm	1x	☒		7/6/2022 19:16
45	E2200636-008		20220706_045	Perchlorate6850c.lcm	1x	☒		7/6/2022 19:24
46	E2200638-001		20220706_046	Perchlorate6850c.lcm	1x	☒	DNU-IS out of range	7/6/2022 19:32
47	E2200638-002		20220706_047	Perchlorate6850c.lcm	1x	☒		7/6/2022 19:40
48	E2200638-003		20220706_048	Perchlorate6850c.lcm	1x	☒		7/6/2022 19:47
49	E2200638-004		20220706_049	Perchlorate6850c.lcm	1x	☒	DNU-IR	7/6/2022 19:55
50	E2200638-005		20220706_050	Perchlorate6850c.lcm	1x	☒	DNU-over ICAL range	7/6/2022 20:03
51	E2200638-006		20220706_051	Perchlorate6850c.lcm	1x	☒	DNU-over ICAL range	7/6/2022 20:11
52	PERCHLORATE7		20220706_052	Perchlorate6850c.lcm	1x	☒	222810	7/6/2022 20:19
53	E2200638-007		20220706_053	Perchlorate6850c.lcm	1x	☒	DNU-IR	7/6/2022 20:27
54	E2200638-008		20220706_054	Perchlorate6850c.lcm	1x	☒		7/6/2022 20:34
55	E2200638-009		20220706_055	Perchlorate6850c.lcm	1x	☒		7/6/2022 20:42
56	E2200638-010		20220706_056	Perchlorate6850c.lcm	1x	☒	DNU-IS out of range	7/6/2022 20:50
57	PERCHLORATE7		20220706_057	Perchlorate6850c.lcm	1x	☒	222810	7/6/2022 20:58
58	IB		20220706_058	Perchlorate6850c.lcm	1x	☒		7/6/2022 21:06
59	IB		20220706_059	Perchlorate6850c.lcm	1x	☒		7/6/2022 21:14
60	null		20220706_060	Perchlorate6850c.lcm	1x	☒		7/6/2022 21:19
61	null		20220706_061	Perchlorate6850c.lcm	1x	☒		7/6/2022 21:23

20220707

1st Review: GRivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 6/1/2022
Cal. Std. xp: 9/4/2022
ICAL ID: **EC2200008**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100820-02 **B:** MeOH 218535

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	null		20220707_001	Perchlorate6850c.lcm	1x	☒		7/7/2022 10:08
2	null		20220707_002	Perchlorate6850c.lcm	1x	☒		7/7/2022 10:13
3	IB		20220707_003	Perchlorate6850c.lcm	1x	☒		7/7/2022 10:18
4	IB		20220707_004	Perchlorate6850c.lcm	1x	☒		7/7/2022 10:26
5	IB		20220707_005	Perchlorate6850c.lcm	1x	☒		7/7/2022 10:34
6	IB		20220707_006	Perchlorate6850c.lcm	1x	☒		7/7/2022 10:42
7	ICS		20220707_007	Perchlorate6850c.lcm	1x	☒		7/7/2022 10:50
8	PERCHLORATE7		20220707_008	Perchlorate6850c.lcm	1x	☒	222810	7/7/2022 11:05
9	LODV		20220707_009	Perchlorate6850c.lcm	1x	☒	222817	7/7/2022 11:47
10	E2200652-008		20220707_010	Perchlorate6850c.lcm	1x	☒		7/7/2022 12:03
11	E2200638-004		20220707_011	Perchlorate6850c.lcm	1x	☒		7/7/2022 12:34
12	E2200638-005		20220707_012	Perchlorate6850c.lcm	10x	☒		7/7/2022 12:42
13	E2200638-006		20220707_013	Perchlorate6850c.lcm	10x	☒		7/7/2022 12:56
14	E2200638-010		20220707_014	Perchlorate6850c.lcm	1x	☒		7/7/2022 13:12
15	E2200636-001		20220707_015	Perchlorate6850c.lcm	1x	☒		7/7/2022 13:20
16	PERCHLORATE7		20220707_016	Perchlorate6850c.lcm	1x	☒	222810	7/7/2022 13:51
17	E2200652-004		20220707_017	Perchlorate6850c.lcm	1x	☒		7/7/2022 14:08
18	E2200638-007		20220707_018	Perchlorate6850c.lcm	1x	☒		7/7/2022 14:16
19	E2200638-001		20220707_019	Perchlorate6850c.lcm	1x	☒		7/7/2022 14:57
20	PERCHLORATE7		20220707_020	Perchlorate6850c.lcm	1x	☒	222810	7/7/2022 15:12
21	EQ220277-01		20220707_021	Perchlorate6850c.lcm	1x	☒		7/7/2022 15:20
22	EQ220277-02		20220707_022	Perchlorate6850c.lcm	1x	☒		7/7/2022 15:28
23	EQ220277-03		20220707_023	Perchlorate6850c.lcm	1x	☒		7/7/2022 15:36
24	E2200647-001		20220707_024	Perchlorate6850c.lcm	1x	☒		7/7/2022 15:45
25	E2200647-002		20220707_025	Perchlorate6850c.lcm	1x	☒		7/7/2022 15:53
26	E2200647-003		20220707_026	Perchlorate6850c.lcm	1x	☒		7/7/2022 16:00
27	E2200647-004		20220707_027	Perchlorate6850c.lcm	1x	☒		7/7/2022 16:08
28	E2200647-005		20220707_028	Perchlorate6850c.lcm	1x	☒		7/7/2022 16:16
29	E2200647-006		20220707_029	Perchlorate6850c.lcm	1x	☒		7/7/2022 16:24
30	PERCHLORATE7		20220707_030	Perchlorate6850c.lcm	1x	☒	222810	7/7/2022 16:32
31	E2200648-001		20220707_031	Perchlorate6850c.lcm	1x	☒		7/7/2022 16:40
32	E2200648-002		20220707_032	Perchlorate6850c.lcm	1x	☒		7/7/2022 16:48
33	E2200648-003		20220707_033	Perchlorate6850c.lcm	1x	☒		7/7/2022 16:56
34	E2200648-004		20220707_034	Perchlorate6850c.lcm	1x	☒		7/7/2022 17:04
35	E2200648-005		20220707_035	Perchlorate6850c.lcm	1x	☒		7/7/2022 17:11
36	E2200648-006		20220707_036	Perchlorate6850c.lcm	1x	☒		7/7/2022 17:19
37	E2200648-007		20220707_037	Perchlorate6850c.lcm	1x	☒		7/7/2022 17:27
38	E2200648-008		20220707_038	Perchlorate6850c.lcm	1x	☒		7/7/2022 17:35
39	PERCHLORATE7		20220707_039	Perchlorate6850c.lcm	1x	☒	222810	7/7/2022 17:43
40	E2200653-001x1KDNU-run10x		20220707_040	Perchlorate6850c.lcm	1000x	☒	DNU-run 10X dilution	7/7/2022 17:51
41	E2200653-002x1K		20220707_041	Perchlorate6850c.lcm	1000x	☒		7/7/2022 17:59
42	E2200653-003x1KDNU-run10K		20220707_042	Perchlorate6850c.lcm	1000x	☒	DNU-run 10,000X dilution	7/7/2022 18:07
43	E2200653-004x1KDNU-run10K		20220707_043	Perchlorate6850c.lcm	1000x	☒	DNU-run 10,000X dilution	7/7/2022 18:14
44	E2200653-005x1KDNU-run		20220707_044	Perchlorate6850c.lcm	1000x	☒	DNU-run dilution	7/7/2022 18:22
45	PERCHLORATE7		20220707_045	Perchlorate6850c.lcm	1x	☒	222810	7/7/2022 18:30
46	IB		20220707_046	Perchlorate6850c.lcm	1x	☒		7/7/2022 18:38
47	IB		20220707_047	Perchlorate6850c.lcm	1x	☒		7/7/2022 18:46
48	IB		20220707_048	Perchlorate6850c.lcm	1x	☒		7/7/2022 18:54
49	IB		20220707_049	Perchlorate6850c.lcm	1x	☒		7/7/2022 19:02
50	null		20220707_050	Perchlorate6850c.lcm	1x	☒		7/7/2022 19:07
51	null		20220707_051	Perchlorate6850c.lcm	1x	☒		7/7/2022 19:11

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22061645

Service Request: E2200638
Date Analyzed: 7/ 6/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220706\20220706_009

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 769646
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1511	0.1511	0.0	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22061645

Service Request: E2200638
Date Analyzed: 7/ 6/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220706\20220706_016

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 769646
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.59	0.1511	0.1450	-4.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22061645

Service Request: E2200638
Date Analyzed: 7/ 6/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220706\20220706_023

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 769646
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1511	0.1518	0.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22061645

Service Request: E2200638
Date Analyzed: 7/ 6/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220706\20220706_033

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 769646
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.95	0.1511	0.1503	-0.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22061645

Service Request: E2200638
Date Analyzed: 7/ 6/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220706\20220706_036

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 769646
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.97	0.1511	0.1506	-0.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22061645

Service Request: E2200638
Date Analyzed: 7/ 6/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220706\20220706_041

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 769646
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.98	0.1511	0.1508	-0.2	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22061645

Service Request: E2200638
Date Analyzed: 7/ 6/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220706\20220706_052

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 769646
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.94	0.1511	0.1503	-0.6	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22061645

Service Request: E2200638
Date Analyzed: 7/ 6/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220706\20220706_057

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 769646
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.90	0.1511	0.1496	-1.0	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22061645

Service Request: E2200638
Date Analyzed: 7/ 7/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220707\20220707_008

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 769895
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.2	0.1511	0.1536	1.6	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22061645

Service Request: E2200638
Date Analyzed: 7/ 7/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220707\20220707_016

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 769895
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.82	0.1511	0.1485	-1.8	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22061645

Service Request: E2200638
Date Analyzed: 7/ 7/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220707\20220707_020

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 769895
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.79	0.1511	0.1479	-2.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Analyzed:**	7/6/22 12:08

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220706\20220706_009	**Lab Code:**	EQ2200280-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	769646
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200280-01	34,430	2.84

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22061645

Service Request: E2200638
Date Analyzed: 7/6/22 14:40

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID: I:\LCMS01\DATA\20220706\20220706_016
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2200280-02
Analysis Lot: 769646
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200280-02	35,076	2.86
Method Blank	EQ2200276-01	49,844	2.87
Lab Control Sample	EQ2200276-02	45,224	2.86
Duplicate Lab Control Sample	EQ2200276-03	44,331	2.85

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Analyzed:**	7/6/22 16:31

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220706\20220706_023	**Lab Code:**	EQ2200280-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	769646
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200280-03	34,878	2.86

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Analyzed:**	7/6/22 17:49

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220706\20220706_033	**Lab Code:**	EQ2200280-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	769646
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200280-04	37,828	2.87

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Analyzed:**	7/6/22 18:13

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220706\20220706_036	**Lab Code:**	EQ2200280-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	769646
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200280-05	37,865	2.87

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Analyzed:**	7/6/22 18:52

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220706\20220706_041	**Lab Code:**	EQ2200280-06
Instrument ID:	E-LCMS-01	**Analysis Lot:**	769646
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200280-06	32,152	2.85
16EW02-220629	E2200638-002	22,157	2.84
16EW02-220629-FD	E2200638-003	23,457	2.84

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Analyzed:**	7/6/22 20:19

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220706\20220706_052	**Lab Code:**	EQ2200280-07
Instrument ID:	E-LCMS-01	**Analysis Lot:**	769646
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200280-07	29,415	2.86
16WW39-220629	E2200638-008	18,276	2.84
16WW49-220629	E2200638-009	24,545	2.84

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Analyzed:**	7/6/22 20:58

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220706\20220706_057	**Lab Code:**	EQ2200280-08
Instrument ID:	E-LCMS-01	**Analysis Lot:**	769646
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200280-08	30,844	2.87

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200638
Project:	HS22061645	**Date Analyzed:**	7/7/22 11:05

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220707\20220707_008	**Lab Code:**	EQ2200282-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	769895
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200282-01	35,682	2.87
16IW26-220629	E2200638-004	27,855	2.85
16WW41-220629	E2200638-005	29,256	2.84
16WW41-220629-FD	E2200638-006	29,567	2.87
16IW03-220629	E2200638-010	28,755	2.85

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22061645

Service Request: E2200638
Date Analyzed: 7/7/22 13:51

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID: I:\LCMS01\DATA\20220707\20220707_016
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2200282-02
Analysis Lot: 769895
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200282-02	38,309	2.88
16WW22-220629	E2200638-007	20,420	2.85
16EW03-220629	E2200638-001	25,851	2.86

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22061645

Service Request: E2200638
Date Analyzed: 7/7/22 15:12

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID: I:\LCMS01\DATA\20220707\20220707_020
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2200282-03
Analysis Lot: 769895
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200282-03	35,915	2.86

Results flagged with an asterisk (*) indicate values outside control criteria.

Insight Report

Printed at 7/7/2022 9:40:29 AM

Method File: I:\LCMS01\DATA\20220706\20220601.lcm
Project File: I:\LCMS01\DATA\20220706\20220706.damlp

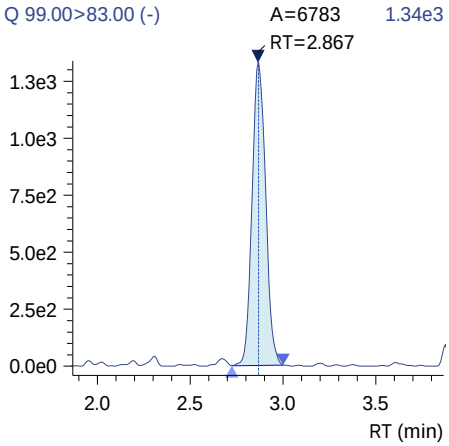
ICS

Sample ID: ICS
Date Acquired: 7/6/2022 11:21:24 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_007.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.867	6783	40214	1.1161	ng/mL	22.16	17.81-33.08
Perchlorate 2	Auto	2.862	1503	40214	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.862	40214	40214	1.0000	ng/mL	----	

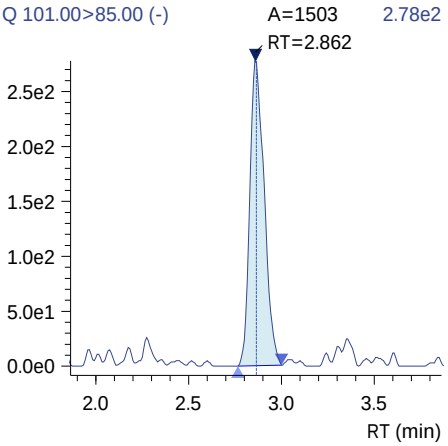
Perchlorate

Conc 1.1161



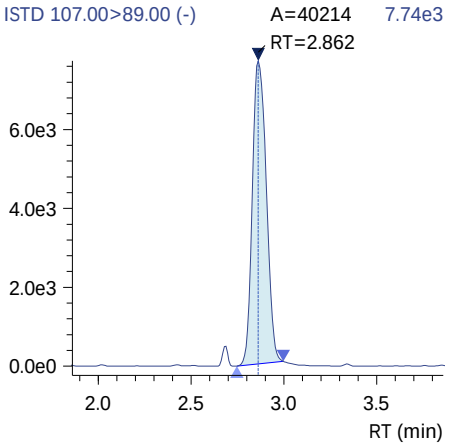
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/7/2022 9:51:00 AM

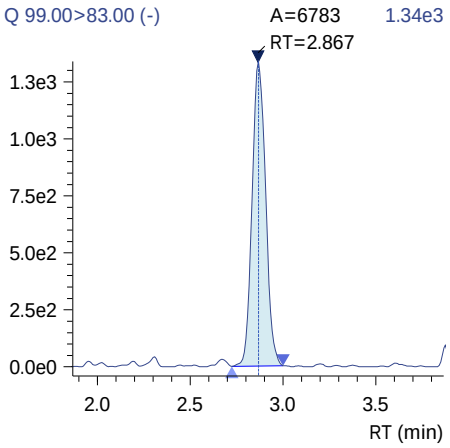
Method File: I:\LCMS01\DATA\20220706\20220601.lcm
Project File: I:\LCMS01\DATA\20220706\20220706.damlp

ICS

Sample ID: ICS
Date Acquired: 7/6/2022 11:21:24 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_007.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 1

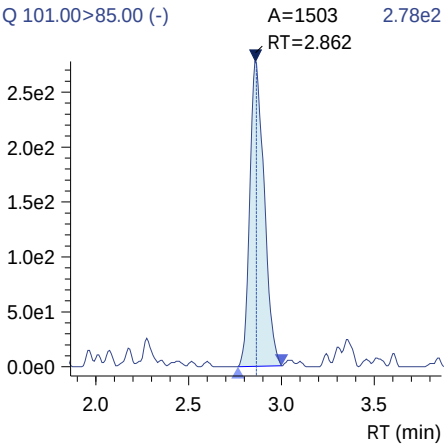
Perchlorate

Conc 1.1431



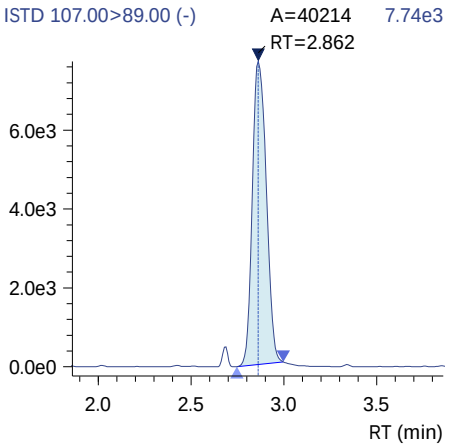
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/7/2022 9:40:29 AM

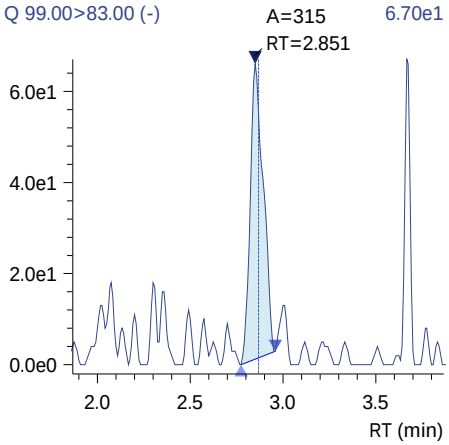
LODV

Sample ID: LODV
Date Acquired: 7/6/2022 12:00:53 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_008.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.851	315	43785	0.0476	ng/mL	24.44	17.81-33.08
Perchlorate 2	M	2.871	86	43785	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.850	43785	43785	1.0000	ng/mL	----	

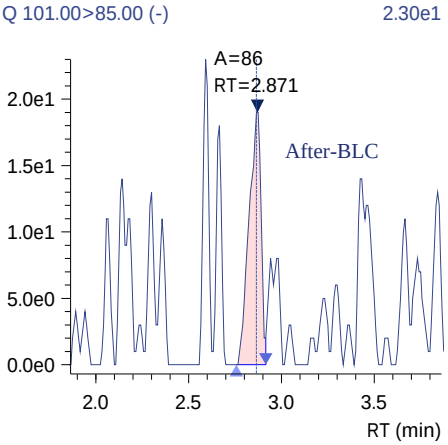
Perchlorate

Conc 0.0476



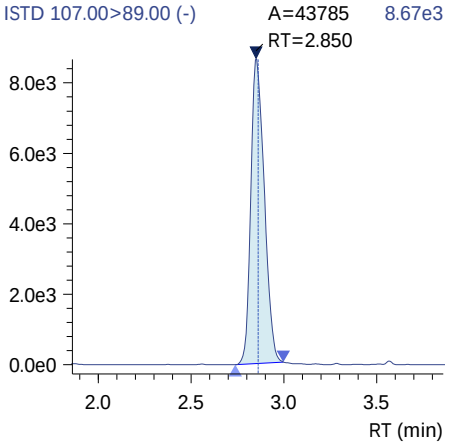
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/7/2022 9:51:00 AM

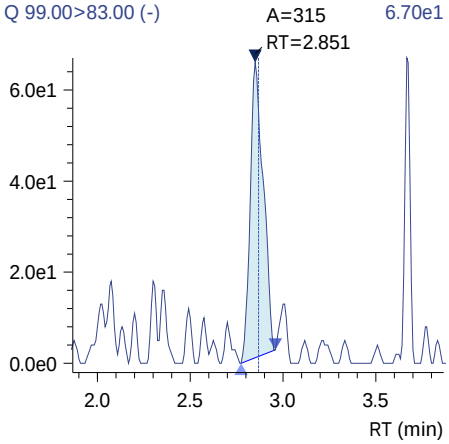
LODV

Sample ID: LODV
Date Acquired: 7/6/2022 12:00:53 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_008.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 0.0488

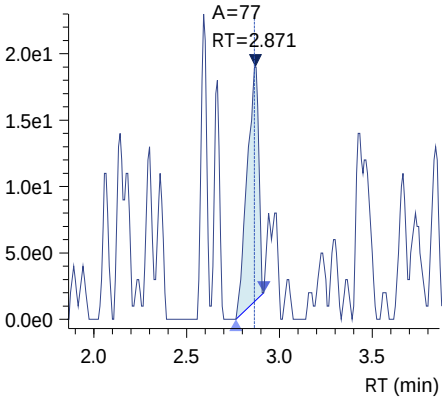
Q 99.00>83.00 (-) A=315 RT=2.851 6.70e1



Perchlorate 2

Conc 0.0000

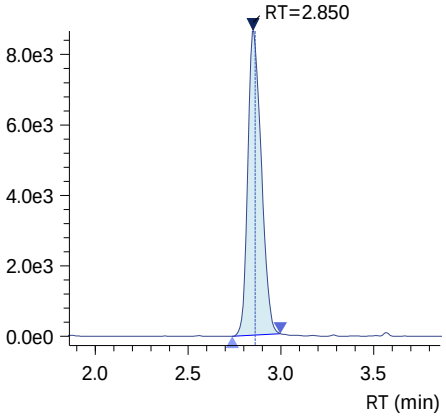
Q 101.00>85.00 (-) A=77 RT=2.871 2.30e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=43785 RT=2.850 8.67e3



Insight Report

Printed at 7/7/2022 9:40:29 AM

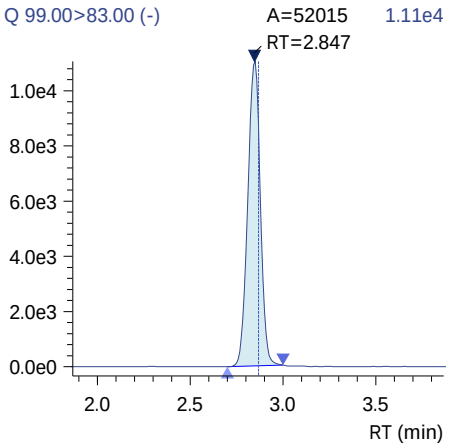
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/6/2022 12:08:55 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_009.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.847	52015	34430	9.9963	ng/mL	25.39	17.81-33.08
Perchlorate 2	Auto	2.845	13206	34430	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.843	34430	34430	1.0000	ng/mL	----	

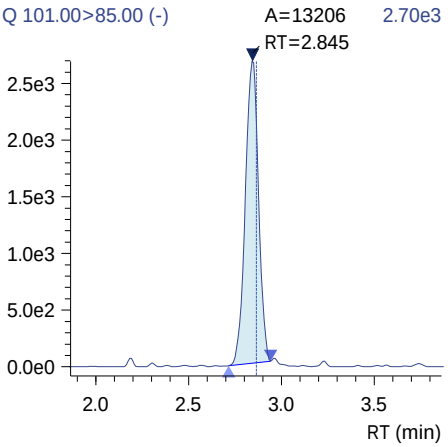
Perchlorate

Conc 9.9963



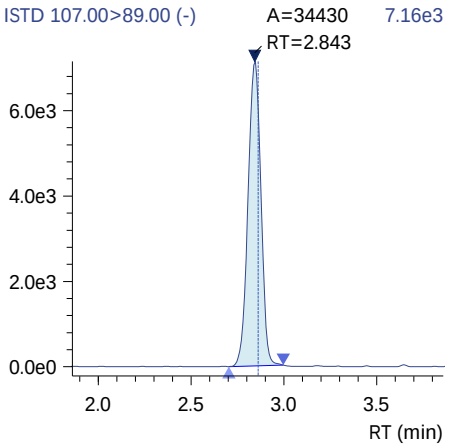
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/7/2022 9:51:00 AM

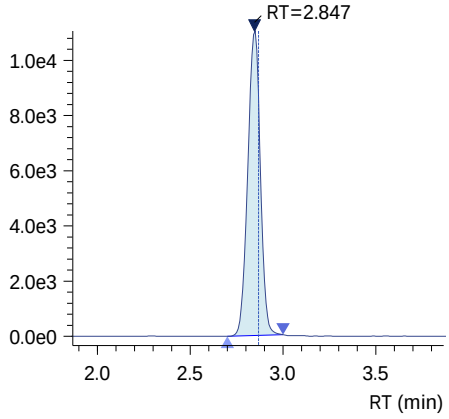
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/6/2022 12:08:55 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_009.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.2384

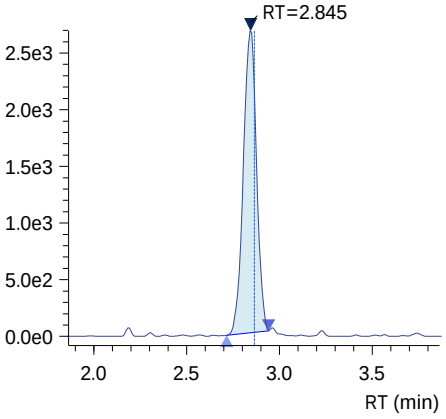
Q 99.00>83.00 (-) A=52015 1.11e4 RT=2.847



Perchlorate 2

Conc 0.0000

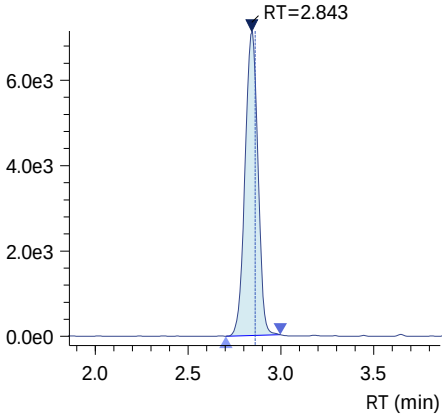
Q 101.00>85.00 (-) A=13206 2.70e3 RT=2.845



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=34430 7.16e3 RT=2.843



Insight Report

Printed at 7/7/2022 9:40:29 AM

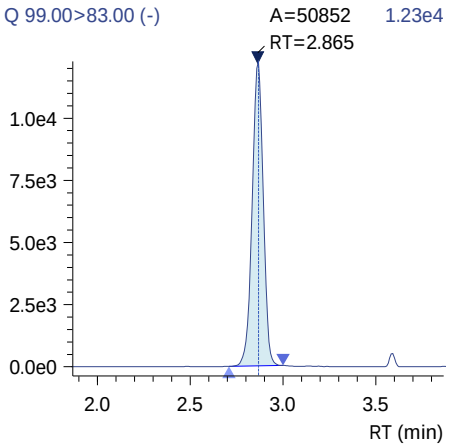
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/6/2022 2:40:54 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_016.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.865	50852	35076	9.5928	ng/mL	26.81	17.81-33.08
Perchlorate 2	Auto	2.864	13632	35076	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.864	35076	35076	1.0000	ng/mL	----	

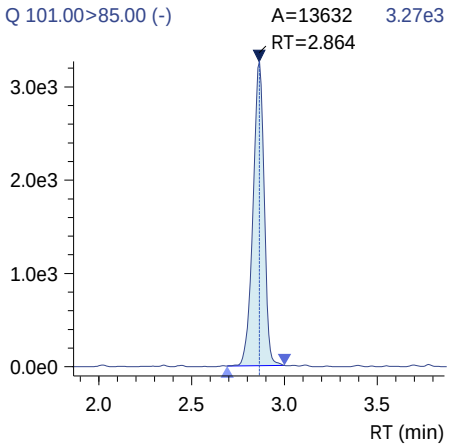
Perchlorate

Conc 9.5928



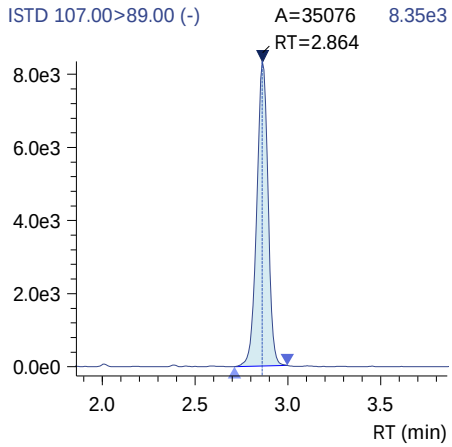
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

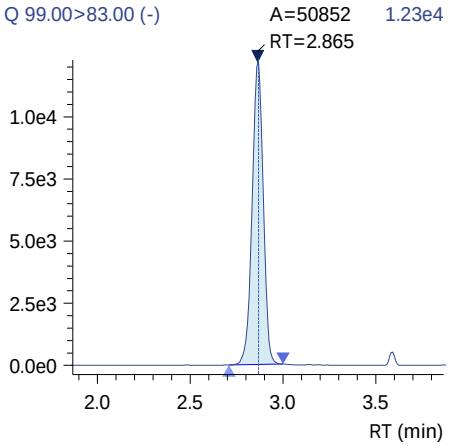
Printed at 7/7/2022 9:51:00 AM

PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/6/2022 2:40:54 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_016.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

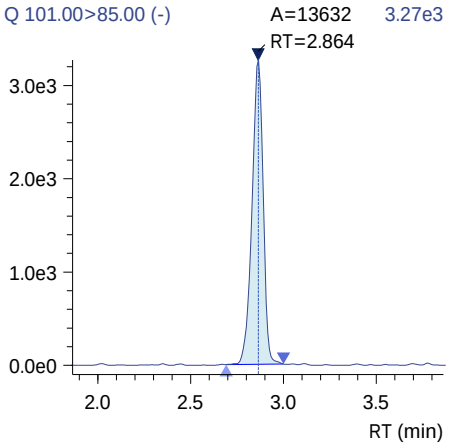
Perchlorate

Conc 9.8251



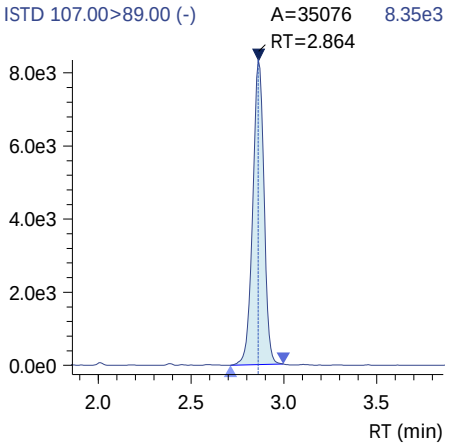
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/7/2022 9:40:29 AM

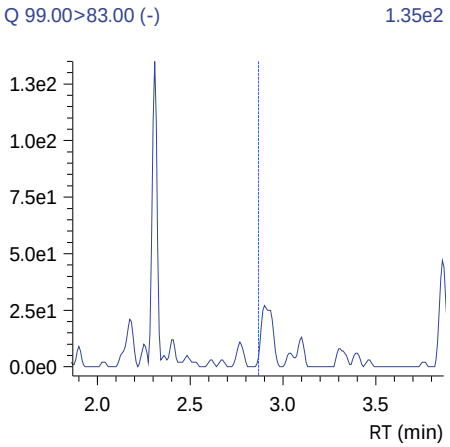
EQ2200276-01

Sample ID: EQ2200276-01
Date Acquired: 7/6/2022 3:18:06 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_017.lcd
Vial: 21 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	49844	----	ng/mL	0.00	17.81-33.08
Perchlorate 2	Auto	2.845	105	49844	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.872	49844	49844	1.0000	ng/mL	----	

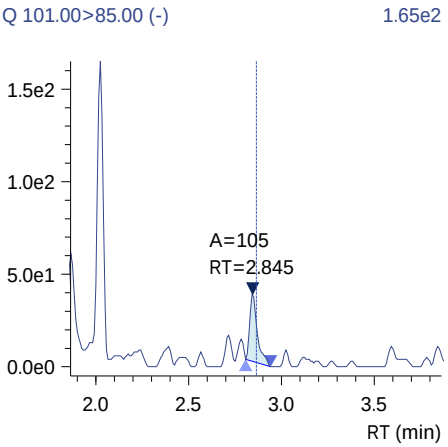
Perchlorate

Conc ----



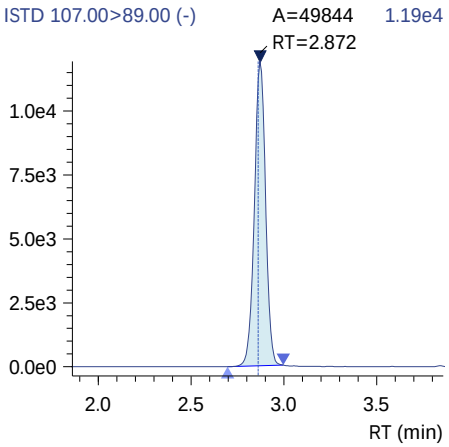
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/7/2022 9:51:00 AM

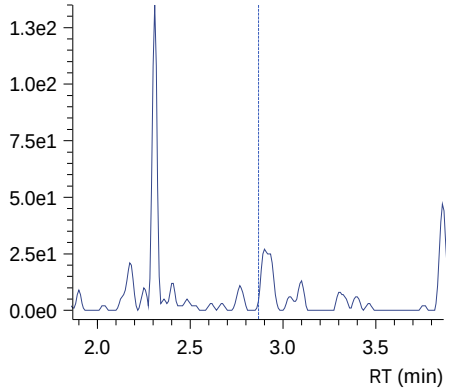
EQ2200276-01

Sample ID: EQ2200276-01
Date Acquired: 7/6/2022 3:18:06 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_017.lcd
Vial: 21 | Inj. Volume: 25.0000uL | Tray: 5

Perchlorate

Conc ----

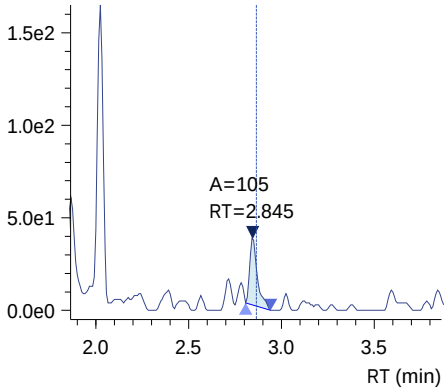
Q 99.00>83.00 (-) 1.35e2



Perchlorate 2

Conc 0.0000

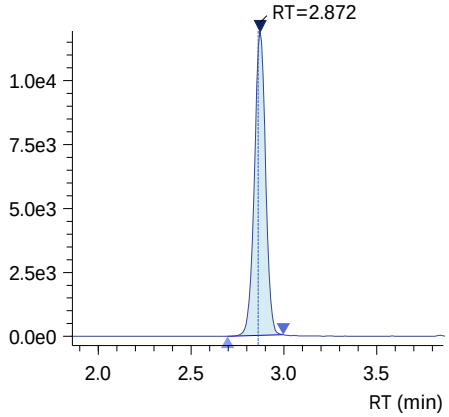
Q 101.00>85.00 (-) 1.65e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=49844 1.19e4



Insight Report

Printed at 7/7/2022 10:26:10 AM

Method File: I:\LCMS01\DATA\20220706\20220601.lcm
Project File: I:\LCMS01\DATA\20220706\20220706.damlp

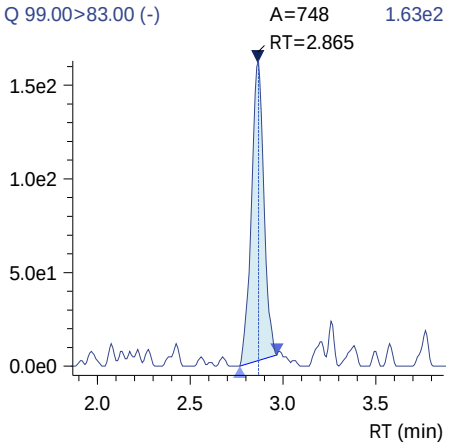
EQ2200276-02

Sample ID: EQ2200276-02
Date Acquired: 7/6/2022 3:51:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_018.lcd
Vial: 22 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.865	748	45224	0.1094	ng/mL	30.21	17.81-33.08
Perchlorate 2	Auto	2.857	226	45224	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	M	2.861	45224	45224	1.0000	ng/mL	----	

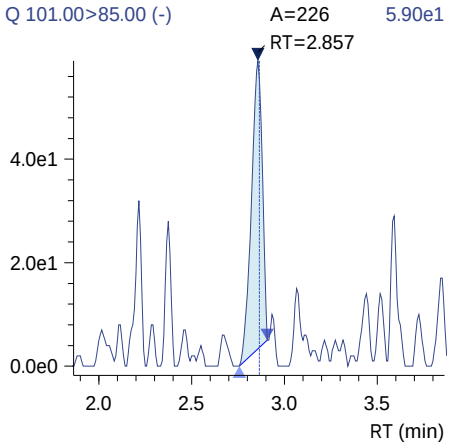
Perchlorate

Conc 0.1094



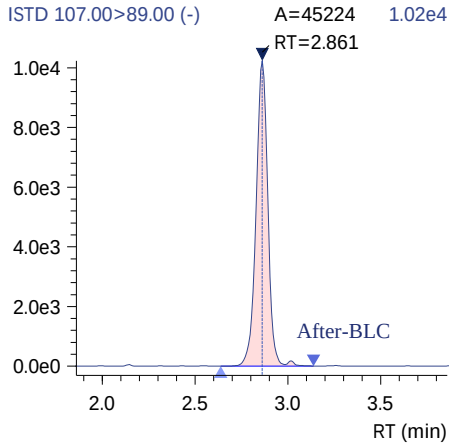
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

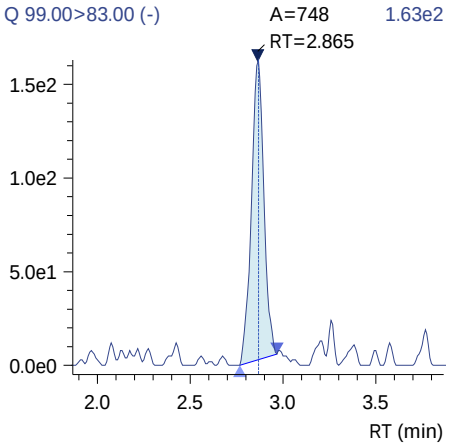
Printed at 7/7/2022 9:51:00 AM

EQ2200276-02

Sample ID: EQ2200276-02
Date Acquired: 7/6/2022 3:51:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_018.lcd
Vial: 22 | Inj. Volume: 25.0000uL | Tray: 5

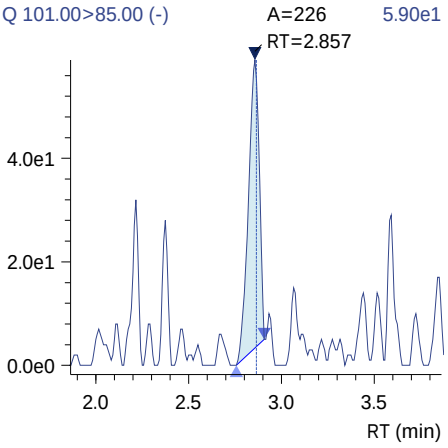
Perchlorate

Conc 0.1146



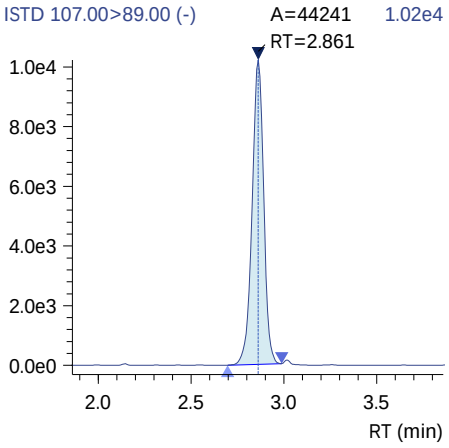
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/7/2022 10:26:10 AM

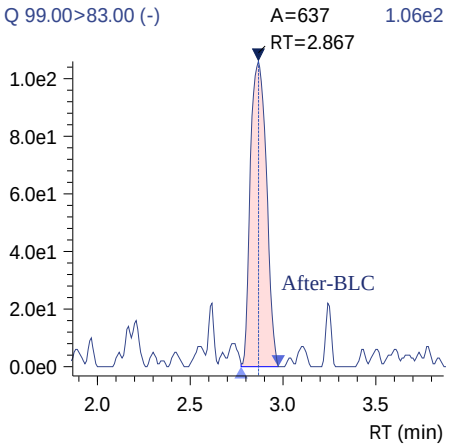
EQ2200276-03

Sample ID: EQ2200276-03
Date Acquired: 7/6/2022 3:59:34 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_019.lcd
Vial: 23 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	2.867	637	44331	0.0951	ng/mL	23.71	17.81-33.08
Perchlorate 2	Auto	2.840	151	44331	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.849	44331	44331	1.0000	ng/mL	----	

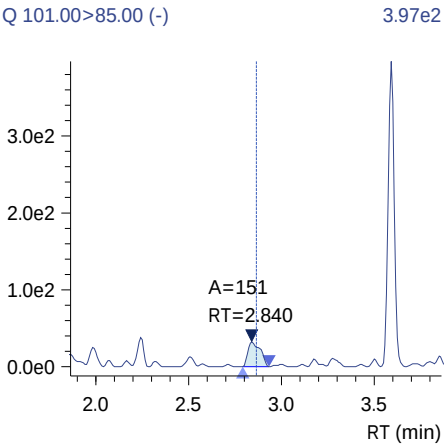
Perchlorate

Conc 0.0951



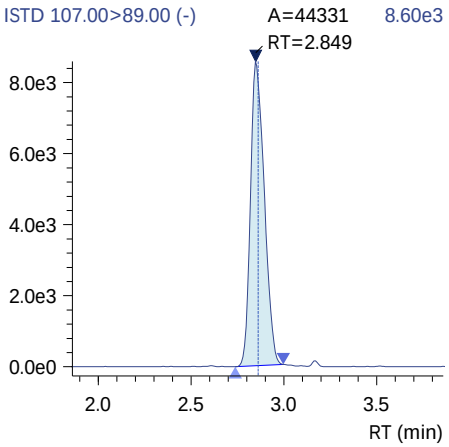
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

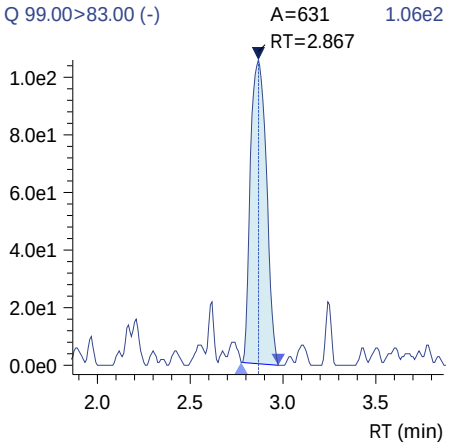
Printed at 7/7/2022 9:51:00 AM

EQ2200276-03

Sample ID: EQ2200276-03
Date Acquired: 7/6/2022 3:59:34 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_019.lcd
Vial: 23 | Inj. Volume: 25.0000uL | Tray: 5

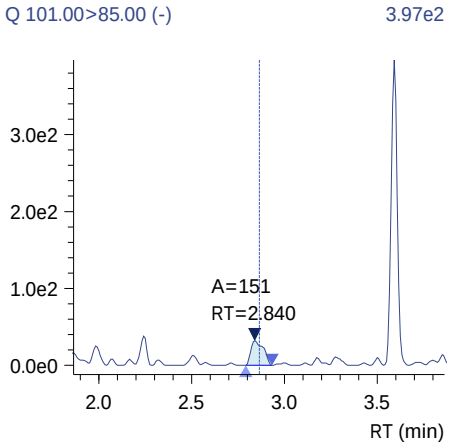
Perchlorate

Conc 0.0965



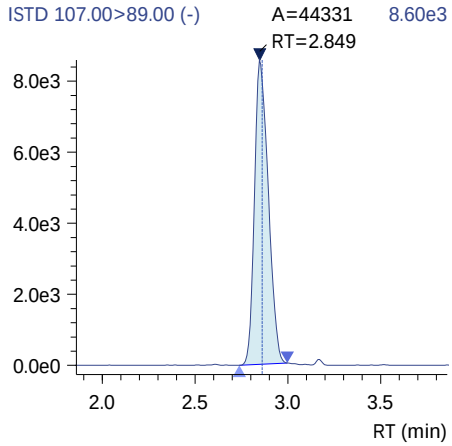
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/7/2022 9:40:29 AM

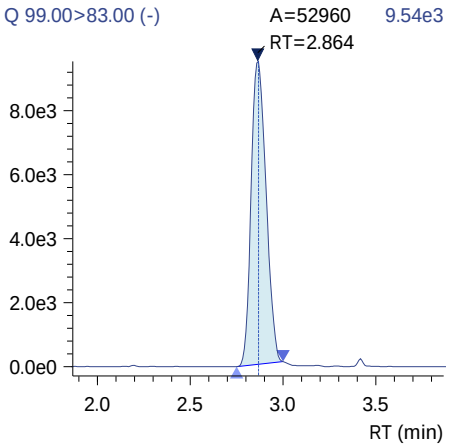
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/6/2022 4:31:01 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_023.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.864	52960	34878	10.0471	ng/mL	25.06	17.81-33.08
Perchlorate 2	Auto	2.857	13269	34878	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.862	34878	34878	1.0000	ng/mL	----	

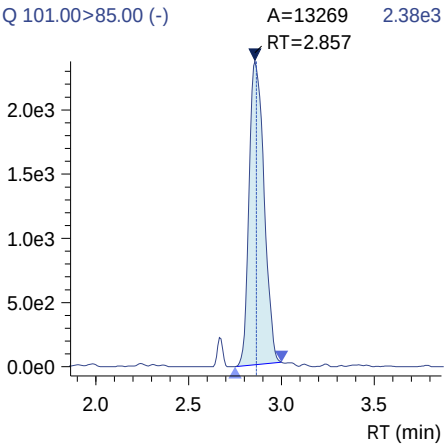
Perchlorate

Conc 10.0471



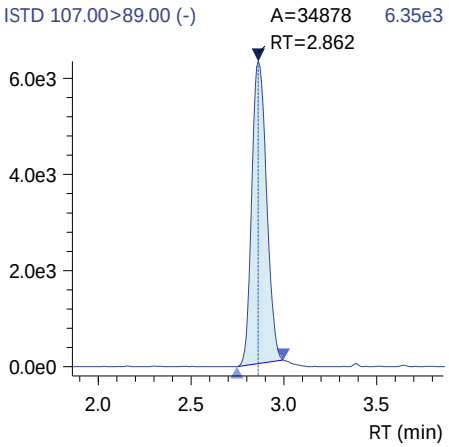
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/7/2022 9:51:00 AM

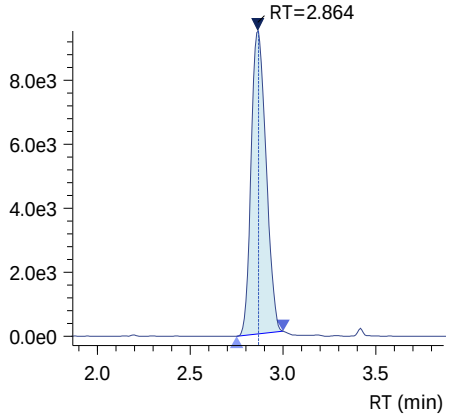
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/6/2022 4:31:01 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_023.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.2905

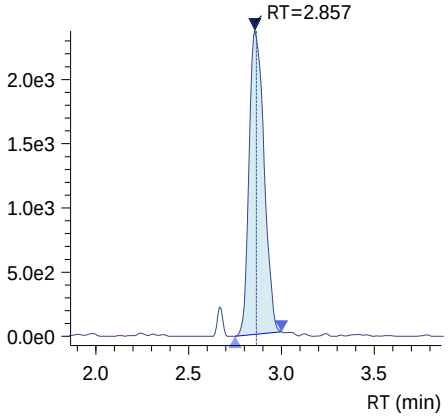
Q 99.00>83.00 (-) A=52960 9.54e3



Perchlorate 2

Conc 0.0000

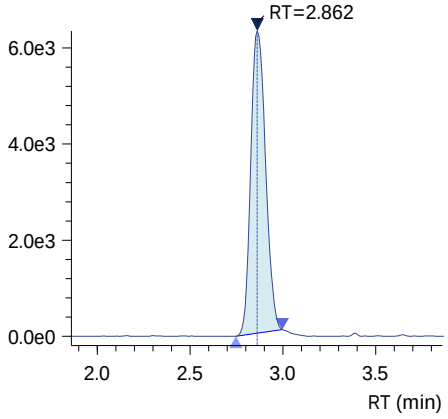
Q 101.00>85.00 (-) A=13269 2.38e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=34878 6.35e3



Insight Report

Printed at 7/7/2022 9:40:29 AM

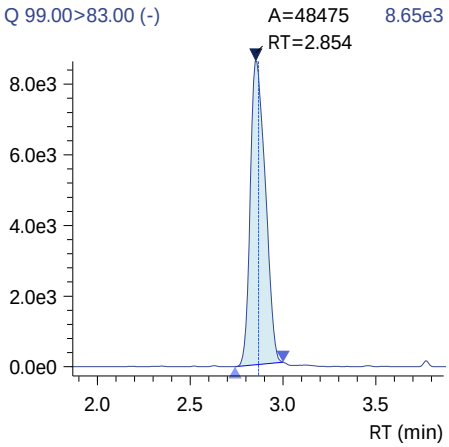
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/6/2022 6:52:42 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_041.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.854	48475	32152	9.9760	ng/mL	25.81	17.81-33.08
Perchlorate 2	Auto	2.864	12509	32152	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.854	32152	32152	1.0000	ng/mL	----	

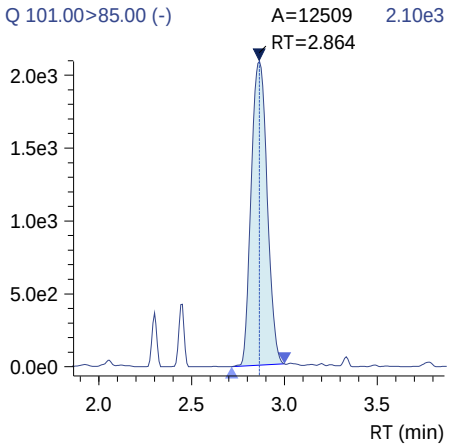
Perchlorate

Conc 9.9760



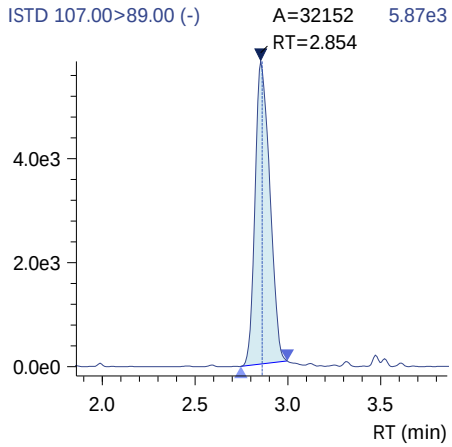
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/7/2022 9:51:00 AM

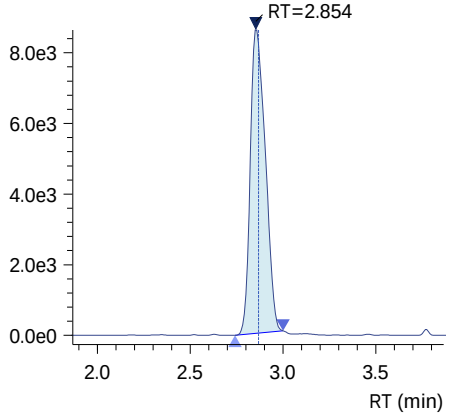
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/6/2022 6:52:42 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_041.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.2176

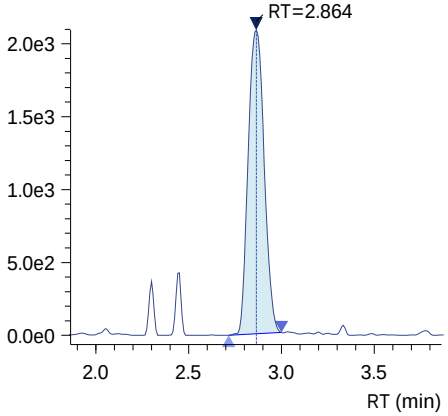
Q 99.00>83.00 (-) A=48475 8.65e3 RT=2.854



Perchlorate 2

Conc 0.0000

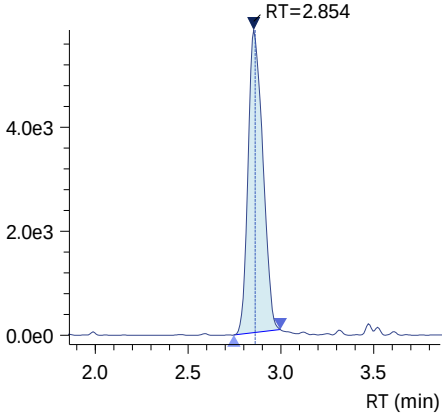
Q 101.00>85.00 (-) A=12509 2.10e3 RT=2.864



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=32152 5.87e3 RT=2.854



Insight Report

Printed at 7/7/2022 9:40:29 AM

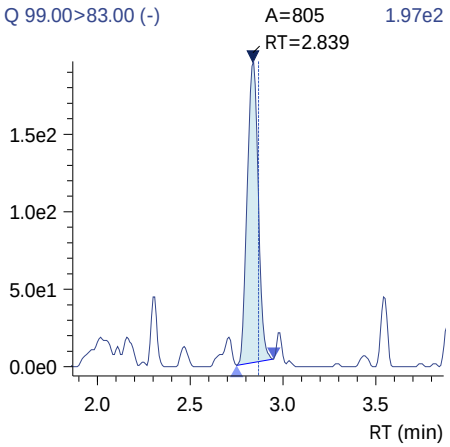
E2200638-002

Sample ID: E2200638-002
Date Acquired: 7/6/2022 7:40:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_047.lcd
Vial: 36 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.839	805	22157	0.2404	ng/mL	27.33	17.81-33.08
Perchlorate 2	Auto	2.842	220	22157	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.838	22157	22157	1.0000	ng/mL	----	

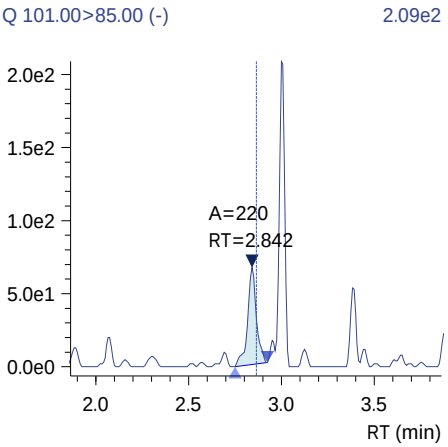
Perchlorate

Conc 0.2404



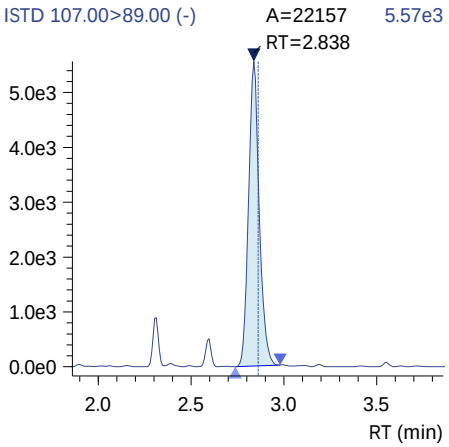
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

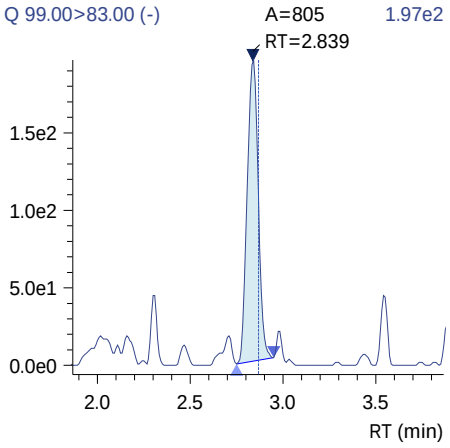
Printed at 7/7/2022 9:51:00 AM

E2200638-002

Sample ID: E2200638-002
Date Acquired: 7/6/2022 7:40:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_047.lcd
Vial: 36 | Inj. Volume: 25.0000uL | Tray: 5

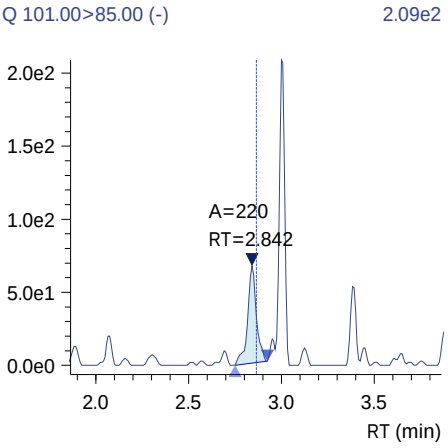
Perchlorate

Conc 0.2462



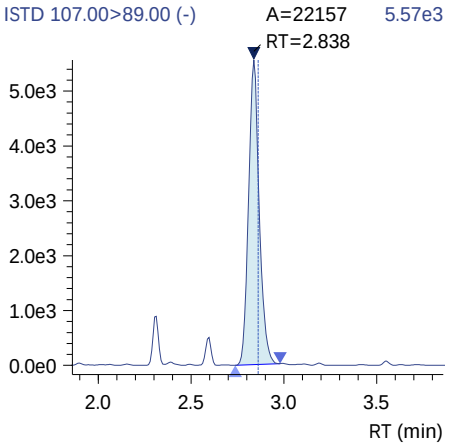
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/7/2022 9:40:29 AM

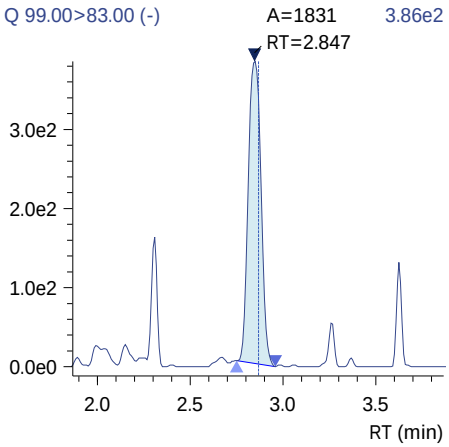
E2200638-003

Sample ID: E2200638-003
Date Acquired: 7/6/2022 7:47:52 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_048.lcd
Vial: 37 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	2.847	1831	23457	0.5165	ng/mL	32.28	17.81-33.08
Perchlorate 2	M	2.843	591	23457	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.837	23457	23457	1.0000	ng/mL	----	

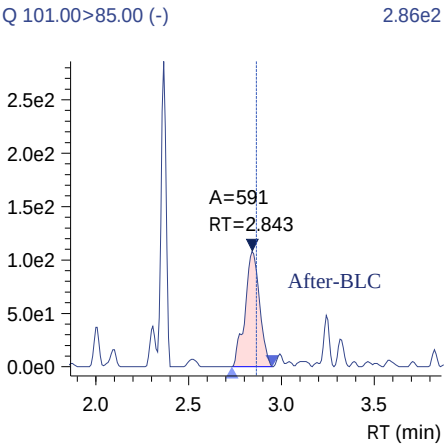
Perchlorate

Conc 0.5165



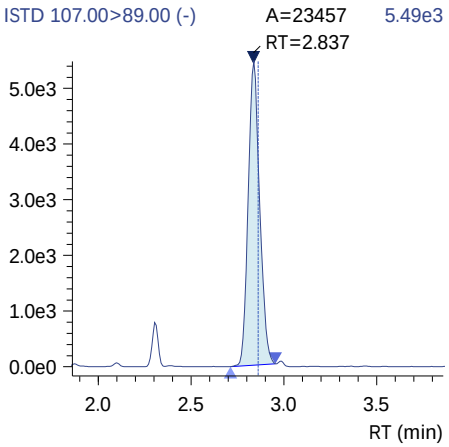
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

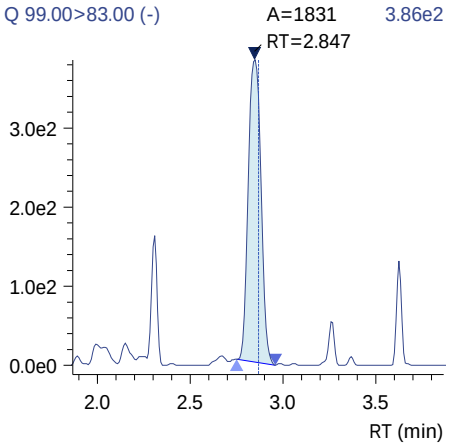
Printed at 7/7/2022 9:51:00 AM

E2200638-003

Sample ID: E2200638-003
Date Acquired: 7/6/2022 7:47:52 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_048.lcd
Vial: 37 | Inj. Volume: 25.0000uL | Tray: 5

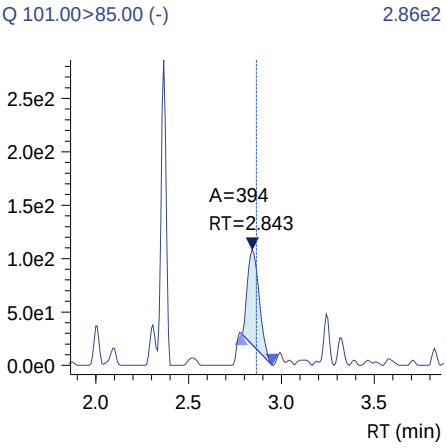
Perchlorate

Conc 0.5290



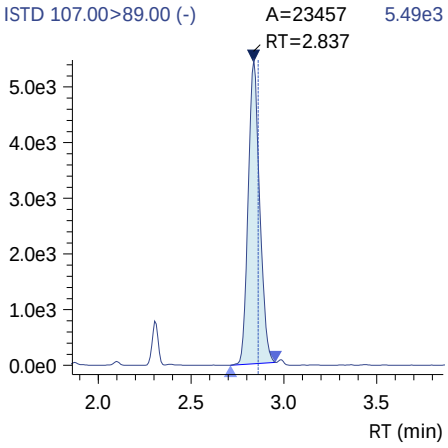
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/7/2022 9:40:29 AM

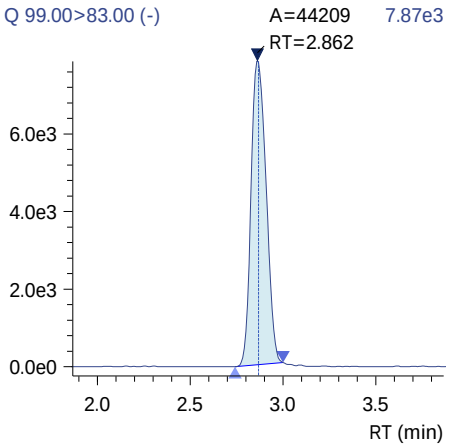
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/6/2022 8:19:18 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_052.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.862	44209	29415	9.9446	ng/mL	24.92	17.81-33.08
Perchlorate 2	Auto	2.859	11017	29415	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.859	29415	29415	1.0000	ng/mL	----	

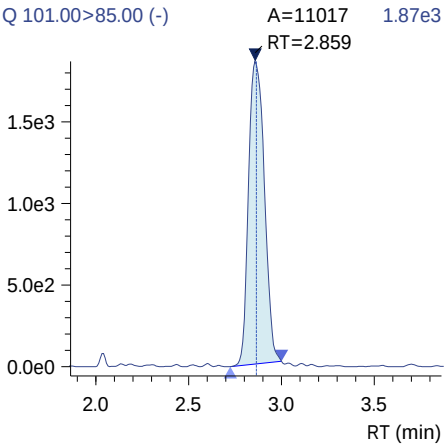
Perchlorate

Conc 9.9446



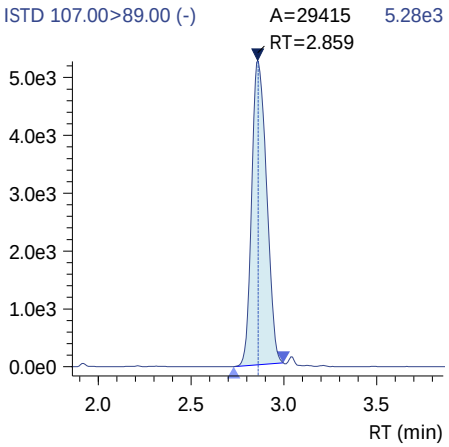
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/7/2022 9:51:00 AM

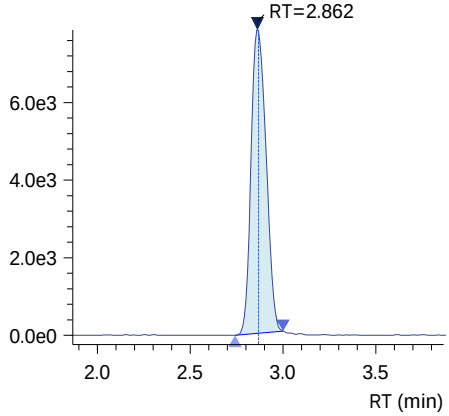
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/6/2022 8:19:18 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_052.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.1855

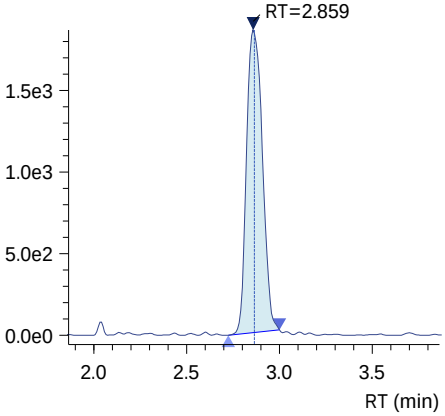
Q 99.00>83.00 (-) A=44209 7.87e3 RT=2.862



Perchlorate 2

Conc 0.0000

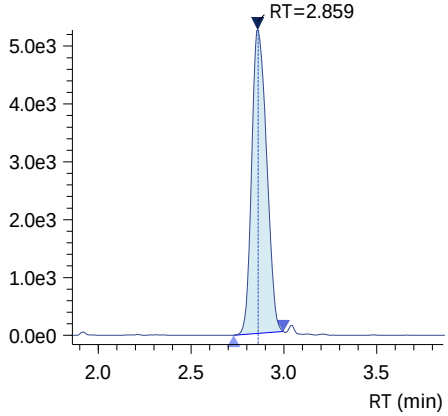
Q 101.00>85.00 (-) A=11017 1.87e3 RT=2.859



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=29415 5.28e3 RT=2.859



Insight Report

Printed at 7/7/2022 9:40:29 AM

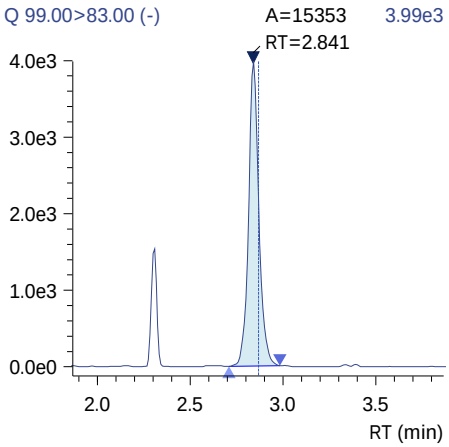
E2200638-008

Sample ID: E2200638-008
Date Acquired: 7/6/2022 8:34:58 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_054.lcd
Vial: 42 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.841	15353	18276	5.5585	ng/mL	24.43	17.81-33.08
Perchlorate 2	Auto	2.839	3751	18276	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.838	18276	18276	1.0000	ng/mL	----	

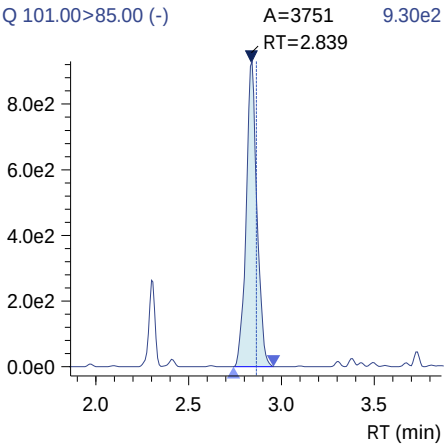
Perchlorate

Conc 5.5585



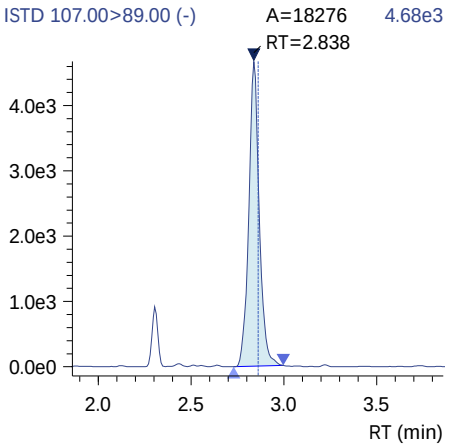
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

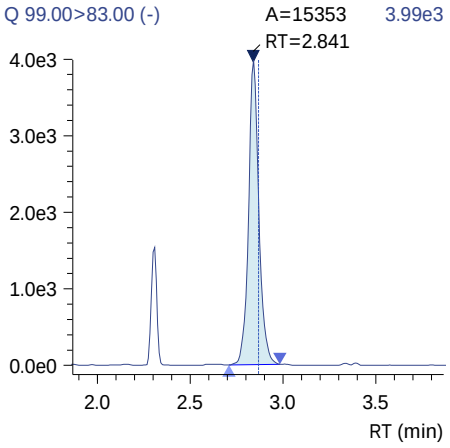
Printed at 7/7/2022 9:51:00 AM

E2200638-008

Sample ID: E2200638-008
Date Acquired: 7/6/2022 8:34:58 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_054.lcd
Vial: 42 | Inj. Volume: 25.0000uL | Tray: 5

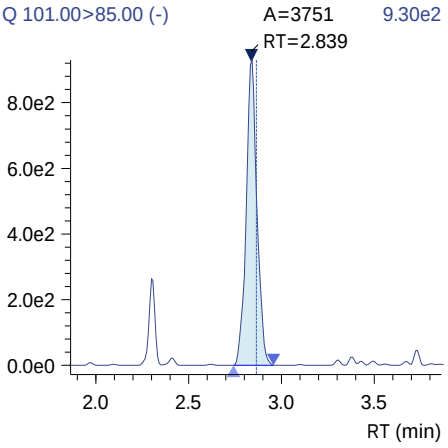
Perchlorate

Conc 5.6931



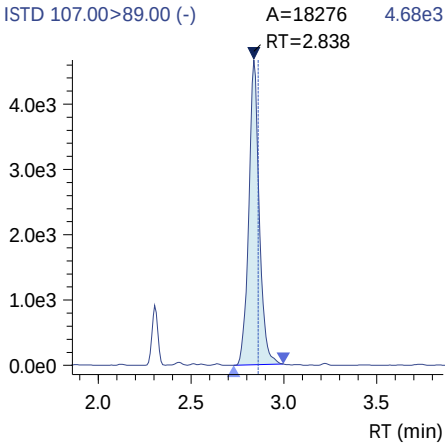
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/7/2022 9:40:29 AM

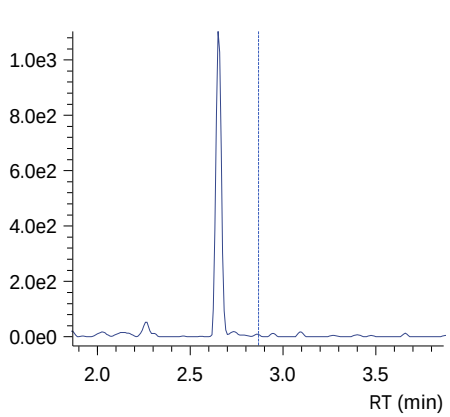
E2200638-009

Sample ID: E2200638-009
Date Acquired: 7/6/2022 8:42:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_055.lcd
Vial: 43 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	24545	----	ng/mL	0.00	17.81-33.08
Perchlorate 2	ND(W/B)	----	----	24545	----	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.841	24545	24545	1.0000	ng/mL	----	

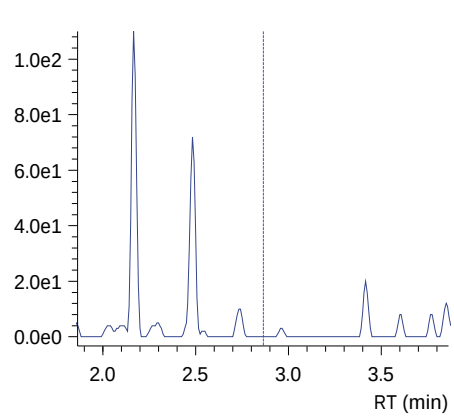
Perchlorate

Conc ----



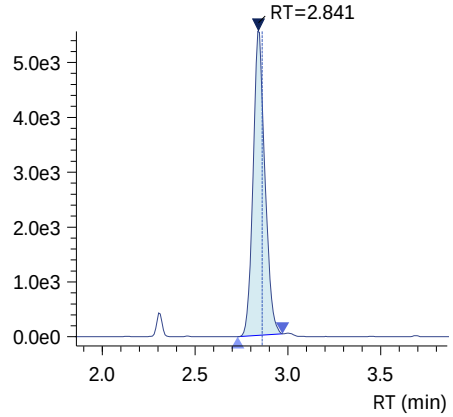
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/7/2022 9:51:00 AM

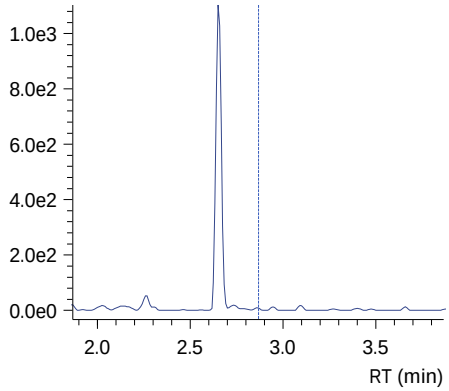
E2200638-009

Sample ID: E2200638-009
Date Acquired: 7/6/2022 8:42:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_055.lcd
Vial: 43 | Inj. Volume: 25.0000uL | Tray: 5

Perchlorate

Conc ----

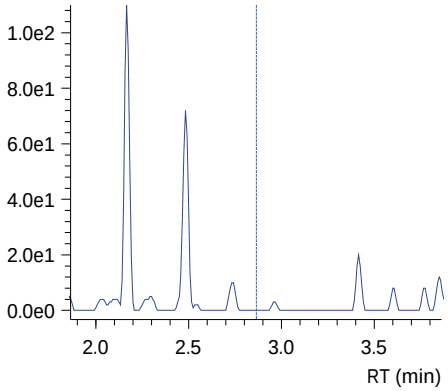
Q 99.00>83.00 (-) 1.10e3



Perchlorate 2

Conc ----

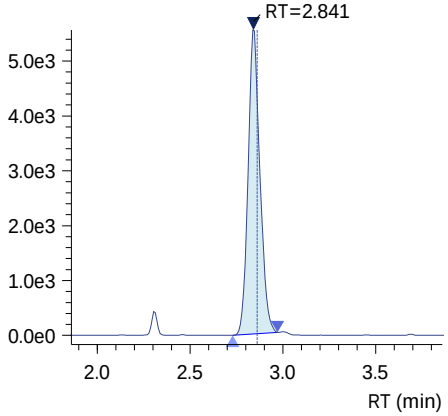
Q 101.00>85.00 (-) 1.10e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=24545 5.57e3



Insight Report

Printed at 7/7/2022 9:40:29 AM

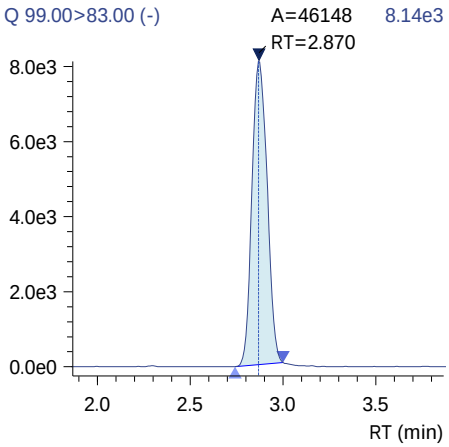
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/6/2022 8:58:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_057.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.870	46148	30844	9.8998	ng/mL	24.91	17.81-33.08
Perchlorate 2	Auto	2.872	11497	30844	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.866	30844	30844	1.0000	ng/mL	----	

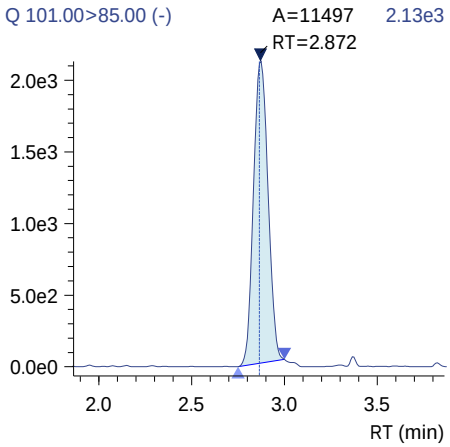
Perchlorate

Conc 9.8998



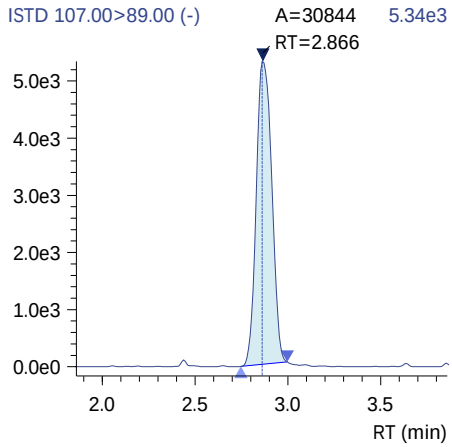
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/7/2022 9:51:00 AM

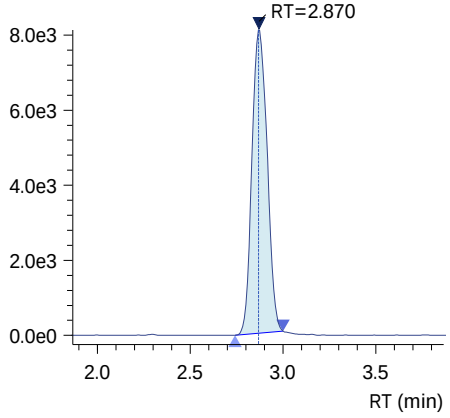
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/6/2022 8:58:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220706\20220706_057.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.1396

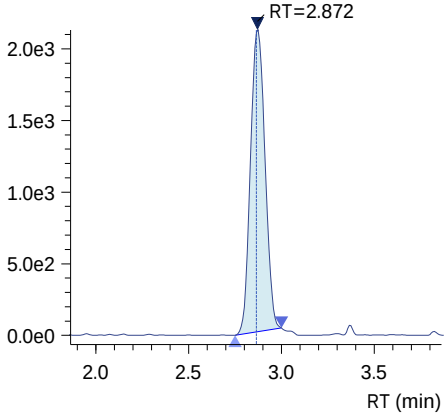
Q 99.00>83.00 (-) A=46148 8.14e3 RT=2.870



Perchlorate 2

Conc 0.0000

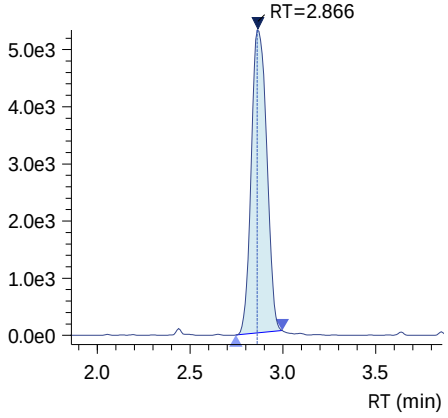
Q 101.00>85.00 (-) A=11497 2.13e3 RT=2.872



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=30844 5.34e3 RT=2.866



Insight Report

Printed at 7/8/2022 9:47:21 AM

Method File: I:\LCMS01\DATA\20220707\20220601.lcm
Project File: I:\LCMS01\DATA\20220707\20220707.damlp

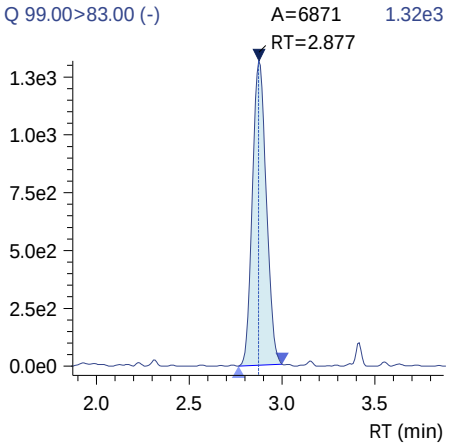
ICS

Sample ID: ICS
Date Acquired: 7/7/2022 10:50:00 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_007.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.877	6871	41109	1.1059	ng/mL	26.11	17.99-33.40
Perchlorate 2	Auto	2.888	1794	41109	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.868	41109	41109	1.0000	ng/mL	----	

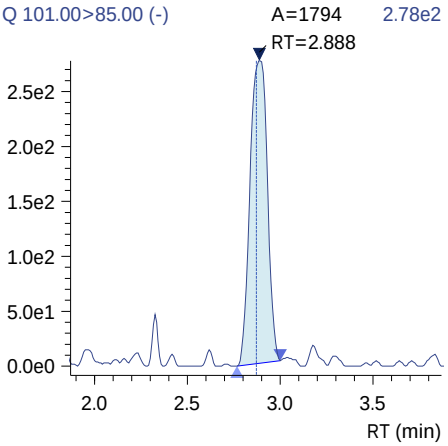
Perchlorate

Conc 1.1059



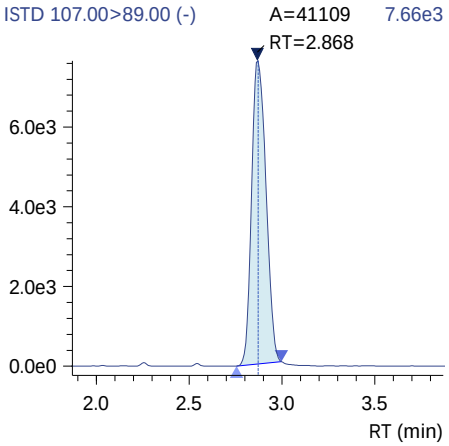
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/8/2022 9:49:55 AM

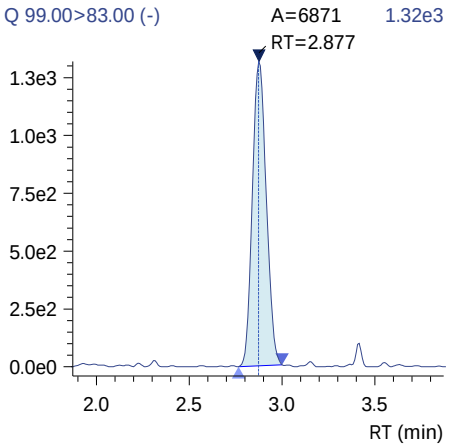
Method File: I:\LCMS01\DATA\20220707\20220601.lcm
Project File: I:\LCMS01\DATA\20220707\20220707.damlp

ICS

Sample ID: ICS
Date Acquired: 7/7/2022 10:50:00 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_007.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 1

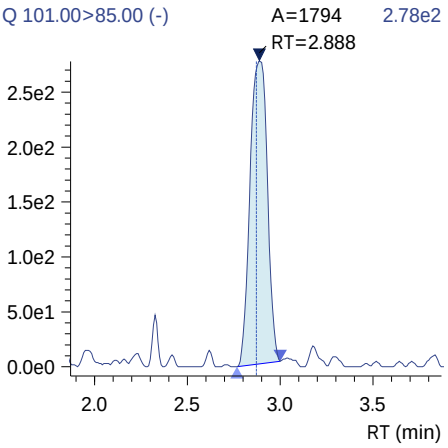
Perchlorate

Conc 1.1327



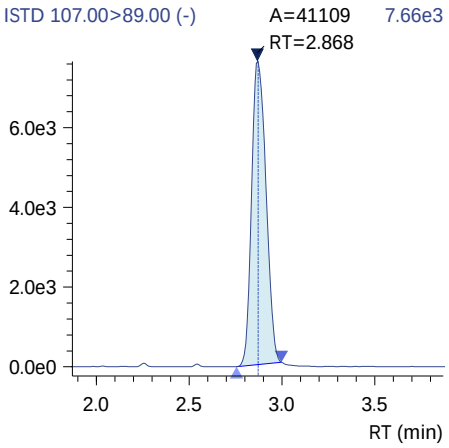
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/8/2022 9:47:21 AM

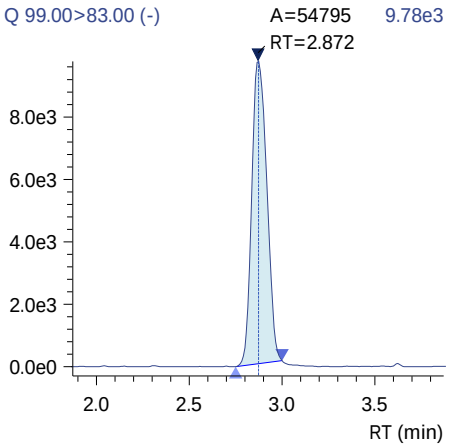
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/7/2022 11:05:49 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_008.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.872	54795	35682	10.1610	ng/mL	25.68	17.99-33.40
Perchlorate 2	Auto	2.875	14073	35682	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.872	35682	35682	1.0000	ng/mL	----	

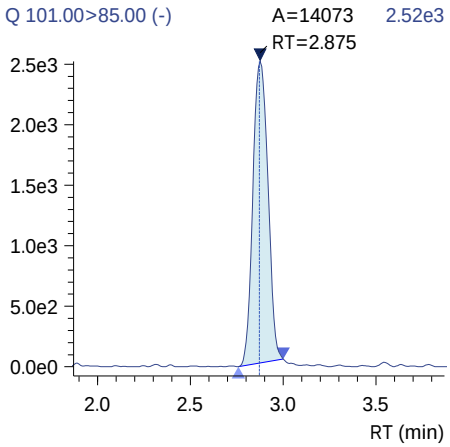
Perchlorate

Conc 10.1610



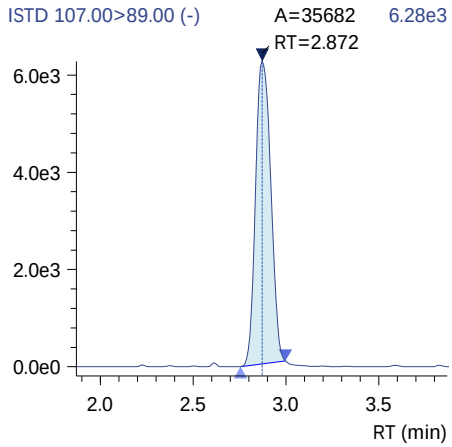
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

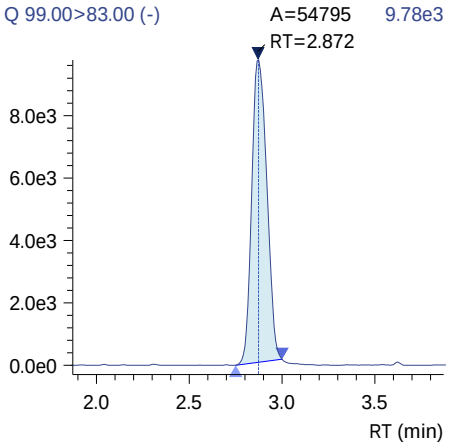
Printed at 7/8/2022 9:49:55 AM

PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/7/2022 11:05:49 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_008.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

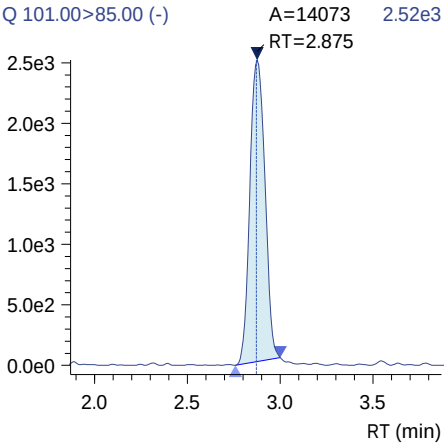
Perchlorate

Conc 10.4072



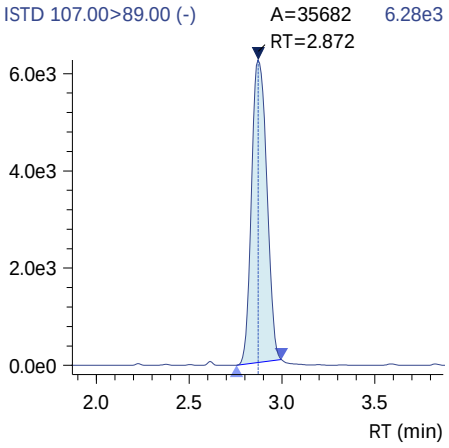
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/8/2022 9:47:21 AM

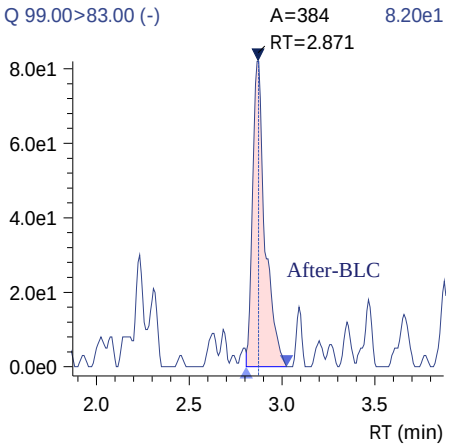
LODV

Sample ID: LODV
Date Acquired: 7/7/2022 11:47:28 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_009.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	2.871	384	44060	0.0577	ng/mL	27.60	17.99-33.40
Perchlorate 2	Auto	2.871	106	44060	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.859	44060	44060	1.0000	ng/mL	----	

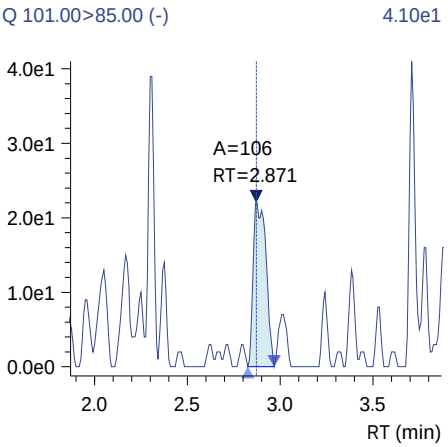
Perchlorate

Conc 0.0577



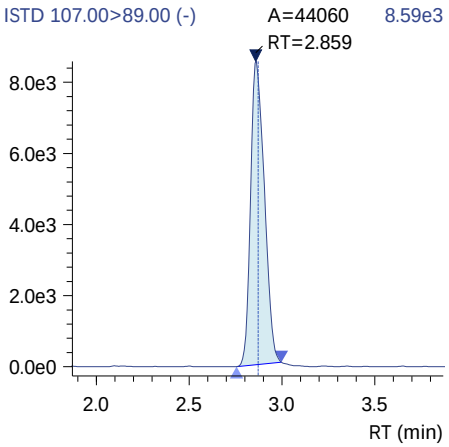
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

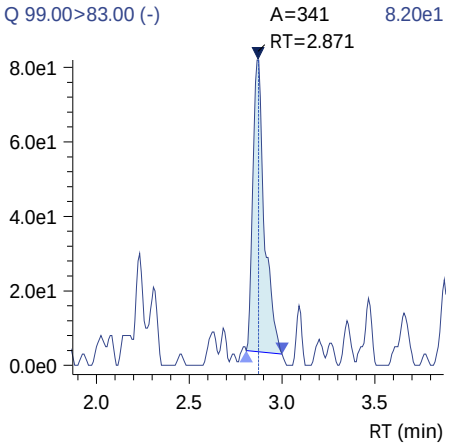
Printed at 7/8/2022 9:49:55 AM

LODV

Sample ID: LODV
Date Acquired: 7/7/2022 11:47:28 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_009.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 1

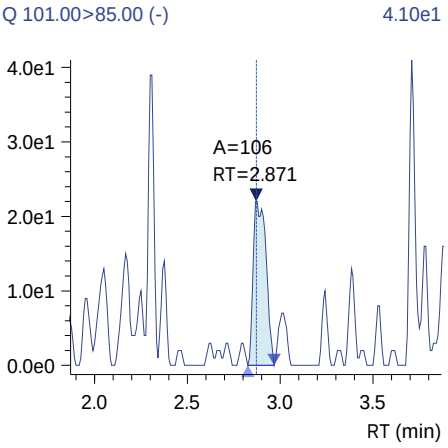
Perchlorate

Conc 0.0525



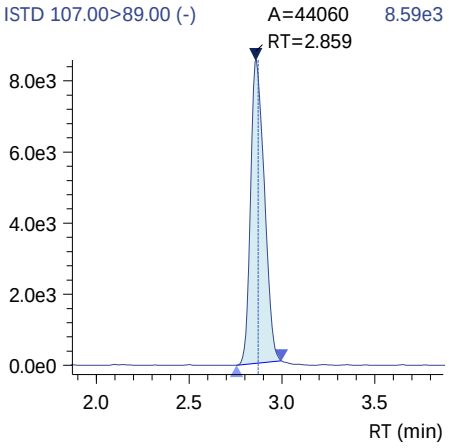
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/8/2022 9:47:21 AM

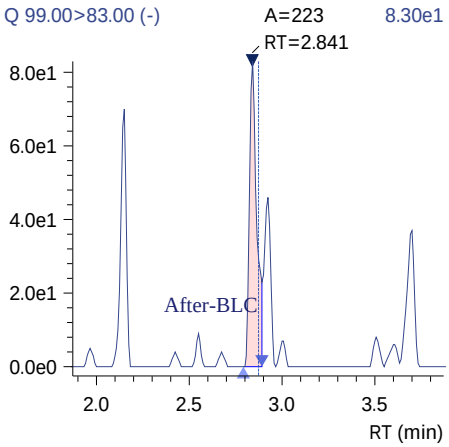
E2200638-004

Sample ID: E2200638-004
Date Acquired: 7/7/2022 12:34:45 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_011.lcd
Vial: 38 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	2.841	223	27855	0.0530	ng/mL	25.11	17.99-33.40
Perchlorate 2	M	2.867	56	27855	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.852	27855	27855	1.0000	ng/mL	----	

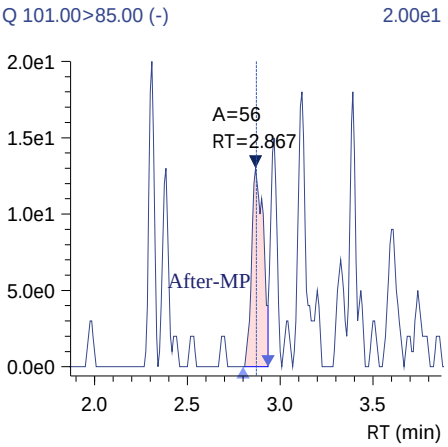
Perchlorate

Conc 0.0530



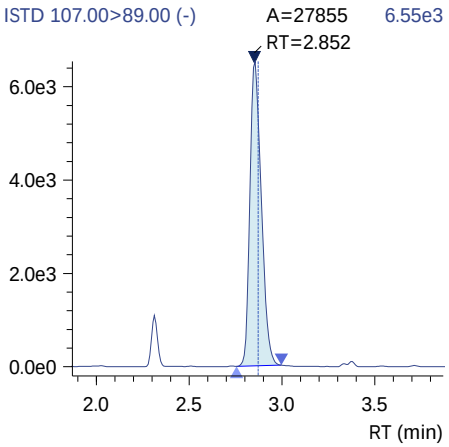
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

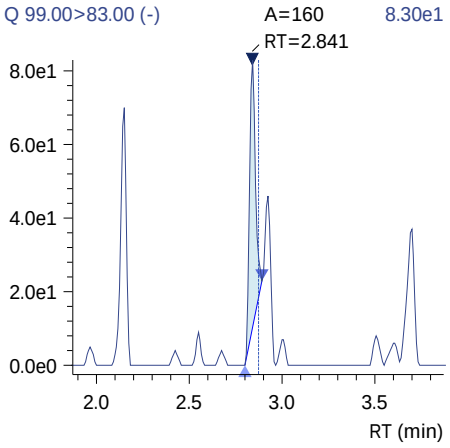
Printed at 7/8/2022 9:49:55 AM

E2200638-004

Sample ID: E2200638-004
Date Acquired: 7/7/2022 12:34:45 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_011.lcd
Vial: 38 | Inj. Volume: 25.0000uL | Tray: 5

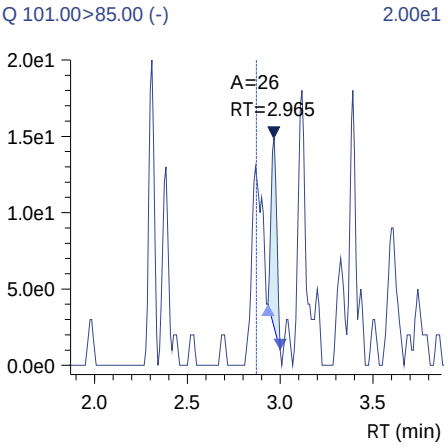
Perchlorate

Conc 0.0389



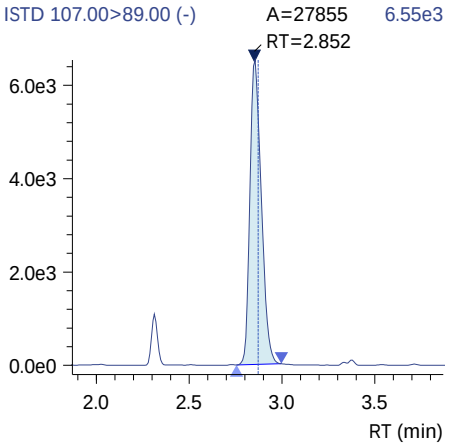
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/8/2022 9:47:21 AM

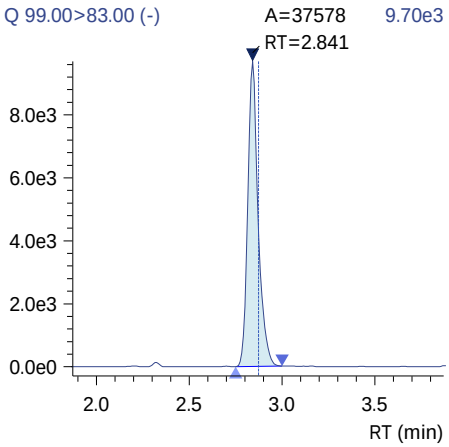
E2200638-005x10

Sample ID: E2200638-005x10
Date Acquired: 7/7/2022 12:42:37 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_012.lcd
Vial: 39 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.841	37578	29256	8.4989	ng/mL	26.18	17.99-33.40
Perchlorate 2	Auto	2.840	9839	29256	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.840	29256	29256	1.0000	ng/mL	----	

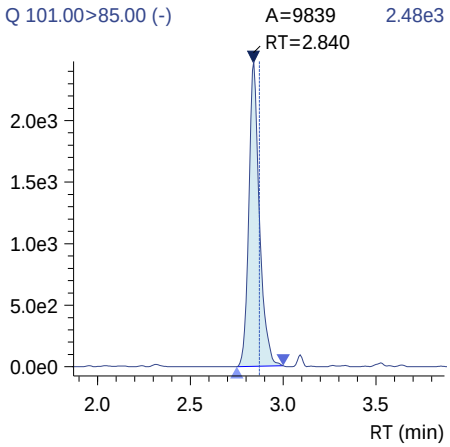
Perchlorate

Conc 8.4989



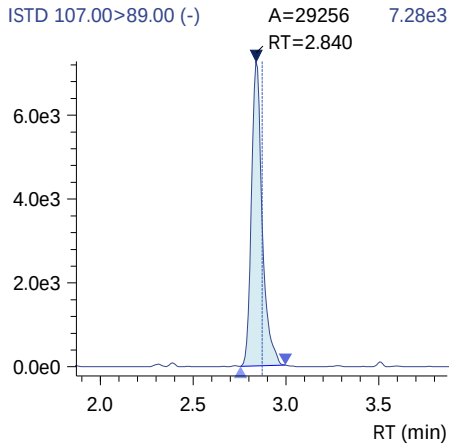
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

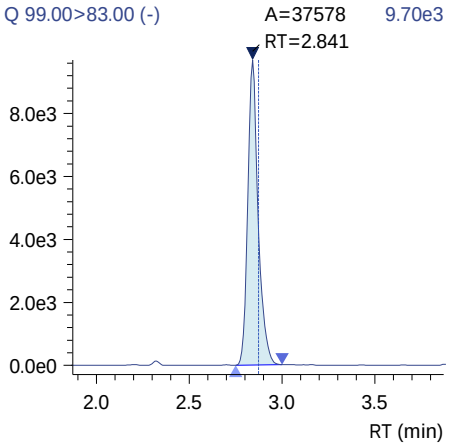
Printed at 7/8/2022 9:49:55 AM

E2200638-005x10

Sample ID: E2200638-005x10
Date Acquired: 7/7/2022 12:42:37 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_012.lcd
Vial: 39 | Inj. Volume: 25.0000uL | Tray: 5

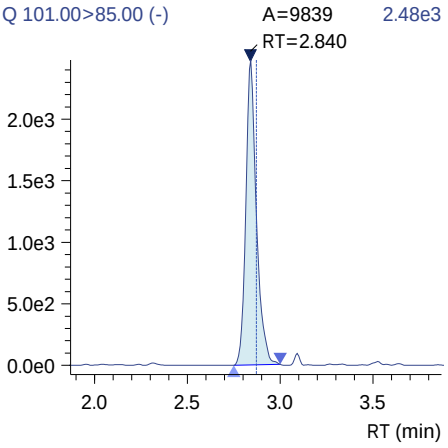
Perchlorate

Conc 8.7048



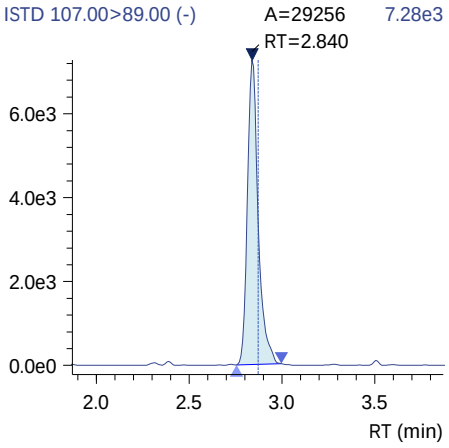
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/8/2022 9:47:21 AM

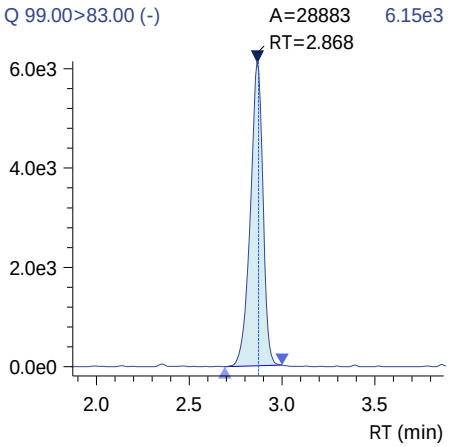
E2200638-006x10

Sample ID: E2200638-006x10
Date Acquired: 7/7/2022 12:56:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_013.lcd
Vial: 40 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.868	28883	29567	6.4637	ng/mL	26.17	17.99-33.40
Perchlorate 2	Auto	2.864	7558	29567	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.866	29567	29567	1.0000	ng/mL	----	

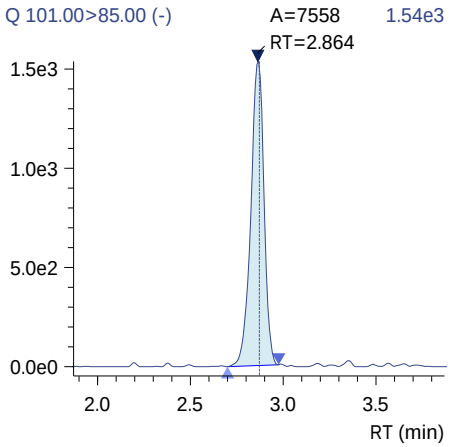
Perchlorate

Conc 6.4637



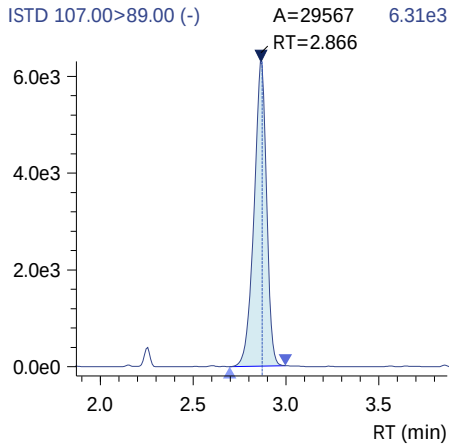
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

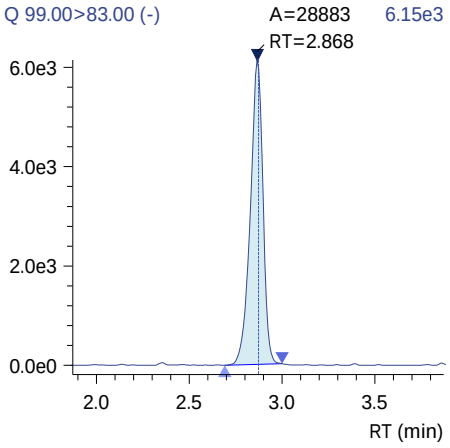
Printed at 7/8/2022 9:49:55 AM

E2200638-006x10

Sample ID: E2200638-006x10
Date Acquired: 7/7/2022 12:56:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_013.lcd
Vial: 40 | Inj. Volume: 25.0000uL | Tray: 5

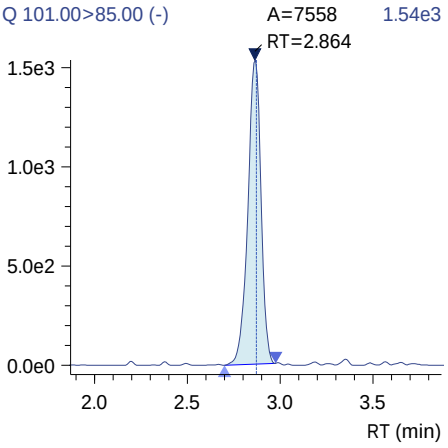
Perchlorate

Conc 6.6203



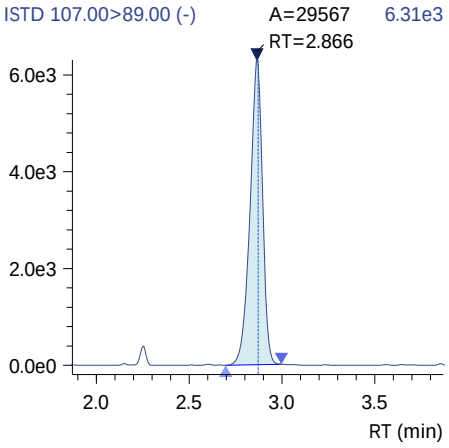
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/8/2022 9:47:21 AM

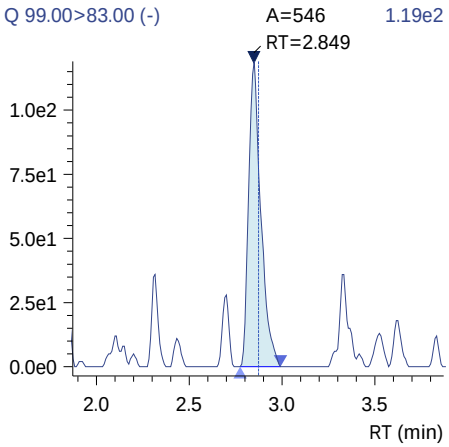
E2200638-010

Sample ID: E2200638-010
Date Acquired: 7/7/2022 1:12:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_014.lcd
Vial: 44 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	2.849	546	28755	0.1256	ng/mL	29.67	17.99-33.40
Perchlorate 2	M	2.884	162	28755	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.846	28755	28755	1.0000	ng/mL	----	

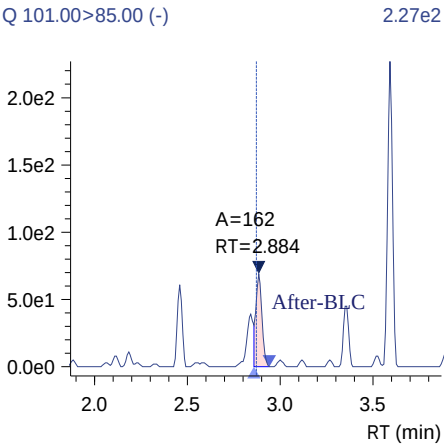
Perchlorate

Conc 0.1256



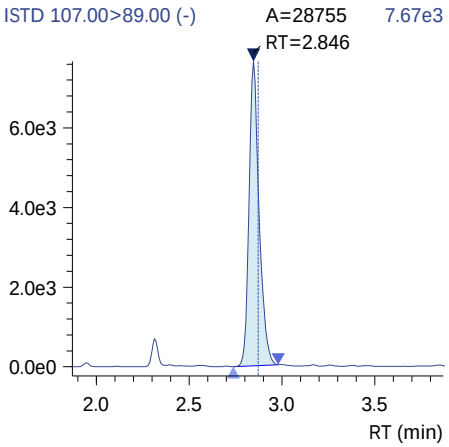
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

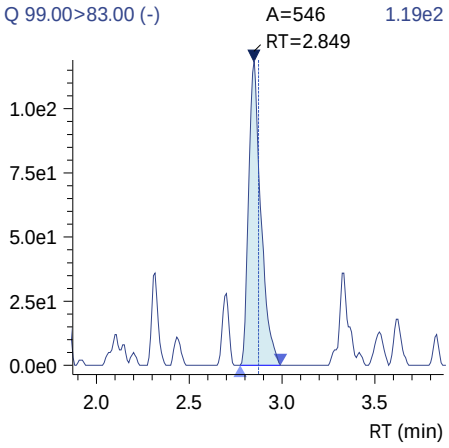
Printed at 7/8/2022 9:49:55 AM

E2200638-010

Sample ID: E2200638-010
Date Acquired: 7/7/2022 1:12:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_014.lcd
Vial: 44 | Inj. Volume: 25.0000uL | Tray: 5

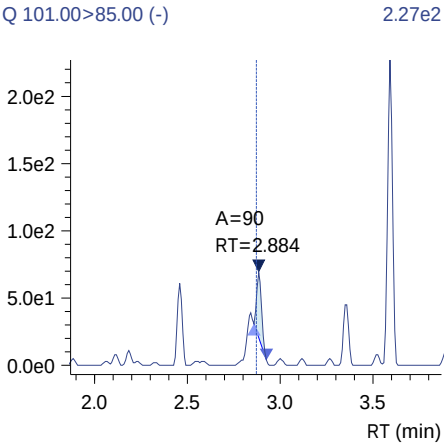
Perchlorate

Conc 0.1287



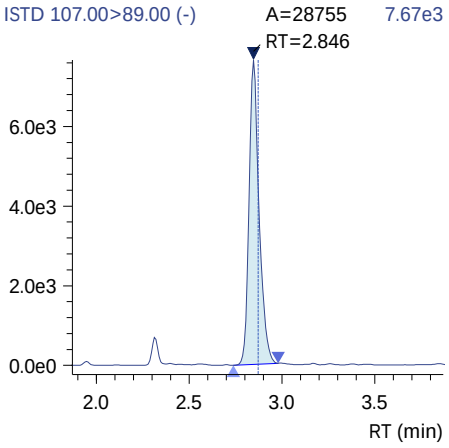
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/8/2022 9:47:21 AM

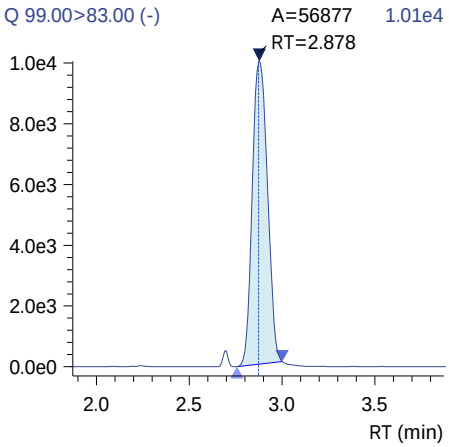
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/7/2022 1:51:56 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_016.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.878	56877	38309	9.8239	ng/mL	25.41	17.99-33.40
Perchlorate 2	Auto	2.883	14455	38309	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.877	38309	38309	1.0000	ng/mL	----	

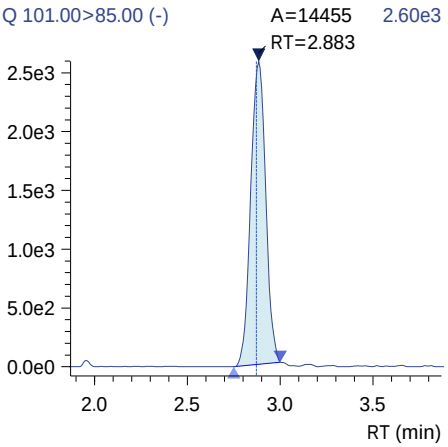
Perchlorate

Conc 9.8239



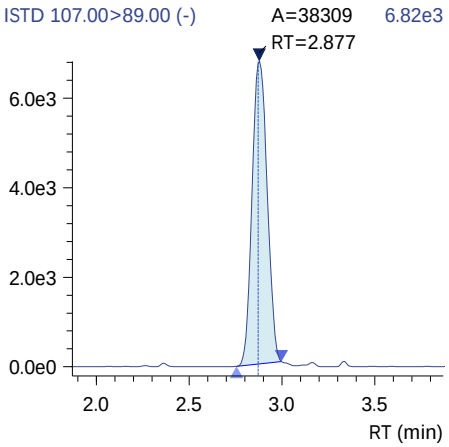
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

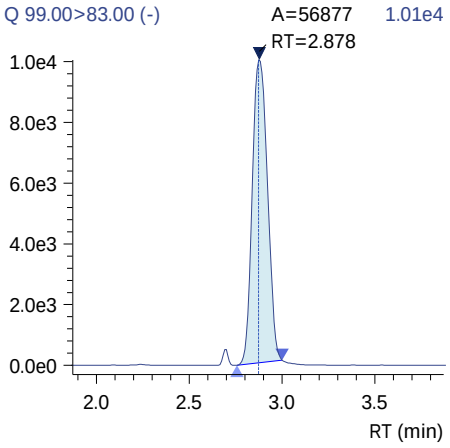
Printed at 7/8/2022 9:49:55 AM

PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/7/2022 1:51:56 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_016.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

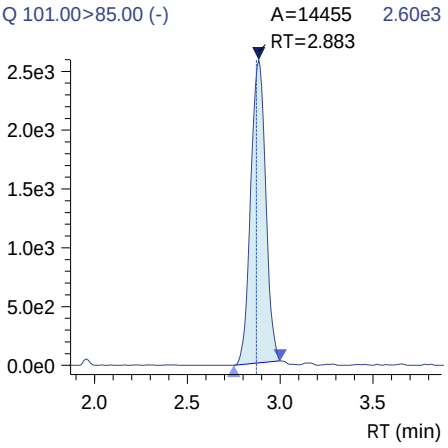
Perchlorate

Conc 10.0618



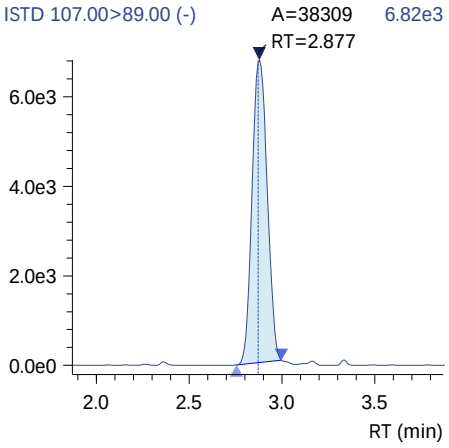
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/8/2022 9:47:21 AM

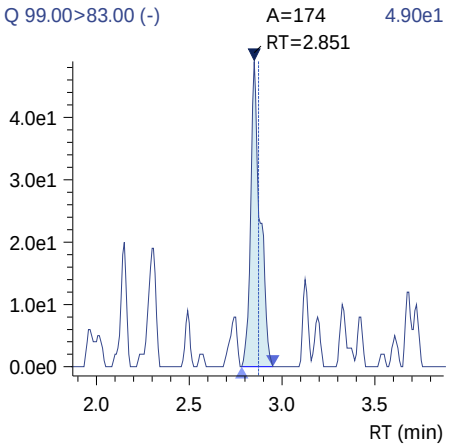
E2200638-007

Sample ID: E2200638-007
Date Acquired: 7/7/2022 2:16:32 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_018.lcd
Vial: 41 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	2.851	174	20420	0.0564	ng/mL	25.29	17.99-33.40
Perchlorate 2	M	2.838	44	20420	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.845	20420	20420	1.0000	ng/mL	----	

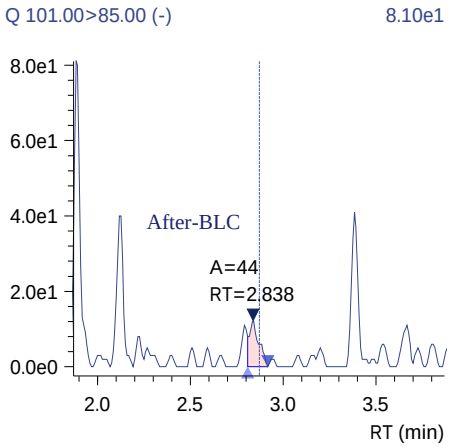
Perchlorate

Conc 0.0564



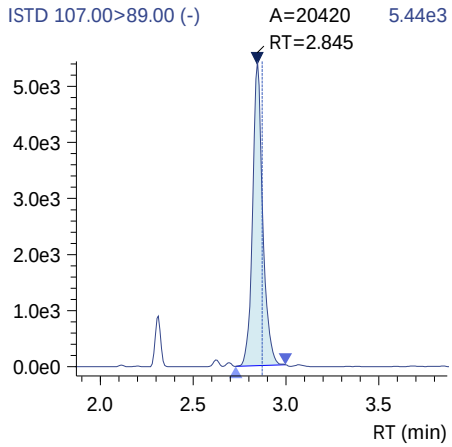
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

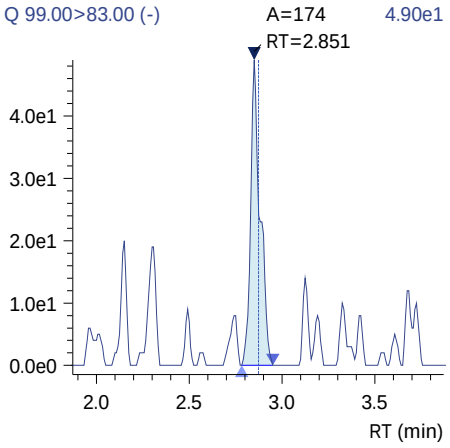
Printed at 7/8/2022 9:49:55 AM

E2200638-007

Sample ID: E2200638-007
Date Acquired: 7/7/2022 2:16:32 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_018.lcd
Vial: 41 | Inj. Volume: 25.0000uL | Tray: 5

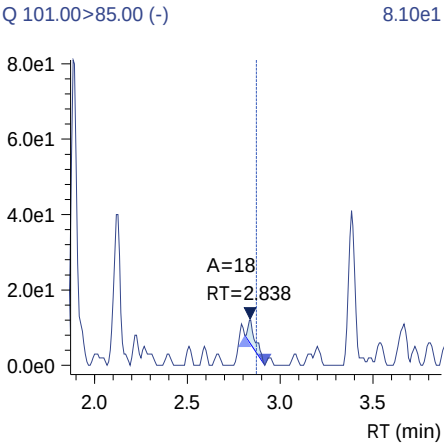
Perchlorate

Conc 0.0577



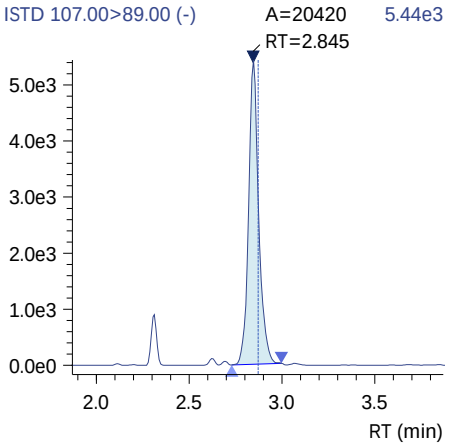
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/8/2022 9:47:21 AM

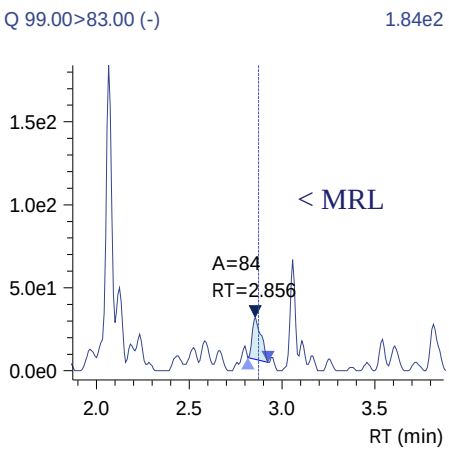
E2200638-001

Sample ID: E2200638-001
Date Acquired: 7/7/2022 2:57:08 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_019.lcd
Vial: 35 | Inj. Volume: 25.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	2.856	84	25851	0.0215	ng/mL	22.62	17.99-33.40
Perchlorate 2	ND(W/B)	----	----	25851	----	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.857	25851	25851	1.0000	ng/mL	----	

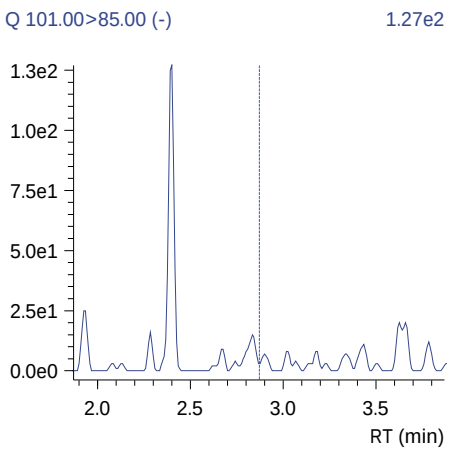
Perchlorate

Conc 0.0215



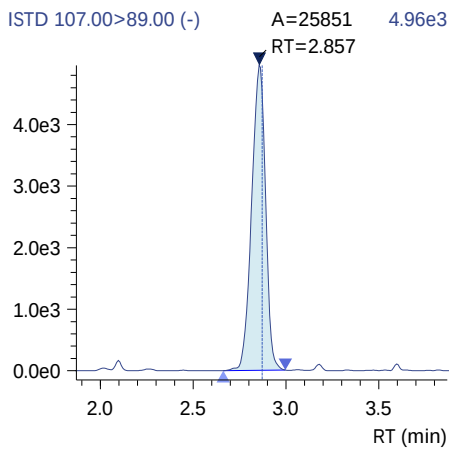
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/8/2022 9:49:55 AM

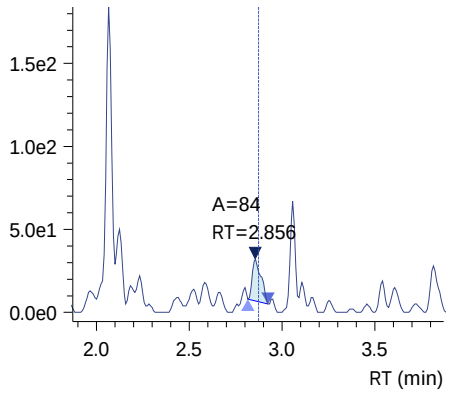
E2200638-001

Sample ID: E2200638-001
Date Acquired: 7/7/2022 2:57:08 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_019.lcd
Vial: 35 | Inj. Volume: 25.0000uL | Tray: 5

Perchlorate

Conc 0.0220

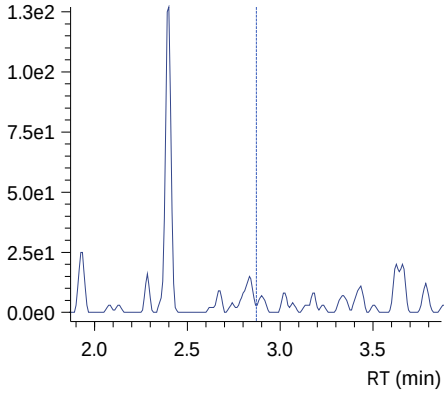
Q 99.00>83.00 (-) 1.84e2



Perchlorate 2

Conc ----

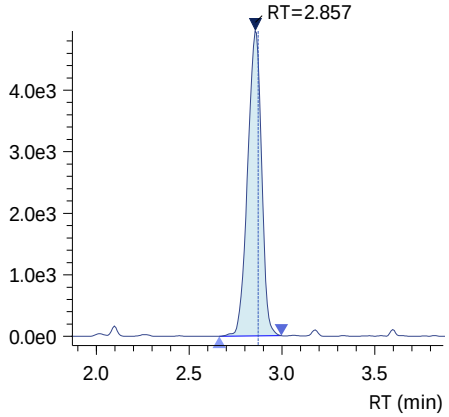
Q 101.00>85.00 (-) 1.27e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=25851 4.96e3



Insight Report

Printed at 7/8/2022 9:47:21 AM

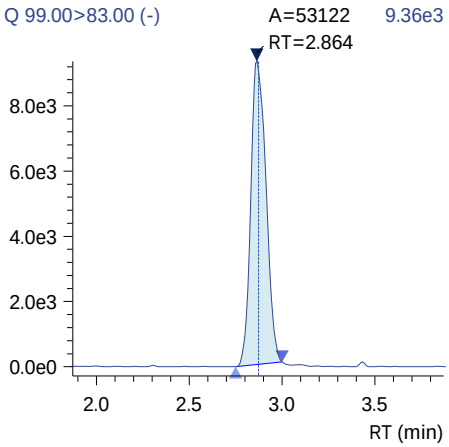
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/7/2022 3:12:55 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_020.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.864	53122	35915	9.7869	ng/mL	25.31	17.99-33.40
Perchlorate 2	Auto	2.862	13447	35915	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.864	35915	35915	1.0000	ng/mL	----	

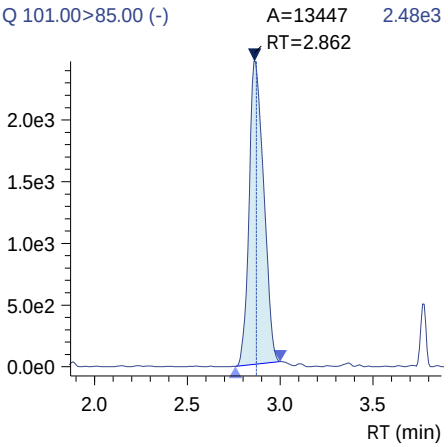
Perchlorate

Conc 9.7869



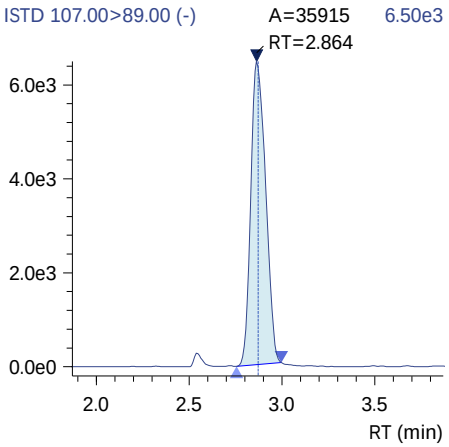
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/8/2022 9:49:55 AM

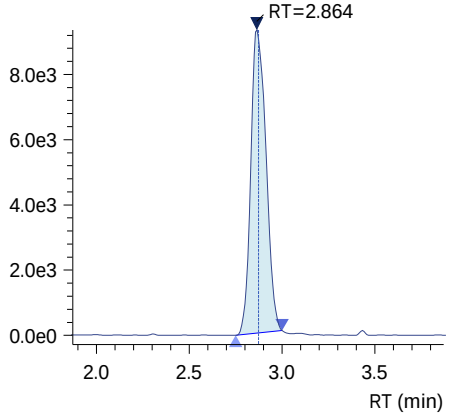
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/7/2022 3:12:55 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220707\20220707_020.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.0240

Q 99.00>83.00 (-) A=53122 9.36e3 RT=2.864



Perchlorate 2

Conc 0.0000

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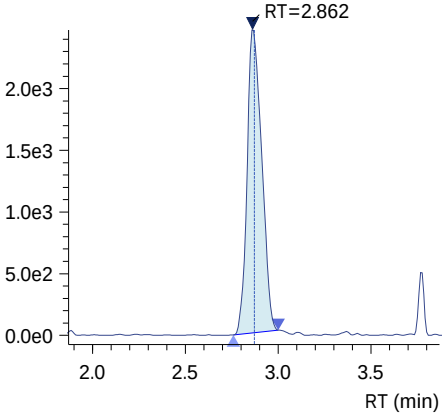

Sodium Perchlorate-18O4_IS

Conc 1.0000

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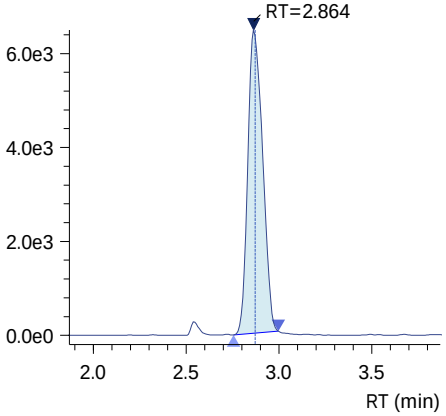

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WorkOrder: HS22070020

LHAAP 16 June 2022

Aptim Environmental & Infrastucture, Inc.

Vicki Graves
10333 Richmond Ave Ste 1030
Houston TX 77042

21-Jul-2022

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ALS Group USA, Corp
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CoverLetter

Certificate of Analysis

HS22070020 LHAAP 16 January 2022 Final

ALS WO# HS22070020

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F: +1 281 530 5887

July 20, 2022

Vicki Graves
Aptim Environmental & Infrastucture, Inc.
10333 Richmond Ave
Ste 1030
Houston, TX 77042

Work Order: **HS22070020**

Laboratory Results for: **LHAAP 16 June 2022**

Dear Vicki Graves ,

ALS Environmental received 10 sample(s) on Jul 01, 2022 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: DANE.WACASEY
Dane J. Wacasey

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Work Order: HS22070020

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS22070020-01	16WW16-220630	Water		30-Jun-2022 07:10	01-Jul-2022 09:25	☐
HS22070020-02	16WW35-220630	Water		30-Jun-2022 08:10	01-Jul-2022 09:25	☐
HS22070020-03	16WW36-220630	Water		30-Jun-2022 08:55	01-Jul-2022 09:25	☐
HS22070020-04	16WW48-220630	Water		30-Jun-2022 09:40	01-Jul-2022 09:25	☐
HS22070020-05	16WW30-220630	Water		30-Jun-2022 10:25	01-Jul-2022 09:25	☐
HS22070020-06	16WW29-220630	Water		30-Jun-2022 11:10	01-Jul-2022 09:25	☐
HS22070020-07	16WW29-220630-FD	Water		30-Jun-2022 11:10	01-Jul-2022 09:25	☐
HS22070020-08	16WW25-220630	Water		30-Jun-2022 12:00	01-Jul-2022 09:25	☐
HS22070020-09	16WW26-220630	Water		30-Jun-2022 12:50	01-Jul-2022 09:25	☐
HS22070020-10	Trip Blank-220630	Water		30-Jun-2022 00:00	01-Jul-2022 09:25	☐

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc. **CASE NARRATIVE**
Project: LHAAP 16 June 2022
Work Order: HS22070020

Work Order Comments

- The analysis for CO2 by RSK175 was subcontracted to Pace located in Baton Rouge, LA. Final report attached.
- The analysis for Perchlorate was subcontracted to ALS Houston Specialty Lab. Final report attached.

Work Order Comments

- The analysis for CO2 by RSK175 was subcontracted to Pace located in Baton Rouge, LA. Final report attached.
- The analysis for Perchlorate was subcontracted to ALS Houston Specialty Lab. Final report attached.

GC Semivolatiles by Method RSK-175

Batch ID: R412754

Sample ID: 16WW16-220630 (HS22070020-01MS)

- The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The recovery of the MS may be due to sample matrix interference.

Sample ID: 16WW16-220630 (HS22070020-01MSD)

- The recovery of the Matrix Spike Duplicate (MSD) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The failed recovery of the MSD may be due to sample matrix interference.

Sample ID: HS22070326-07MS

- MS and MSD are for an unrelated sample

GCMS Volatiles by Method SW8260

Batch ID: R412413

Sample ID: 16WW16-220630 (HS22070020-01)

- Surrogate Toluene_d8 exceeded recovery limits. This surrogate is not associated with compound reported.

Sample ID: 16WW26-220630 (HS22070020-09)

- Surrogate Toluene_d8 exceeded recovery limits. This surrogate is not associated with compound reported.

Sample ID: 16WW16-220630 (HS22070020-01MSD)

- MSD failed QC limit for some compounds

Batch ID: R412360

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SM5310B

Batch ID: R413048,R413050

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Work Order: HS22070020

CASE NARRATIVE

WetChemistry by Method SW9056

Batch ID: R412120

Sample ID: 16WW16-220630 (HS22070020-01MS)

- The MS and/or MSD recovery was outside of the control limit

Sample ID: 16WW35-220630 (HS22070020-02)

- The reporting limit is elevated due to dilution for high concentrations of non-target analytes. (Bromide)

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW16-220630
Collection Date: 30-Jun-2022 07:10

ANALYTICAL REPORT
WorkOrder:HS22070020
Lab ID:HS22070020-01
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	25	U	7.5	25	25	ug/L	25	07-Jul-2022 14:03
1,1-Dichloroethene	**52**		**5.0**	**12**	**25**	**ug/L**	25	07-Jul-2022 14:03
1,2-Dichloroethane	**36**		**5.0**	**12**	**25**	**ug/L**	25	07-Jul-2022 14:03
cis-1,2-Dichloroethene	**19,000**		**50**	**120**	**250**	**ug/L**	250	07-Jul-2022 14:24
Methylene chloride	50	U	10	50	50	ug/L	25	07-Jul-2022 14:03
Trichloroethene	**40,000**		**50**	**120**	**250**	**ug/L**	250	07-Jul-2022 14:24
Vinyl chloride	**310**		**5.0**	**12**	**25**	**ug/L**	25	07-Jul-2022 14:03
Surr: 1,2-Dichloroethane-d4	*90.7*			**0**	*81-118*	*%REC*	*25*	*07-Jul-2022 14:03*
Surr: 1,2-Dichloroethane-d4	*88.6*			**0**	*81-118*	*%REC*	*250*	*07-Jul-2022 14:24*
Surr: 4-Bromofluorobenzene	*103*			**0**	*85-114*	*%REC*	*25*	*07-Jul-2022 14:03*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*250*	*07-Jul-2022 14:24*
Surr: Dibromofluoromethane	*94.3*			**0**	*80-119*	*%REC*	*250*	*07-Jul-2022 14:24*
Surr: Dibromofluoromethane	*97.5*			**0**	*80-119*	*%REC*	*25*	*07-Jul-2022 14:03*
Surr: Toluene-d8	*108*			**0**	*89-112*	*%REC*	*25*	*07-Jul-2022 14:03*
Surr: Toluene-d8	*118*	*S*		**0**	*89-112*	*%REC*	*250*	*07-Jul-2022 14:24*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	11-Jul-2022 11:28
Ethene	**0.0168**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	11-Jul-2022 11:28
Methane	**1.11**		**0.0107**	**0.0500**	**0.0500**	**mg/L**	100	11-Jul-2022 12:36
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: MZD
Organic Carbon, Total	**4.30**		**0.500**	**1.00**	**1.00**	**mg/L**	1	15-Jul-2022 13:46
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Bromide	**3.54**		**0.0300**	**0.100**	**0.100**	**mg/L**	1	01-Jul-2022 13:34
Nitrogen, Nitrate (As N)	**0.207**		**0.0300**	**0.100**	**0.100**	**mg/L**	1	01-Jul-2022 13:34
Sulfate	**380**		**2.00**	**5.00**	**5.00**	**mg/L**	10	01-Jul-2022 13:50
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	19-Jul-2022 19:43
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	18-Jul-2022 09:12

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW35-220630
Collection Date: 30-Jun-2022 08:10

ANALYTICAL REPORT
WorkOrder:HS22070020
Lab ID:HS22070020-02
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	10	U	3.0	10	10	ug/L	10	07-Jul-2022 01:00
1,1-Dichloroethene	**65**		**2.0**	**5.0**	**10**	**ug/L**	10	07-Jul-2022 01:00
1,2-Dichloroethane	5.0	U	2.0	5.0	10	ug/L	10	07-Jul-2022 01:00
cis-1,2-Dichloroethene	**570**		**2.0**	**5.0**	**10**	**ug/L**	10	07-Jul-2022 01:00
Methylene chloride	**21**		**4.0**	**20**	**20**	**ug/L**	10	07-Jul-2022 01:00
Trichloroethene	**7,800**		**20**	**50**	**100**	**ug/L**	100	07-Jul-2022 01:21
Vinyl chloride	**83**		**2.0**	**5.0**	**10**	**ug/L**	10	07-Jul-2022 01:00
Surr: 1,2-Dichloroethane-d4	*102*			**0**	*81-118*	*%REC*	*10*	*07-Jul-2022 01:00*
Surr: 1,2-Dichloroethane-d4	*98.8*			**0**	*81-118*	*%REC*	*100*	*07-Jul-2022 01:21*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*10*	*07-Jul-2022 01:00*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*100*	*07-Jul-2022 01:21*
Surr: Dibromofluoromethane	*98.7*			**0**	*80-119*	*%REC*	*10*	*07-Jul-2022 01:00*
Surr: Dibromofluoromethane	*94.7*			**0**	*80-119*	*%REC*	*100*	*07-Jul-2022 01:21*
Surr: Toluene-d8	*108*			**0**	*89-112*	*%REC*	*10*	*07-Jul-2022 01:00*
Surr: Toluene-d8	*109*			**0**	*89-112*	*%REC*	*100*	*07-Jul-2022 01:21*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	11-Jul-2022 12:02
Ethene	**0.0110**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	11-Jul-2022 12:02
Methane	**0.118**		**0.00107**	**0.00500**	**0.00500**	**mg/L**	10	11-Jul-2022 12:46
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: MZD
Organic Carbon, Total	**61.4**		**5.00**	**10.0**	**10.0**	**mg/L**	10	15-Jul-2022 22:13
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Bromide	0.500	U	0.150	0.500	0.500	mg/L	5	01-Jul-2022 13:55
Nitrogen, Nitrate (As N)	**0.268**	J	**0.150**	**0.500**	**0.500**	**mg/L**	5	01-Jul-2022 13:55
Sulfate	**10,000**		**100**	**250**	**250**	**mg/L**	500	01-Jul-2022 14:06
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	19-Jul-2022 19:43
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	18-Jul-2022 09:12

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW36-220630
Collection Date: 30-Jun-2022 08:55

ANALYTICAL REPORT
WorkOrder:HS22070020
Lab ID:HS22070020-03
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	25	U	7.5	25	25	ug/L	25	07-Jul-2022 02:24
1,1-Dichloroethene	**200**		**5.0**	**12**	**25**	**ug/L**	25	07-Jul-2022 02:24
1,2-Dichloroethane	**21**	J	**5.0**	**12**	**25**	**ug/L**	25	07-Jul-2022 02:24
cis-1,2-Dichloroethene	**23,000**		**50**	**120**	**250**	**ug/L**	250	07-Jul-2022 02:45
Methylene chloride	**52**		**10**	**50**	**50**	**ug/L**	25	07-Jul-2022 02:24
Trichloroethene	**32,000**		**50**	**120**	**250**	**ug/L**	250	07-Jul-2022 02:45
Vinyl chloride	**260**		**5.0**	**12**	**25**	**ug/L**	25	07-Jul-2022 02:24
Surr: 1,2-Dichloroethane-d4	*102*			**0**	*81-118*	*%REC*	*25*	*07-Jul-2022 02:24*
Surr: 1,2-Dichloroethane-d4	*102*			**0**	*81-118*	*%REC*	*250*	*07-Jul-2022 02:45*
Surr: 4-Bromofluorobenzene	*104*			**0**	*85-114*	*%REC*	*25*	*07-Jul-2022 02:24*
Surr: 4-Bromofluorobenzene	*100*			**0**	*85-114*	*%REC*	*250*	*07-Jul-2022 02:45*
Surr: Dibromofluoromethane	*96.5*			**0**	*80-119*	*%REC*	*25*	*07-Jul-2022 02:24*
Surr: Dibromofluoromethane	*97.2*			**0**	*80-119*	*%REC*	*250*	*07-Jul-2022 02:45*
Surr: Toluene-d8	*108*			**0**	*89-112*	*%REC*	*25*	*07-Jul-2022 02:24*
Surr: Toluene-d8	*109*			**0**	*89-112*	*%REC*	*250*	*07-Jul-2022 02:45*
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: MZD
Organic Carbon, Total	**23.4**		**0.500**	**1.00**	**1.00**	**mg/L**	1	15-Jul-2022 14:29
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	19-Jul-2022 19:43

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW48-220630
Collection Date: 30-Jun-2022 09:40

ANALYTICAL REPORT
WorkOrder:HS22070020
Lab ID:HS22070020-04
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	25	U	7.5	25	25	ug/L	25	07-Jul-2022 14:45
1,1-Dichloroethene	**53**		**5.0**	**12**	**25**	**ug/L**	25	07-Jul-2022 14:45
1,2-Dichloroethane	**39**		**5.0**	**12**	**25**	**ug/L**	25	07-Jul-2022 14:45
cis-1,2-Dichloroethene	**22,000**		**50**	**120**	**250**	**ug/L**	250	07-Jul-2022 15:48
Methylene chloride	50	U	10	50	50	ug/L	25	07-Jul-2022 14:45
Trichloroethene	**20,000**		**50**	**120**	**250**	**ug/L**	250	07-Jul-2022 15:48
Vinyl chloride	**410**		**5.0**	**12**	**25**	**ug/L**	25	07-Jul-2022 14:45
Surr: 1,2-Dichloroethane-d4	*98.3*			**0**	*81-118*	*%REC*	*25*	*07-Jul-2022 14:45*
Surr: 1,2-Dichloroethane-d4	*91.5*			**0**	*81-118*	*%REC*	*250*	*07-Jul-2022 15:48*
Surr: 4-Bromofluorobenzene	*92.7*			**0**	*85-114*	*%REC*	*250*	*07-Jul-2022 15:48*
Surr: 4-Bromofluorobenzene	*92.0*			**0**	*85-114*	*%REC*	*25*	*07-Jul-2022 14:45*
Surr: Dibromofluoromethane	*95.4*			**0**	*80-119*	*%REC*	*25*	*07-Jul-2022 14:45*
Surr: Dibromofluoromethane	*90.0*			**0**	*80-119*	*%REC*	*250*	*07-Jul-2022 15:48*
Surr: Toluene-d8	*99.8*			**0**	*89-112*	*%REC*	*250*	*07-Jul-2022 15:48*
Surr: Toluene-d8	*98.6*			**0**	*89-112*	*%REC*	*25*	*07-Jul-2022 14:45*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	11-Jul-2022 12:10
Ethene	**0.0418**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	11-Jul-2022 12:10
Methane	**0.0272**		**0.000107**	**0.000500**	**0.000500**	**mg/L**	1	11-Jul-2022 12:10
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Bromide	**6.64**		**0.0600**	**0.200**	**0.200**	**mg/L**	2	01-Jul-2022 14:43
Nitrogen, Nitrate (As N)	**0.0934**	J	**0.0600**	**0.200**	**0.200**	**mg/L**	2	01-Jul-2022 14:43
Sulfate	**2,460**		**10.0**	**25.0**	**25.0**	**mg/L**	50	01-Jul-2022 14:54
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	19-Jul-2022 19:43
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	18-Jul-2022 09:12

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW30-220630
Collection Date: 30-Jun-2022 10:25

ANALYTICAL REPORT
WorkOrder:HS22070020
Lab ID:HS22070020-05
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	06-Jul-2022 21:50
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 21:50
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 21:50
cis-1,2-Dichloroethene	**3.3**		**0.20**	**0.50**	**1.0**	**ug/L**	1	06-Jul-2022 21:50
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	06-Jul-2022 21:50
Trichloroethene	**45**		**0.20**	**0.50**	**1.0**	**ug/L**	1	06-Jul-2022 21:50
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 21:50
Surr: 1,2-Dichloroethane-d4	*93.0*			**0**	*81-118*	*%REC*	*1*	*06-Jul-2022 21:50*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*1*	*06-Jul-2022 21:50*
Surr: Dibromofluoromethane	*93.0*			**0**	*80-119*	*%REC*	*1*	*06-Jul-2022 21:50*
Surr: Toluene-d8	*111*			**0**	*89-112*	*%REC*	*1*	*06-Jul-2022 21:50*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	19-Jul-2022 19:43

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW29-220630
Collection Date: 30-Jun-2022 11:10

ANALYTICAL REPORT
WorkOrder:HS22070020
Lab ID:HS22070020-06
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	06-Jul-2022 22:11
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 22:11
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 22:11
cis-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 22:11
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	06-Jul-2022 22:11
Trichloroethene	**1.7**		**0.20**	**0.50**	**1.0**	**ug/L**	1	06-Jul-2022 22:11
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 22:11
Surr: 1,2-Dichloroethane-d4	*105*			**0**	*81-118*	*%REC*	*1*	*06-Jul-2022 22:11*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*1*	*06-Jul-2022 22:11*
Surr: Dibromofluoromethane	*99.7*			**0**	*80-119*	*%REC*	*1*	*06-Jul-2022 22:11*
Surr: Toluene-d8	*108*			**0**	*89-112*	*%REC*	*1*	*06-Jul-2022 22:11*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	19-Jul-2022 19:43

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW29-220630-FD
Collection Date: 30-Jun-2022 11:10

ANALYTICAL REPORT
WorkOrder:HS22070020
Lab ID:HS22070020-07
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	06-Jul-2022 22:32
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 22:32
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 22:32
cis-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 22:32
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	06-Jul-2022 22:32
Trichloroethene	**1.8**		**0.20**	**0.50**	**1.0**	**ug/L**	1	06-Jul-2022 22:32
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 22:32
Surr: 1,2-Dichloroethane-d4	*104*			**0**	*81-118*	*%REC*	*1*	*06-Jul-2022 22:32*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*1*	*06-Jul-2022 22:32*
Surr: Dibromofluoromethane	*99.6*			**0**	*80-119*	*%REC*	*1*	*06-Jul-2022 22:32*
Surr: Toluene-d8	*110*			**0**	*89-112*	*%REC*	*1*	*06-Jul-2022 22:32*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	19-Jul-2022 19:43

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW25-220630
Collection Date: 30-Jun-2022 12:00

ANALYTICAL REPORT
WorkOrder:HS22070020
Lab ID:HS22070020-08
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	06-Jul-2022 20:05
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 20:05
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 20:05
cis-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 20:05
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	06-Jul-2022 20:05
Trichloroethene	**1.3**		**0.20**	**0.50**	**1.0**	**ug/L**	1	06-Jul-2022 20:05
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 20:05
Surr: 1,2-Dichloroethane-d4	*101*			**0**	*81-118*	*%REC*	*1*	*06-Jul-2022 20:05*
Surr: 4-Bromofluorobenzene	*103*			**0**	*85-114*	*%REC*	*1*	*06-Jul-2022 20:05*
Surr: Dibromofluoromethane	*97.5*			**0**	*80-119*	*%REC*	*1*	*06-Jul-2022 20:05*
Surr: Toluene-d8	*110*			**0**	*89-112*	*%REC*	*1*	*06-Jul-2022 20:05*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	19-Jul-2022 19:43

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW26-220630
Collection Date: 30-Jun-2022 12:50

ANALYTICAL REPORT
WorkOrder:HS22070020
Lab ID:HS22070020-09
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	07-Jul-2022 13:42
1,1-Dichloroethene	**1.7**		**0.20**	**0.50**	**1.0**	**ug/L**	1	07-Jul-2022 13:42
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	07-Jul-2022 13:42
cis-1,2-Dichloroethene	**110**		**0.20**	**0.50**	**1.0**	**ug/L**	1	07-Jul-2022 13:42
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	07-Jul-2022 13:42
Trichloroethene	**1,100**		**5.0**	**12**	**25**	**ug/L**	25	07-Jul-2022 16:30
Vinyl chloride	**6.7**		**0.20**	**0.50**	**1.0**	**ug/L**	1	07-Jul-2022 13:42
Surr: 1,2-Dichloroethane-d4	*98.2*			**0**	*81-118*	*%REC*	*1*	*07-Jul-2022 13:42*
Surr: 1,2-Dichloroethane-d4	*98.0*			**0**	*81-118*	*%REC*	*25*	*07-Jul-2022 16:30*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*1*	*07-Jul-2022 13:42*
Surr: 4-Bromofluorobenzene	*103*			**0**	*85-114*	*%REC*	*25*	*07-Jul-2022 16:30*
Surr: Dibromofluoromethane	*95.7*			**0**	*80-119*	*%REC*	*1*	*07-Jul-2022 13:42*
Surr: Dibromofluoromethane	*93.5*			**0**	*80-119*	*%REC*	*25*	*07-Jul-2022 16:30*
Surr: Toluene-d8	*110*			**0**	*89-112*	*%REC*	*1*	*07-Jul-2022 13:42*
Surr: Toluene-d8	*117*	*S*		**0**	*89-112*	*%REC*	*25*	*07-Jul-2022 16:30*
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: MZD
Organic Carbon, Total	**2.68**		**0.500**	**1.00**	**1.00**	**mg/L**	1	15-Jul-2022 14:42
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	19-Jul-2022 19:43

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: Trip Blank-220630
Collection Date: 30-Jun-2022 00:00

ANALYTICAL REPORT
WorkOrder:HS22070020
Lab ID:HS22070020-10
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	06-Jul-2022 19:01
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 19:01
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 19:01
cis-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 19:01
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	06-Jul-2022 19:01
Trichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 19:01
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	06-Jul-2022 19:01
Surr: 1,2-Dichloroethane-d4	*99.9*			**0**	*81-118*	*%REC*	*1*	*06-Jul-2022 19:01*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*1*	*06-Jul-2022 19:01*
Surr: Dibromofluoromethane	*97.5*			**0**	*80-119*	*%REC*	*1*	*06-Jul-2022 19:01*
Surr: Toluene-d8	*109*			**0**	*89-112*	*%REC*	*1*	*06-Jul-2022 19:01*

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022 **DATES REPORT**
WorkOrder: HS22070020

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R412120 (0)	**Test Name :** ANIONS BY SW9056A				**Matrix:** Water	
HS22070020-01	16WW16-220630	30 Jun 2022 07:10			01 Jul 2022 13:50	10
HS22070020-01	16WW16-220630	30 Jun 2022 07:10			01 Jul 2022 13:34	1
HS22070020-02	16WW35-220630	30 Jun 2022 08:10			01 Jul 2022 14:06	500
HS22070020-02	16WW35-220630	30 Jun 2022 08:10			01 Jul 2022 13:55	5
HS22070020-04	16WW48-220630	30 Jun 2022 09:40			01 Jul 2022 14:54	50
HS22070020-04	16WW48-220630	30 Jun 2022 09:40			01 Jul 2022 14:43	2
Batch ID: R412360 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS22070020-02	16WW35-220630	30 Jun 2022 08:10			07 Jul 2022 01:21	100
HS22070020-02	16WW35-220630	30 Jun 2022 08:10			07 Jul 2022 01:00	10
HS22070020-03	16WW36-220630	30 Jun 2022 08:55			07 Jul 2022 02:45	250
HS22070020-03	16WW36-220630	30 Jun 2022 08:55			07 Jul 2022 02:24	25
HS22070020-05	16WW30-220630	30 Jun 2022 10:25			06 Jul 2022 21:50	1
HS22070020-06	16WW29-220630	30 Jun 2022 11:10			06 Jul 2022 22:11	1
HS22070020-07	16WW29-220630-FD	30 Jun 2022 11:10			06 Jul 2022 22:32	1
HS22070020-08	16WW25-220630	30 Jun 2022 12:00			06 Jul 2022 20:05	1
HS22070020-10	Trip Blank-220630	30 Jun 2022 00:00			06 Jul 2022 19:01	1
Batch ID: R412413 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS22070020-01	16WW16-220630	30 Jun 2022 07:10			07 Jul 2022 14:24	250
HS22070020-01	16WW16-220630	30 Jun 2022 07:10			07 Jul 2022 14:03	25
HS22070020-04	16WW48-220630	30 Jun 2022 09:40			07 Jul 2022 15:48	250
HS22070020-04	16WW48-220630	30 Jun 2022 09:40			07 Jul 2022 14:45	25
HS22070020-09	16WW26-220630	30 Jun 2022 12:50			07 Jul 2022 16:30	25
HS22070020-09	16WW26-220630	30 Jun 2022 12:50			07 Jul 2022 13:42	1
Batch ID: R412754 (0)	**Test Name :** DISSOLVED GASES BY RSK-175				**Matrix:** Water	
HS22070020-01	16WW16-220630	30 Jun 2022 07:10			11 Jul 2022 12:36	100
HS22070020-01	16WW16-220630	30 Jun 2022 07:10			11 Jul 2022 11:28	1
HS22070020-02	16WW35-220630	30 Jun 2022 08:10			11 Jul 2022 12:46	10
HS22070020-02	16WW35-220630	30 Jun 2022 08:10			11 Jul 2022 12:02	1
HS22070020-04	16WW48-220630	30 Jun 2022 09:40			11 Jul 2022 12:10	1
Batch ID: R413048 (0)	**Test Name :** TOTAL ORGANIC CARBON - SM5310B-2011				**Matrix:** Water	
HS22070020-02	16WW35-220630	30 Jun 2022 08:10			15 Jul 2022 22:13	10
Batch ID: R413050 (0)	**Test Name :** TOTAL ORGANIC CARBON - SM5310B-2011				**Matrix:** Water	
HS22070020-01	16WW16-220630	30 Jun 2022 07:10			15 Jul 2022 13:46	1
HS22070020-03	16WW36-220630	30 Jun 2022 08:55			15 Jul 2022 14:29	1
HS22070020-09	16WW26-220630	30 Jun 2022 12:50			15 Jul 2022 14:42	1

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070020

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R413091 (0)	**Test Name :** SUBCONTRACT ANALYSIS - RSK				**Matrix:** Water	
HS22070020-01	16WW16-220630	30 Jun 2022 07:10			18 Jul 2022 09:12	1
HS22070020-02	16WW35-220630	30 Jun 2022 08:10			18 Jul 2022 09:12	1
HS22070020-04	16WW48-220630	30 Jun 2022 09:40			18 Jul 2022 09:12	1
Batch ID: R413282 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Water	
HS22070020-01	16WW16-220630	30 Jun 2022 07:10			19 Jul 2022 19:43	1
HS22070020-02	16WW35-220630	30 Jun 2022 08:10			19 Jul 2022 19:43	1
HS22070020-03	16WW36-220630	30 Jun 2022 08:55			19 Jul 2022 19:43	1
HS22070020-04	16WW48-220630	30 Jun 2022 09:40			19 Jul 2022 19:43	1
HS22070020-05	16WW30-220630	30 Jun 2022 10:25			19 Jul 2022 19:43	1
HS22070020-06	16WW29-220630	30 Jun 2022 11:10			19 Jul 2022 19:43	1
HS22070020-07	16WW29-220630-FD	30 Jun 2022 11:10			19 Jul 2022 19:43	1
HS22070020-08	16WW25-220630	30 Jun 2022 12:00			19 Jul 2022 19:43	1
HS22070020-09	16WW26-220630	30 Jun 2022 12:50			19 Jul 2022 19:43	1

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070020

QC BATCH REPORT

Batch ID: R412754 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MBLK Sample ID: **MBLK-220711** Units: **mg/L** Analysis Date: **11-Jul-2022 09:00**
Client ID: Run ID: **FID-4_412754** SeqNo: **6742107** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.000500	0.00100								U
Ethene	0.000500	0.00100								U
Methane	0.000500	0.000500								U

LCS Sample ID: **LCS-220711** Units: **mg/L** Analysis Date: **11-Jul-2022 09:10**
Client ID: Run ID: **FID-4_412754** SeqNo: **6742108** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0206	0.00100	0.01804	0	114	75 - 125				
Ethene	0.0189	0.00100	0.0168	0	113	75 - 125				
Methane	0.00936	0.000500	0.009647	0	97.1	75 - 125				

MS Sample ID: **HS22070326-07MS** Units: **mg/L** Analysis Date: **11-Jul-2022 13:35**
Client ID: Run ID: **FID-4_412754** SeqNo: **6742134** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0225	0.00100	0.01804	0	125	75 - 125				
Ethene	0.0242	0.00100	0.0168	0	144	75 - 125				S
Methane	0.749	0.000500	0.009647	3.020	-23500	75 - 125				SEO

MS Sample ID: **HS22070020-01MS** Units: **mg/L** Analysis Date: **11-Jul-2022 11:36**
Client ID: **16WW16-220630** Run ID: **FID-4_412754** SeqNo: **6742123** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0255	0.00100	0.01804	0	141	75 - 125				S
Ethene	0.0262	0.00100	0.0168	0.01680	56.2	75 - 125				S
Methane	1.26	0.000500	0.009647	1.330	-729	75 - 125				SEO

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070020

QC BATCH REPORT

Batch ID: R412754 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MSD Sample ID: **HS22070326-07MSD** Units: **mg/L** Analysis Date: **11-Jul-2022 13:43**
Client ID: Run ID: **FID-4_412754** SeqNo: **6742135** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0203	0.00100	0.01804	0	113	75 - 125	0.02247	10.1	30	
Ethene	0.0233	0.00100	0.0168	0	139	75 - 125	0.02422	3.89	30	S
Methane	0.860	0.000500	0.009647	3.020	-22400	75 - 125	0.7487	13.8	30	SEO

MSD Sample ID: **HS22070020-01MSD** Units: **mg/L** Analysis Date: **11-Jul-2022 11:53**
Client ID: **16WW16-220630** Run ID: **FID-4_412754** SeqNo: **6742124** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0233	0.00100	0.01804	0	129	75 - 125	0.02546	8.71	30	S
Ethene	0.0270	0.00100	0.0168	0.01680	60.6	75 - 125	0.02624	2.73	30	S
Methane	1.28	0.000500	0.009647	1.330	-525	75 - 125	1.260	1.55	30	SEO

The following samples were analyzed in this batch: HS22070020-01 HS22070020-02 HS22070020-04

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070020

QC BATCH REPORT

Batch ID: R412360 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-220706** Units: **ug/L** Analysis Date: **06-Jul-2022 18:40**
Client ID: Run ID: **VOA6_412360** SeqNo: **6733260** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1.0	1.0								U
1,1-Dichloroethene	0.50	1.0								U
1,2-Dichloroethane	0.50	1.0								U
cis-1,2-Dichloroethene	0.50	1.0								U
Methylene chloride	2.0	2.0								U
Trichloroethene	0.50	1.0								U
Vinyl chloride	0.50	1.0								U
Surr: 1,2-Dichloroethane-d4	*50.06*	*1.0*	*50*	*0*	*100*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.14*	*1.0*	*50*	*0*	*102*	*85 - 114*				
Surr: Dibromofluoromethane	*48.37*	*1.0*	*50*	*0*	*96.7*	*80 - 119*				
Surr: Toluene-d8	*54.14*	*1.0*	*50*	*0*	*108*	*89 - 112*				

LCS Sample ID: **VLCSW-220706** Units: **ug/L** Analysis Date: **06-Jul-2022 17:37**
Client ID: Run ID: **VOA6_412360** SeqNo: **6733259** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	18.53	1.0	20	0	92.6	80 - 119				
1,1-Dichloroethene	16.37	1.0	20	0	81.9	71 - 131				
1,2-Dichloroethane	20.98	1.0	20	0	105	73 - 128				
cis-1,2-Dichloroethene	18.52	1.0	20	0	92.6	78 - 123				
Methylene chloride	18.23	2.0	20	0	91.2	74 - 124				
Trichloroethene	18.55	1.0	20	0	92.8	79 - 123				
Vinyl chloride	15.59	1.0	20	0	78.0	58 - 137				
Surr: 1,2-Dichloroethane-d4	*56.78*	*1.0*	*50*	*0*	*114*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.6*	*1.0*	*50*	*0*	*103*	*85 - 114*				
Surr: Dibromofluoromethane	*53.1*	*1.0*	*50*	*0*	*106*	*80 - 119*				
Surr: Toluene-d8	*49.37*	*1.0*	*50*	*0*	*98.7*	*89 - 112*				

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070020

QC BATCH REPORT

Batch ID: R412360 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS22070020-08MS** Units: **ug/L** Analysis Date: **06-Jul-2022 20:26**
Client ID: **16WW25-220630** Run ID: **VOA6_412360** SeqNo: **6733265** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	20.31	1.0	20	0	102	80 - 119				
1,1-Dichloroethene	18.79	1.0	20	0	94.0	71 - 131				
1,2-Dichloroethane	20.44	1.0	20	0	102	73 - 128				
cis-1,2-Dichloroethene	19.71	1.0	20	0	98.6	78 - 123				
Methylene chloride	18.85	2.0	20	0	94.3	74 - 124				
Trichloroethene	21.2	1.0	20	1.313	99.4	79 - 123				
Vinyl chloride	19.12	1.0	20	0	95.6	58 - 137				
Surr: 1,2-Dichloroethane-d4	*53.93*	*1.0*	*50*	*0*	*108*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*55.44*	*1.0*	*50*	*0*	*111*	*85 - 114*				
Surr: Dibromofluoromethane	*49.44*	*1.0*	*50*	*0*	*98.9*	*80 - 119*				
Surr: Toluene-d8	*55.16*	*1.0*	*50*	*0*	*110*	*89 - 112*				

MSD Sample ID: **HS22070020-08MSD** Units: **ug/L** Analysis Date: **06-Jul-2022 20:47**
Client ID: **16WW25-220630** Run ID: **VOA6_412360** SeqNo: **6733266** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	18.16	1.0	20	0	90.8	80 - 119	20.31	11.2	20	
1,1-Dichloroethene	20.46	1.0	20	0	102	71 - 131	18.79	8.52	20	
1,2-Dichloroethane	19.46	1.0	20	0	97.3	73 - 128	20.44	4.9	20	
cis-1,2-Dichloroethene	18.29	1.0	20	0	91.4	78 - 123	19.71	7.49	20	
Methylene chloride	18.8	2.0	20	0	94.0	74 - 124	18.85	0.288	20	
Trichloroethene	20.55	1.0	20	1.313	96.2	79 - 123	21.2	3.11	20	
Vinyl chloride	19.46	1.0	20	0	97.3	58 - 137	19.12	1.76	20	
Surr: 1,2-Dichloroethane-d4	*46.22*	*1.0*	*50*	*0*	*92.4*	*81 - 118*	*53.93*	*15.4*	*20*	
Surr: 4-Bromofluorobenzene	*51.55*	*1.0*	*50*	*0*	*103*	*85 - 114*	*55.44*	*7.26*	*20*	
Surr: Dibromofluoromethane	*46.66*	*1.0*	*50*	*0*	*93.3*	*80 - 119*	*49.44*	*5.8*	*20*	
Surr: Toluene-d8	*47.45*	*1.0*	*50*	*0*	*94.9*	*89 - 112*	*55.16*	*15*	*20*	

The following samples were analyzed in this batch:

HS22070020-02	HS22070020-03	HS22070020-05	HS22070020-06
HS22070020-07	HS22070020-08	HS22070020-10	

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070020

QC BATCH REPORT

Batch ID: R412413 (0) **Instrument: VOA6** **Method: VOLATILES ORGANICS BY METHOD 8260C**

MBLK Sample ID: **VBLKW-220707** Units: **ug/L** Analysis Date: **07-Jul-2022 12:23**
Client ID: Run ID: **VOA6_412413** SeqNo: **6734426** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1.0	1.0								U
1,1-Dichloroethene	0.50	1.0								U
1,2-Dichloroethane	0.50	1.0								U
cis-1,2-Dichloroethene	0.50	1.0								U
Methylene chloride	2.0	2.0								U
Trichloroethene	0.50	1.0								U
Vinyl chloride	0.50	1.0								U
Surr: 1,2-Dichloroethane-d4	*51.98*	*1.0*	*50*	*0*	*104*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.74*	*1.0*	*50*	*0*	*101*	*85 - 114*				
Surr: Dibromofluoromethane	*49.85*	*1.0*	*50*	*0*	*99.7*	*80 - 119*				
Surr: Toluene-d8	*54.86*	*1.0*	*50*	*0*	*110*	*89 - 112*				

LCS Sample ID: **VLCSW-220707** Units: **ug/L** Analysis Date: **07-Jul-2022 11:41**
Client ID: Run ID: **VOA6_412413** SeqNo: **6734425** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	19.21	1.0	20	0	96.0	80 - 119				
1,1-Dichloroethene	20.6	1.0	20	0	103	71 - 131				
1,2-Dichloroethane	19.5	1.0	20	0	97.5	73 - 128				
cis-1,2-Dichloroethene	19.16	1.0	20	0	95.8	78 - 123				
Methylene chloride	20.5	2.0	20	0	102	74 - 124				
Trichloroethene	20.29	1.0	20	0	101	79 - 123				
Vinyl chloride	20.79	1.0	20	0	104	58 - 137				
Surr: 1,2-Dichloroethane-d4	*48.36*	*1.0*	*50*	*0*	*96.7*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.37*	*1.0*	*50*	*0*	*103*	*85 - 114*				
Surr: Dibromofluoromethane	*49.57*	*1.0*	*50*	*0*	*99.1*	*80 - 119*				
Surr: Toluene-d8	*50.77*	*1.0*	*50*	*0*	*102*	*89 - 112*				

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070020

QC BATCH REPORT

Batch ID: R412413 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS22070020-01MS** Units: **ug/L** Analysis Date: **07-Jul-2022 15:06**
Client ID: **16WW16-220630** Run ID: **VOA6_412413** SeqNo: **6734433** PrepDate: DF: **250**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	4992	250	5000	0	99.8	80 - 119				
1,1-Dichloroethene	4635	250	5000	0	92.7	71 - 131				
1,2-Dichloroethane	5050	250	5000	0	101	73 - 128				
cis-1,2-Dichloroethene	23700	250	5000	19300	88.0	78 - 123				
Methylene chloride	4469	500	5000	308.6	83.2	74 - 124				
Trichloroethene	44070	250	5000	40120	79.1	79 - 123				O
Vinyl chloride	4437	250	5000	426.5	80.2	58 - 137				
Surr: 1,2-Dichloroethane-d4	*12730*	*250*	*12500*	*0*	*102*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*12930*	*250*	*12500*	*0*	*103*	*85 - 114*				
Surr: Dibromofluoromethane	*12030*	*250*	*12500*	*0*	*96.3*	*80 - 119*				
Surr: Toluene-d8	*13560*	*250*	*12500*	*0*	*108*	*89 - 112*				

MSD Sample ID: **HS22070020-01MSD** Units: **ug/L** Analysis Date: **07-Jul-2022 15:27**
Client ID: **16WW16-220630** Run ID: **VOA6_412413** SeqNo: **6734434** PrepDate: DF: **250**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	4964	250	5000	0	99.3	80 - 119	4992	0.558	20	
1,1-Dichloroethene	4386	250	5000	0	87.7	71 - 131	4635	5.51	20	
1,2-Dichloroethane	5094	250	5000	0	102	73 - 128	5050	0.859	20	
cis-1,2-Dichloroethene	22970	250	5000	19300	73.3	78 - 123	23700	3.14	20	S
Methylene chloride	4339	500	5000	308.6	80.6	74 - 124	4469	2.95	20	
Trichloroethene	41640	250	5000	40120	30.5	79 - 123	44070	5.67	20	SO
Vinyl chloride	4593	250	5000	426.5	83.3	58 - 137	4437	3.46	20	
Surr: 1,2-Dichloroethane-d4	*12700*	*250*	*12500*	*0*	*102*	*81 - 118*	*12730*	*0.248*	*20*	
Surr: 4-Bromofluorobenzene	*13070*	*250*	*12500*	*0*	*105*	*85 - 114*	*12930*	*1.11*	*20*	
Surr: Dibromofluoromethane	*12090*	*250*	*12500*	*0*	*96.7*	*80 - 119*	*12030*	*0.438*	*20*	
Surr: Toluene-d8	*13730*	*250*	*12500*	*0*	*110*	*89 - 112*	*13560*	*1.27*	*20*	

The following samples were analyzed in this batch: HS22070020-01 HS22070020-04 HS22070020-09

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070020

QC BATCH REPORT

Batch ID: R412120 (0) **Instrument:** ICS-Integrion **Method:** ANIONS BY SW9056A

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **01-Jul-2022 14:22**
Client ID: Run ID: **ICS-Integrion_412120** SeqNo: **6727568** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	0.100	0.100								U
Nitrogen, Nitrate (As N)	0.100	0.100								U
Sulfate	0.500	0.500								U

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **01-Jul-2022 13:29**
Client ID: Run ID: **ICS-Integrion_412120** SeqNo: **6727560** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	3.764	0.100	4	0	94.1	80 - 120				
Nitrogen, Nitrate (As N)	3.901	0.100	4	0	97.5	80 - 120				
Sulfate	19.51	0.500	20	0	97.5	80 - 120				

MS Sample ID: **HS22070020-01MS** Units: **mg/L** Analysis Date: **01-Jul-2022 13:39**
Client ID: **16WW16-220630** Run ID: **ICS-Integrion_412120** SeqNo: **6727562** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	5.534	0.100	2	3.541	99.6	80 - 120				
Nitrogen, Nitrate (As N)	2.24	0.100	2	0.2067	102	80 - 120				
Sulfate	369.1	0.500	10	0	3690	80 - 120				SE

MSD Sample ID: **HS22070020-01MSD** Units: **mg/L** Analysis Date: **01-Jul-2022 13:45**
Client ID: **16WW16-220630** Run ID: **ICS-Integrion_412120** SeqNo: **6727563** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	5.532	0.100	2	3.541	99.5	80 - 120	5.534	0.0343	20	
Nitrogen, Nitrate (As N)	2.261	0.100	2	0.2067	103	80 - 120	2.24	0.942	20	
Sulfate	369.4	0.500	10	0	3690	80 - 120	369.1	0.0744	20	SE

The following samples were analyzed in this batch: HS22070020-01 HS22070020-02 HS22070020-04

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070020

QC BATCH REPORT

Batch ID: R413048 (0) **Instrument:** TOC_04 **Method:** TOTAL ORGANIC CARBON - SM5310B-2011

MBLK Sample ID: **MBLK4-07152022** Units: **mg/L** Analysis Date: **15-Jul-2022 20:15**
Client ID: Run ID: **TOC_04_413048** SeqNo: **6749577** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	1.00	1.00								U

LCS Sample ID: **LCS4-07152022** Units: **mg/L** Analysis Date: **15-Jul-2022 20:28**
Client ID: Run ID: **TOC_04_413048** SeqNo: **6749578** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.638	1.00	10	0	96.4	85 - 115				

LCSD Sample ID: **LCSD4-07152022** Units: **mg/L** Analysis Date: **15-Jul-2022 20:42**
Client ID: Run ID: **TOC_04_413048** SeqNo: **6749579** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.758	1.00	10	0	97.6	85 - 115	9.638	1.24	20	

MS Sample ID: **HS22070652-01MS** Units: **mg/L** Analysis Date: **15-Jul-2022 21:08**
Client ID: Run ID: **TOC_04_413048** SeqNo: **6749581** PrepDate: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	96.15	10.0	100	5.034	91.1	80 - 120				

The following samples were analyzed in this batch: HS22070020-02

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070020

QC BATCH REPORT

Batch ID: R413050 (0) **Instrument:** TOC_04 **Method:** TOTAL ORGANIC CARBON - SM5310B-2011

MBLK Sample ID: **MBLK2-07152022** Units: **mg/L** Analysis Date: **15-Jul-2022 12:53**
Client ID: Run ID: **TOC_04_413050** SeqNo: **6749621** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	1.00	1.00								U

LCS Sample ID: **LCS2-07152022** Units: **mg/L** Analysis Date: **15-Jul-2022 13:07**
Client ID: Run ID: **TOC_04_413050** SeqNo: **6749622** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.733	1.00	10	0	97.3	85 - 115				

LCSD Sample ID: **LCSD2-07152022** Units: **mg/L** Analysis Date: **15-Jul-2022 13:20**
Client ID: Run ID: **TOC_04_413050** SeqNo: **6749623** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.761	1.00	10	0	97.6	85 - 115	9.733	0.287	20	

MS Sample ID: **HS22070020-01MS** Units: **mg/L** Analysis Date: **15-Jul-2022 13:59**
Client ID: **16WW16-220630** Run ID: **TOC_04_413050** SeqNo: **6749626** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	14.33	1.00	10	4.299	100	80 - 120				

The following samples were analyzed in this batch: HS22070020-01 HS22070020-03 HS22070020-09

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: **HS22070020**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
California	2919 2022-2023	30-Apr-2023
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-36	30-Jun-2023
Illinois	2000322022-9	09-May-2023
Kansas	E-10352 2021-2022	31-Jul-2022
Kentucky	123043, 2022-2023	30-Apr-2023
Louisiana	03087, 2022-2023	30-Jun-2023
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2022	31-Dec-2022
North Dakota	R-193 2022-2023	30-Apr-2023
Oklahoma	2021-080	31-Aug-2022
Texas	T104704231-22-29	30-Apr-2023
Utah	TX026932021-12	30-Jul-2022

ALS Houston, US Date: 20-Jul-22

Sample Receipt Checklist

Work Order ID: HS22070020 **Date/Time Received:** 01-Jul-2022 09:25

Client Name: CBI-Houston **Received by:** Corey Grandits

Completed By: /S/ Nilesh D. Ranchod (eSignature) 30-Jun-2022 12:38 (Date/Time) **Reviewed by:** /S/ Dane J. Wacasey (eSignature) 18-Jul-2022 13:30 (Date/Time)

Matrices: **Water** Carrier name: **FedEx Priority Overnight**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	2 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	4.0uc/4.5c	IR #31
Cooler(s)/Kit(s):	47394	
Date/Time sample(s) sent to storage:	07/01/2022	

Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

CHAIN OF CUSTODY

HS22070020

Aptim Environmental & Infrastucture, Inc.

LHAAP 16 January 2022

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210 Houston, TX. 77099 (281) 575-2190 ATTN: Dane Wacasey

Project: APTIM LONGHORN ARMY AMMN. PLANT (LHAAP) GROUNDWATER TREATMENT PLANT (GWTP) KARNACK, TEXAS	Project No. 501032
Job: **LHAAP 16 January 2022**	
Prepared By: Scott Beesinger	P.O. Number

Field Sample I.D.	Sample Matrix	Date / Time	MS / MSD	No. OF CONTAINERS	A VOC by SW 8260B	TOC by SM5310C	MEE by RSK 175	Anions sulfate and nitrate by SW9056	CO2 by RSK 175	Perchlorate by SW 6850					Remarks (Preservatives, etc.)	Lab I.D.#
16ww16-220630	wG	6/30/22 0710		13	X	X	X	X	X	X						
16ww16-220630-ms	wG	6/30/22 0710		13	X	X	X	X	X	X						
16ww16-220630-msD	wG	6/30/22 0710		13	X	X	X	X	X	X						
16ww35-220630	wG	6/30/22 0810		13	X	X	X	X	X	X						
16ww36-220630	wG	6/30/22 0855		6	X	X				X						
16ww48-220630	wG	6/30/22 0940		11	X		X	X	X	X						
16ww30-220630	wG	6/30/22 1025		4	X					X						
16ww29-220630	wG	6/30/22 1110		4	X					X						

Additional Remarks: Standard TAT on all parameters. Please email results to Vicki.Graves@aptim.com and invoices to fedinvoices@aptim.com

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
Scott Beesinger	6/30/22	1430							CORE/S	7-1-22	0735

For Lab Use Only

Received At Lab By:	Date	Time	Airbill No.	Opened By:	Date	Time	Temp of Container	Seal No.	Condition

Remarks:

477941 4.0°C

IR21

CF205

HS22070020

CHAIN OF CUSTODY

Aptim Environmental & Infrastucture, Inc.
LHAAP 16 January 2022

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210 Houston, TX. 77099 (281) 575-2190 ATTN: Dane Wacasey

Project: APTIM LONGHORN ARMY AMMN. PLANT (LHAAP) GROUNDWATER TREATMENT PLANT (GWTP) KARNACK, TEXAS	Project No. 501032
Job: **LHAAP 16 January 2022**	
Prepared By: Scott Beesinger	P.O. Number

Field Sample I.D. / Time	Sample Matrix	Date /	MS / MSD	No. OF CONTAINERS	VOC by SW 8260B	TOC by SM5310C	MEE by RSK 175	Anions sulfate and nitrate by SW9056	CO2 by RSK 175	Perchlorate by SW 6850					Remarks (Preservatives, etc.)	Lab I.D.#
16ww29-220630-FD	wG	6/30/22 1110		4	X					X						
16ww25-220630	wG	6/30/22 1200		4	X					X						
16ww25-220630-ms	wG	6/30/22 1200		4	X					X						
16ww25-220630-MSD	wG	6/30/22 1200		4	X					X						
16ww26-220630	wG	6/30/22 1250		6	X	X				X						
TRIP BLANK-220630	w	6/30/22		2	X											

Additional Remarks: Standard TAT on all parameters. Please email results to Vicki.Graves@aptim.com and invoices to fedinvoices@aptim.com

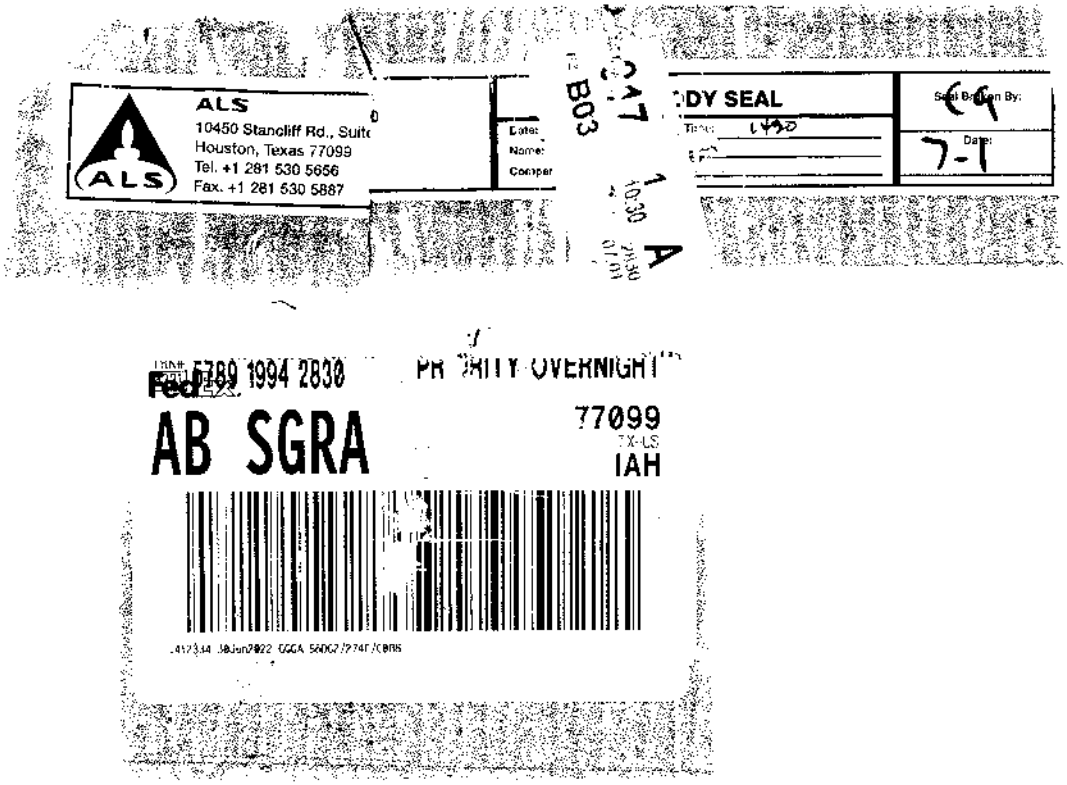
Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
Scott Beesinger	6/30/22	1430							[illegible]	7-1-22	0725

For Lab Use Only

Received At Lab By:	Date	Time	Airbill No.	Opened By:	Date	Time	Temp of Container	Seal No.	Condition

Remarks: 97394 1821 4.0°C LF30.5

Word) S:\I-ces\Forms\Chain of Custody - BiWeekly


ALS
10450 Stancliff Rd., Suite
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887
DY SEAL
Date:
7-1
B03
A
Fed
1994 2830
PRIORITY OVERNIGHT
AB SGRA
77099
TX-US
IAH

July 19, 2022 Service Request No:E2200646

Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

Laboratory Results for: HS22070020

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory July 01, 2022
For your reference, these analyses have been assigned our service request number **E2200646.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Corey Grandits
Project Manager

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental

Certificate of Analysis

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Environmental

Client:	ALS	**Service Request No.:**	E2200646
Project:	HS22070020	**Date Received:**	07/01/22
Sample Matrix:	W		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Nine samples were received for analysis at ALS Environmental in Houston on 07/01/22.

The samples were received in good condition and are consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2200278: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in addition to a MS/MSD for this extraction batch. The LCS-DLCS recoveries met acceptance criteria. EQ278-06/07 MS/MSD recoveries met acceptance criteria. EQ278-04/05 MS/MSD failed, parent sample 581 ug/L.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: ALS Environmental - US **Service Request:**E2200646
Project: HS22070020

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2200646-001	16WW16-220630	6/30/2022	0710
E2200646-002	16WW35-220630	6/30/2022	0810
E2200646-003	16WW36-220630	6/30/2022	0855
E2200646-004	16WW48-220630	6/30/2022	0940
E2200646-005	16WW30-220630	6/30/2022	1025
E2200646-006	16WW29-220630	6/30/2022	1110
E2200646-007	16WW29-220630-FD	6/30/2022	1110
E2200646-008	16WW25-220630	6/30/2022	1200
E2200646-009	16WW26-220630	6/30/2022	1250

Service Request Summary

Folder #: **E2200646**
Client Name: ALS Environmental - US
Project Name: HS22070020
Project Number:

Report To: Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-575-2190
Cell Number:
Fax Number: 281-530-5887
E-mail: dane.wacasey@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 07/01/22
Internal Due Date: 7/18/2022
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS22070020
EDD: EQUIS
EFWEDD_LHAAP

13 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2200646-001	16WW16-220630	Water	06/30/22 0710	**IV**
E2200646-002	16WW35-220630	Water	06/30/22 0810	**IV**
E2200646-003	16WW36-220630	Water	06/30/22 0855	**IV**
E2200646-004	16WW48-220630	Water	06/30/22 0940	**IV**
E2200646-005	16WW30-220630	Water	06/30/22 1025	**IV**
E2200646-006	16WW29-220630	Water	06/30/22 1110	**IV**
E2200646-007	16WW29-220630-FD	Water	06/30/22 1110	**IV**
E2200646-008	16WW25-220630	Water	06/30/22 1200	**IV**
E2200646-009	16WW26-220630	Water	06/30/22 1250	**IV**

Service Request Summary

Folder #: **E2200646**
Client Name: ALS Environmental - US
Project Name: HS22070020
Project Number:

Report To: Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-575-2190
Cell Number:
Fax Number: 281-530-5887
E-mail: dane.wacasey@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 07/01/22
Internal Due Date: 7/18/2022
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS22070020
EDD: EQUIS
EFWEDD_LHAAP

13 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Test Comments:

Group	Test/Method	Samples	Comments
Semivoa GCMS	ClO4 DOD/6850	7	IV Due 7/25
Semivoa GCMS	ClO4 DOD/6850	2	MS/MSD

Data Qualifiers

Lab Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	Internal standard not within the specified limits. See case narrative.
J	Estimated Value. Concentration found below MRL.
K	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	Analyte was detected above the method reporting limit prior to normalization.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
L1	Laboratory control sample recovery outside the specified limits; results may be biased high.
L2	Laboratory control sample recovery outside the specified limits; results may be biased low.
L3	Laboratory control sample recovery outside the specified limits.
M	Matrix interference; results may be biased high.
M	The duplicate injection precision not met.
M1	Matrix interference due to coelution with a non-target compound; results may be biased high.

Data Qualifiers

Lab Standard

N	Presumptive evidence of a compound for TICs that have been identified based on a mass spectral library search.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
P	Pesticide/Aroclor target analyte > 40% difference for detected concentrations between GC columns
Q	Indicates as estimated value because the P and P + 2 theoretical abundance ratio does not meet method criteria.
R	Duplicate Precision not met.
R1	Duplicate precision not within the specified limits; however, the results are below the MRL and considered estimated.
S	Surrogate recovery not within specified limits.
S	The reported value was determined by the Method of Standard Additions (MSA).
T	Analyte is a tentatively identified compound, result is estimated.
U	Compound was analyzed for, but was not detected (ND).
V1	The continuing calibration verification standard was outside (biased high) the specified limits for this compound.
V2	The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
W	Result quantified, but the corresponding peak was detected outside the generated retention time window.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
X	See case narrative.
Y	Recovery outside limits
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

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ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793	5/27/2023
California Department of Health Services	2919-2023	4/30/2023
Department of Defense	L22-90	3/31/2024
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Hawaii Department of Health	2022	4/30/2023
Illinois Environmental Protection Agency	2000322022-9	5/9/2023
Kansas Department of Health and Environment	E-10352 2022	7/31/2022
Louisiana Department of Environmental Quality	03087-2022	6/30/2023
Louisiana Department of Health and Hospitals	LA028	12/31/2022
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343	6/30/2023
Michigan Depratment of Environmental Quality	9971-2022	4/30/2023
Minnesota Department of Health	2228443	12/31/2022
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2023
Nevada Department of Concervation and Natural Resources	TX026932022-1	7/31/2022
New Hampshire Environmental Laboratory Accreditation Program	209422	4/24/2023
New Jersey Department of Environmental Protection	TX008-2023	6/30/2023
New York Department of Health	11707	3/31/2023
Oklahoma Department of Environmental Quality	2021-080	8/31/2022
Oregon Environmental Laboratory Accreditation Program	TX200002	5/15/2023
Pennsylvania Department of Environmental Protection	68-03441-016	6/30/2023
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	04016-2022	4/30/2023
Texas Commision on Environmental Quality	T104704231-22-29	4/30/2023
United States Department of Agriculture	P330-19-00299	10/10/2022
Utah Department of Health Environmental Laboratory Certification	TX026932021-12	7/31/2022
Washington Department of Health	C819-2022	11/14/2022

Chain of Custody

ALS Environmental - Houston HRMS
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Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 19102**

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084 **Phone:** +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	Dane J. Wacasey
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	Dane.Wacasey@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS22070020
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS22070020-01**	**16WW16-220630**	**Water**	**30 Jun 2022 07:10**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			18 Jul 2022
2.	**HS22070020-02**	**16WW35-220630**	**Water**	**30 Jun 2022 08:10**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			18 Jul 2022
3.	**HS22070020-03**	**16WW36-220630**	**Water**	**30 Jun 2022 08:55**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			18 Jul 2022
4.	**HS22070020-04**	**16WW48-220630**	**Water**	**30 Jun 2022 09:40**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			18 Jul 2022
5.	**HS22070020-05**	**16WW30-220630**	**Water**	**30 Jun 2022 10:25**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			18 Jul 2022
6.	**HS22070020-06**	**16WW29-220630**	**Water**	**30 Jun 2022 11:10**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			18 Jul 2022
7.	**HS22070020-07**	**16WW29-220630-FD**	**Water**	**30 Jun 2022 11:10**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			18 Jul 2022
8.	**HS22070020-08**	**16WW25-220630**	**Water**	**30 Jun 2022 12:00**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 19102**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			18 Jul 2022
9.	**HS22070020-09**	**16WW26-220630**	**Water**	**30 Jun 2022 12:50**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			18 Jul 2022

Comments: Sample 16WW16-220630 & 16WW25-220630 MS/MSD

Please analyze for the analysis listed above.
Send report to the emails shown above.

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: 7/1/22 1109

Cooler ID(s): _____ Temperature(s): _____

ALS Environmental

Cooler Receipt Form

Project Chemist CH

Client/Project ALS-H

Thermometer ID IR#1

Date/Time Received: 7-1-22 Initials: NELA Date/Time Logged in: 7-1-22 Initials CH

1. Method of delivery: ○ US Mail ○ Fed Ex ○ UPS ○ DHL ☒ Courier (ALS) ○ Client

2. Samples received in: ☒ Cooler ○ Box ○ Envelope ○ Other

3. Were custody seals on coolers? ○ Yes ☒ No
   Were they intact? ○ Yes ○ No ☒ N/A
   Were they signed and dated? ○ Yes ○ No ☒ N/A
   If yes, how many and where?

4. Packing Material: ○ Inserts ☒ Baggies ○ Bubble Wrap ○ Gel Packs ☒ Wet Ice ○ Sleeves ○ Other

5. Foreign or Regulated Soil? ○ Yes ○ No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		7-1-22	1109	CH	0.8°	☒
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ☒ Yes ○ No
7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ☒ Yes ○ No
8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ☒ Yes ○ No
9. Were appropriate bottles/containers and volumes received for the requested tests? ☒ Yes ○ No
10. Did sample labels and tags agree with custody documents? ☒ Yes ○ No

Notes, Discrepancies, & Resolutions:

Service request Label:

HS-HRMSCoolerReceipt R1.0

ALS Environmental - Houston HRMS

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www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6ºC.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10ºC.
- ✓ Air samples are shipped and stored cold, at 0 to 6ºC
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

Preparation Information Benchsheets

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 402386 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 7/6/22 11:18

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2200646-001	16WW16-220630	.01	6850/ClO4 DOD			Water	10mL	
2	E2200646-002	16WW35-220630	.01	6850/ClO4 DOD			Water	10mL	
3	E2200646-003	16WW36-220630	.01	6850/ClO4 DOD			Water	10mL	
4	E2200646-004	16WW48-220630	.01	6850/ClO4 DOD			Water	10mL	
5	E2200646-005	16WW30-220630	.01	6850/ClO4 DOD			Water	10mL	
6	E2200646-006	16WW29-220630	.01	6850/ClO4 DOD			Water	10mL	
7	E2200646-007	16WW29-220630-FD	.01	6850/ClO4 DOD			Water	10mL	
8	E2200646-008	16WW25-220630	.01	6850/ClO4 DOD			Water	10mL	
9	E2200646-009	16WW26-220630	.01	6850/ClO4 DOD			Water	10mL	
10	EQ2200278-01	MB		6850/ClO4 DOD			Liquid	10mL	
11	EQ2200278-02	LCS		6850/ClO4 DOD			Liquid	10mL	
12	EQ2200278-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
13	EQ2200278-04	16WW16-220630 MS	.01	6850/ClO4 DOD			Liquid	10mL	
14	EQ2200278-05	16WW16-220630 DMS	.01	6850/ClO4 DOD			Liquid	10mL	
15	EQ2200278-06	16WW25-220630 MS	.01	6850/ClO4 DOD			Liquid	10mL	
16	EQ2200278-07	16WW25-220630 DMS	.01	6850/ClO4 DOD			Liquid	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 222798 Logbook Ref: Perchlorate (1st Source) Expires On: 10/29/2022

EQ2200278-02	1.00µL	EQ2200278-03	1.00µL	EQ2200278-04	1.00µL	EQ2200278-05	1.00µL	EQ2200278-06	1.00µL	EQ2200278-07	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 223118 Logbook Ref: Perchlorate Internal Standard Expires On: 10/31/2022

E2200646-001	100.00µL	E2200646-002	100.00µL	E2200646-003	100.00µL	E2200646-004	100.00µL	E2200646-005	100.00µL	E2200646-006	100.00µL
E2200646-007	100.00µL	E2200646-008	100.00µL	E2200646-009	100.00µL	EQ2200278-01	100.00µL	EQ2200278-02	100.00µL	EQ2200278-03	100.00µL
EQ2200278-04	100.00µL	EQ2200278-05	100.00µL	EQ2200278-06	100.00µL	EQ2200278-07	100.00µL				

Preparation Materials

Water HPLC Grade	5/12/2022 Water (223055)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 Syringe Filters (222410)
6850 Luer-Lok Syringes	Luer-Lok Syringes (221305)	6850 Pipette Tips 50-1000 uL	6850 Pipette Tips (221929)		

Preparation Information Benchsheet

Prep Run#: 402386
Team: Semivoa GCMS/GRIVERA
Prep WorkFlow: GenExt28Day
Prep Method: Method
Status: Prepped
Prep Date/Time: 7/6/22 11:18

Preparation Steps

Step: Preparation
Started: 7/6/22 11:18
Finished: 7/6/22 11:50
By: GRIVERA
Comments

Comments: _____

Reviewed By: GR Date: 7/6/22

Chain of Custody

Relinquished By:		Date:		Extracts Examined
Received By:		Date:		Yes No

Analytical Results

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 0710
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW16-220630	**Units:**	µg/L
Lab Code:	E2200646-001	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**581**		5.00	2.50	1.25	50	7/ 6/22	7/18/22 12:26	402386	770746	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 0810
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW35-220630	**Units:**	µg/L
Lab Code:	E2200646-002	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**419**		5.00	2.50	1.25	50	7/ 6/22	7/18/22 12:34	402386	770746	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 0855
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW36-220630	**Units:**	µg/L
Lab Code:	E2200646-003	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.500	0.250	0.125	5	7/ 6/22	7/18/22 16:00	402386	770746	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 0940
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW48-220630	**Units:**	µg/L
Lab Code:	E2200646-004	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**7.87**		0.500	0.250	0.125	5	7/ 6/22	7/18/22 16:08	402386	770746	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 1025
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW30-220630	**Units:**	µg/L
Lab Code:	E2200646-005	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.176**	J	0.500	0.250	0.125	5	7/ 6/22	7/19/22 10:23	402386	770867	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 1110
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW29-220630	**Units:**	µg/L
Lab Code:	E2200646-006	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/ 6/22	7/12/22 18:50	402386	770203	*

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 1110
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW29-220630-FD	**Units:**	µg/L
Lab Code:	E2200646-007	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/ 6/22	7/12/22 19:05	402386	770203	*

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 1200
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW25-220630	**Units:**	µg/L
Lab Code:	E2200646-008	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/ 6/22	7/12/22 19:13	402386	770203	*

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 1250
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW26-220630	**Units:**	µg/L
Lab Code:	E2200646-009	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/ 6/22	7/12/22 19:21	402386	770203	*

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2200278-01	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/ 6/22	7/12/22 15:23	402386	770203	

Accuracy & Precision

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020
Sample Matrix: Water

Service Request: E2200646
Date Analyzed: 7/12/22

Lab Control Sample Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 402386

	Lab Control Sample EQ2200278-02			Duplicate Lab Control Sample EQ2200278-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.115	0.100	115	0.107	0.100	107	84 - 119	7	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2200278-02	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.115**		0.100	0.0500	0.0250	1	7/ 6/22	7/12/22 15:55	402386	770203	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2200278-03	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.107**		0.100	0.0500	0.0250	1	7/ 6/22	7/12/22 16:11	402386	770203	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22
Sample Matrix:	Water	**Date Received:**	7/1/22
		Date Analyzed:	7/12/22

Matrix Spike Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Sample Name:	16WW16-220630	**Units:**	µg/L
Lab Code:	E2200646-001	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16WW16-220630MS				16WW16-220630DMS					
		Matrix Spike				**Duplicate Matrix Spike**					
		EQ2200278-04				EQ2200278-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	581	588	0.100	6407	#	598	0.100	17211	# 84 - 119	2	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 0710
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW16-220630	**Units:**	µg/L
Lab Code:	EQ2200278-04	**Basis:**	NA
Run Type:	Matrix Spike		

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**588**	E	0.100	0.0500	0.0250	1	7/ 6/22	7/12/22 17:39	402386	770203	*

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 0710
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW16-220630	**Units:**	µg/L
Lab Code:	EQ2200278-05	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**598**	E	0.100	0.0500	0.0250	1	7/ 6/22	7/12/22 17:47	402386	770203	*

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22
Sample Matrix:	Water	**Date Received:**	7/1/22
		Date Analyzed:	7/18/22

Matrix Spike Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Sample Name:	16WW25-220630	**Units:**	µg/L
Lab Code:	E2200646-008	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16WW25-220630MS				16WW25-220630DMS					
		Matrix Spike				**Duplicate Matrix Spike**					
		EQ2200278-06				EQ2200278-07					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	ND	0.105	0.100	105		0.112	0.100	112	84 - 119	6	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 1200
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW25-220630	**Units:**	µg/L
Lab Code:	EQ2200278-06	**Basis:**	NA
Run Type:	Matrix Spike		

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.105**		0.100	0.0500	0.0250	1	7/ 6/22	7/18/22 11:47	402386	770746	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 1200
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW25-220630	**Units:**	µg/L
Lab Code:	EQ2200278-07	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.112**		0.100	0.0500	0.0250	1	7/ 6/22	7/18/22 11:55	402386	770746	

Pace Analytical®

LELAP CERTIFICATE NUMBER: 01955
DOD-ELAP ACCREDITATION NUMBER: 74960

ANALYTICAL RESULTS

PERFORMED BY

Pace Analytical Gulf Coast
7979 Innovation Park Dr.
Baton Rouge, LA 70820
(225) 769-4900

Report Date 07/16/2022

Report # 222070757

Project HS22070020

Samples Collected 6/30/22

Deliver To	***Additional Recipients***
Dane Wacasey ALS 10450 Stancliff Rd., Ste 210 Houston, TX 770994338	Jumoke Lawal, ALS Houston

PJLA Testing DoD ELAP

ISO 17025

NELAP ACCREDITED TNI LABORATORY

Report#: 222070757
Project ID: HS22070020 **Report Date:** 07/16/2022

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with Pace Gulf Coast's Standard Operating Procedures.

Common Abbreviations that may be Utilized in this Report

ND	Indicates the result was Not Detected at the specified reporting limit
NO	Indicates the sample did not ignite when preliminary test performed for EPA Method 1030
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
DL	Detection Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
RE	Re-analysis
CF	HPLC or GC Confirmation
00:01	Reported as a time equivalent to 12:00 AM

Reporting Flags that may be Utilized in this Report

J or I	Indicates the result is between the MDL and LOQ
J	DOD flag on analyte in the parent sample for MS/MSD outside acceptance criteria
U	Indicates the compound was analyzed for but not detected
B or V	Indicates the analyte was detected in the associated Method Blank
Q	Indicates a non-compliant QC Result (See Q Flag Application Report)
*****	Indicates a non-compliant or not applicable QC recovery or RPD – see narrative
E	Organics - The result is estimated because it exceeded the instrument calibration range
E	Metals - % diference for the serial dilution is > 10%
L	Reporting Limits adjusted to meet risk-based limit.
P	RPD between primary and confirmation result is greater than 40
DL	Diluted analysis – when appended to Client Sample ID

Sample receipt at Pace Gulf Coast is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of Pace Gulf Coast. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with The NELAC Institute (TNI) Standard 2009 and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

Authorized Signature
Pace Gulf Coast Report 222070757

Certifications

Certification	Certification Number
DOD ELAP	74960
Alabama	01955
Arkansas	88-0655
Colorado	01955
Delaware	01955
Florida	E87854
Georgia	01955
Hawaii	01955
Idaho	01955
Illinois	200048
Indiana	01955
Kansas	E-10354
Kentucky	95
Louisiana	01955
Maryland	01955
Massachusetts	01955
Michigan	01955
Mississippi	01955
Missouri	01955
Montana	N/A
Nebraska	01955
New Mexico	01955
North Carolina	618
North Dakota	R-195
Oklahoma	9403
South Carolina	73006001
South Dakota	01955
Tennessee	01955
Texas	T104704178
Vermont	01955
Virginia	460215
Washington	C929
USDA Soil Permit	P330-16-00234

Case Narrative

Client: ALS Environmental - Houston, TX **Report:** 222070757

Pace Analytical Gulf Coast received and analyzed the sample(s) listed
on the Report Sample Summary page of this report. Receipt of the sample(s) is documented
by the attached chain of custody. This applies only to the sample(s) listed in this report.
No sample integrity or quality control exceptions were identified unless noted below.

This report was completed in accordance with DOD QSM 5.3 as specified in the contract.

VOLATILES GAS CHROMATOGRAPHY

In the EPA RSK-175 analysis for analytical batch 745070, the MS/MSD recoveries and RPDs are not applicable to Carbon Dioxide because the spike was diluted out of the samples. The LCS recovery is acceptable.

Pace Analytical

Report#: 222070757
Project ID: HS22070020 **Report Date:** 07/16/2022

Sample Summary

Lab ID	Client ID	Matrix	Collect Date	Receive Date
22207075701	16WW16-220630	Water	6/30/22 07:10	7/07/22 09:49
22207075702	16WW35-220630	Water	6/30/22 08:10	7/07/22 09:49
22207075703	16WW48-220630	Water	6/30/22 09:40	7/07/22 09:49
22207075704	16WW16-220630 MS	Water	6/30/22 07:10	7/07/22 09:49
22207075705	16WW16-220630 MSD	Water	6/30/22 07:10	7/07/22 09:49

Test Summary

EPA RSK-175					
Lab ID	**Client ID**	**Matrix**	**Batch**	**Instru**	**RunDate**
22207075701	16WW16-220630	Water	745070	GCV8B	7/11/22 15:22
22207075702	16WW35-220630	Water	745070	GCV8B	7/11/22 15:29
22207075703	16WW48-220630	Water	745070	GCV8B	7/11/22 15:43
22207075704	16WW16-220630 MS	Water	745070	GCV8B	7/11/22 15:49
22207075705	16WW16-220630 MSD	Water	745070	GCV8B	7/11/22 15:55

Manual Integrations

Manual Integrations for LC and IC (if performed) are documented in the raw data.
No other manual integrations were performed by Pace Gulf Coast.

Q Flag Summary

NO Q FLAGS FOR THIS WORKORDER

Detect Summary

Results and Detection Limits are adjusted for dilution and moisture when applicable

EPA RSK-175

Lab ID	Client ID	Parameter	Units	Result	Dil.	%Moist
22207075701	16WW16-220630	Carbon Dioxide	ug/L	196000J	30	NA
22207075702	16WW35-220630	Carbon Dioxide	ug/L	312000	30	NA
22207075703	16WW48-220630	Carbon Dioxide	ug/L	385000	30	NA

Report#: 222070757
Project ID: HS22070020 Report Date: 07/16/2022

Sample Results

16WW16-220630

Collect Date 06/30/2022 07:10 Lab ID 22207075701
Receive Date 07/07/2022 09:49 Matrix Water

EPA RSK-175

*Results and limits are adjusted for dilution.

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	30	07/11/22 15:22	745070	BDP	NA

CAS#	Parameter	Result	DL	LOD	LOQ	Units
124-38-9	Carbon Dioxide	196000J	3810	11600	27000	ug/L

16WW35-220630

Collect Date 06/30/2022 08:10 Lab ID 22207075702
Receive Date 07/07/2022 09:49 Matrix Water

EPA RSK-175

*Results and limits are adjusted for dilution.

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	30	07/11/22 15:29	745070	BDP	NA

CAS#	Parameter	Result	DL	LOD	LOQ	Units
124-38-9	Carbon Dioxide	312000	3810	11600	27000	ug/L

16WW48-220630

Collect Date 06/30/2022 09:40 Lab ID 22207075703
Receive Date 07/07/2022 09:49 Matrix Water

EPA RSK-175

*Results and limits are adjusted for dilution.

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	30	07/11/22 15:43	745070	BDP	NA

CAS#	Parameter	Result	DL	LOD	LOQ	Units
124-38-9	Carbon Dioxide	385000	3810	11600	27000	ug/L

16WW16-220630 MS

Collect Date 06/30/2022 07:10 Lab ID 22207075704
Receive Date 07/07/2022 09:49 Matrix Water

EPA RSK-175

*Results and limits are adjusted for dilution.

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	30	07/11/22 15:49	745070	BDP	NA

CAS#	Parameter	Result	DL	LOD	LOQ	Units
124-38-9	Carbon Dioxide	203000	3810	11600	27000	ug/L

Report#: 222070757
Project ID: HS22070020 Report Date: 07/16/2022

Sample Results

16WW16-220630 MSD				
	Collect Date	06/30/2022 07:10	Lab ID	22207075705
	Receive Date	07/07/2022 09:49	Matrix	Water

EPA RSK-175

*Results and limits are adjusted for dilution.

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	30	07/11/22 15:55	745070	BDP	NA

CAS#	Parameter	Result	DL	LOD	LOQ	Units
124-38-9	Carbon Dioxide	215000	3810	11600	27000	ug/L

GC Volatiles QC Summary

Analytical Batch 745070	Client ID	MB745070		LCS745070				LCSD745070				
	Lab ID	2369016		2369017				2369018				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	07/11/22 13:39		07/11/22 13:25				07/11/22 13:31				
	Matrix	Water		Water				Water				
EPA RSK-175		Units Result	ug/L LOD	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Carbon Dioxide	124-38-9	386U	386	8700	9190	106	38 - 147	8700	9360	108	2	40

Analytical Batch 745070	Client ID	16WW16-220630		16WW16-220630 MS				16WW16-220630 MSD				
	Lab ID	22207075701		22207075704				22207075705				
	Sample Type	SAMPLE		MS				MSD				
	Prep Date	NA		NA				NA				
	Analysis Date	07/11/2022 15:22		07/11/22 15:49				07/11/22 15:55				
	Matrix	Water		Water				Water				
EPA RSK-175		Units Result	ug/L LOD	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Carbon Dioxide	124-38-9	196000	11600	5800	203000	121	38 - 147	5800	215000	**328***	6	40

Client ID: ALS Houston - ALS Environmental - Houston, TX
SDG: 222070757
PM: RWe

www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 19101

SUBCONTRACT TO:

Pace Analytical
7979 Innovation Park Drive
Baton Rouge, LA 70820 **Phone:** +1 225 769 4900

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	Dane J. Wacasey
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	Dane.Wacasey@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS22070020
TSR:	Ron Martino

	LAB SAMPLE ID / ANALYSIS REQUESTED	CLIENT SAMPLE ID	MATRIX	COLLECT DATE / DUE DATE	
1.	**HS22070020-01**	**16WW16-220630**	**Water**	**30 Jun 2022 07:10**	1,4,5
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			18 Jul 2022	
2.	**HS22070020-02**	**16WW35-220630**	**Water**	**30 Jun 2022 08:10**	2
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			18 Jul 2022	
3.	**HS22070020-04**	**16WW48-220630**	**Water**	**30 Jun 2022 09:40**	3
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			18 Jul 2022	

Comments: Sample 16WW16-220630 MS/MSD

Please analyze for the analysis listed above.
Send report to the emails shown above.

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: 7/5/2022 1800

Received By: _____ Date/Time: _____

Cooler ID(s): _____ Temperature(s): _____

Fed Ex
5789 1995 2680

7/7/22 0949
7/7/22 0949
7/7/22 = 42
5.6

Pace Analytical®

SAMPLE RECEIVING CHECKLIST

2220707 57

SAMPLE DELIVERY GROUP 222070757	
Client **PM** RWe ALS Houston - ALS Environmental - Houston, TX	**Transport Method** FEDEX
Profile Number 294458	**Received By** Roberts, George S.
Line Item(s) 1 - CO2	**Receive Date(s)** 07/07/22

CHECKLIST	YES	NO
Samples received with proper thermal preservation?	☑	☐
Radioactivity is <1600 cpm? If no, record cpm value in notes section.	☑	☐
COC relinquished and complete (including sampleIDs, collect times, and sampler)?	☑	☐
All containers received in good condition and within hold time?	☑	☐
All sample labels and containers received match the chain of custody?	☐	☐
Preservative added to any containers?	☐	☐
If received, was headspace for VOC water containers < 6mm?	☐	☐
Samples collected in containers provided by Pace Gulf Coast?	☐	☐

COOLERS

Airbill	Thermometer ID: E42	Temp °C
578919952680		5.6

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

HS22070020-MSVOA-SW8260

ALS WO# HS22070020

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Form 1

Organic Analysis Data Sheet

Volatiles Organics by Method 8260C

Wokorder

HS22070020

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2022

07/20/2022

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

Volatiles Organics by Method 8260C

HS22070020-01
16WW16-220630

Collected	Received	Matrix	Units
06/30/22 07:10	07/01/22 09:25	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	25	U	7.5	25	25	25	07/07/22 14:03	VOA6_412413	X070712
1,1-Dichloroethene	52		5.0	25	25	25	07/07/22 14:03	VOA6_412413	X070712
1,2-Dichloroethane	36		5.0	25	25	25	07/07/22 14:03	VOA6_412413	X070712
Methylene chloride	50	U	10	50	50	25	07/07/22 14:03	VOA6_412413	X070712
Vinyl chloride	310		5.0	25	25	25	07/07/22 14:03	VOA6_412413	X070712
cis-1,2-Dichloroethene	19000		50	250	250	250	07/07/22 14:24	VOA6_412413	X070713
Trichloroethene	40000		50	250	250	250	07/07/22 14:24	VOA6_412413	X070713

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

Volatiles Organics by Method 8260C

HS22070020-02
16WW35-220630

Collected	Received	Matrix	Units
06/30/22 08:10	07/01/22 09:25	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	10	U	3.0	10	10	10	07/07/22 01:00	VOA6_412360	Y070626
1,1-Dichloroethene	65		2.0	10	10	10	07/07/22 01:00	VOA6_412360	Y070626
1,2-Dichloroethane	5	U	2.0	10	10	10	07/07/22 01:00	VOA6_412360	Y070626
cis-1,2-Dichloroethene	570		2.0	10	10	10	07/07/22 01:00	VOA6_412360	Y070626
Methylene chloride	21		4.0	20	20	10	07/07/22 01:00	VOA6_412360	Y070626
Vinyl chloride	83		2.0	10	10	10	07/07/22 01:00	VOA6_412360	Y070626
Trichloroethene	7800		20	100	100	100	07/07/22 01:21	VOA6_412360	Y070627

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

Volatiles Organics by Method 8260C

HS22070020-03
16WW36-220630

Collected	Received	Matrix	Units
06/30/22 08:55	07/01/22 09:25	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	25	U	7.5	25	25	25	07/07/22 02:24	VOA6_412360	Y070630
1,1-Dichloroethene	200		5.0	25	25	25	07/07/22 02:24	VOA6_412360	Y070630
1,2-Dichloroethane	21	J	5.0	25	25	25	07/07/22 02:24	VOA6_412360	Y070630
Methylene chloride	52		10	50	50	25	07/07/22 02:24	VOA6_412360	Y070630
Vinyl chloride	260		5.0	25	25	25	07/07/22 02:24	VOA6_412360	Y070630
cis-1,2-Dichloroethene	23000		50	250	250	250	07/07/22 02:45	VOA6_412360	Y070631
Trichloroethene	32000		50	250	250	250	07/07/22 02:45	VOA6_412360	Y070631

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

Volatiles Organics by Method 8260C

HS22070020-04
16WW48-220630

Collected	Received	Matrix	Units
06/30/22 09:40	07/01/22 09:25	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	25	U	7.5	25	25	25	07/07/22 14:45	VOA6_412413	X070714
1,1-Dichloroethene	53		5.0	25	25	25	07/07/22 14:45	VOA6_412413	X070714
1,2-Dichloroethane	39		5.0	25	25	25	07/07/22 14:45	VOA6_412413	X070714
Methylene chloride	50	U	10	50	50	25	07/07/22 14:45	VOA6_412413	X070714
Vinyl chloride	410		5.0	25	25	25	07/07/22 14:45	VOA6_412413	X070714
cis-1,2-Dichloroethene	22000		50	250	250	250	07/07/22 15:48	VOA6_412413	X070717
Trichloroethene	20000		50	250	250	250	07/07/22 15:48	VOA6_412413	X070717

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

Volatiles Organics by Method 8260C

HS22070020-05
16WW30-220630

Collected	Received	Matrix	Units
06/30/22 10:25	07/01/22 09:25	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/06/22 21:50	VOA6_412360	Y070617
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/06/22 21:50	VOA6_412360	Y070617
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/06/22 21:50	VOA6_412360	Y070617
cis-1,2-Dichloroethene	3.3		0.20	1.0	1.0	1	07/06/22 21:50	VOA6_412360	Y070617
Methylene chloride	2	U	0.40	2.0	2.0	1	07/06/22 21:50	VOA6_412360	Y070617
Trichloroethene	45		0.20	1.0	1.0	1	07/06/22 21:50	VOA6_412360	Y070617
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	07/06/22 21:50	VOA6_412360	Y070617

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

Volatiles Organics by Method 8260C

HS22070020-06
16WW29-220630

Collected	Received	Matrix	Units
06/30/22 11:10	07/01/22 09:25	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/06/22 22:11	VOA6_412360	Y070618
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/06/22 22:11	VOA6_412360	Y070618
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/06/22 22:11	VOA6_412360	Y070618
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/06/22 22:11	VOA6_412360	Y070618
Methylene chloride	2	U	0.40	2.0	2.0	1	07/06/22 22:11	VOA6_412360	Y070618
Trichloroethene	1.7		0.20	1.0	1.0	1	07/06/22 22:11	VOA6_412360	Y070618
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	07/06/22 22:11	VOA6_412360	Y070618

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

Volatiles Organics by Method 8260C

HS22070020-07
16WW29-220630-FD

Collected	Received	Matrix	Units
06/30/22 11:10	07/01/22 09:25	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/06/22 22:32	VOA6_412360	Y070619
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/06/22 22:32	VOA6_412360	Y070619
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/06/22 22:32	VOA6_412360	Y070619
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/06/22 22:32	VOA6_412360	Y070619
Methylene chloride	2	U	0.40	2.0	2.0	1	07/06/22 22:32	VOA6_412360	Y070619
Trichloroethene	1.8		0.20	1.0	1.0	1	07/06/22 22:32	VOA6_412360	Y070619
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	07/06/22 22:32	VOA6_412360	Y070619

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

Volatiles Organics by Method 8260C

HS22070020-08
16WW25-220630

Collected	Received	Matrix	Units
06/30/22 12:00	07/01/22 09:25	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/06/22 20:05	VOA6_412360	Y070612
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/06/22 20:05	VOA6_412360	Y070612
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/06/22 20:05	VOA6_412360	Y070612
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/06/22 20:05	VOA6_412360	Y070612
Methylene chloride	2	U	0.40	2.0	2.0	1	07/06/22 20:05	VOA6_412360	Y070612
Trichloroethene	1.3		0.20	1.0	1.0	1	07/06/22 20:05	VOA6_412360	Y070612
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	07/06/22 20:05	VOA6_412360	Y070612

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

Volatiles Organics by Method 8260C

HS22070020-09
16WW26-220630

Collected	Received	Matrix	Units
06/30/22 12:50	07/01/22 09:25	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/07/22 13:42	VOA6_412413	X070711
1,1-Dichloroethene	1.7		0.20	1.0	1.0	1	07/07/22 13:42	VOA6_412413	X070711
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/07/22 13:42	VOA6_412413	X070711
cis-1,2-Dichloroethene	110		0.20	1.0	1.0	1	07/07/22 13:42	VOA6_412413	X070711
Methylene chloride	2	U	0.40	2.0	2.0	1	07/07/22 13:42	VOA6_412413	X070711
Vinyl chloride	6.7		0.20	1.0	1.0	1	07/07/22 13:42	VOA6_412413	X070711
Trichloroethene	1100		5.0	25	25	25	07/07/22 16:30	VOA6_412413	X070719

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

Volatiles Organics by Method 8260C

HS22070020-10
Trip Blank-220630

Collected	Received	Matrix	Units
06/30/22 00:00	07/01/22 09:25	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/06/22 19:01	VOA6_412360	Y070609
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/06/22 19:01	VOA6_412360	Y070609
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/06/22 19:01	VOA6_412360	Y070609
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/06/22 19:01	VOA6_412360	Y070609
Methylene chloride	2	U	0.40	2.0	2.0	1	07/06/22 19:01	VOA6_412360	Y070609
Trichloroethene	0.5	U	0.20	1.0	1.0	1	07/06/22 19:01	VOA6_412360	Y070609
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	07/06/22 19:01	VOA6_412360	Y070609

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

Volatiles Organics by Method 8260C

VBLKW-220706
VBLKW-220706

Collected	Received	Matrix	Units
NA	NA	Aqueous	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/06/22 18:40	VOA6_412360	Y070608
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/06/22 18:40	VOA6_412360	Y070608
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/06/22 18:40	VOA6_412360	Y070608
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/06/22 18:40	VOA6_412360	Y070608
Methylene chloride	2	U	0.40	2.0	2.0	1	07/06/22 18:40	VOA6_412360	Y070608
Trichloroethene	0.5	U	0.20	1.0	1.0	1	07/06/22 18:40	VOA6_412360	Y070608
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	07/06/22 18:40	VOA6_412360	Y070608

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

Volatiles Organics by Method 8260C

VBLKW-220707
VBLKW-220707

Collected	Received	Matrix	Units
NA	NA	Aqueous	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/07/22 12:23	VOA6_412413	X070707
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/07/22 12:23	VOA6_412413	X070707
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/07/22 12:23	VOA6_412413	X070707
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/07/22 12:23	VOA6_412413	X070707
Methylene chloride	2	U	0.40	2.0	2.0	1	07/07/22 12:23	VOA6_412413	X070707
Trichloroethene	0.5	U	0.20	1.0	1.0	1	07/07/22 12:23	VOA6_412413	X070707
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	07/07/22 12:23	VOA6_412413	X070707

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Form 2

System Monitoring Compound Recovery

Volatiles Organics by Method 8260C

Wokorder

HS22070020

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2022

07/20/2022

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

RunID
VOA6_412360

Volatiles Organics by Method 8260C

VLCSW-220706 (6733259)	Analyzed 07/06/22 17:37		Conc Units µg/L	DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
Dibromofluoromethane	53.10	50.00	106	80 - 119	
Toluene-d8	49.37	50.00	99	89 - 112	
4-Bromofluorobenzene	51.60	50.00	103	85 - 114	
1,2-Dichloroethane-d4	56.78	50.00	114	81 - 118	

VBLKW-220706 (6733260)	Analyzed 07/06/22 18:40		Conc Units µg/L	DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	50.06	50.00	100	81 - 118	
Dibromofluoromethane	48.37	50.00	97	80 - 119	
Toluene-d8	54.14	50.00	108	89 - 112	
4-Bromofluorobenzene	51.14	50.00	102	85 - 114	

HS22070020-10 (6733261)	Analyzed 07/06/22 19:01		Conc Units µg/L	DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	49.93	50.00	100	81 - 118	
Dibromofluoromethane	48.73	50.00	98	80 - 119	
Toluene-d8	54.36	50.00	109	89 - 112	
4-Bromofluorobenzene	51.23	50.00	102	85 - 114	

HS22070020-08 (6733264)	Analyzed 07/06/22 20:05		Conc Units µg/L	DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	50.52	50.00	101	81 - 118	
Dibromofluoromethane	48.73	50.00	98	80 - 119	
Toluene-d8	54.82	50.00	110	89 - 112	
4-Bromofluorobenzene	51.65	50.00	103	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

RunID
VOA6_412360

Volatiles Organics by Method 8260C

HS22070020-08MS (6733265)	Analyzed 07/06/22 20:26		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	53.93	50.00	108	81 - 118	
Dibromofluoromethane	49.44	50.00	99	80 - 119	
Toluene-d8	55.16	50.00	110	89 - 112	
4-Bromofluorobenzene	55.44	50.00	111	85 - 114	

HS22070020-08MSD (6733266)	Analyzed 07/06/22 20:47		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	46.22	50.00	92	81 - 118	
Dibromofluoromethane	46.66	50.00	93	80 - 119	
Toluene-d8	47.45	50.00	95	89 - 112	
4-Bromofluorobenzene	51.55	50.00	103	85 - 114	

HS22070020-05 (6733268)	Analyzed 07/06/22 21:50		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	46.49	50.00	93	81 - 118	
Dibromofluoromethane	46.48	50.00	93	80 - 119	
Toluene-d8	55.31	50.00	111	89 - 112	
4-Bromofluorobenzene	51.16	50.00	102	85 - 114	

HS22070020-06 (6733269)	Analyzed 07/06/22 22:11		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	52.62	50.00	105	81 - 118	
Dibromofluoromethane	49.83	50.00	100	80 - 119	
Toluene-d8	53.99	50.00	108	89 - 112	
4-Bromofluorobenzene	50.42	50.00	101	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

RunID
VOA6_412360

Volatiles Organics by Method 8260C

HS22070020-07 (6733270)	Analyzed 07/06/22 22:32		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	52.20	50.00	104	81 - 118	
Dibromofluoromethane	49.80	50.00	100	80 - 119	
Toluene-d8	55.09	50.00	110	89 - 112	
4-Bromofluorobenzene	50.27	50.00	101	85 - 114	

HS22070020-02 (6733277)	Analyzed 07/07/22 01:00		Conc Units µg/L		DF 10
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	509.9	500.0	102	81 - 118	
Dibromofluoromethane	493.3	500.0	99	80 - 119	
Toluene-d8	540.4	500.0	108	89 - 112	
4-Bromofluorobenzene	506.6	500.0	101	85 - 114	

HS22070020-02 (6733278)	Analyzed 07/07/22 01:21		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	4940	5000	99	81 - 118	
Dibromofluoromethane	4737	5000	95	80 - 119	
Toluene-d8	5459	5000	109	89 - 112	
4-Bromofluorobenzene	5118	5000	102	85 - 114	

HS22070020-03 (6733281)	Analyzed 07/07/22 02:24		Conc Units µg/L		DF 25
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	1277	1250	102	81 - 118	
Dibromofluoromethane	1207	1250	97	80 - 119	
Toluene-d8	1350	1250	108	89 - 112	
4-Bromofluorobenzene	1294	1250	104	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

RunID
VOA6_412360

Volatiles Organics by Method 8260C

HS22070020-03 (6733282) **Analyzed** 07/07/22 02:45 **Conc Units** µg/L **DF** 250

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	12710	12500	102	81 - 118	
Dibromofluoromethane	12150	12500	97	80 - 119	
Toluene-d8	13620	12500	109	89 - 112	
4-Bromofluorobenzene	12550	12500	100	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

RunID
VOA6_412413

Volatiles Organics by Method 8260C

VLCSW-220707 (6734425)	Analyzed 07/07/22 11:41		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
Dibromofluoromethane	49.57	50.00	99	80 - 119	
Toluene-d8	50.77	50.00	102	89 - 112	
4-Bromofluorobenzene	51.37	50.00	103	85 - 114	
1,2-Dichloroethane-d4	48.36	50.00	97	81 - 118	

VBLKW-220707 (6734426)	Analyzed 07/07/22 12:23		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	51.98	50.00	104	81 - 118	
Dibromofluoromethane	49.85	50.00	100	80 - 119	
Toluene-d8	54.86	50.00	110	89 - 112	
4-Bromofluorobenzene	50.74	50.00	101	85 - 114	

HS22070020-09 (6734429)	Analyzed 07/07/22 13:42		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	49.09	50.00	98	81 - 118	
Dibromofluoromethane	47.84	50.00	96	80 - 119	
Toluene-d8	54.77	50.00	110	89 - 112	
4-Bromofluorobenzene	50.39	50.00	101	85 - 114	

HS22070020-01 (6734430)	Analyzed 07/07/22 14:03		Conc Units µg/L		DF 25
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	1134	1250	91	81 - 118	
Dibromofluoromethane	1218	1250	98	80 - 119	
Toluene-d8	1349	1250	108	89 - 112	
4-Bromofluorobenzene	1286	1250	103	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

RunID
VOA6_412413

Volatiles Organics by Method 8260C

HS22070020-01 (6734431)	Analyzed 07/07/22 14:24		Conc Units µg/L		DF 250
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
Toluene-d8	14720	12500	118	89 - 112	*
1,2-Dichloroethane-d4	11070	12500	89	81 - 118	
Dibromofluoromethane	11790	12500	94	80 - 119	
4-Bromofluorobenzene	12810	12500	102	85 - 114	

HS22070020-04 (6734432)	Analyzed 07/07/22 14:45		Conc Units µg/L		DF 25
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	1228	1250	98	81 - 118	
Dibromofluoromethane	1192	1250	95	80 - 119	
Toluene-d8	1232	1250	99	89 - 112	
4-Bromofluorobenzene	1150	1250	92	85 - 114	

HS22070020-01MS (6734433)	Analyzed 07/07/22 15:06		Conc Units µg/L		DF 250
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	12730	12500	102	81 - 118	
Dibromofluoromethane	12030	12500	96	80 - 119	
Toluene-d8	13560	12500	108	89 - 112	
4-Bromofluorobenzene	12930	12500	103	85 - 114	

HS22070020-01MSD (6734434)	Analyzed 07/07/22 15:27		Conc Units µg/L		DF 250
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	12700	12500	102	81 - 118	
Dibromofluoromethane	12090	12500	97	80 - 119	
Toluene-d8	13730	12500	110	89 - 112	
4-Bromofluorobenzene	13070	12500	105	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

RunID
VOA6_412413

Volatiles Organics by Method 8260C

HS22070020-04 (6734435)	Analyzed 07/07/22 15:48	Conc Units µg/L	DF 250

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	11440	12500	92	81 - 118	
Dibromofluoromethane	11250	12500	90	80 - 119	
Toluene-d8	12480	12500	100	89 - 112	
4-Bromofluorobenzene	11590	12500	93	85 - 114	

HS22070020-09 (6734437)	Analyzed 07/07/22 16:30	Conc Units µg/L	DF 25

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
Toluene-d8	**1461**	**1250**	**117**	**89 - 112**	*
1,2-Dichloroethane-d4	1225	1250	98	81 - 118	
Dibromofluoromethane	1169	1250	94	80 - 119	
4-Bromofluorobenzene	1286	1250	103	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Volatiles Organics by Method 8260C

Wokorder

HS22070020

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2022

07/20/2022

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

RunID
VOA6_412360

Volatiles Organics by Method 8260C

16WW25-220630		HS22070020-08		HS22070020-08MS				HS22070020-08MSD						
Sample Matrix Aqueous Units µg/L		Run Date 07/06/22 Run Time 20:05 Data File Y070612.D		07/06/22 20:26 Y070613.D				07/06/22 20:47 Y070614.D						
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	#	MSD Result	Spike Added	%R	#	RPD Limit	RPD	#
1,1,2-Trichloroethane	80-119	1	0	20.31	20.00	102		18.16	20.00	91		20	11	
1,1-Dichloroethene	71-131	1	0	18.79	20.00	94		20.46	20.00	102		20	8	
1,2-Dichloroethane	73-128	1	0	20.44	20.00	102		19.46	20.00	97		20	5	
cis-1,2-Dichloroethene	78-123	1	0	19.71	20.00	99		18.29	20.00	91		20	8	
Methylene chloride	74-124	1	0	18.85	20.00	94		18.8	20.00	94		20	0	
Trichloroethene	79-123	1	1.313	21.20	20.00	99		20.55	20.00	96		20	3	
Vinyl chloride	58-137	1	0	19.12	20.00	96		19.46	20.00	97		20	2	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

RunID
VOA6_412413

Volatiles Organics by Method 8260C

16WW16-220630		HS22070020-01		HS22070020-01MS				HS22070020-01MSD						
Sample Matrix	Aqueous	Run Date	07/07/22	07/07/22				07/07/22						
Units	µg/L	Run Time	14:24	15:06				15:27						
		Data File	X070713.D	X070715.D				X070716.D						
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	#	MSD Result	Spike Added	%R	#	RPD Limit	RPD	#
1,1,2-Trichloroethane	80-119	250	0	4992	5000	100		4964	5000	99		20	1	
1,1-Dichloroethene	71-131	250	0	4635	5000	93		4386	5000	88		20	6	
1,2-Dichloroethane	73-128	250	0	5050	5000	101		5094	5000	102		20	1	
cis-1,2-Dichloroethene	78-123	250	19300	23700	5000	88		22970	5000	73	*	20	3	
Methylene chloride	74-124	250	308.6	4469	5000	83		4339	5000	81		20	3	
Trichloroethene	79-123	250	40120	44070	5000	79		41640	5000	31	*	20	6	
Vinyl chloride	58-137	250	426.5	4437	5000	80		4593	5000	83		20	4	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits

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Form 3B

Laboratory Control Sample Recovery

Volatiles Organics by Method 8260C

Wokorder

HS22070020

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2022

07/20/2022

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

RunID
VOA6_412360

Volatiles Organics by Method 8260C

Batch QC			LCS		
QC Matrix: Aqueous	Units: ug/L	Run Date / Run Time	07/06/22 17:37		
Analyte	%R Limits	Spike Added	LCS Result	%R	#
1,1,2-Trichloroethane	80-119	20	18.53	93	
1,1-Dichloroethene	71-131	20	16.37	82	
1,2-Dichloroethane	73-128	20	20.98	105	
1,2-Dichloroethane-d4	81-118	50	56.78	114	
4-Bromofluorobenzene	85-114	50	51.6	103	
cis-1,2-Dichloroethene	78-123	20	18.52	93	
Dibromofluoromethane	80-119	50	53.1	106	
Methylene chloride	74-124	20	18.23	91	
Toluene-d8	89-112	50	49.37	99	
Trichloroethene	79-123	20	18.55	93	
Vinyl chloride	58-137	20	15.59	78	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

RunID
VOA6_412413

Volatiles Organics by Method 8260C

Batch QC			LCS		
QC Matrix: Aqueous	Units: ug/L	Run Date / Run Time	07/07/22 11:41		
Analyte	%R Limits	Spike Added	LCS Result	%R	#
1,1,2-Trichloroethane	80-119	20	19.21	96	
1,1-Dichloroethene	71-131	20	20.6	103	
1,2-Dichloroethane	73-128	20	19.5	98	
1,2-Dichloroethane-d4	81-118	50	48.36	97	
4-Bromofluorobenzene	85-114	50	51.37	103	
cis-1,2-Dichloroethene	78-123	20	19.16	96	
Dibromofluoromethane	80-119	50	49.57	99	
Methylene chloride	74-124	20	20.5	102	
Toluene-d8	89-112	50	50.77	102	
Trichloroethene	79-123	20	20.29	101	
Vinyl chloride	58-137	20	20.79	104	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits

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Form 4

Method Blank Summary

Volatiles Organics by Method 8260C

Wokorder

HS22070020

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2022

07/20/2022

Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

Volatiles Organics by Method 8260C

BatchID
R412360

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	VBLKW-220706	Y070608.D	07/06/22 18:40	VOA6_412360
VLCSW-220706	VLCSW-220706	Y070605.D	07/06/22 17:37	VOA6_412360
Trip Blank-220630	HS22070020-10	Y070609.D	07/06/22 19:01	VOA6_412360
ZZZZZZ	HS22061645-08	Y070610.D	07/06/22 19:23	VOA6_412360
ZZZZZZ	HS22061645-09	Y070611.D	07/06/22 19:44	VOA6_412360
16WW25-220630	HS22070020-08	Y070612.D	07/06/22 20:05	VOA6_412360
HS22070020-08MS	HS22070020-08MS	Y070613.D	07/06/22 20:26	VOA6_412360
HS22070020-08MSD	HS22070020-08MSD	Y070614.D	07/06/22 20:47	VOA6_412360
ZZZZZZ	HS22061605-07	Y070615.D	07/06/22 21:08	VOA6_412360
16WW30-220630	HS22070020-05	Y070617.D	07/06/22 21:50	VOA6_412360
16WW29-220630	HS22070020-06	Y070618.D	07/06/22 22:11	VOA6_412360
16WW29-220630-FD	HS22070020-07	Y070619.D	07/06/22 22:32	VOA6_412360
ZZZZZZ	HS22061645-04	Y070620.D	07/06/22 22:53	VOA6_412360
ZZZZZZ	HS22061645-01	Y070621.D	07/06/22 23:14	VOA6_412360
ZZZZZZ	HS22061645-05	Y070622.D	07/06/22 23:35	VOA6_412360
ZZZZZZ	HS22061645-05	Y070623.D	07/06/22 23:56	VOA6_412360
ZZZZZZ	HS22061645-06	Y070624.D	07/07/22 00:17	VOA6_412360
ZZZZZZ	HS22061645-06	Y070625.D	07/07/22 00:39	VOA6_412360
16WW35-220630	HS22070020-02	Y070626.D	07/07/22 01:00	VOA6_412360
16WW35-220630	HS22070020-02	Y070627.D	07/07/22 01:21	VOA6_412360
ZZZZZZ	HS22061645-10	Y070628.D	07/07/22 01:42	VOA6_412360
ZZZZZZ	HS22061645-10	Y070629.D	07/07/22 02:03	VOA6_412360
16WW36-220630	HS22070020-03	Y070630.D	07/07/22 02:24	VOA6_412360
16WW36-220630	HS22070020-03	Y070631.D	07/07/22 02:45	VOA6_412360

Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

Volatiles Organics by Method 8260C

BatchID
R412413

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	VBLKW-220707	X070707.D	07/07/22 12:23	VOA6_412413
VLCSW-220707	VLCSW-220707	X070705.D	07/07/22 11:41	VOA6_412413
ZZZZZZ	HS22070255-02	X070708.D	07/07/22 12:44	VOA6_412413
ZZZZZZ	HS22070255-01	X070709.D	07/07/22 13:20	VOA6_412413
16WW26-220630	HS22070020-09	X070711.D	07/07/22 13:42	VOA6_412413
16WW16-220630	HS22070020-01	X070712.D	07/07/22 14:03	VOA6_412413
16WW16-220630	HS22070020-01	X070713.D	07/07/22 14:24	VOA6_412413
16WW48-220630	HS22070020-04	X070714.D	07/07/22 14:45	VOA6_412413
HS22070020-01MS	HS22070020-01MS	X070715.D	07/07/22 15:06	VOA6_412413
HS22070020-01MSD	HS22070020-01MSD	X070716.D	07/07/22 15:27	VOA6_412413
16WW48-220630	HS22070020-04	X070717.D	07/07/22 15:48	VOA6_412413
ZZZZZZ	HS22061645-08	X070718.D	07/07/22 16:09	VOA6_412413
16WW26-220630	HS22070020-09	X070719.D	07/07/22 16:30	VOA6_412413

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Form 5

Instrument Performance Check

Volatiles Organics by Method 8260C

Wokorder

HS22070020

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2022

07/20/2022

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

RunID
VOA6_412359

Volatiles Organics by Method 8260C

Tune File X070601.D 07/06/22 10:59

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	19.2 (19.2)
75	30.0 - 60.0% of mass 95	47.6 (47.6)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.3 (6.27)
173	Less than 2.0% of mass 174	0.7 (0.782) 1
174	50.0 - 120.0% of mass 95	89.3 (89.3)
175	4.0 - 9.0% of mass 174	6 (6.77) 1
176	93.0 - 101.0% of mass 174	86.9 (97.3) 1
177	5.0 - 9.0% of mass 176	7 (8.05) 2

Value is % of mass 1) 174 2) 176 RA - Relative Abundance

This check applies to the following analyses

	Type	Date Analyzed	Lab File ID	Sample ID
1	ICAL1	07/06/22 11:20	X070602	VSTD000.25
2	ICAL2	07/06/22 12:02	X070603	VSTD000.5
3	ICAL3	07/06/22 12:23	X070604	VSTD001
4	ICAL4	07/06/22 12:44	X070605	VSTD002
5	ICAL5	07/06/22 13:05	X070606	VSTD005
6	ICAL6	07/06/22 13:26	X070607	VSTD020
7	ICAL7	07/06/22 13:47	X070608	VSTD050
8	ICAL8	07/06/22 14:08	X070609	VSTD100
9	ICAL9	07/06/22 14:28	X070610	VSTD150
10	ICAL	07/06/22 14:49	X070611	VSTD200
11	ICV	07/06/22 15:52	X070614	CCV

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

RunID
VOA6_412360

Volatiles Organics by Method 8260C

Tune File Y070601.D 07/06/22 16:13

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	16.4 (16.4)
75	30.0 - 60.0% of mass 95	44.7 (44.7)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.7 (6.72)
173	Less than 2.0% of mass 174	0.6 (0.783) 1
174	50.0 - 120.0% of mass 95	79.3 (79.3)
175	4.0 - 9.0% of mass 174	5.8 (7.32) 1
176	93.0 - 101.0% of mass 174	80 (101) 1
177	5.0 - 9.0% of mass 176	4.9 (6.07) 2

Value is % of mass 1) 174 2) 176 RA - Relative Abundance

This check applies to the following analyses

	Type	Date Analyzed	Lab File ID	Sample ID
1	CCV	07/06/22 16:55	Y070603	CCV
2	CCB	07/06/22 17:16	Y070604	CCB
3	LCS	07/06/22 17:37	Y070605	VLCSW-220706
4	MBLK	07/06/22 18:40	Y070608	VBLKW-220706
5	SAMP	07/06/22 19:01	Y070609	Trip Blank-220630
6	SAMP	07/06/22 20:05	Y070612	16WW25-220630
7	MS	07/06/22 20:26	Y070613	HS22070020-08MS
8	MSD	07/06/22 20:47	Y070614	HS22070020-08MSD
9	SAMP	07/06/22 21:50	Y070617	16WW30-220630
10	SAMP	07/06/22 22:11	Y070618	16WW29-220630
11	SAMP	07/06/22 22:32	Y070619	16WW29-220630-FD
12	SAMP	07/07/22 01:00	Y070626	16WW35-220630
13	SAMP	07/07/22 01:21	Y070627	16WW35-220630
14	SAMP	07/07/22 02:24	Y070630	16WW36-220630
15	SAMP	07/07/22 02:45	Y070631	16WW36-220630
16	CCV_EN	07/07/22 03:06	Y070632	CCV-END

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

RunID
VOA6_412413

Volatiles Organics by Method 8260C

Tune File X070701.D 07/07/22 10:17

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	15.6 (15.6)
75	30.0 - 60.0% of mass 95	44.3 (44.3)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.5 (6.46)
173	Less than 2.0% of mass 174	0.8 (0.928) 1
174	50.0 - 120.0% of mass 95	90.9 (90.9)
175	4.0 - 9.0% of mass 174	6.7 (7.37) 1
176	93.0 - 101.0% of mass 174	88.5 (97.4) 1
177	5.0 - 9.0% of mass 176	5.7 (6.43) 2

Value is % of mass 1) 174 2) 176 RA - Relative Abundance

This check applies to the following analyses

	Type	Date Analyzed	Lab File ID	Sample ID
1	CCV	07/07/22 10:38	X070702	CCV
2	CCB	07/07/22 11:20	X070704	CCB
3	LCS	07/07/22 11:41	X070705	VLCSW-220707
4	MBLK	07/07/22 12:23	X070707	VBLKW-220707
5	SAMP	07/07/22 13:42	X070711	16WW26-220630
6	SAMP	07/07/22 14:03	X070712	16WW16-220630
7	SAMP	07/07/22 14:24	X070713	16WW16-220630
8	SAMP	07/07/22 14:45	X070714	16WW48-220630
9	MS	07/07/22 15:06	X070715	HS22070020-01MS
10	MSD	07/07/22 15:27	X070716	HS22070020-01MSD
11	SAMP	07/07/22 15:48	X070717	16WW48-220630
12	SAMP	07/07/22 16:30	X070719	16WW26-220630
13	CCV_EN	07/07/22 16:51	X070720	CCV-END

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Form 6

Initial Calibration Data

Volatiles Organics by Method 8260C

Wokorder

HS22070020

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2022

07/20/2022

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2022

Workorder HS22070020

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120
ICAL End Date 06-JUL-2022 1449

Calibration Files

Level 1 ..Voa6.i\X220706.b\X070602.D
Level 2 ..Voa6.i\X220706.b\X070603.D
Level 3 ..Voa6.i\X220706.b\X070604.D
Level 4 ..Voa6.i\X220706.b\X070605.D
Level 5 ..Voa6.i\X220706.b\X070606.D
Level 6 ..Voa6.i\X220706.b\X070607.D
Level 7 ..Voa6.i\X220706.b\X070608.D
Level 8 ..Voa6.i\X220706.b\X070609.D
Level 9 ..Voa6.i\X220706.b\X070610.D
Level 10 ..Voa6.i\X220706.b\X070611.D

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Dichlorodifluoromethane	NE 228618	2244 472287	3986 730536	8882 NE	18774	92044	LINR	0.02678	0.52058		0.99751	
Chloromethane	NE 294786	3473 593952	6557 933811	13168 NE	29886	112794	LINR	0.02315	0.66134		0.99763	
Propionitrile	NE 0.05770	0.06489 0.06278	0.05598 0.05859	0.04621 0.05823	0.05594	0.06198	AVRG		0.05803		9.32069	
Vinyl Chloride	NE 0.57196	0.70191 0.66494	0.67775 0.69281	0.60470 0.60241	0.58529	0.65392	AVRG		0.63952		7.64867	
Bromomethane	NE 176516	2387 344344	3753 NE	11634 NE	19488	75223	LINR	-0.00734	0.36869		0.99608	
Chloroethane	NE 0.34789	0.45911 0.38597	0.40065 0.40462	0.37357 0.35342	0.40334	0.40593	AVRG		0.39272		8.47705	
Trichlorofluoromethane	NE 0.67093	0.82389 0.77105	0.69347 0.93760	0.78330 0.79565	0.74470	0.85058	AVRG		0.78569		10.30295	
Acrolein	NE 19387	255 34243	357 53183	1255 NE	2163	7750	LINR	-0.03329	0.01875		0.99941	
Acetone	NE 0.11922	0.14672 0.12870	0.13728 0.13116	0.12933 0.11774	0.14765	0.14137	AVRG		0.13324		8.17429	
1,1-Dichloroethene	NE 0.41281	0.55905 0.47435	0.48136 0.52133	0.46051 0.45169	0.46054	0.48332	AVRG		0.47833		8.76191	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2022

Workorder HS22070020

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Isobutyl Alcohol	NE 0.05972	0.05853 0.06396	0.05565 0.05904	0.06459 0.05263	0.05996	0.06123	AVRG		0.05948		6.29876	
Acetonitrile	NE 0.05236	0.05823 0.05673	0.05046 0.06335	0.06147 0.05461	0.05651	0.05891	AVRG		0.05696		7.23354	
Allyl Chloride	NE 1.12540	1.18248 1.26397	1.18379 1.28361	1.06667 1.12357	1.19299	1.27683	AVRG		1.18881		6.35509	
Iodomethane	NE 662033	4551 1331022	8470 2317759	17091 NE	46631	226571	QUAD	0.01853	1.63495	-0.08684	0.99983	
Acrylonitrile	NE 0.16390	0.16016 0.17760	0.15012 0.18748	0.16394 0.16646	0.14359	0.16757	AVRG		0.16454		7.97212	
Methylene Chloride	NE 278913	3611 510517	6773 843638	19043 NE	28961	104226	LINR	0.01251	0.58854		0.99715	
Methyl tert-butyl ether	NE 1.28444	1.51807 1.34533	1.34886 1.47525	1.40025 1.30321	1.31864	1.34442	AVRG		1.37094		5.76884	
Carbon Disulfide	NE 1.30403	1.50018 1.48870	1.48724 1.57227	1.35754 1.35759	1.41146	1.47062	AVRG		1.43885		5.99587	
trans-1,2-Dichloroethene	NE 0.48821	0.55751 0.52160	0.47815 0.57257	0.49281 0.49651	0.46859	0.49485	AVRG		0.50787		7.02264	
Vinyl Acetate	NE 1.27195	1.20065 1.37516	1.20040 1.46961	1.18381 1.30183	1.25923	1.34556	AVRG		1.28980		7.31928	
1,1-Dichloroethane	NE 0.87630	1.04484 0.94846	0.92994 1.01939	0.91579 0.88962	0.86940	0.90988	AVRG		0.93374		6.57881	
Chloroprene	NE 0.20536	0.25440 0.24395	0.22795 0.25442	NE 0.22948	0.23231	0.22968	AVRG		0.23469		6.88366	*

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2022

Workorder HS22070020

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
2-Butanone	NE	0.13754	0.14536	0.14185	0.12762	0.14926						
	0.15636	0.17587	0.16130	0.16471			AVRG		0.15110		9.89300	
Methacrylonitrile	NE	0.44287	0.36611	0.34136	0.34918	0.38115						
	0.36505	0.38625	0.36505	0.36928			AVRG		0.37403		7.83511	
2,2-Dichloropropane	NE	3935	6446	16259	32701	128059						
	373902	695305	1055611	1584194			LINR	0.00723	0.75133		0.99982	
cis-1,2-Dichloroethene	NE	0.63077	0.56859	0.57565	0.57206	0.58048						
	0.55488	0.58845	0.57150	0.56603			AVRG		0.57871		3.73871	
Chloroform	NE	1.03131	0.93537	0.94502	0.90220	0.90517						
	0.88569	0.93179	0.87682	0.89595			AVRG		0.92326		5.05904	
Bromochloromethane	NE	0.33675	0.32625	0.28304	0.30665	0.29851						
	0.29220	0.29841	0.28777	0.29573			AVRG		0.30281		5.87685	
1,1,1-Trichloroethane	NE	0.87686	0.73831	0.78712	0.68762	0.71793						
	0.72024	0.77822	0.73792	0.76734			AVRG		0.75684		7.27207	
1,1-Dichloropropene	NE	0.51761	0.42920	0.44713	0.43947	0.42234						
	0.43437	0.40862	0.45747	0.52928			AVRG		0.45395		9.23043	
1,2-Dichloroethane	NE	0.45426	0.40960	0.41677	0.39826	0.41275						
	0.41462	0.38626	0.41130	0.42528			AVRG		0.41434		4.51566	
Carbon Tetrachloride	NE	0.48575	0.45944	0.46312	0.40207	0.38561						
	0.39798	0.37809	0.42138	0.50377			AVRG		0.43302		10.63840	
Benzene	NE	1.41120	1.23145	1.26142	1.35361	1.33106						
	1.30676	1.21967	1.34745	1.40267			AVRG		1.31836		5.27209	
Trichloroethene	NE	0.39730	0.37807	0.37368	0.35687	0.36774						
	0.36579	0.37976	0.37485	0.37578			AVRG		0.37443		2.97845	

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Project LHAAP 16 January 2022

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Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Bromodichloromethane	NE 0.44349	0.49277 0.40839	0.50529 0.44050	0.44456 0.44514	0.43180	0.43314	AVRG		0.44945		6.77432	
Methyl Methacrylate	NE 0.36904	0.40537 0.41719	0.38781 0.36397	0.37932 0.31823	0.34216	0.36653	AVRG		0.37218		8.14060	
2-Chloroethylvinyl ether	NE 155463	1262 304667	2653 461701	4759 623026	10612	49783	LINR	0.11717	0.11052		0.99586	
1,2-Dichloropropane	NE 0.34791	0.40295 0.34622	0.37630 0.35392	0.32988 0.35296	0.35679	0.35264	AVRG		0.35773		5.81206	
2-Nitropropane	NE 0.11824	0.17611 0.12143	0.14281 0.11333	0.13075 0.10220	0.12064	0.11023	AVRG		0.12619		17.49861	*
Dibromomethane	NE 0.21219	0.26219 0.20988	0.25295 0.20664	0.22382 0.20879	0.21408	0.20879	AVRG		0.22215		9.37137	
4-Methyl-2-Pentanone	NE 0.29347	0.28217 0.31267	0.24988 0.28643	0.26328 0.29264	0.28186	0.29160	AVRG		0.28378		6.41473	
cis-1,3-Dichloropropene	NE 0.58897	0.61233 0.54578	0.61725 0.59239	0.56220 0.60076	0.55529	0.58065	AVRG		0.58396		4.30480	
Ethyl Methacrylate	NE 0.40478	0.43281 0.38018	0.37149 0.42138	0.39269 0.43224	0.38010	0.42610	AVRG		0.40464		6.01432	
Toluene	NE 1.51365	1.64034 1.63387	1.52244 1.53111	1.56895 1.52139	1.51332	1.54320	AVRG		1.55425		3.22020	
trans-1,3-Dichloropropene	NE 0.48284	0.51749 0.44191	0.48569 0.48469	0.43703 0.48859	0.44092	0.48270	AVRG		0.47354		5.78180	
2-Hexanone	NE 0.19028	0.16495 0.19643	0.16255 0.18949	0.16326 0.19121	0.17647	0.18250	AVRG		0.17968		7.41565	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2022

Workorder HS22070020

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
1,1,2-Trichloroethane	NE 0.28174	0.29379 0.28852	0.29020 0.27613	0.27210 0.27912	0.28696	0.28978	AVRG		0.28426		2.57584	
1,3-Dichloropropane	NE 0.57798	0.64476 0.59697	0.59666 0.56514	0.57811 0.57038	0.59005	0.58259	AVRG		0.58918		3.99341	
Dibromochloromethane	NE 0.39001	0.39651 0.39390	0.40546 0.38728	0.37677 0.39588	0.38505	0.38007	AVRG		0.39010		2.28706	
Tetrachloroethene	NE 0.31727	0.36587 0.34614	0.32830 0.33586	0.35475 0.33278	0.32458	0.32369	AVRG		0.33658		4.75168	
1,2-Dibromoethane	NE 0.34681	0.33961 0.34913	0.32298 0.33959	0.35379 0.34292	0.35083	0.34074	AVRG		0.34293		2.64628	
1-Chlorohexane	NE 0.27315	0.31576 0.27241	0.31351 0.31523	0.29592 0.31230	0.24973	0.27317	AVRG		0.29124		8.47163	
Chlorobenzene	NE 0.99533	1.06589 1.02411	1.01980 0.99685	1.03527 0.99758	1.02341	0.99871	AVRG		1.01744		2.30728	
1,1,1,2-Tetrachloroethane	NE 0.36431	0.41539 0.37124	0.36422 0.36718	0.37071 0.37302	0.35178	0.35947	AVRG		0.37081		4.84448	
Ethylbenzene	NE 0.51053	0.56789 0.54247	0.52141 0.53021	0.53238 0.53143	0.52072	0.50444	AVRG		0.52905		3.52558	
m,p-Xylenes	NE 0.64203	0.64695 0.67448	0.61885 0.65712	0.67406 0.65517	0.65903	0.64743	AVRG		0.65279		2.60707	
o-Xylene	NE 0.61765	0.63614 0.64101	0.61100 0.62607	0.64034 0.62521	0.62668	0.62039	AVRG		0.62717		1.64261	
Styrene	NE 1.05358	1.04948 1.09546	0.98990 1.06360	0.98629 1.06601	1.00918	1.05677	AVRG		1.04114		3.59353	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2022

Workorder HS22070020

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Bromoform	NE	0.20694	0.21031	0.21435	0.21513	0.22091						
	0.23376	0.23842	0.23725	0.24335			AVRG		0.22449		6.12077	
Isopropylbenzene	NE	1.66264	1.47409	1.58570	1.51881	1.50831						
	1.50142	1.62393	1.58792	1.57808			AVRG		1.56010		4.02658	
1,1,2,2-Tetrachloroethane	NE	0.91864	0.86647	0.84137	0.83101	0.76347						
	0.77319	0.65427	0.76490	0.78390			AVRG		0.79969		9.47670	
1,2,3-Trichloropropane	NE	0.79579	0.69499	0.70443	0.66588	0.66691						
	0.61007	0.54217	0.62638	0.63262			AVRG		0.65991		10.71177	
trans-1,4-Dichloro-2-butene	NE	0.09533	0.08788	0.06679	0.07966	0.08623						
	0.09582	0.09878	0.09845	0.10031			AVRG		0.08992		12.31675	
n-Propylbenzene	NE	4.08468	3.59493	3.67782	3.61849	3.62881						
	3.62769	3.32262	3.86636	3.87837			AVRG		3.69997		5.87768	
Bromobenzene	NE	0.95684	0.89832	0.93069	0.90839	0.89768						
	0.89102	0.77851	0.90375	0.91825			AVRG		0.89816		5.48400	
1,3,5-Trimethylbenzene	NE	2.96923	2.71715	2.76431	2.59034	2.61229						
	2.59354	2.34923	2.70202	2.70665			AVRG		2.66719		6.23675	
2-Chlorotoluene	NE	2.52397	2.60604	2.50790	2.40238	2.27798						
	2.23076	1.97980	2.29806	2.31708			AVRG		2.34933		8.01606	
4-Chlorotoluene	NE	2.63948	2.78326	2.63588	2.62571	2.55318						
	2.54418	2.24256	2.59723	2.58817			AVRG		2.57885		5.59058	
tert-Butylbenzene	NE	2.55300	2.29297	2.30592	2.17037	2.16203						
	2.12758	1.95416	2.28544	2.28961			AVRG		2.23790		7.32334	
1,2,4-Trimethylbenzene	NE	2.85096	2.60303	2.65839	2.59496	2.56634						
	2.57871	2.29534	2.65574	2.67499			AVRG		2.60872		5.56946	

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Project LHAAP 16 January 2022

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Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
sec-Butylbenzene	NE 2.94203	3.48906 3.21595	3.06207 3.20274	3.15737 3.20853	2.96867	2.94253	AVRG		3.13210		5.63946	
p-Isopropyltoluene	NE 2.56474	2.59548 2.80205	2.35214 2.77820	2.60344 2.79812	2.50961	2.53136	AVRG		2.61502		5.82143	
1,3-Dichlorobenzene	NE 1.45535	1.57752 1.51457	1.47466 1.51648	1.51358 1.54059	1.41588	1.45084	AVRG		1.49549		3.36596	
1,4-Dichlorobenzene	NE 1.47543	1.74560 1.53130	1.62017 1.51969	1.61194 1.53771	1.55675	1.49059	AVRG		1.56546		5.31687	
Benzyl Chloride	NE 0.46252	0.48897 0.60455	0.40396 0.52364	0.41979 0.55988	0.41984	0.42676	AVRG		0.47888		14.77196	
n-Butylbenzene	NE 2.17743	2.24648 2.47185	1.85913 2.38974	2.05070 2.41410	2.05377	2.13676	AVRG		2.19999		9.12320	
1,2-Dichlorobenzene	NE 1.30147	1.45436 1.36632	1.19509 1.34144	1.35612 1.35513	1.32191	1.29245	AVRG		1.33159		5.22300	
1,2-Dibromo-3-Chloropropane	NE 19733	220 46014	240 59633	747 82211	1639	6429	LINR	0.04576	0.06653		0.99805	*
1,2,4-Trichlorobenzene	NE 0.49382	0.50149 0.54518	0.42991 0.55210	0.46261 0.58201	0.42253	0.53767	AVRG		0.50304		11.15060	
Hexachlorobutadiene	NE 0.41067	0.41715 0.48271	0.38357 0.48056	0.45039 0.49539	0.39667	0.46324	AVRG		0.44226		9.31709	
Naphthalene	NE 195396	2154 445332	3671 593234	7630 821089	16357	68129	LINR	0.04645	0.66146		0.99746	
1,2,3-Trichlorobenzene	NE 94733	953 223441	1624 293740	3319 408985	7553	35281	LINR	0.04891	0.32935		0.99720	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2022

Workorder HS22070020

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Ethyl Acetate	NE 0.42963	0.49197 0.45633	0.46840 0.41610	NE 0.42554	0.48963	0.44650	AVRG		0.45301		6.36097	*
Methyl Acrylate	NE 241889	NE 452925	NE 648238	6582 990328	14161	56584	LINR	0.04034	0.47545		0.99823	*
n-Butanol	NE 84111	922 181490	1186 255408	NE NE	4438	27545	LINR	0.80892	0.00944		0.99521	*
Ethyl Acrylate	NE 1.03892	NE 1.26891	NE 1.13515	0.52808 0.98180	0.35441	1.08187	AVRG		0.91273		37.02764	*
Cyclohexanone	NE 0.01770	0.03889 0.01459	0.02516 0.01708	0.01919 0.01720	0.01981	0.01849	AVRG		0.02090		35.07283	*
1,4-Dioxane	0.00436 0.00431	0.00451 0.00462	0.00550 0.00427	NE 0.00365	0.00479	0.00462	AVRG		0.00452		10.86985	*
n-Hexane	NE 0.48063	0.52638 0.60871	0.46851 0.65543	0.48442 0.56193	0.48311	0.50949	AVRG		0.53096		12.25408	
Freon TF	NE 205242	2637 437673	4021 759845	9995 NE	19880	82373	QUAD	-0.00726	2.55524	-0.43716	0.99889	
Methyl Acetate	NE 0.27711	0.31181 0.31330	0.31208 0.32391	0.26390 0.29114	0.26196	0.29675	AVRG		0.29466		7.72156	
Methylcyclohexane	NE 0.69028	0.71896 0.72387	0.59155 0.74864	0.68849 0.74618	0.65141	0.68367	AVRG		0.69367		7.15077	
Isopropyl alcohol	NE 0.02008	0.02224 0.02164	0.01991 0.02251	0.02034 0.01922	0.01988	0.02348	AVRG		0.02103		6.99120	
Amyl alcohol	NE 0.00628	NE 0.00704	NE 0.00671	0.00522 0.00672	0.00409	0.00580	AVRG		0.00598		17.37162	*

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2022

Workorder HS22070020

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Allyl alcohol	NE 0.02403	0.02632 0.03044	0.02343 0.03277	0.02422 0.02810	0.02416	0.02547	AVRG		0.02655		12.25408	
4-Methyl-2-pentanol	NE 0.04445	0.08503 0.04445	0.04945 0.04858	0.05265 0.04950	0.05370	0.05090	AVRG		0.05319		23.22821	*
Tert-butyl alcohol	NE 0.03514	0.04248 0.03732	0.03485 0.03980	0.03179 0.03454	0.03460	0.03537	AVRG		0.03621		8.84717	
Diethyl ether	NE 0.33801	0.42954 0.37244	0.37176 0.38274	0.37946 0.34211	0.40411	0.40564	AVRG		0.38064		7.78247	
1,3-Butadiene	NE 0.44569	0.56311 0.54282	0.48612 0.53855	0.44236 0.48396	0.45613	0.51704	AVRG		0.49731		9.04179	
Cyclohexane	NE 338562	3905 730603	5668 1071645	14214 NE	29249	129079	QUAD	0.01494	1.37109	-0.03808	0.99699	
alpha-Methylstyrene	NE 1.31747	1.26366 1.18816	1.27917 1.37782	1.23821 1.39629	1.24952	1.28864	AVRG		1.28877		5.15102	
Diisopropyl ether	NE 1.43671	1.53372 1.55869	1.40078 1.64730	1.49149 1.44601	1.47306	1.55489	AVRG		1.50474		5.07498	
Dichlorofluoromethane	NE 0.85060	NE 0.94003	NE 1.05898	1.00882 0.92349	0.97836	1.02313	AVRG		0.96906		7.25146	*
Propylene oxide	NE 0.04992	0.07500 0.05087	0.05851 0.05357	0.05396 0.04855	0.05553	0.06009	AVRG		0.05622		14.24058	
3-Methyl-1-butanol	NE 0.00581	NE 0.00654	NE 0.00625	0.00145 0.00624	0.00487	0.00558	AVRG		0.00525		33.58407	*
Butyl acrylate	NE 0.52147	NE 0.57263	0.39905 0.59198	0.48299 0.61912	0.48528	0.50938	AVRG		0.52274		13.53409	*

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2022

Workorder HS22070020

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
1,2,3-Trimethylbenzene	NE 2.32763	2.61779 2.38960	2.17266 2.36896	2.68306 2.38882	2.26360	2.36488	AVRG		2.39744		6.68433	
Ethanol	NE 0.00305	NE 0.00308	NE 0.00274	0.00403 0.00232	0.00343	0.00362	AVRG		0.00318		17.83184	*
tert-Butyl formate	NE 0.26357	NE 0.29562	NE 0.27752	0.26267 0.23838	NE	0.26910	AVRG		0.26781		7.04493	*
3,3-Dimethyl-1-butanol	NE 0.02275	NE 0.02324	NE 0.02281	NE 0.02290	0.02518	0.02530	AVRG		0.02370		5.09004	*
tert-Amyl methyl ether	NE 1.43699	2.09954 1.58784	1.84206 1.49104	1.76788 1.32713	1.77658	1.53779	AVRG		1.65187		14.51959	
tert-Butyl ethyl ether	NE 1.42724	1.56852 1.50317	1.53872 1.64661	1.55151 1.45446	1.46230	1.52505	AVRG		1.51973		4.43030	
tert-Amyl alcohol	NE 0.02636	0.03310 0.02956	0.02698 0.02775	0.03185 0.02384	0.02841	0.02691	AVRG		0.02831		10.06299	
Epichlorohydrin	NE 0.02250	NE 0.02024	0.01807 0.02286	0.02137 0.02288	0.02265	0.02324	AVRG		0.02173		8.17071	*
Isoprene	NE 0.15902	0.24454 0.17230	0.21632 0.19846	0.25701 0.17192	0.21352	0.18837	AVRG		0.20239		16.57739	*
n-Amyl acetate	NE 0.43772	NE 0.46697	NE 0.47751	NE 0.49928	NE	0.43849	AVRG		0.46399		5.67875	*
Isopropyl acetate	NE 0.79437	0.36983 0.73032	0.87712 0.77875	0.84689 0.80021	0.79606	0.79357	AVRG		0.75412		19.87108	*
n-Butyl acetate	NE 0.19069	0.31787 0.18402	0.26460 0.17444	0.20421 0.17218	0.23654	0.21349	AVRG		0.21756		22.15930	*

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2022

Workorder HS22070020

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Acetaldehyde	NE 66564	NE 129846	NE 181687	2907 NE	11383	25191	LINR	-0.14857	0.03276		0.99589	
Methyl Amyl Ketone	NE 0.50401	NE 0.52962	NE 0.53046	0.41257 0.55064	0.42225	0.49770	AVRG		0.49246		11.02369	*
Dimethyl Disulfide	NE 0.75621	0.65543 0.82365	0.66876 0.78053	0.73789 0.79630	0.65126	0.73135	AVRG		0.73349		8.60528	
1,2-Dichloroethylene (total)	NE 0.52154	0.59414 0.55502	0.52337 0.57203	0.53423 0.53127	0.52033	0.53766	AVRG		0.54329		4.69482	
Xylenes (total)	NE 0.57483	0.59008 0.52262	0.61201 0.59560	0.58690 0.59247	0.58938	0.58471	AVRG		0.58318		4.24847	
Dibromofluoromethane	NE 241477	2530 434904	3275 627970	9962 978031	21128	85780	LINR	-0.00580	0.45849		0.99941	
1,2-Dichloroethane-d4	NE 251549	2572 454111	3656 634876	11348 964795	21986	88656	LINR	-0.02335	0.45760		0.99847	
Toluene-d8	NE 1.22083	1.48278 1.29799	0.98355 1.21131	1.24160 1.20806	1.26438	1.26401	AVRG		1.24161		10.32338	
4-Bromofluorobenzene	NE 310560	3152 562316	5552 839072	12993 1105705	28163	113041	LINR	-0.00630	0.43176		0.99980	

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Form 6I

Initial Calibration Verification (ICV)

Volatiles Organics by Method 8260C

Wokorder

HS22070020

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2022

07/20/2022

Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2022

Workorder HS22070020

RunID VOA6_412359

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X070614.D
Lab Smp Id ICV
Analysis Type VOA
ICAL Date 06-JUL-2022
ICAL Time 1347
Client Smp ID ICV
Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
1,1,1,2-Tetrachlor	50.00	47.77	95.56	80-120	
1,1,1-Trichloroeth	50.00	43.57	87.14	80-120	
1,1,2,2-Tetrachlor	50.00	47.78	95.57	80-120	
Freon TF	50.00	50.42	100.85	80-120	
Methyl Acetate	50.00	52.89	105.79	80-120	
Cyclohexane	50.00	40.22	80.45	80-120	
Methylcyclohexane	50.00	49.87	99.75	80-120	
Carbon Disulfide	100.00	100.61	100.62	80-120	
2-Hexanone	100.00	106.18	106.18	80-120	
1,1,2-Trichloroeth	50.00	47.91	95.82	80-120	
1,1-Dichloroethane	50.00	51.34	102.68	80-120	
1,1-Dichloroethene	50.00	48.66	97.33	80-120	
1,1-Dichloropropen	50.00	44.21	88.43	80-120	
1,2,3-Trichloroben	50.00	56.53	113.06	80-120	
1,2,3-Trichloropro	50.00	46.94	93.89	80-120	
1,2,4-Trichloroben	50.00	59.83	119.68	80-120	
1,2,4-Trimethylben	50.00	49.10	98.20	80-120	
1,2-Dibromo-3-Chlo	50.00	49.15	98.30	80-120	
1,2-Dibromoethane	50.00	48.64	97.30	80-120	
Acrolein	100.00	102.58	102.59	80-120	
Acrylonitrile	100.00	104.26	104.26	80-120	
1,2-Dichlorobenzen	50.00	50.47	100.95	80-120	
1,2-Dichloroethane	50.00	46.35	92.70	80-120	
1,2-Dichloropropan	50.00	47.98	95.97	80-120	
1,3,5-Trimethylben	50.00	47.94	95.90	80-120	
1,3-Dichlorobenzen	50.00	49.56	99.14	80-120	
1,3-Dichloropropan	50.00	47.61	95.22	80-120	
1,4-Dichlorobenzen	50.00	48.75	97.51	80-120	
1-Chlorohexane	50.00	44.75	89.50	80-120	
2,2-Dichloropropan	50.00	45.14	90.29	80-120	
2-Butanone	100.00	104.45	104.46	80-120	
2-Chlorotoluene	50.00	46.68	93.36	80-120	
4-Chlorotoluene	50.00	48.71	97.42	80-120	
p-Isopropyltoluene	50.00	49.08	98.16	80-120	

Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2022

Workorder HS22070020

RunID VOA6_412359

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X070614.D
Lab Smp Id ICV
Analysis Type VOA
ICAL Date 06-JUL-2022
ICAL Time 1347
Client Smp ID ICV
Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
4-Methyl-2-Pentano	100.00	100.35	100.35	80-120	
Acetone	100.00	113.99	114.00	80-120	
Benzene	50.00	48.27	96.55	80-120	
Bromobenzene	50.00	49.23	98.47	80-120	
Bromochloromethane	50.00	45.37	90.75	80-120	
Bromodichlorometha	50.00	46.64	93.29	80-120	
Bromoform	50.00	51.60	103.20	80-120	
Bromomethane	50.00	55.13	110.27	80-120	
Carbon Tetrachlori	50.00	40.95	81.91	80-120	
Chlorobenzene	50.00	48.18	96.38	80-120	
Chloroethane	50.00	48.92	97.85	80-120	
Chloroform	50.00	45.18	90.38	80-120	
Chloromethane	50.00	47.85	95.71	80-120	
cis-1,2-Dichloroet	50.00	46.56	93.13	80-120	
cis-1,3-Dichloropr	50.00	48.90	97.82	80-120	
Dibromochlorometha	50.00	47.73	95.48	80-120	
Dibromomethane	50.00	45.16	90.34	80-120	
Dichlorodifluorome	50.00	44.23	88.47	80-120	
Ethylbenzene	50.00	47.42	94.84	80-120	
Hexachlorobutadien	50.00	53.45	106.91	80-120	
Isopropylbenzene	50.00	46.65	93.32	80-120	
m,p-Xylenes	100.00	97.09	97.10	80-120	
Methyl tert-butyl	50.00	53.13	106.27	80-120	
Methylene Chloride	50.00	50.08	100.16	80-120	
n-Butylbenzene	50.00	50.44	100.89	80-120	
n-Propylbenzene	50.00	47.83	95.66	80-120	
Naphthalene	50.00	56.59	113.20	80-120	
o-Xylene	50.00	48.17	96.35	80-120	
sec-Butylbenzene	50.00	45.81	91.62	80-120	
Styrene	50.00	50.18	100.36	80-120	
tert-Butylbenzene	50.00	46.42	92.85	80-120	
Tetrachloroethene	50.00	44.87	89.74	80-120	
Toluene	50.00	47.63	95.28	80-120	
trans-1,2-Dichloro	50.00	52.82	105.65	80-120	

Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2022

Workorder HS22070020

RunID VOA6_412359

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X070614.D
Lab Smp Id ICV
Analysis Type VOA

ICAL Date 06-JUL-2022
ICAL Time 1347
Client Smp ID ICV
Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
trans-1,3-Dichloro	50.00	48.85	97.71	80-120	
Trichloroethene	50.00	46.69	93.39	80-120	
Trichlorofluoromet	50.00	49.15	98.31	80-120	
Vinyl Chloride	50.00	47.18	94.37	80-120	
1,2-Dichloroethyle	100.00	99.38	99.39	80-120	
Xylenes (total)	150.00	145.27	96.85	80-120	
1,4-Dioxane	1000.00	838.63	83.86	80-120	
1,2-Dichloroethane	50.00	49.44	98.88	0-130	
4-Bromofluorobenze	50.00	52.44	104.88	0-130	
Dibromofluorometha	50.00	49.49	99.00	74-125	
Toluene-d8	50.00	51.51	103.03	78-123	

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Form 7

Continuing Calibration Verification (CCV)

Volatiles Organics by Method 8260C

Wokorder

HS22070020

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2022

07/20/2022

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2022

Workorder HS22070020

RunID VOA6_412360

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID Y070603.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 06-JUL-2022 1655
ICAL Date(s) 06-JUL-2022 06-JUL-2022
ICAL Times 1120 1449
Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2-Dichloroethane-d4	50.0	58.00653	0.54156	0.100	-16.01305	20.0	Linear	
4-Bromofluorobenzene	50.0	52.16955	0.45322	0.100	-4.33909	20.0	Linear	
Dibromofluoromethane	50.0	53.80414	0.49604	0.100	-7.60828	20.0	Linear	
Toluene-d8	1.24161	1.23044	1.23044	0.100	0.90004	20.0	Averaged	
1,1,2-Trichloroethane	0.28426	0.27758	0.27758	0.100	2.35082	20.0	Averaged	
1,1-Dichloroethene	0.47833	0.41264	0.41264	0.100	13.73309	20.0	Averaged	
1,2-Dichloroethane	0.41434	0.46684	0.46684	0.100	-12.66889	20.0	Averaged	
cis-1,2-Dichloroethene	0.57871	0.56392	0.56392	0.100	2.55589	20.0	Averaged	
Methylene Chloride	50.0	45.20560	0.52474	0.100	9.58880	20.0	Linear	
Trichloroethene	0.37443	0.36605	0.36605	0.200	2.23735	20.0	Averaged	
Vinyl Chloride	0.63952	0.51982	0.51982	0.100	18.71684	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2022

Workorder HS22070020

RunID VOA6_412360

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID Y070632.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 07-JUL-2022 0306
ICAL Date(s) 06-JUL-2022 06-JUL-2022
ICAL Times 1120 1449
Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2-Dichloroethane-d4	50.0	55.53283	0.51893	0.100	-11.06566	50.0	Linear	
4-Bromofluorobenzene	50.0	51.61417	0.44842	0.100	-3.22834	50.0	Linear	
Dibromofluoromethane	50.0	53.15712	0.49011	0.100	-6.31424	50.0	Linear	
Toluene-d8	1.24161	1.31583	1.31583	0.100	-5.97719	50.0	Averaged	
1,1,2-Trichloroethane	0.28426	0.28874	0.28874	0.100	-1.57526	50.0	Averaged	
1,1-Dichloroethene	0.47833	0.44096	0.44096	0.100	7.81330	50.0	Averaged	
1,2-Dichloroethane	0.41434	0.42285	0.42285	0.100	-2.05290	50.0	Averaged	
cis-1,2-Dichloroethene	0.57871	0.57586	0.57586	0.100	0.49328	50.0	Averaged	
Methylene Chloride	50.0	47.19957	0.54821	0.100	5.60085	50.0	Linear	
Trichloroethene	0.37443	0.37775	0.37775	0.200	-0.88812	50.0	Averaged	
Vinyl Chloride	0.63952	0.59498	0.59498	0.100	6.96432	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2022

Workorder HS22070020

RunID VOA6_412413

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X070702.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 07-JUL-2022 1038
ICAL Date(s) 06-JUL-2022 06-JUL-2022
ICAL Times 1120 1449
Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2-Dichloroethane-d4	50.0	51.44970	0.48156	0.100	-2.89939	20.0	Linear	
4-Bromofluorobenzene	50.0	51.45113	0.44702	0.100	-2.90225	20.0	Linear	
Dibromofluoromethane	50.0	51.01711	0.47048	0.100	-2.03421	20.0	Linear	
Toluene-d8	1.24161	1.27041	1.27041	0.100	-2.31929	20.0	Averaged	
1,1,2-Trichloroethane	0.28426	0.27737	0.27737	0.100	2.42555	20.0	Averaged	
1,1-Dichloroethene	0.47833	0.43551	0.43551	0.100	8.95111	20.0	Averaged	
1,2-Dichloroethane	0.41434	0.42263	0.42263	0.100	-2.00100	20.0	Averaged	
cis-1,2-Dichloroethene	0.57871	0.56187	0.56187	0.100	2.90953	20.0	Averaged	
Methylene Chloride	50.0	46.93123	0.54505	0.100	6.13754	20.0	Linear	
Trichloroethene	0.37443	0.35967	0.35967	0.200	3.94073	20.0	Averaged	
Vinyl Chloride	0.63952	0.60150	0.60150	0.100	5.94515	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2022

Workorder HS22070020

RunID VOA6_412413

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X070720.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 07-JUL-2022 1651
ICAL Date(s) 06-JUL-2022 06-JUL-2022
ICAL Times 1120 1449
Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2-Dichloroethane-d4	50.0	49.48624	0.46359	0.100	1.02751	50.0	Linear	
4-Bromofluorobenzene	50.0	58.52125	0.50807	0.100	-17.04250	50.0	Linear	
Dibromofluoromethane	50.0	50.24121	0.46337	0.100	-0.48243	50.0	Linear	
Toluene-d8	1.24161	1.26441	1.26441	0.100	-1.83622	50.0	Averaged	
1,1,2-Trichloroethane	0.28426	0.27855	0.27855	0.100	2.00989	50.0	Averaged	
1,1-Dichloroethene	0.47833	0.51798	0.51798	0.100	-8.29035	50.0	Averaged	
1,2-Dichloroethane	0.41434	0.39254	0.39254	0.100	5.26132	50.0	Averaged	
cis-1,2-Dichloroethene	0.57871	0.56259	0.56259	0.100	2.78633	50.0	Averaged	
Methylene Chloride	50.0	53.48194	0.62216	0.100	-6.96388	50.0	Linear	
Trichloroethene	0.37443	0.36950	0.36950	0.200	1.31475	50.0	Averaged	
Vinyl Chloride	0.63952	0.67744	0.67744	0.100	-5.93007	50.0	Averaged	

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Form 8

Internal Standard Area and RT Summary

Volatiles Organics by Method 8260C

Wokorder

HS22070020

Client

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LHAAP 16 January 2022

07/20/2022

Form 8 - Internal Standard Area and RT Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

RunID
VOA6_412360

Volatiles Organics by Method 8260C

		IS1				IS2				IS3				IS4			
Sample ID	File ID	Area		RT		Area		RT		Area		RT		Area		RT	
12-HOUR STD (CCV)	Y070603	502697	#	4.19	#	768128	#	4.97	#	719712	#	7.67	#	350847	#	9.67	#
CCB	Y070604	595769		4.19		861996		4.97		746167		7.67		327153		9.67	
VLCSW-220706	Y070605	529254		4.19		811904		4.97		759938		7.67		364410		9.66	
VBLKW-220706	Y070608	638197		4.19		914598		4.97		789897		7.67		356188		9.67	
HS22070020-10	Y070609	638633		4.19		912079		4.97		792820		7.67		355106		9.67	
HS22070020-08	Y070612	610291		4.19		858443		4.97		759657		7.67		326806		9.67	
HS22070020-08MS	Y070613	557092		4.19		858636		4.97		665533		7.67		355703		9.67	
HS22070020-08MSD	Y070614	533586		4.19		759776		4.97		760309		7.67		306381		9.67	
HS22070020-05	Y070617	533388		4.19		765454		4.97		661370		7.67		300581		9.67	
HS22070020-06	Y070618	614536		4.19		889198		4.97		762824		7.67		328129		9.67	
HS22070020-07	Y070619	613074		4.19		897300		4.97		758130		7.67		332276		9.67	
HS22070020-02	Y070626	630035		4.19		910430		4.97		777014		7.67		346091		9.67	
HS22070020-02	Y070627	631740		4.19		895268		4.97		767447		7.67		332421		9.67	
HS22070020-03	Y070630	621227		4.19		897691		4.97		770480		7.67		344261		9.67	
HS22070020-03	Y070631	616665		4.19		884391		4.97		760127		7.67		328885		9.67	
CCV-END	Y070632	520784		4.19		808784		4.97		704431		7.67		342987		9.67	

IS1 - Pentafluorobenzene IS2 - 1,4-Difluorobenzene IS3 - Chlorobenzene-d5 IS4 - 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of 12H STD IS Area
AREA LOWER LIMIT = - 50% of 12H STD IS Area
RT - Retention Time IS - Internal Standard

RT UPPER LIMIT = + 0.50 of 12H STD IS RT
RT LOWER LIMIT = - 0.50 of 12H STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

Form 8 - Internal Standard Area and RT Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

RunID
VOA6_412413

Volatiles Organics by Method 8260C

		IS1				IS2				IS3				IS4			
Sample ID	File ID	Area		RT		Area		RT		Area		RT		Area		RT	
12-HOUR STD (CCV)	X070702	501061	#	4.19	#	742502	#	4.97	#	617814	#	7.67	#	300342	#	9.66	#
CCB	X070704	525828		4.19		738935		4.97		711577		7.67		333635		9.67	
VLCSW-220707	X070705	443226		4.19		664479		4.97		610892		7.67		292724		9.67	
VBLKW-220707	X070707	600072		4.19		871359		4.97		749639		7.67		330561		9.67	
HS22070020-09	X070711	627102		4.19		897615		4.97		757644		7.67		325013		9.67	
HS22070020-01	X070712	570510		4.19		781087		4.97		634372		7.67		330296		9.67	
HS22070020-01	X070713	540931		4.19		754113		4.97		652300		7.67		290036		9.67	
HS22070020-04	X070714	576122		4.19		829347		4.97		752140		7.67		310659		9.67	
HS22070020-01MS	X070715	628349		4.19		893831		4.97		773639		7.67		348111		9.67	
HS22070020-01MSD	X070716	610592		4.19		866659		4.97		744549		7.67		332978		9.67	
HS22070020-04	X070717	557063		4.19		741529		4.97		735114		7.67		282236		9.67	
HS22070020-09	X070719	558637		4.19		826355		4.97		645655		7.67		288300		9.67	
CCV-END	X070720	437090		4.19		662385		4.97		603418		7.67		289877		9.66	

IS1 - Pentafluorobenzene IS2 - 1,4-Difluorobenzene IS3 - Chlorobenzene-d5 IS4 - 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of 12H STD IS Area
AREA LOWER LIMIT = - 50% of 12H STD IS Area
RT - Retention Time IS - Internal Standard

RT UPPER LIMIT = + 0.50 of 12H STD IS RT
RT LOWER LIMIT = - 0.50 of 12H STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

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Analysis Run Log

Volatiles Organics by Method 8260C

Wokorder

HS22070020

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2022

07/20/2022

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

Volatiles Organics by Method 8260C

RunID
VOA6_412359

Instrument ID VOA6 **Matrix** R412359 **Start Date** 07/06/2022 **EndDate** 07/06/2022

Client Sample ID	Type	Lab Sample ID	DF	Analysis Date	File ID
BFB	TUNE	BFB	1	07/06/22 10:59	X070601.D
VSTD000.25	ICAL1	VSTD000.25	1	07/06/22 11:20	X070602.D
VSTD000.5	ICAL2	VSTD000.5	1	07/06/22 12:02	X070603.D
VSTD001	ICAL3	VSTD001	1	07/06/22 12:23	X070604.D
VSTD002	ICAL4	VSTD002	1	07/06/22 12:44	X070605.D
VSTD005	ICAL5	VSTD005	1	07/06/22 13:05	X070606.D
VSTD020	ICAL6	VSTD020	1	07/06/22 13:26	X070607.D
VSTD050	ICAL7	VSTD050	1	07/06/22 13:47	X070608.D
VSTD100	ICAL8	VSTD100	1	07/06/22 14:08	X070609.D
VSTD150	ICAL9	VSTD150	1	07/06/22 14:28	X070610.D
VSTD200	ICAL	VSTD200	1	07/06/22 14:49	X070611.D
CCV	ICV	CCV	1	07/06/22 15:52	X070614.D

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

Volatiles Organics by Method 8260C

RunID
VOA6_412360

Instrument ID VOA6 **Matrix** R412360 **Start Date** 07/06/2022 **EndDate** 07/07/2022

Client Sample ID	Type	Lab Sample ID	DF	Analysis Date	File ID
BFB	TUNE	BFB	1	07/06/22 16:13	Y070601.D
CCV	CCV	CCV	1	07/06/22 16:55	Y070603.D
CCB	CCB	CCB	1	07/06/22 17:16	Y070604.D
VLCSW-220706	LCS	VLCSW-220706	1	07/06/22 17:37	Y070605.D
VBLKW-220706	MBLK	VBLKW-220706	1	07/06/22 18:40	Y070608.D
Trip Blank-220630	SAMP	HS22070020-10	1	07/06/22 19:01	Y070609.D
ZZZZZZZZZZ	SAMP	HS22061645-08	1	07/06/22 19:23	Y070610.D
ZZZZZZZZZZ	SAMP	HS22061645-09	1	07/06/22 19:44	Y070611.D
16WW25-220630	SAMP	HS22070020-08	1	07/06/22 20:05	Y070612.D
HS22070020-08MS	MS	HS22070020-08MS	1	07/06/22 20:26	Y070613.D
HS22070020-08MSD	MSD	HS22070020-08MSD	1	07/06/22 20:47	Y070614.D
ZZZZZZZZZZ	SAMP	HS22061605-07	500	07/06/22 21:08	Y070615.D
16WW30-220630	SAMP	HS22070020-05	1	07/06/22 21:50	Y070617.D
16WW29-220630	SAMP	HS22070020-06	1	07/06/22 22:11	Y070618.D
16WW29-220630-FD	SAMP	HS22070020-07	1	07/06/22 22:32	Y070619.D
ZZZZZZZZZZ	SAMP	HS22061645-04	5	07/06/22 22:53	Y070620.D
ZZZZZZZZZZ	SAMP	HS22061645-01	5	07/06/22 23:14	Y070621.D
ZZZZZZZZZZ	SAMP	HS22061645-05	10	07/06/22 23:35	Y070622.D
ZZZZZZZZZZ	SAMP	HS22061645-05	100	07/06/22 23:56	Y070623.D
ZZZZZZZZZZ	SAMP	HS22061645-06	10	07/07/22 00:17	Y070624.D
ZZZZZZZZZZ	SAMP	HS22061645-06	100	07/07/22 00:39	Y070625.D
16WW35-220630	SAMP	HS22070020-02	10	07/07/22 01:00	Y070626.D
16WW35-220630	SAMP	HS22070020-02	100	07/07/22 01:21	Y070627.D
ZZZZZZZZZZ	SAMP	HS22061645-10	25	07/07/22 01:42	Y070628.D
ZZZZZZZZZZ	SAMP	HS22061645-10	250	07/07/22 02:03	Y070629.D
16WW36-220630	SAMP	HS22070020-03	25	07/07/22 02:24	Y070630.D
16WW36-220630	SAMP	HS22070020-03	250	07/07/22 02:45	Y070631.D
CCV-END	CCV_END	CCV-END	1	07/07/22 03:06	Y070632.D

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2022

Workorder
HS22070020

Volatiles Organics by Method 8260C

RunID
VOA6_412413

Instrument ID VOA6 **Matrix** R412413 **Start Date** 07/07/2022 **EndDate** 07/07/2022

Client Sample ID	Type	Lab Sample ID	DF	Analysis Date	File ID
BFB	TUNE	BFB	1	07/07/22 10:17	X070701.D
CCV	CCV	CCV	1	07/07/22 10:38	X070702.D
CCB	CCB	CCB	1	07/07/22 11:20	X070704.D
VLCSW-220707	LCS	VLCSW-220707	1	07/07/22 11:41	X070705.D
VBLKW-220707	MBLK	VBLKW-220707	1	07/07/22 12:23	X070707.D
ZZZZZZZZZZ	SAMP	HS22070255-02	1	07/07/22 12:44	X070708.D
ZZZZZZZZZZ	SAMP	HS22070255-01	1	07/07/22 13:20	X070709.D
16WW26-220630	SAMP	HS22070020-09	1	07/07/22 13:42	X070711.D
16WW16-220630	SAMP	HS22070020-01	25	07/07/22 14:03	X070712.D
16WW16-220630	SAMP	HS22070020-01	250	07/07/22 14:24	X070713.D
16WW48-220630	SAMP	HS22070020-04	25	07/07/22 14:45	X070714.D
HS22070020-01MS	MS	HS22070020-01MS	250	07/07/22 15:06	X070715.D
HS22070020-01MSD	MSD	HS22070020-01MSD	250	07/07/22 15:27	X070716.D
16WW48-220630	SAMP	HS22070020-04	250	07/07/22 15:48	X070717.D
ZZZZZZZZZZ	SAMP	HS22061645-08	5	07/07/22 16:09	X070718.D
16WW26-220630	SAMP	HS22070020-09	25	07/07/22 16:30	X070719.D
CCV-END	CCV_END	CCV-END	1	07/07/22 16:51	X070720.D

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Raw Data VOA6 412359

Volatiles Organics by Method 8260C

Wokorder

HS22070020

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2022

07/20/2022

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070601.D Page 1
Report Date: 06-Jul-2022 11:45

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070601.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 06-JUL-2022 10:59
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\bfb.m
Meth Date : 14-Jun-2022 12:47 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.702	8.889	(0.000)	95	25488			0.00- 100.00	100.00
8.702	8.889	(0.000)	50	4886			15.00- 40.00	19.17
8.702	8.889	(0.000)	75	12128			30.00- 60.00	47.58
8.702	8.889	(0.000)	96	1599			5.00- 9.00	6.27
8.702	8.889	(0.000)	173	178			0.00- 2.00	0.78
8.702	8.889	(0.000)	174	22768			50.00- 0.00	89.33
8.702	8.889	(0.000)	175	1541			5.00- 9.00	6.77
8.702	8.889	(0.000)	176	22152			95.00- 101.00	97.29
8.702	8.889	(0.000)	177	1783			5.00- 9.00	8.05

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.17
75	30.00 - 60.00% of mass 95	47.58
96	5.00 - 9.00% of mass 95	6.27
173	Less than 2.00% of mass 174	0.70 (0.78)
174	Greater than 50.00% of mass 95	89.33
175	5.00 - 9.00% of mass 174	6.05 (6.77)
176	95.00 - 101.00% of mass 174	86.91 (97.29)
177	5.00 - 9.00% of mass 176	7.00 (8.05)

Data File: X070601.D
Spectrum: Scan 2164 (8.70)
Location of Maximum: 95.00
Number of points: 75

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	239	62.90	924	86.90	968	129.00	126
37.10	1021	64.10	221	88.00	1186	129.90	146
38.00	900	65.20	186	90.80	67	138.90	72
39.00	471	66.10	89	91.90	658	140.90	395
39.90	845	67.00	99	93.00	1011	142.80	346
41.90	63	68.00	2733	94.00	2894	145.70	78
44.00	1042	69.00	2427	95.00	25488	154.80	111
44.90	335	69.80	151	96.00	1599	157.10	175
47.00	267	71.90	113	103.90	180	167.80	73
47.90	114	73.00	1230	106.00	55	170.00	83
49.00	781	74.00	4070	109.70	56	172.70	178
50.00	4886	75.00	12128	112.90	50	173.90	22768
51.00	1387	76.00	1032	115.00	174	174.90	1541
55.10	54	77.10	365	115.80	150	175.90	22152
55.90	287	78.10	269	116.90	209	176.90	1783
57.00	773	78.80	689	117.60	150	177.80	82
60.00	207	79.80	169	118.80	115	185.90	590
61.00	895	80.90	795	119.00	114	262.10	177
62.00	1194	81.80	230	128.00	131		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070601.D Page 1

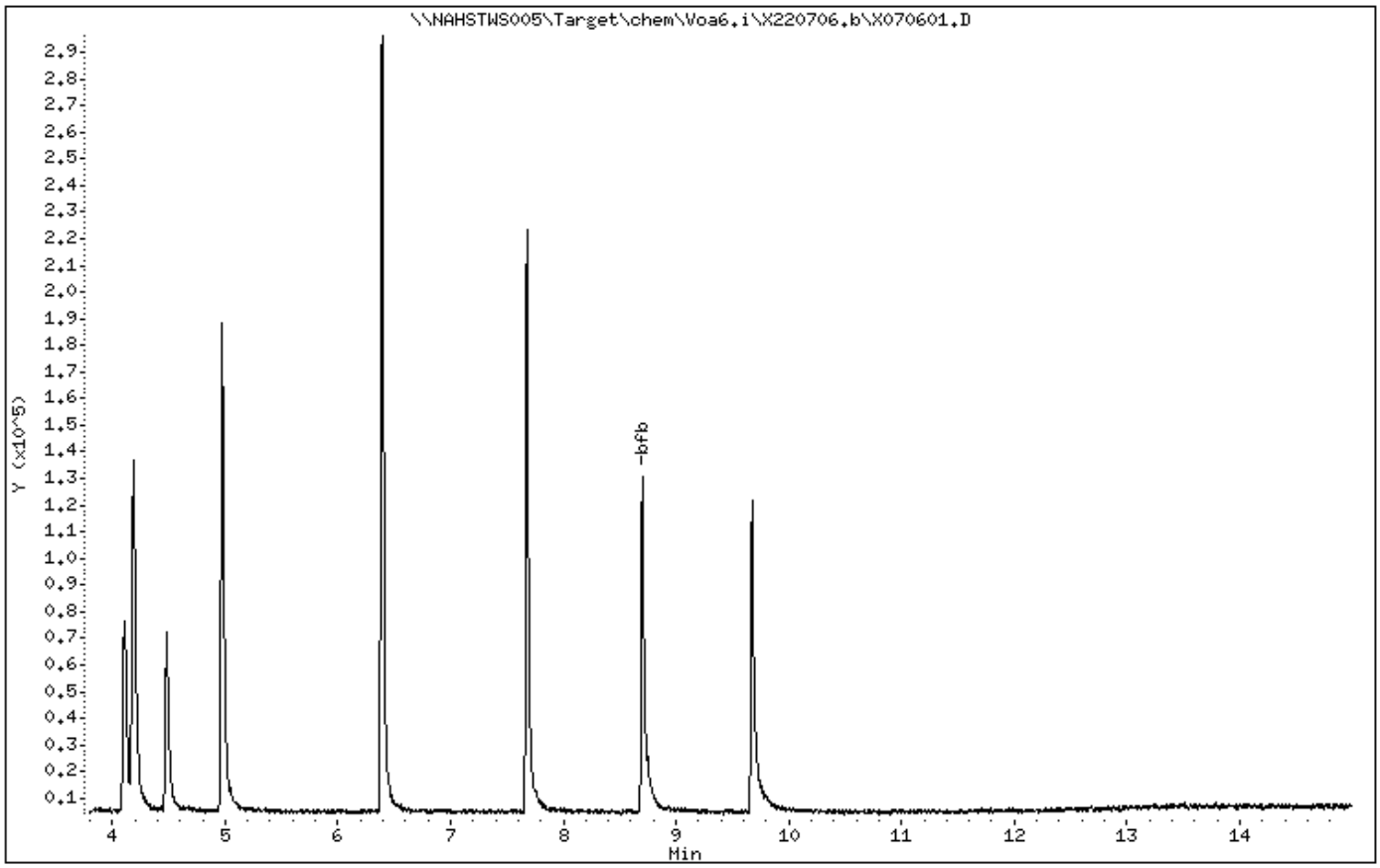
Date : 06-JUL-2022 10:59

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070601.D Page 2

Date : 06-JUL-2022 10:59

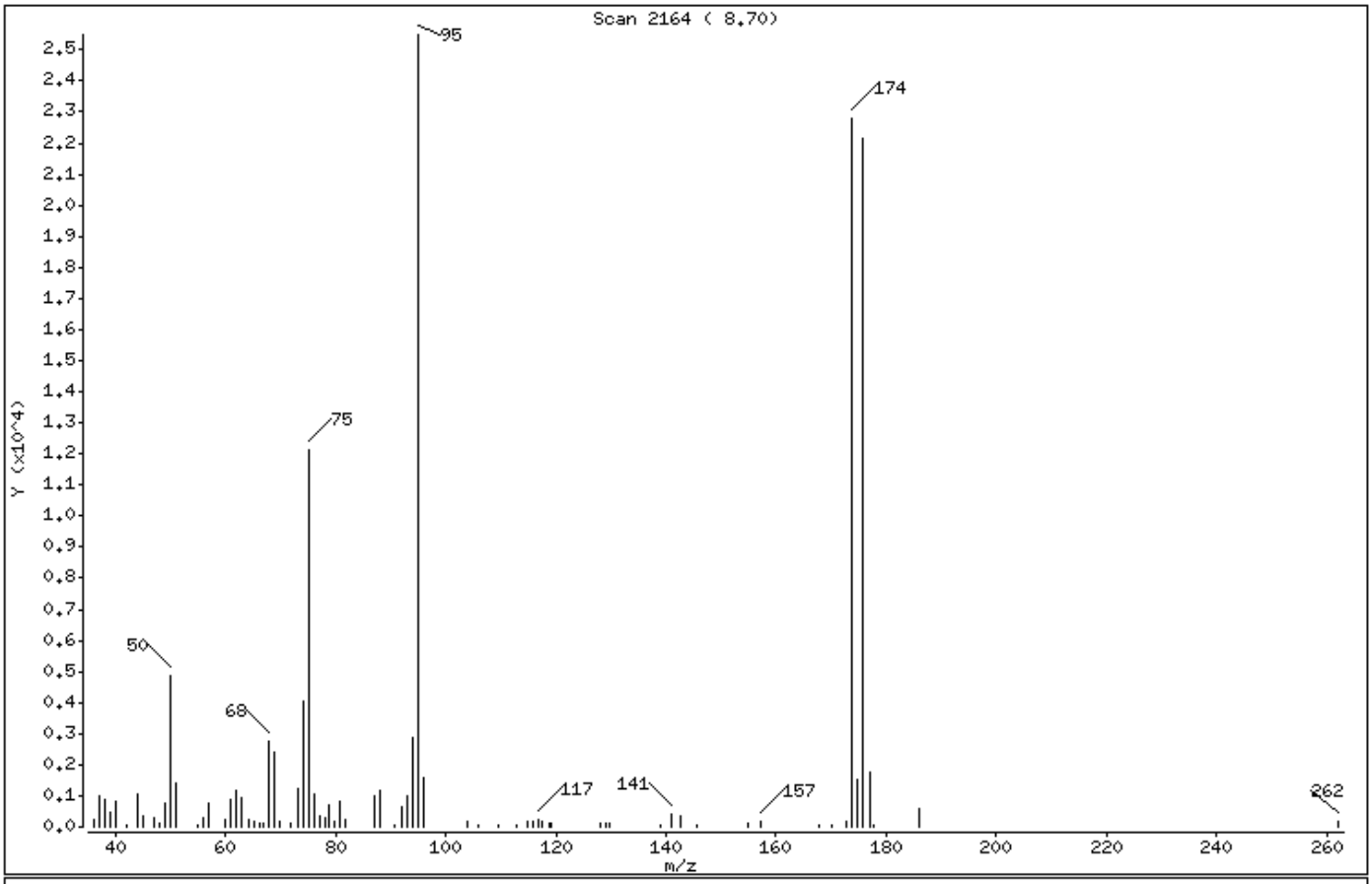
Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.17
75	30.00 - 60.00% of mass 95	47.58
96	5.00 - 9.00% of mass 95	6.27
173	Less than 2.00% of mass 174	0.70 (0.78)
174	Greater than 50.00% of mass 95	89.33
175	5.00 - 9.00% of mass 174	6.05 (6.77)
176	95.00 - 101.00% of mass 174	86.91 (97.29)
177	5.00 - 9.00% of mass 176	7.00 (8.05)

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070601.D

Date : 06-JUL-2022 10:59

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

Data File: X070601.D
Spectrum: Scan 2164 (8.70)
Location of Maximum: 95.00
Number of points: 75

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	239	62.90	924	86.90	968	129.00	126
37.10	1021	64.10	221	88.00	1186	129.90	146
38.00	900	65.20	186	90.80	67	138.90	72
39.00	471	66.10	89	91.90	658	140.90	395
39.90	845	67.00	99	93.00	1011	142.80	346
41.90	63	68.00	2733	94.00	2894	145.70	78
44.00	1042	69.00	2427	95.00	25488	154.80	111
44.90	335	69.80	151	96.00	1599	157.10	175
47.00	267	71.90	113	103.90	180	167.80	73
47.90	114	73.00	1230	106.00	55	170.00	83
49.00	781	74.00	4070	109.70	56	172.70	178
50.00	4886	75.00	12128	112.90	50	173.90	22768
51.00	1387	76.00	1032	115.00	174	174.90	1541
55.10	54	77.10	365	115.80	150	175.90	22152
55.90	287	78.10	269	116.90	209	176.90	1783
57.00	773	78.80	689	117.60	150	177.80	82
60.00	207	79.80	169	118.80	115	185.90	590
61.00	895	80.90	795	119.00	114	262.10	177
62.00	1194	81.80	230	128.00	131		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070602.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070602.D
Lab Smp Id: VSTD000.25 Client Smp ID: VSTD000.25
Inj Date : 06-JUL-2022 11:20
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.25;VSTD000.25;1;1;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

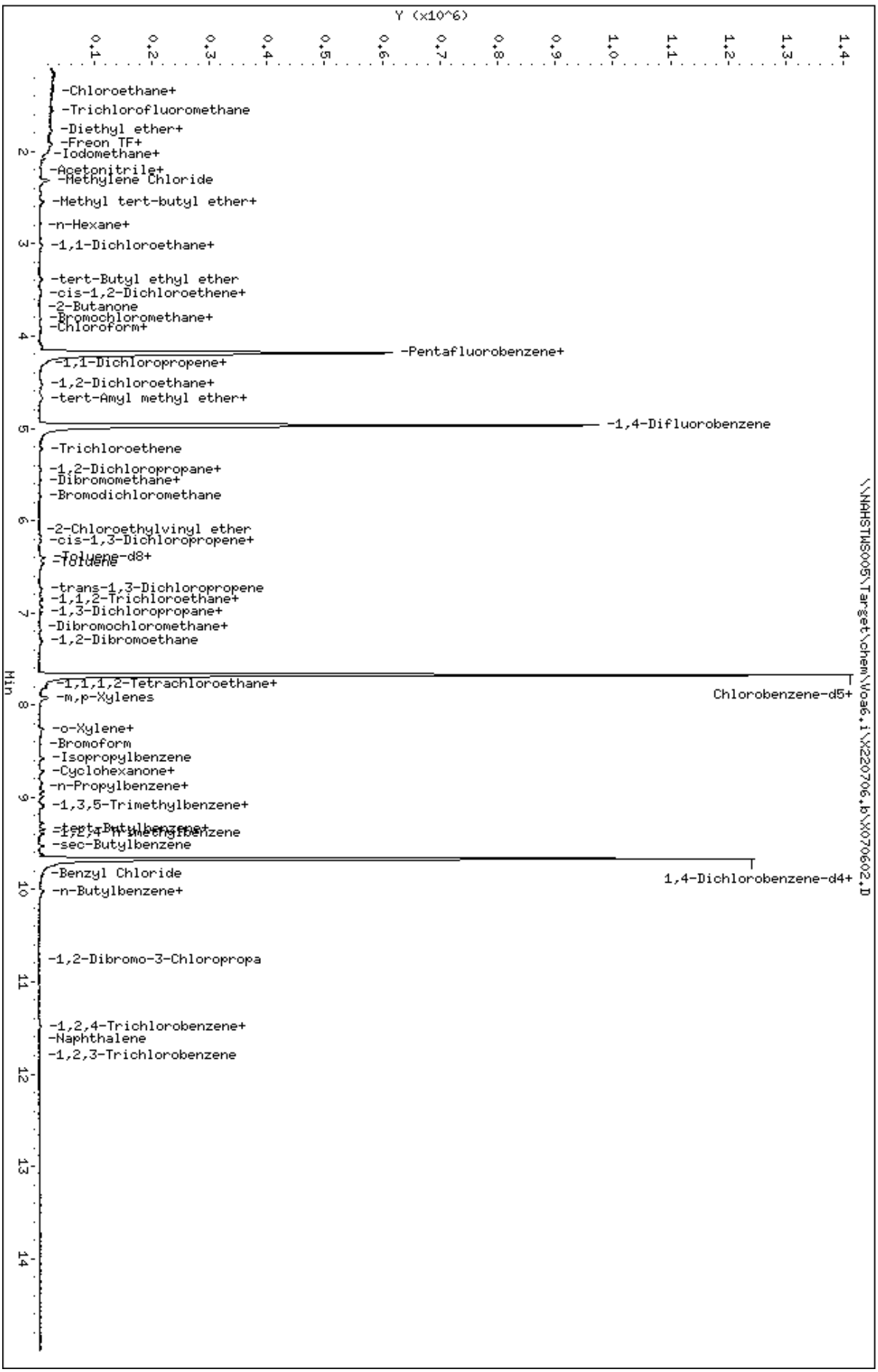
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	554842	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	841573	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	758983	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	332385	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.492	4.492	(1.073)	1413	0.25000	(Ta)
$ 69 4-Bromofluorobenzene	95	8.717	8.717	(1.136)	2364	0.25000	0.04(aM)
$ 30 Dibromofluoromethane	113	4.106	4.106	(0.981)	2078	0.25000	0.11
$ 48 Toluene-d8	98	6.404	6.404	(0.835)	7582	0.25000	0.40(a)
53 1,1,2-Trichloroethane	83	6.854	6.854	(0.893)	1359	0.25000	0.31(a)
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	1469	0.25000	0.27(aM)
33 1,2-Dichloroethane	62	4.575	4.575	(0.921)	2424	0.25000	0.34(a)
27 cis-1,2-Dichloroethene	96	3.544	3.544	(0.847)	1688	0.25000	0.26(a)
17 Methylene Chloride	84	2.311	2.311	(0.552)	3035	0.25000	1.09(aM)
38 Trichloroethene	130	5.223	5.223	(1.051)	1665	0.25000	0.26(a)
5 Vinyl Chloride	62	1.148	1.148	(0.275)	2150	0.25000	0.30(a)

QC Flag Legend

T - Target compound detected outside RT window.

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\Voa6,i\X220706,b\X070602,D
Date : 06-JUL-2022 11:20
Client ID: VSTD000,25
Sample Info: VSTD000,25;VSTD000,25;1;1;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6,i
Operator: PC
Column diameter: 0.18

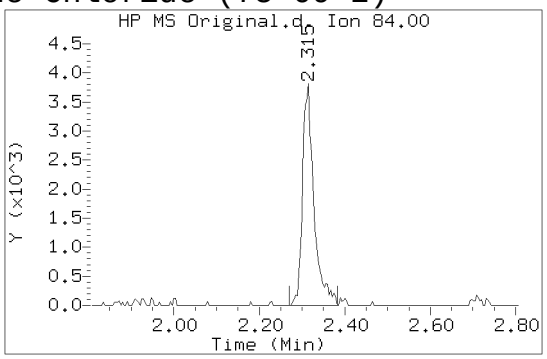
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070602.D
Inj Date : 06-JUL-2022 11:20
InstruID : voa6.i
LabSampID : VSTD000.25

Methylene Chloride (75-09-2)

Reason Code:

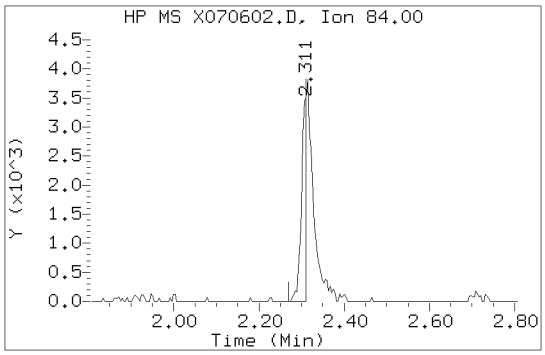
BEFORE

MASS
64
AREA
1122
HEIGHT
1063
06-Jul-2022
11:36
ALSHS
Server



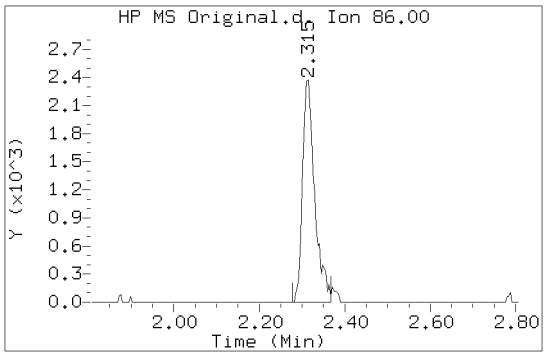
AFTER

MASS
84
AREA
3035
HEIGHT
3496
15-Jul-2022
14:25
ALSHS
Ser



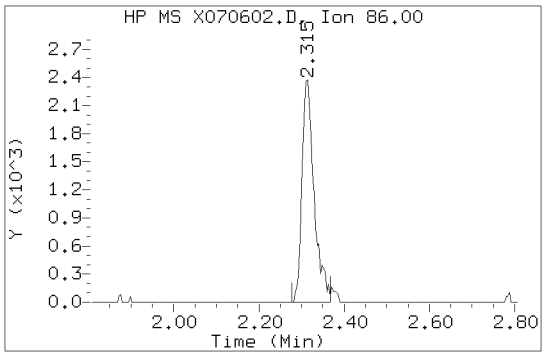
BEFORE

MASS
66
AREA
629
HEIGHT
432
06-Jul-2022
11:36
ALSHS
Server



AFTER

MASS
86
AREA
4755
HEIGHT
2374
15-Jul-2022
14:25
ALSHS
Ser

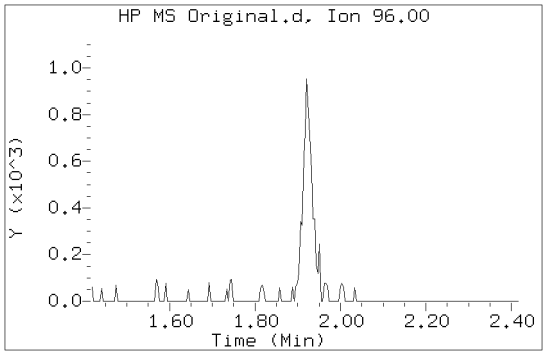


1,1-Dichloroethene (75-35-4)

Reason Code:

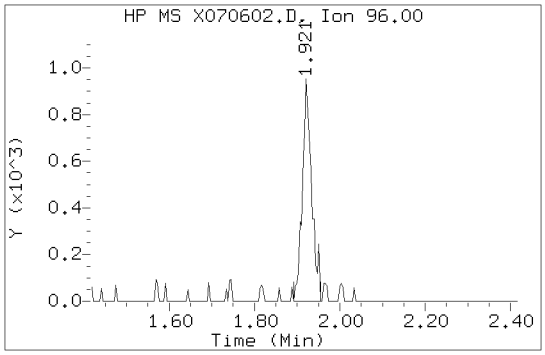
BEFORE

MASS
142
AREA
2076
HEIGHT
1275
06-Jul-2022
11:36
ALSHS
Server



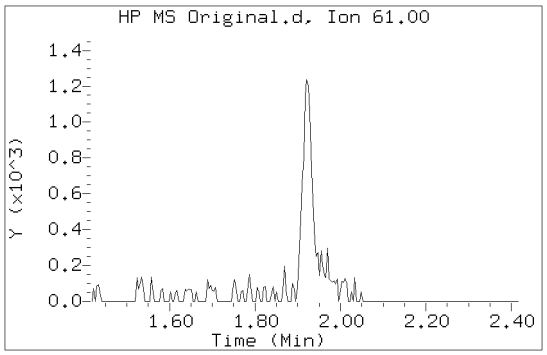
AFTER

MASS
96
AREA
1469
HEIGHT
953
15-Jul-2022
14:25
ALSHS
Ser



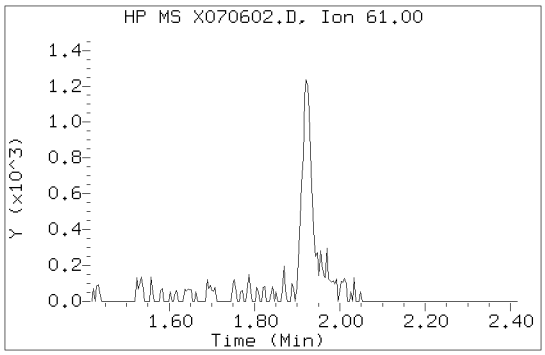
BEFORE

MASS
127
AREA
1136
HEIGHT
640
06-Jul-2022
11:36
ALSHS
Server



AFTER

MASS
61
AREA
0
HEIGHT
0
15-Jul-2022
14:25
ALSHS
Ser



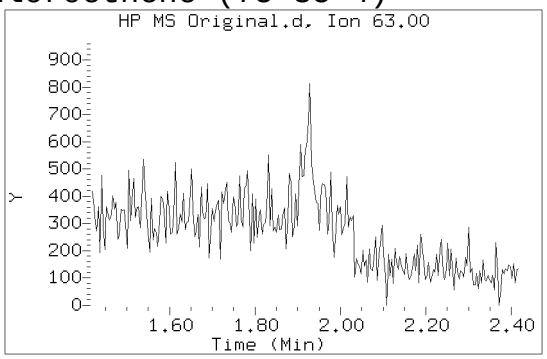
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070602.D
Inj Date : 06-JUL-2022 11:20
InstruID : voa6.i
LabSampID : VSTD000.25

1,1-Dichloroethene (75-35-4)

Reason Code:

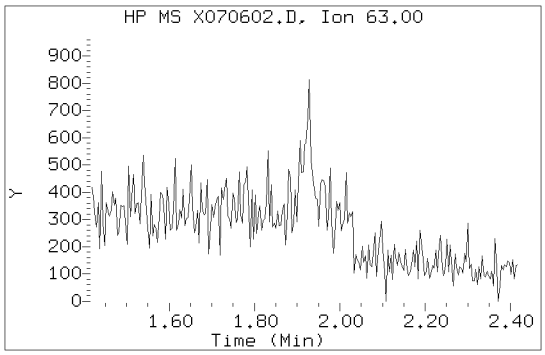
BEFORE

MASS
141
AREA
0
HEIGHT
0
06-Jul-2022
11:36
ALSHS
Server



AFTER

MASS
63
AREA
0
HEIGHT
0
15-Jul-2022
14:25
ALSHS
Ser

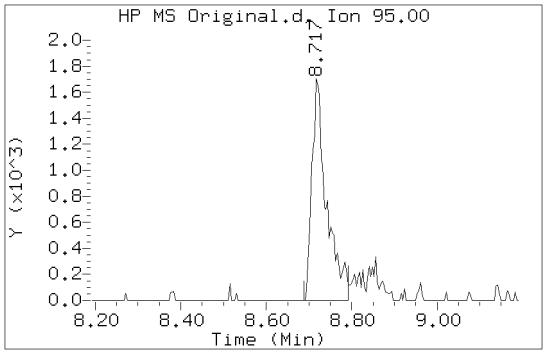


4-Bromofluorobenzene (460-00-4)

Reason Code:

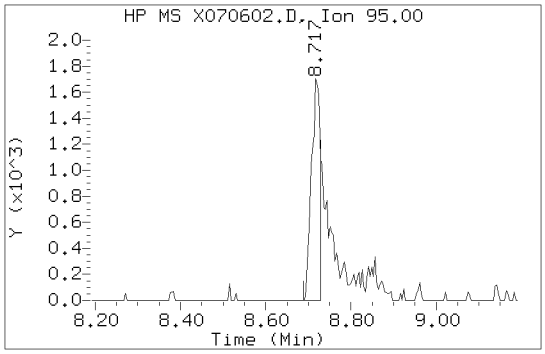
BEFORE

MASS
96
AREA
1513
HEIGHT
746
06-Jul-2022
11:36
ALSHS
Server



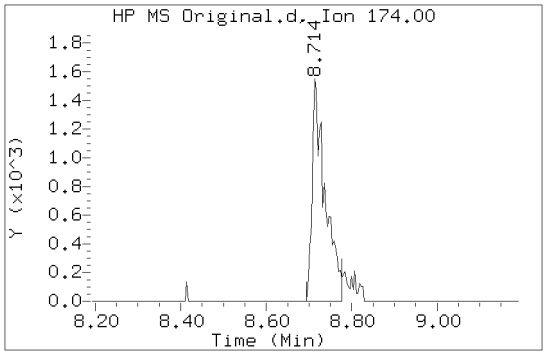
AFTER

MASS
95
AREA
2364
HEIGHT
1704
15-Jul-2022
14:25
ALSHS
Ser



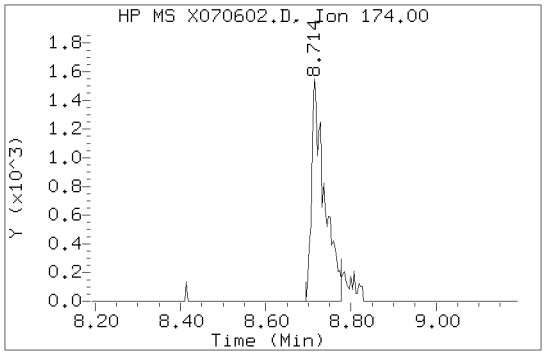
BEFORE

MASS
61
AREA
1976
HEIGHT
952
06-Jul-2022
11:36
ALSHS
Server



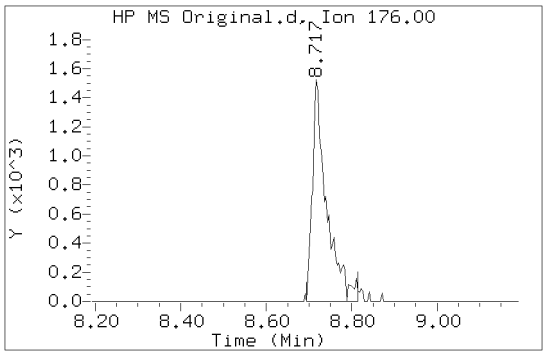
AFTER

MASS
174
AREA
3272
HEIGHT
1550
15-Jul-2022
14:25
ALSHS
Ser



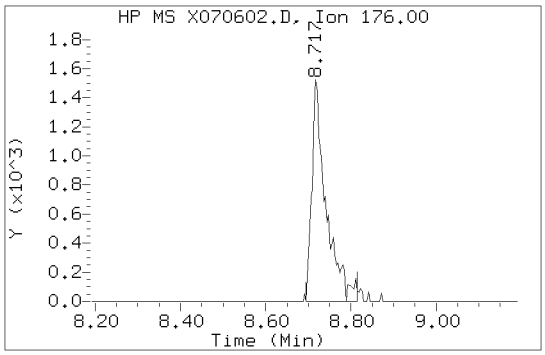
BEFORE

MASS
98
AREA
887
HEIGHT
675
06-Jul-2022
11:36
ALSHS
Server



AFTER

MASS
176
AREA
3533
HEIGHT
1524
15-Jul-2022
14:25
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D
Lab Smp Id: VSTD000.5 Client Smp ID: VSTD000.5
Inj Date : 06-JUL-2022 12:02
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.5;VSTD000.5;1;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 11:20 Cal File: X070602.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

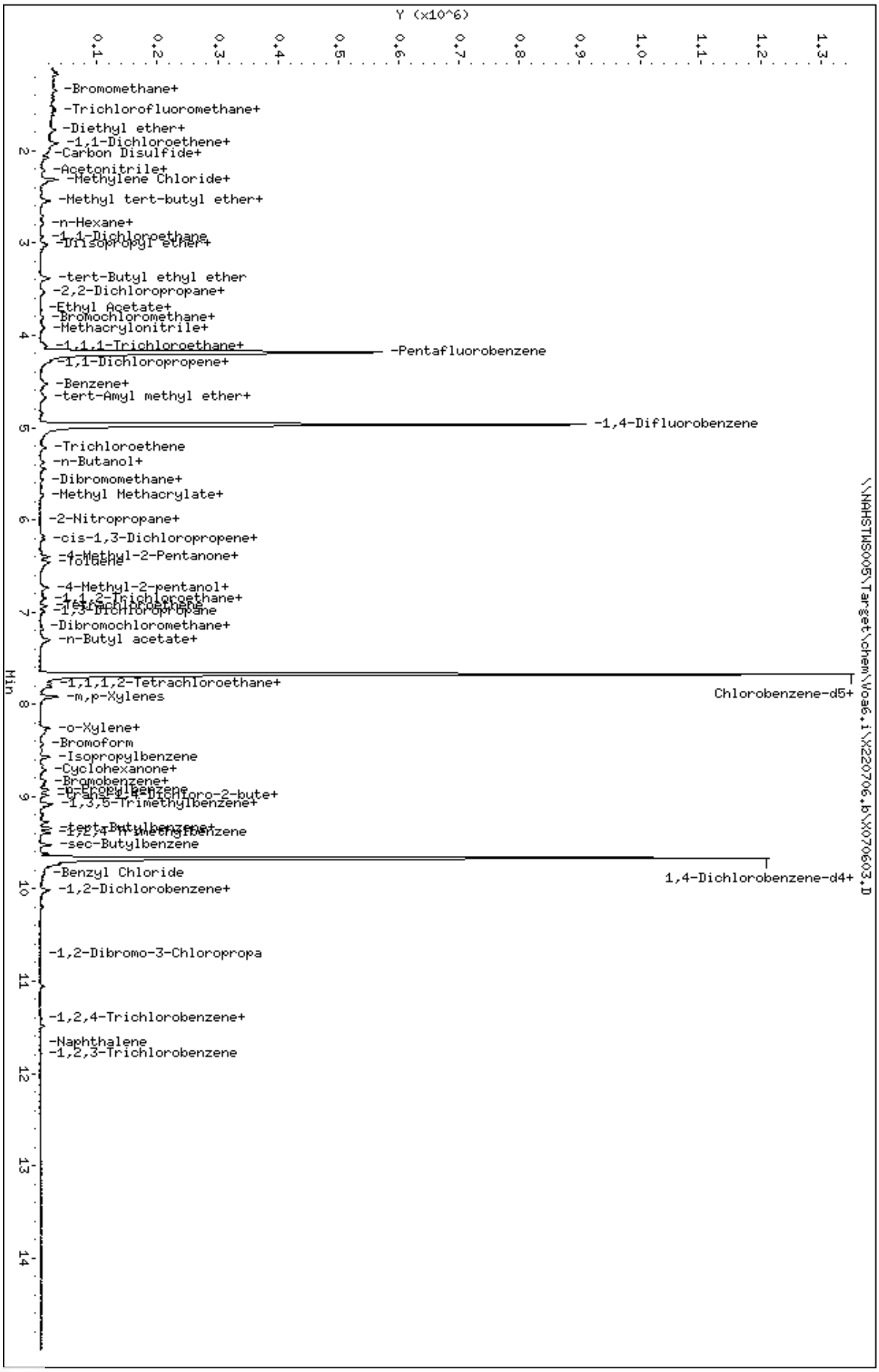
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	517303	50.0000	
*	36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	797124	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	731127	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	327223	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.489	4.489	(1.073)	2572	0.50000	(TaM)
$	69 4-Bromofluorobenzene	95	8.717	8.717	(1.136)	3152	0.50000	0.18(aM)
$	30 Dibromofluoromethane	113	4.121	4.121	(0.985)	2530	0.50000	0.24(M)
$	48 Toluene-d8	98	6.400	6.400	(0.834)	10841	0.50000	0.59(aM)
	53 1,1,2-Trichloroethane	83	6.850	6.850	(0.893)	2148	0.50000	0.51(a)
	11 1,1-Dichloroethene	96	1.925	1.925	(0.460)	2892	0.50000	0.58(a)
	33 1,2-Dichloroethane	62	4.575	4.575	(0.921)	3621	0.50000	0.54(aM)
	27 cis-1,2-Dichloroethene	96	3.548	3.548	(0.848)	3263	0.50000	0.54(a)
	17 Methylene Chloride	84	2.307	2.307	(0.551)	3611	0.50000	1.21(aM)
	38 Trichloroethene	130	5.220	5.220	(1.051)	3167	0.50000	0.53(a)
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	3631	0.50000	0.54(aM)

QC Flag Legend

T - Target compound detected outside RT window.

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220706.b\X070603.D
Date : 06-JUL-2022 12:02
Client ID: VSTD000.5
Sample Info: VSTD000.5;VSTD000.5;1;2;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

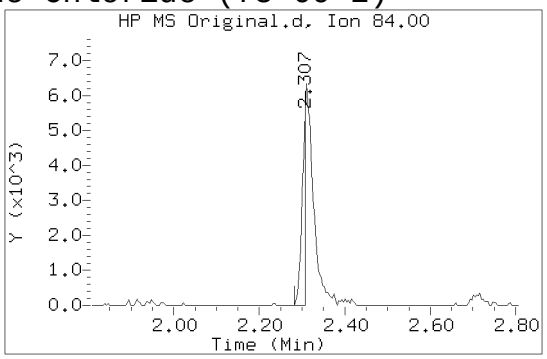
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D
Inj Date : 06-JUL-2022 12:02
InstruID : voa6.i
LabSampID : VSTD000.5

Methylene Chloride (75-09-2)

Reason Code:

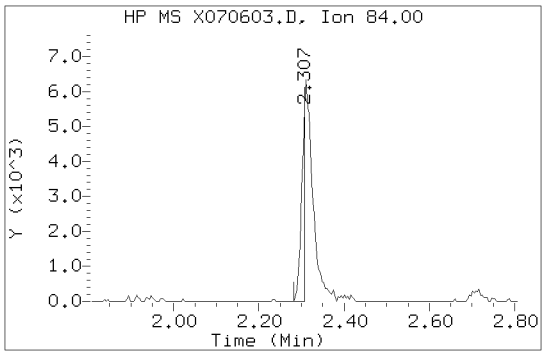
BEFORE

MASS
84
AREA
3611
HEIGHT
5578
15-Jul-2022
14:25
linh
pham



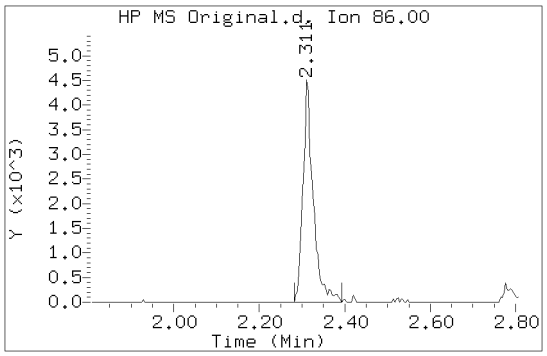
AFTER

MASS
84
AREA
3611
HEIGHT
5578
15-Jul-2022
14:25
linh
pham



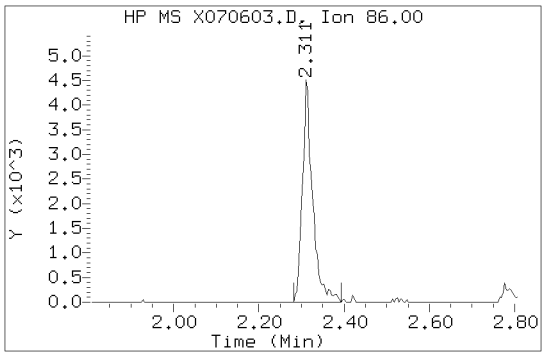
BEFORE

MASS
86
AREA
7666
HEIGHT
4512
15-Jul-2022
14:25
linh
pham



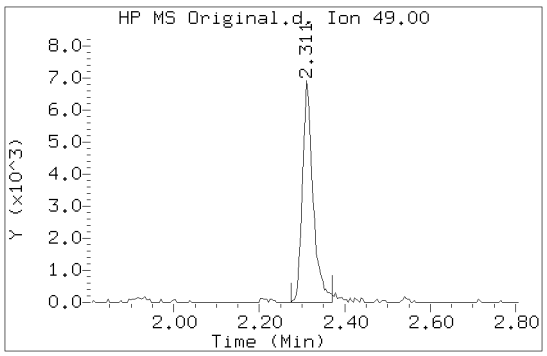
AFTER

MASS
86
AREA
7666
HEIGHT
4512
15-Jul-2022
14:25
linh
pham



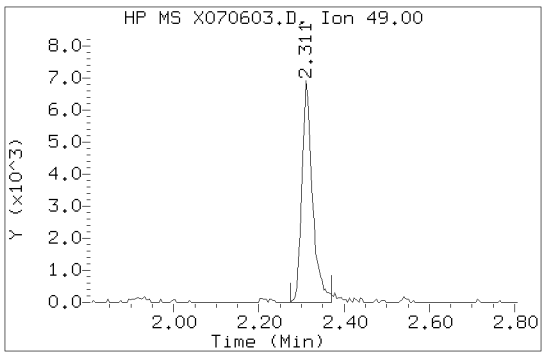
BEFORE

MASS
49
AREA
12193
HEIGHT
6914
15-Jul-2022
14:25
linh
pham



AFTER

MASS
49
AREA
12193
HEIGHT
6914
15-Jul-2022
14:25
linh
pham

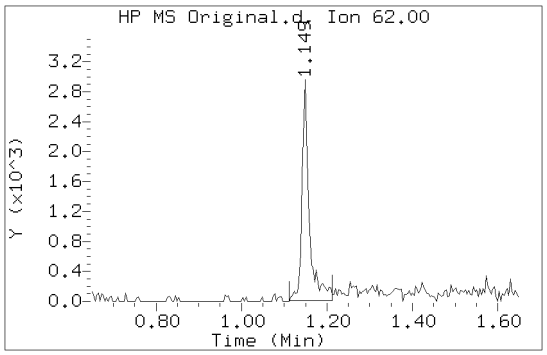


Vinyl Chloride (75-01-4)

Reason Code:

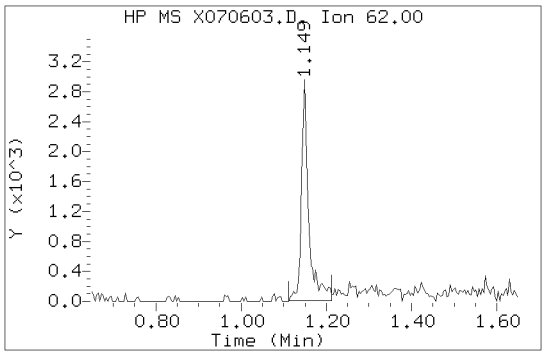
BEFORE

MASS
62
AREA
3631
HEIGHT
2951
15-Jul-2022
14:25
linh
pham



AFTER

MASS
62
AREA
3631
HEIGHT
2951
15-Jul-2022
14:25
linh
pham



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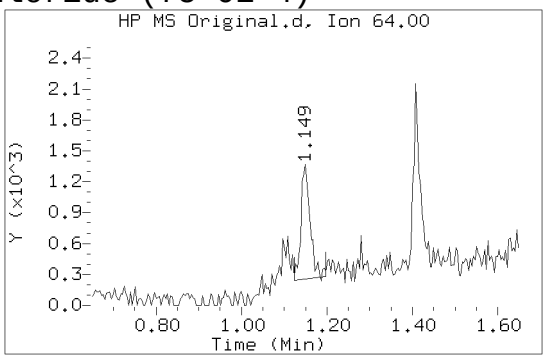
Inj Date : 06-JUL-2022 12:02
InstruID : voa6.i
LabSampID : VSTD000.5

Vinyl Chloride (75-01-4)

BEFORE

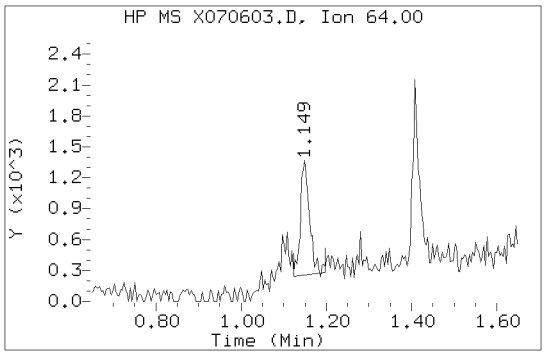
MASS
64
AREA
1708
HEIGHT
1116
15-Jul-2022
14:25
linh
pham



Reason Code:

AFTER

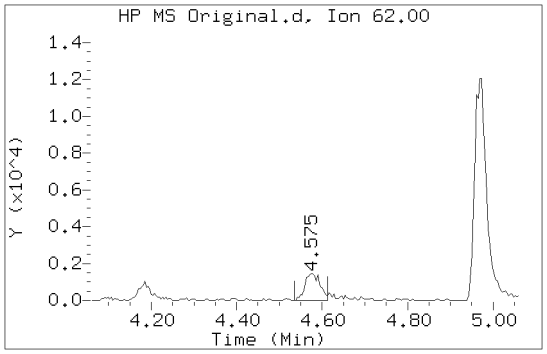
MASS
64
AREA
1708
HEIGHT
1116
15-Jul-2022
14:25
linh
pham



1,2-Dichloroethane (107-06-2)

BEFORE

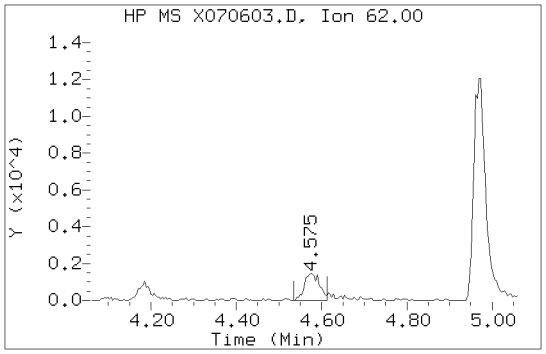
MASS
62
AREA
3621
HEIGHT
1448
15-Jul-2022
14:25
linh
pham



Reason Code:

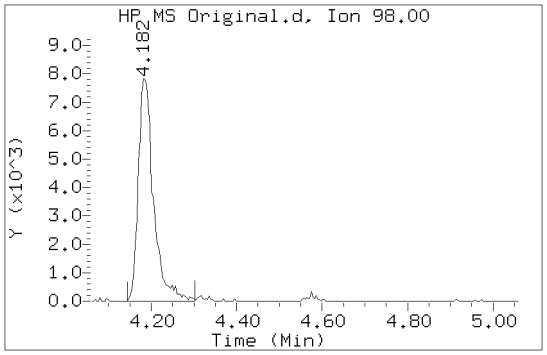
AFTER

MASS
62
AREA
3621
HEIGHT
1448
15-Jul-2022
14:25
linh
pham



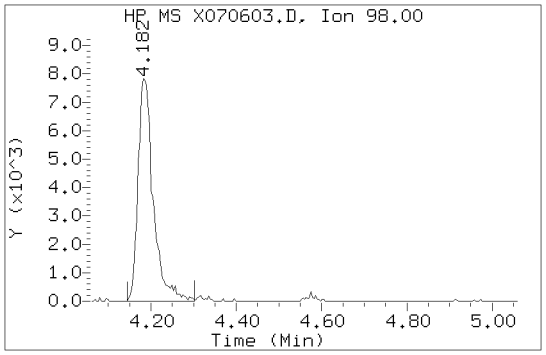
BEFORE

MASS
98
AREA
19367
HEIGHT
7823
15-Jul-2022
14:25
linh
pham



AFTER

MASS
98
AREA
19367
HEIGHT
7823
15-Jul-2022
14:25
linh
pham

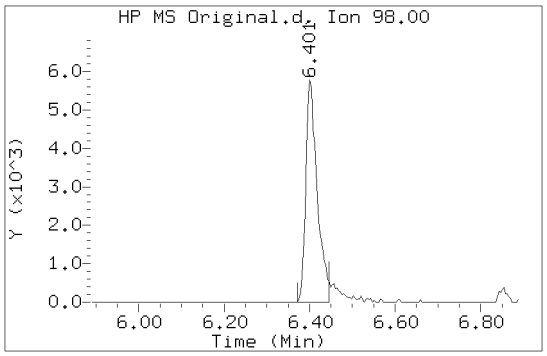


Toluene-d8 (2037-26-5)

Reason Code:

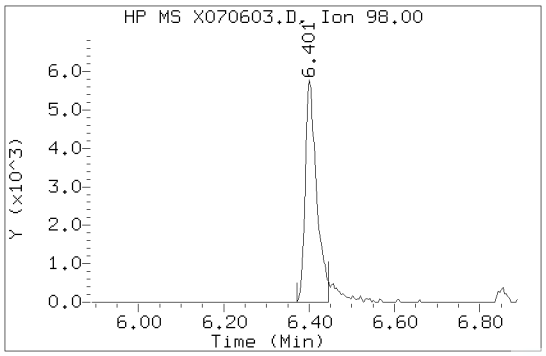
BEFORE

MASS
98
AREA
10841
HEIGHT
5782
15-Jul-2022
14:25
linh
pham



AFTER

MASS
98
AREA
10841
HEIGHT
5782
15-Jul-2022
14:25
linh
pham

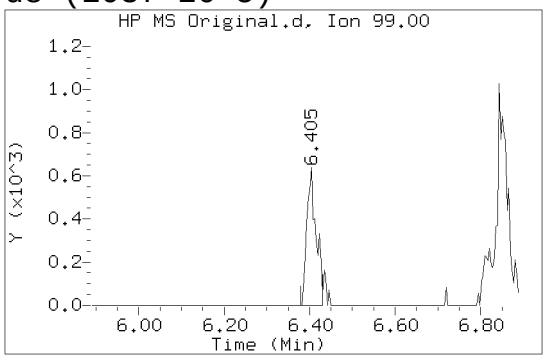


Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D
Inj Date : 06-JUL-2022 12:02
InstruID : voa6.i
LabSampID : VSTD000.5

Toluene-d8 (2037-26-5)

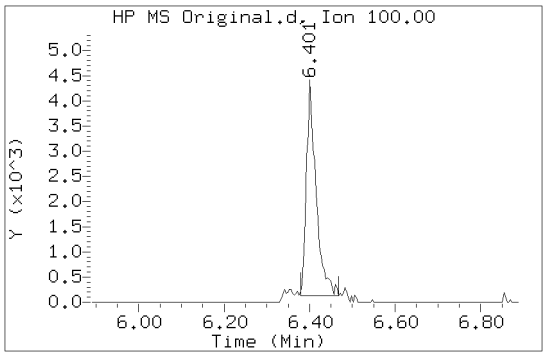
BEFORE

MASS
99
AREA
971
HEIGHT
639
15-Jul-2022
14:25
linh
pham



BEFORE

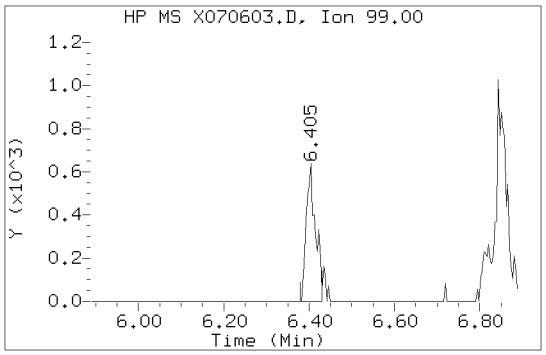
MASS
100
AREA
6864
HEIGHT
4294
15-Jul-2022
14:25
linh
pham



Reason Code:

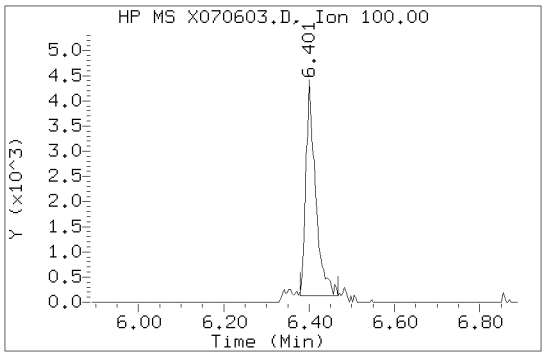
AFTER

MASS
99
AREA
971
HEIGHT
639
15-Jul-2022
14:25
linh
pham



AFTER

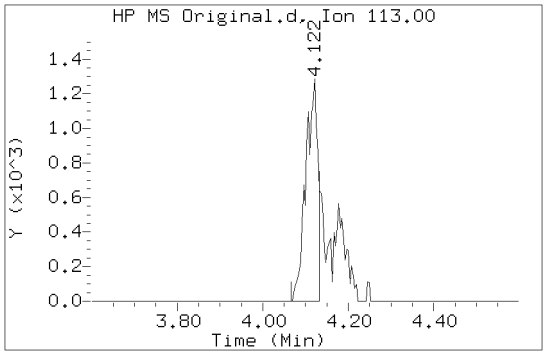
MASS
100
AREA
6864
HEIGHT
4294
15-Jul-2022
14:25
linh
pham



Dibromofluoromethane (1868-53-7)

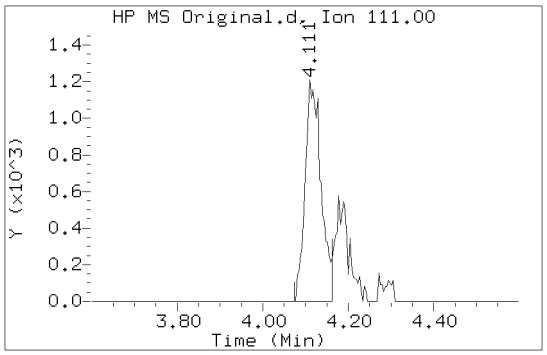
BEFORE

MASS
113
AREA
2530
HEIGHT
1286
15-Jul-2022
14:25
linh
pham



BEFORE

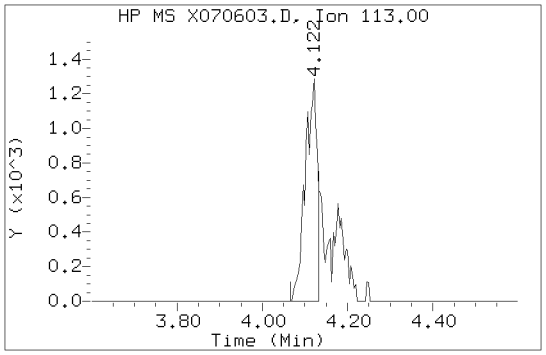
MASS
111
AREA
3177
HEIGHT
1211
15-Jul-2022
14:25
linh
pham



Reason Code:

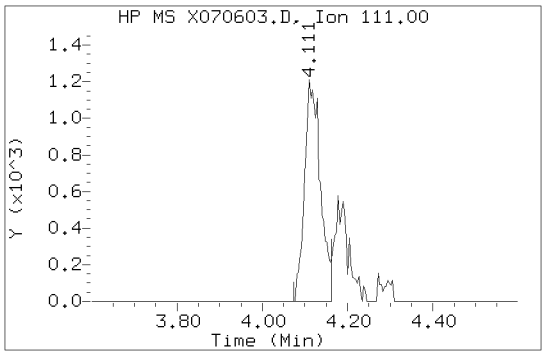
AFTER

MASS
113
AREA
2530
HEIGHT
1286
15-Jul-2022
14:25
linh
pham



AFTER

MASS
111
AREA
3177
HEIGHT
1211
15-Jul-2022
14:25
linh
pham

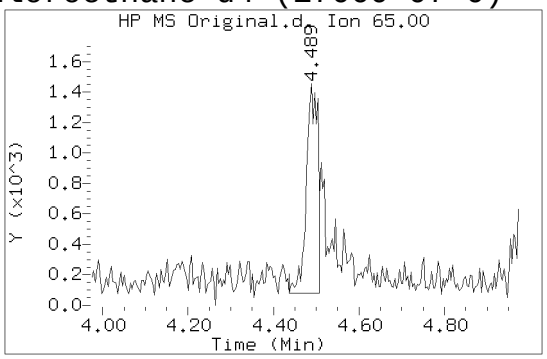


Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D
Inj Date : 06-JUL-2022 12:02
InstruID : voa6.i
LabSampID : VSTD000.5

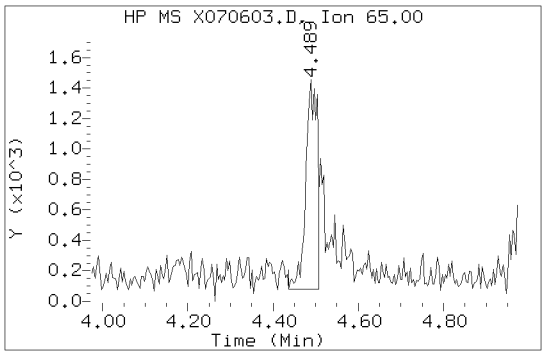
1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

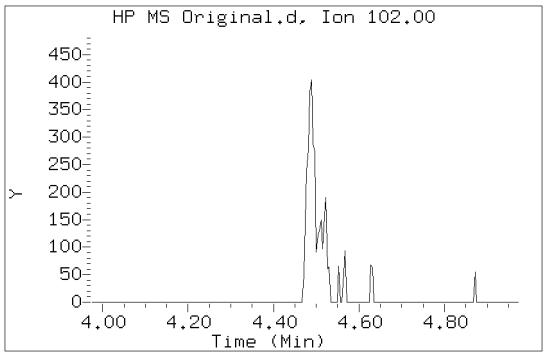
BEFORE
MASS
65
AREA
2572
HEIGHT
1375
15-Jul-2022
14:25
linh
pham



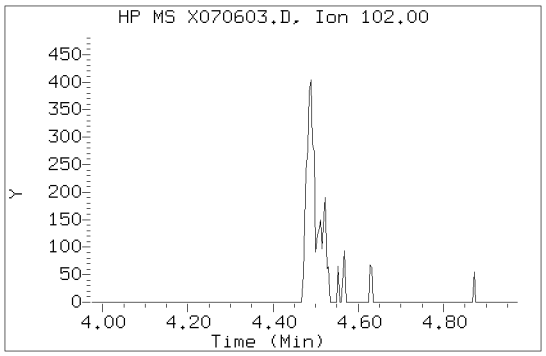
AFTER
MASS
65
AREA
2572
HEIGHT
1375
15-Jul-2022
14:25
linh
pham



BEFORE
MASS
102
AREA
0
HEIGHT
0
15-Jul-2022
14:25
linh
pham



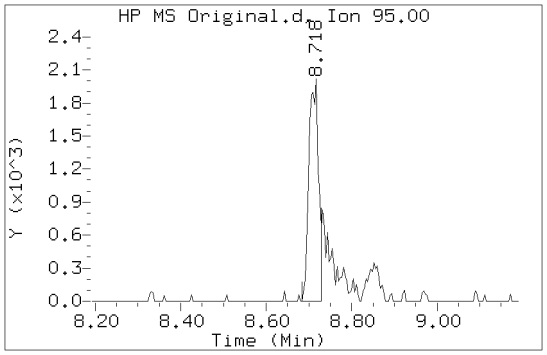
AFTER
MASS
102
AREA
0
HEIGHT
0
15-Jul-2022
14:25
linh
pham



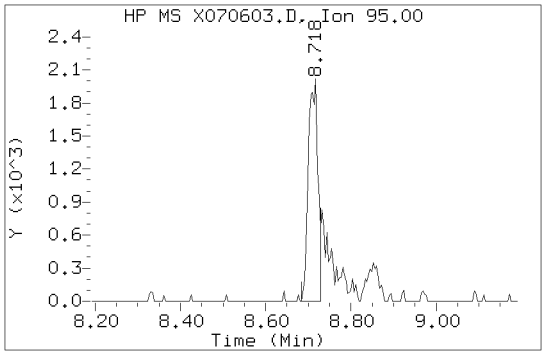
4-Bromofluorobenzene (460-00-4)

Reason Code:

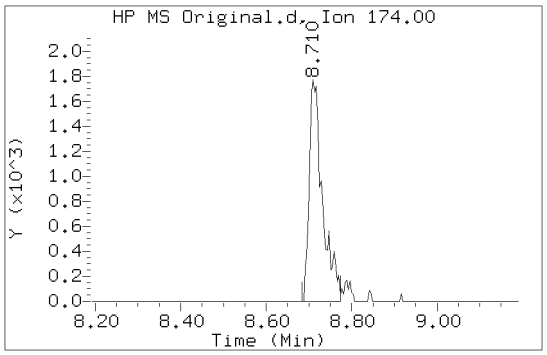
BEFORE
MASS
95
AREA
3152
HEIGHT
2018
15-Jul-2022
14:25
linh
pham



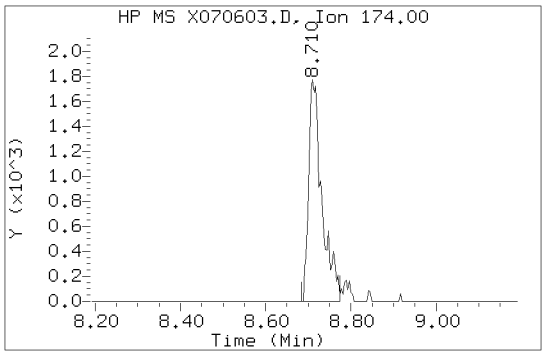
AFTER
MASS
95
AREA
3152
HEIGHT
2018
15-Jul-2022
14:25
linh
pham



BEFORE
MASS
174
AREA
3817
HEIGHT
1773
15-Jul-2022
14:25
linh
pham



AFTER
MASS
174
AREA
3817
HEIGHT
1773
15-Jul-2022
14:25
linh
pham



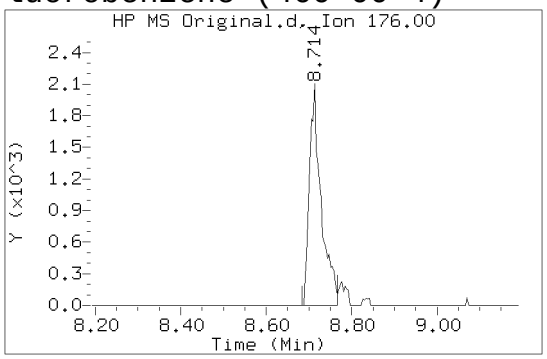
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D
Inj Date : 06-JUL-2022 12:02
InstruID : voa6.i
LabSampID : VSTD000.5

4-Bromofluorobenzene (460-00-4)

Reason Code:

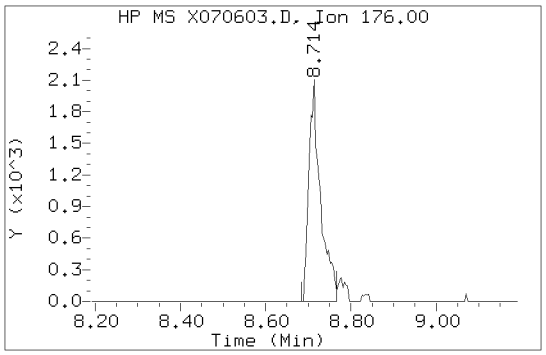
BEFORE

MASS
176
AREA
3989
HEIGHT
2104
15-Jul-2022
14:25
linh
pham



AFTER

MASS
176
AREA
3989
HEIGHT
2104
15-Jul-2022
14:25
linh
pham



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070604.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070604.D
Lab Smp Id: VSTD001 Client Smp ID: VSTD001
Inj Date : 06-JUL-2022 12:23
Operator : PC Inst ID: voa6.i
Smp Info : VSTD001;VSTD001;1;3;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 12:02 Cal File: X070603.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

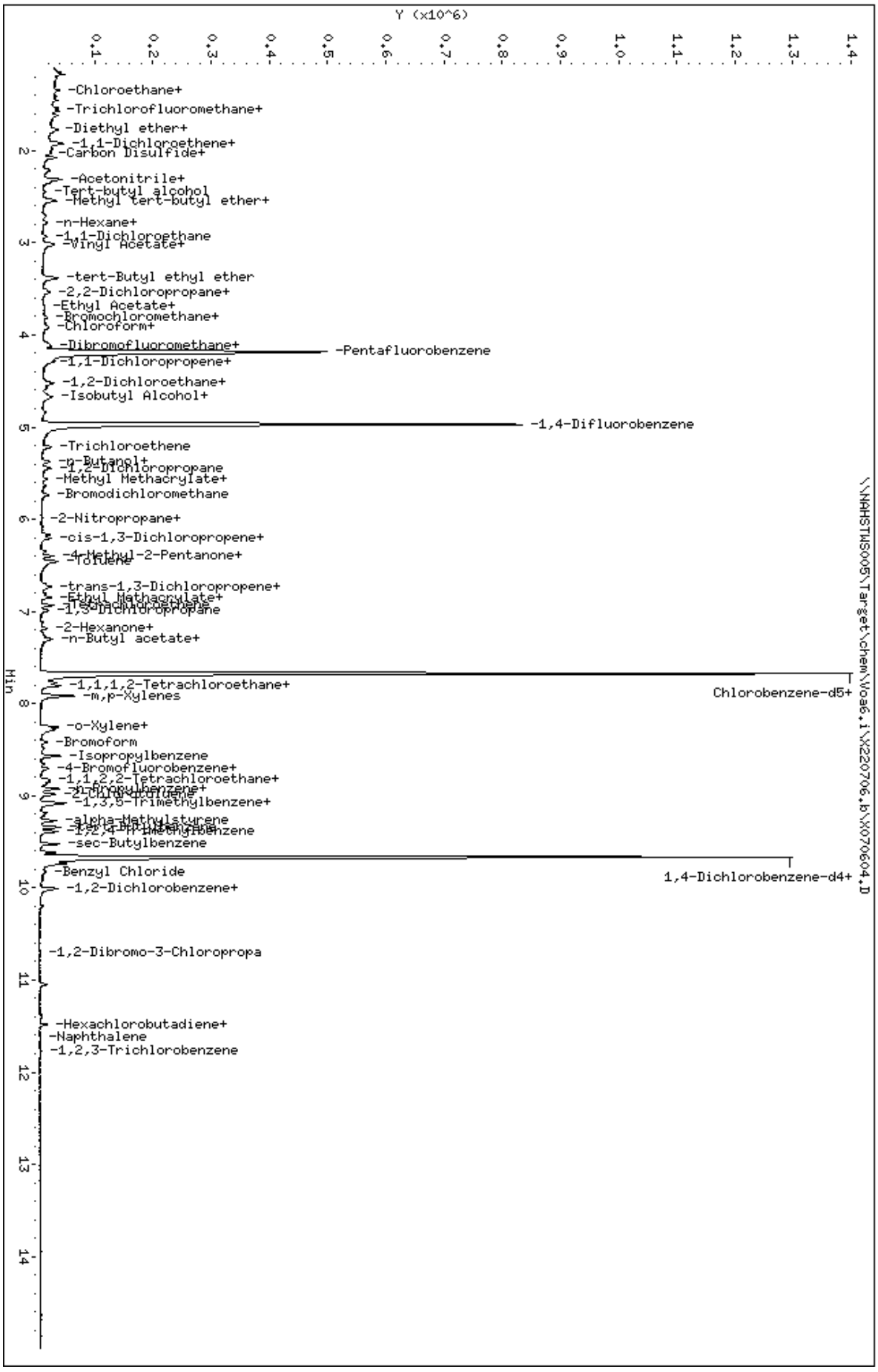
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	451641	50.0000	
* 36 1,4-Difluorobenzene	114	4.972	4.972	(1.000)	737303	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	732248	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	331230	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.489	4.489	(1.073)	3656	1.00000	(a)
$ 69 4-Bromofluorobenzene	95	8.706	8.706	(1.135)	5552	1.00000	0.56(a)
$ 30 Dibromofluoromethane	113	4.114	4.114	(0.983)	3275	1.00000	0.50
$ 48 Toluene-d8	98	6.401	6.401	(0.834)	14404	1.00000	0.79(a)
53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	4250	1.00000	1.02(a)
11 1,1-Dichloroethene	96	1.925	1.925	(0.460)	4348	1.00000	1.00(a)
33 1,2-Dichloroethane	62	4.579	4.579	(0.921)	6040	1.00000	0.98(a)
27 cis-1,2-Dichloroethene	96	3.540	3.540	(0.846)	5136	1.00000	0.98(a)
17 Methylene Chloride	84	2.315	2.315	(0.553)	6773	1.00000	1.89(aM)
38 Trichloroethene	130	5.216	5.216	(1.049)	5575	1.00000	1.00(a)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	6122	1.00000	1.05(a)

QC Flag Legend

a - Target compound detected but, quantitated amount

Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070604.D
Date : 06-JUL-2022 12:23
Client ID: VSTD001
Sample Info: VSTD001;VSTD001;1;3;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

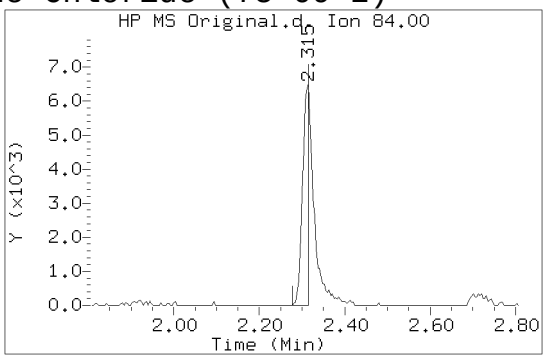
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070604.D
Inj Date : 06-JUL-2022 12:23
InstruID : voa6.i
LabSampID : VSTD001

Methylene Chloride (75-09-2)

Reason Code:

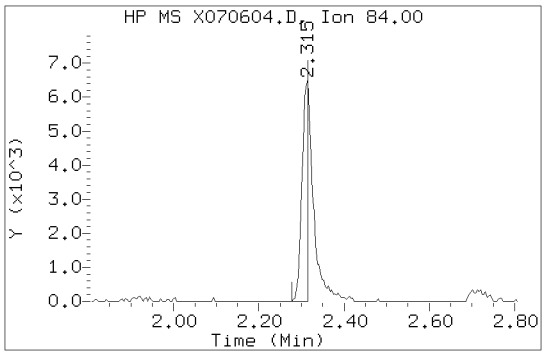
BEFORE

MASS
84
AREA
6773
HEIGHT
6513
15-Jul-2022
14:25
linh
pham



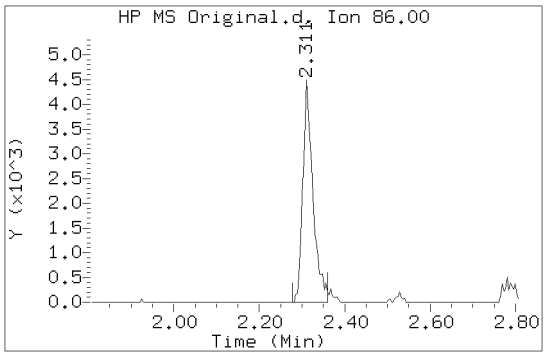
AFTER

MASS
84
AREA
6773
HEIGHT
6513
15-Jul-2022
14:25
linh
pham



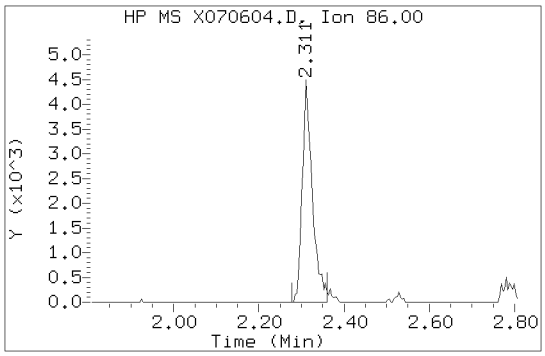
BEFORE

MASS
86
AREA
7530
HEIGHT
4492
15-Jul-2022
14:25
linh
pham



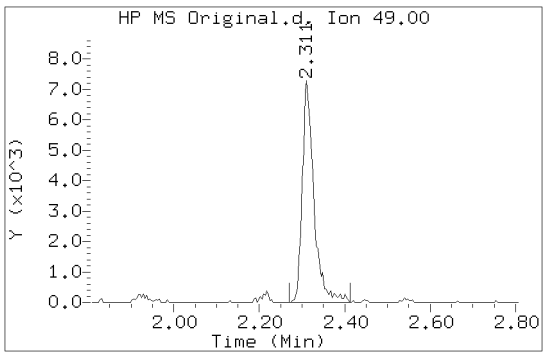
AFTER

MASS
86
AREA
7530
HEIGHT
4492
15-Jul-2022
14:25
linh
pham



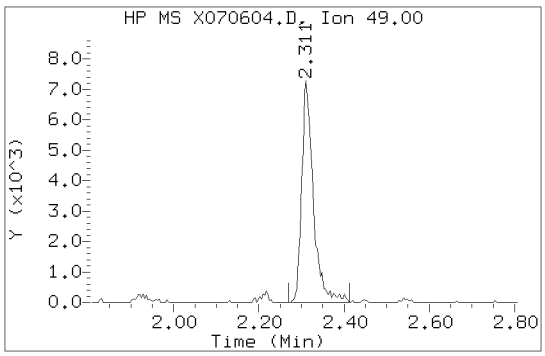
BEFORE

MASS
49
AREA
14080
HEIGHT
7288
15-Jul-2022
14:25
linh
pham



AFTER

MASS
49
AREA
14080
HEIGHT
7288
15-Jul-2022
14:25
linh
pham



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070605.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070605.D
Lab Smp Id: VSTD002 Client Smp ID: VSTD002
Inj Date : 06-JUL-2022 12:44
Operator : PC Inst ID: voa6.i
Smp Info : VSTD002;VSTD002;1;4;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 12:23 Cal File: X070604.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

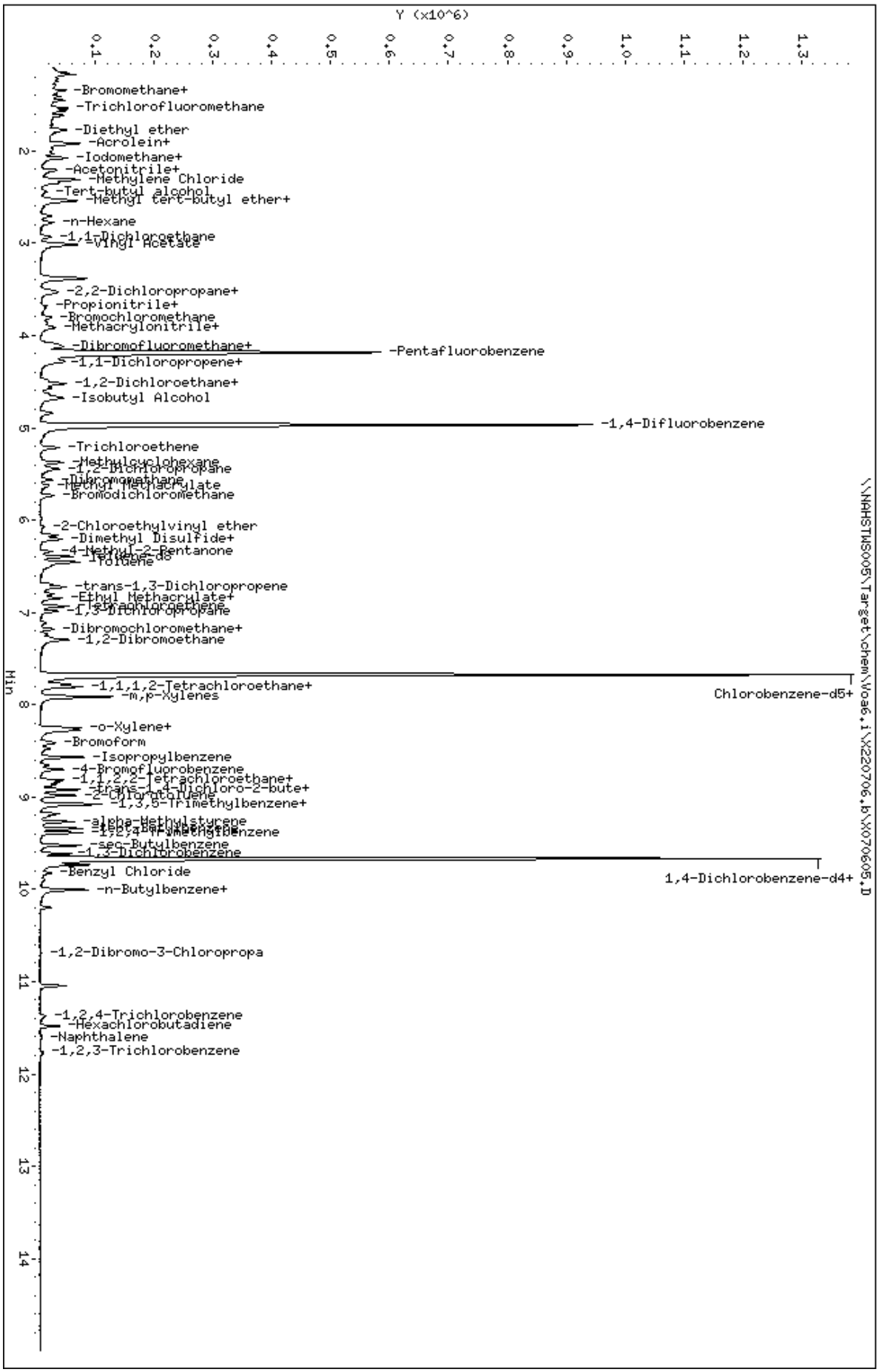
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	530225	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	824307	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	729884	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	337544	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.485	4.485	(1.072)	11348	2.00000	1.17(a)
$ 69 4-Bromofluorobenzene	95	8.702	8.702	(1.134)	12993	2.00000	1.74(a)
$ 30 Dibromofluoromethane	113	4.117	4.117	(0.984)	9962	2.00000	1.75
$ 48 Toluene-d8	98	6.397	6.397	(0.834)	36249	2.00000	1.99(a)
53 1,1,2-Trichloroethane	83	6.846	6.846	(0.892)	7944	2.00000	1.91(a)
11 1,1-Dichloroethene	96	1.917	1.917	(0.458)	9767	2.00000	1.92(a)
33 1,2-Dichloroethane	62	4.567	4.567	(0.919)	13742	2.00000	2.01(a)
27 cis-1,2-Dichloroethene	96	3.540	3.540	(0.846)	12209	2.00000	1.98(a)
17 Methylene Chloride	84	2.311	2.311	(0.552)	19043	2.00000	3.67(a)
38 Trichloroethene	130	5.212	5.212	(1.049)	12321	2.00000	1.99(a)
5 Vinyl Chloride	62	1.148	1.148	(0.275)	12825	2.00000	1.89(a)

QC Flag Legend

a - Target compound detected but, quantitated amount

Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070605.D
Date : 06-JUL-2022 12:44
Client ID: VSTD002
Sample Info: VSTD002;VSTD002;1;4;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070605.D
Inj Date : 06-JUL-2022 12:44
InstruID : voa6.i
LabSampID : VSTD002

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070606.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070606.D
Lab Smp Id: VSTD005 Client Smp ID: VSTD005
Inj Date : 06-JUL-2022 13:05
Operator : PC Inst ID: voa6.i
Smp Info : VSTD005;VSTD005;1;5;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 12:44 Cal File: X070605.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

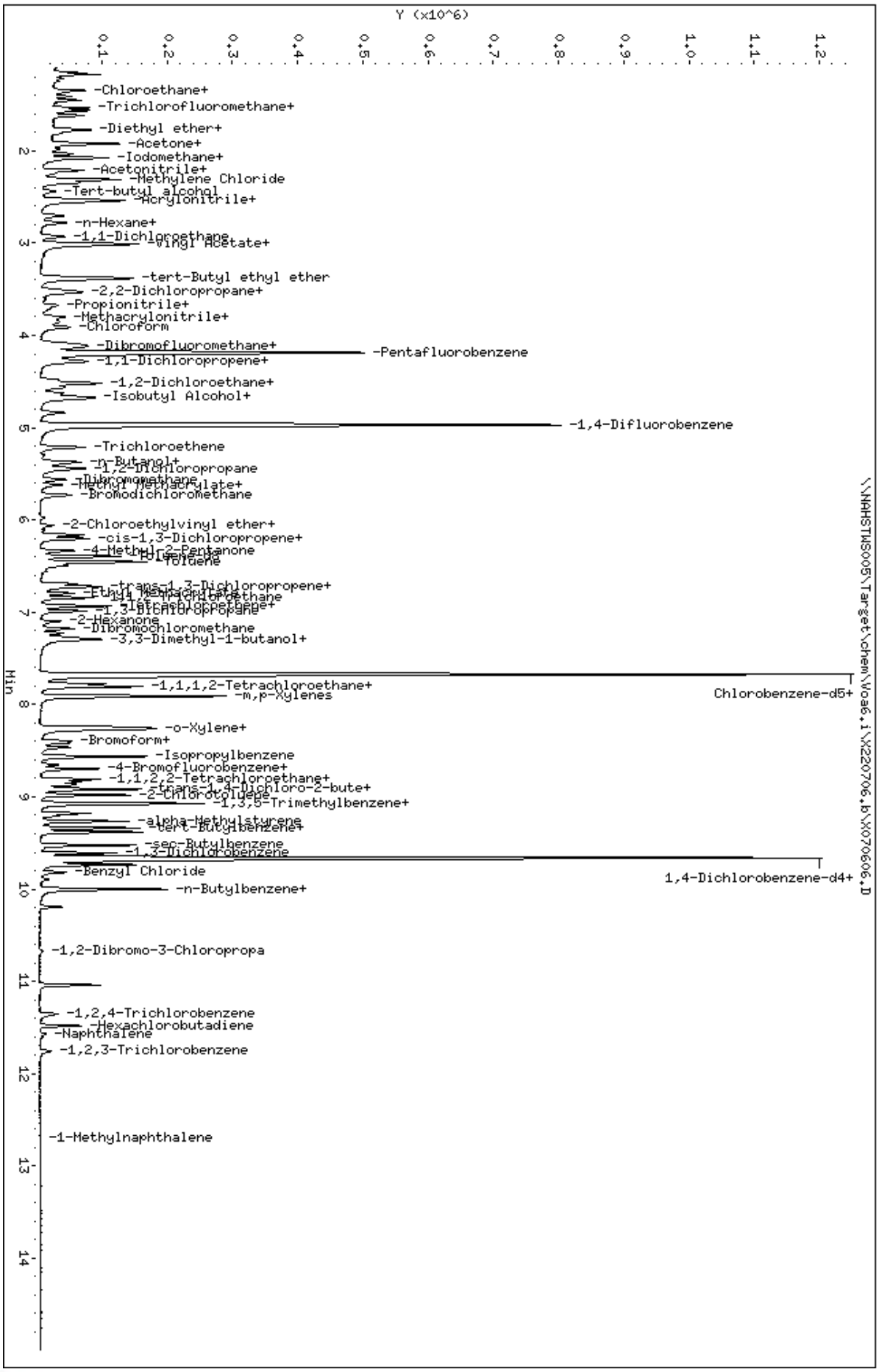
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	457328	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	703889	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	639975	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	300852	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.485	4.485	(1.072)	21986	5.00000	4.08(a)
$ 69 4-Bromofluorobenzene	95	8.695	8.695	(1.133)	28163	5.00000	4.78(a)
$ 30 Dibromofluoromethane	113	4.106	4.106	(0.981)	21128	5.00000	4.74
$ 48 Toluene-d8	98	6.393	6.393	(0.833)	80917	5.00000	5.09
53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	18365	5.00000	5.04
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	21062	5.00000	4.81(a)
33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	28033	5.00000	4.80(a)
27 cis-1,2-Dichloroethene	96	3.537	3.537	(0.845)	26162	5.00000	4.94(a)
17 Methylene Chloride	84	2.311	2.311	(0.552)	28961	5.00000	6.00(M)
38 Trichloroethene	130	5.212	5.212	(1.049)	25120	5.00000	4.76(a)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	26767	5.00000	4.57(a)

QC Flag Legend

a - Target compound detected but, quantitated amount

Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070606.D
Date : 06-JUL-2022 13:05
Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;5;;
Purge Volume: 5.0
Column phase: DB624

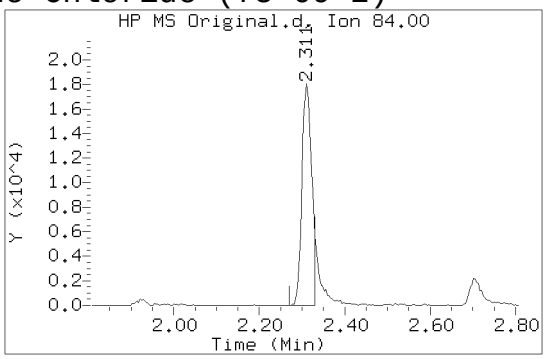
\\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070606.D
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070606.D
Inj Date : 06-JUL-2022 13:05
InstruID : voa6.i
LabSampID : VSTD005

Methylene Chloride (75-09-2)

Reason Code:

BEFORE
MASS
84
AREA
28961
HEIGHT
18056
15-Jul-2022
14:25
linh
pham



AFTER
MASS
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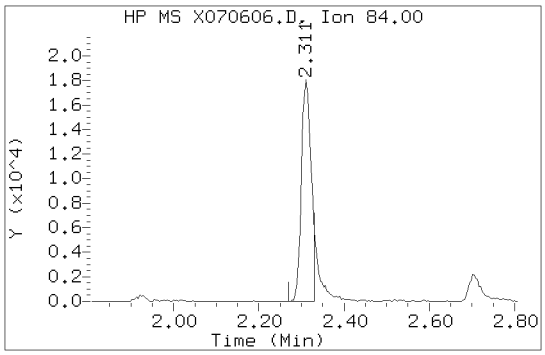
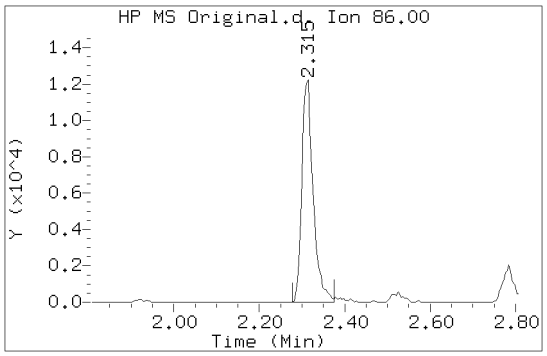
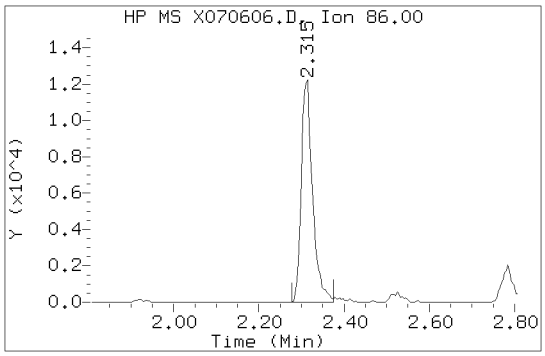
AREA
28961
HEIGHT
18056
15-Jul-2022
14:25
linh
pham



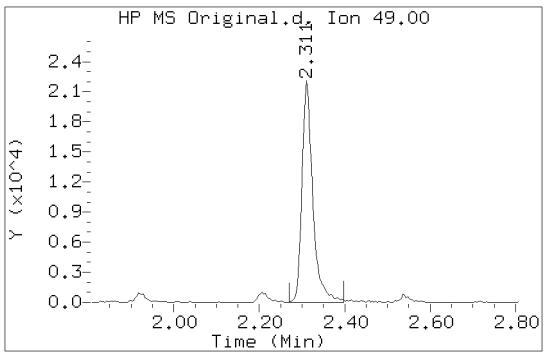
BEFORE
MASS
86
AREA
22788
HEIGHT
12232
15-Jul-2022
14:25
linh
pham



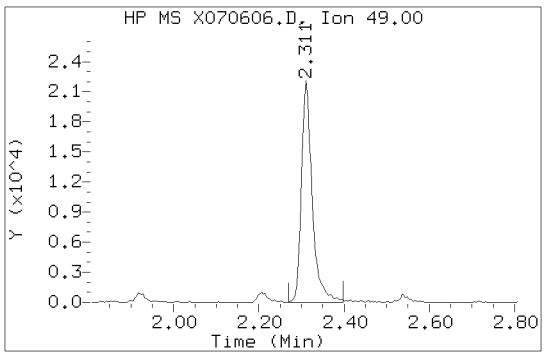
AFTER
MASS
86
AREA
22788
HEIGHT
12232
15-Jul-2022
14:25
linh
pham



BEFORE
MASS
49
AREA
39454
HEIGHT
22104
15-Jul-2022
14:25
linh
pham



AFTER
MASS
49
AREA
39454
HEIGHT
22104
15-Jul-2022
14:25
linh
pham



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070607.D Page 1
Report Date: 15-Jul-2022 14:25

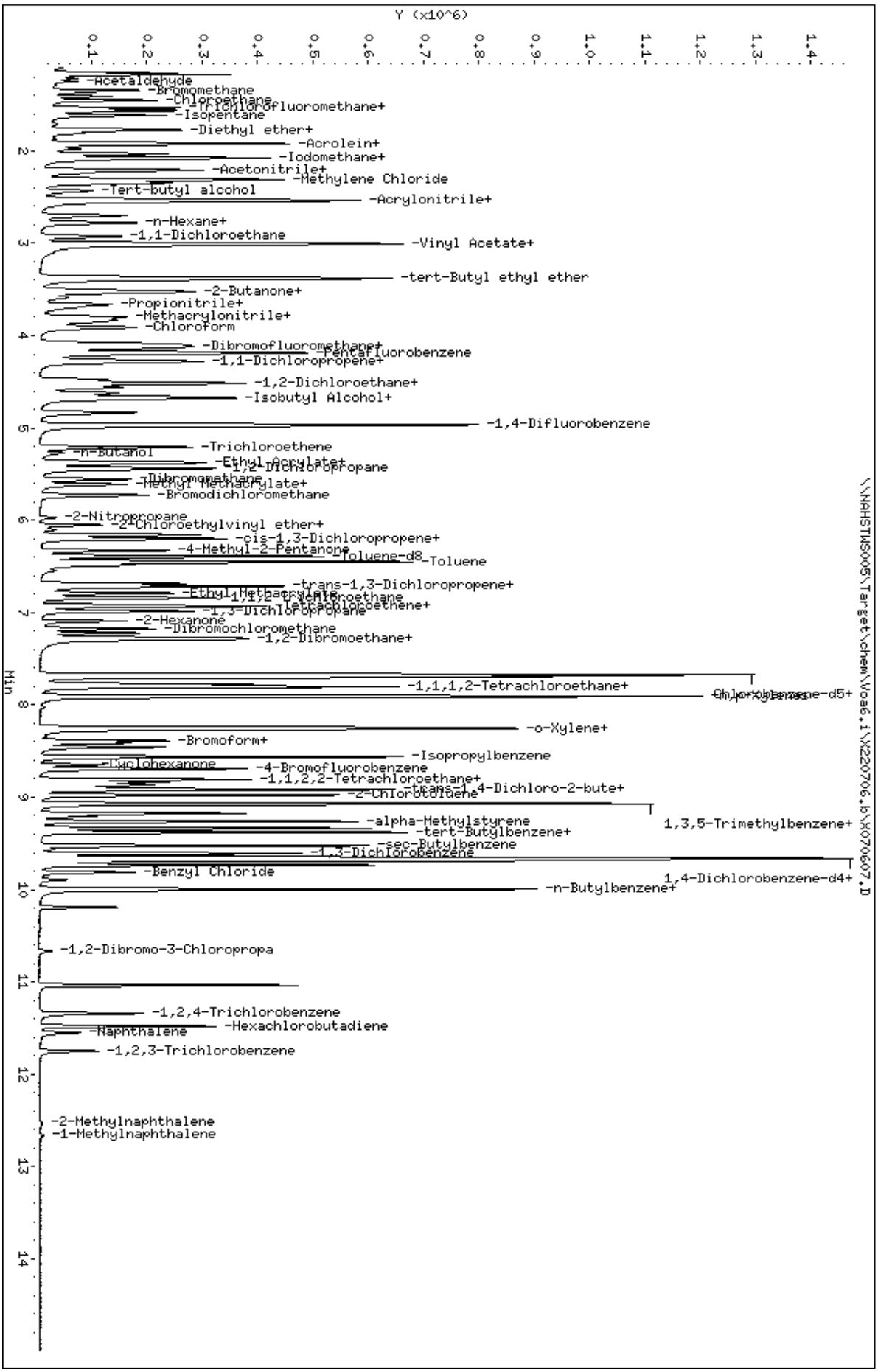
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070607.D
Lab Smp Id: VSTD020 Client Smp ID: VSTD020
Inj Date : 06-JUL-2022 13:26
Operator : PC Inst ID: voa6.i
Smp Info : VSTD020;VSTD020;1;6;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:05 Cal File: X070606.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	441521	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	687694	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	629838	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	301150	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	88656	20.0000	20.77
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	113041	20.0000	20.46
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	85780	20.0000	20.89
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	318449	20.0000	20.36
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	73006	20.0000	20.38
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	85358	20.0000	20.20
33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	113537	20.0000	19.92
27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	102517	20.0000	20.06
17 Methylene Chloride	84	2.307	2.307	(0.551)	104226	20.0000	20.68
38 Trichloroethene	130	5.208	5.208	(1.048)	101157	20.0000	19.64
5 Vinyl Chloride	62	1.149	1.149	(0.275)	115487	20.0000	20.45



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070607.D
Date : 06-JUL-2022 13:26
Client ID: VSTD020
Sample Info: VSTD020;VSTD020;1;6;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070607.D
Inj Date : 06-JUL-2022 13:26
InstruID : voa6.i
LabSampID : VSTD020

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070608.D Page 1
Report Date: 15-Jul-2022 14:25

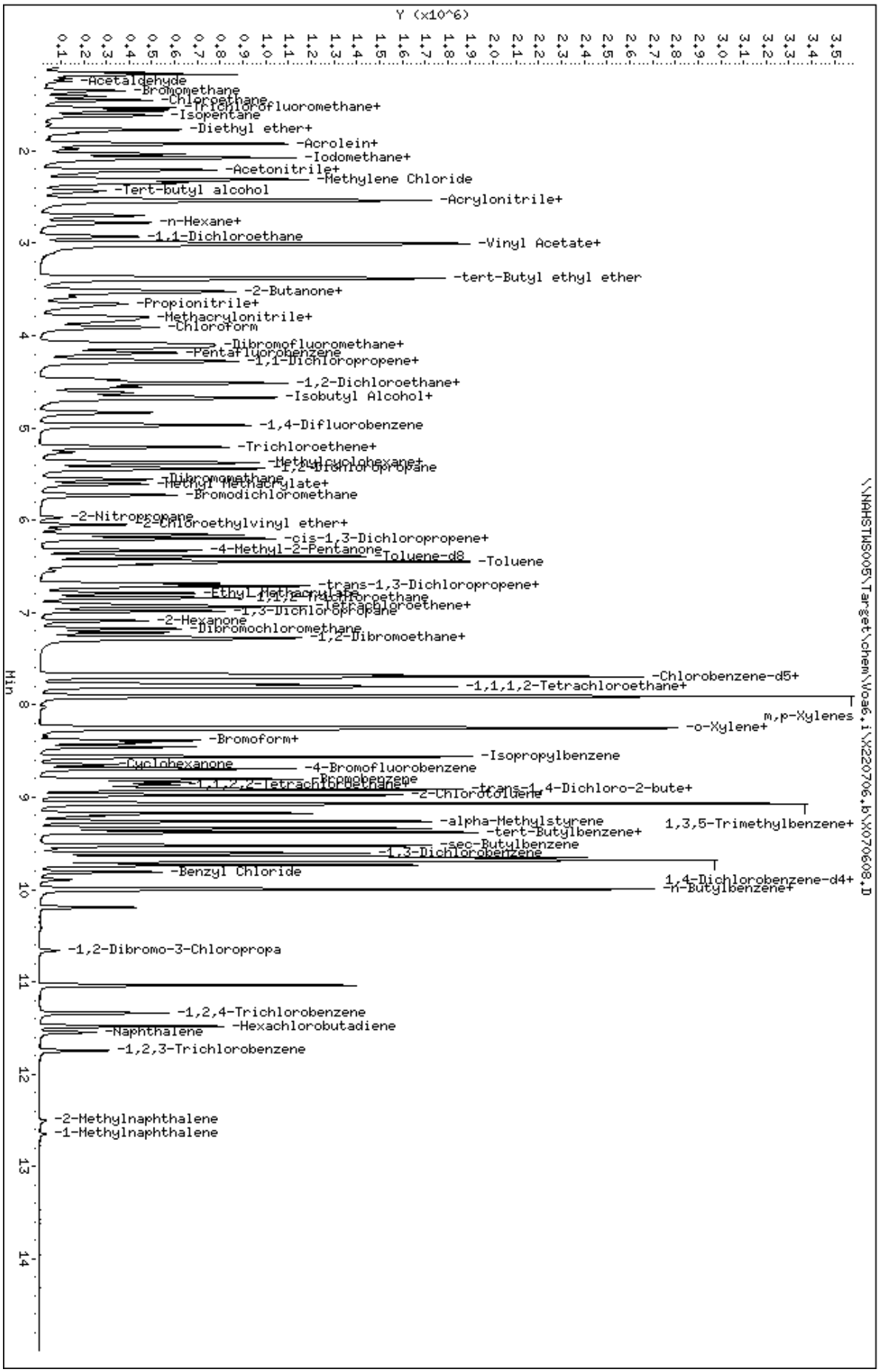
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070608.D
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 06-JUL-2022 13:47
Operator : PC Inst ID: voa6.i
Smp Info : VSTD050;VSTD050;1;7;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:26 Cal File: X070607.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	524720	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	789735	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	716144	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	343654	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	251549	50.0000	51.21
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	310560	50.0000	49.90
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	241477	50.0000	49.89
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	874288	50.0000	49.16
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	201769	50.0000	49.55
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	216608	50.0000	43.15
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	327436	50.0000	50.03
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	291155	50.0000	47.94
17 Methylene Chloride	84	2.311	2.311	(0.552)	278913	50.0000	45.78
38 Trichloroethene	130	5.209	5.209	(1.048)	288879	50.0000	48.84
5 Vinyl Chloride	62	1.149	1.149	(0.275)	300120	50.0000	44.71



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070608.D
Date : 06-JUL-2022 13:47
Client ID: VSTD050
Sample Info: VSTD050;VSTD050;1;7;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070608.D
Inj Date : 06-JUL-2022 13:47
InstruID : voa6.i
LabSampID : VSTD050

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070609.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070609.D
Lab Smp Id: VSTD100 Client Smp ID: VSTD100
Inj Date : 06-JUL-2022 14:08
Operator : PC Inst ID: voa6.i
Smp Info : VSTD100;VSTD100;1;8;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

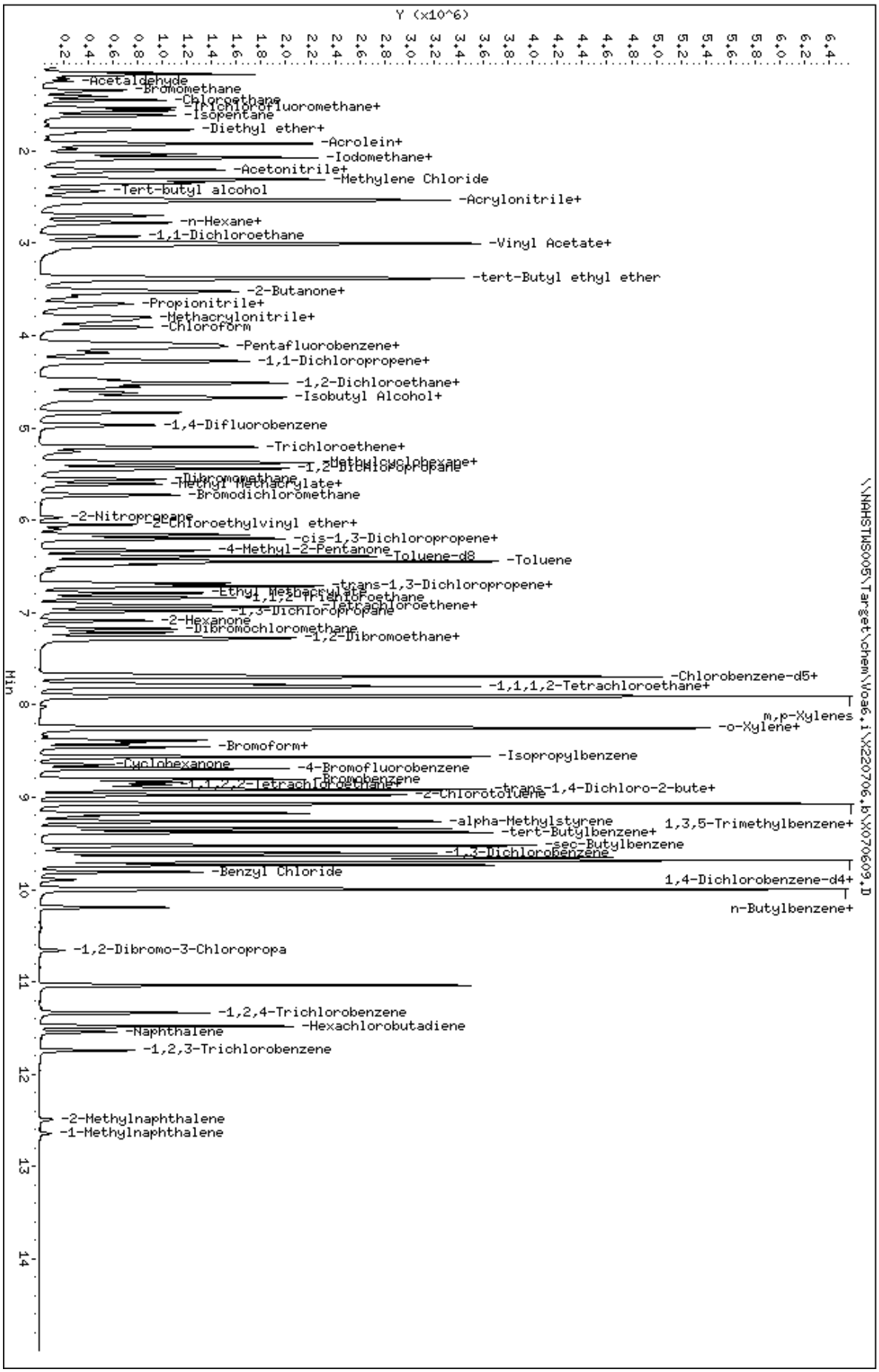
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	458566	50.0000	
*	36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	803838	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	633328	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	360755	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	454111	100.000	107.03
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	562316	100.000	102.50
$	30 Dibromofluoromethane	113	4.099	4.099	(0.979)	434904	100.000	103.13
$	48 Toluene-d8	98	6.389	6.389	(0.833)	1644104	100.000	104.54(A)
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	365458	100.000	101.49
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	435039	100.000	99.16
	33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	620979	100.000	93.22
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	539682	100.000	101.68
	17 Methylene Chloride	84	2.307	2.307	(0.551)	510517	100.000	95.20
	38 Trichloroethene	130	5.208	5.208	(1.048)	610532	100.000	101.42
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	609836	100.000	103.97

QC Flag Legend

A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070609.D
Date : 06-JUL-2022 14:08
Client ID: VSTD100
Sample Info: VSTD100;VSTD100;1;8;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070609.D
Inj Date : 06-JUL-2022 14:08
InstruID : voa6.i
LabSampID : VSTD100

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070610.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070610.D
Lab Smp Id: VSTD150 Client Smp ID: VSTD150
Inj Date : 06-JUL-2022 14:28
Operator : PC Inst ID: voa6.i
Smp Info : VSTD150;VSTD150;1;9;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:08 Cal File: X070609.D
Als bottle: 11 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

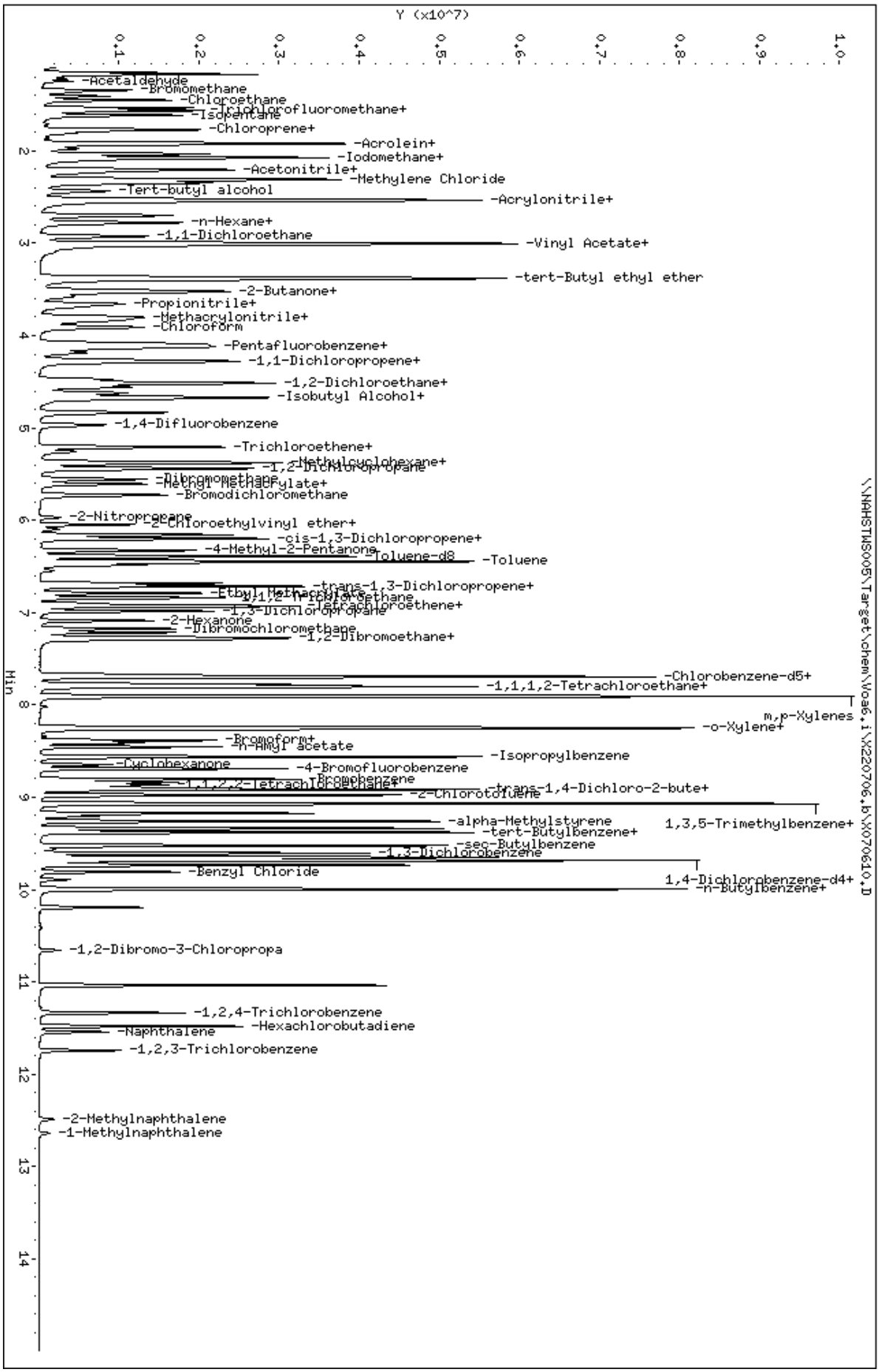
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	467218	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	708435	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	652387	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	312809	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	634876	150.000	147.30
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	839072	150.000	148.62
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.979)	627970	150.000	146.28
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	2370733	150.000	146.33(A)
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	540430	150.000	145.70
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	730731	150.000	163.48
33 1,2-Dichloroethane	62	4.556	4.556	(0.917)	874133	150.000	148.89
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	801041	150.000	148.13
17 Methylene Chloride	84	2.307	2.307	(0.551)	843638	150.000	154.02
38 Trichloroethene	130	5.208	5.208	(1.048)	796666	150.000	150.16
5 Vinyl Chloride	62	1.149	1.149	(0.275)	971073	150.000	162.49

QC Flag Legend

A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070610.D
Date : 06-JUL-2022 14:28
Client ID: VSTD150
Sample Info: VSTD150;VSTD150;1;9;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070610.D
Inj Date : 06-JUL-2022 14:28
InstruID : voa6.i
LabSampID : VSTD150

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070611.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070611.D
Lab Smp Id: VSTD200 Client Smp ID: VSTD200
Inj Date : 06-JUL-2022 14:49
Operator : PC Inst ID: voa6.i
Smp Info : VSTD200;VSTD200;1;10;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:28 Cal File: X070610.D
Als bottle: 12 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

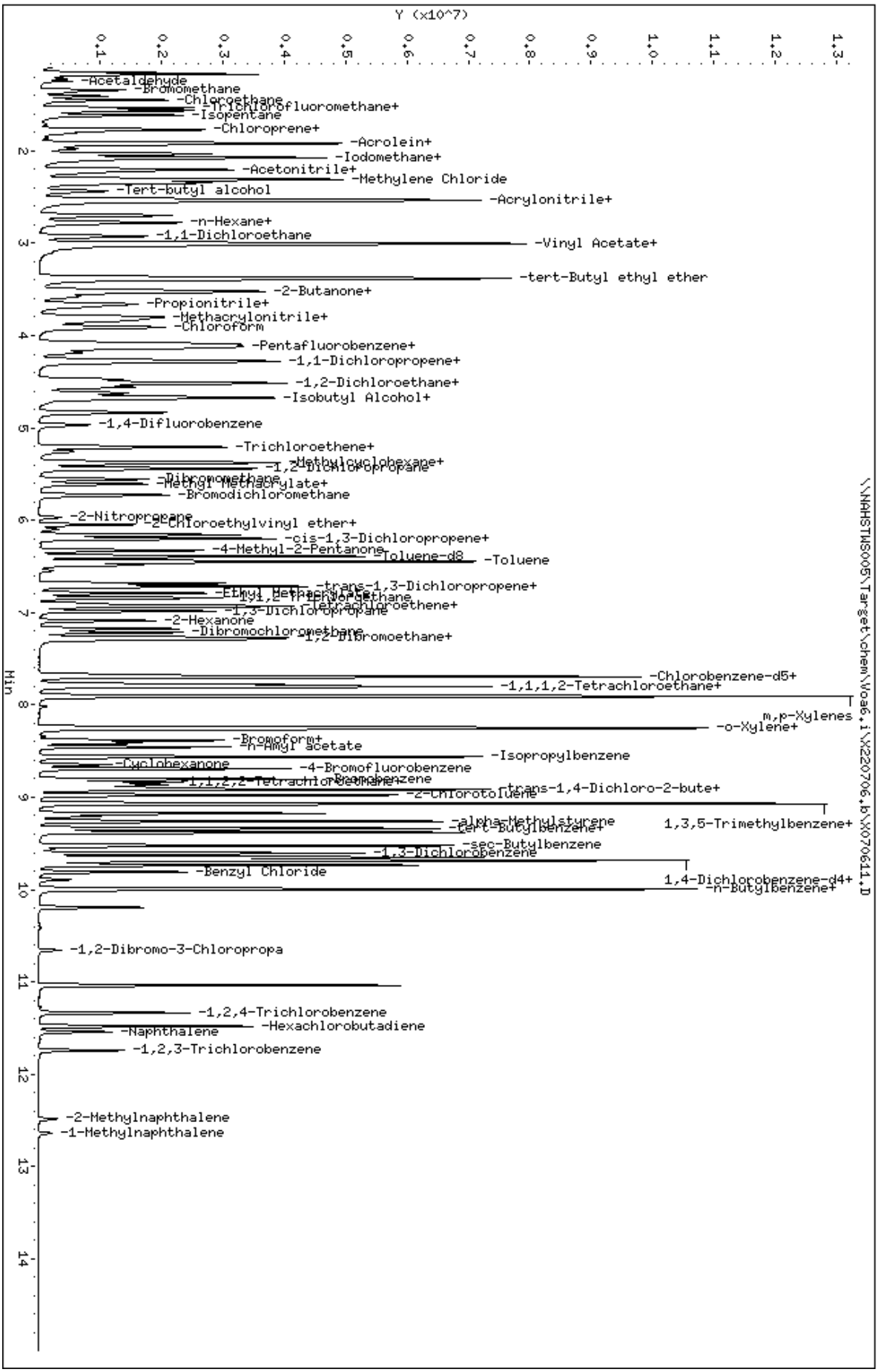
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	529767	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	697056	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	640107	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	304695	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	964795	200.000	197.82
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	1105705	200.000	199.72
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.979)	978031	200.000	201.03(A)
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	3093155	200.000	194.59(A)
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	714668	200.000	196.38
11 1,1-Dichloroethene	96	1.917	1.917	(0.458)	957171	200.000	188.86
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	1185784	200.000	205.28(A)
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	1199454	200.000	195.61
17 Methylene Chloride	84	2.307	2.307	(0.551)	1096995	200.000	176.54
38 Trichloroethene	130	5.208	5.208	(1.048)	1047757	200.000	200.72(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	1276551	200.000	188.39

QC Flag Legend

A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070611.D
Date : 06-JUL-2022 14:49
Client ID: VSTD200
Sample Info: VSTD200;VSTD200;1;10;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070611.D
Inj Date : 06-JUL-2022 14:49
InstruID : voa6.i
LabSampID : VSTD200

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070614.D Page 1
Report Date: 15-Jul-2022 14:25

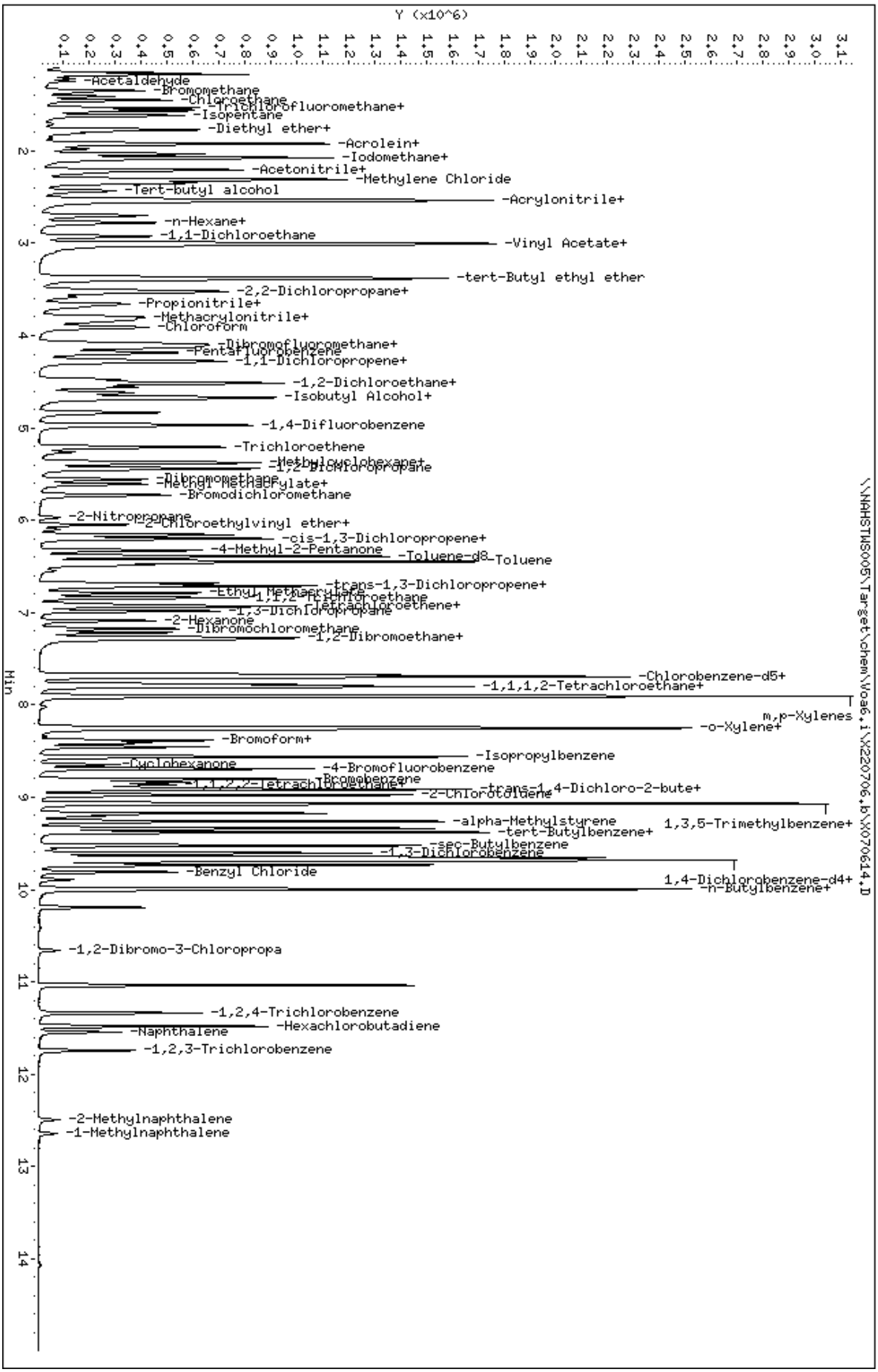
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070614.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 06-JUL-2022 15:52
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;ICV
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 15 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	472913	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	715416	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	649761	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.665	(1.000)	314721	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	219042	49.4414	49.44
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	296009	52.4412	52.44
$ 30 Dibromofluoromethane	113	4.103	4.099	(0.980)	215909	49.4980	49.49
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	831163	51.5130	51.51
53 1,1,2-Trichloroethane	83	6.839	6.843	(0.892)	176990	47.9123	47.91
11 1,1-Dichloroethene	96	1.921	1.917	(0.459)	220172	48.6658	48.66
33 1,2-Dichloroethane	62	4.556	4.560	(0.917)	274800	46.3519	46.35
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	254872	46.5638	46.56
17 Methylene Chloride	84	2.307	2.307	(0.551)	275295	50.0810	50.08
38 Trichloroethene	130	5.209	5.208	(1.048)	250171	46.6962	46.69
5 Vinyl Chloride	62	1.149	1.149	(0.275)	285397	47.1828	47.18



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070614.D
Date : 06-JUL-2022 15:52
Client ID: ICV
Sample Info: CCV;CCV;2;;ICV
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070614.D
Inj Date : 06-JUL-2022 15:52
InstruID : voa6.i
LabSampID : ICV

NO MANUAL INTEGRATIONS

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right partner.

Raw Data VOA6 412360

Volatiles Organics by Method 8260C

Wokorder

HS22070020

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2022

07/20/2022

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070601.D Page 1
Report Date: 07-Jul-2022 10:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070601.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 06-JUL-2022 16:13
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\bfb.m
Meth Date : 14-Jun-2022 12:47 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 16 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.691	8.889	(0.000)	95	119736			0.00- 100.00	100.00
8.691	8.889	(0.000)	50	19688			15.00- 40.00	16.44
8.691	8.889	(0.000)	75	53536			30.00- 60.00	44.71
8.691	8.889	(0.000)	96	8044			5.00- 9.00	6.72
8.691	8.889	(0.000)	173	744			0.00- 2.00	0.78
8.691	8.889	(0.000)	174	94992			50.00- 0.00	79.33
8.691	8.889	(0.000)	175	6958			5.00- 9.00	7.32
8.691	8.889	(0.000)	176	95736			95.00- 101.00	100.78
8.691	8.889	(0.000)	177	5809			5.00- 9.00	6.07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.44
75	30.00 - 60.00% of mass 95	44.71
96	5.00 - 9.00% of mass 95	6.72
173	Less than 2.00% of mass 174	0.62 (0.78)
174	Greater than 50.00% of mass 95	79.33
175	5.00 - 9.00% of mass 174	5.81 (7.32)
176	95.00 - 101.00% of mass 174	79.96 (100.78)
177	5.00 - 9.00% of mass 176	4.85 (6.07)

Data File: Y070601.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 105

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	799	65.00	129	96.90	299	143.90	78
37.10	4874	65.90	115	97.90	282	144.70	76
38.00	4076	67.00	244	103.00	84	145.80	132
39.00	1543	68.00	10638	103.90	343	147.00	107
40.00	900	69.10	11319	104.90	185	147.70	335
41.00	87	69.90	952	105.90	380	148.90	83
42.00	171	72.20	441	107.00	86	149.60	92
43.00	164	73.00	4480	109.10	63	150.10	78
44.10	734	74.00	17136	110.80	95	152.00	72
45.00	679	75.00	53536	114.80	141	152.80	65
46.10	92	76.10	4912	115.90	413	153.90	115
47.10	1560	77.00	582	116.90	714	154.70	209
48.00	729	78.00	1028	117.90	420	156.90	319
49.00	3782	79.00	2419	118.80	561	158.90	119
50.10	19688	79.90	651	127.90	290	160.80	236
51.10	5626	80.90	2148	128.80	207	170.20	139
52.00	247	82.00	454	129.70	356	172.90	744
52.80	90	83.10	99	130.80	116	174.00	94992
55.00	458	85.60	75	133.90	56	175.00	6958
56.10	1276	87.00	5392	134.80	104	175.90	95736
57.00	2445	88.00	5705	135.00	105	176.90	5809
58.10	166	91.00	307	136.70	130	177.90	286
60.10	979	92.00	2719	139.20	62	186.00	269
61.00	4478	93.00	4281	140.10	112	261.90	120
62.00	4497	94.00	12569	140.90	916		
63.10	3369	95.00	119736	141.90	215		
64.00	336	96.10	8044	142.90	881		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070601.D Page 1

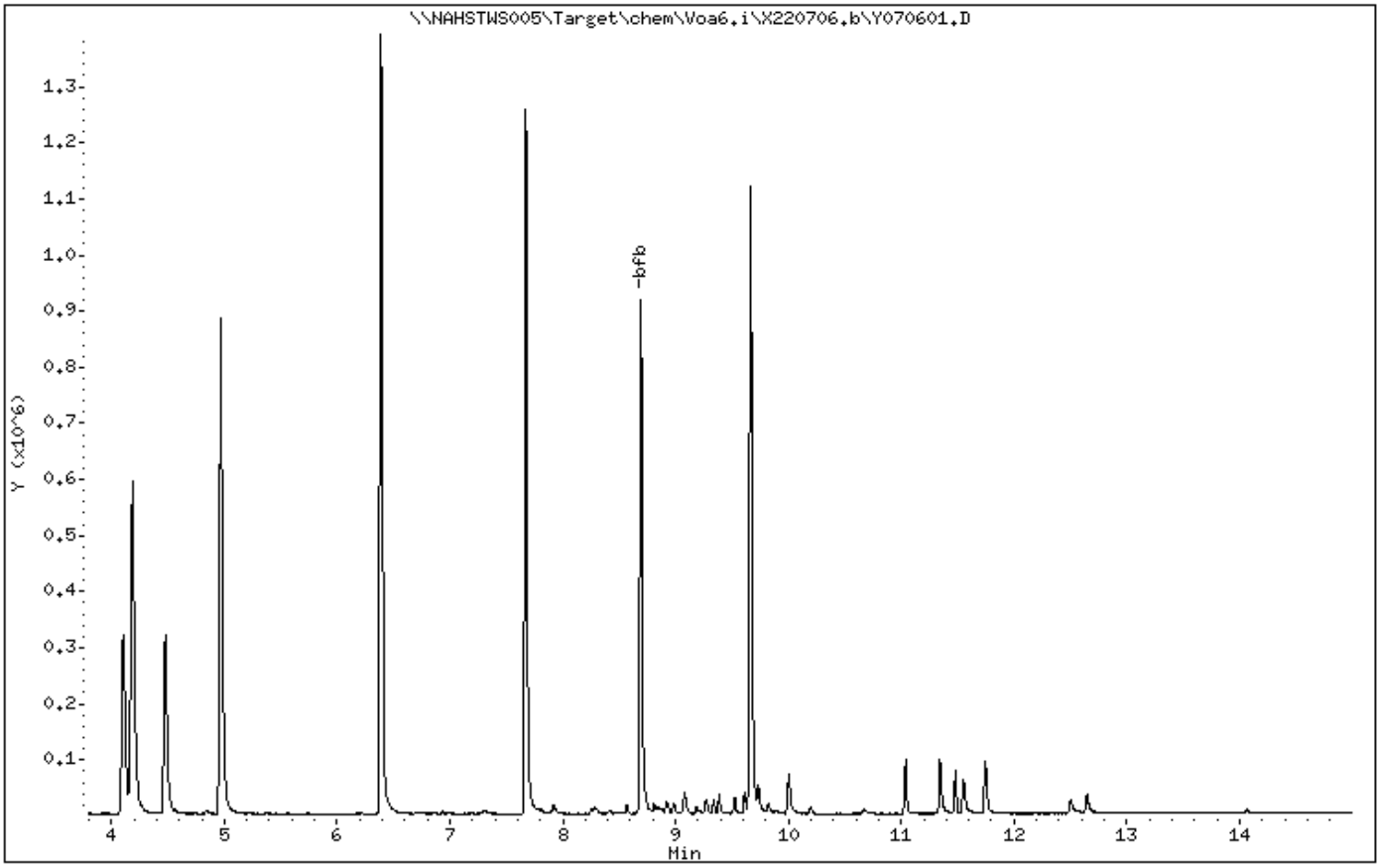
Date : 06-JUL-2022 16:13

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070601.D Page 2

Date : 06-JUL-2022 16:13

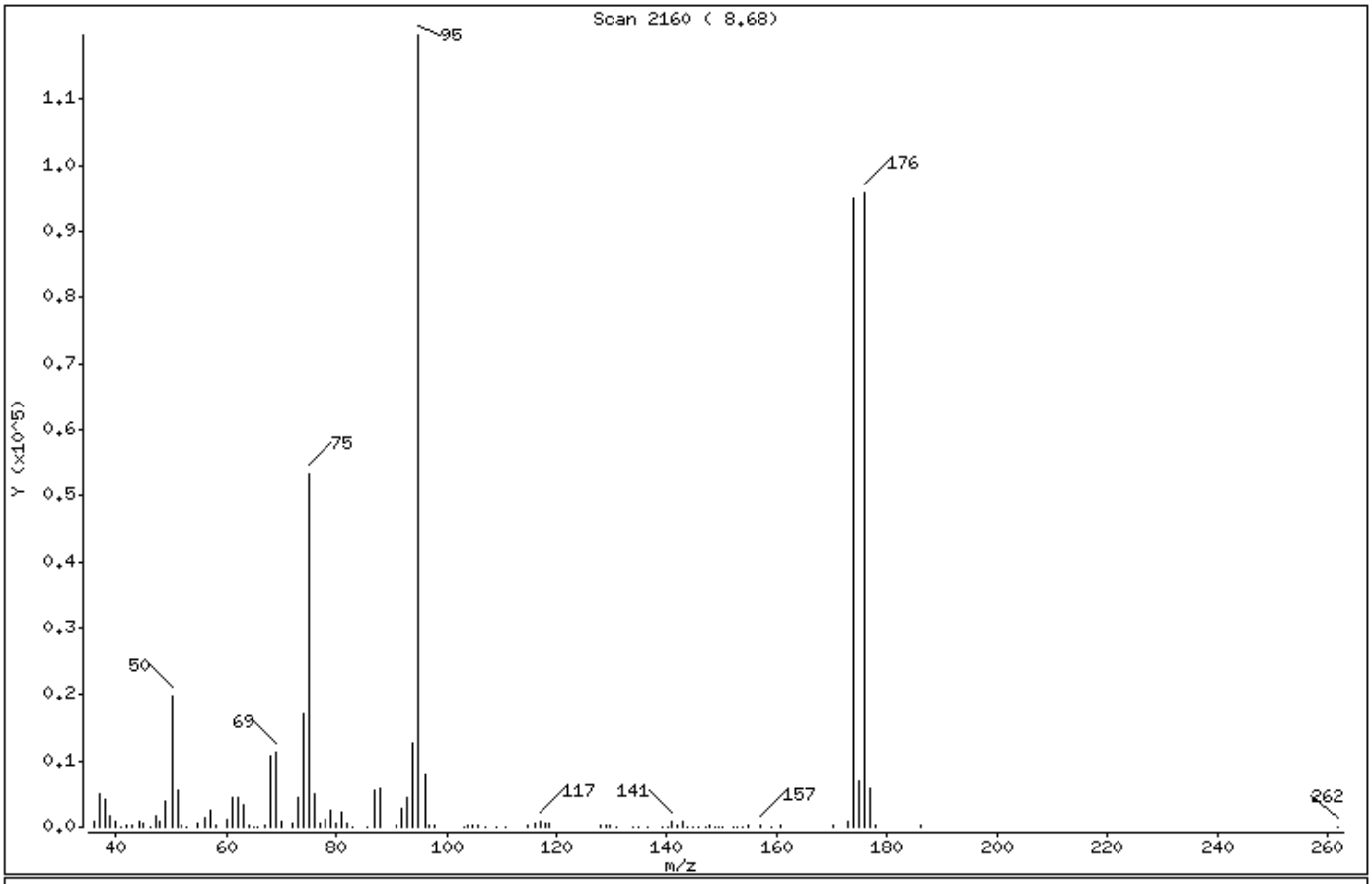
Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.44
75	30.00 - 60.00% of mass 95	44.71
96	5.00 - 9.00% of mass 95	6.72
173	Less than 2.00% of mass 174	0.62 (0.78)
174	Greater than 50.00% of mass 95	79.33
175	5.00 - 9.00% of mass 174	5.81 (7.32)
176	95.00 - 101.00% of mass 174	79.96 (100.78)
177	5.00 - 9.00% of mass 176	4.85 (6.07)

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070601.D

Date : 06-JUL-2022 16:13

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

Data File: Y070601.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 105

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	799	65.00	129	96.90	299	143.90	78
37.10	4874	65.90	115	97.90	282	144.70	76
38.00	4076	67.00	244	103.00	84	145.80	132
39.00	1543	68.00	10638	103.90	343	147.00	107
40.00	900	69.10	11319	104.90	185	147.70	335
41.00	87	69.90	952	105.90	380	148.90	83
42.00	171	72.20	441	107.00	86	149.60	92
43.00	164	73.00	4480	109.10	63	150.10	78
44.10	734	74.00	17136	110.80	95	152.00	72
45.00	679	75.00	53536	114.80	141	152.80	65
46.10	92	76.10	4912	115.90	413	153.90	115
47.10	1560	77.00	582	116.90	714	154.70	209
48.00	729	78.00	1028	117.90	420	156.90	319
49.00	3782	79.00	2419	118.80	561	158.90	119
50.10	19688	79.90	651	127.90	290	160.80	236
51.10	5626	80.90	2148	128.80	207	170.20	139
52.00	247	82.00	454	129.70	356	172.90	744
52.80	90	83.10	99	130.80	116	174.00	94992
55.00	458	85.60	75	133.90	56	175.00	6958
56.10	1276	87.00	5392	134.80	104	175.90	95736
57.00	2445	88.00	5705	135.00	105	176.90	5809
58.10	166	91.00	307	136.70	130	177.90	286
60.10	979	92.00	2719	139.20	62	186.00	269
61.00	4478	93.00	4281	140.10	112	261.90	120
62.00	4497	94.00	12569	140.90	916		
63.10	3369	95.00	119736	141.90	215		
64.00	336	96.10	8044	142.90	881		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070603.D Page 1
Report Date: 15-Jul-2022 14:30

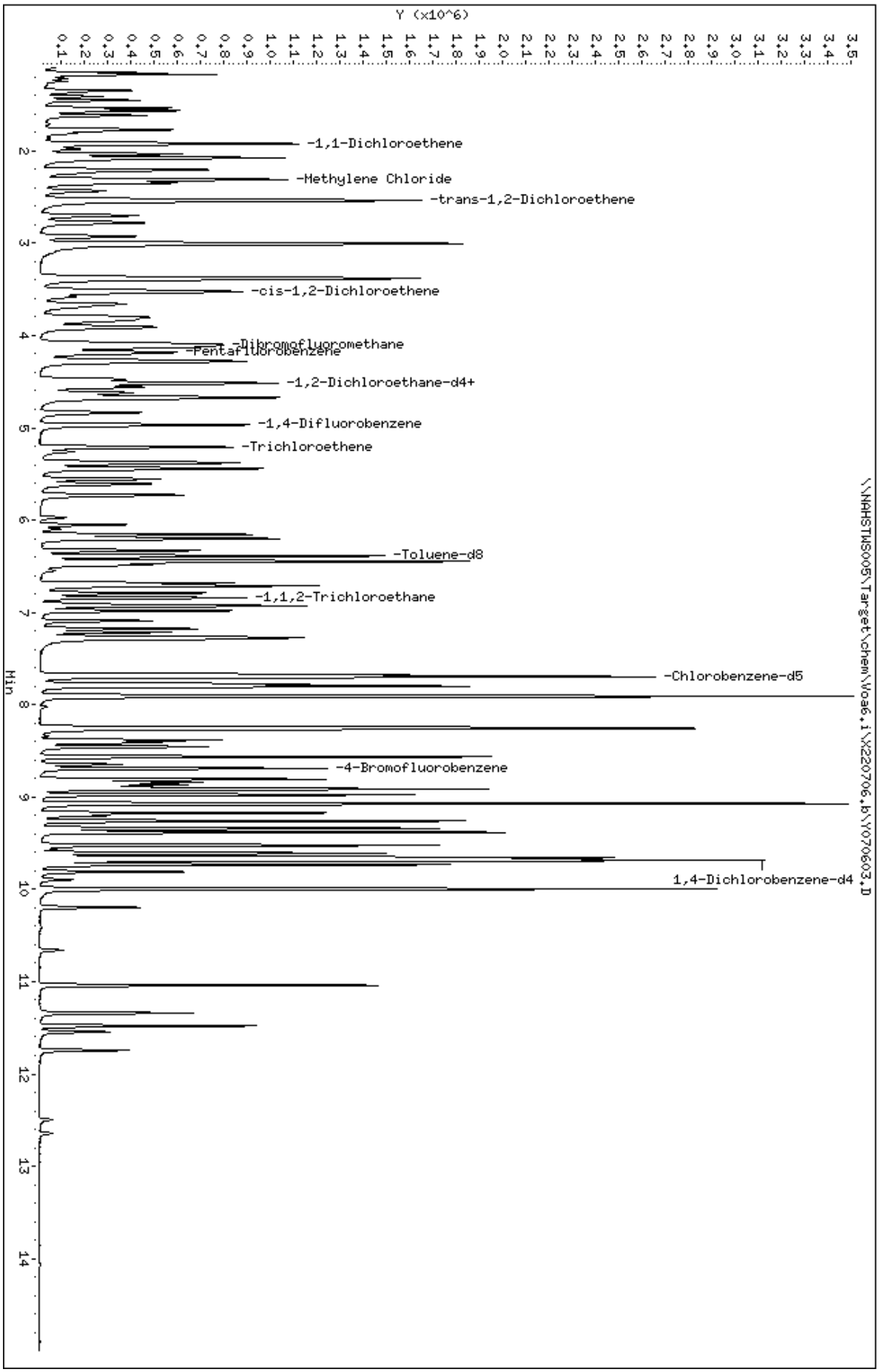
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070603.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 06-JUL-2022 16:55
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	502697	50.0000	
*	36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	768128	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	719712	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	350847	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	272243	50.0000	58.00
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	326188	50.0000	52.16
$	30 Dibromofluoromethane	113	4.103	4.103	(0.980)	249357	50.0000	53.80
$	48 Toluene-d8	98	6.389	6.389	(0.833)	885560	50.0000	49.54
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	199777	50.0000	48.82
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	207433	50.0000	43.13
	33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	358590	50.0000	56.33
	27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	283481	50.0000	48.72
	17 Methylene Chloride	84	2.311	2.311	(0.552)	263785	50.0000	45.20
	38 Trichloroethene	130	5.208	5.208	(1.048)	281173	50.0000	48.88
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	261313	50.0000	40.64



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220706.b\Y070603.D
Date : 06-JUL-2022 16:55
Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070603.D
Inj Date : 06-JUL-2022 16:55
InstruID : voa6.i
LabSampID : CCV

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070604.D Page 1
Report Date: 07-Jul-2022 10:49

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Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070604.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 06-JUL-2022 17:16
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220706.b\8260W.m
Meth Date : 07-Jul-2022 10:49 pcabasca Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	595769	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	269281	49.0004	49.00
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	291824	52.3535	52.35
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	861996	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	746167	50.0000	
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	995868	53.7465	53.74
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	329483	50.8201	50.82
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	327153	50.0000	
17 Methylene Chloride	84	2.315	2.311	(0.553)	7543	1.70112	1.70(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070605.D Page 1
Report Date: 15-Jul-2022 14:30

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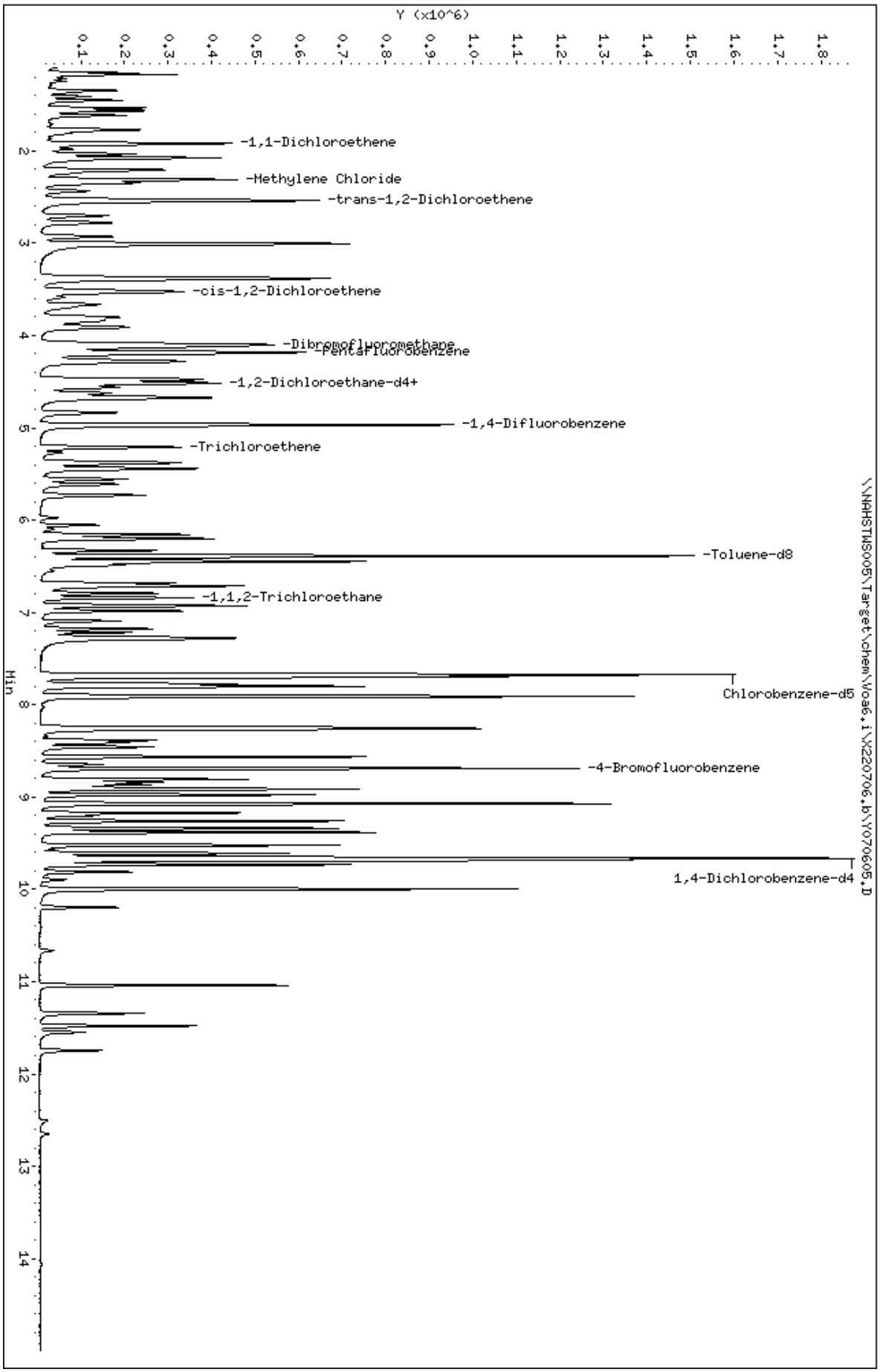
Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070605.D
Lab Smp Id: VLCSW-220706 Client Smp ID: VLCSW-220706
Inj Date : 06-JUL-2022 17:37
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-220706;VLCSW-220706;3;;LCS
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 19 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	529254	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	811904	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	759938	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.666	(1.000)	364410	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	280674	56.7779	56.77
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	340705	51.6035	51.60
$ 30 Dibromofluoromethane	113	4.106	4.103	(0.981)	259125	53.1025	53.10
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	931746	49.3746	49.37
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	80049	18.5280	18.52
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	82891	16.3714	16.37
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	141135	20.9768	20.97
27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	113420	18.5154	18.51
17 Methylene Chloride	84	2.311	2.311	(0.552)	109690	18.2331	18.23
38 Trichloroethene	130	5.212	5.208	(1.049)	112807	18.5539	18.55
5 Vinyl Chloride	62	1.149	1.149	(0.275)	105567	15.5948	15.59



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070605.D
Date : 06-JUL-2022 17:37
Client ID: VLCSW-220706
Sample Info: VLCSW-220706;VLCSW-220706;3;;LCS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Page 1

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070605.D
Inj Date : 06-JUL-2022 17:37
InstruID : voa6.i
LabSampID : VLCSW-220706

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070608.D Page 1
Report Date: 15-Jul-2022 14:30

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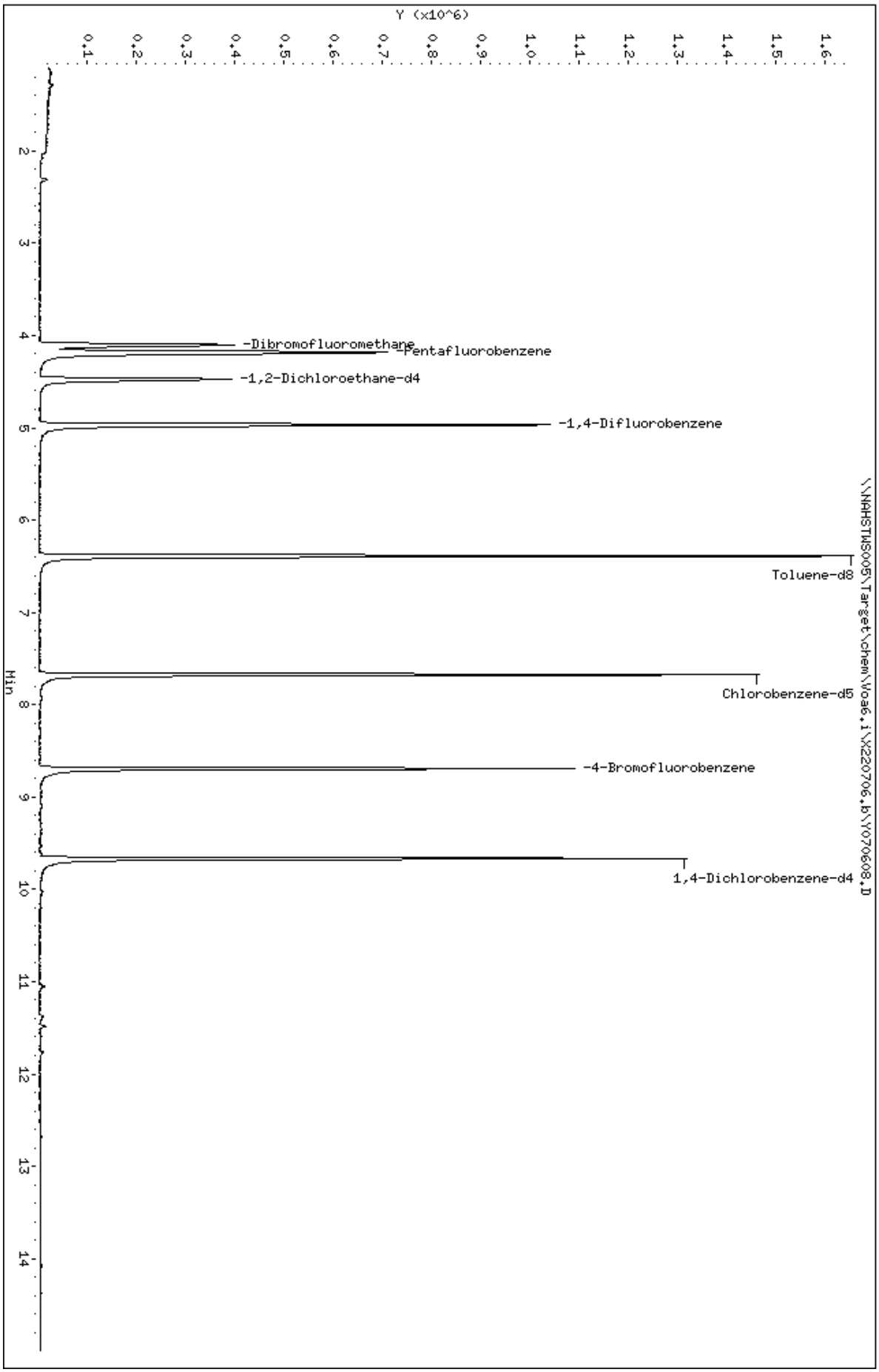
Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070608.D
Lab Smp Id: VBLKW-220706 Client Smp ID: VBLKW-220706
Inj Date : 06-JUL-2022 18:40
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-220706;VBLKW-220706;3;;BLANK
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 22 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	638197	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	914598	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	789897	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.666	(1.000)	356188	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	299182	50.0551	50.05
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	350982	51.1411	51.14
$ 30 Dibromofluoromethane	113	4.102	4.103	(0.980)	284763	48.3690	48.36
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1062048	54.1449	54.14



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220706.b\Y070608.D
Date : 06-JUL-2022 18:40
Client ID: VBLKW-220706
Sample Info: VBLKW-220706;VBLKW-220706;3;;BLANK
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070608.D
Inj Date : 06-JUL-2022 18:40
InstruID : voa6.i
LabSampID : VBLKW-220706

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070609.D Page 1
Report Date: 15-Jul-2022 14:30

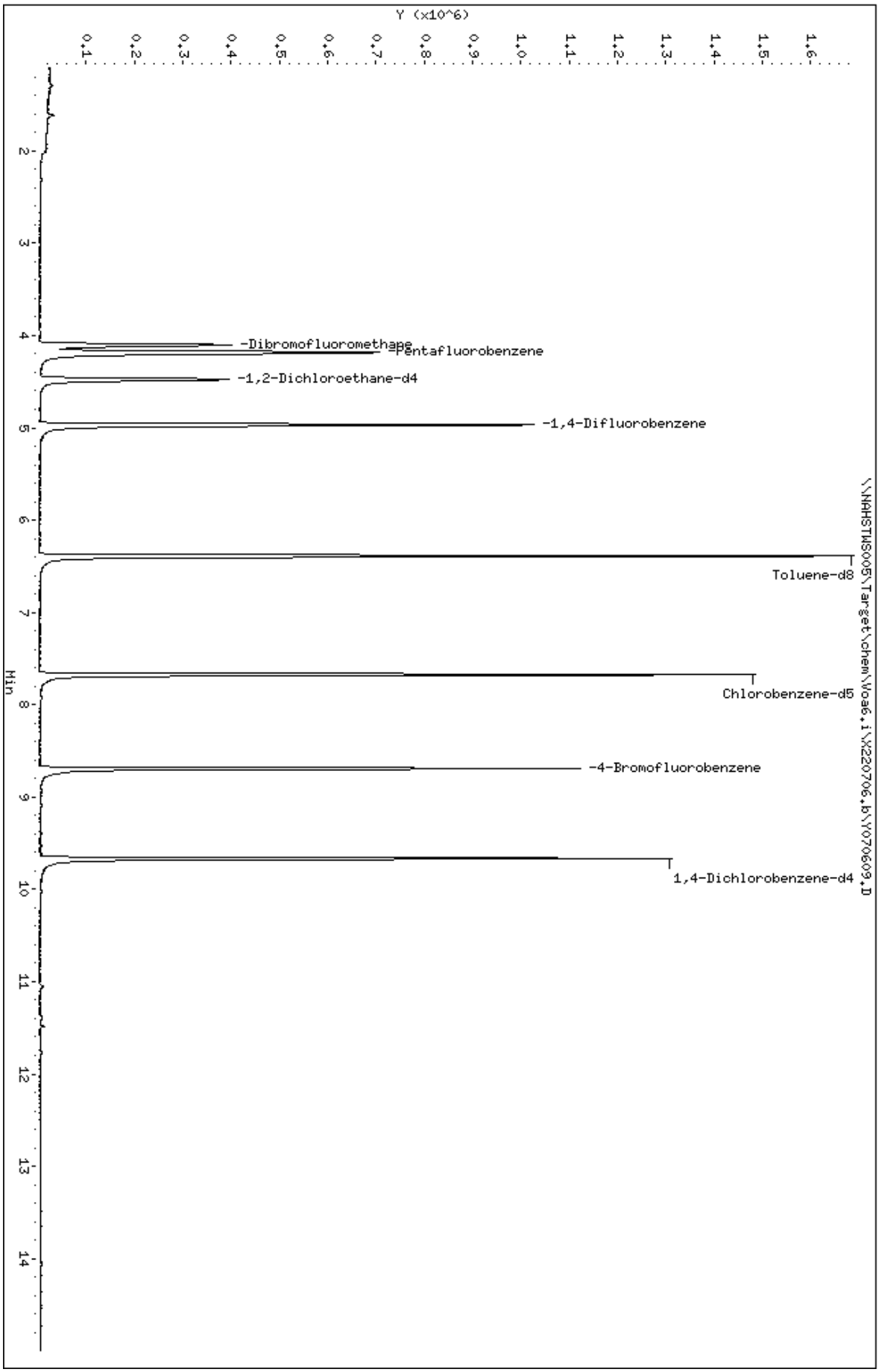
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070609.D
Lab Smp Id: HS22070020-10 Client Smp ID: HS22070020-10
Inj Date : 06-JUL-2022 19:01
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-10;HS22070020-10;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	638633	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	912079	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	792820	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	355106	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	298639	49.9272	49.92
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	352911	51.2331	51.23
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	287096	48.7342	48.73
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1070160	54.3574	54.35



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070609.D
Date : 06-JUL-2022 19:01
Client ID: HS220700020-10
Sample Info: HS220700020-10;HS220700020-10;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070609.D
Inj Date : 06-JUL-2022 19:01
InstruID : voa6.i
LabSampID : HS22070020-10

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070612.D Page 1
Report Date: 15-Jul-2022 14:30

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070612.D
Lab Smp Id: HS22070020-08 Client Smp ID: HS22070020-08
Inj Date : 06-JUL-2022 20:05
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-08;HS22070020-08;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

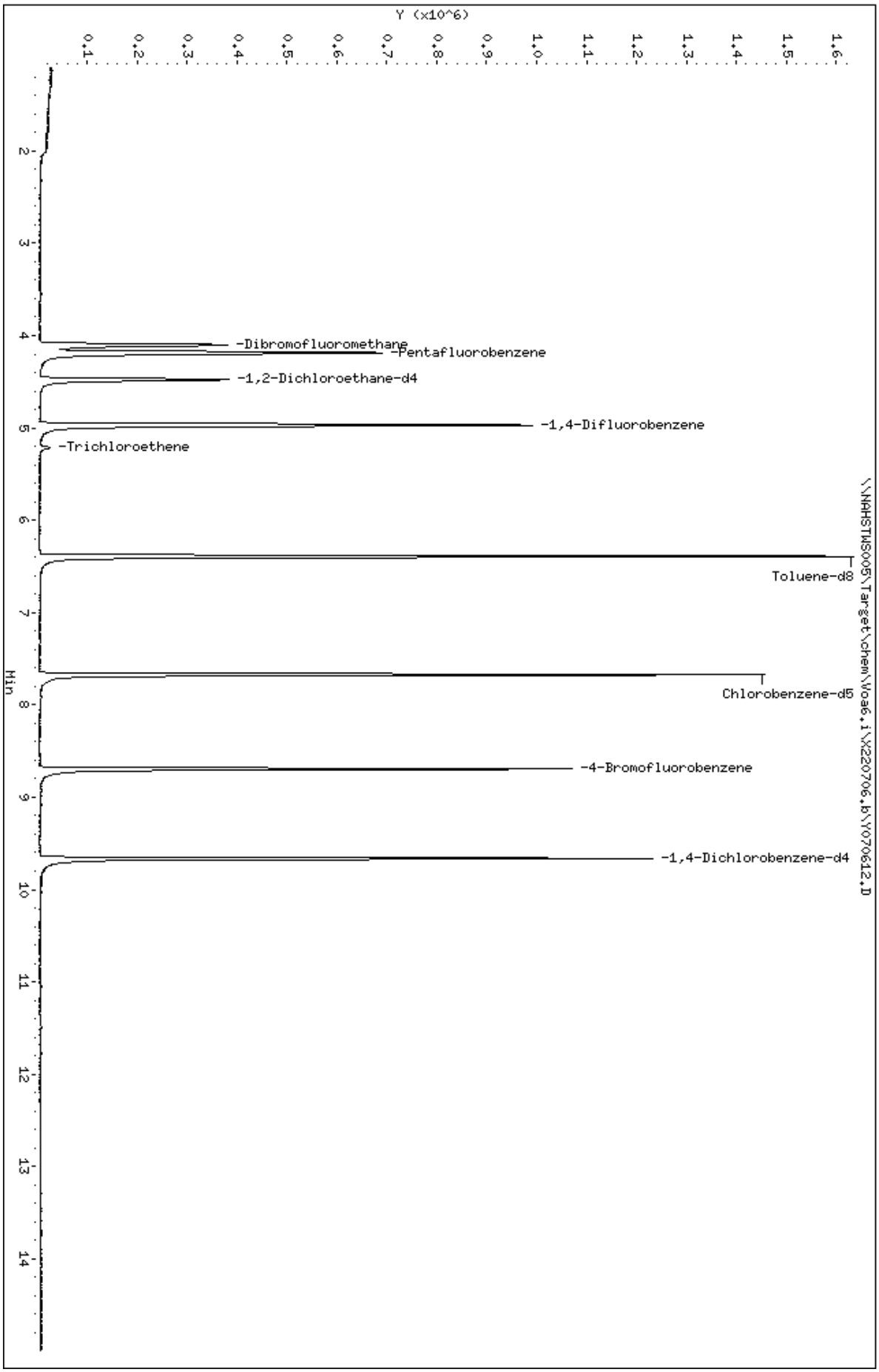
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	610291	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	858443	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	759657	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	326806	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.478	4.474	(1.070)	288722	50.5245	50.52
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	340889	51.6508	51.65
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	274306	48.7255	48.72
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1034058	54.8165	54.81
38 Trichloroethene	130	5.216	5.208	(1.050)	8442	1.31322	1.31(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070612.D
Date : 06-JUL-2022 20:05
Client ID: HS220700Z0-08
Sample Info: HS220700Z0-08;HS220700Z0-08;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070612.D Page 2

Date : 06-JUL-2022 20:05

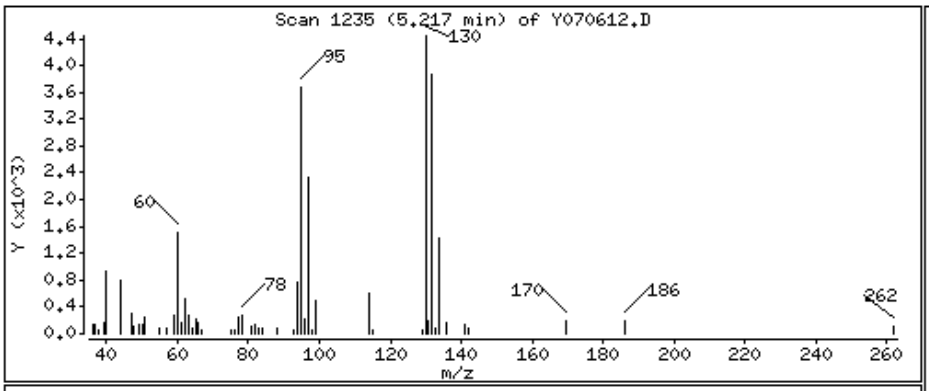
Client ID: HS22070020-08 Instrument: voa6.i

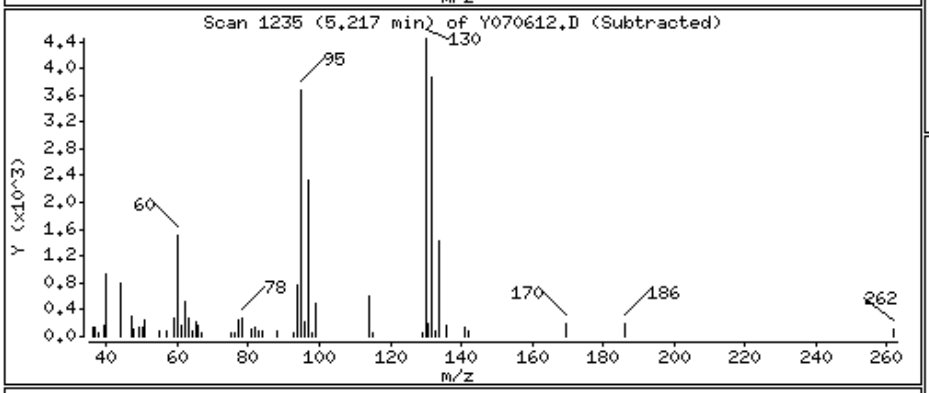
Sample Info: HS22070020-08;HS22070020-08;;;

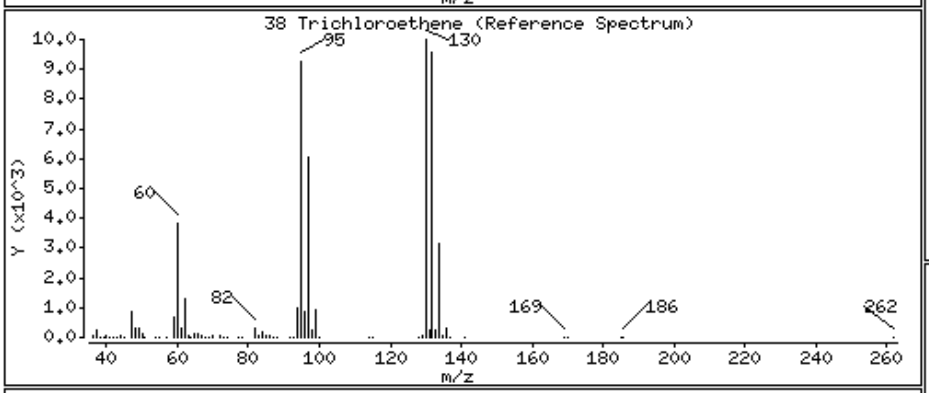
Purge Volume: 5.0 Operator: PC

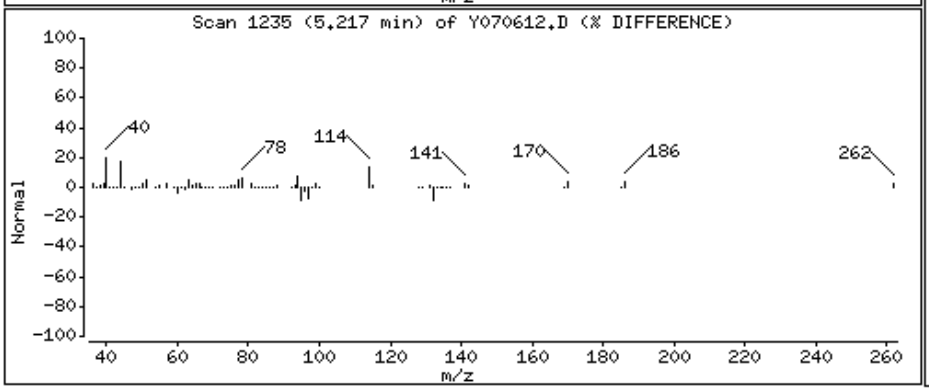
Column phase: DB624 Column diameter: 0.18

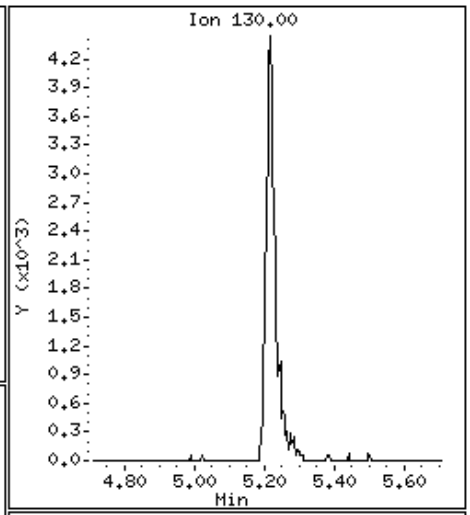
38 Trichloroethene Concentration: 1.31 ug/l

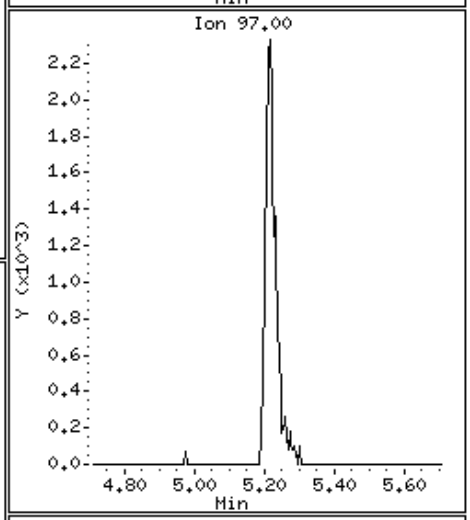


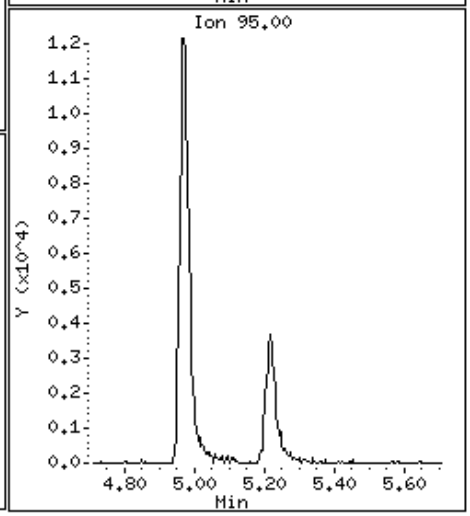












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070612.D
Inj Date : 06-JUL-2022 20:05
InstruID : voa6.i
LabSampID : HS22070020-08

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070613.D Page 1
Report Date: 15-Jul-2022 14:30

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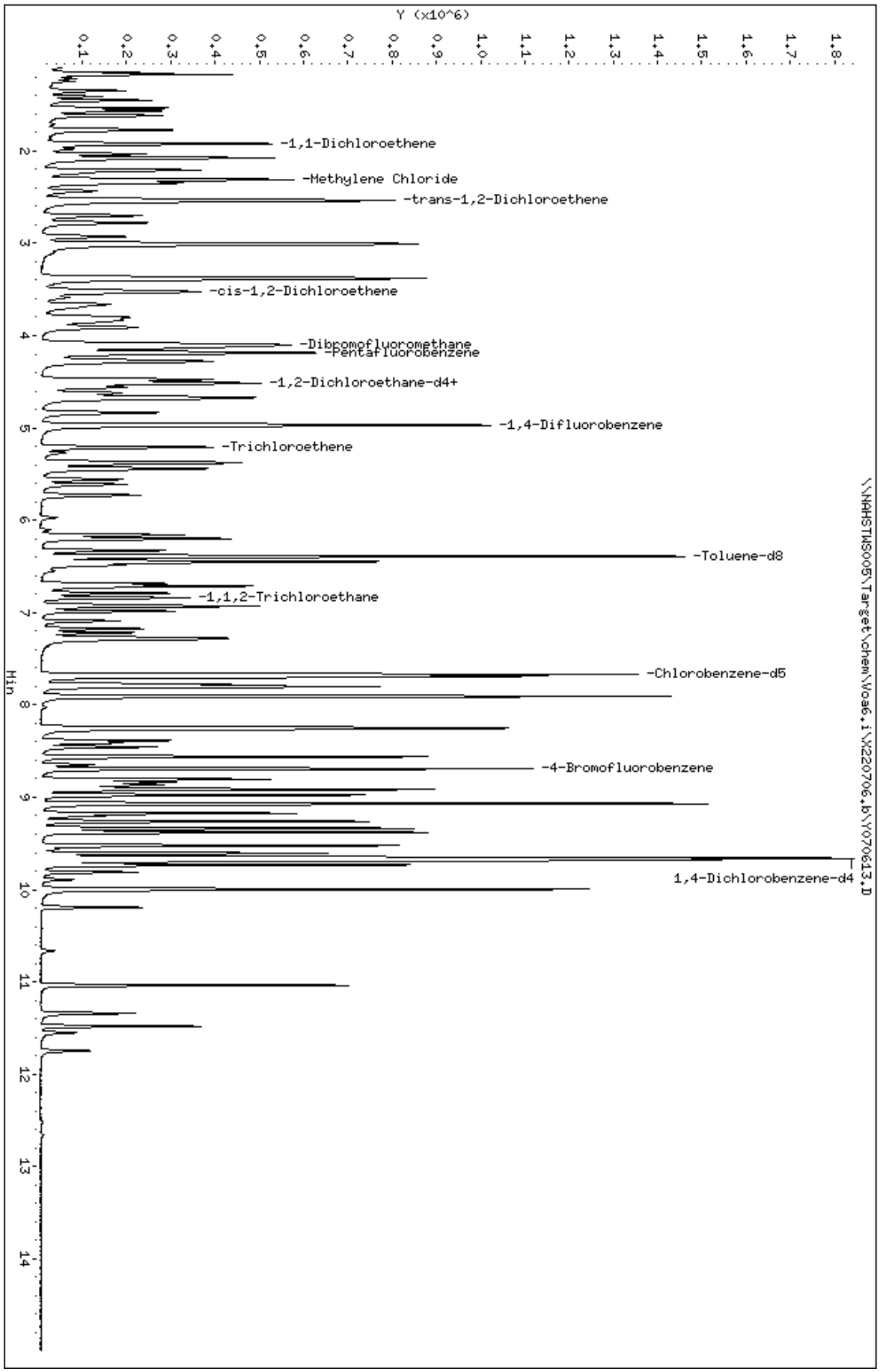
Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070613.D
Lab Smp Id: HS22070020-08MS Client Smp ID: HS22070020-08MS
Inj Date : 06-JUL-2022 20:26
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-08MS;HS22070020-08MS;3;;MS
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 27 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	557092	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	858636	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	665533	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	355703	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	280934	53.9333	53.93
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	320423	55.4390	55.43
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	254063	49.4435	49.44
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	911649	55.1623	55.16
53 1,1,2-Trichloroethane	83	6.843	6.839	(0.892)	76863	20.3142	20.31
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	100142	18.7902	18.79
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	145430	20.4388	20.43
27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	127108	19.7131	19.71
17 Methylene Chloride	84	2.311	2.311	(0.552)	119512	18.8511	18.85
38 Trichloroethene	130	5.209	5.208	(1.048)	136331	21.2026	21.20
5 Vinyl Chloride	62	1.149	1.149	(0.275)	136252	19.1219	19.12



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070613.D
Date : 06-JUL-2022 20:26
Client ID: HS22070020-08HS
Sample Info: HS22070020-08HS;HS22070020-08HS;3;;MS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070613.D
Inj Date : 06-JUL-2022 20:26
InstruID : voa6.i
LabSampID : HS22070020-08MS

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070614.D Page 1
Report Date: 15-Jul-2022 14:31

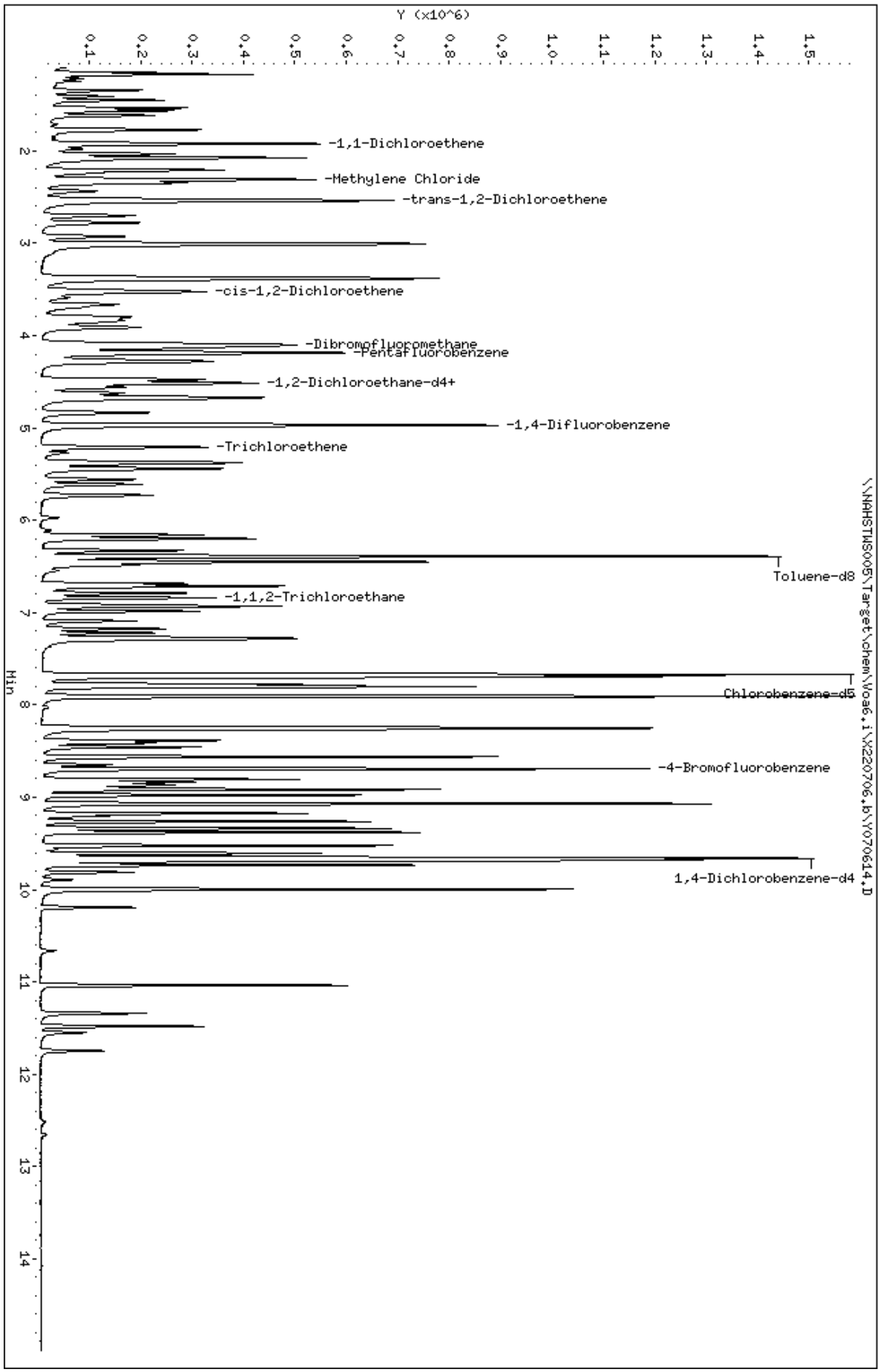
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070614.D
Lab Smp Id: HS22070020-08MSD Client Smp ID: HS22070020-08MSD
Inj Date : 06-JUL-2022 20:47
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-08MSD;HS22070020-08MSD;3;;MSD
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 27 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	533586	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	759776	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	760309	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	306381	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	231411	46.2196	46.21
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	340542	51.5534	51.55
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	229707	46.6566	46.65
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	895921	47.4530	47.45
53 1,1,2-Trichloroethane	83	6.843	6.839	(0.892)	78505	18.1618	18.16
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	104450	20.4619	20.46
33 1,2-Dichloroethane	62	4.564	4.560	(0.919)	122530	19.4611	19.46
27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	112951	18.2892	18.28
17 Methylene Chloride	84	2.307	2.311	(0.551)	114129	18.7969	18.79
38 Trichloroethene	130	5.212	5.208	(1.049)	116940	20.5532	20.55
5 Vinyl Chloride	62	1.149	1.149	(0.275)	132818	19.4611	19.46



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070614.D
Date : 06-JUL-2022 20:47
Client ID: HS220700 20-08HSD
Sample Info: HS220700 20-08HSD;HS220700 20-08HSD;3;;HSD
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Page 1

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070614.D
Inj Date : 06-JUL-2022 20:47
InstruID : voa6.i
LabSampID : HS22070020-08MSD

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070617.D Page 1
Report Date: 15-Jul-2022 14:31

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070617.D
Lab Smp Id: HS22070020-05 Client Smp ID: HS22070020-05
Inj Date : 06-JUL-2022 21:50
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-05;HS22070020-05;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

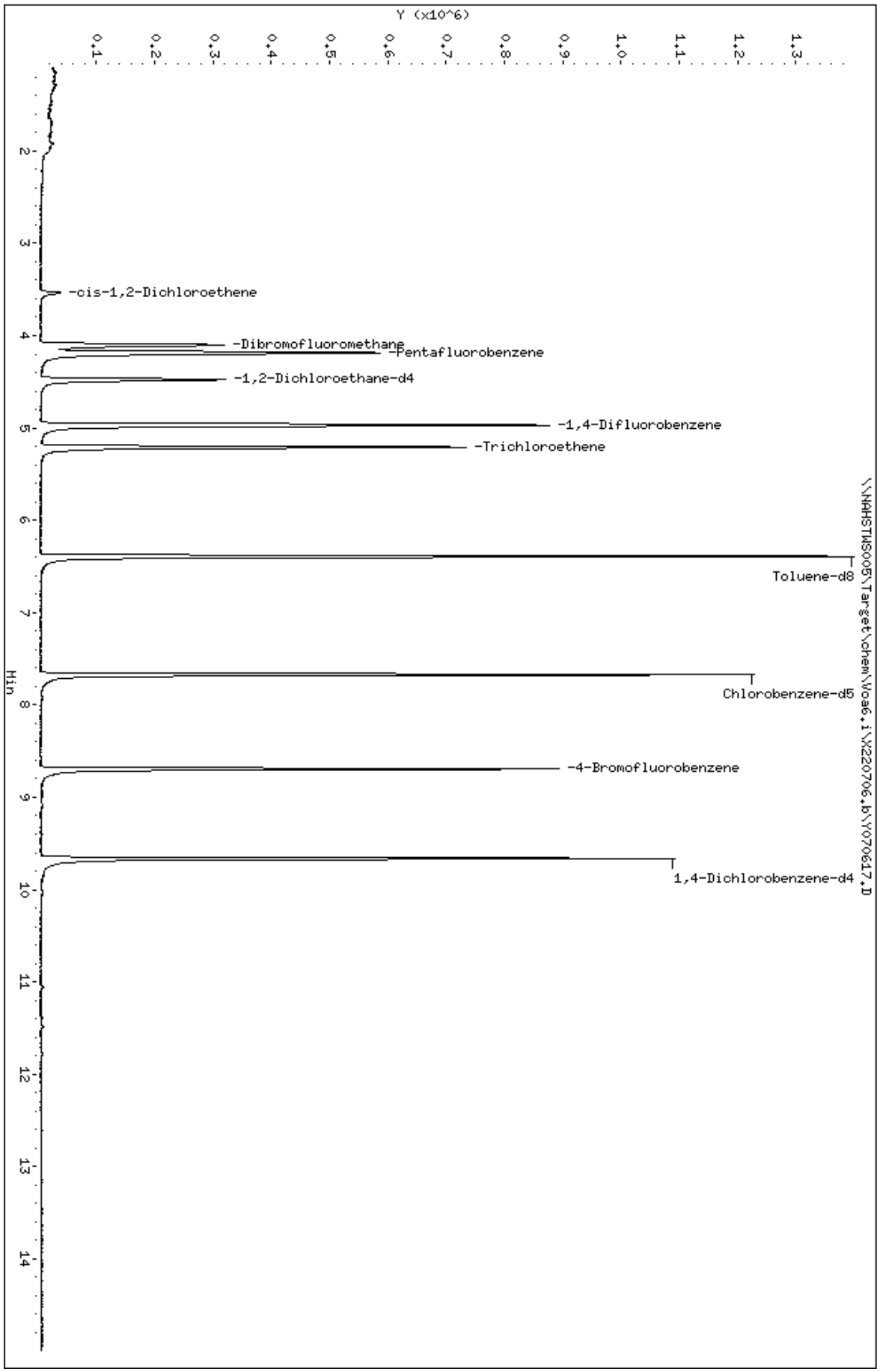
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	533388	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	765454	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	661370	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	300581	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	232647	46.4904	46.49
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	293975	51.1590	51.15
$ 30 Dibromofluoromethane	113	4.106	4.103	(0.981)	228760	46.4804	46.48
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	908296	55.3053	55.30
27 cis-1,2-Dichloroethene	96	3.540	3.533	(0.846)	20372	3.29988	3.29(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	256973	44.8303	44.83

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070617.D
Date : 06-JUL-2022 21:50
Client ID: HS220700Z0-05
Sample Info: HS220700Z0-05;HS220700Z0-05;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070617.D Page 2

Date : 06-JUL-2022 21:50

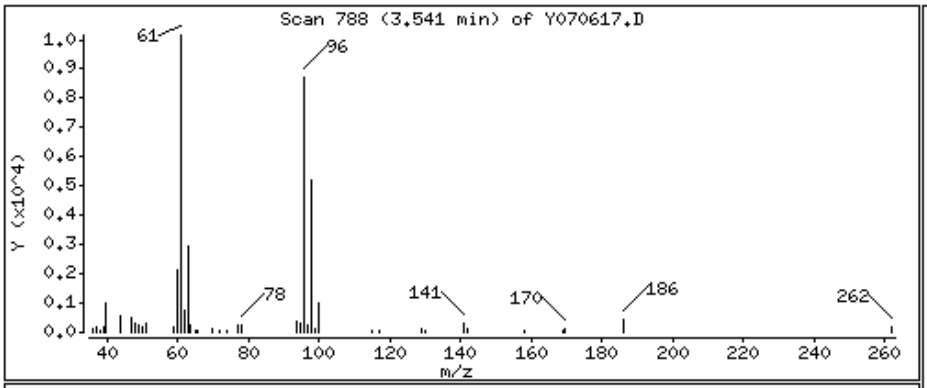
Client ID: HS22070020-05 Instrument: voa6.i

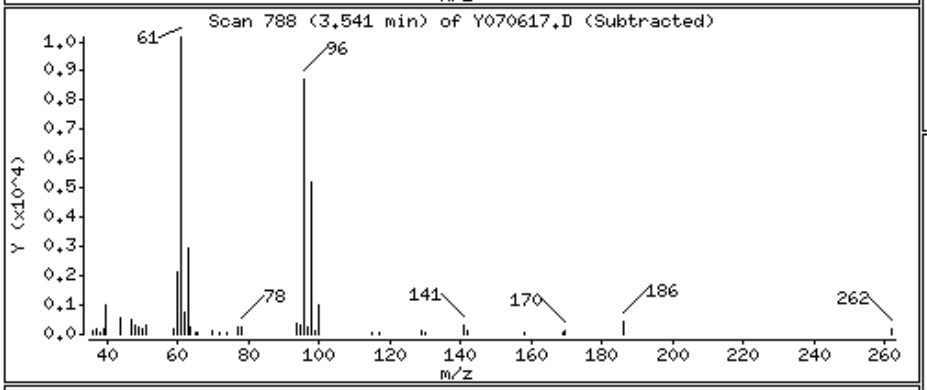
Sample Info: HS22070020-05;HS22070020-05;;;

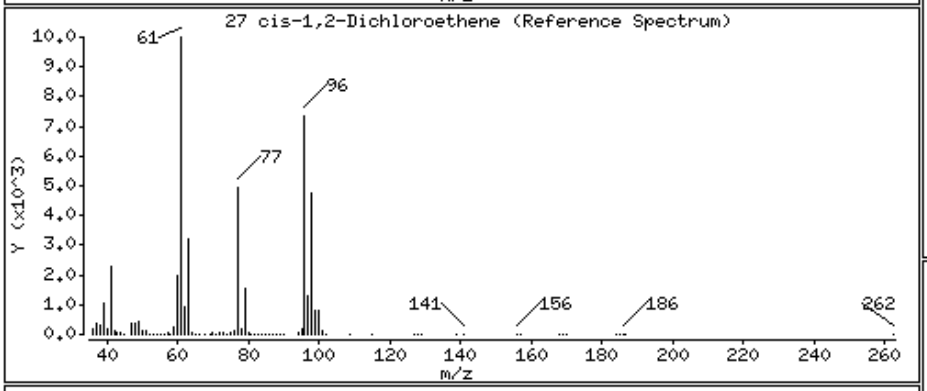
Purge Volume: 5.0 Operator: PC

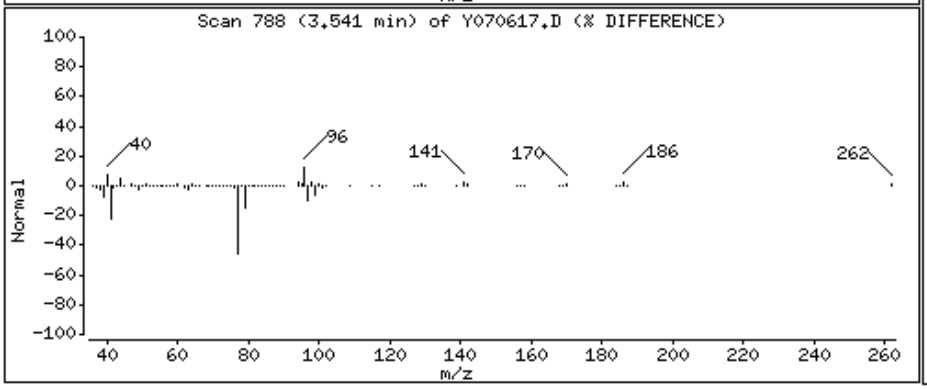
Column phase: DB624 Column diameter: 0.18

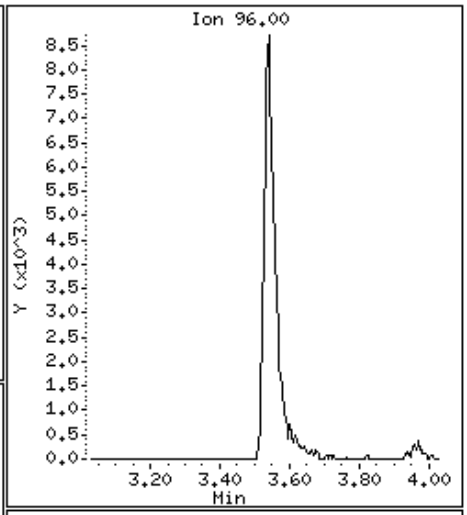
27 cis-1,2-Dichloroethene Concentration: 3.29 ug/l

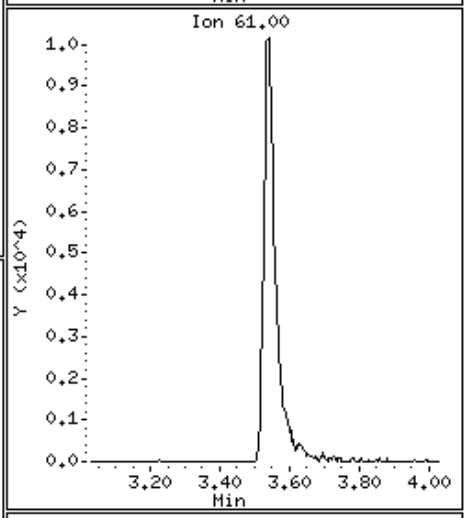


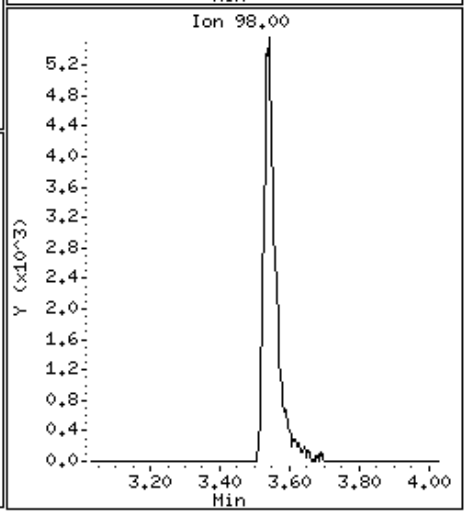












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070617.D Page 3

Date : 06-JUL-2022 21:50

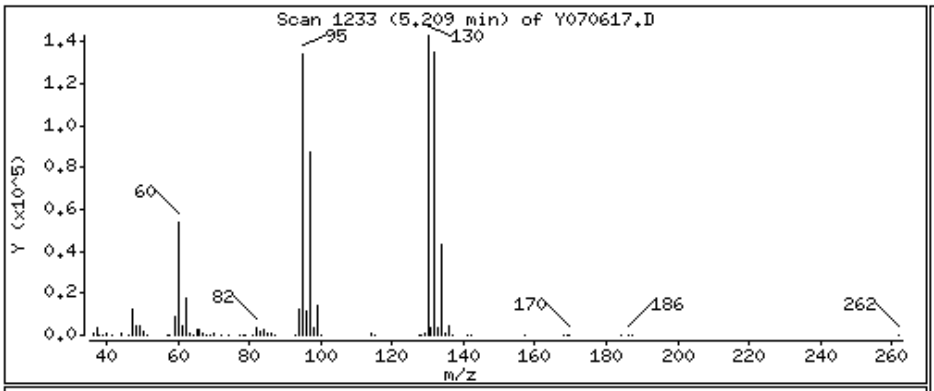
Client ID: HS22070020-05 Instrument: voa6.i

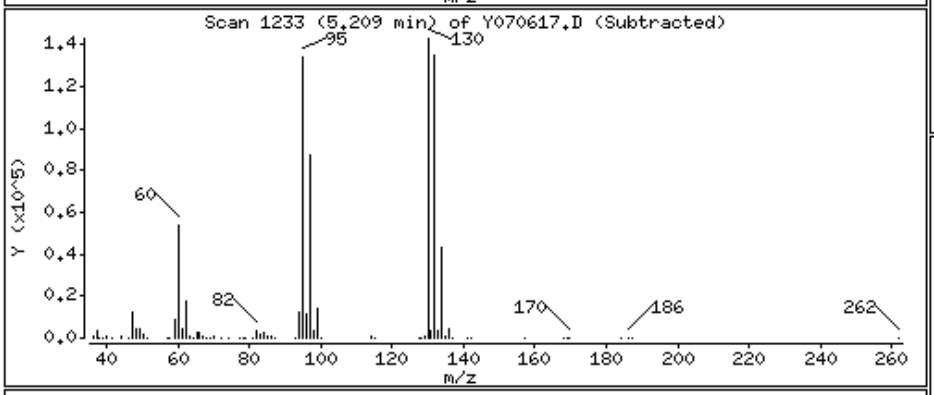
Sample Info: HS22070020-05;HS22070020-05;;;

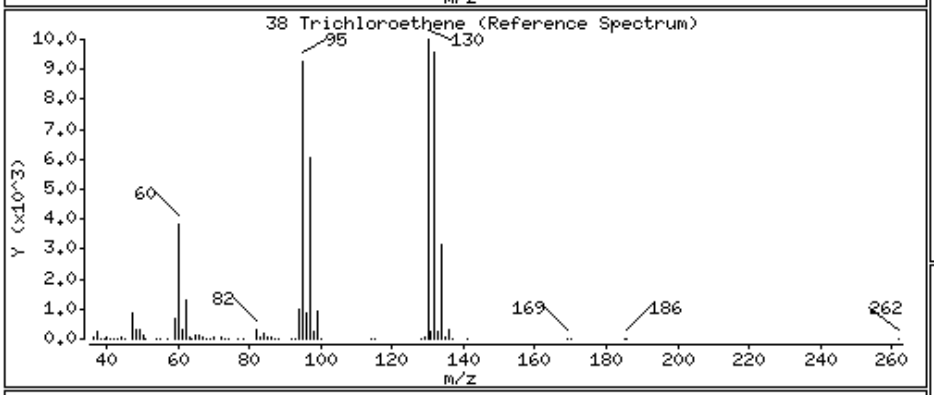
Purge Volume: 5.0 Operator: PC

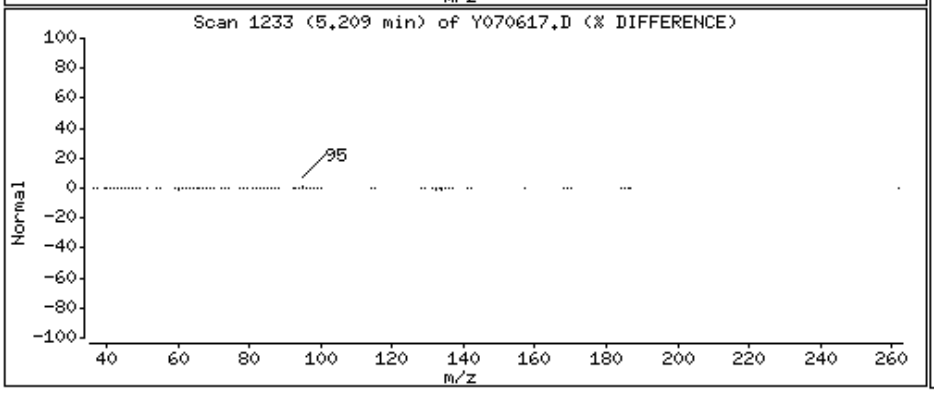
Column phase: DB624 Column diameter: 0.18

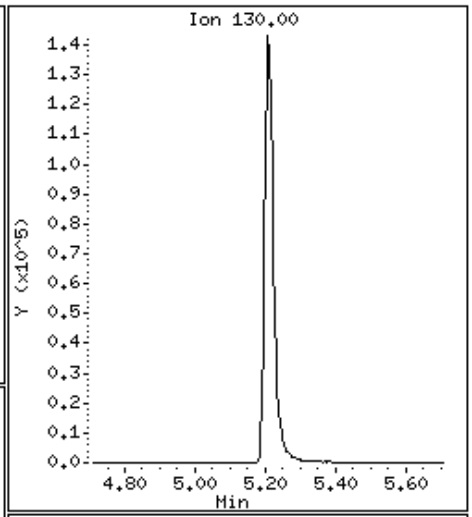
38 Trichloroethene Concentration: 44.83 ug/l

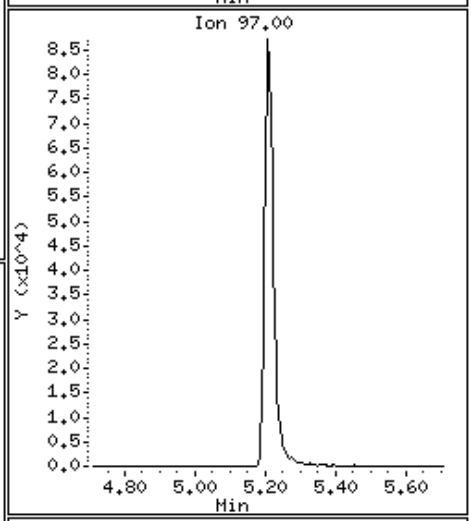


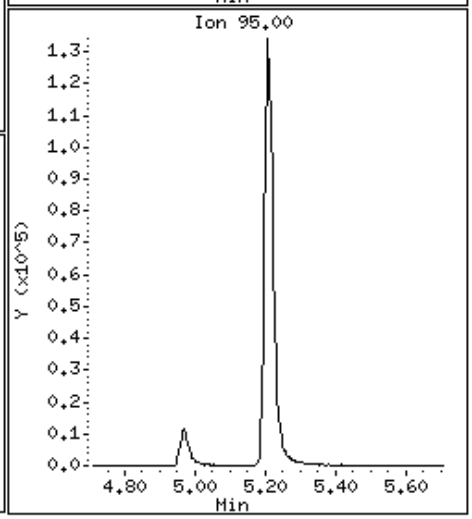












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070617.D
Inj Date : 06-JUL-2022 21:50
InstruID : voa6.i
LabSampID : HS22070020-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070618.D Page 1
Report Date: 15-Jul-2022 14:31

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Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070618.D
Lab Smp Id: HS22070020-06 Client Smp ID: HS22070020-06
Inj Date : 06-JUL-2022 22:11
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-06;HS22070020-06;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 31
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

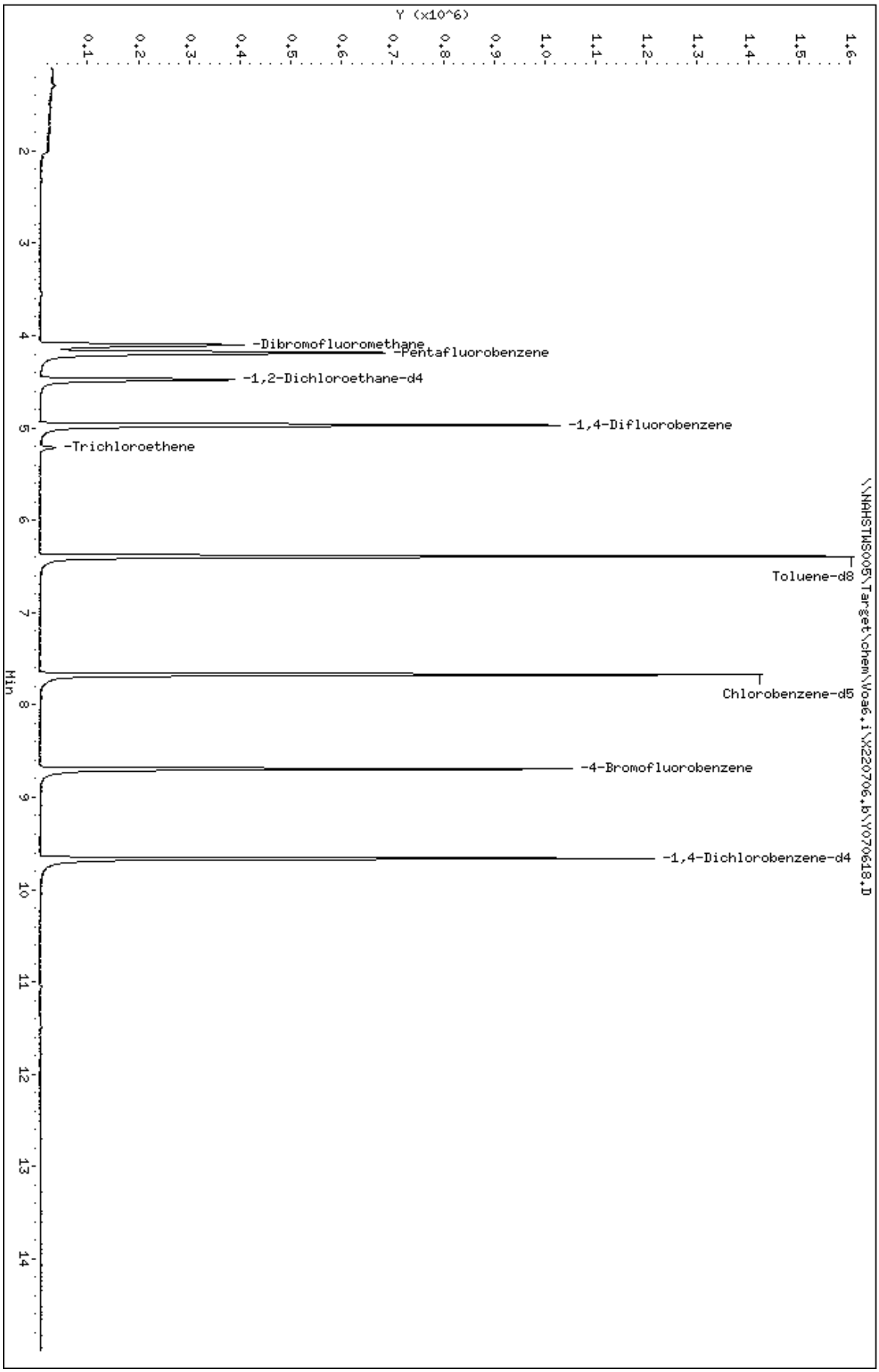
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	614536	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	889198	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	762824	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	328129	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	302524	52.6215	52.62
$ 69 4-Bromofluorobenzene	95	8.695	8.691	(1.133)	334226	50.4236	50.42
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	282463	49.8344	49.83
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1022655	53.9870	53.98
38 Trichloroethene	130	5.212	5.208	(1.049)	11578	1.73875	1.73(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).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Date : 06-JUL-2022 22:11
Client ID: HS220700Z0-06
Sample Info: HS220700Z0-06;HS220700Z0-06;;;
Purge Volume: 5.0
Column phase: DB624
Instrument: voa6.i
Operator: PC
Column diameter: 0.18
Page 1
Y (x10^6)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
2
3
4
5
6
7
8
9
10
11
12
13
14
Min
-Dibromofluoromethane
-Pentafluorobenzene
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene
-Trichloroethene
Toluene-d8
Chlorobenzene-d5
-4-Bromofluorobenzene
-1,4-Dichlorobenzene-d4
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Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070618.D

Date : 06-JUL-2022 22:11

Client ID: HS22070020-06

Instrument: voa6.i

Sample Info: HS22070020-06;HS22070020-06;;;

Purge Volume: 5.0

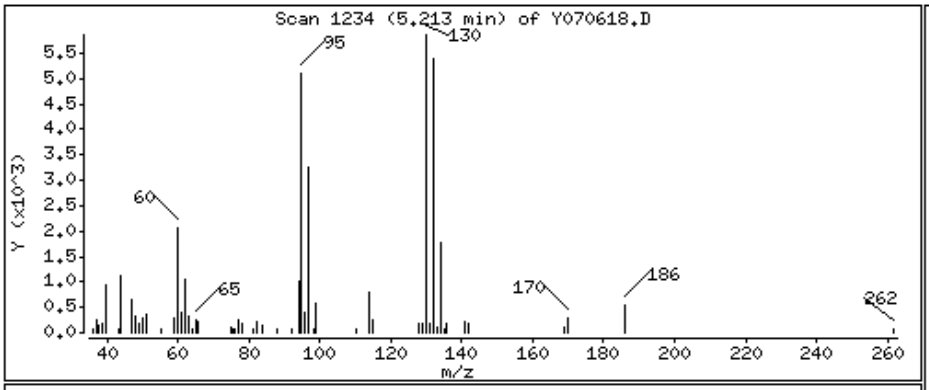
Operator: PC

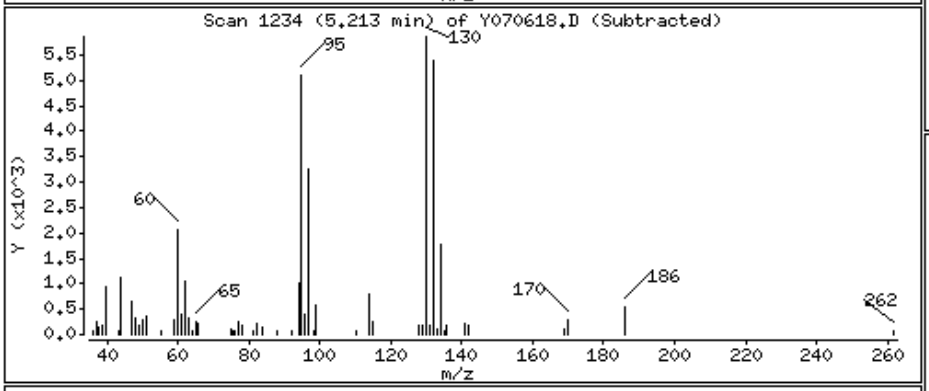
Column phase: DB624

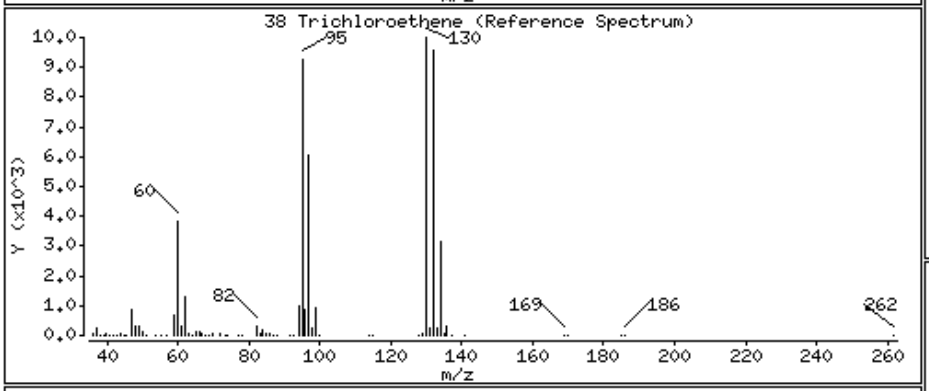
Column diameter: 0.18

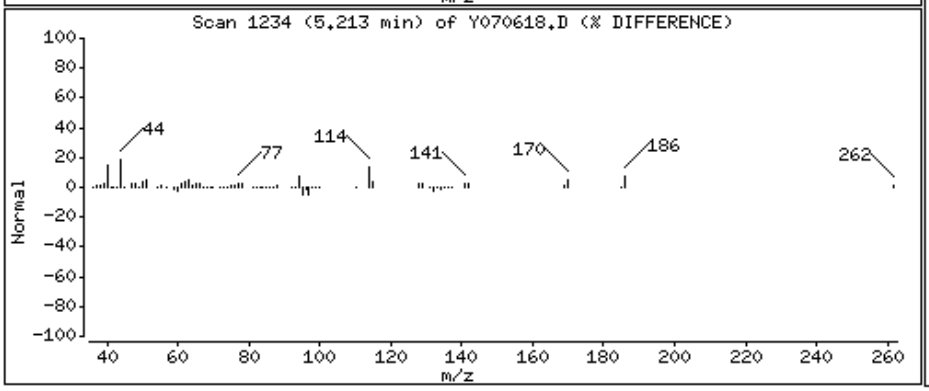
38 Trichloroethene

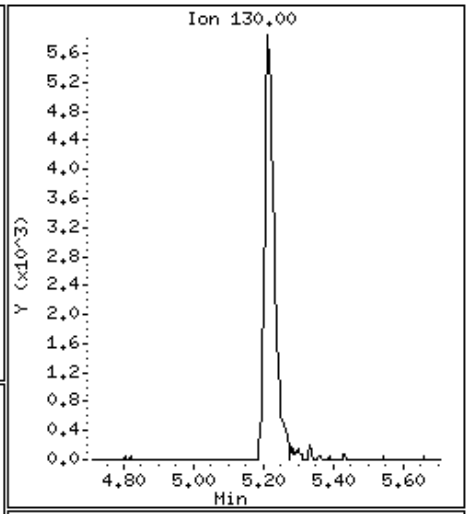
Concentration: 1.73 ug/l

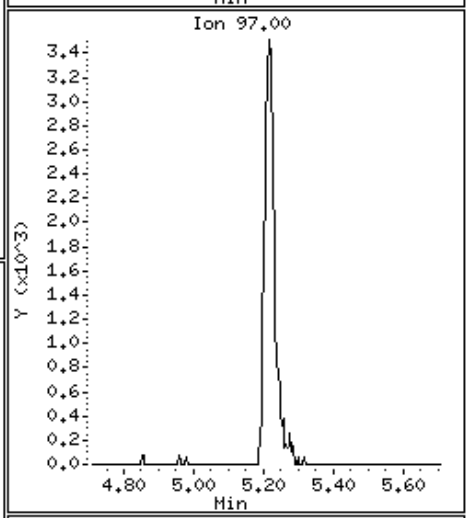


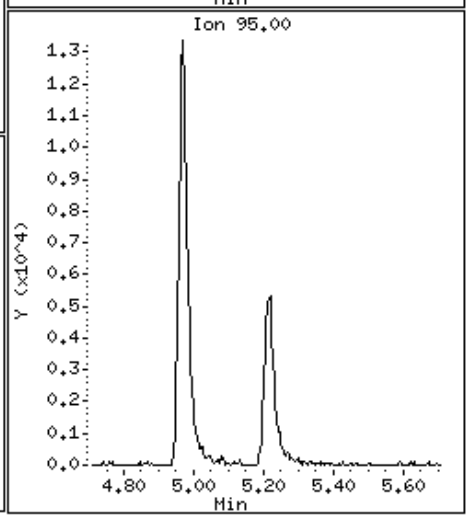












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070618.D
Inj Date : 06-JUL-2022 22:11
InstruID : voa6.i
LabSampID : HS22070020-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070619.D Page 1
Report Date: 15-Jul-2022 14:31

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070619.D
Lab Smp Id: HS22070020-07 Client Smp ID: HS22070020-07
Inj Date : 06-JUL-2022 22:32
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-07;HS22070020-07;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 32
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

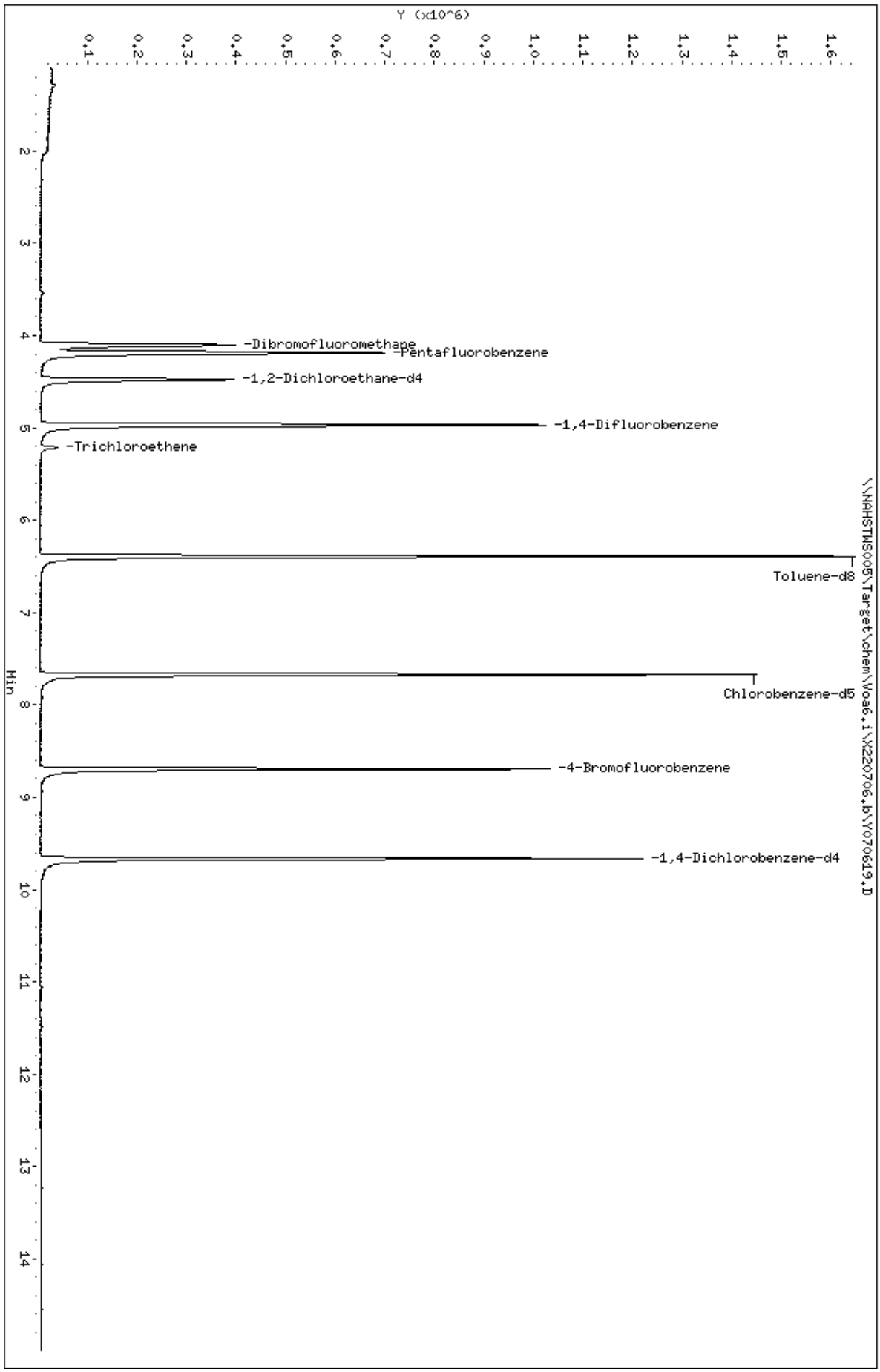
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	613074	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	897300	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	758130	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	332276	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	299434	52.1990	52.19
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	331149	50.2677	50.26
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	281622	49.8043	49.80
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1037160	55.0917	55.09
38 Trichloroethene	130	5.220	5.208	(1.051)	12311	1.83214	1.83(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070619.D
Date : 06-JUL-2022 22:32
Client ID: HS220700Z0-07
Sample Info: HS220700Z0-07;HS220700Z0-07;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070619.D

Date : 06-JUL-2022 22:32

Client ID: HS22070020-07

Instrument: voa6.i

Sample Info: HS22070020-07;HS22070020-07;;;

Purge Volume: 5.0

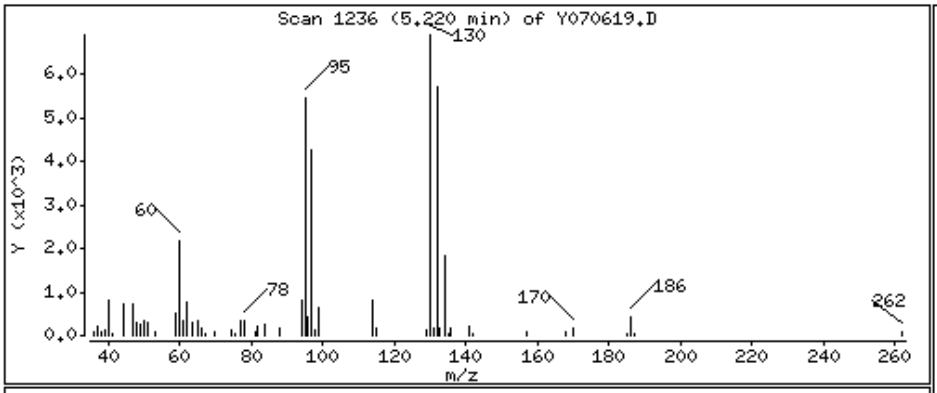
Operator: PC

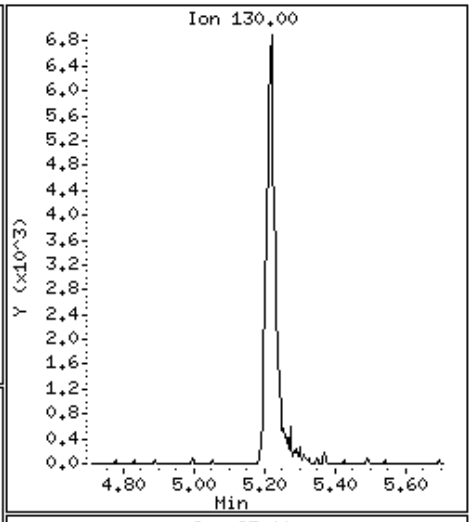
Column phase: DB624

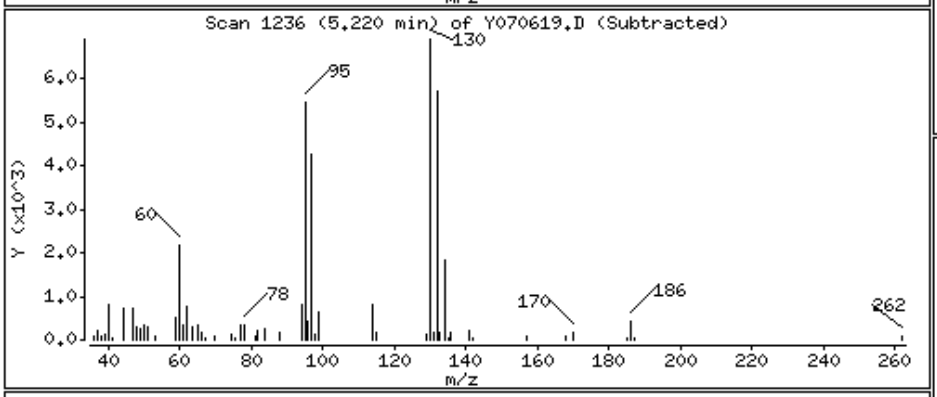
Column diameter: 0.18

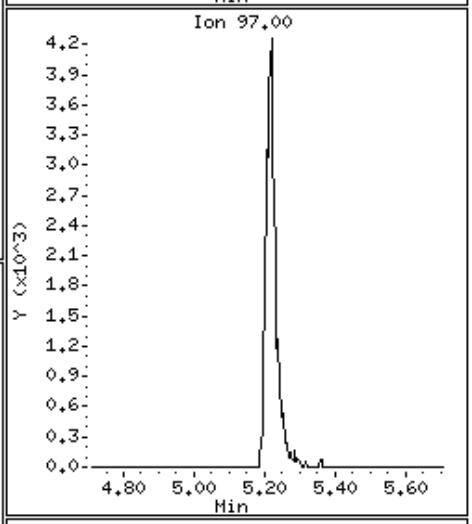
38 Trichloroethene

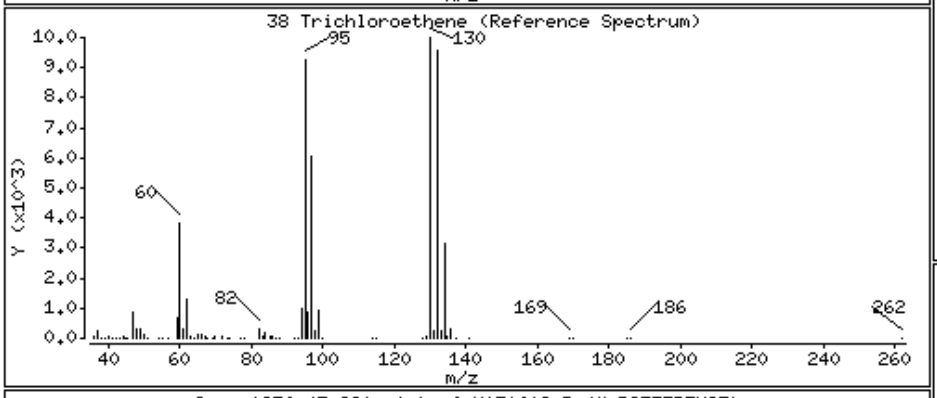
Concentration: 1.83 ug/l

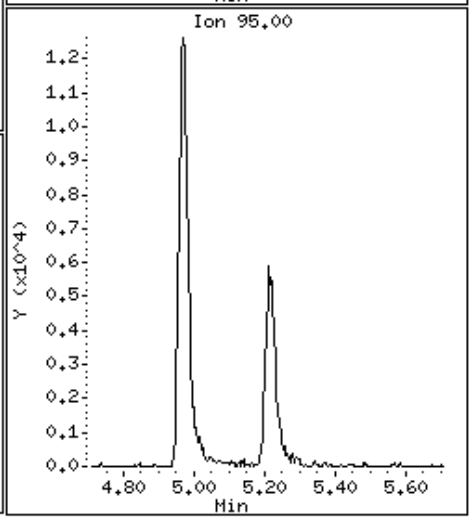


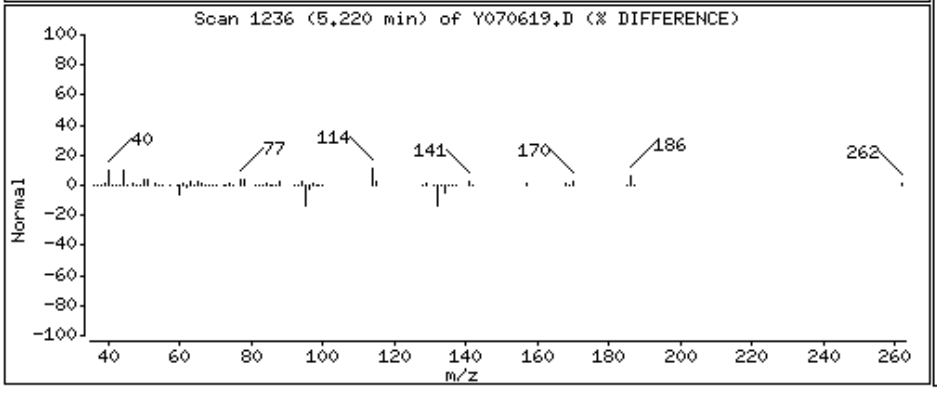












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070619.D
Inj Date : 06-JUL-2022 22:32
InstruID : voa6.i
LabSampID : HS22070020-07

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070626.D Page 1
Report Date: 15-Jul-2022 14:31

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070626.D
Lab Smp Id: HS22070020-02 Client Smp ID: HS22070020-02
Inj Date : 07-JUL-2022 01:00
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-02;HS22070020-02;;;
Misc Info : HS22052000V6;WATER;0;10;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 39
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	10.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	630035	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	286694	49.3336	49.33
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	300754	50.9913	50.99
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	910430	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	777014	50.0000	
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1042606	54.0351	54.03
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	342017	50.6581	50.65
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	346091	50.0000	
5 Vinyl Chloride	62	1.149	1.149	(0.275)	66897	8.30152	83.01
11 1,1-Dichloroethene	96	1.917	1.921	(0.458)	39013	6.47273	64.72
17 Methylene Chloride	84	2.311	2.311	(0.552)	10883	2.09300	20.92(a)
27 cis-1,2-Dichloroethene	96	3.529	3.533	(0.843)	414387	56.8263	568.26
38 Trichloroethene	130	5.208	5.208	(1.048)	4999476	733.299	7332.98(A)

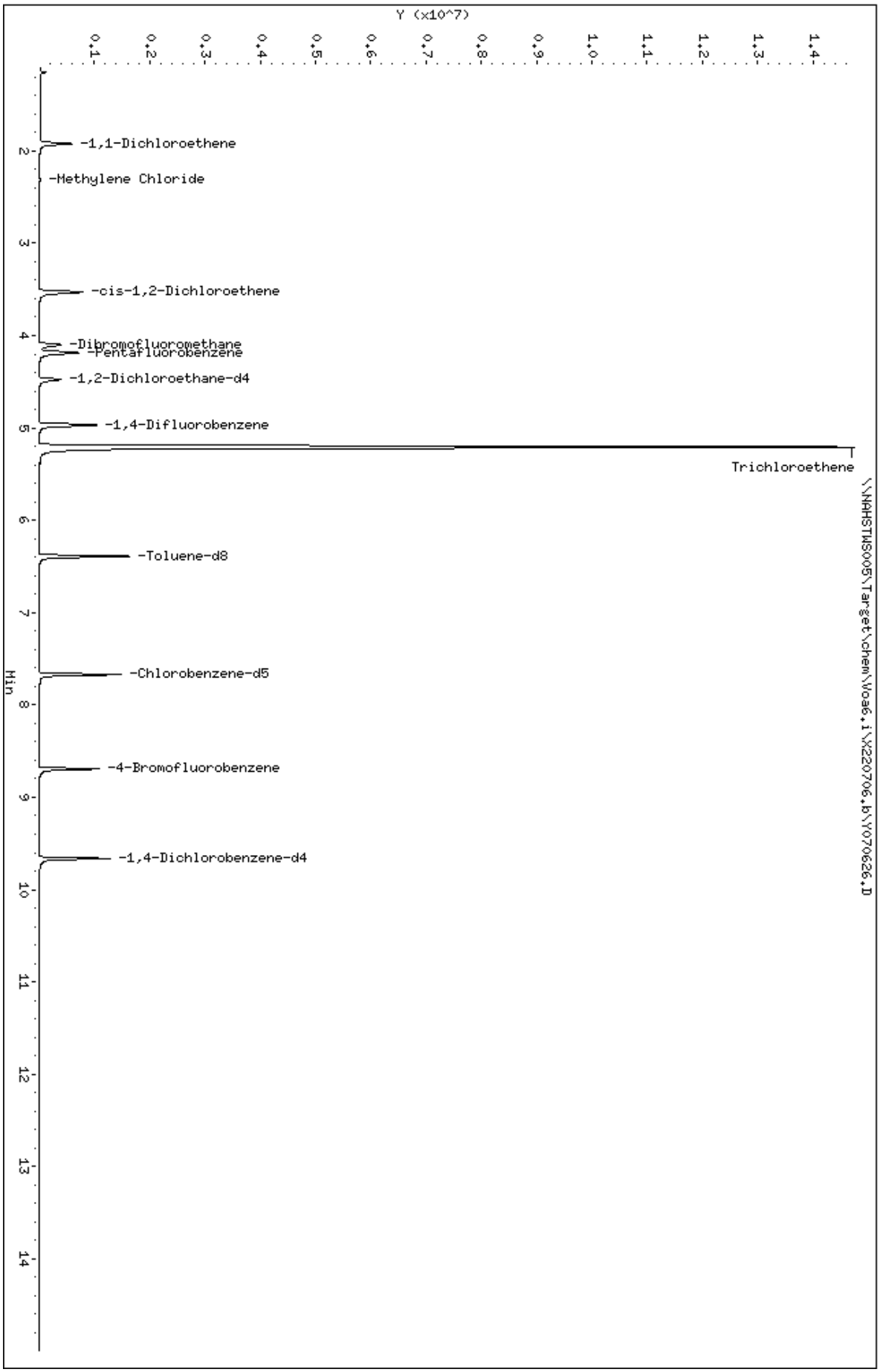
QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount

exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070626.D
Date : 07-JUL-2022 01:00
Client ID: HS220700Z0-02
Sample Info: HS220700Z0-02;HS220700Z0-02;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070626.D

Date : 07-JUL-2022 01:00

Client ID: HS22070020-02

Instrument: voa6.i

Sample Info: HS22070020-02;HS22070020-02;;;

Purge Volume: 5.0

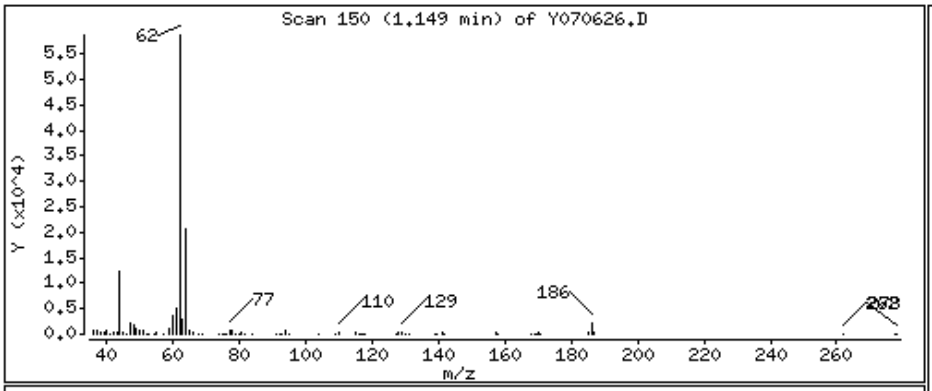
Operator: PC

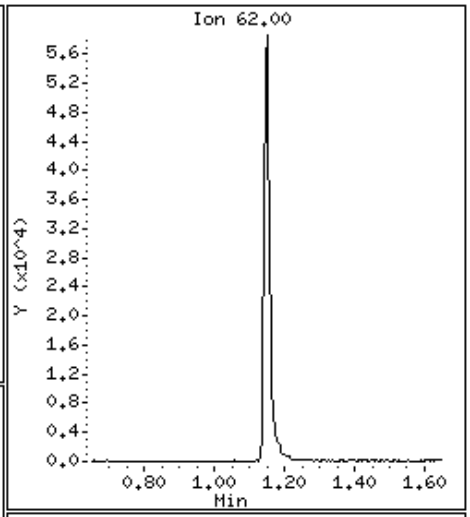
Column phase: DB624

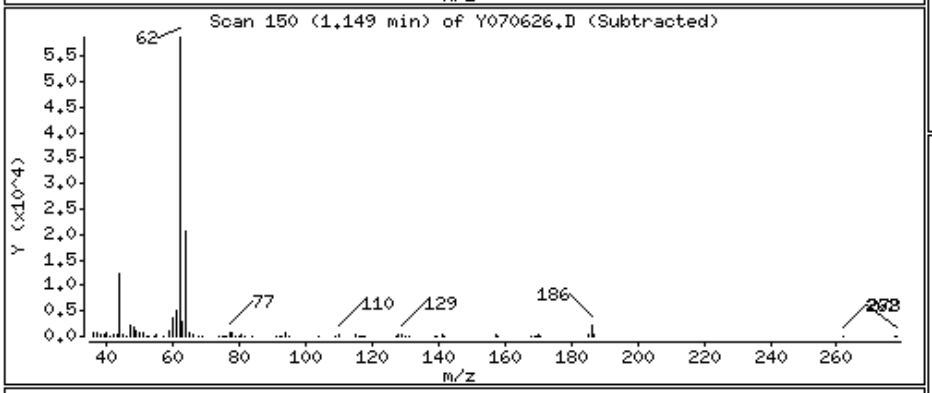
Column diameter: 0.18

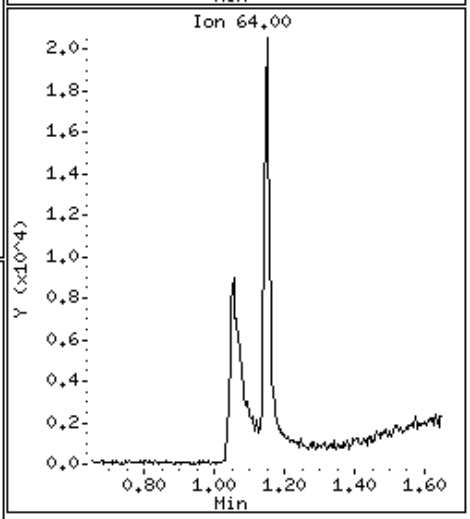
5 Vinyl Chloride

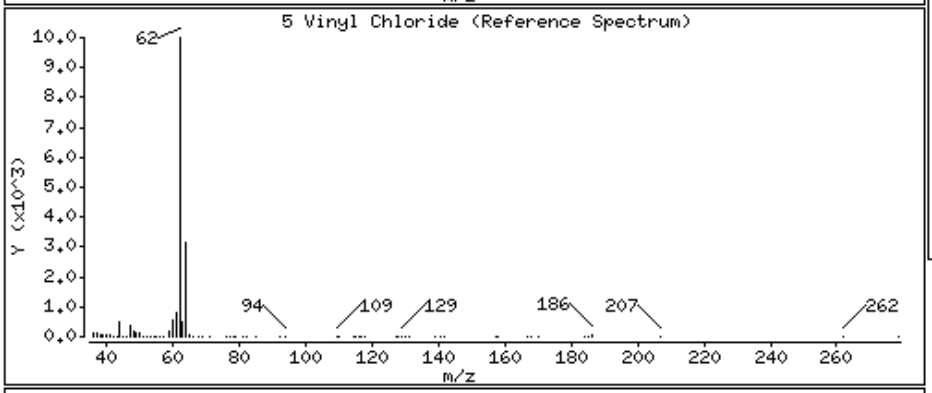
Concentration: 83.01 ug/l

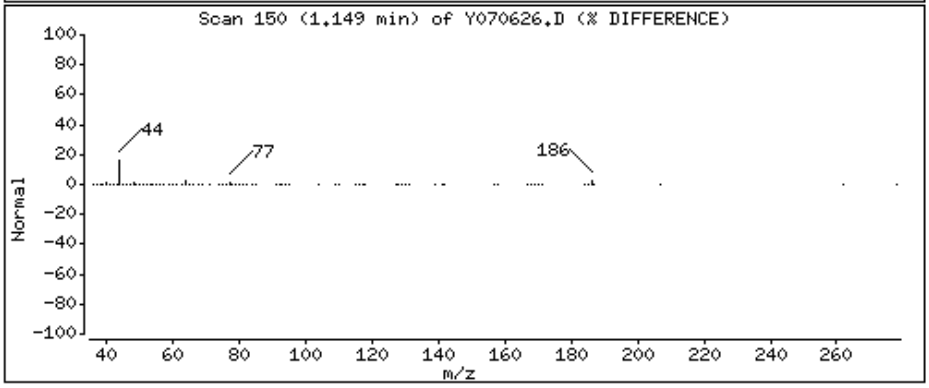












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070626.D Page 3

Date : 07-JUL-2022 01:00

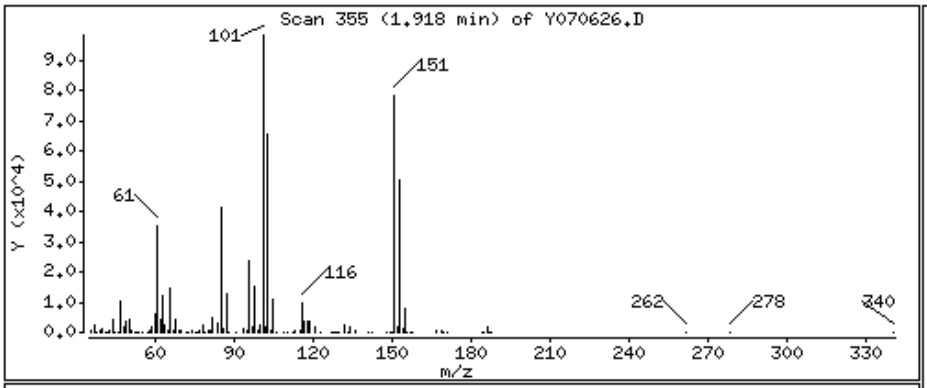
Client ID: HS22070020-02 Instrument: voa6.i

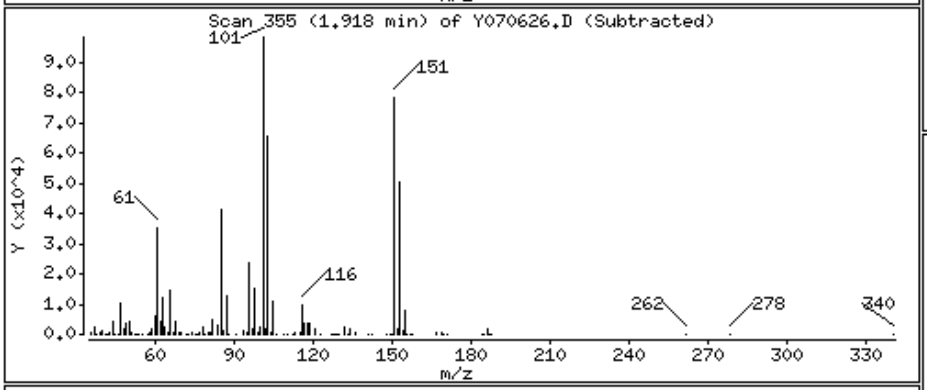
Sample Info: HS22070020-02;HS22070020-02;;;

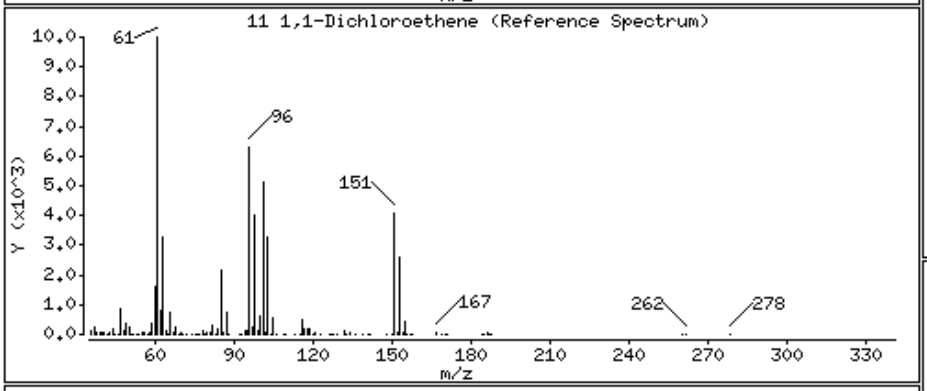
Purge Volume: 5.0 Operator: PC

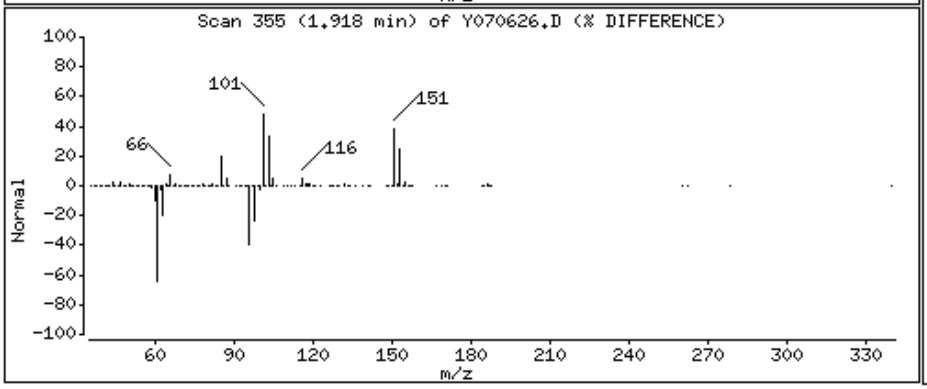
Column phase: DB624 Column diameter: 0.18

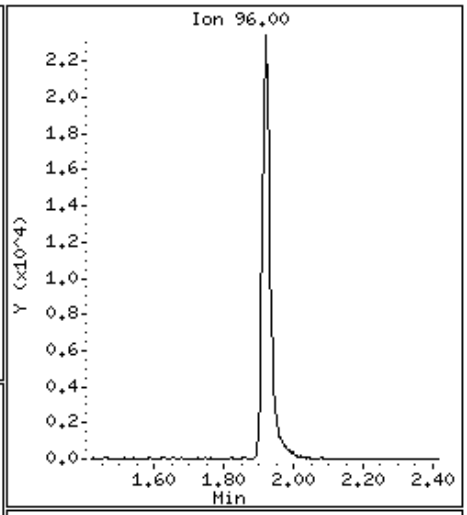
11 1,1-Dichloroethene Concentration: 64.72 ug/l

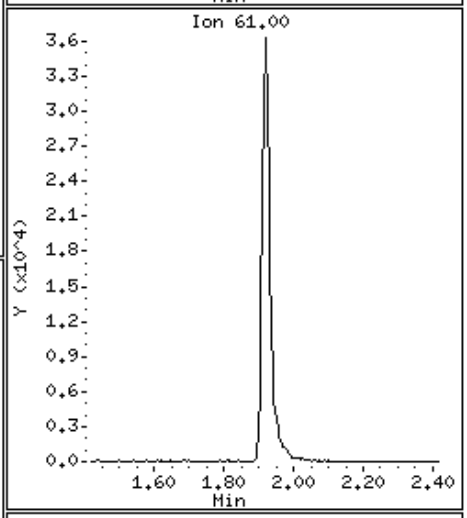


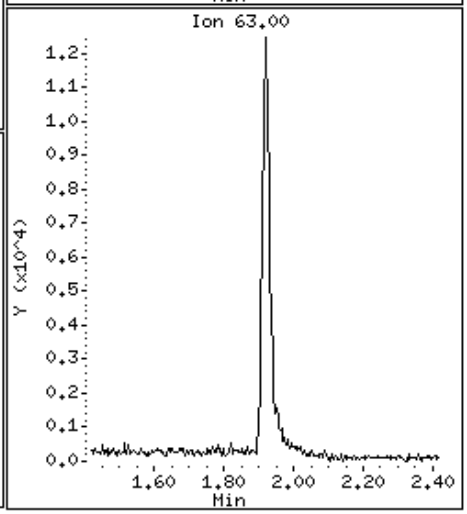












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070626.D

Date : 07-JUL-2022 01:00

Client ID: HS22070020-02

Instrument: voa6.i

Sample Info: HS22070020-02;HS22070020-02;;;

Purge Volume: 5.0

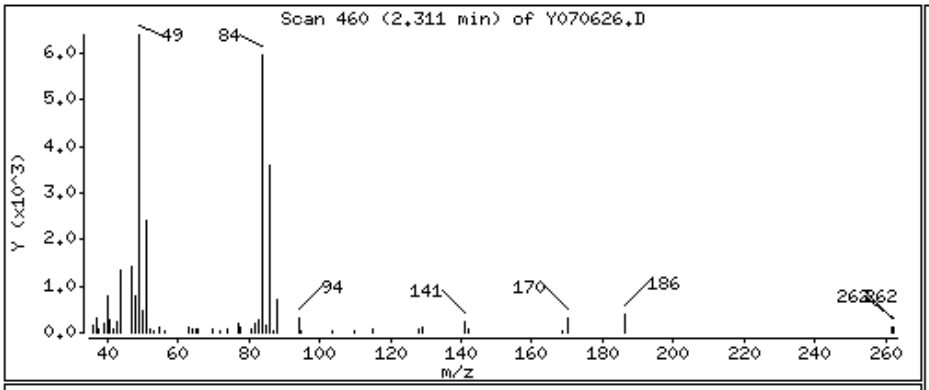
Operator: PC

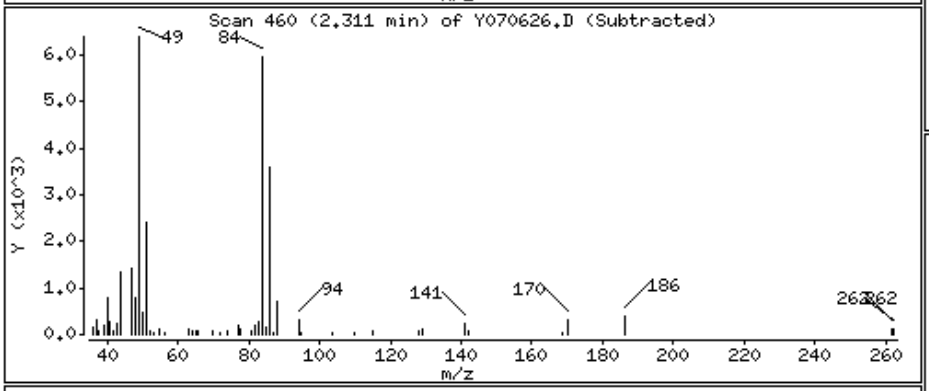
Column phase: DB624

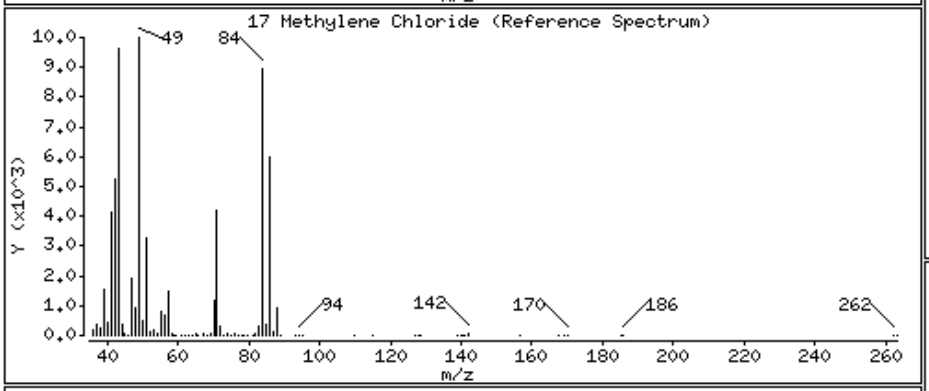
Column diameter: 0.18

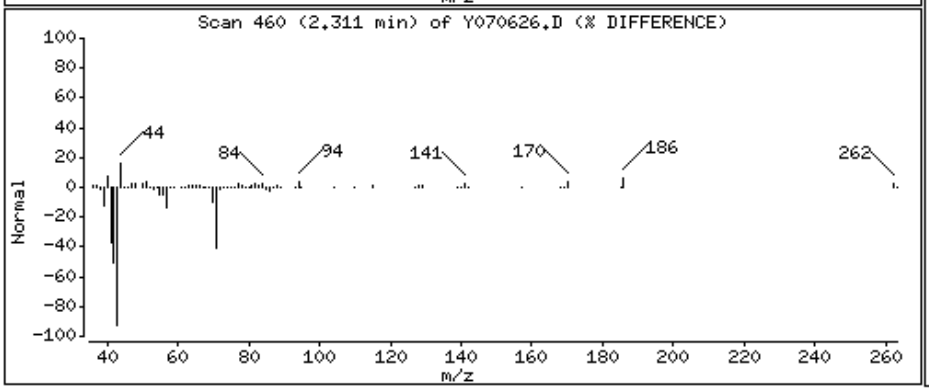
17 Methylene Chloride

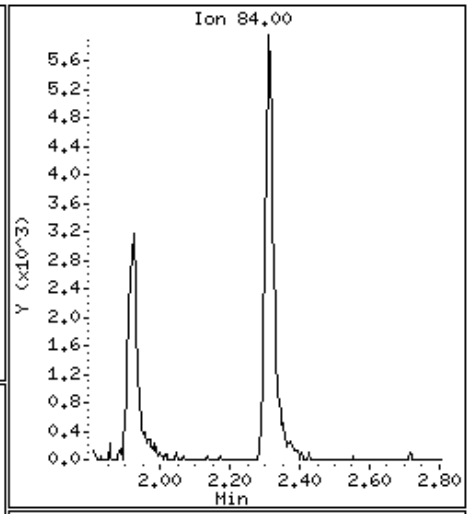
Concentration: 20.92 ug/l

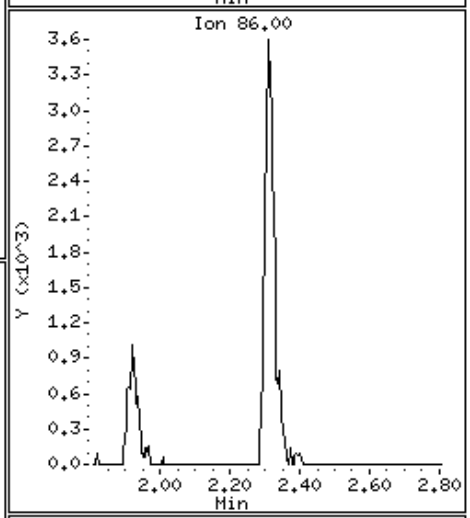


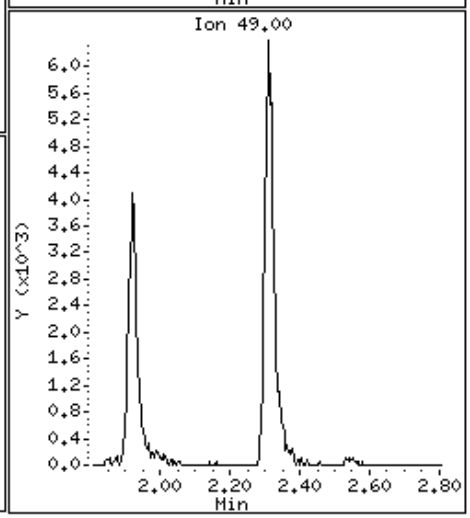












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070626.D Page 5

Date : 07-JUL-2022 01:00

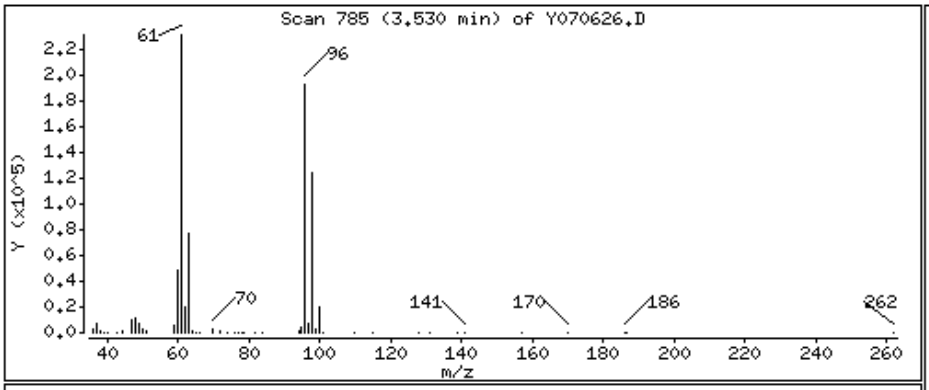
Client ID: HS22070020-02 Instrument: voa6.i

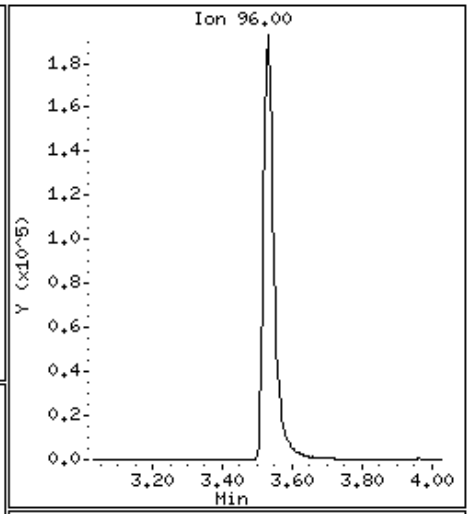
Sample Info: HS22070020-02;HS22070020-02;;;

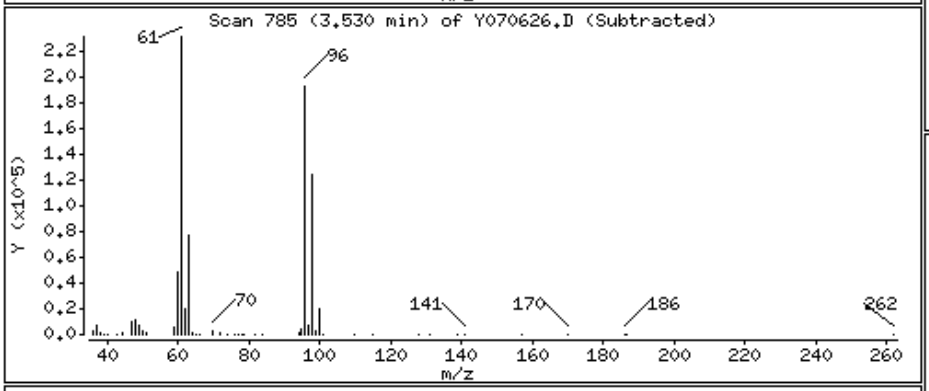
Purge Volume: 5.0 Operator: PC

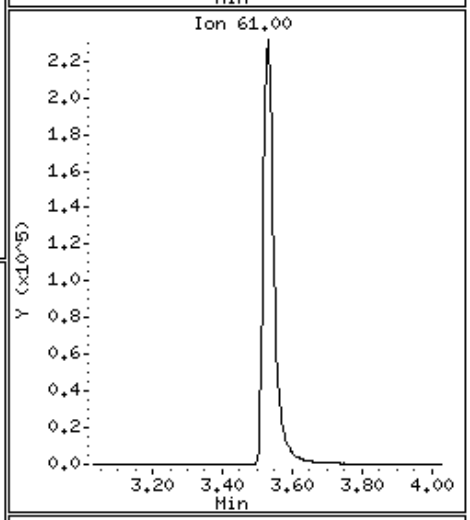
Column phase: DB624 Column diameter: 0.18

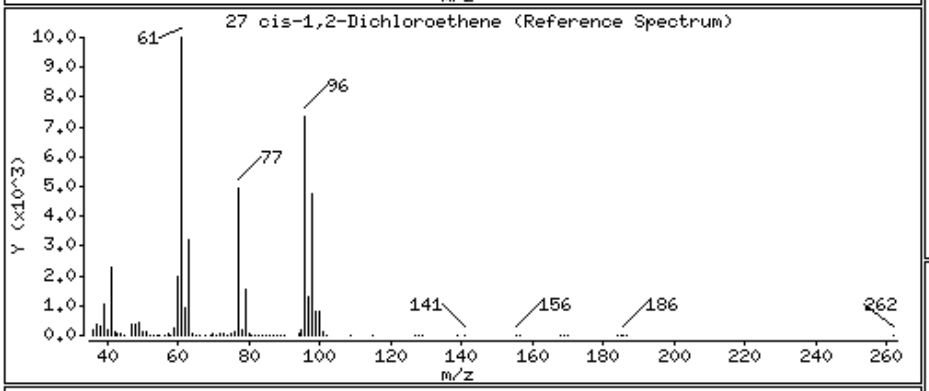
27 cis-1,2-Dichloroethene Concentration: 568.26 ug/l

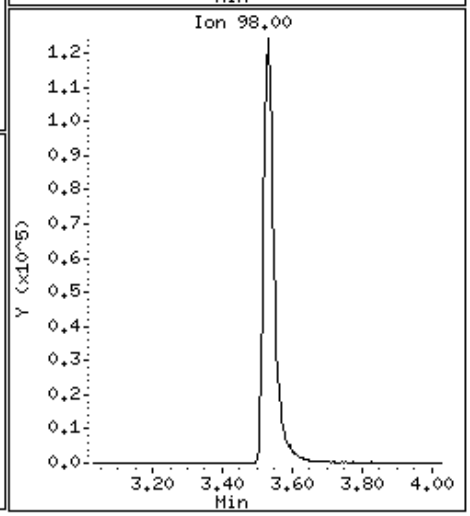


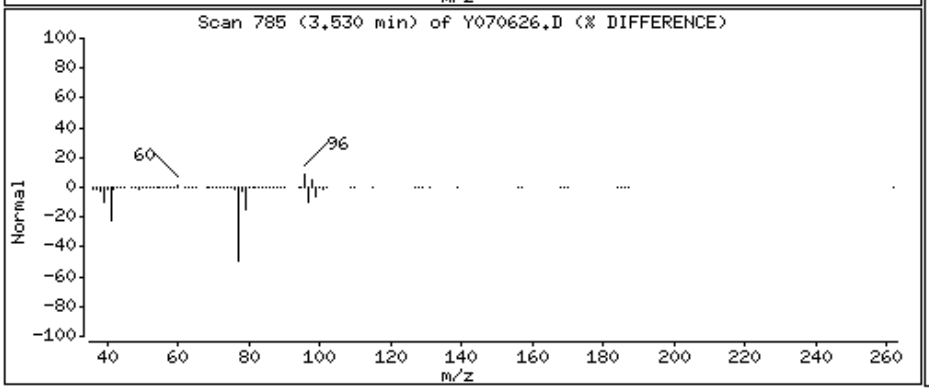












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070626.D

Date : 07-JUL-2022 01:00

Client ID: HS22070020-02

Instrument: voa6.i

Sample Info: HS22070020-02;HS22070020-02;;;

Purge Volume: 5.0

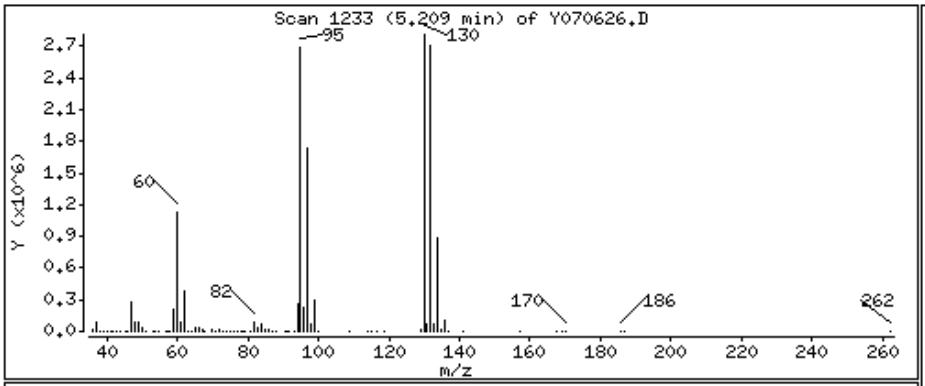
Operator: PC

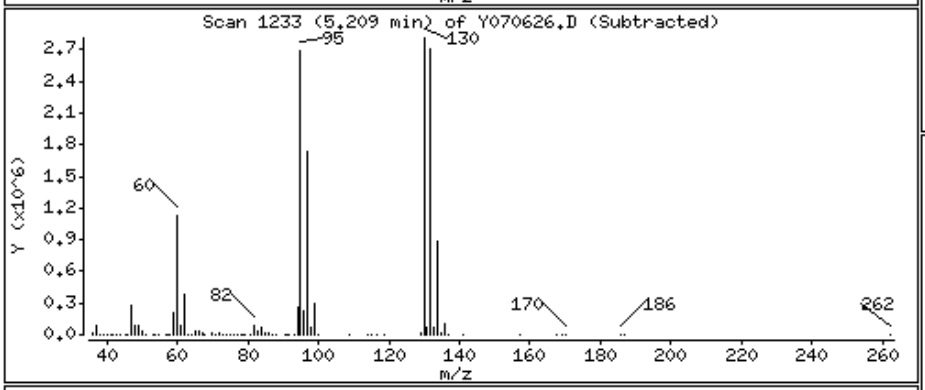
Column phase: DB624

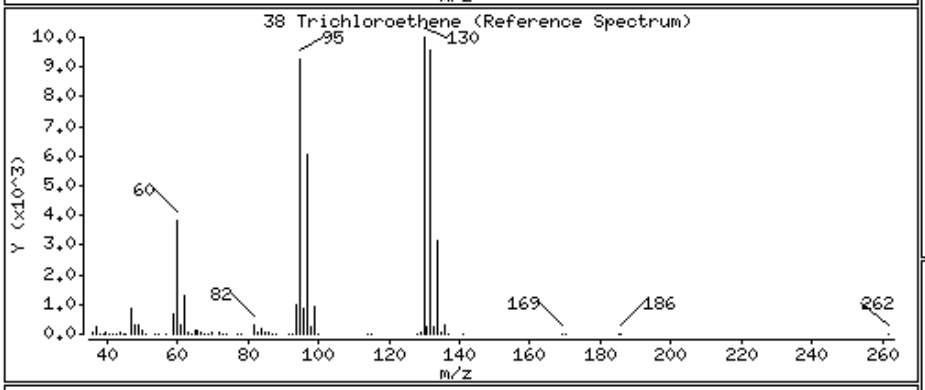
Column diameter: 0.18

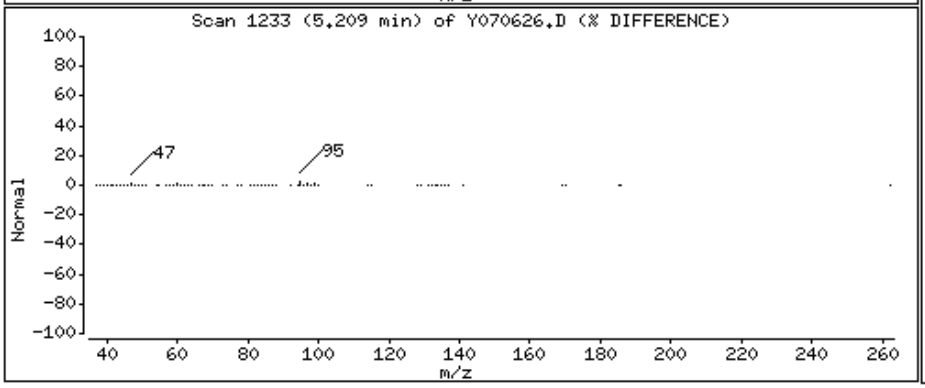
38 Trichloroethene

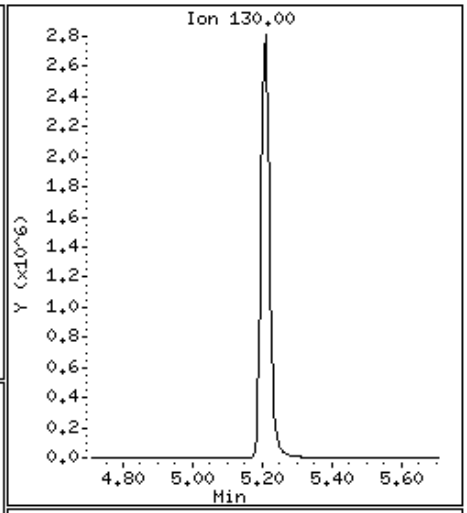
Concentration: 7332.98 ug/l

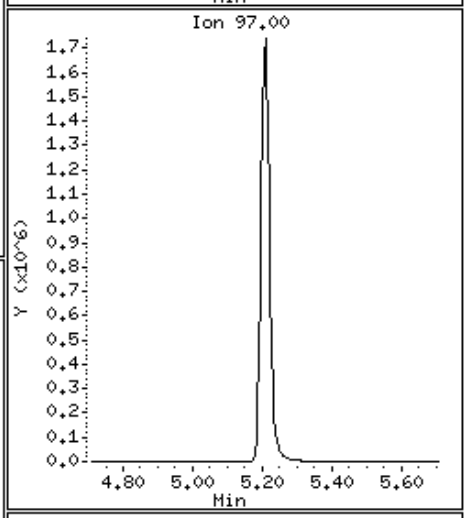


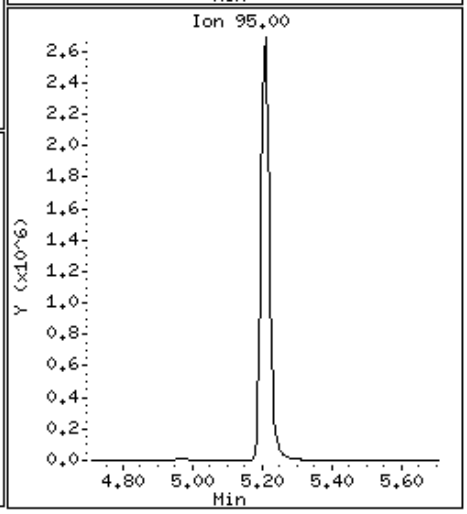












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Inj Date : 07-JUL-2022 01:00
InstruID : voa6.i
LabSampID : HS22070020-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070627.D Page 1
Report Date: 20-Jul-2022 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070627.D
Lab Smp Id: HS22070020-02 Client Smp ID: HS22070020-02
Inj Date : 07-JUL-2022 01:21
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-02;HS22070020-02;;;
Misc Info : HS22052000V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:31 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 40
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

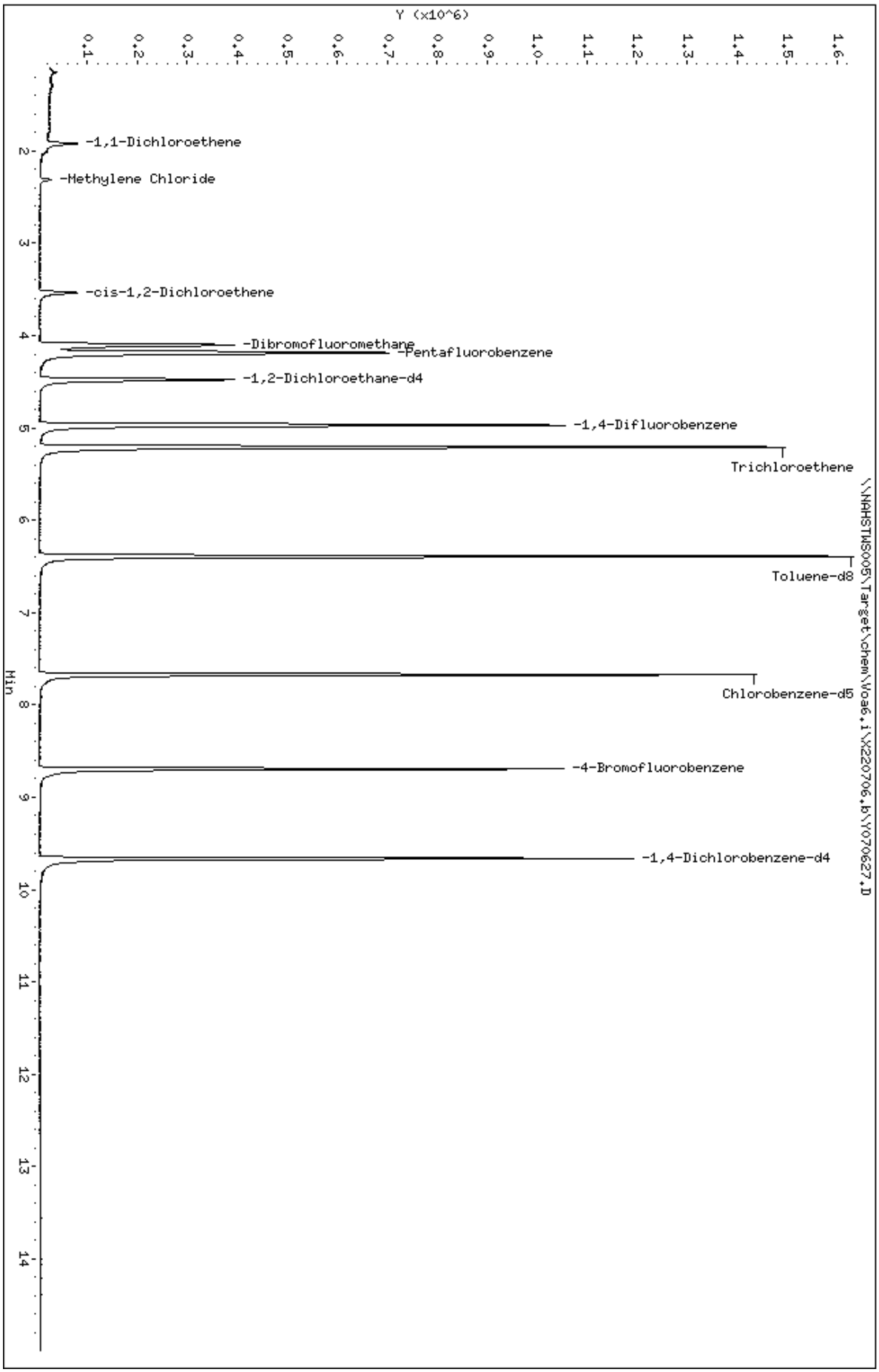
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	100.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	631740	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	895268	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	767447	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	332421	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	292386	49.4032	49.40
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	341270	51.1808	51.18
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	276078	47.3672	47.36
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1040350	54.5903	54.59
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	4064	0.67245	67.24(a)
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	41927	5.73407	573.40
17 Methylene Chloride	84	2.311	2.311	(0.552)	10299	2.01050	201.04(a)
38 Trichloroethene	130	5.208	5.209	(1.048)	523327	78.0590	7805.90
5 Vinyl Chloride	62	1.149	1.149	(0.275)	6995	0.86570	86.56(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



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Date : 07-JUL-2022 01:21
Client ID: HS220700Z0-02
Sample Info: HS220700Z0-02;HS220700Z0-02;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070627.D Page 2

Date : 07-JUL-2022 01:21

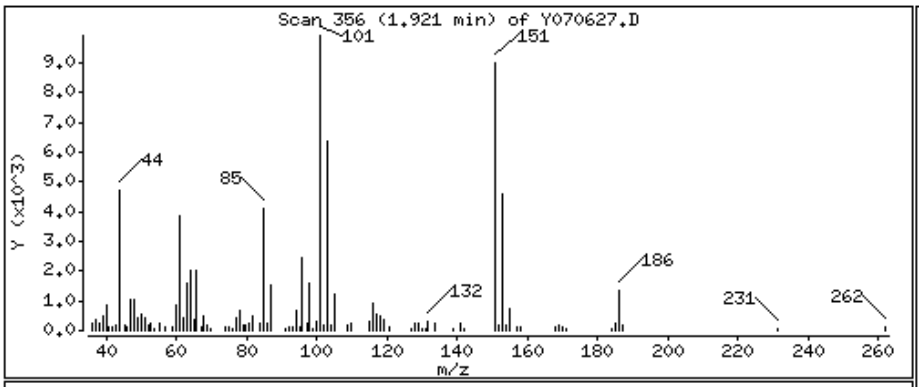
Client ID: HS22070020-02 Instrument: voa6.i

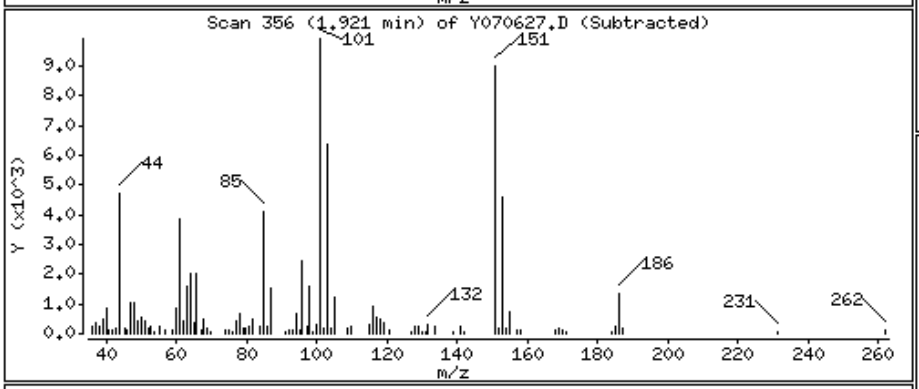
Sample Info: HS22070020-02;HS22070020-02;;;

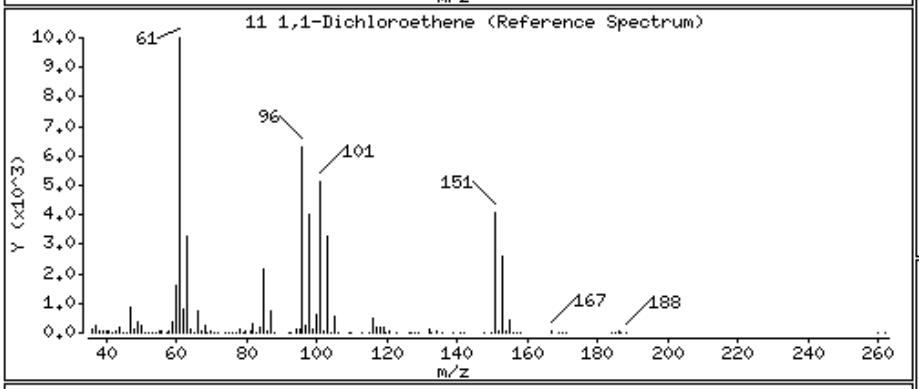
Purge Volume: 5.0 Operator: PC

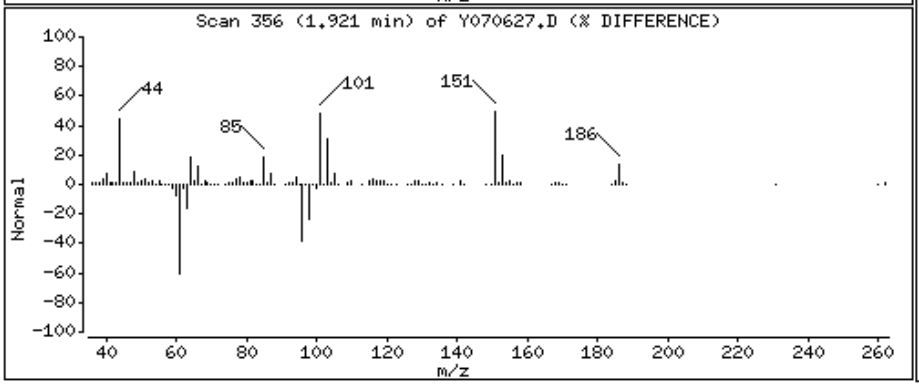
Column phase: DB624 Column diameter: 0.18

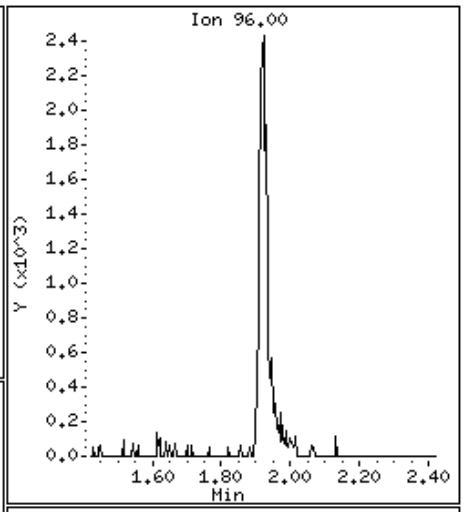
11 1,1-Dichloroethene Concentration: 67.24 ug/l

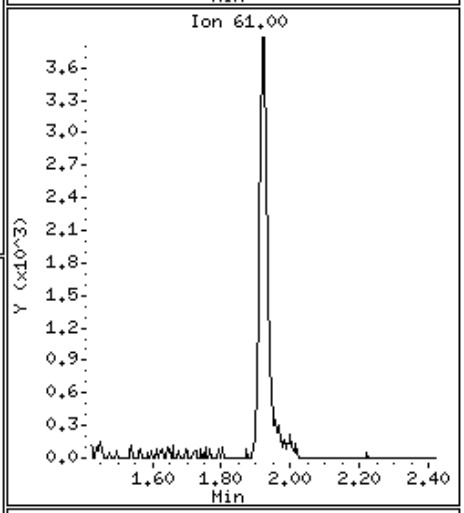


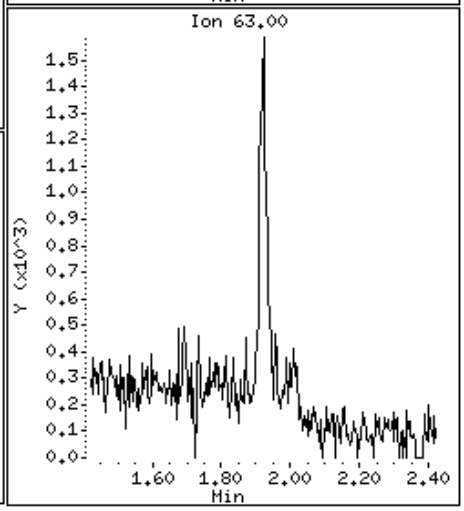












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070627.D Page 3

Date : 07-JUL-2022 01:21

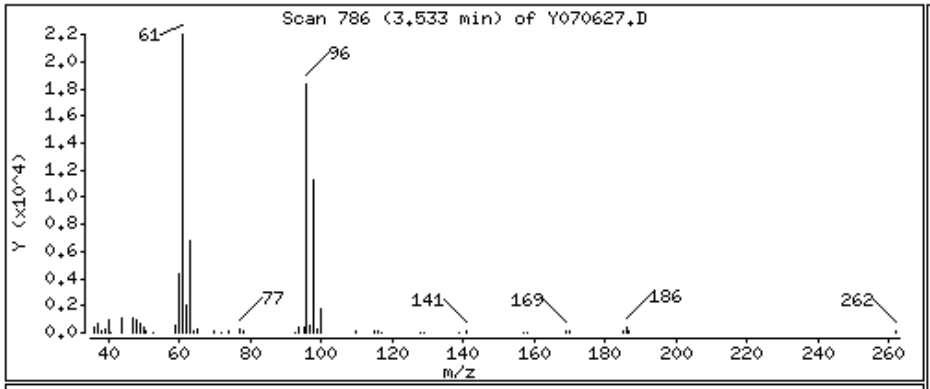
Client ID: HS22070020-02 Instrument: voa6.i

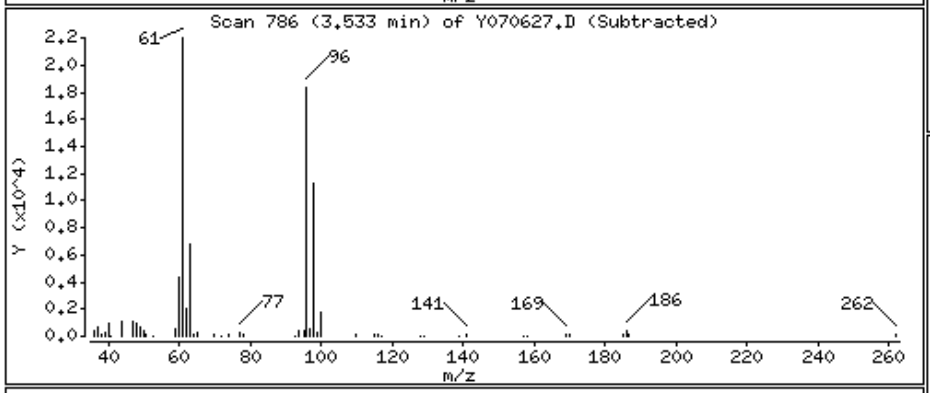
Sample Info: HS22070020-02;HS22070020-02;;;

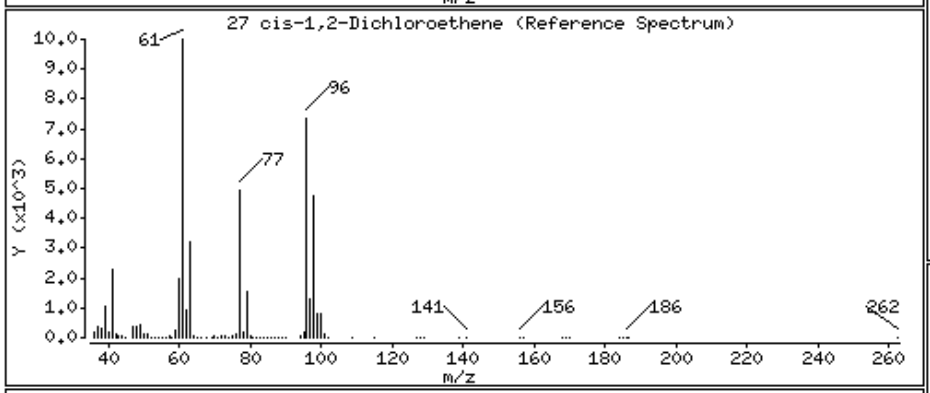
Purge Volume: 5.0 Operator: PC

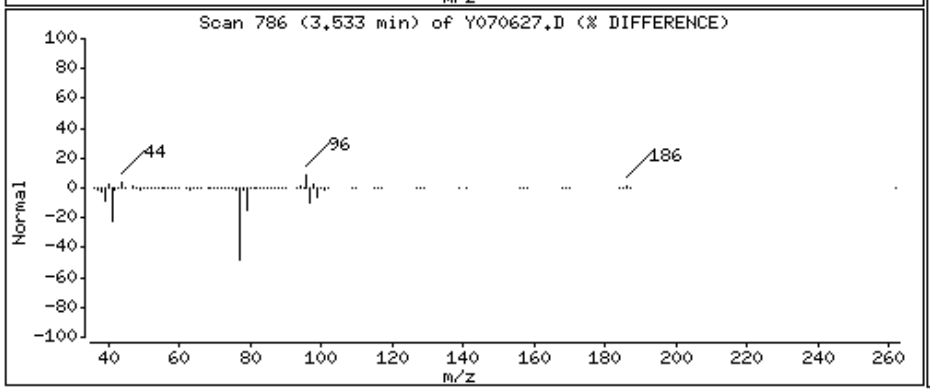
Column phase: DB624 Column diameter: 0.18

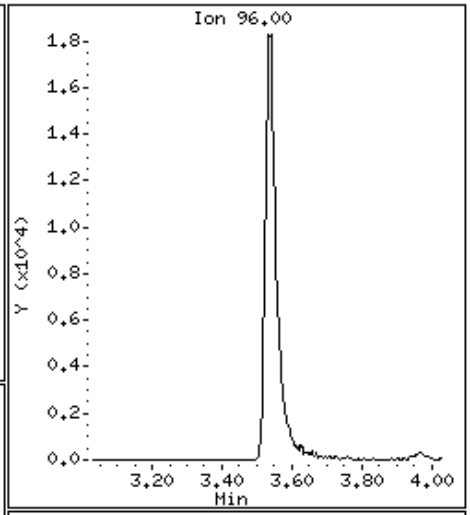
27 cis-1,2-Dichloroethene Concentration: 573.40 ug/l

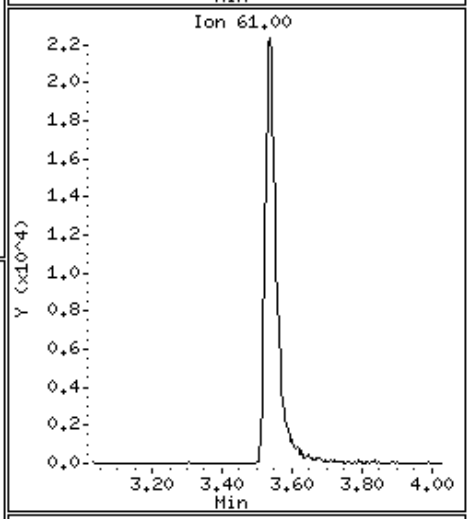


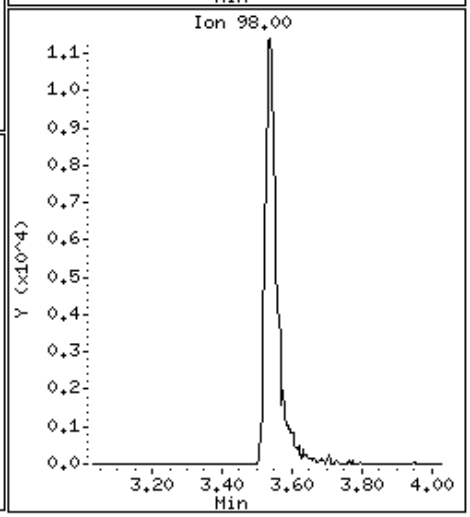












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070627.D Page 4

Date : 07-JUL-2022 01:21

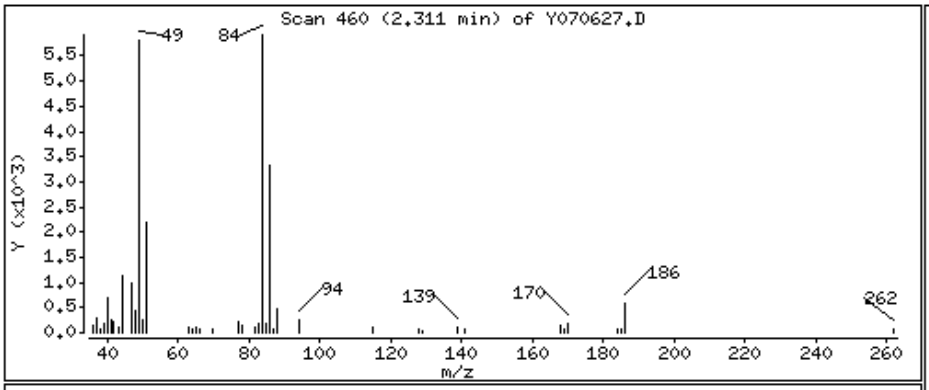
Client ID: HS22070020-02 Instrument: voa6.i

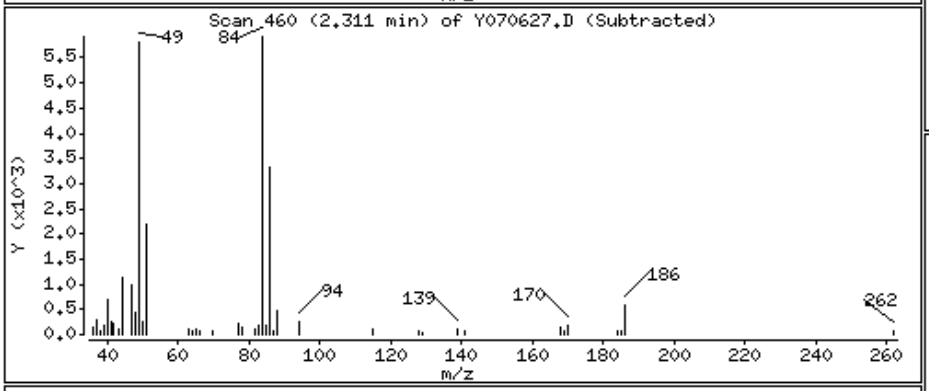
Sample Info: HS22070020-02;HS22070020-02;;;

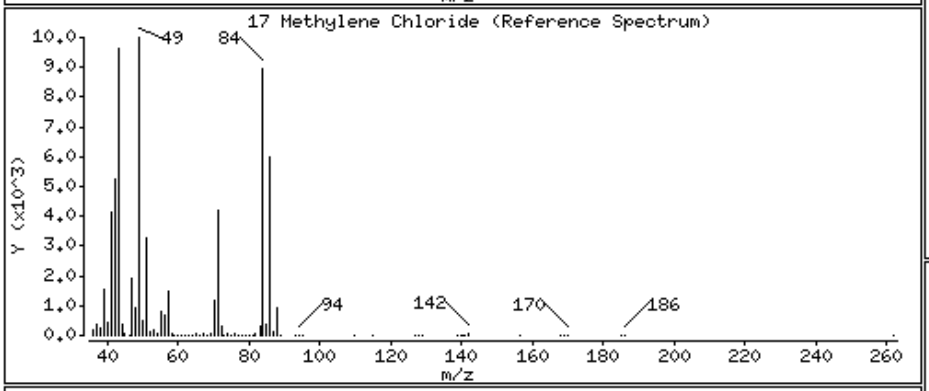
Purge Volume: 5.0 Operator: PC

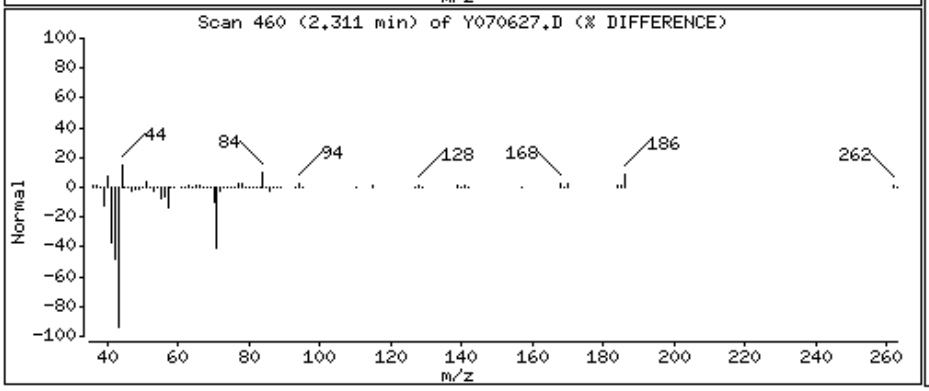
Column phase: DB624 Column diameter: 0.18

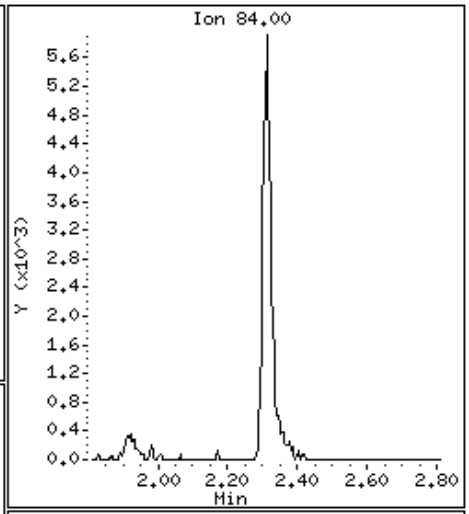
17 Methylene Chloride Concentration: 201.04 ug/l

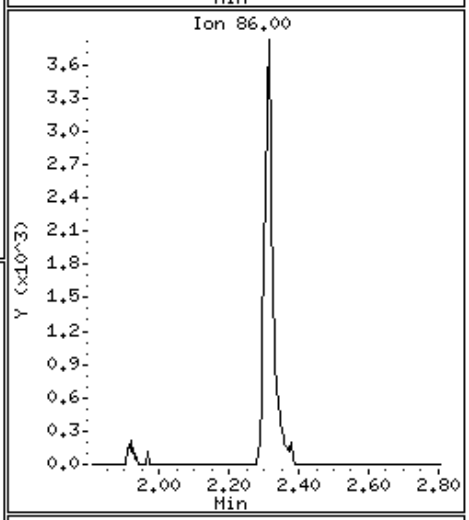


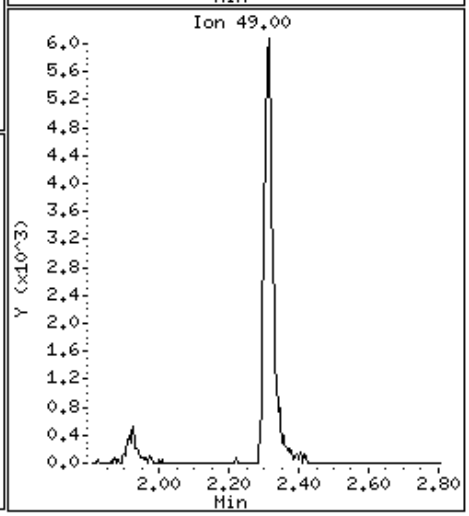












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070627.D Page 5

Date : 07-JUL-2022 01:21

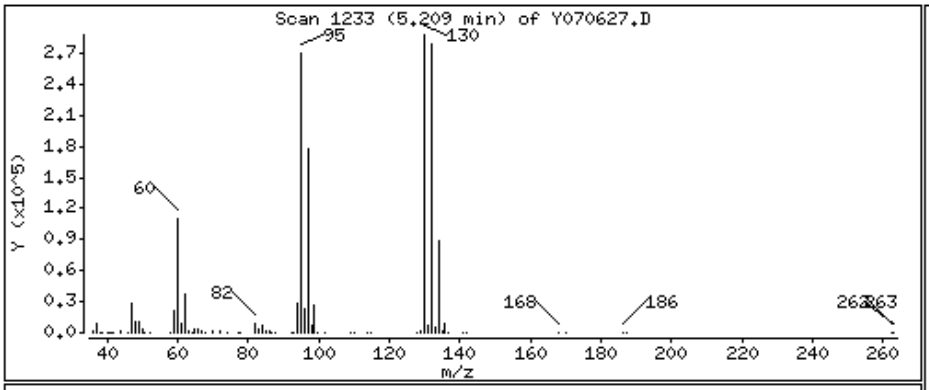
Client ID: HS22070020-02 Instrument: voa6.i

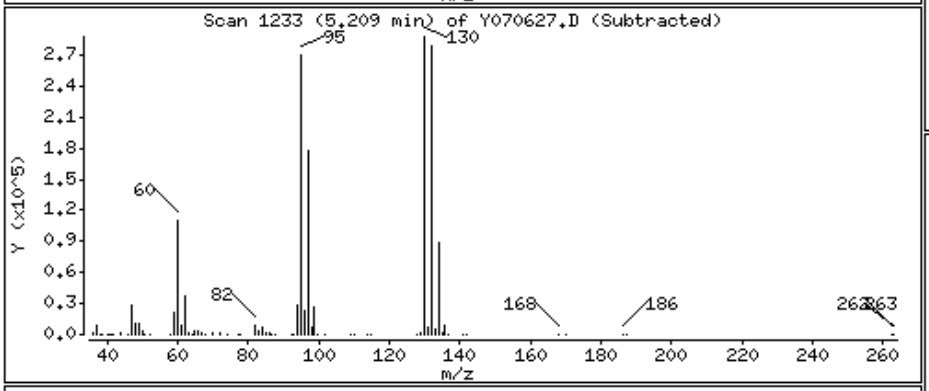
Sample Info: HS22070020-02;HS22070020-02;;;

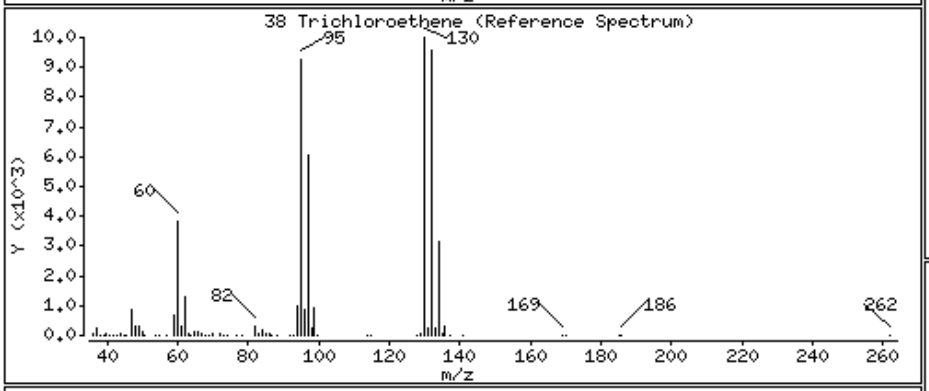
Purge Volume: 5.0 Operator: PC

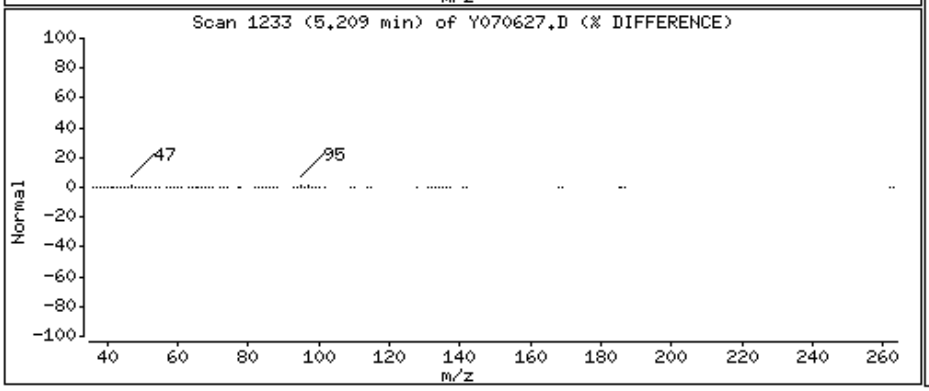
Column phase: DB624 Column diameter: 0.18

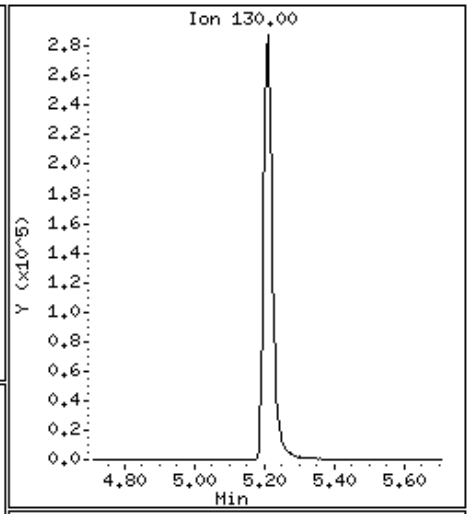
38 Trichloroethene Concentration: 7805.90 ug/l

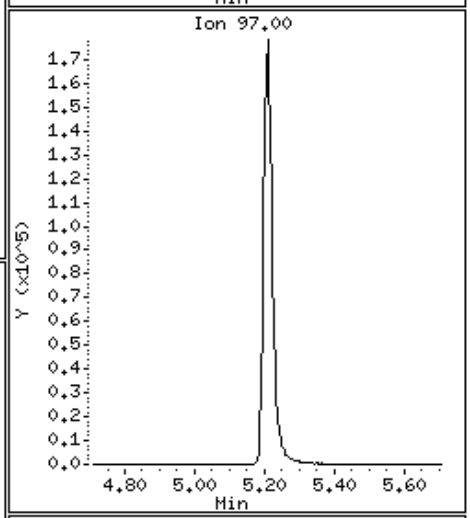


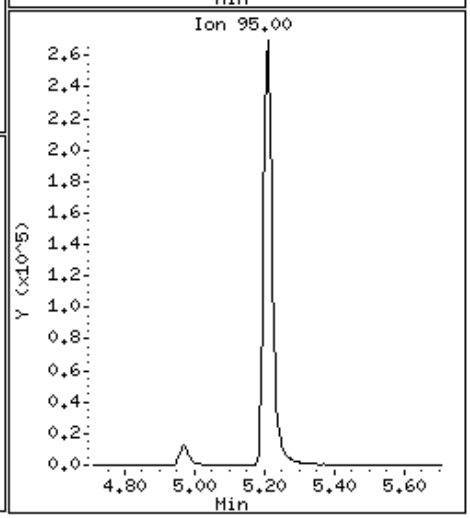












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070627.D Page 6

Date : 07-JUL-2022 01:21

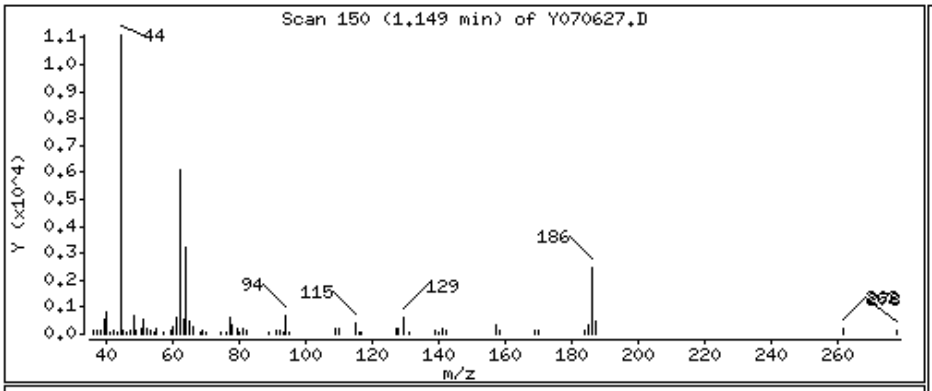
Client ID: HS22070020-02 Instrument: voa6.i

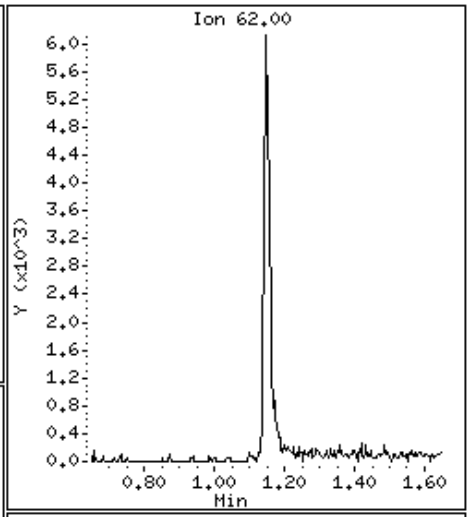
Sample Info: HS22070020-02;HS22070020-02;;;

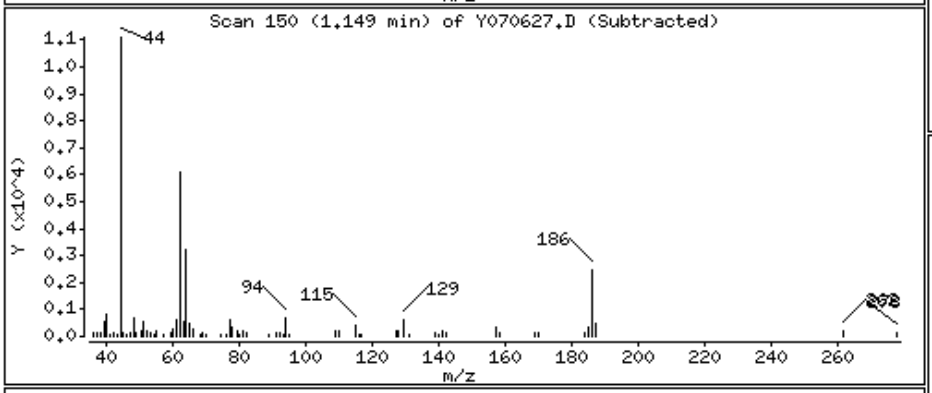
Purge Volume: 5.0 Operator: PC

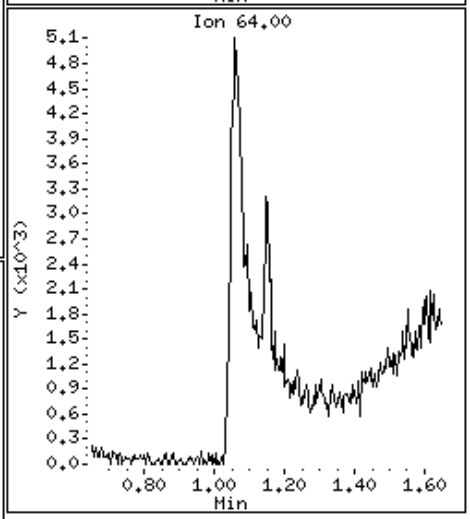
Column phase: DB624 Column diameter: 0.18

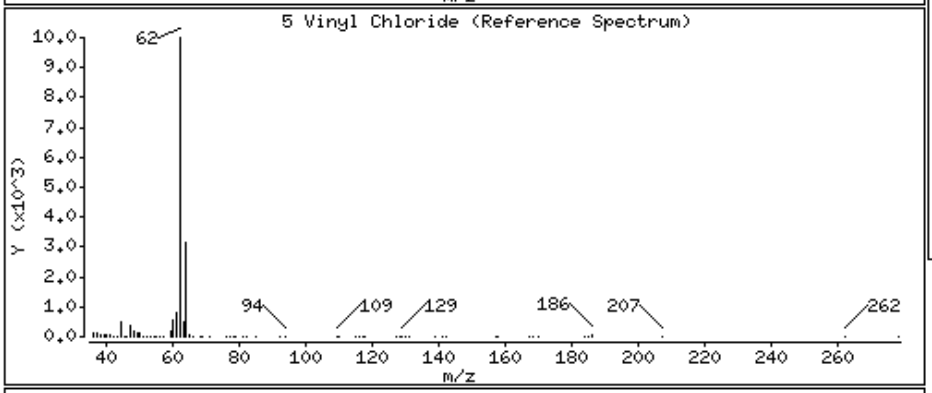
5 Vinyl Chloride Concentration: 86.56 ug/l

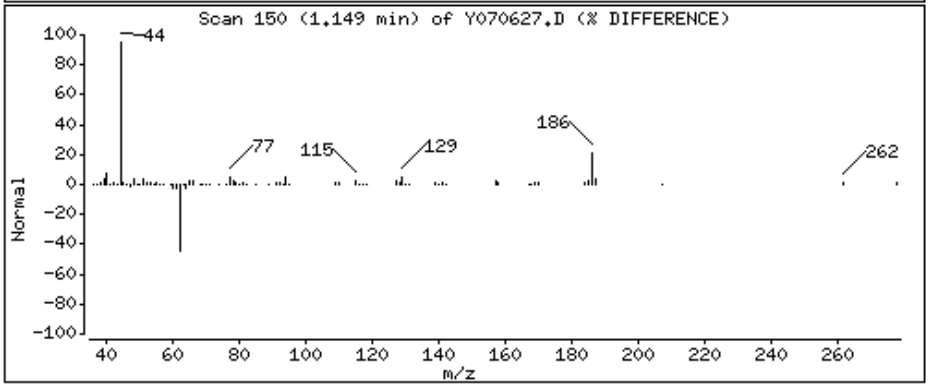












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Inj Date : 07-JUL-2022 01:21
InstruID : voa6.i
LabSampID : HS22070020-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070630.D Page 1
Report Date: 15-Jul-2022 14:31

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070630.D
Lab Smp Id: HS22070020-03 Client Smp ID: HS22070020-03
Inj Date : 07-JUL-2022 02:24
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-03;HS22070020-03;;;
Misc Info : HS22052000V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 43
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

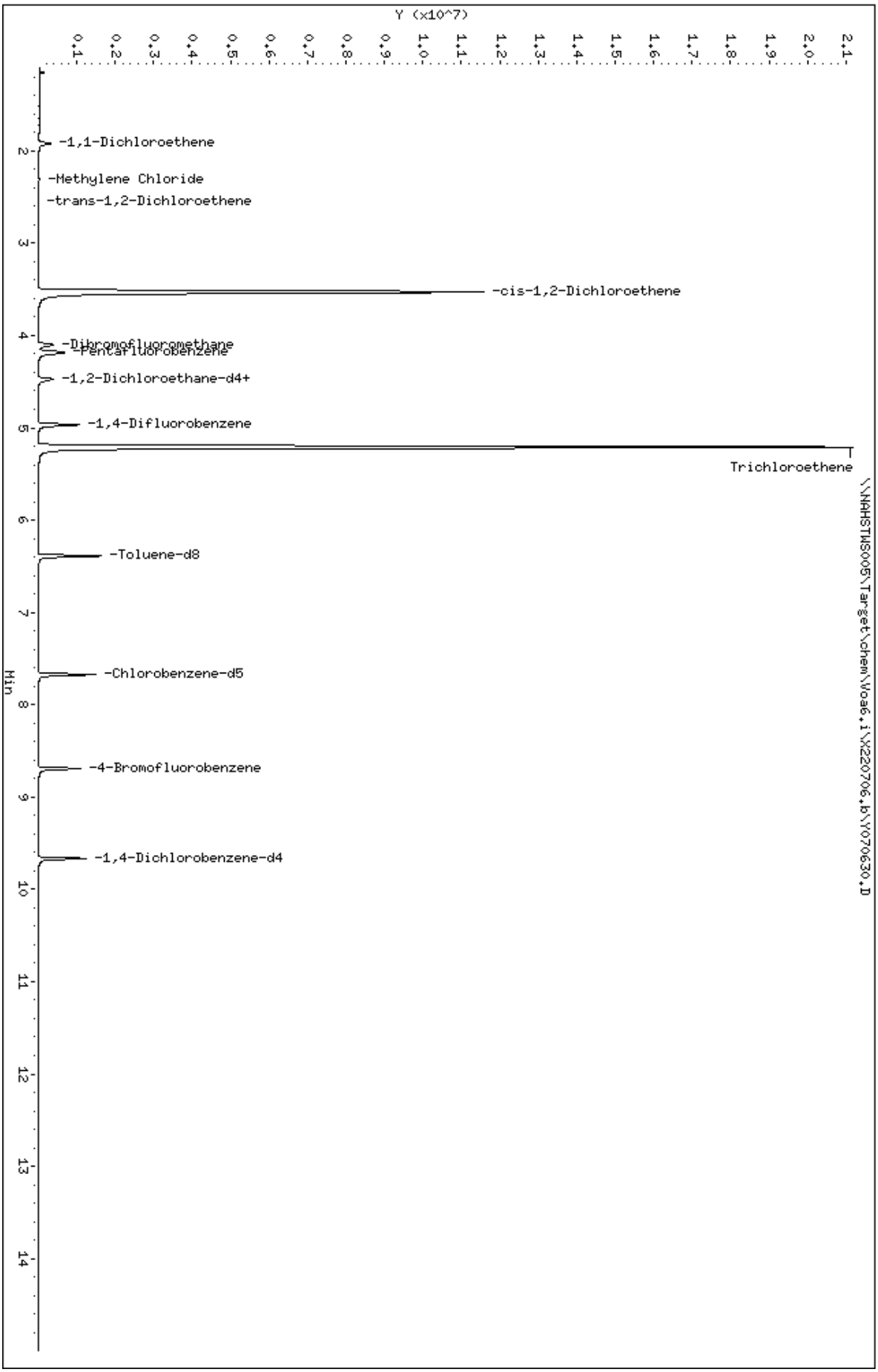
Name	Value	Description
DF	25.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	621227	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	897691	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	770480	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	344261	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	296965	51.0644	51.06
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	346467	51.7592	51.75
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	276575	48.2609	48.26
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1033169	54.0001	54.00
11 1,1-Dichloroethene	96	1.925	1.921	(0.460)	48688	8.19246	204.81
33 1,2-Dichloroethane	62	4.567	4.560	(0.919)	6395	0.85965	21.49(a)
27 cis-1,2-Dichloroethene	96	3.529	3.533	(0.843)	6074963	844.892	21122.30(A)
17 Methylene Chloride	84	2.314	2.311	(0.553)	10564	2.07018	51.75(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	7352932	1093.80	27344.91(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	82704	10.4086	260.21

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

A - Target compound detected but, quantitated amount exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070630.D
Date : 07-JUL-2022 02:24
Client ID: HS220700Z0-03
Sample Info: HS220700Z0-03;HS220700Z0-03;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070630.D Page 2

Date : 07-JUL-2022 02:24

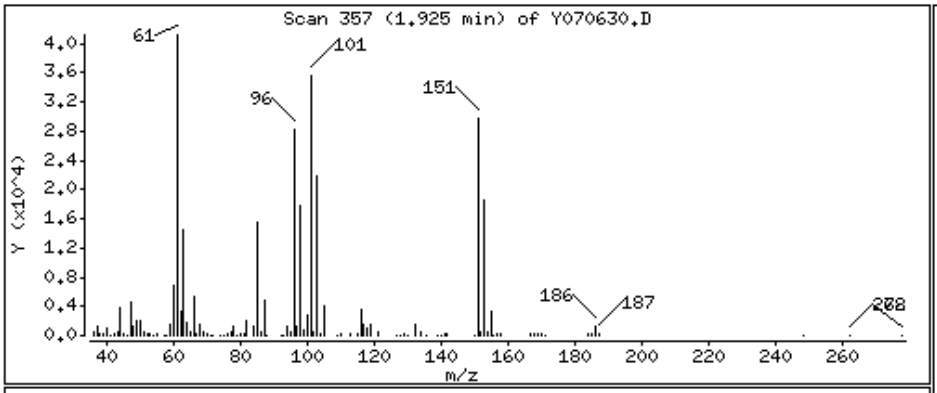
Client ID: HS22070020-03 Instrument: voa6.i

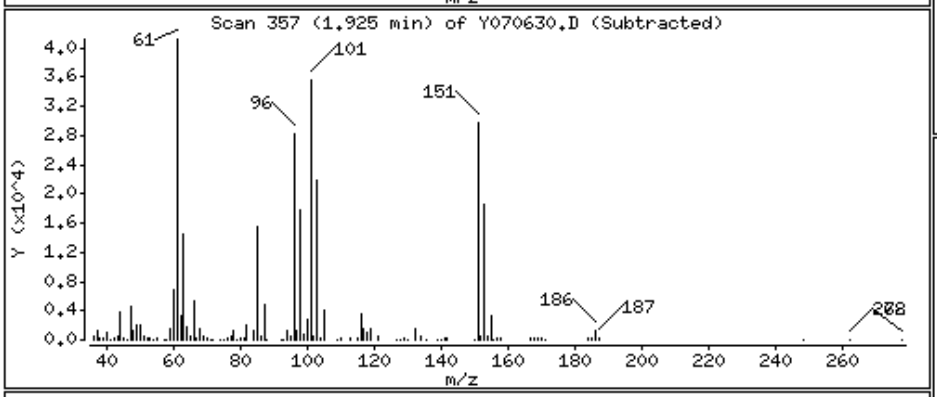
Sample Info: HS22070020-03;HS22070020-03;;;

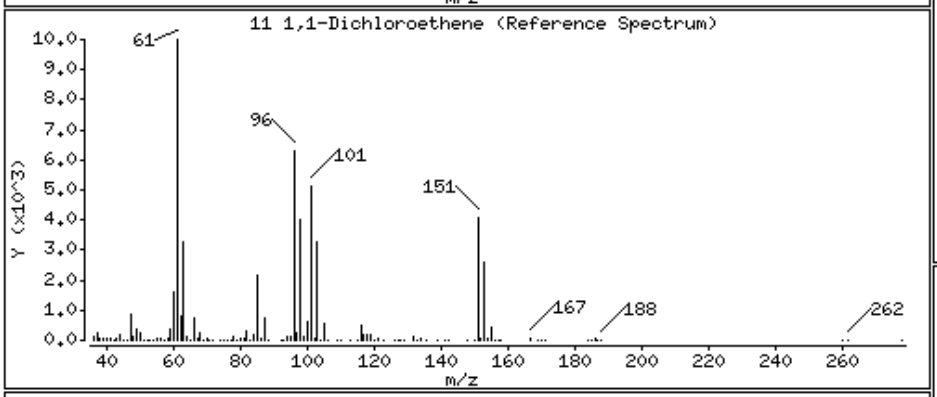
Purge Volume: 5.0 Operator: PC

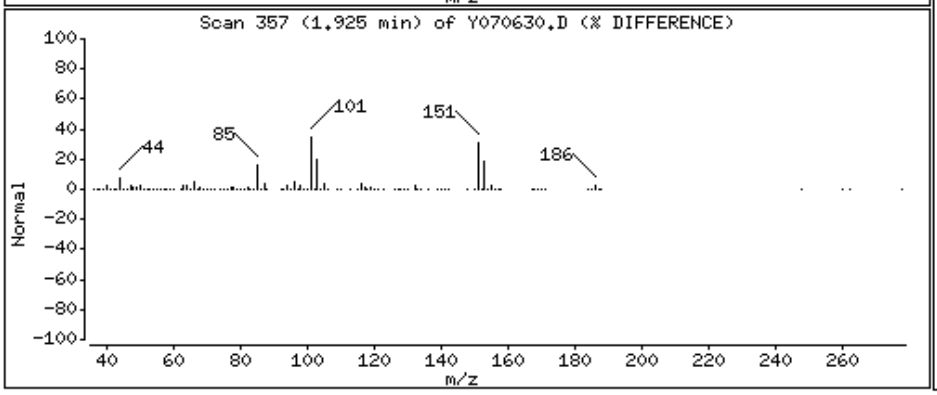
Column phase: DB624 Column diameter: 0.18

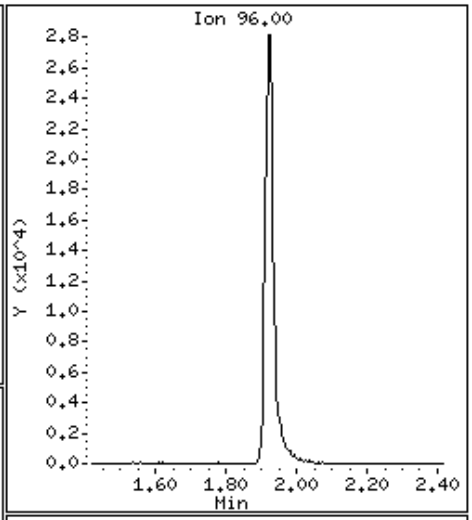
11 1,1-Dichloroethene Concentration: 204.81 ug/l

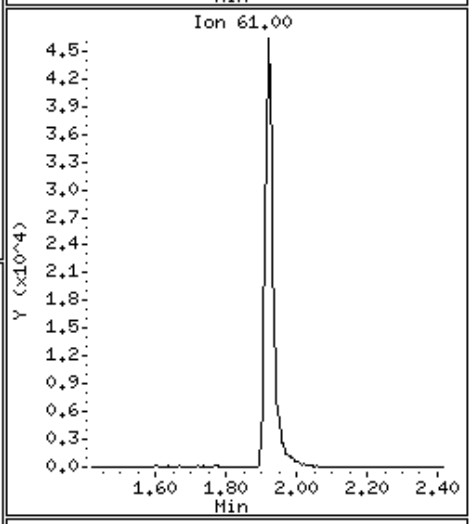


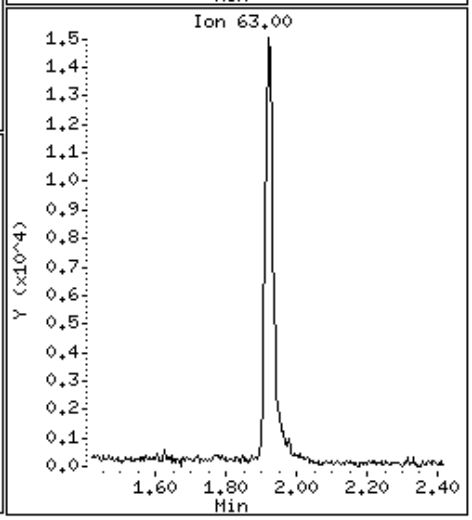












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070630.D Page 3

Date : 07-JUL-2022 02:24

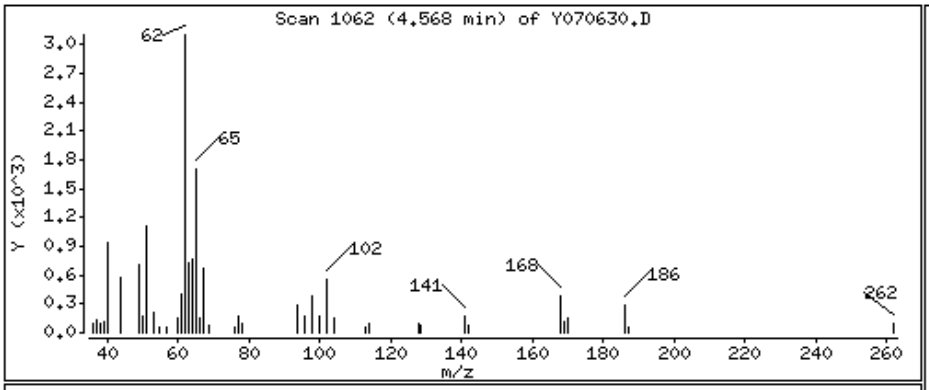
Client ID: HS22070020-03 Instrument: voa6.i

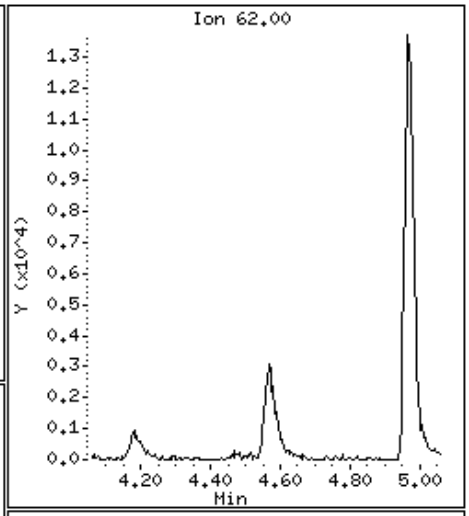
Sample Info: HS22070020-03;HS22070020-03;;;

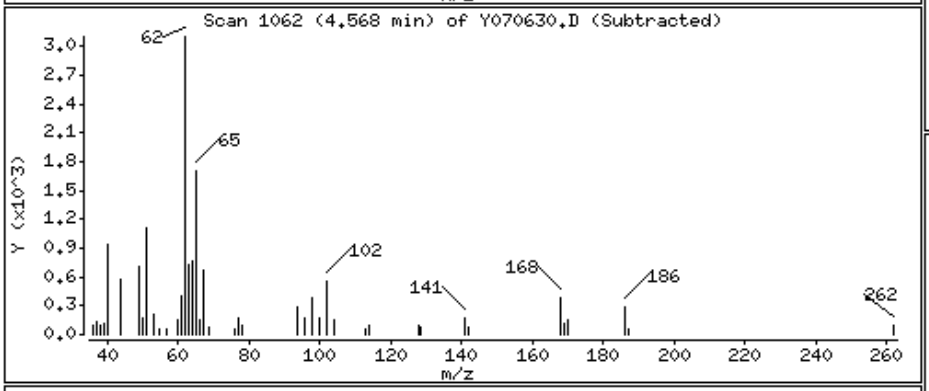
Purge Volume: 5.0 Operator: PC

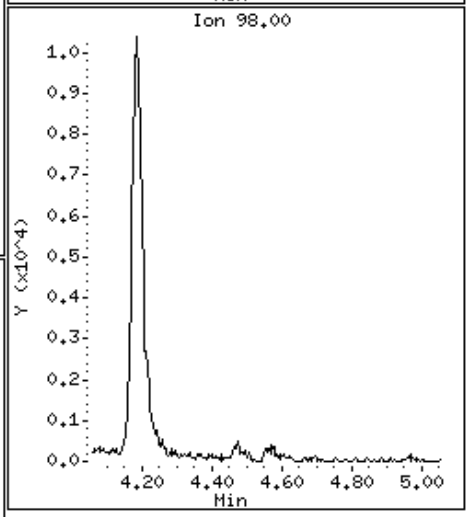
Column phase: DB624 Column diameter: 0.18

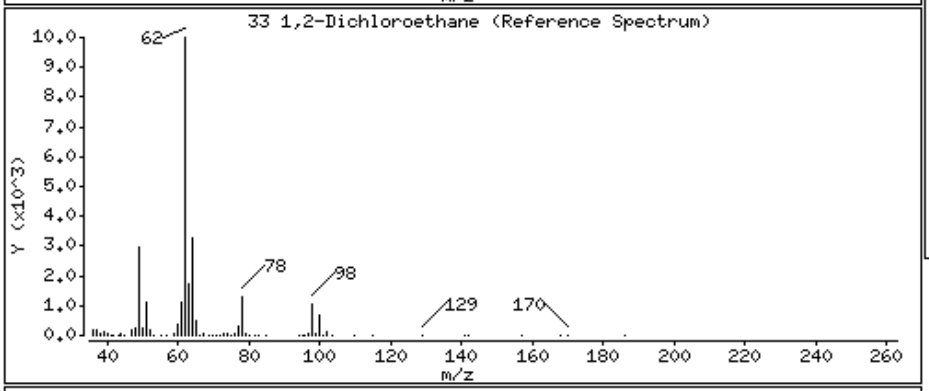
33 1,2-Dichloroethane Concentration: 21.49 ug/l

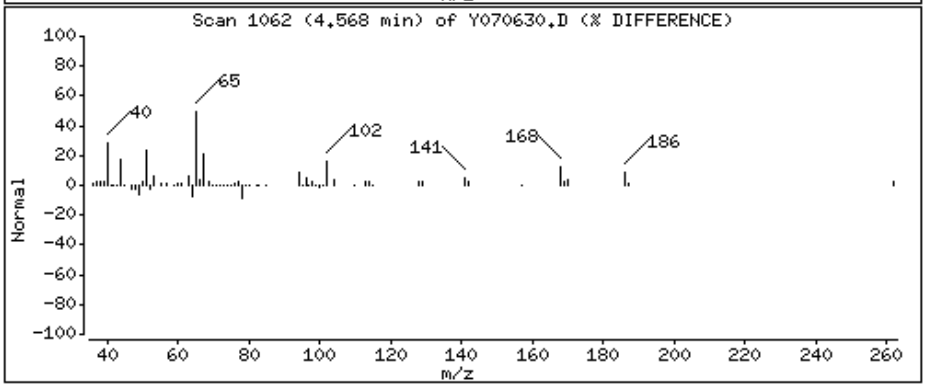












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070630.D Page 4

Date : 07-JUL-2022 02:24

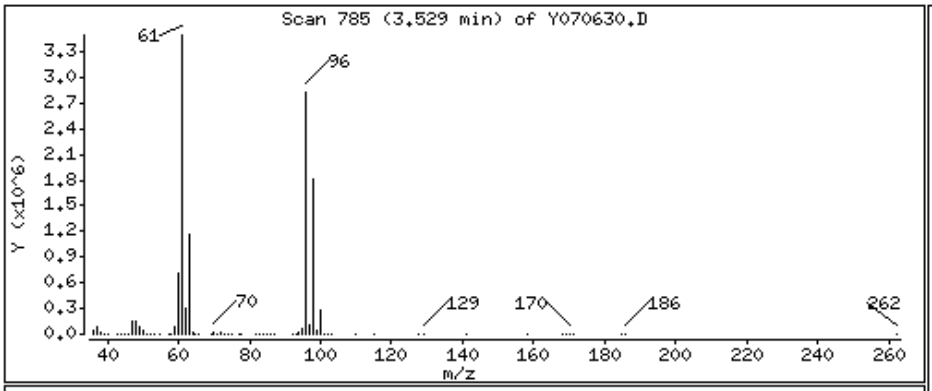
Client ID: HS22070020-03 Instrument: voa6.i

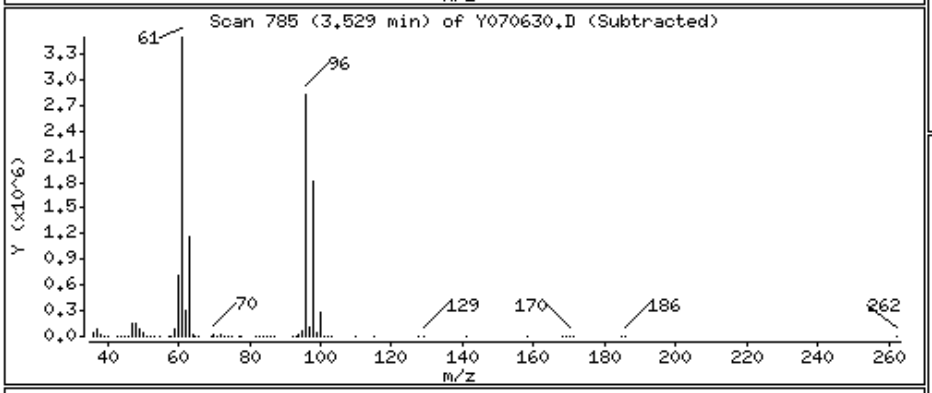
Sample Info: HS22070020-03;HS22070020-03;;;

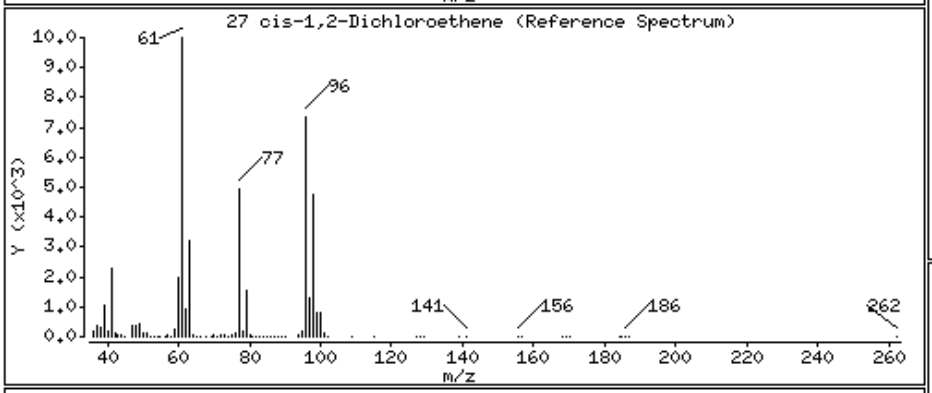
Purge Volume: 5.0 Operator: PC

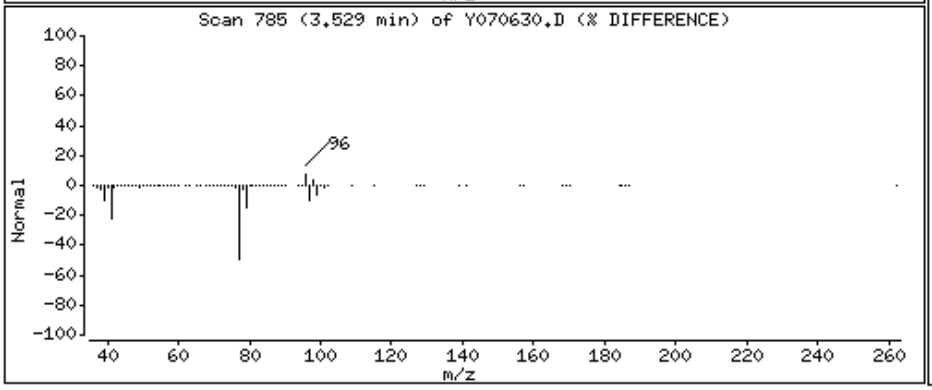
Column phase: DB624 Column diameter: 0.18

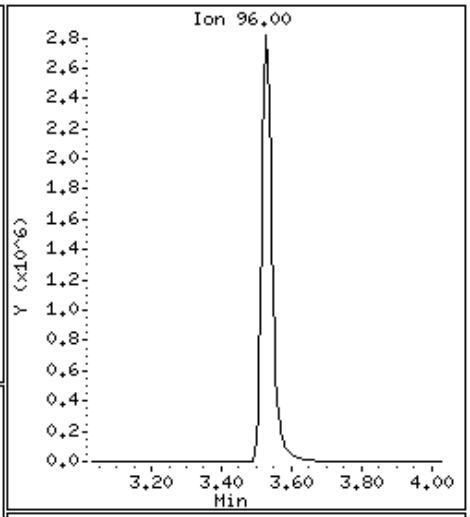
27 cis-1,2-Dichloroethene Concentration: 21122.30 ug/l

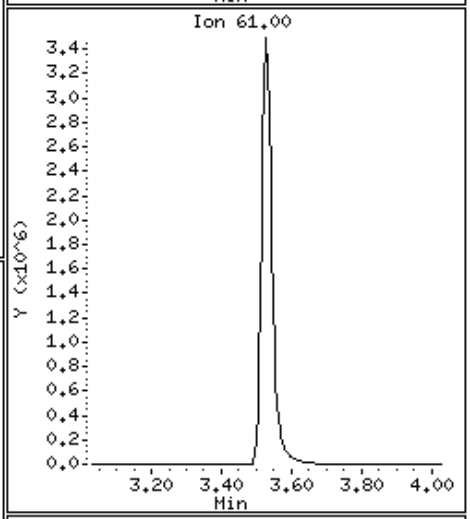


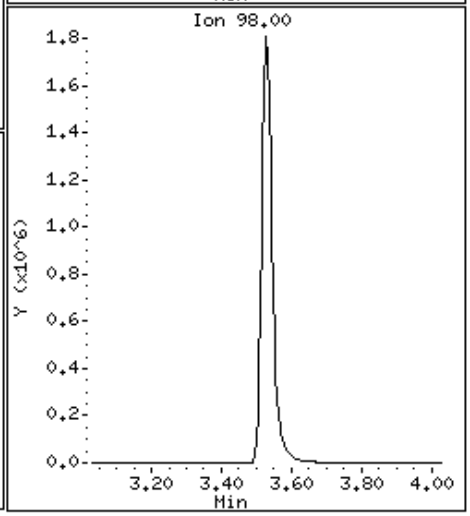












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070630.D Page 5

Date : 07-JUL-2022 02:24

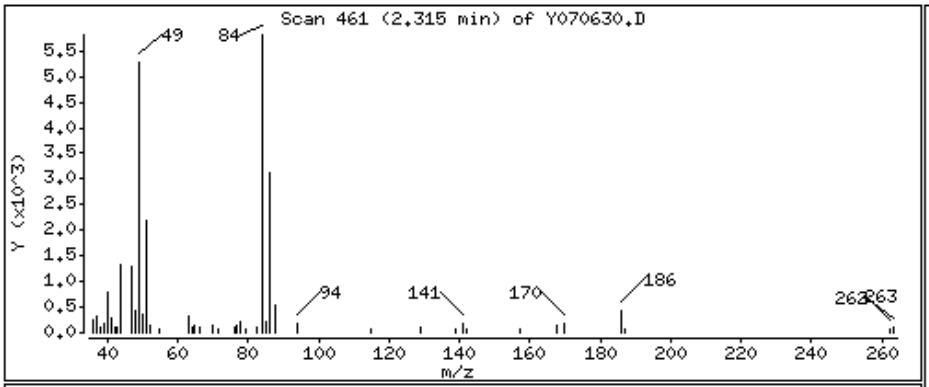
Client ID: HS22070020-03 Instrument: voa6.i

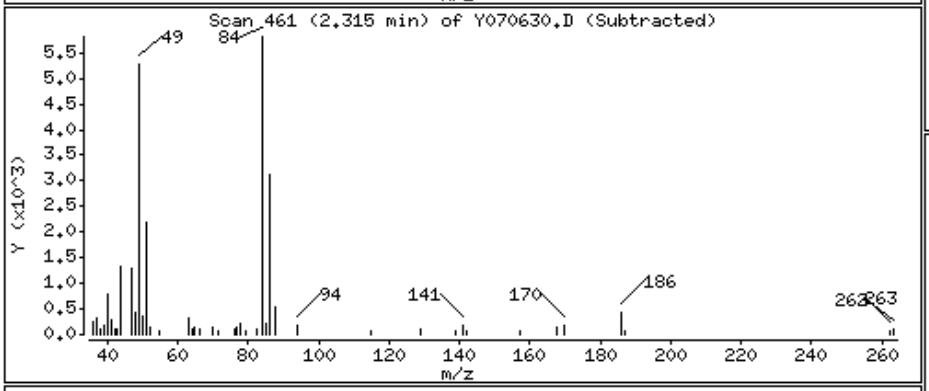
Sample Info: HS22070020-03;HS22070020-03;;;

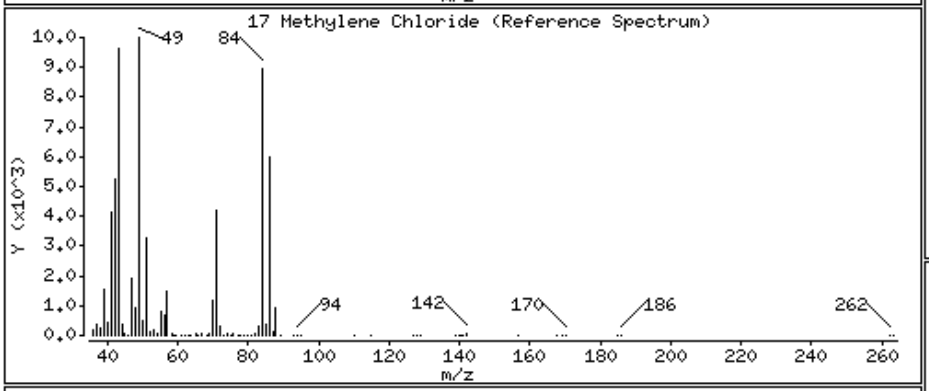
Purge Volume: 5.0 Operator: PC

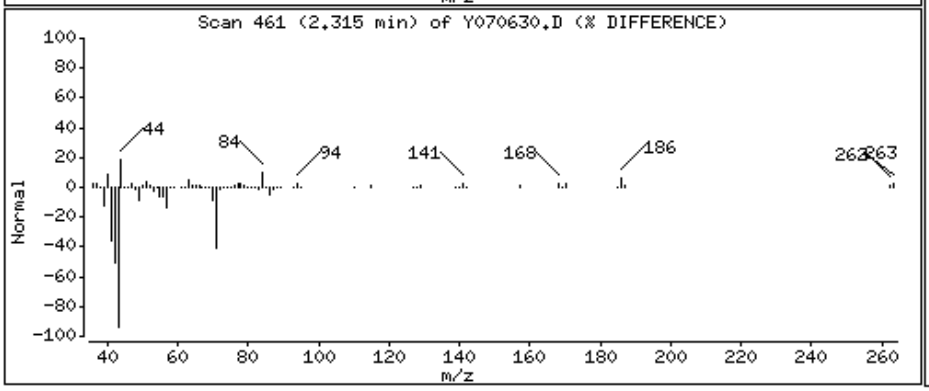
Column phase: DB624 Column diameter: 0.18

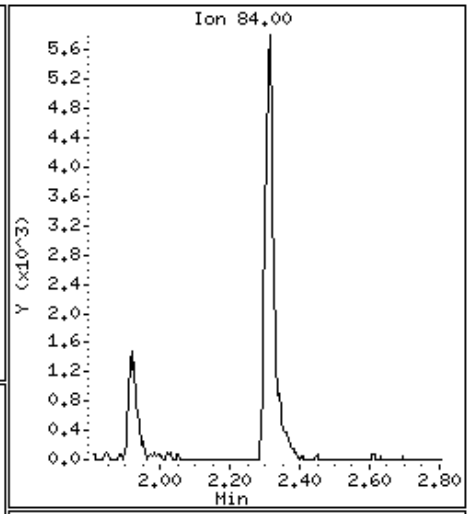
17 Methylene Chloride Concentration: 51.75 ug/l

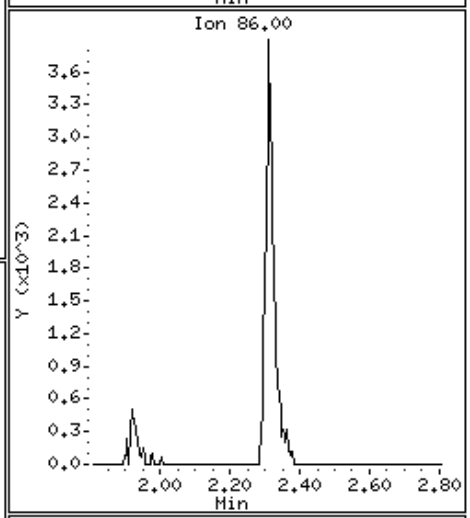


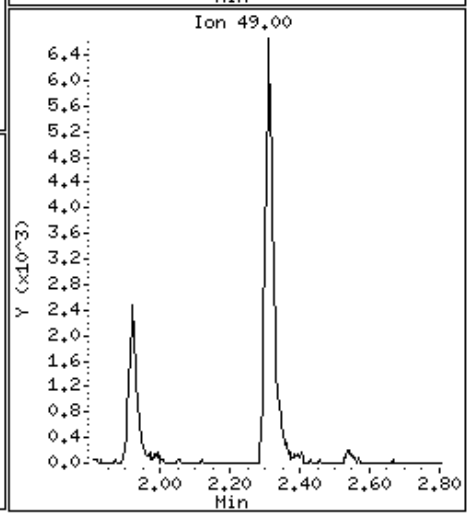












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070630.D Page 6

Date : 07-JUL-2022 02:24

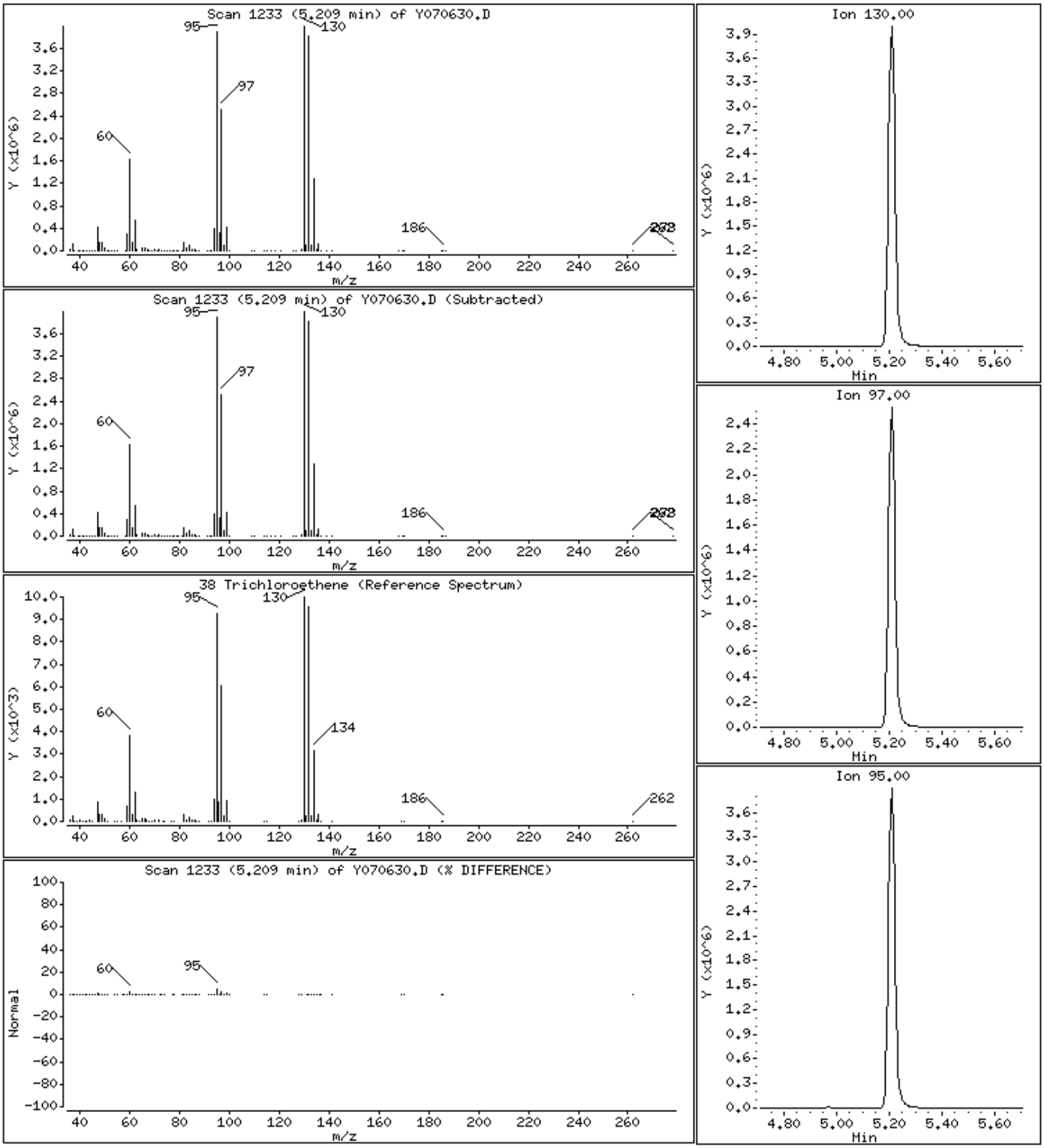
Client ID: HS22070020-03 Instrument: voa6.i

Sample Info: HS22070020-03;HS22070020-03;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

38 Trichloroethene Concentration: 27344.91 ug/l



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070630.D Page 7

Date : 07-JUL-2022 02:24

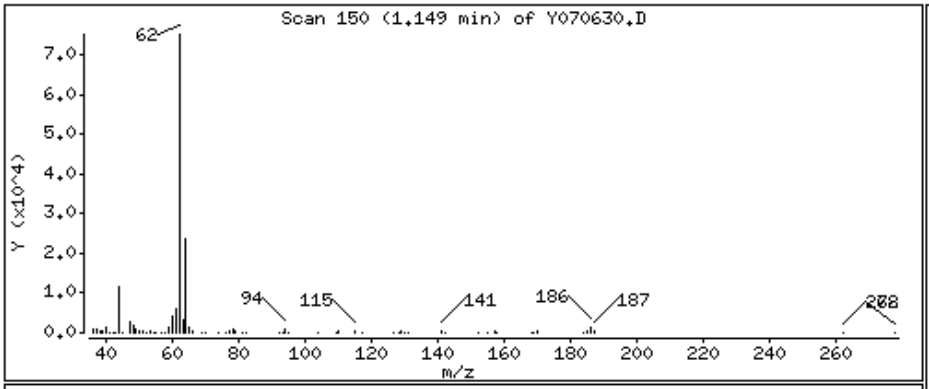
Client ID: HS22070020-03 Instrument: voa6.i

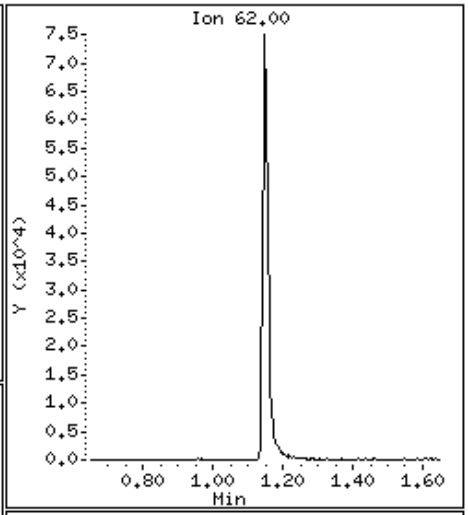
Sample Info: HS22070020-03;HS22070020-03;;;

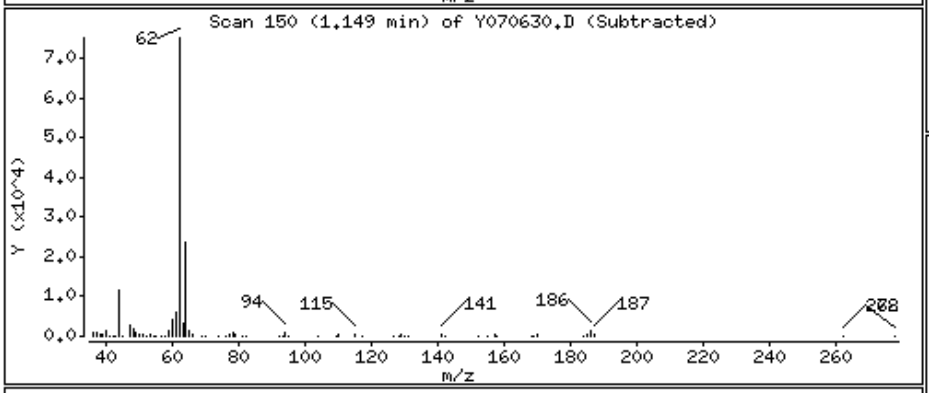
Purge Volume: 5.0 Operator: PC

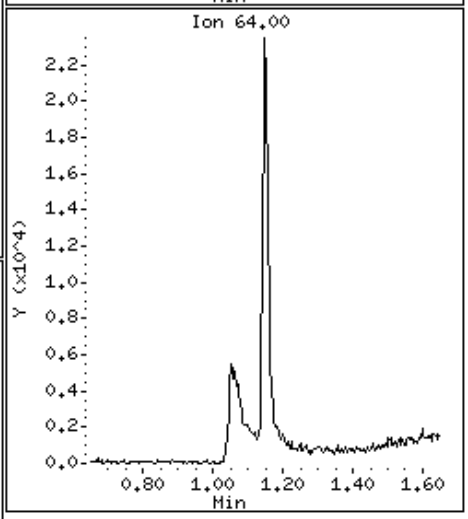
Column phase: DB624 Column diameter: 0.18

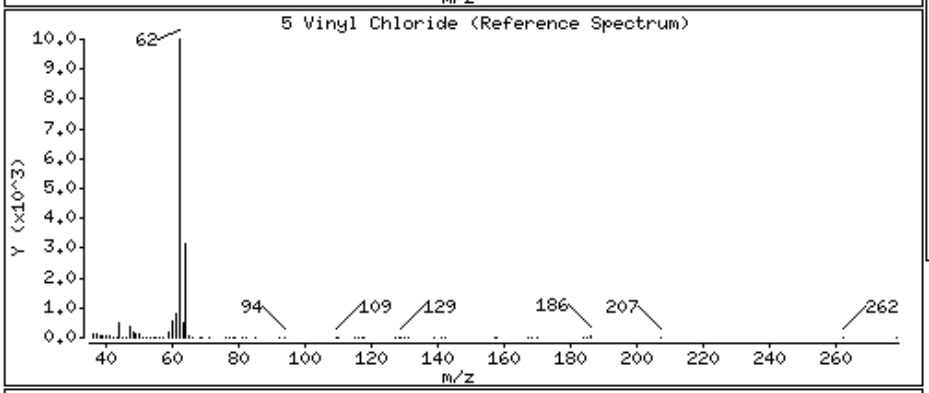
5 Vinyl Chloride Concentration: 260.21 ug/l

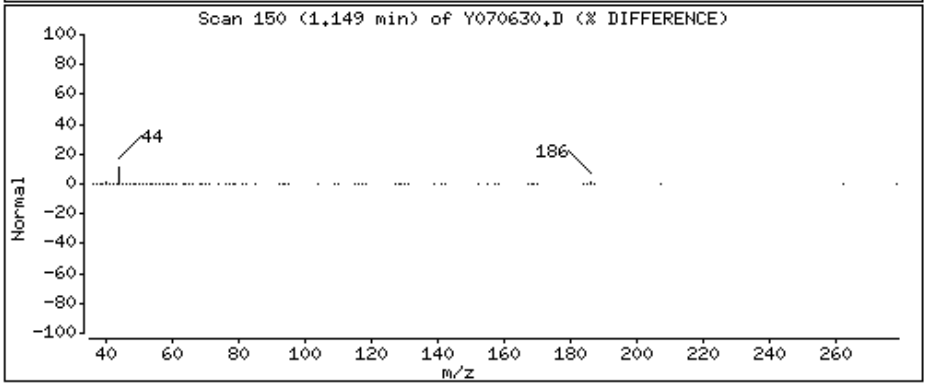












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070630.D
Inj Date : 07-JUL-2022 02:24
InstruID : voa6.i
LabSampID : HS22070020-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070631.D Page 1
Report Date: 15-Jul-2022 14:31

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070631.D
Lab Smp Id: HS22070020-03 Client Smp ID: HS22070020-03
Inj Date : 07-JUL-2022 02:45
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-03;HS22070020-03;;;
Misc Info : HS22052000V6;WATER;0;250
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:30 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 44
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

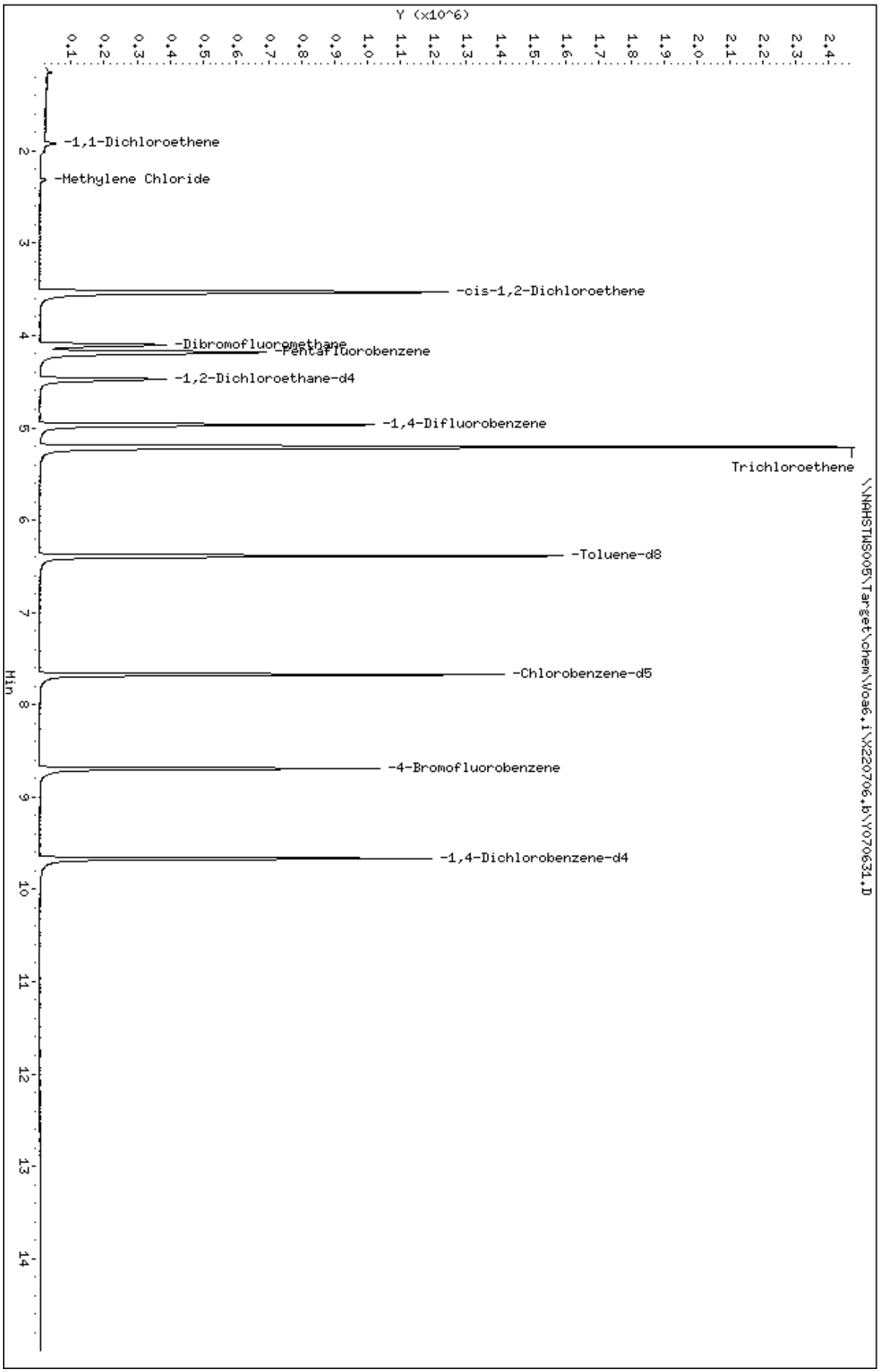
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	250.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	616665	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	884391	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	760127	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.666	(1.000)	328885	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	293601	50.8547	50.85
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	331698	50.2184	50.21
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	276553	48.6162	48.61
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1028363	54.4809	54.48
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	4849	0.82195	205.48(a)
27 cis-1,2-Dichloroethene	96	3.529	3.533	(0.843)	659772	92.4384	23109.60
17 Methylene Chloride	84	2.314	2.311	(0.553)	9178	1.88992	472.47(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	857979	129.549	32387.34
5 Vinyl Chloride	62	1.149	1.149	(0.275)	9226	1.16971	292.42(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220706.b\Y070631.D
Date : 07-JUL-2022 02:45
Client ID: HS220700Z0-03
Sample Info: HS220700Z0-03;HS220700Z0-03;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070631.D Page 2

Date : 07-JUL-2022 02:45

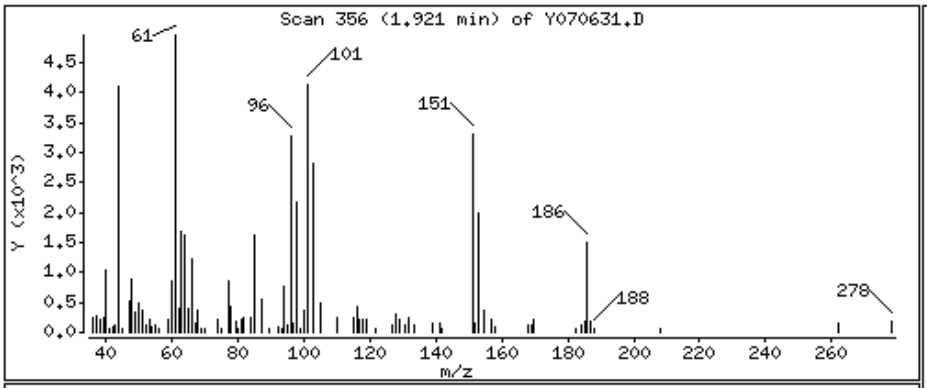
Client ID: HS22070020-03 Instrument: voa6.i

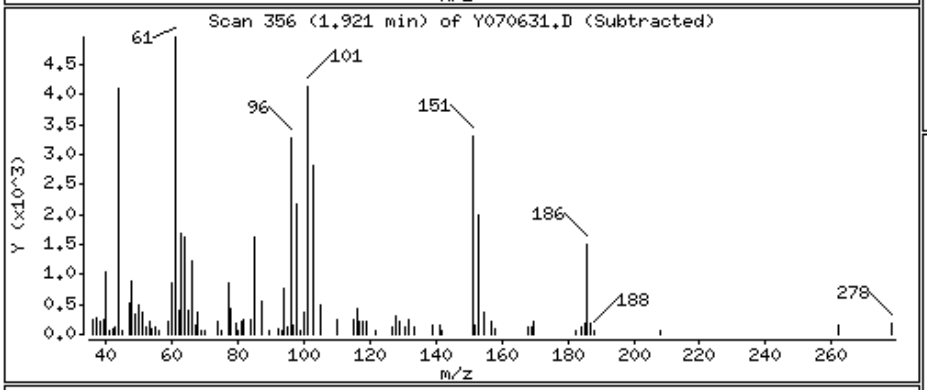
Sample Info: HS22070020-03;HS22070020-03;;;

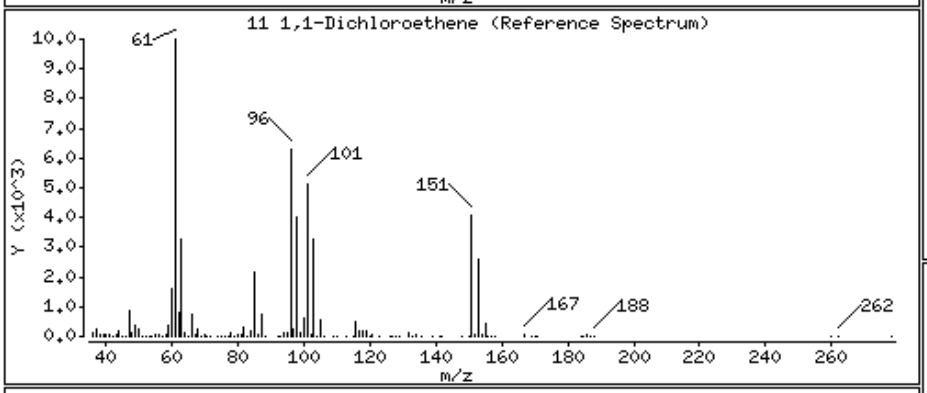
Purge Volume: 5.0 Operator: PC

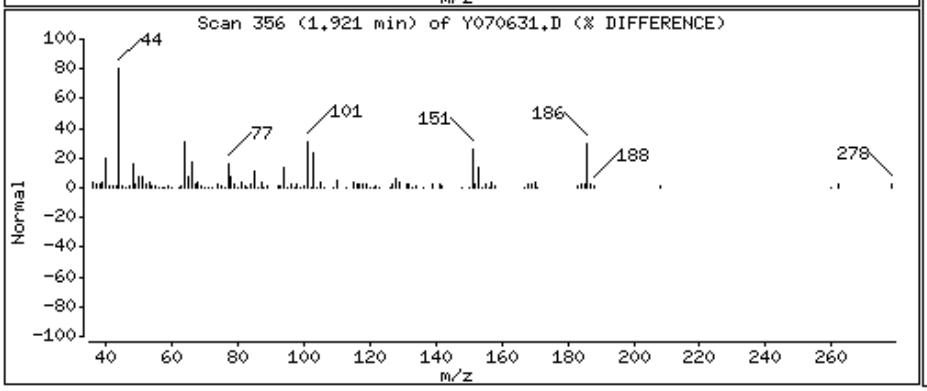
Column phase: DB624 Column diameter: 0.18

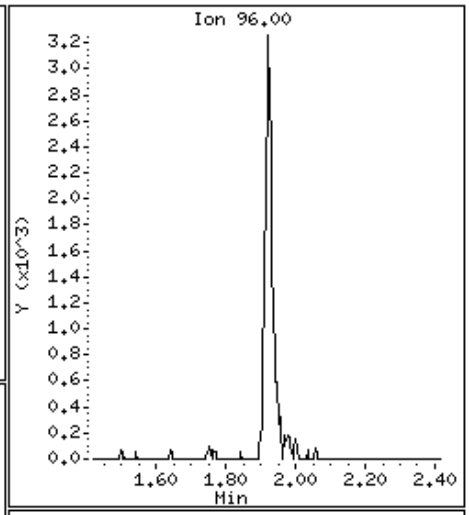
11 1,1-Dichloroethene Concentration: 205.48 ug/l

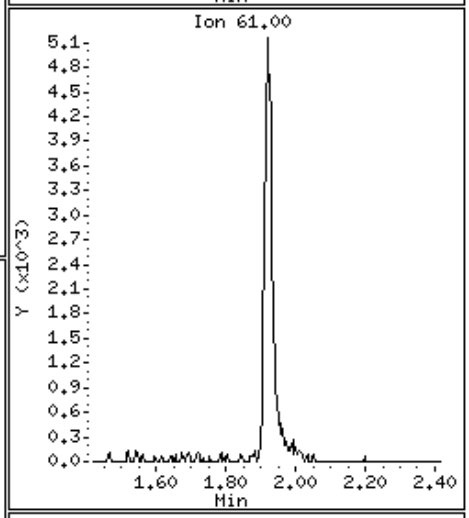


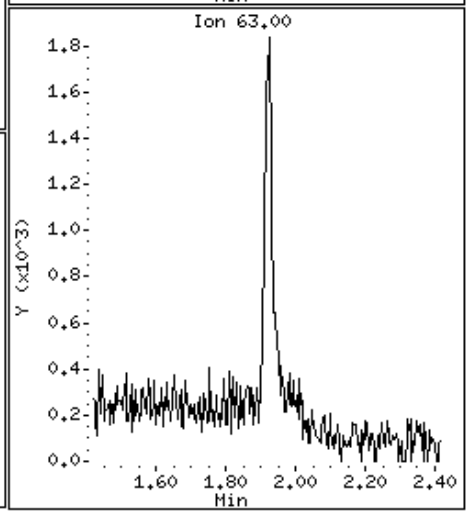












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070631.D Page 3

Date : 07-JUL-2022 02:45

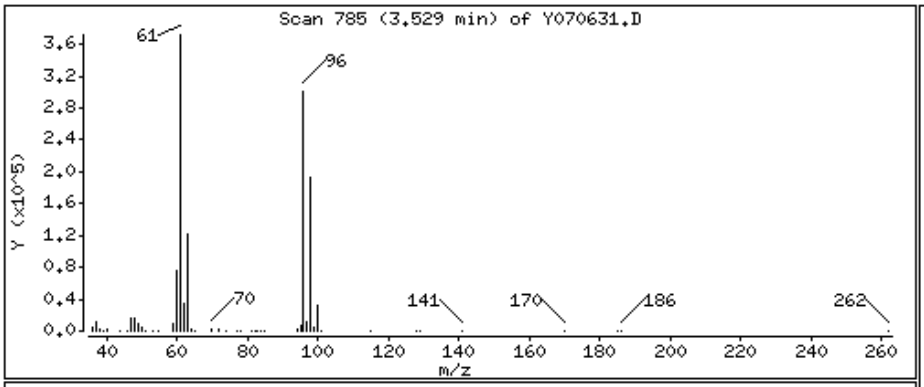
Client ID: HS22070020-03 Instrument: voa6.i

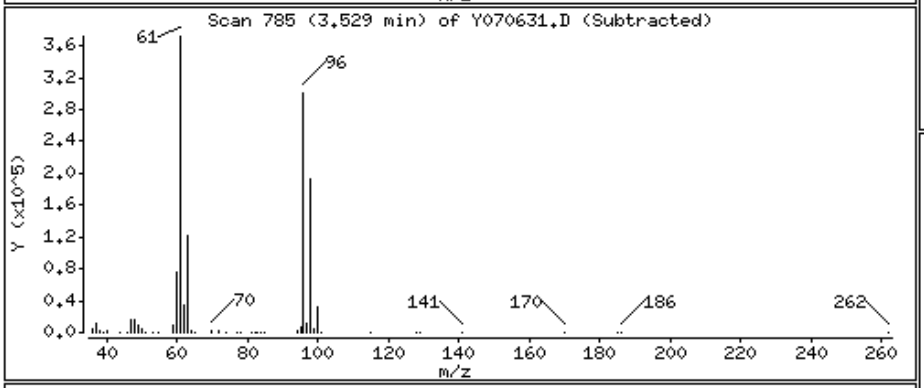
Sample Info: HS22070020-03;HS22070020-03;;;

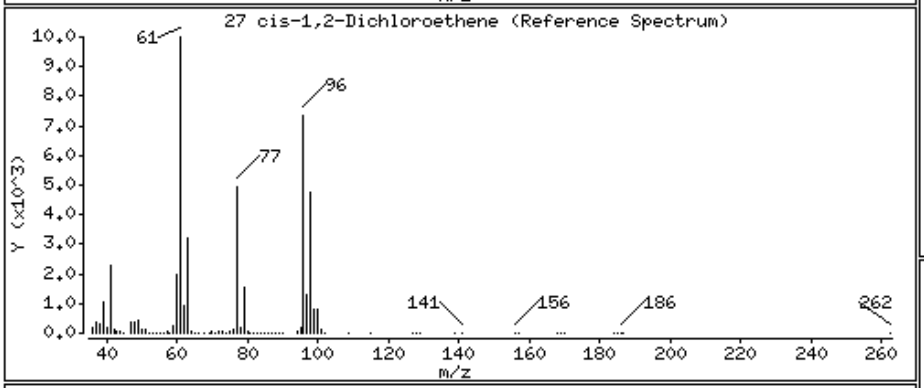
Purge Volume: 5.0 Operator: PC

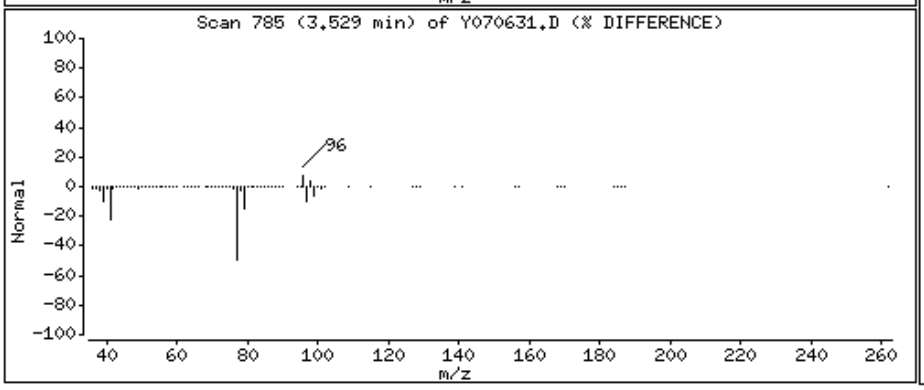
Column phase: DB624 Column diameter: 0.18

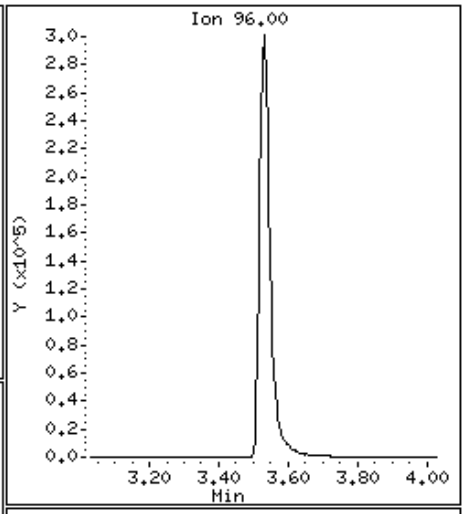
27 cis-1,2-Dichloroethene Concentration: 23109.60 ug/l

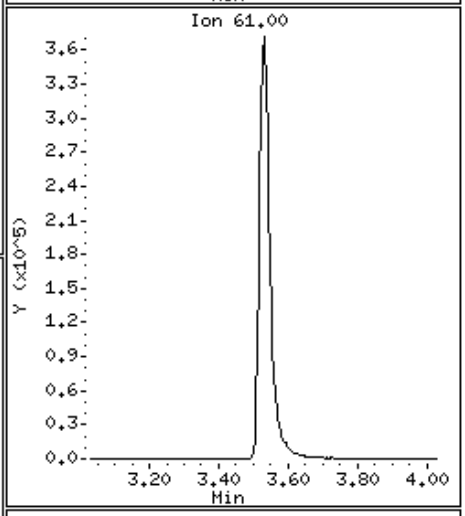


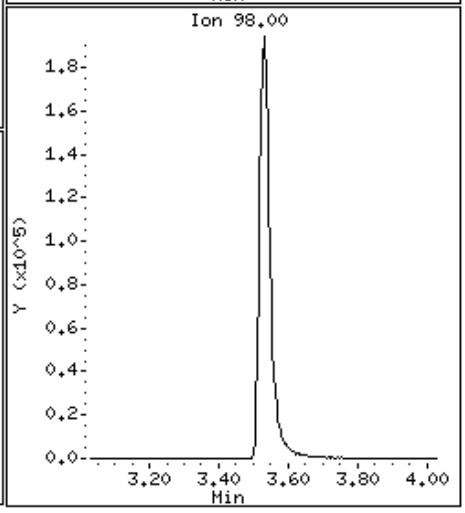












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070631.D

Date : 07-JUL-2022 02:45

Client ID: HS22070020-03

Instrument: voa6.i

Sample Info: HS22070020-03;HS22070020-03;;;

Purge Volume: 5.0

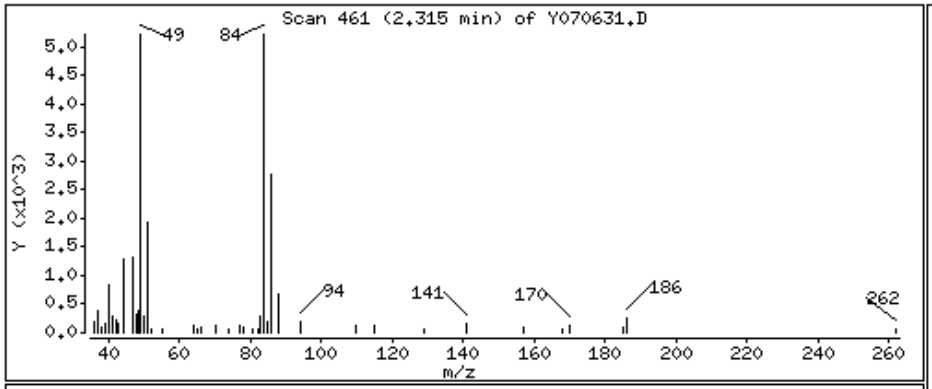
Operator: PC

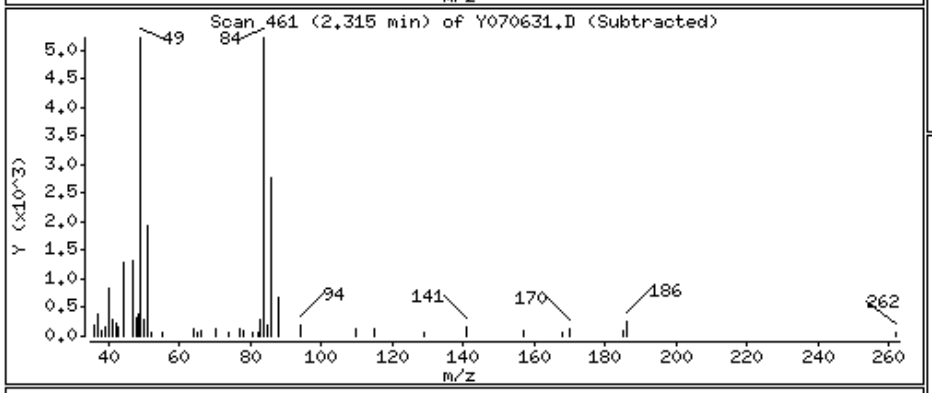
Column phase: DB624

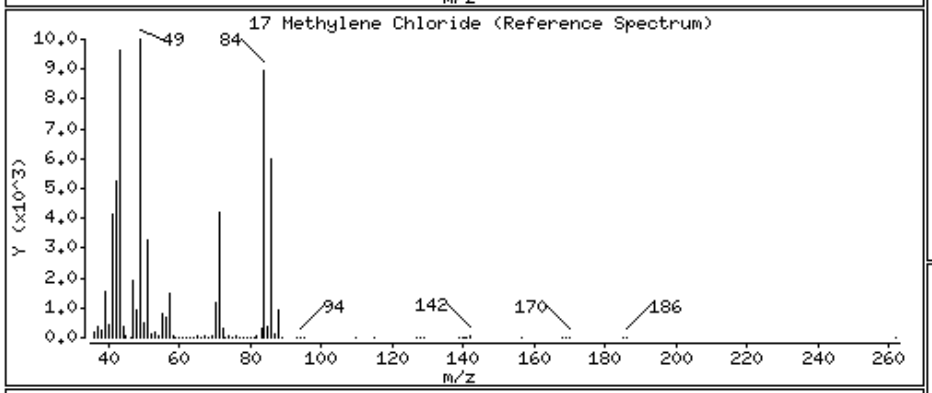
Column diameter: 0.18

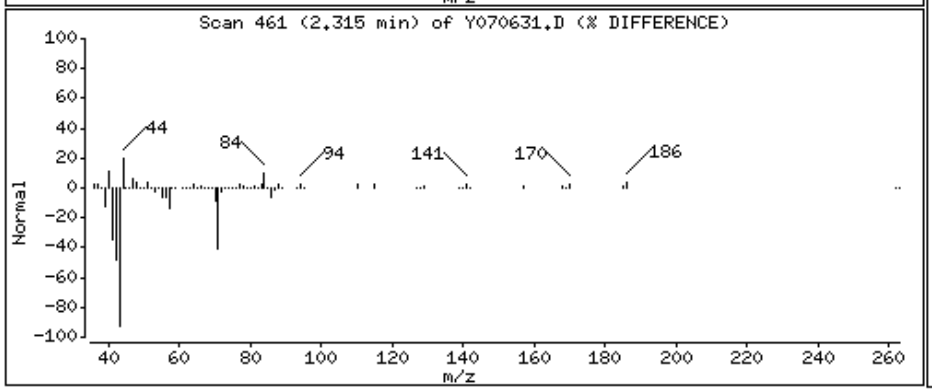
17 Methylene Chloride

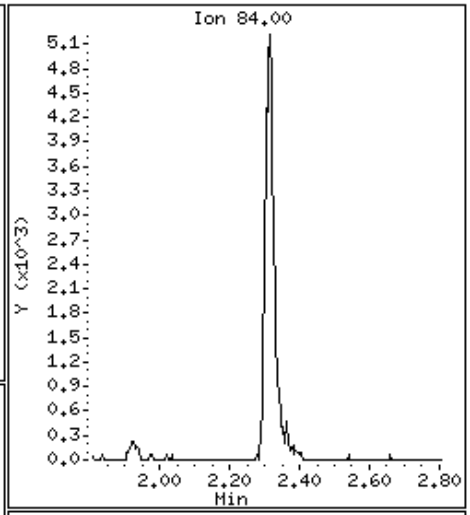
Concentration: 472.47 ug/l

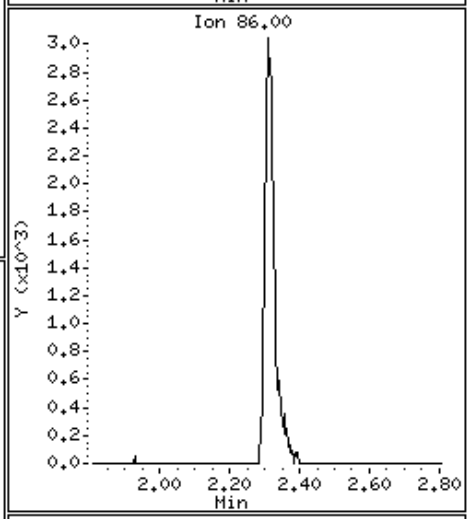


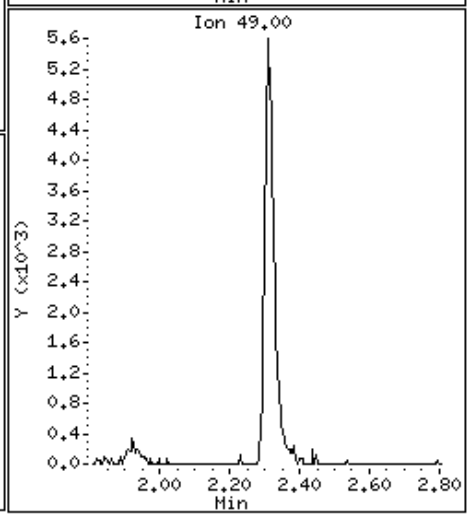












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070631.D Page 5

Date : 07-JUL-2022 02:45

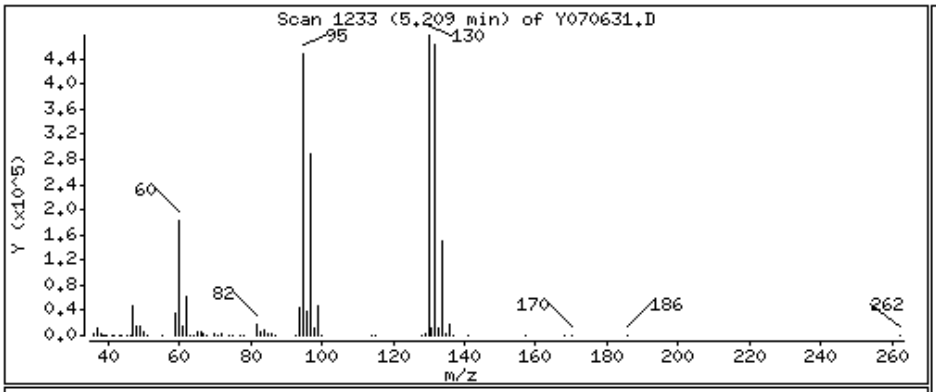
Client ID: HS22070020-03 Instrument: voa6.i

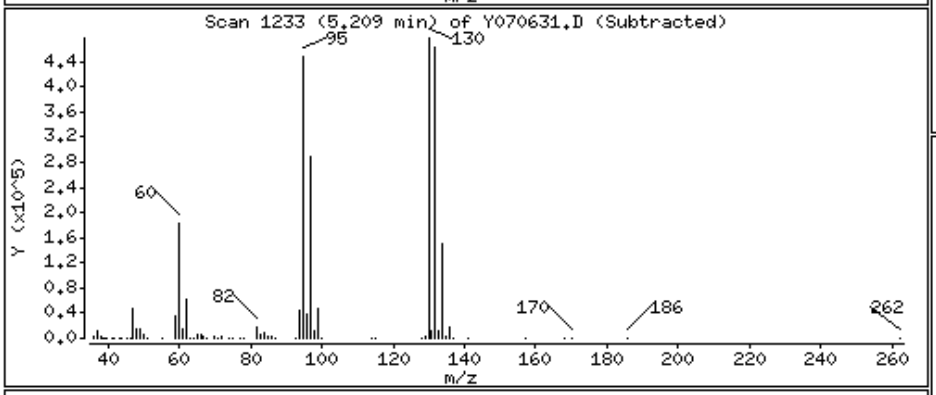
Sample Info: HS22070020-03;HS22070020-03;;;

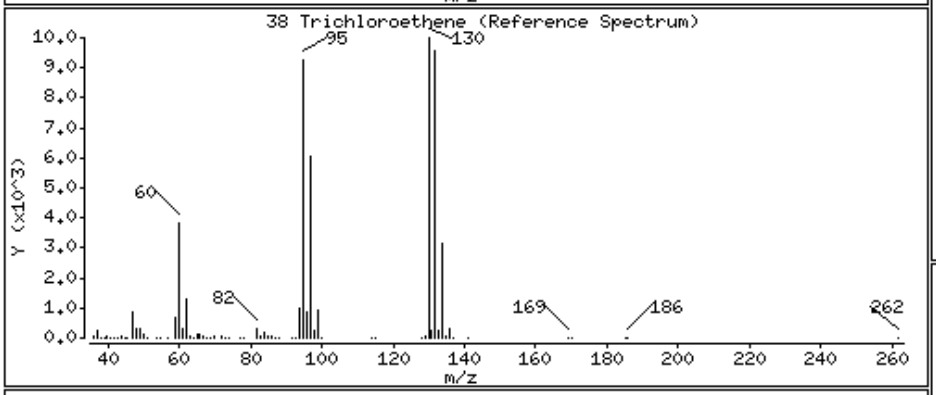
Purge Volume: 5.0 Operator: PC

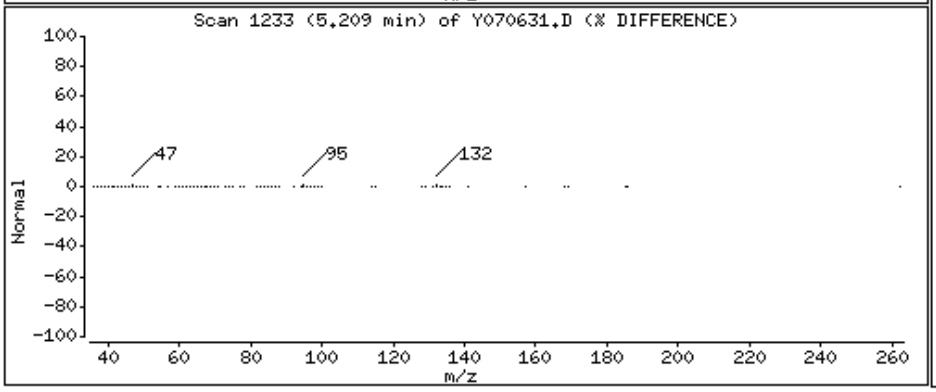
Column phase: DB624 Column diameter: 0.18

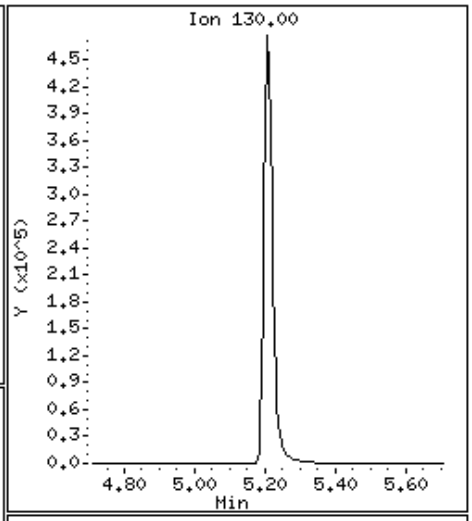
38 Trichloroethene Concentration: 32387.34 ug/l

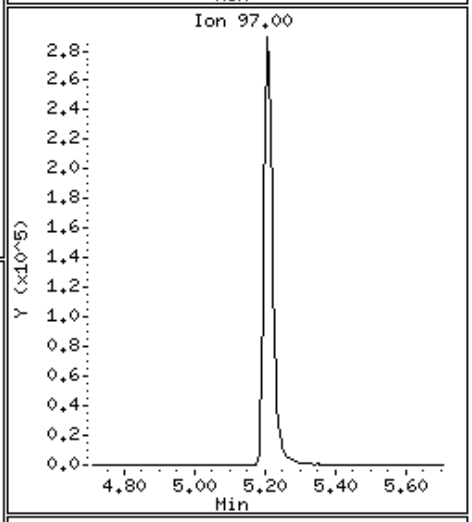


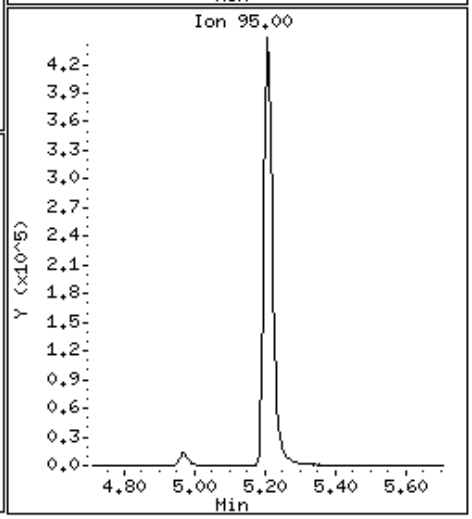












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070631.D

Date : 07-JUL-2022 02:45

Client ID: HS22070020-03

Instrument: voa6.i

Sample Info: HS22070020-03;HS22070020-03;;;

Purge Volume: 5.0

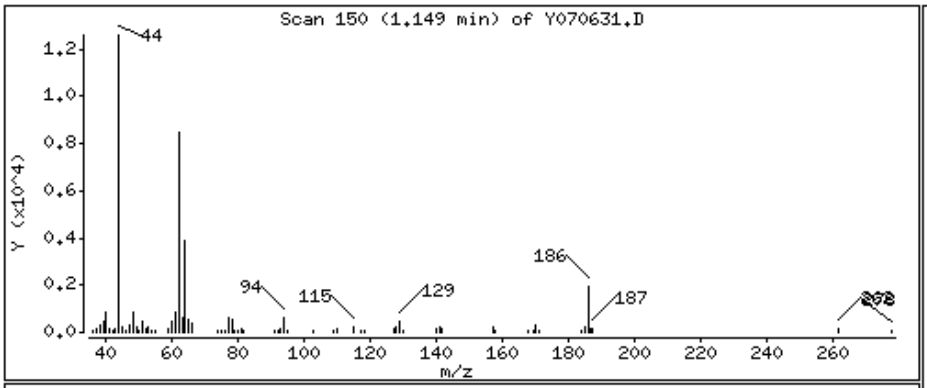
Operator: PC

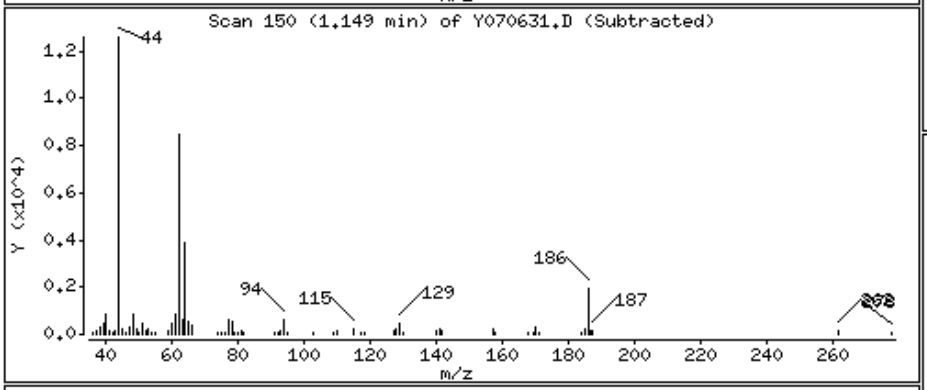
Column phase: DB624

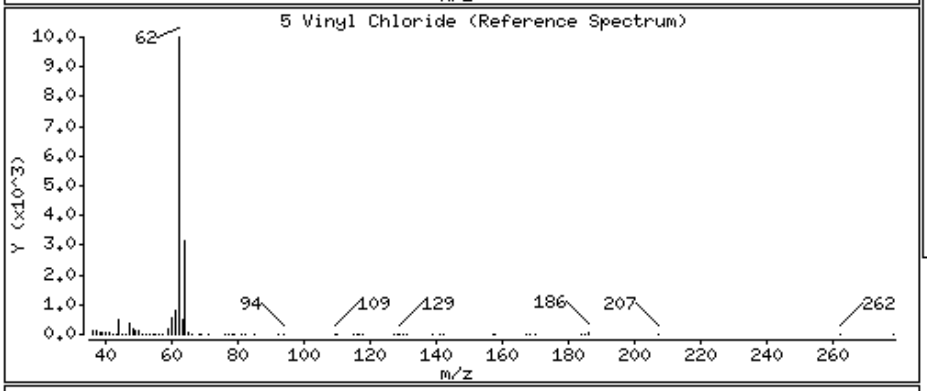
Column diameter: 0.18

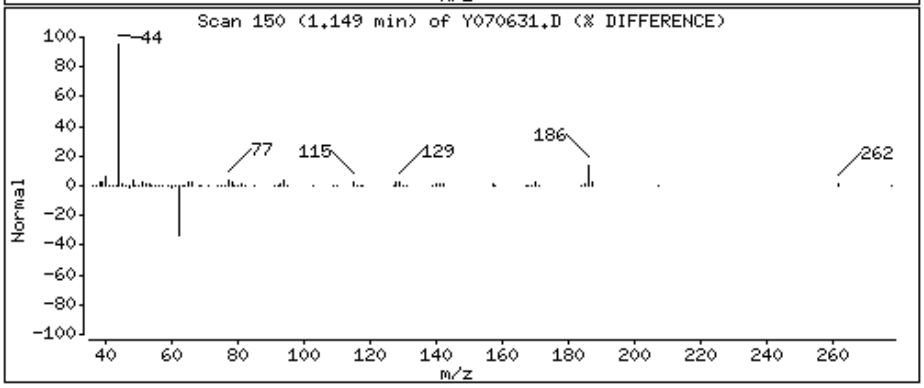
5 Vinyl Chloride

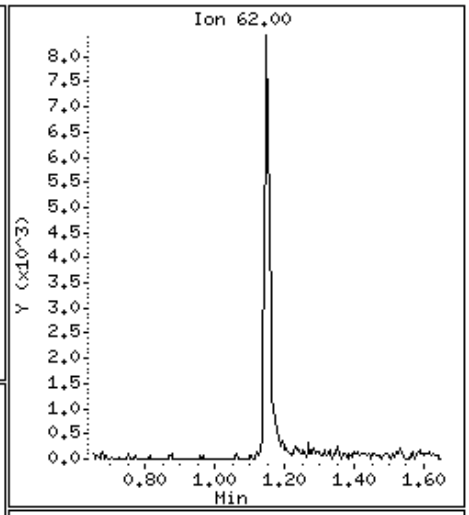
Concentration: 292.42 ug/l

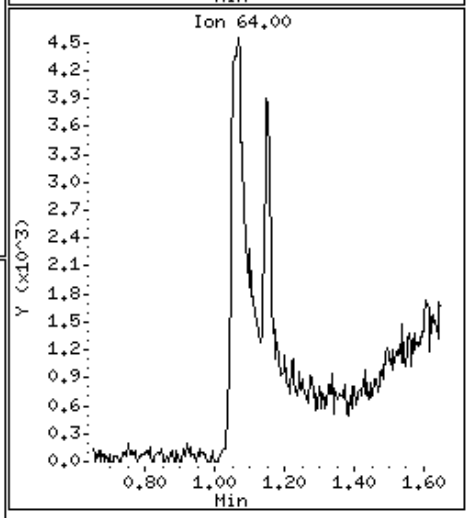












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070631.D
Inj Date : 07-JUL-2022 02:45
InstruID : voa6.i
LabSampID : HS22070020-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070632.D Page 1
Report Date: 15-Jul-2022 14:31

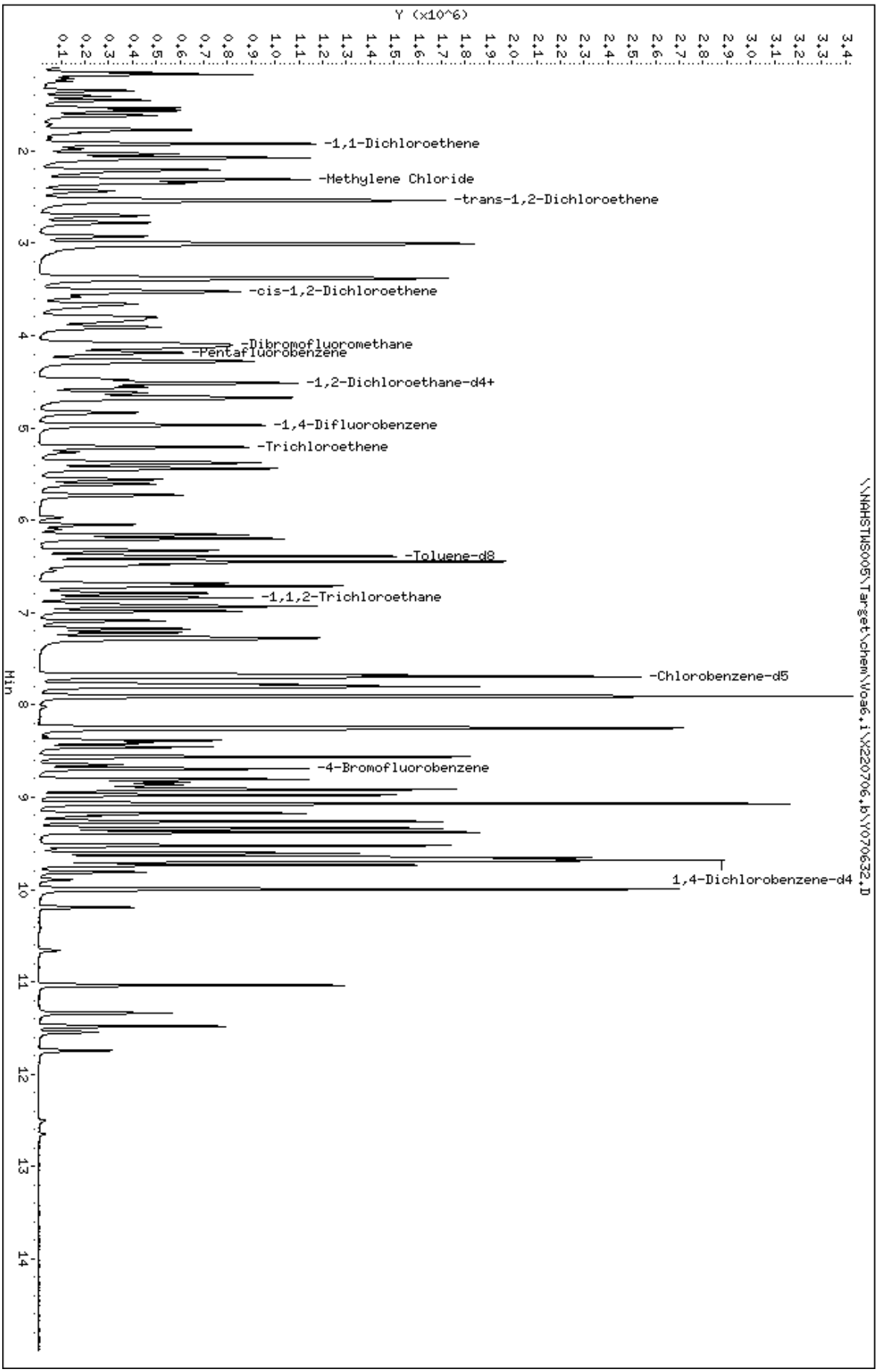
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070632.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 07-JUL-2022 03:06
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:31 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 45 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	520784	50.0000	
*	36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	808784	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	704431	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	342987	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	270248	50.0000	55.53
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	315884	50.0000	51.61
$	30 Dibromofluoromethane	113	4.103	4.103	(0.980)	255239	50.0000	53.15
$	48 Toluene-d8	98	6.389	6.389	(0.833)	926908	50.0000	52.98
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	203397	50.0000	50.78
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	229643	50.0000	46.09
	33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	341994	50.0000	51.02
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	299897	50.0000	49.75
	17 Methylene Chloride	84	2.311	2.311	(0.552)	285499	50.0000	47.19
	38 Trichloroethene	130	5.209	5.209	(1.048)	305520	50.0000	50.44
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	309857	50.0000	46.51



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220706.b\Y070632.D
Date : 07-JUL-2022 03:06
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Page 1

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\Y070632.D
Inj Date : 07-JUL-2022 03:06
InstruID : voa6.i
LabSampID : CCV-END

NO MANUAL INTEGRATIONS

right solutions.
right partner.

Raw Data VOA6 412413

Volatiles Organics by Method 8260C

Wokorder

HS22070020

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2022

07/20/2022

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070701.D Page 1
Report Date: 07-Jul-2022 10:57

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070701.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 07-JUL-2022 10:17
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\bfb.m
Meth Date : 14-Jun-2022 12:47 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.691	8.889	(0.000)	95	133952			0.00- 100.00	100.00
8.691	8.889	(0.000)	50	20880			15.00- 40.00	15.59
8.691	8.889	(0.000)	75	59344			30.00- 60.00	44.30
8.691	8.889	(0.000)	96	8646			5.00- 9.00	6.45
8.691	8.889	(0.000)	173	1130			0.00- 2.00	0.93
8.691	8.889	(0.000)	174	121776			50.00- 0.00	90.91
8.691	8.889	(0.000)	175	8970			5.00- 9.00	7.37
8.691	8.889	(0.000)	176	118560			95.00- 101.00	97.36
8.691	8.889	(0.000)	177	7619			5.00- 9.00	6.43

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.59
75	30.00 - 60.00% of mass 95	44.30
96	5.00 - 9.00% of mass 95	6.45
173	Less than 2.00% of mass 174	0.84 (0.93)
174	Greater than 50.00% of mass 95	90.91
175	5.00 - 9.00% of mass 174	6.70 (7.37)
176	95.00 - 101.00% of mass 174	88.51 (97.36)
177	5.00 - 9.00% of mass 176	5.69 (6.43)

Data File: X070701.D
Spectrum: Scan 2162 (8.69)
Location of Maximum: 95.00
Number of points: 106

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	826	65.00	139	95.00	133952	140.90	859
37.10	4355	65.80	140	96.00	8646	142.00	69
38.00	3929	66.90	307	97.00	348	142.90	873
39.00	1717	68.00	12236	98.00	534	145.50	121
39.90	727	69.00	12407	103.00	137	146.90	60
41.00	405	70.10	1108	103.90	328	148.00	238
41.90	645	71.00	120	104.70	333	148.80	107
43.10	604	72.10	845	105.90	562	149.90	96
44.00	989	73.10	4843	107.00	225	152.00	61
45.00	939	74.10	17824	112.80	89	152.80	76
46.10	55	75.00	59344	114.90	277	153.90	164
47.00	1356	76.10	4850	116.00	296	154.90	360
48.10	477	76.90	1220	116.90	747	156.70	249
49.10	4281	77.90	755	117.90	383	158.80	201
50.10	20880	78.90	2202	118.80	449	160.80	117
51.00	6077	79.90	570	119.90	60	170.00	148
52.00	298	80.90	2134	124.10	61	173.00	1130
53.80	52	81.80	601	126.80	76	174.00	121776
55.00	1495	83.00	177	127.80	439	175.00	8970
56.00	1701	85.20	55	129.00	263	176.00	118560
57.00	2962	85.70	149	129.80	383	176.90	7619
57.80	254	87.00	6388	130.90	291	177.90	178
60.10	1129	88.00	5850	134.90	184	185.90	396
61.10	5222	90.70	447	135.90	57	261.90	110
62.00	4913	92.00	3334	136.80	192	277.90	61
63.10	3587	93.00	4340	138.90	60		
64.10	253	94.00	12925	140.00	103		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070701.D Page 1

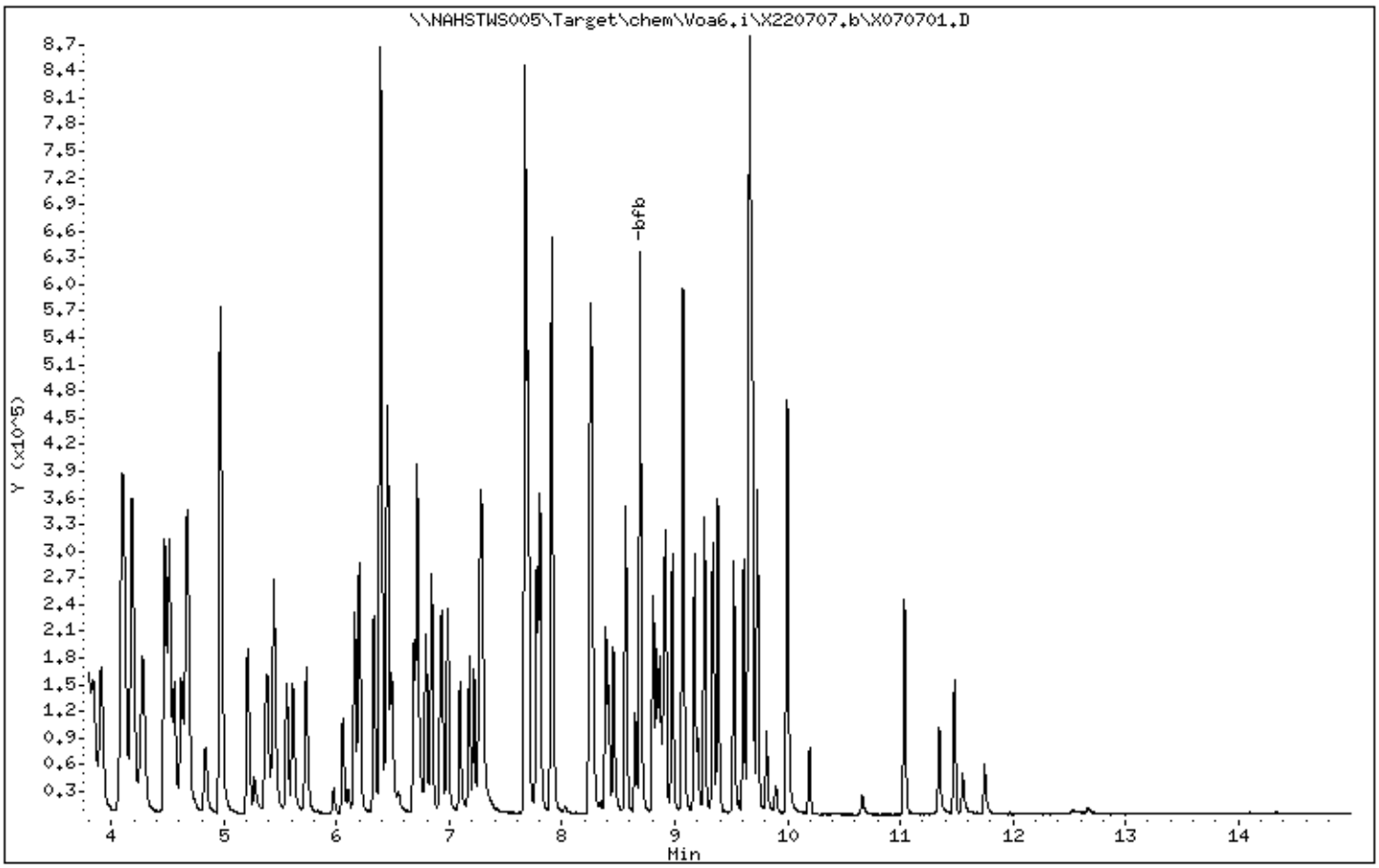
Date : 07-JUL-2022 10:17

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070701.D

Date : 07-JUL-2022 10:17

Client ID: BFB

Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

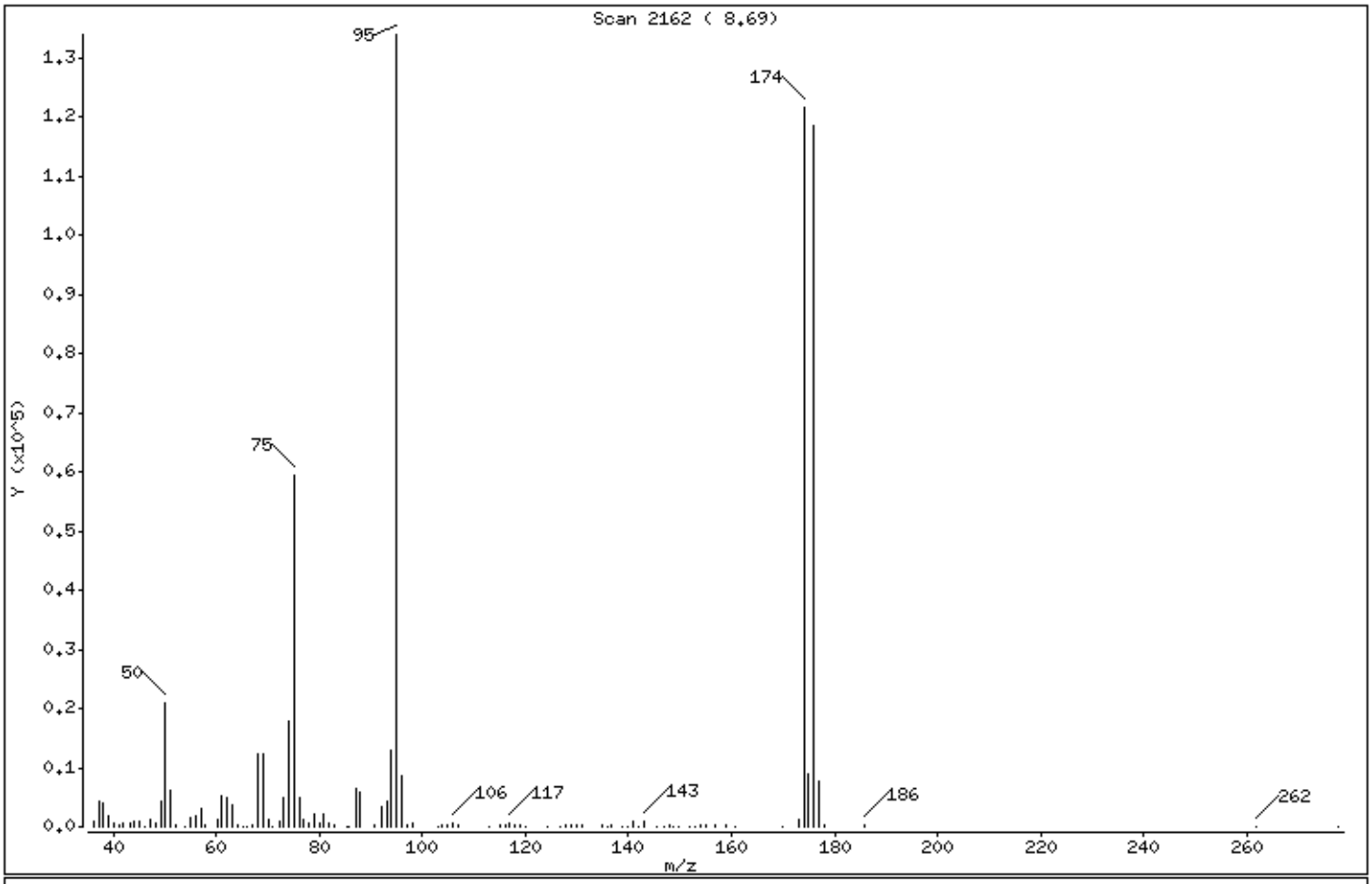
Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.59
75	30.00 - 60.00% of mass 95	44.30
96	5.00 - 9.00% of mass 95	6.45
173	Less than 2.00% of mass 174	0.84 (0.93)
174	Greater than 50.00% of mass 95	90.91
175	5.00 - 9.00% of mass 174	6.70 (7.37)
176	95.00 - 101.00% of mass 174	88.51 (97.36)
177	5.00 - 9.00% of mass 176	5.69 (6.43)

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070701.D

Date : 07-JUL-2022 10:17

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

Data File: X070701.D
Spectrum: Scan 2162 (8.69)
Location of Maximum: 95.00
Number of points: 106

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	826	65.00	139	95.00	133952	140.90	859
37.10	4355	65.80	140	96.00	8646	142.00	69
38.00	3929	66.90	307	97.00	348	142.90	873
39.00	1717	68.00	12236	98.00	534	145.50	121
39.90	727	69.00	12407	103.00	137	146.90	60
41.00	405	70.10	1108	103.90	328	148.00	238
41.90	645	71.00	120	104.70	333	148.80	107
43.10	604	72.10	845	105.90	562	149.90	96
44.00	989	73.10	4843	107.00	225	152.00	61
45.00	939	74.10	17824	112.80	89	152.80	76
46.10	55	75.00	59344	114.90	277	153.90	164
47.00	1356	76.10	4850	116.00	296	154.90	360
48.10	477	76.90	1220	116.90	747	156.70	249
49.10	4281	77.90	755	117.90	383	158.80	201
50.10	20880	78.90	2202	118.80	449	160.80	117
51.00	6077	79.90	570	119.90	60	170.00	148
52.00	298	80.90	2134	124.10	61	173.00	1130
53.80	52	81.80	601	126.80	76	174.00	121776
55.00	1495	83.00	177	127.80	439	175.00	8970
56.00	1701	85.20	55	129.00	263	176.00	118560
57.00	2962	85.70	149	129.80	383	176.90	7619
57.80	254	87.00	6388	130.90	291	177.90	178
60.10	1129	88.00	5850	134.90	184	185.90	396
61.10	5222	90.70	447	135.90	57	261.90	110
62.00	4913	92.00	3334	136.80	192	277.90	61
63.10	3587	93.00	4340	138.90	60		
64.10	253	94.00	12925	140.00	103		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070702.D Page 1
Report Date: 19-Jul-2022 13:44

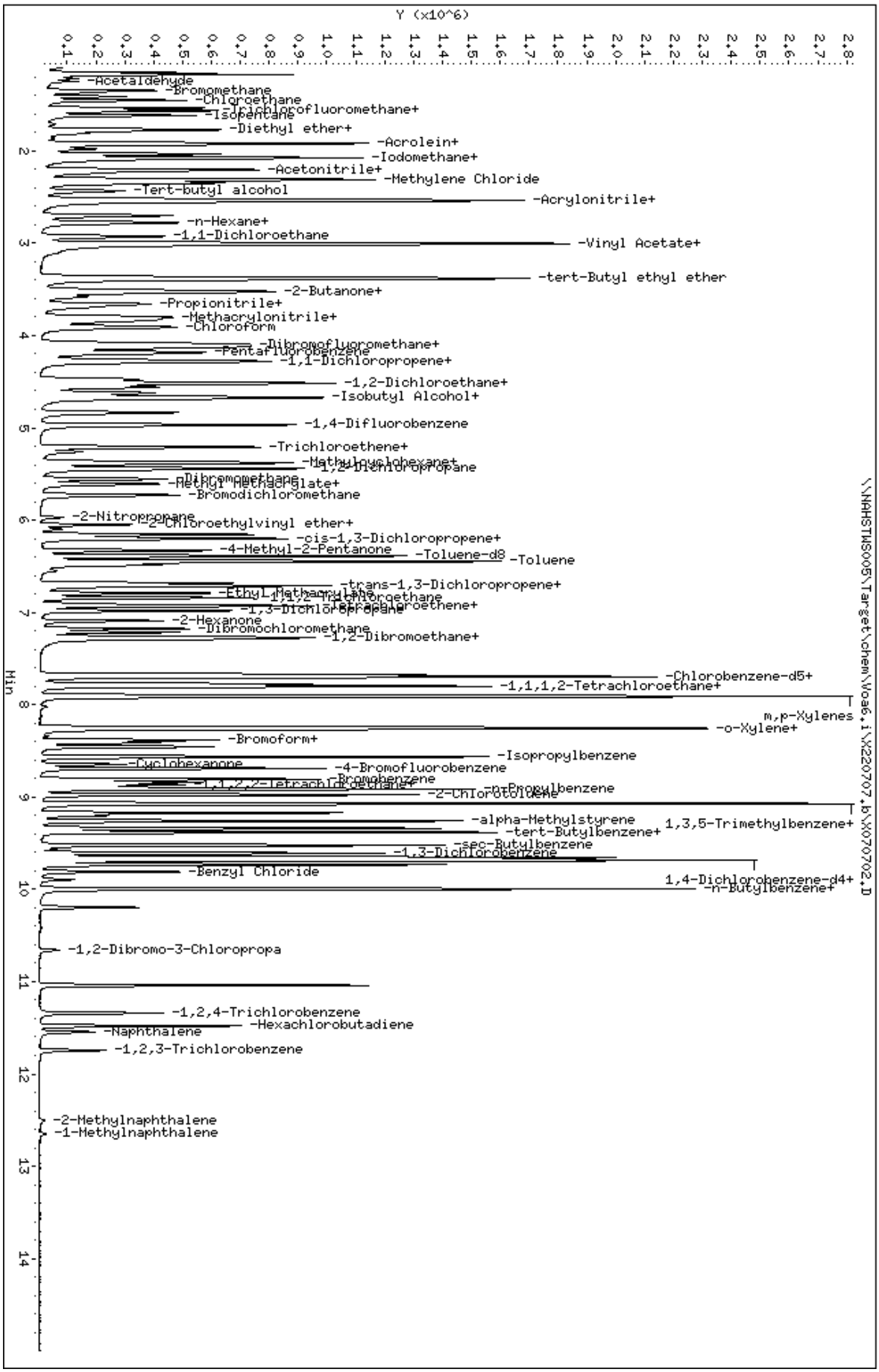
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070702.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 07-JUL-2022 10:38
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:44 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	501061	50.0000	
*	36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	742502	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	617814	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	300342	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	241289	50.0000	51.44
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	276173	50.0000	51.45
$	30 Dibromofluoromethane	113	4.103	4.103	(0.980)	235740	50.0000	51.01
$	48 Toluene-d8	98	6.389	6.389	(0.833)	784876	50.0000	51.15
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	171361	50.0000	48.78
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	218219	50.0000	45.52
	33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	313807	50.0000	51.00
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	281533	50.0000	48.54
	17 Methylene Chloride	84	2.311	2.311	(0.552)	273104	50.0000	46.93
	38 Trichloroethene	130	5.208	5.208	(1.048)	267057	50.0000	48.02
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	301388	50.0000	47.02



Data File: \\NAHSTMS005\Target\chem\Voa6.i\X220707.b\X070702.D
Date : 07-JUL-2022 10:38
Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

\\NAHSTMS005\Target\chem\Voa6.i\X220707.b\X070702.D

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070702.D
Inj Date : 07-JUL-2022 10:38
InstruID : voa6.i
LabSampID : CCV

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070704.D Page 1
Report Date: 07-Jul-2022 20:45

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070704.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 07-JUL-2022 11:20
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220707.b\8260W.m
Meth Date : 07-Jul-2022 20:44 pcabasca Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	525828	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	221786	45.7065	45.70
$ 35 1,2-Dichloroethane-d4	65	4.478	4.474	(1.070)	220747	44.7028	44.70
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	738935	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	711577	50.0000	
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	881429	49.8827	49.88
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	343543	55.5940	55.59
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	333635	50.0000	

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070705.D Page 1
Report Date: 19-Jul-2022 13:44

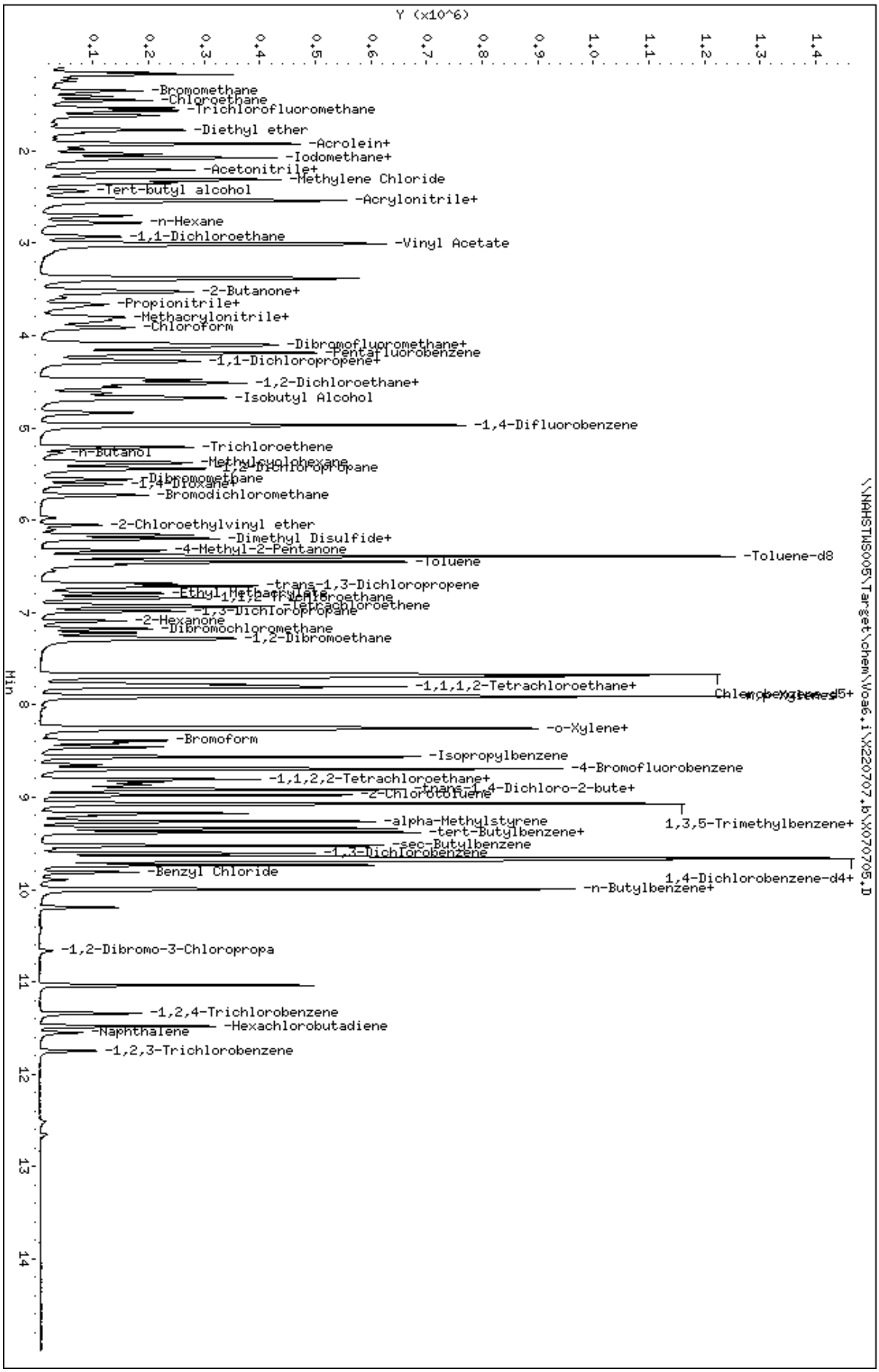
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070705.D
Lab Smp Id: VLCSW-220707 Client Smp ID: VLCSW-220707
Inj Date : 07-JUL-2022 11:41
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-220707;VLCSW-220707;3;;LCS
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:44 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	443226	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	664479	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	610892	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	292724	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	200897	48.3580	48.35
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	272639	51.3678	51.36
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	202667	49.5746	49.57
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	770241	50.7746	50.77
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	66712	19.2084	19.20
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	87352	20.6011	20.60
33 1,2-Dichloroethane	62	4.564	4.560	(0.919)	107360	19.4971	19.49
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	98304	19.1626	19.16
17 Methylene Chloride	84	2.307	2.311	(0.551)	103672	20.4971	20.49
38 Trichloroethene	130	5.212	5.208	(1.049)	100950	20.2875	20.28
5 Vinyl Chloride	62	1.149	1.149	(0.275)	117866	20.7912	20.79



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220707.b\X070705.D
Date : 07-JUL-2022 11:41
Client ID: VLCSW-220707
Sample Info: VLCSW-220707;VLCSW-220707;3;;LCS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070705.D
Inj Date : 07-JUL-2022 11:41
InstruID : voa6.i
LabSampID : VLCSW-220707

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070707.D Page 1
Report Date: 19-Jul-2022 13:44

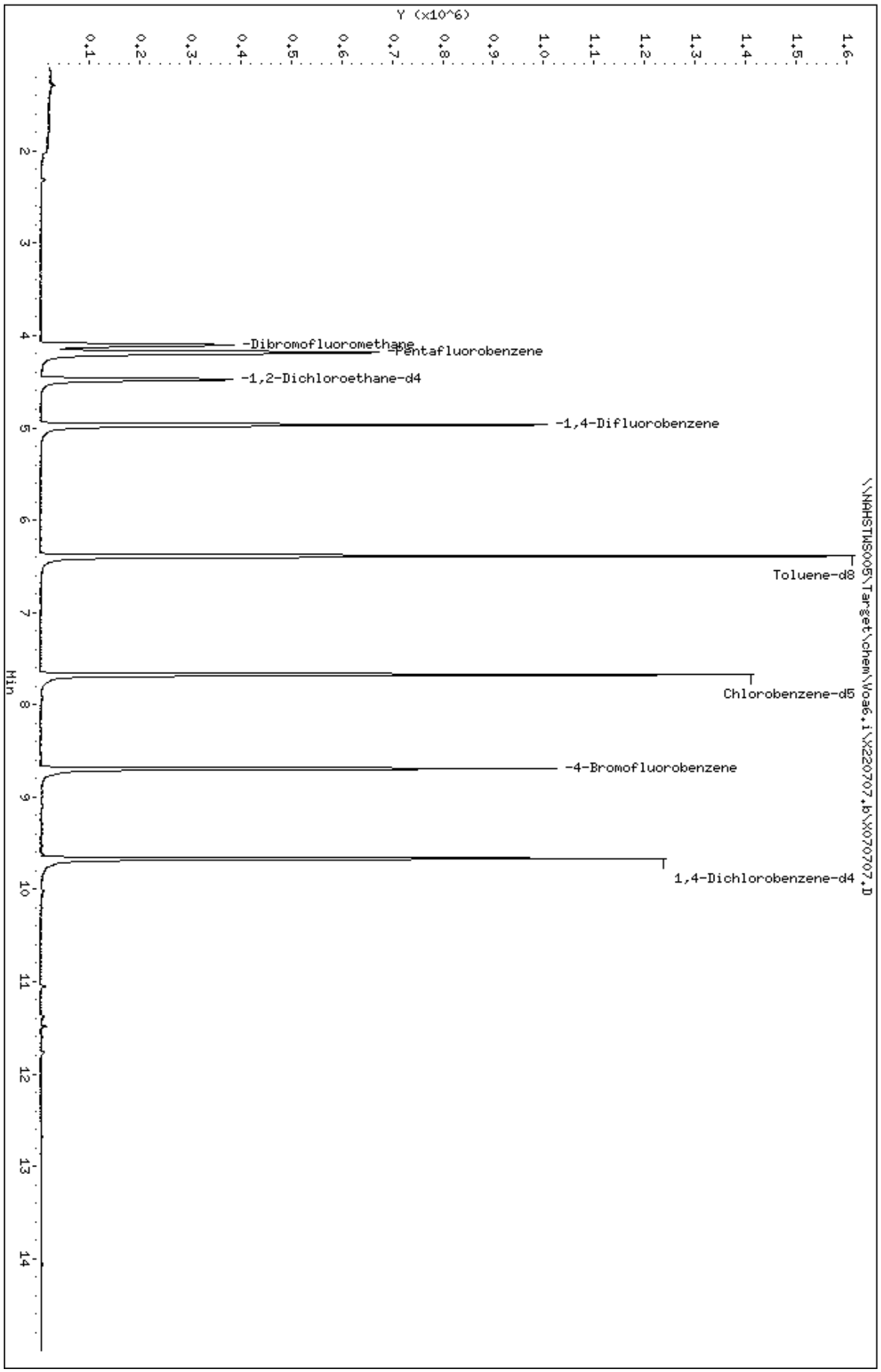
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070707.D
Lab Smp Id: VBLKW-220707 Client Smp ID: VBLKW-220707
Inj Date : 07-JUL-2022 12:23
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-220707;VBLKW-220707;3;;BLANK
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:44 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	600072	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	871359	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	749639	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	330561	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	291889	51.9815	51.98
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	330514	50.7425	50.74
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	275884	49.8470	49.84
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1021248	54.8609	54.86


Data File: \\NAHSTMS005\Target\chem\Voa6.i\X220707.b\X070707.D
Date : 07-JUL-2022 12:23
Client ID: VBLKW-220707
Sample Info: VBLKW-220707;VBLKW-220707;3;;BLANK
Purge Volume: 5.0
Column phase: DB624
Instrument: voa6.i
Operator: PC
Column diameter: 0.18
Page 1
Y (x10^6)
Min
-Dibromofluoromethane
-Pentafluorobenzene
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene
Toluene-d8
Chlorobenzene-d5
-4-Bromofluorobenzene
1,4-Dichlorobenzene-d4
\\NAHSTMS005\Target\chem\Voa6.i\X220707.b\X070707.D

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070707.D
Inj Date : 07-JUL-2022 12:23
InstruID : voa6.i
LabSampID : VBLKW-220707

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070711.D
Lab Smp Id: HS22070020-09 Client Smp ID: HS22070020-09
Inj Date : 07-JUL-2022 13:42
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-09;HS22070020-09;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:44 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

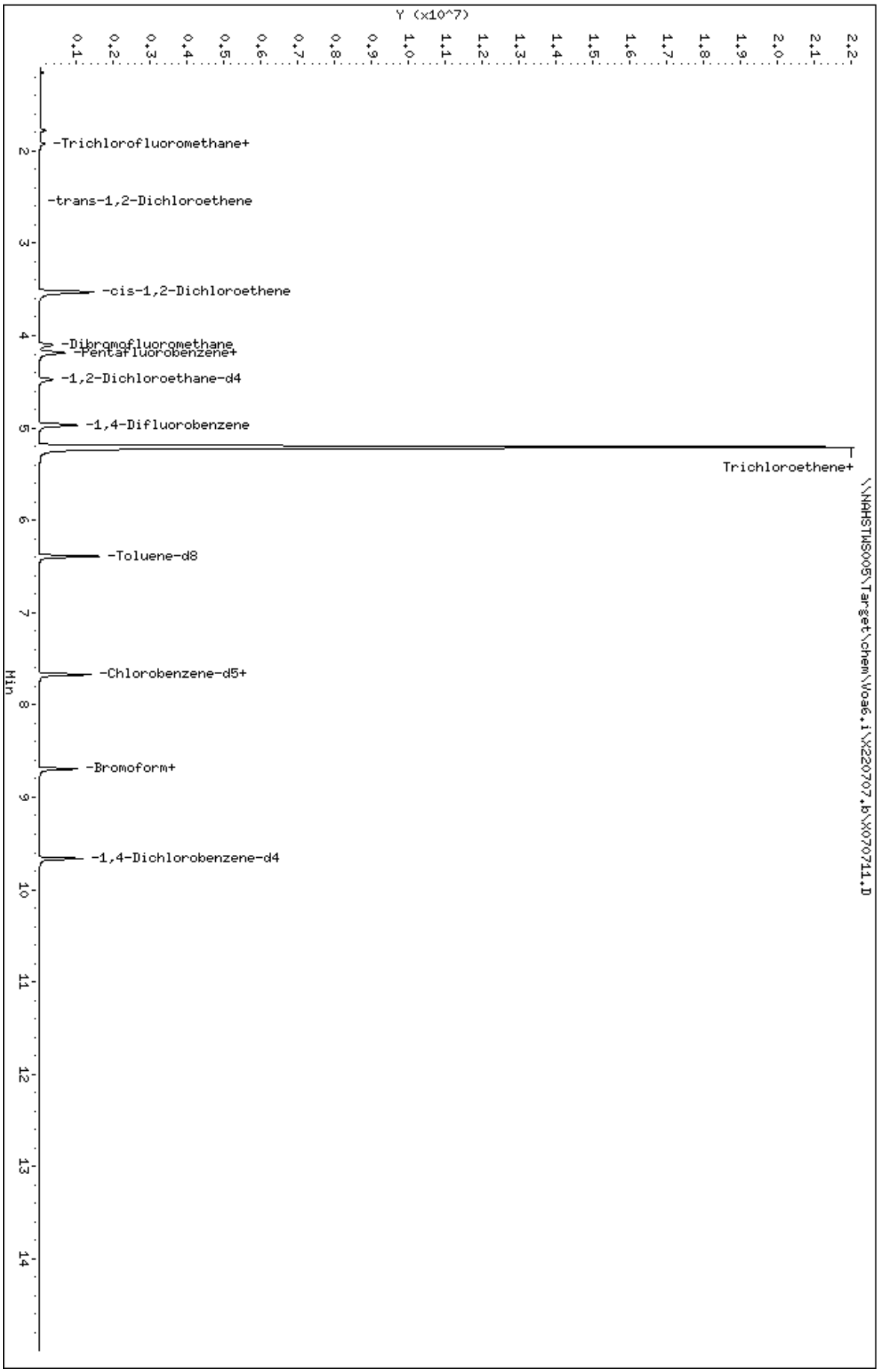
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	627102	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	897615	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	757644	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	325013	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.478	4.474	(1.070)	288415	49.0853	49.08
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	331727	50.3885	50.38
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	276750	47.8365	47.83
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1030463	54.7711	54.77
11 1,1-Dichloroethene	96	1.925	1.921	(0.460)	9910	1.65188	1.65(a)
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	780017	107.467	107.46
38 Trichloroethene	130	5.209	5.208	(1.048)	7548210	1122.94	1122.94(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	53692	6.69402	6.69

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
    exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070711.D
Date : 07-JUL-2022 13:42
Client ID: HS220700Z0-09
Sample Info: HS220700Z0-09;HS220700Z0-09;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070711.D Page 2

Date : 07-JUL-2022 13:42

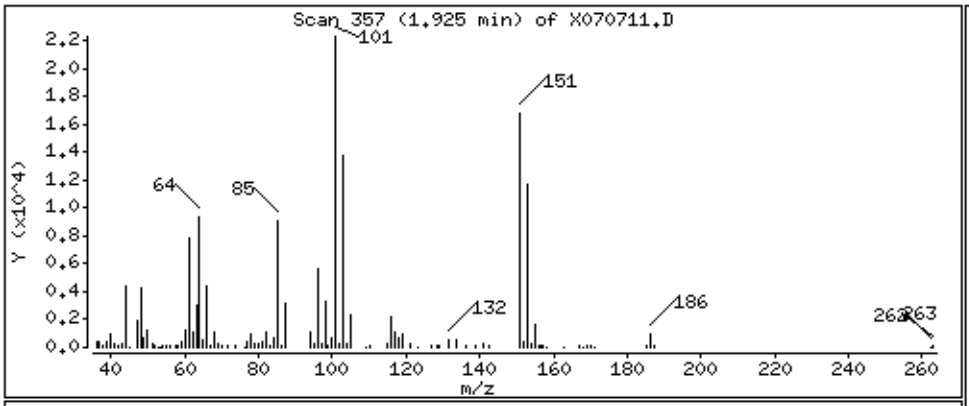
Client ID: HS22070020-09 Instrument: voa6.i

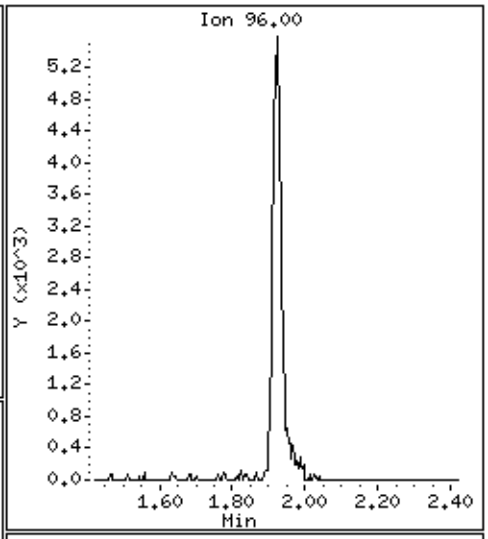
Sample Info: HS22070020-09;HS22070020-09;;;

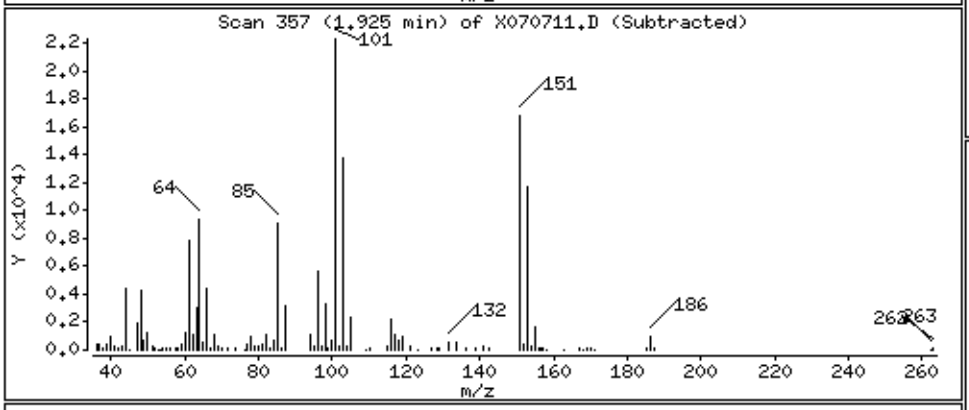
Purge Volume: 5.0 Operator: PC

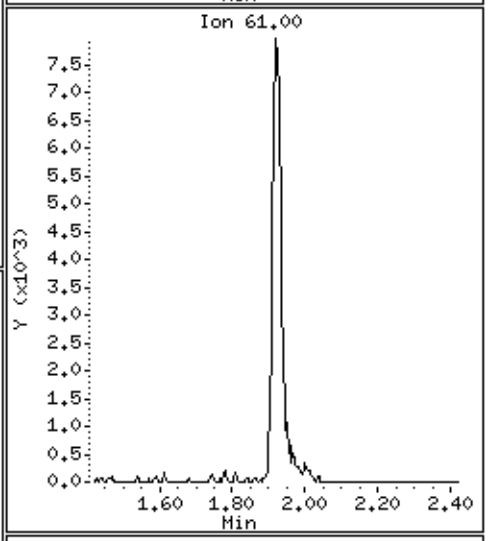
Column phase: DB624 Column diameter: 0.18

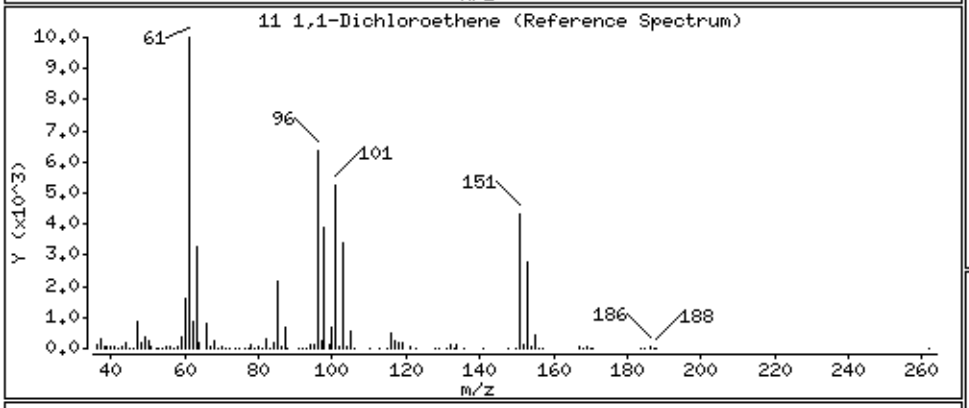
11 1,1-Dichloroethene Concentration: 1.65 ug/l

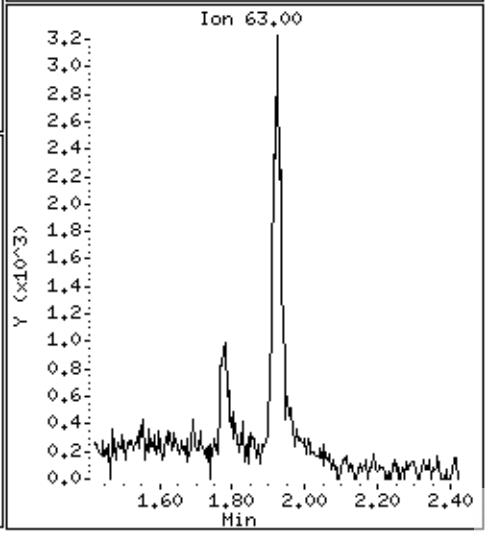


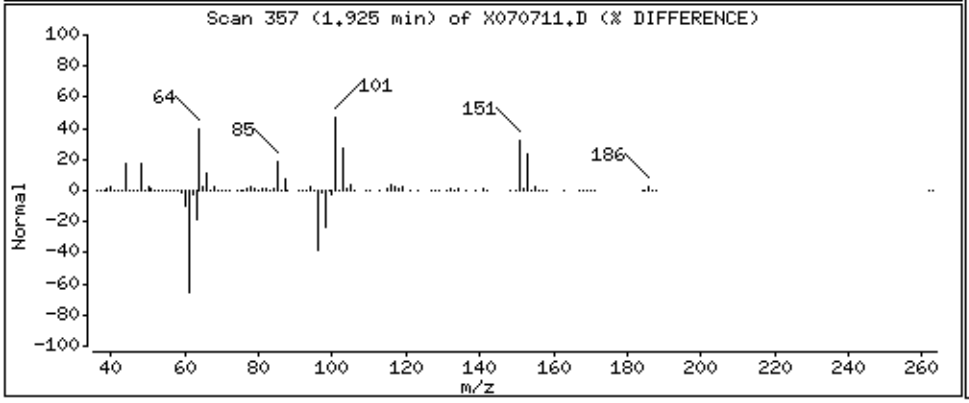












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070711.D Page 3

Date : 07-JUL-2022 13:42

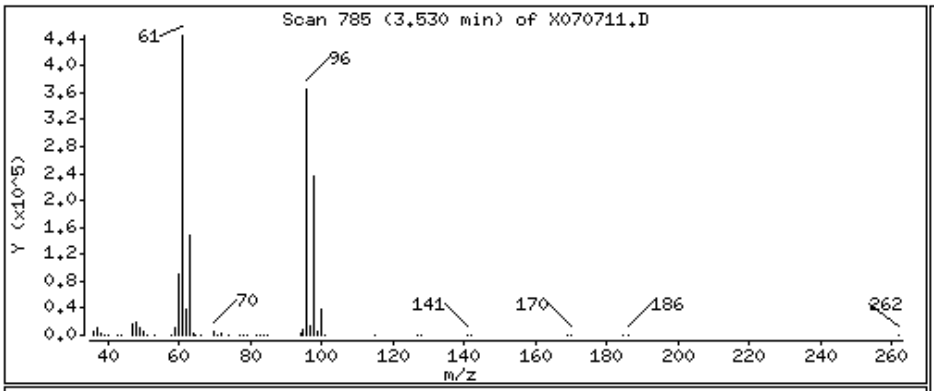
Client ID: HS22070020-09 Instrument: voa6.i

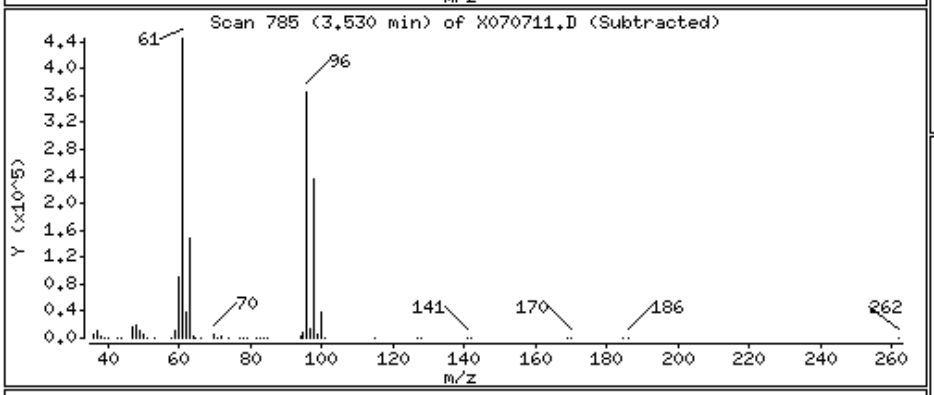
Sample Info: HS22070020-09;HS22070020-09;;;

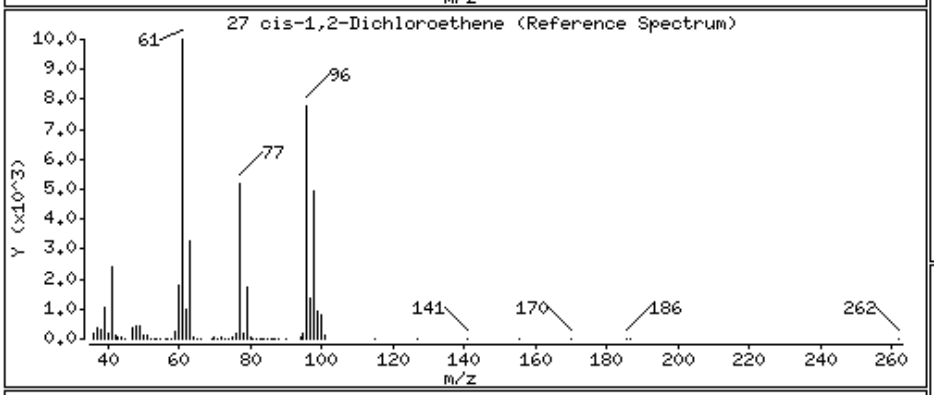
Purge Volume: 5.0 Operator: PC

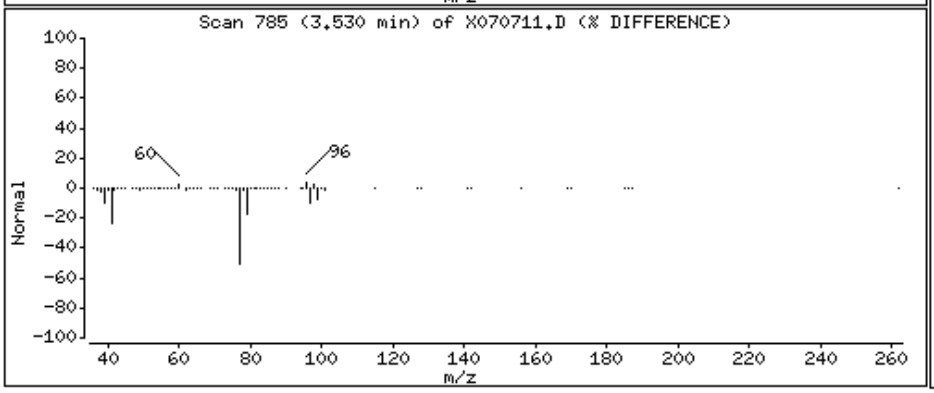
Column phase: DB624 Column diameter: 0.18

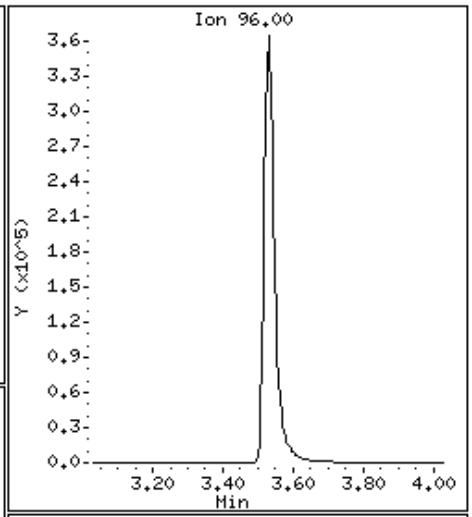
27 cis-1,2-Dichloroethene Concentration: 107.46 ug/l

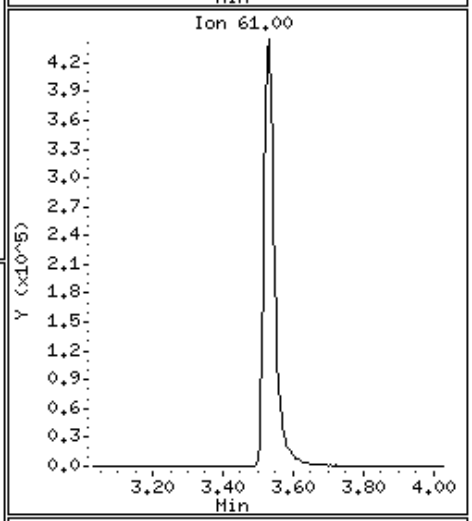


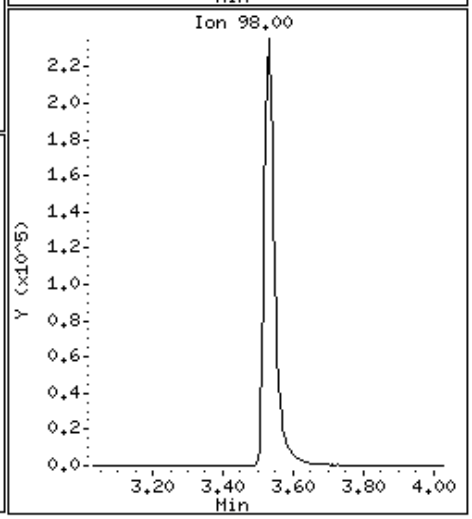












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Date : 07-JUL-2022 13:42

Client ID: HS22070020-09

Instrument: voa6.i

Sample Info: HS22070020-09;HS22070020-09;;;

Purge Volume: 5.0

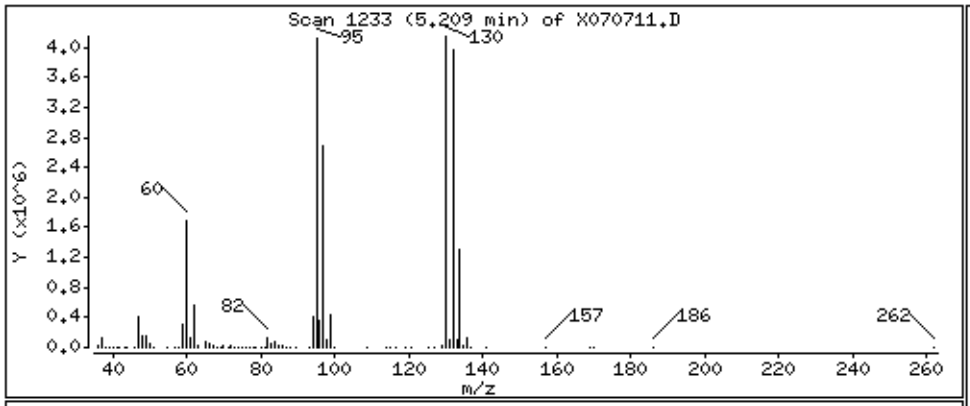
Operator: PC

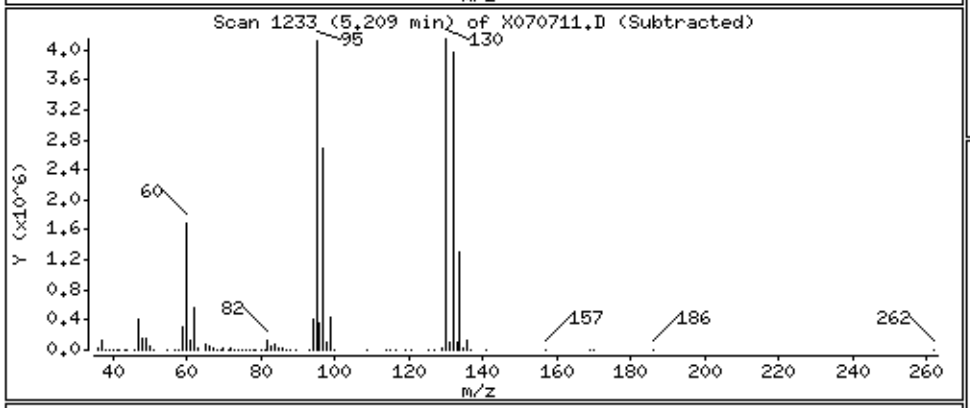
Column phase: DB624

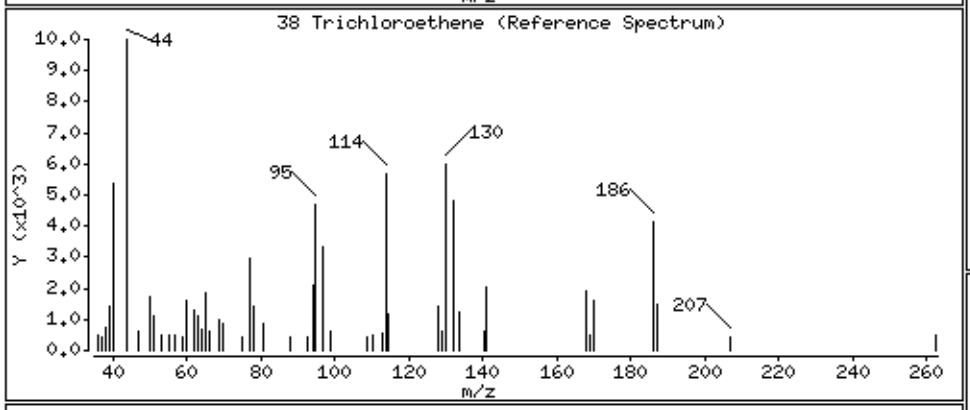
Column diameter: 0.18

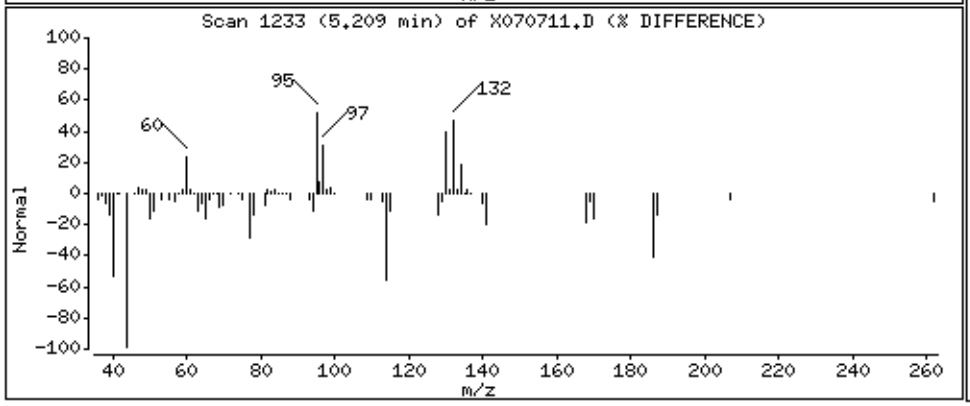
38 Trichloroethene

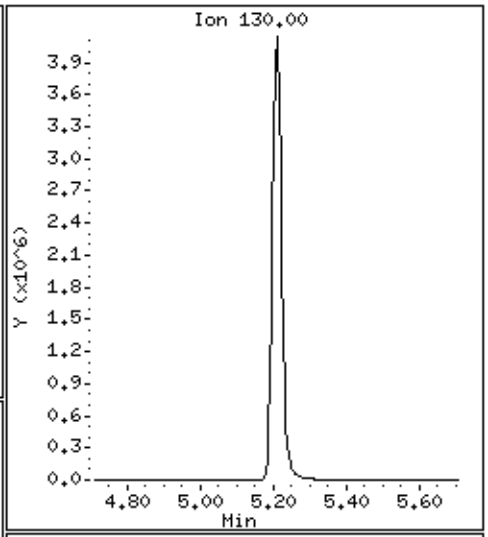
Concentration: 1122.94 ug/l

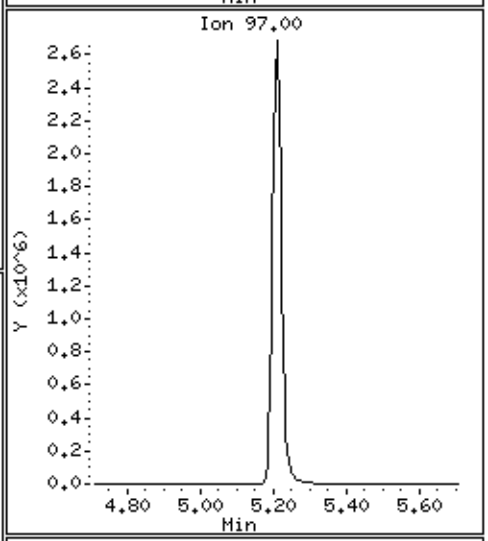


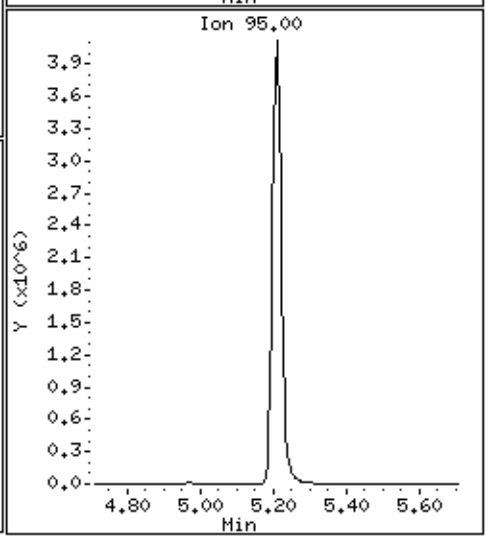












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070711.D

Date : 07-JUL-2022 13:42

Client ID: HS22070020-09

Instrument: voa6.i

Sample Info: HS22070020-09;HS22070020-09;;;

Purge Volume: 5.0

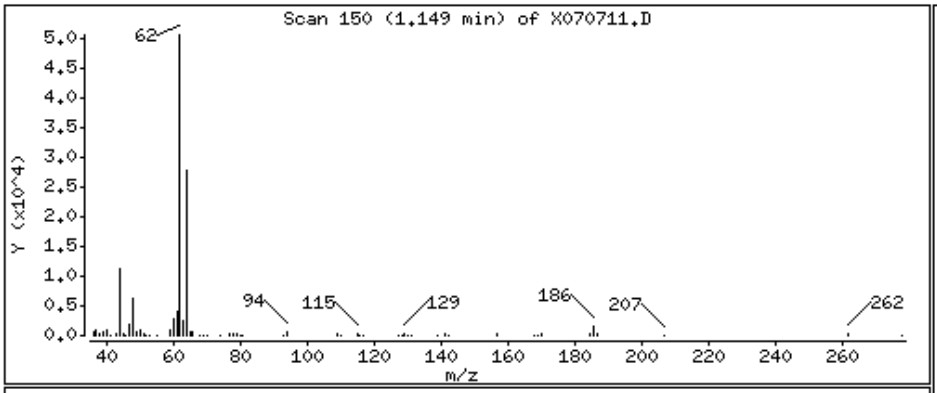
Operator: PC

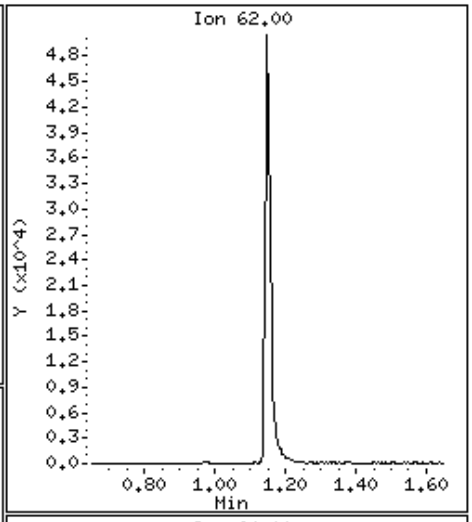
Column phase: DB624

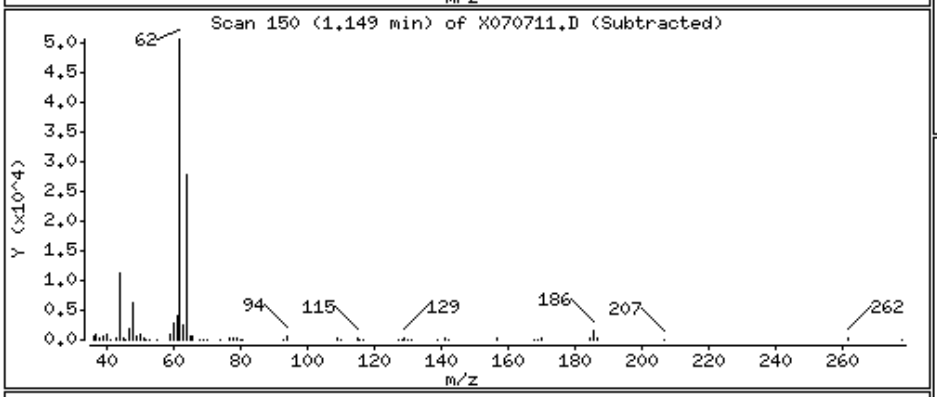
Column diameter: 0.18

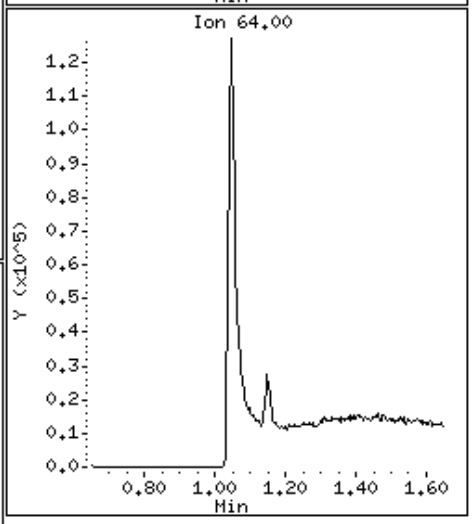
5 Vinyl Chloride

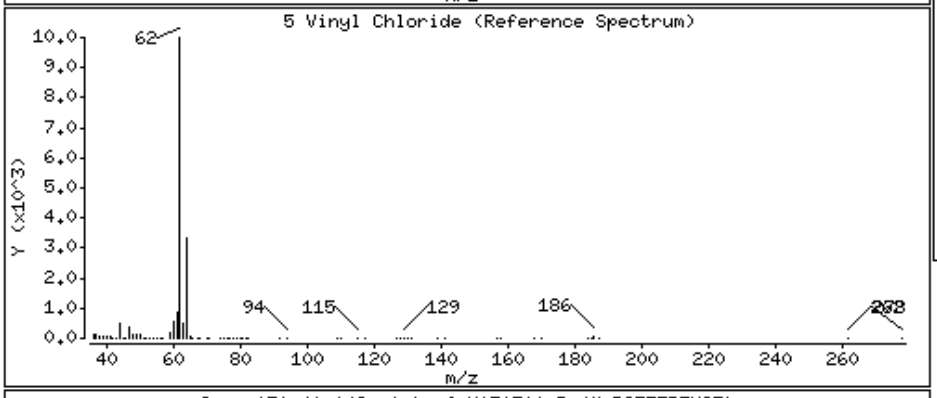
Concentration: 6.69 ug/l

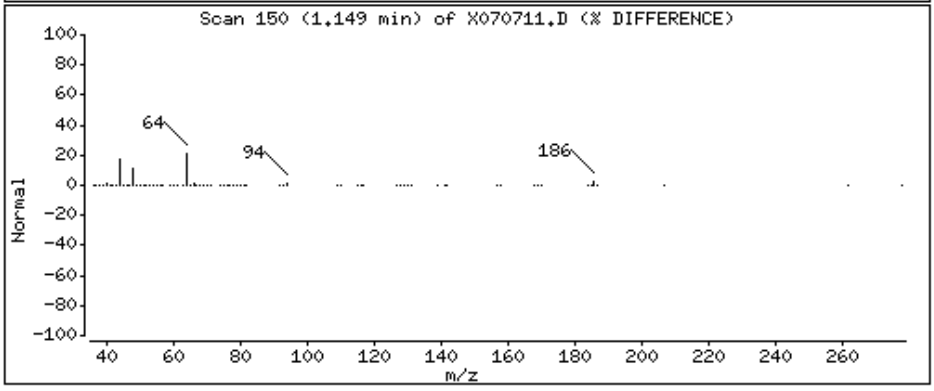












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070711.D
Inj Date : 07-JUL-2022 13:42
InstruID : voa6.i
LabSampID : HS22070020-09

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070712.D Page 1
Report Date: 19-Jul-2022 13:44

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070712.D
Lab Smp Id: HS22070020-01 Client Smp ID: HS22070020-01
Inj Date : 07-JUL-2022 14:03
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-01;HS22070020-01;;;
Misc Info : HS22052000V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:44 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 11
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

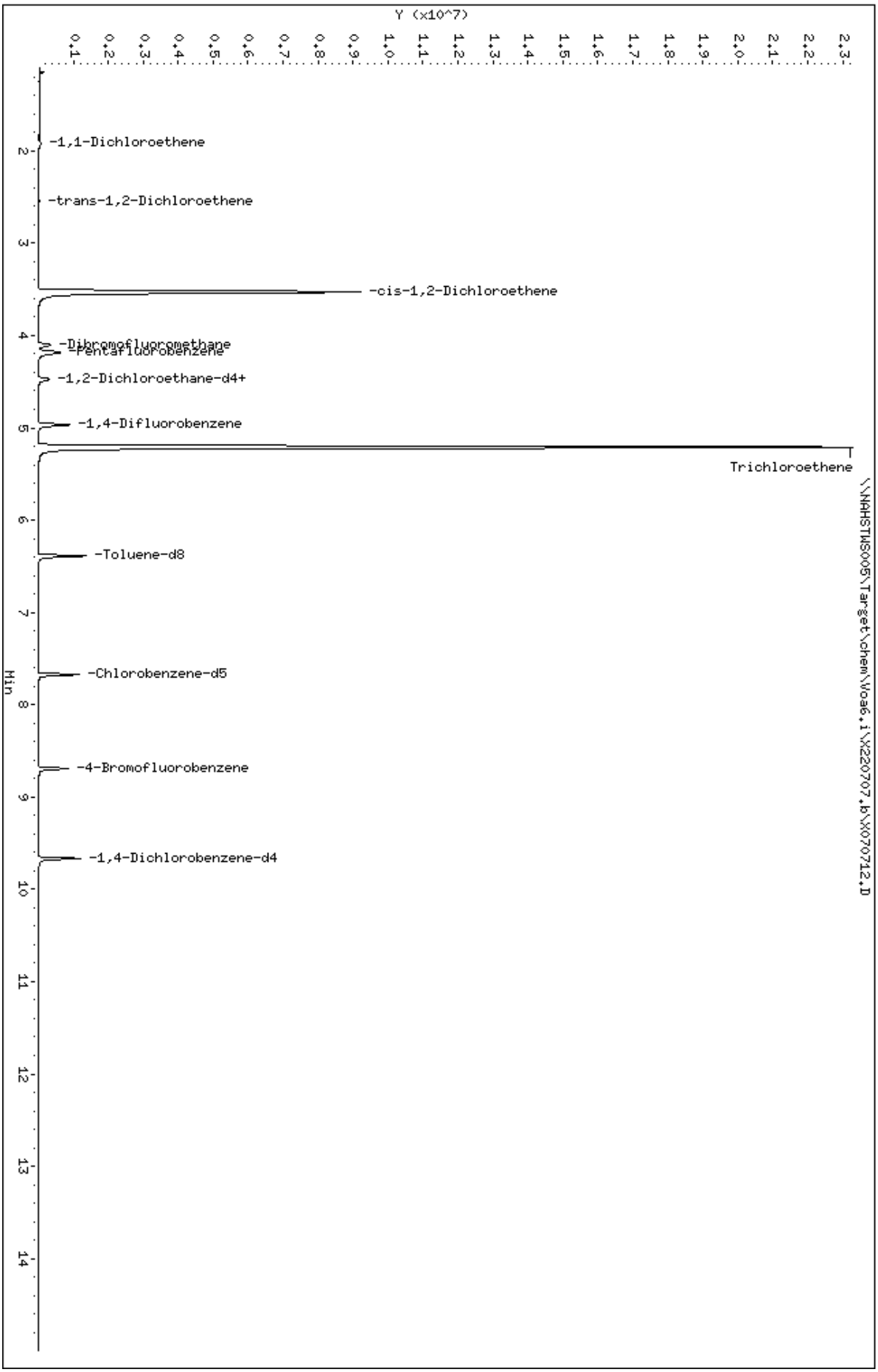
Name	Value	Description
DF	25.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	570510	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	781087	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	634372	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	330296	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	242927	45.3583	45.35
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	283551	51.4468	51.44
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	256460	48.7320	48.73
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	850116	53.9658	53.96
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	11415	2.09149	52.28(a)
33 1,2-Dichloroethane	62	4.564	4.560	(0.919)	9215	1.42366	35.59(a)
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	4859877	735.987	18399.66(A)
38 Trichloroethene	130	5.212	5.208	(1.049)	8195031	1401.05	35026.28(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	91613	12.5548	313.86

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070712.D
Date : 07-JUL-2022 14:03
Client ID: HS220700Z0-01
Sample Info: HS220700Z0-01;HS220700Z0-01;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070712.D

Date : 07-JUL-2022 14:03

Client ID: HS22070020-01

Instrument: voa6.i

Sample Info: HS22070020-01;HS22070020-01;;;

Purge Volume: 5.0

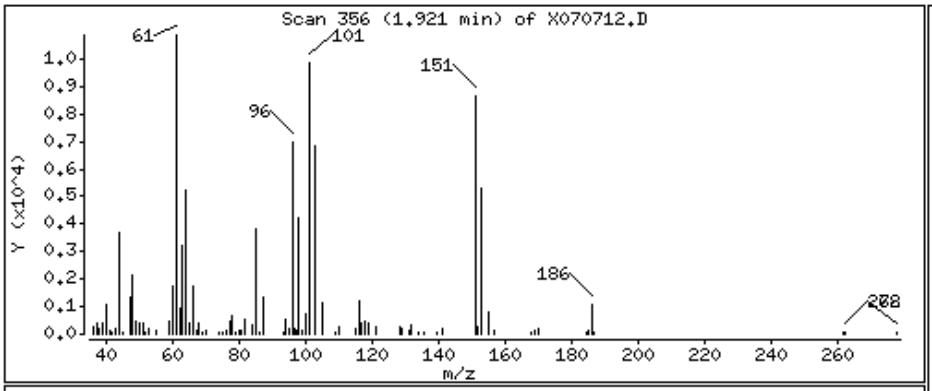
Operator: PC

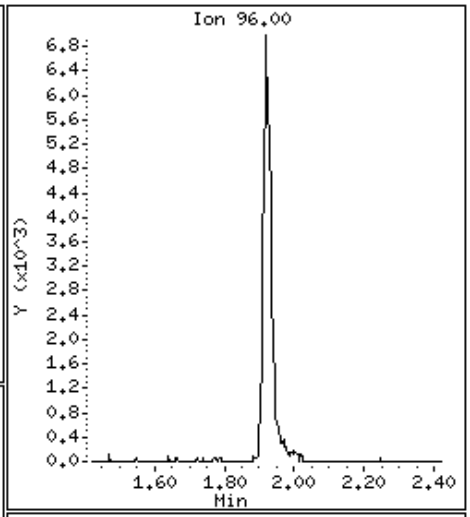
Column phase: DB624

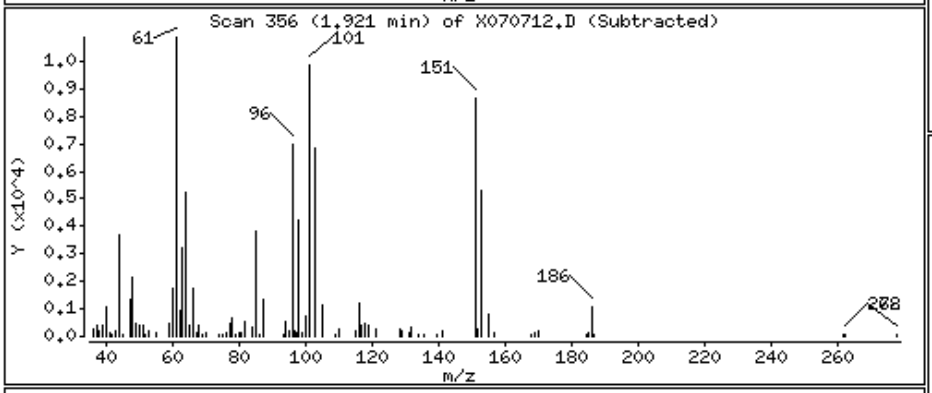
Column diameter: 0.18

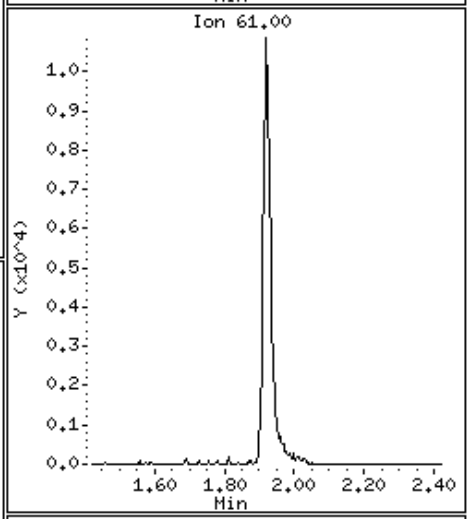
11 1,1-Dichloroethene

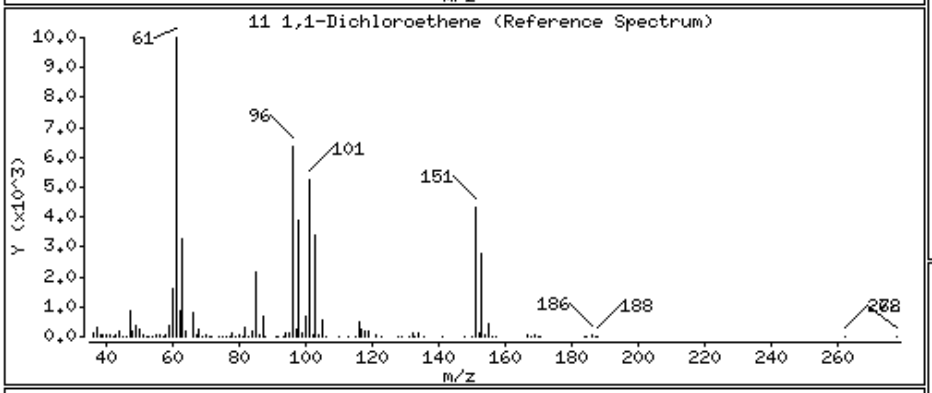
Concentration: 52.28 ug/l

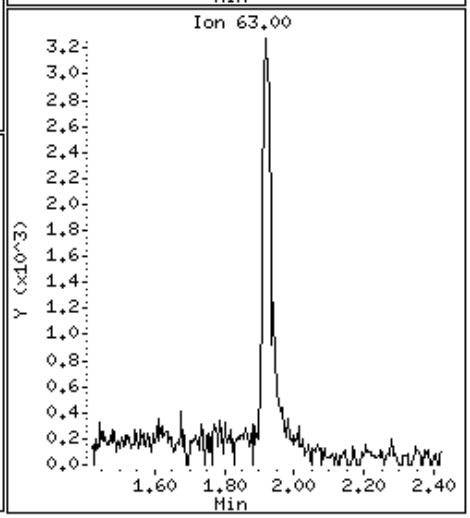


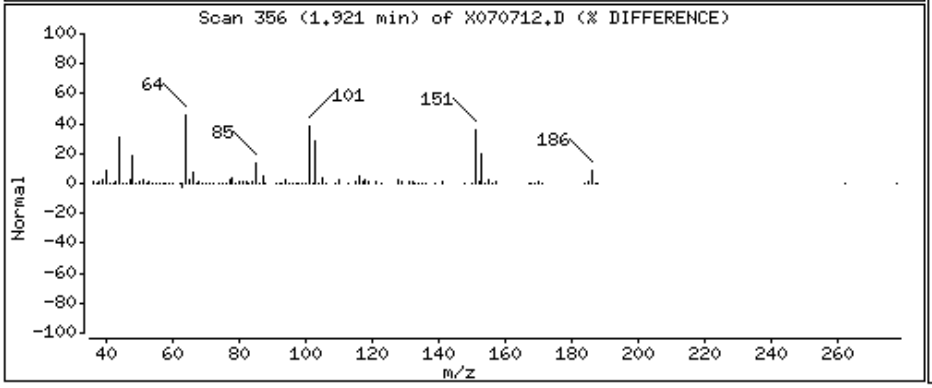












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070712.D

Date : 07-JUL-2022 14:03

Client ID: HS22070020-01

Instrument: voa6.i

Sample Info: HS22070020-01;HS22070020-01;;;

Purge Volume: 5.0

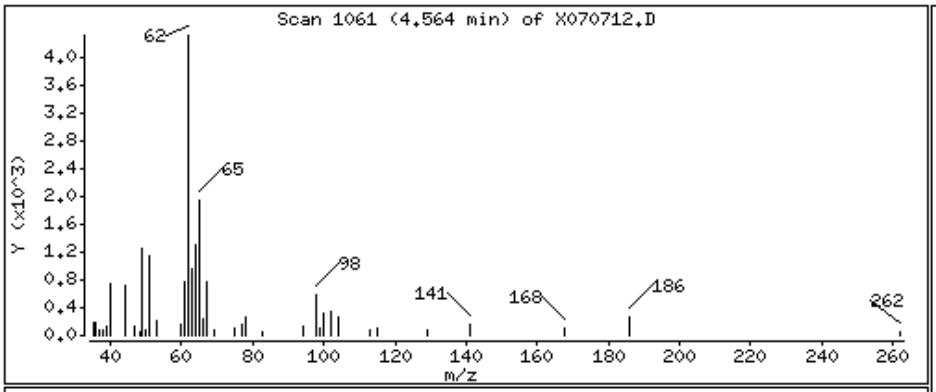
Operator: PC

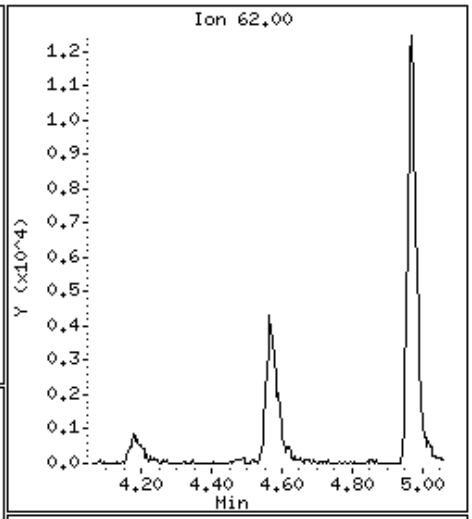
Column phase: DB624

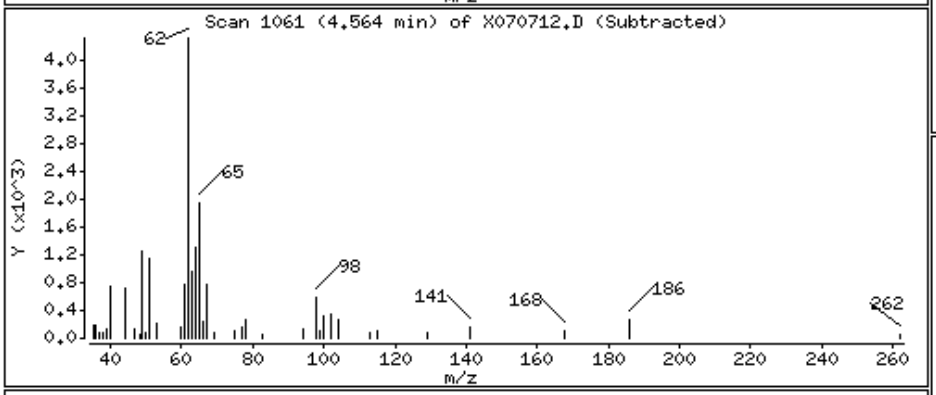
Column diameter: 0.18

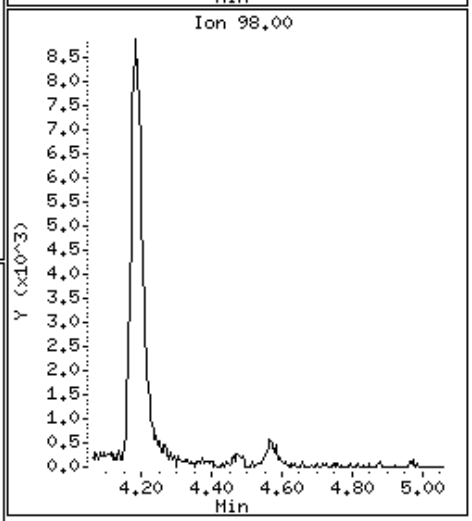
33 1,2-Dichloroethane

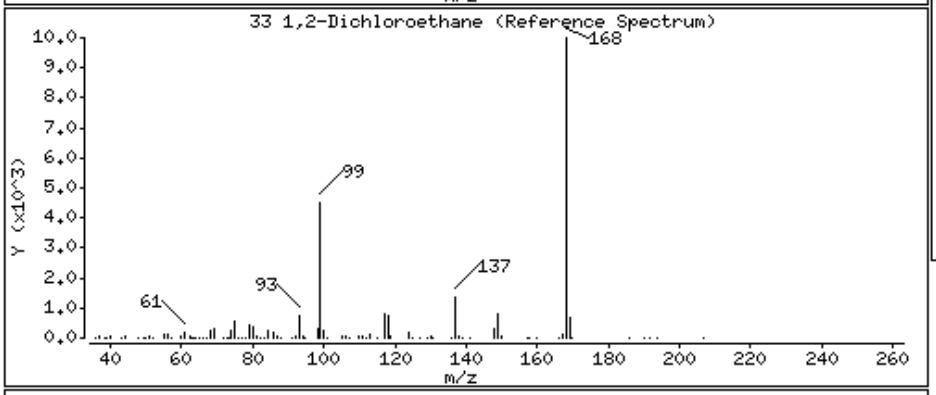
Concentration: 35.59 ug/l

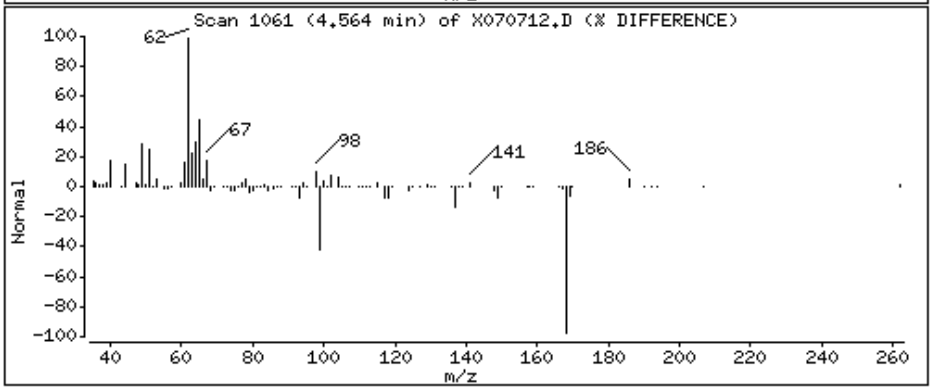












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070712.D

Date : 07-JUL-2022 14:03

Client ID: HS22070020-01

Instrument: voa6.i

Sample Info: HS22070020-01;HS22070020-01;;;

Purge Volume: 5.0

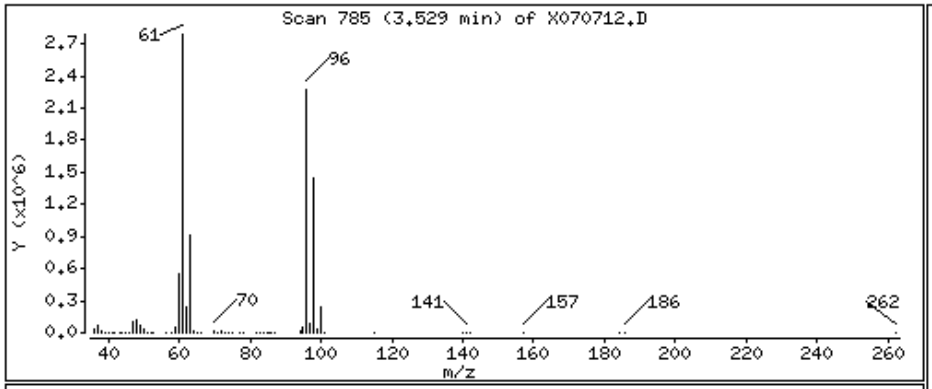
Operator: PC

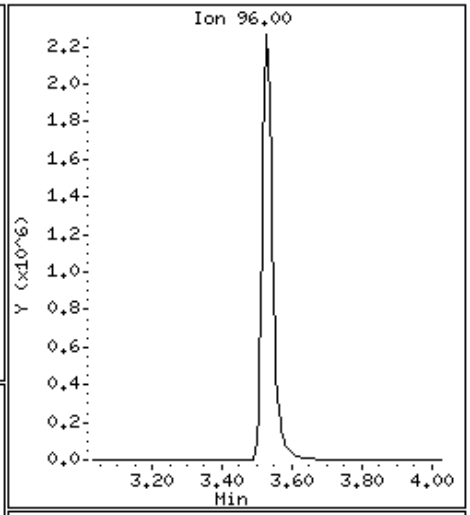
Column phase: DB624

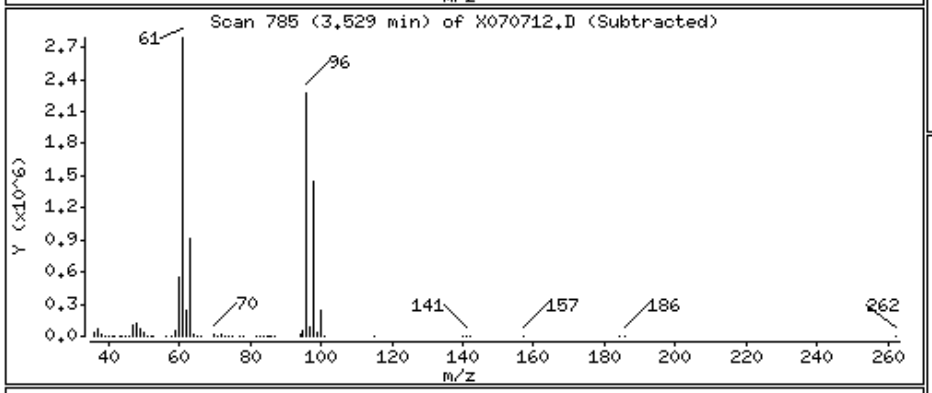
Column diameter: 0.18

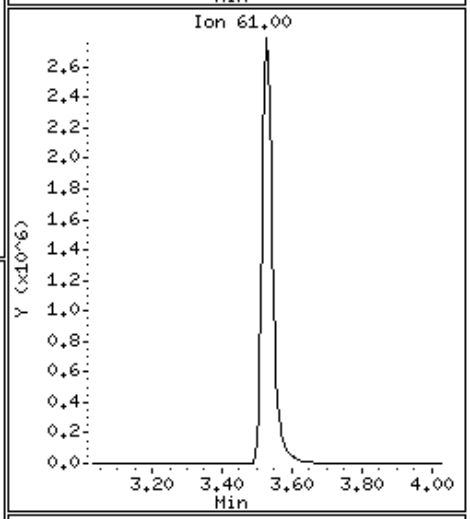
27 cis-1,2-Dichloroethene

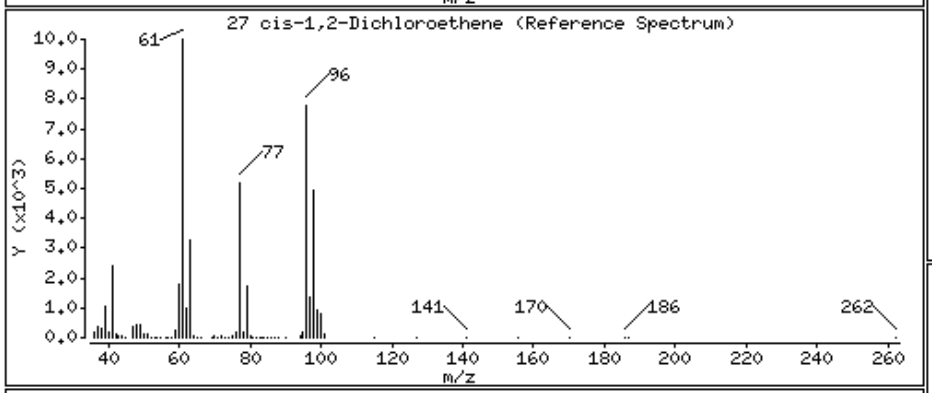
Concentration: 18399.66 ug/l

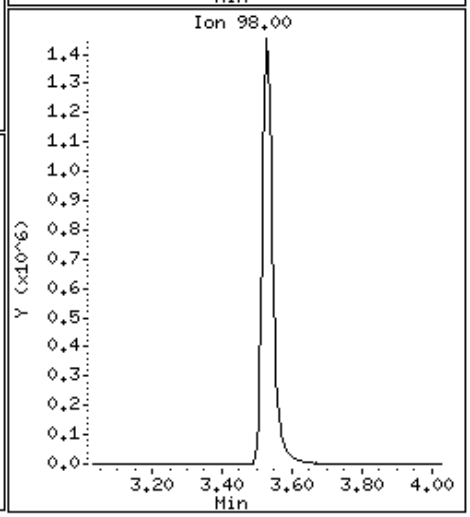


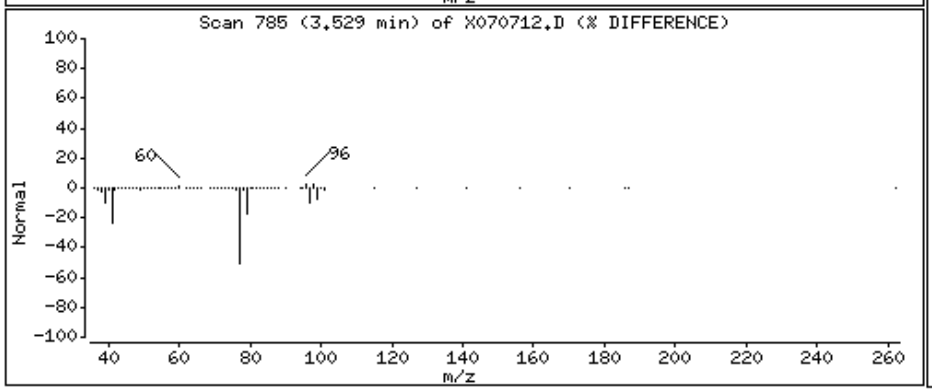












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070712.D Page 5

Date : 07-JUL-2022 14:03

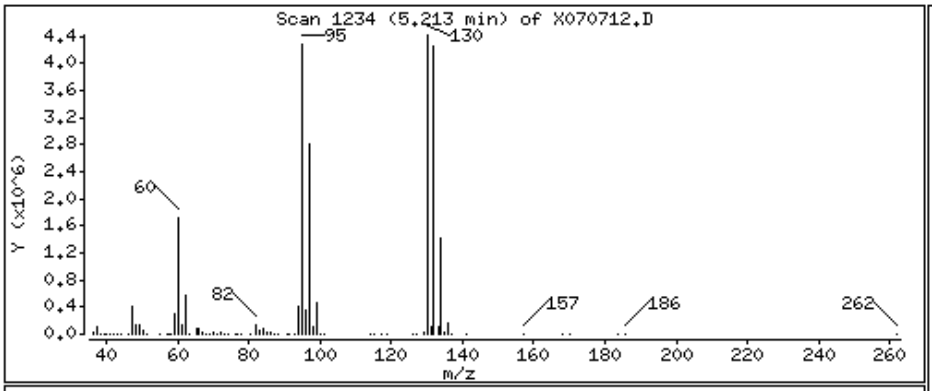
Client ID: HS22070020-01 Instrument: voa6.i

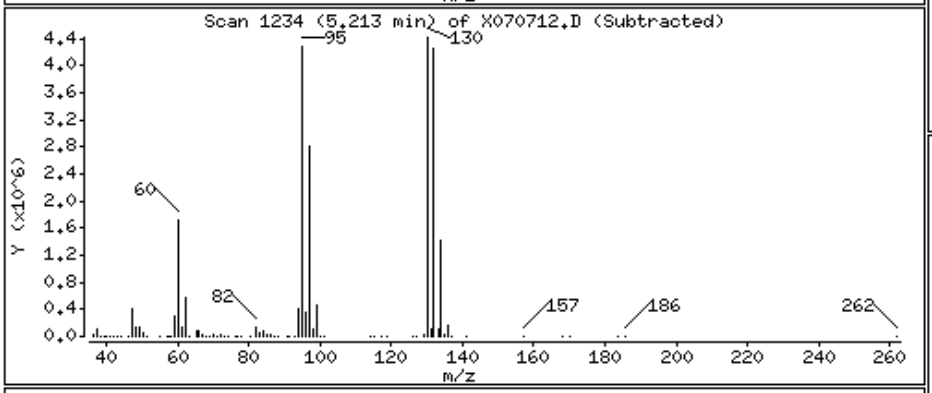
Sample Info: HS22070020-01;HS22070020-01;;;

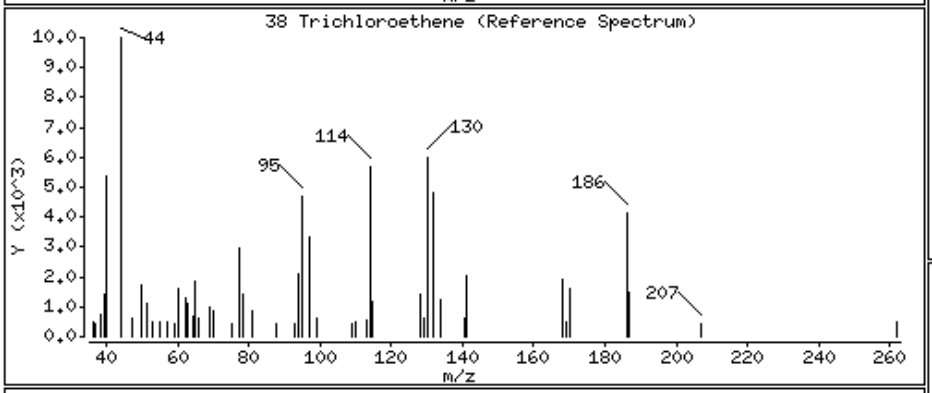
Purge Volume: 5.0 Operator: PC

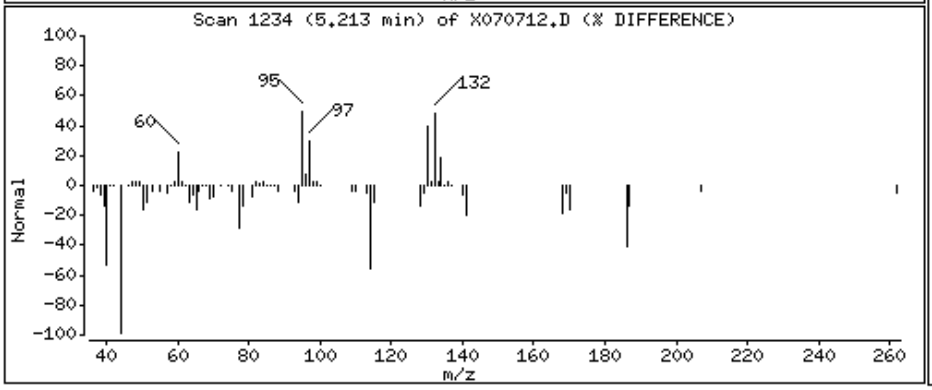
Column phase: DB624 Column diameter: 0.18

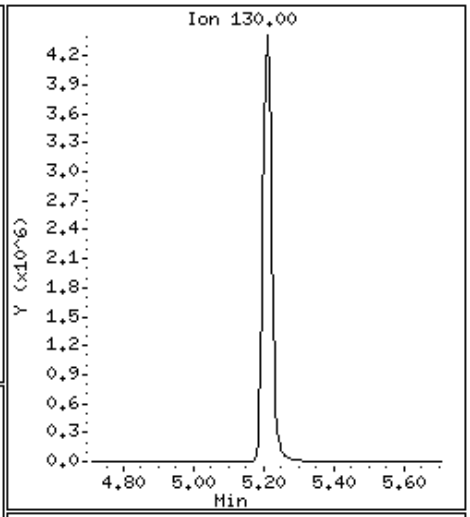
38 Trichloroethene Concentration: 35026.28 ug/l

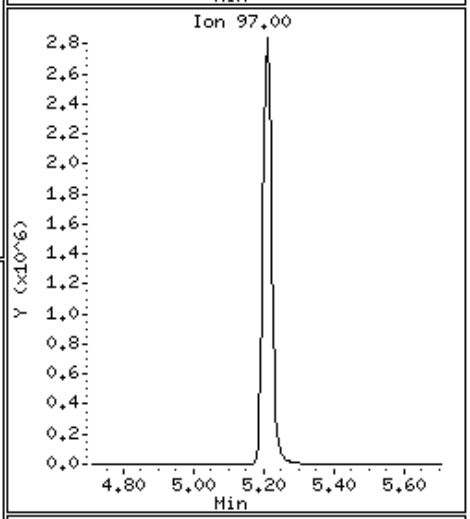


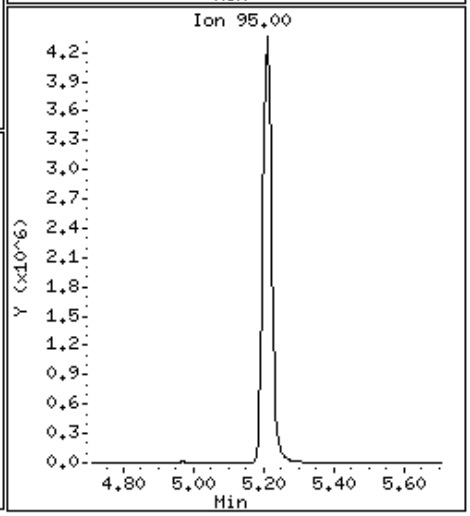












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070712.D

Date : 07-JUL-2022 14:03

Client ID: HS22070020-01

Instrument: voa6.i

Sample Info: HS22070020-01;HS22070020-01;;;

Purge Volume: 5.0

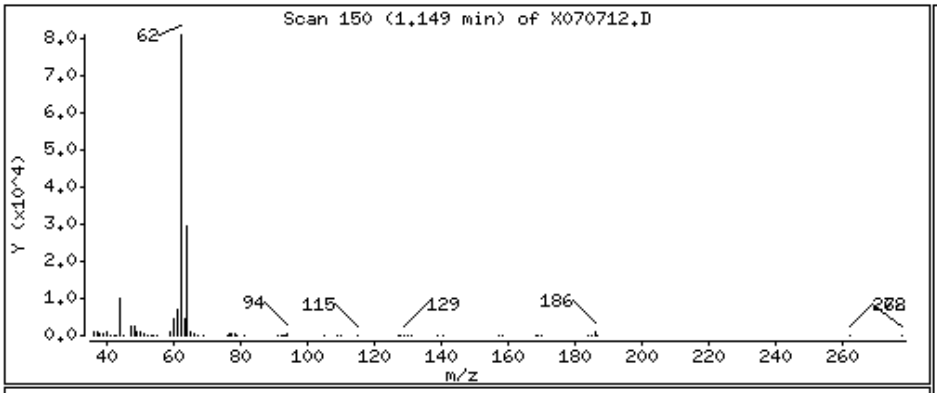
Operator: PC

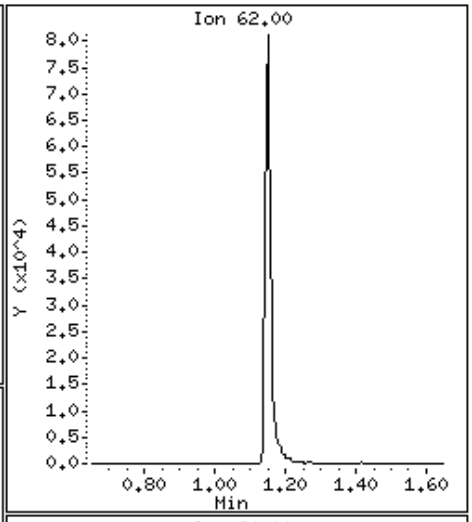
Column phase: DB624

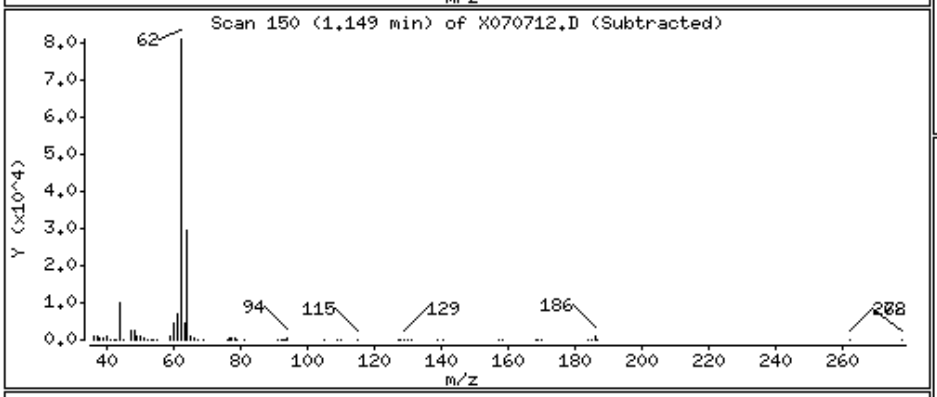
Column diameter: 0.18

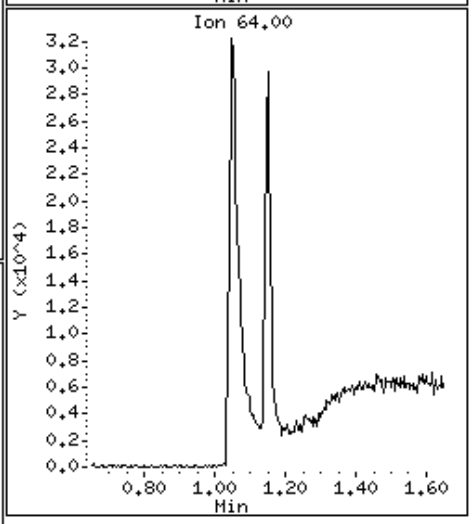
5 Vinyl Chloride

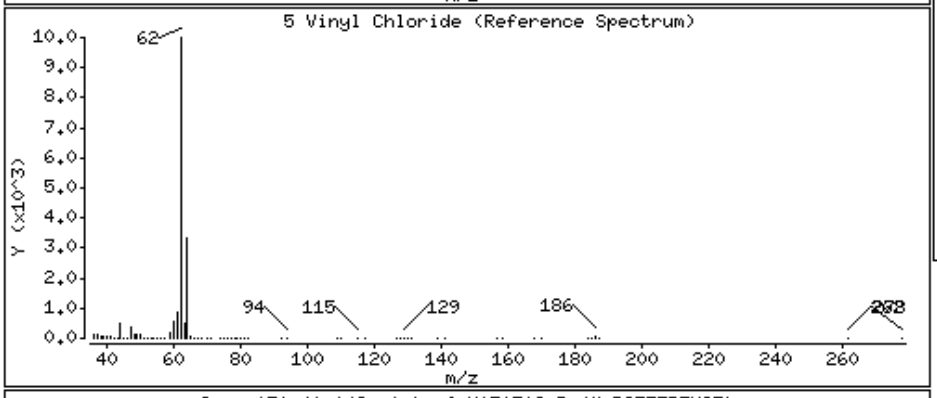
Concentration: 313.86 ug/l

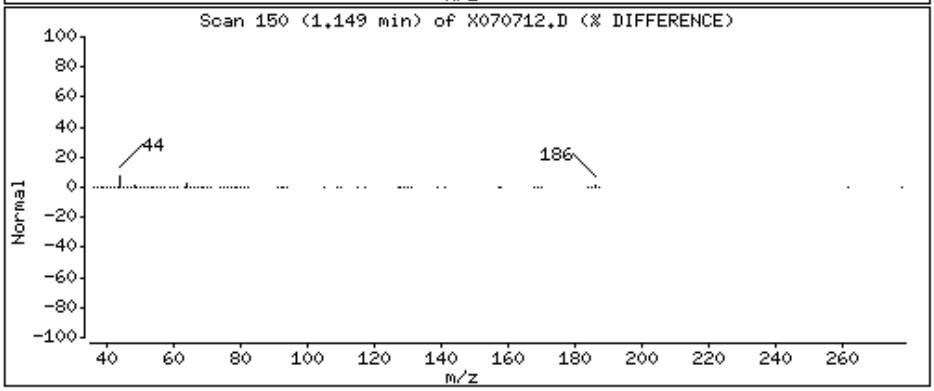












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070712.D
Inj Date : 07-JUL-2022 14:03
InstruID : voa6.i
LabSampID : HS22070020-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070713.D Page 1
Report Date: 19-Jul-2022 13:44

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070713.D
Lab Smp Id: HS22070020-01 Client Smp ID: HS22070020-01
Inj Date : 07-JUL-2022 14:24
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-01;HS22070020-01;;;
Misc Info : HS22052000V6;WATER;0;250;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:44 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 12
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	250.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

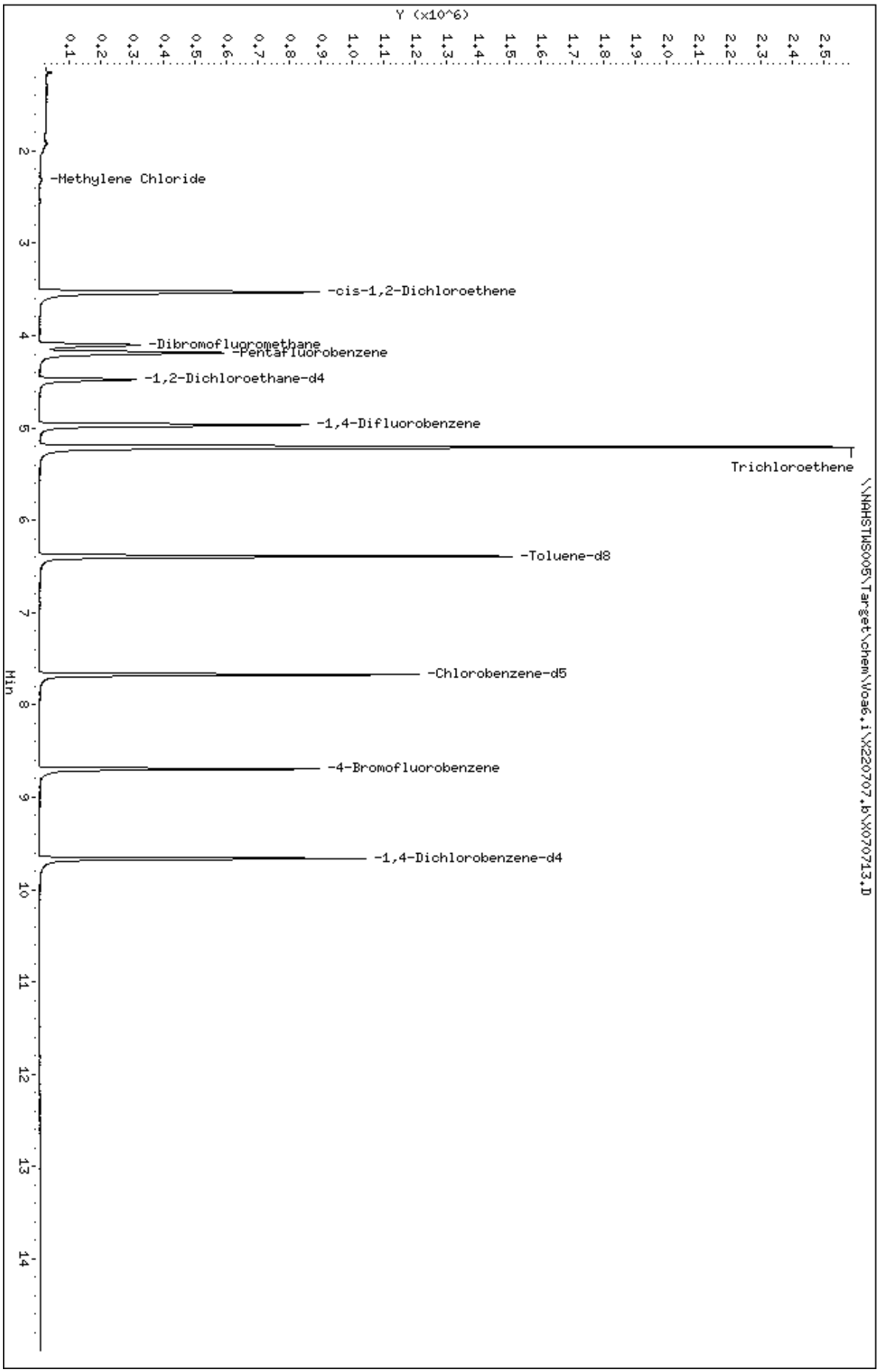
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	540931	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	754113	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	652300	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	290036	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	224998	44.2808	44.28
$ 69 4-Bromofluorobenzene	95	8.695	8.691	(1.133)	290376	51.2358	51.23
$ 30 Dibromofluoromethane	113	4.102	4.103	(0.980)	235407	47.1683	47.16
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	954023	58.8973	58.89
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	483378	77.2063	19301.58
17 Methylene Chloride	84	2.318	2.311	(0.554)	3876	1.23424	308.55(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	906189	160.467	40116.70
5 Vinyl Chloride	62	1.149	1.149	(0.275)	11804	1.70609	426.52(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070713.D
Date : 07-JUL-2022 14:24
Client ID: HS22070020-01
Sample Info: HS22070020-01;HS22070020-01;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070713.D

Date : 07-JUL-2022 14:24

Client ID: HS22070020-01

Instrument: voa6.i

Sample Info: HS22070020-01;HS22070020-01;;;

Purge Volume: 5.0

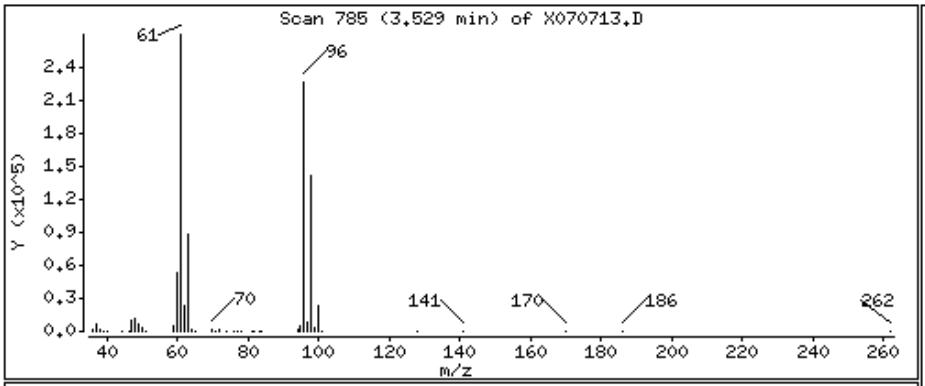
Operator: PC

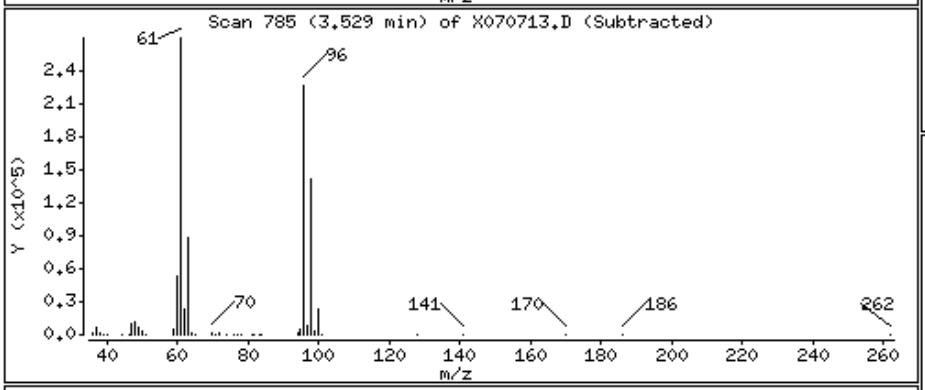
Column phase: DB624

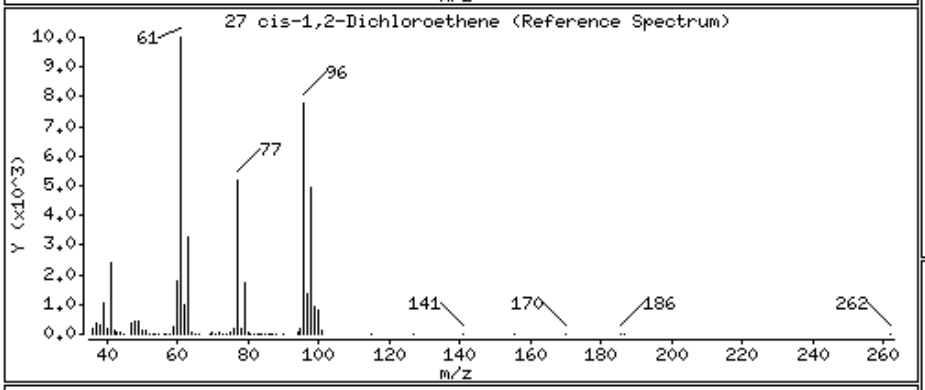
Column diameter: 0.18

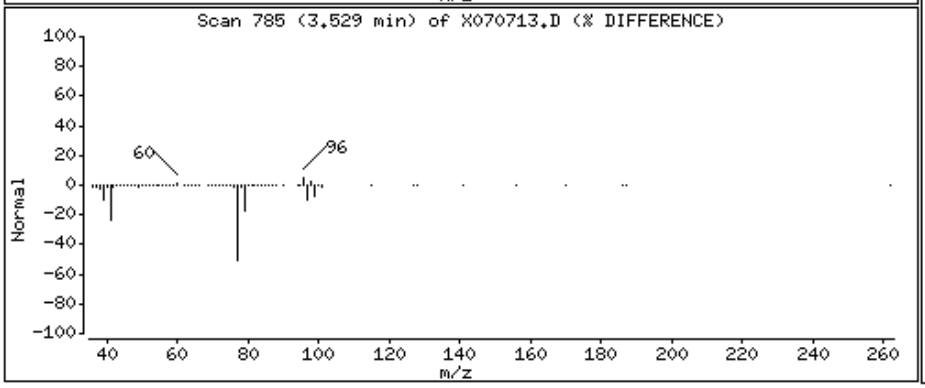
27 cis-1,2-Dichloroethene

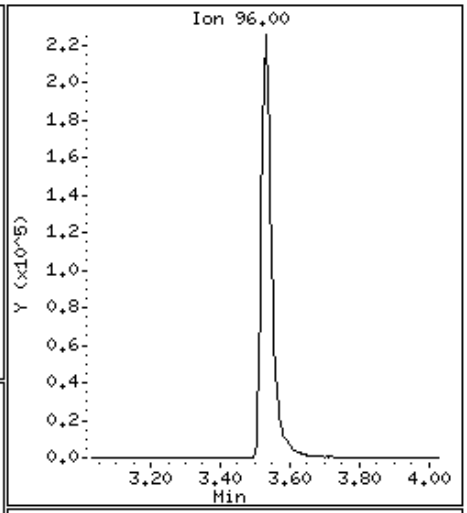
Concentration: 19301.58 ug/l

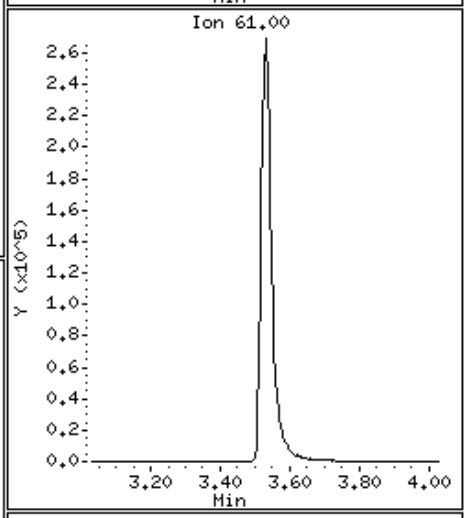


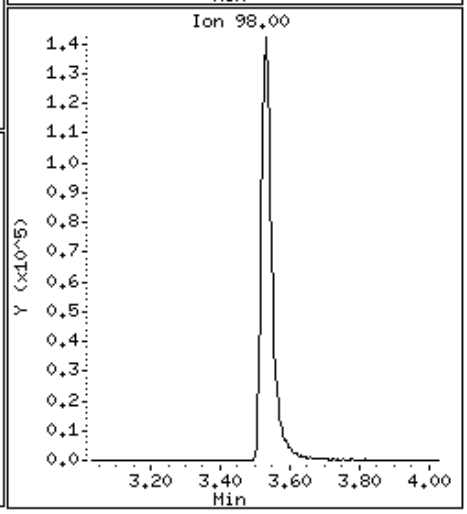












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070713.D

Date : 07-JUL-2022 14:24

Client ID: HS22070020-01

Instrument: voa6.i

Sample Info: HS22070020-01;HS22070020-01;;;

Purge Volume: 5.0

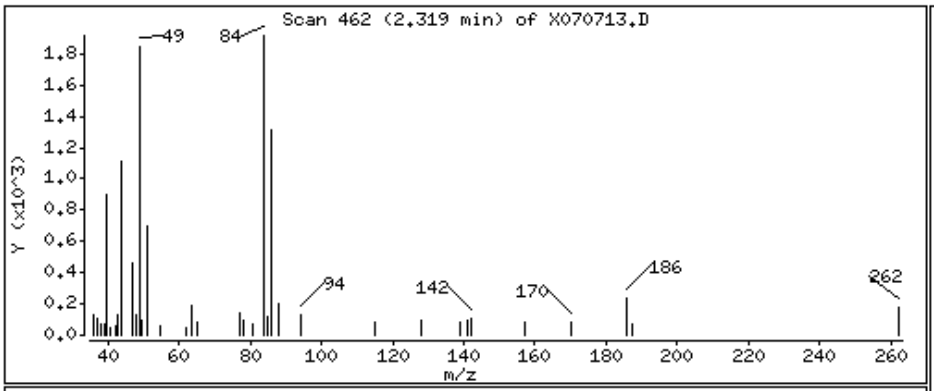
Operator: PC

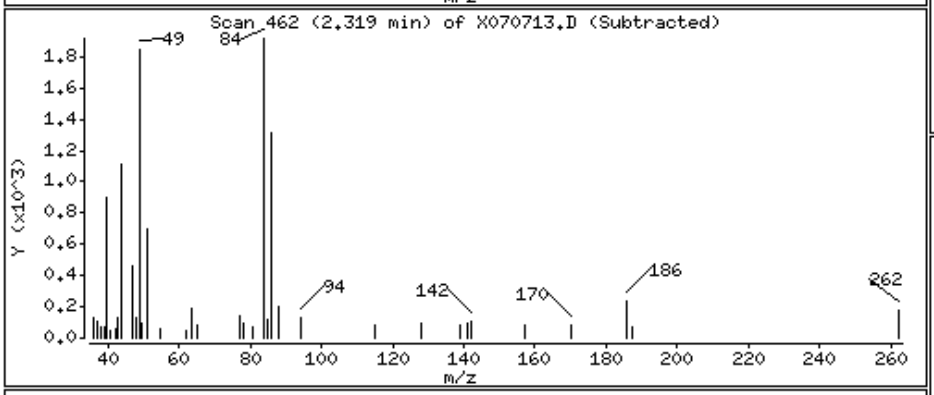
Column phase: DB624

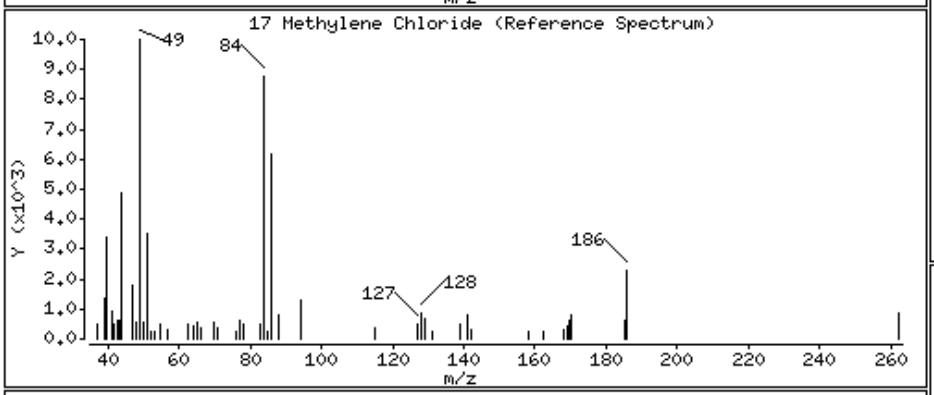
Column diameter: 0.18

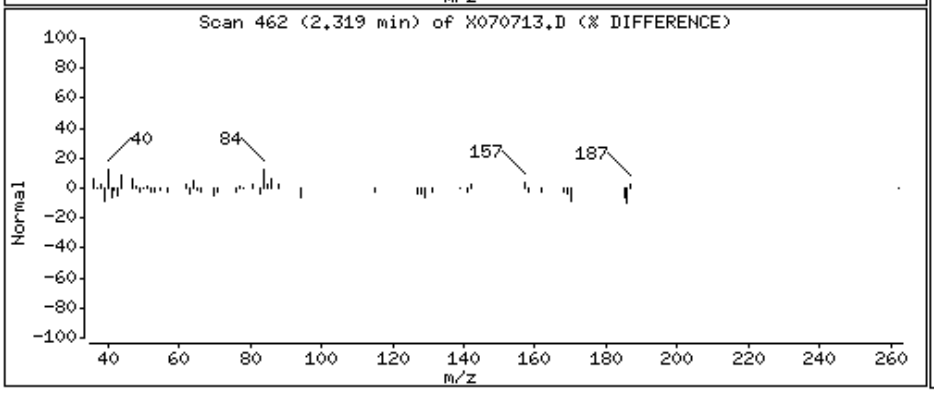
17 Methylene Chloride

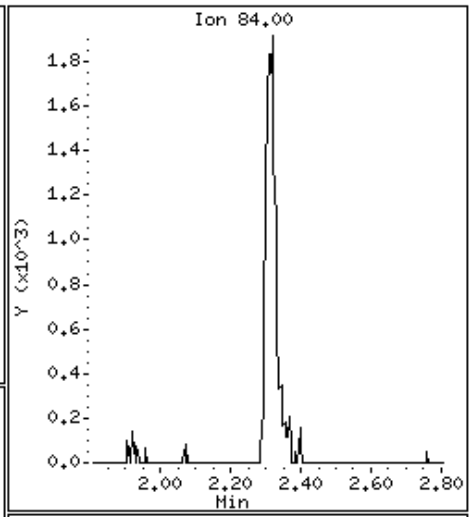
Concentration: 308.55 ug/l

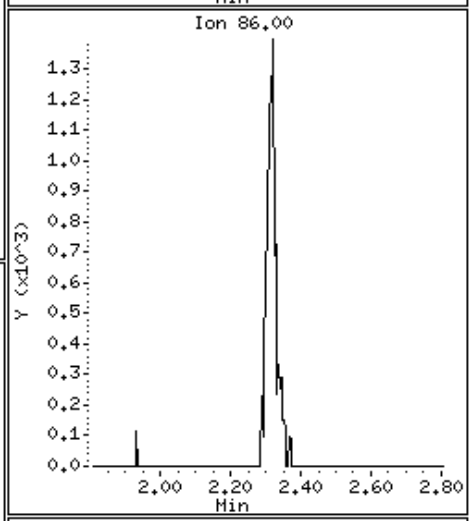


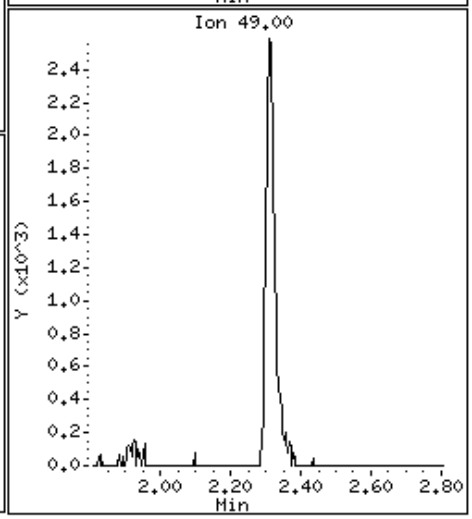












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070713.D

Date : 07-JUL-2022 14:24

Client ID: HS22070020-01

Instrument: voa6.i

Sample Info: HS22070020-01;HS22070020-01;;;

Purge Volume: 5.0

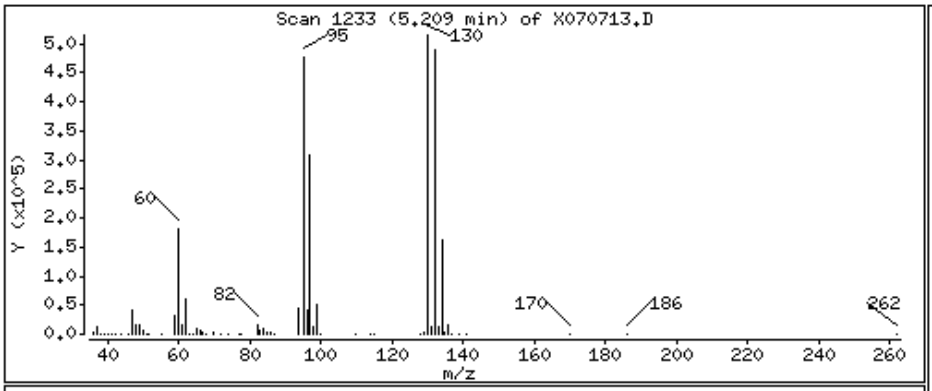
Operator: PC

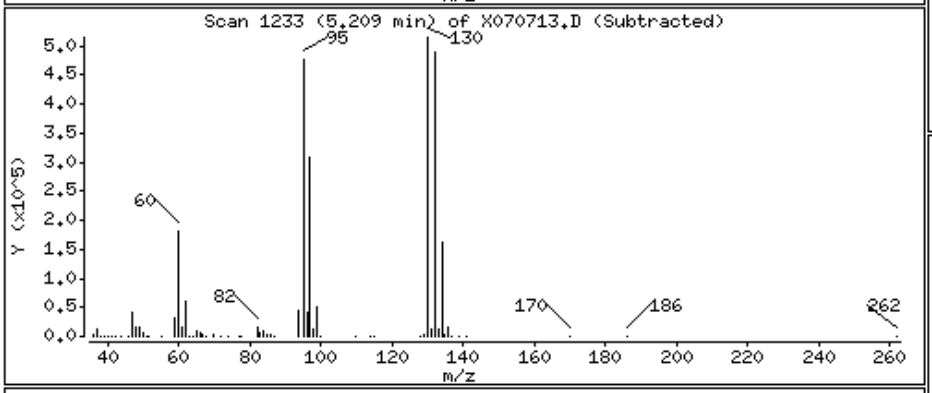
Column phase: DB624

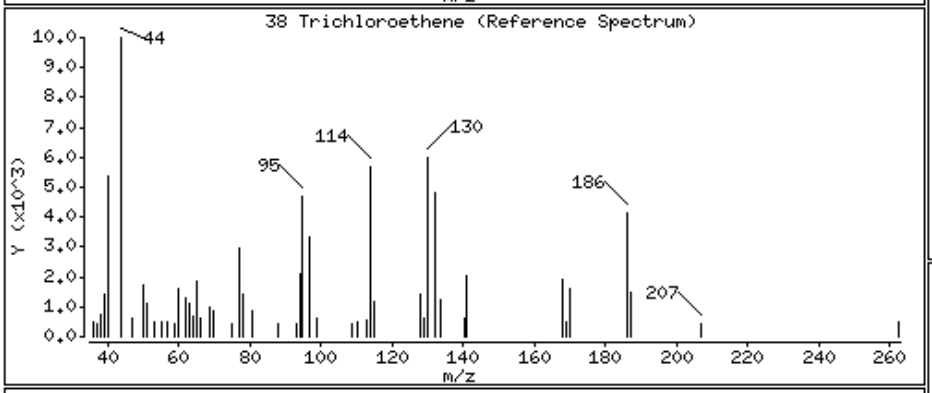
Column diameter: 0.18

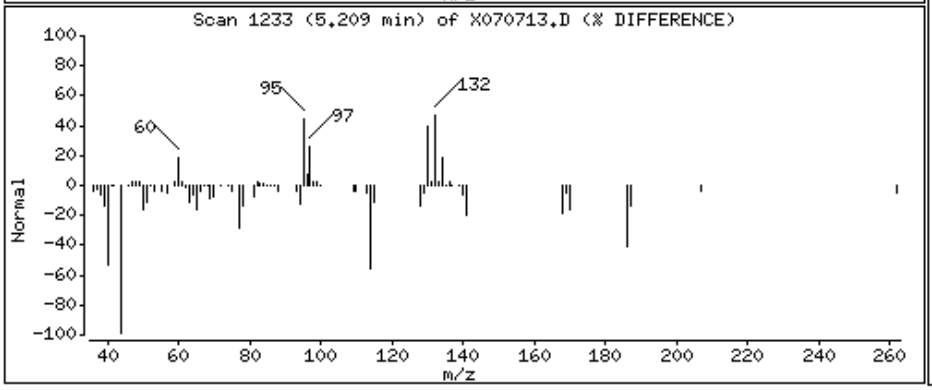
38 Trichloroethene

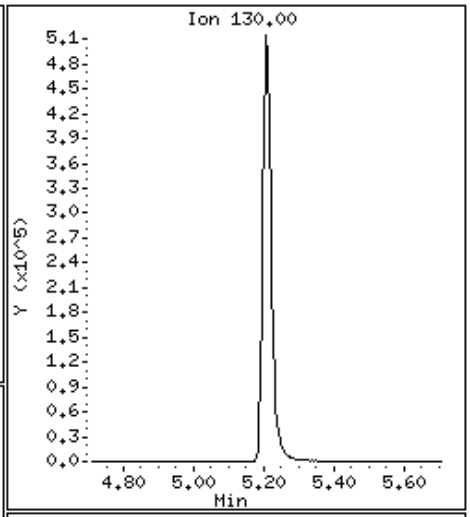
Concentration: 40116.70 ug/l

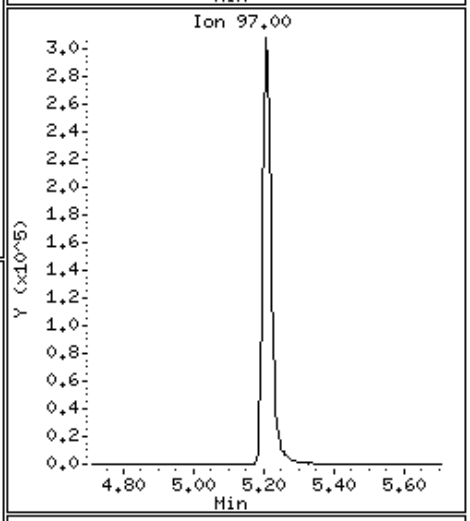


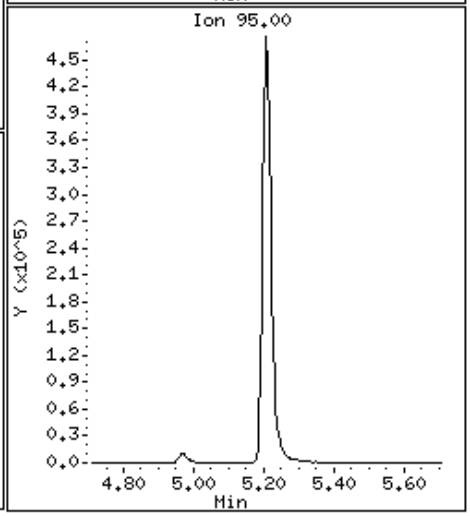












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070713.D

Date : 07-JUL-2022 14:24

Client ID: HS22070020-01

Instrument: voa6.i

Sample Info: HS22070020-01;HS22070020-01;;;

Purge Volume: 5.0

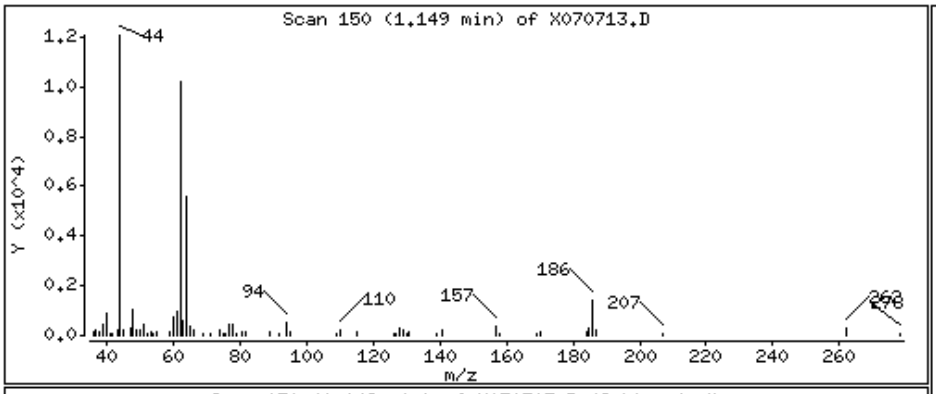
Operator: PC

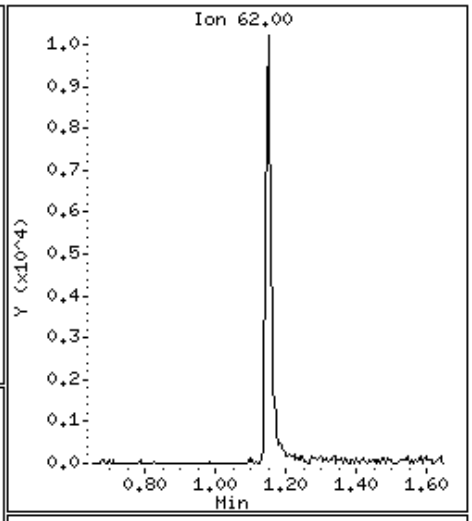
Column phase: DB624

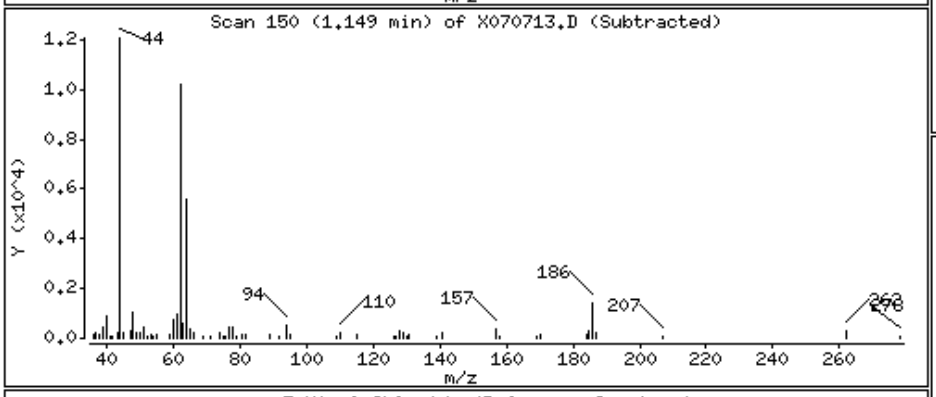
Column diameter: 0.18

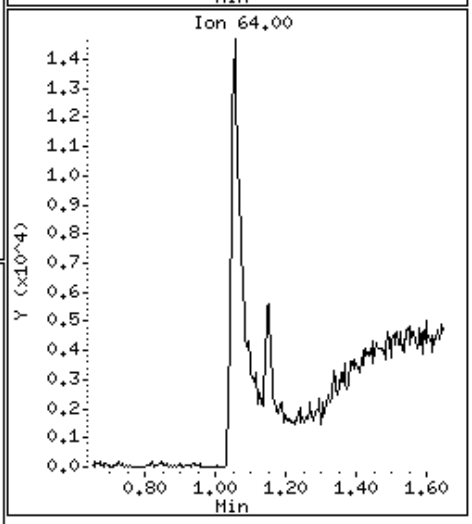
5 Vinyl Chloride

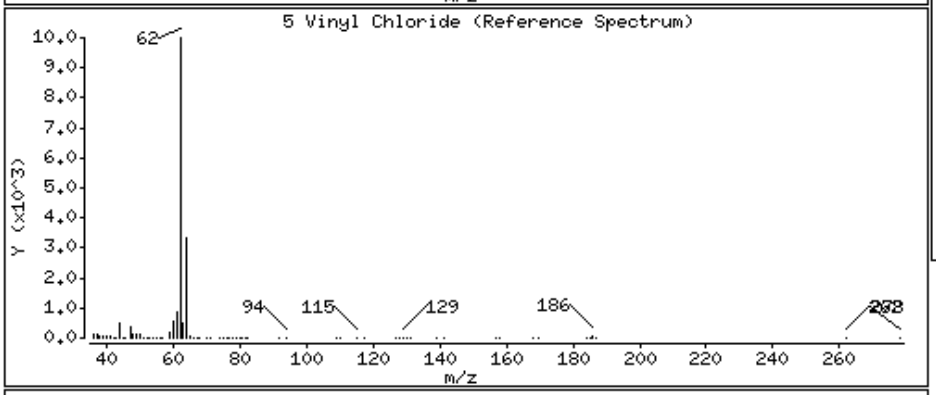
Concentration: 426.52 ug/l

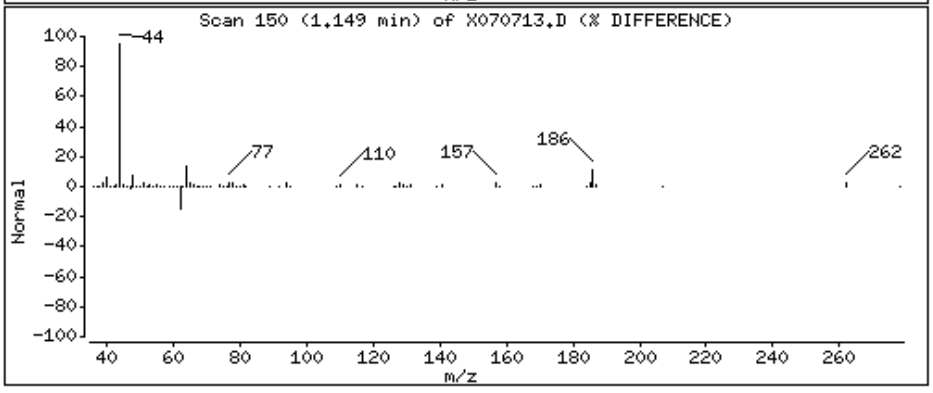












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Inj Date : 07-JUL-2022 14:24
InstruID : voa6.i
LabSampID : HS22070020-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070714.D Page 1
Report Date: 19-Jul-2022 13:45

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070714.D
Lab Smp Id: HS22070020-04 Client Smp ID: HS22070020-04
Inj Date : 07-JUL-2022 14:45
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-04;HS22070020-04;;;
Misc Info : HS22052000V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:44 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 13
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

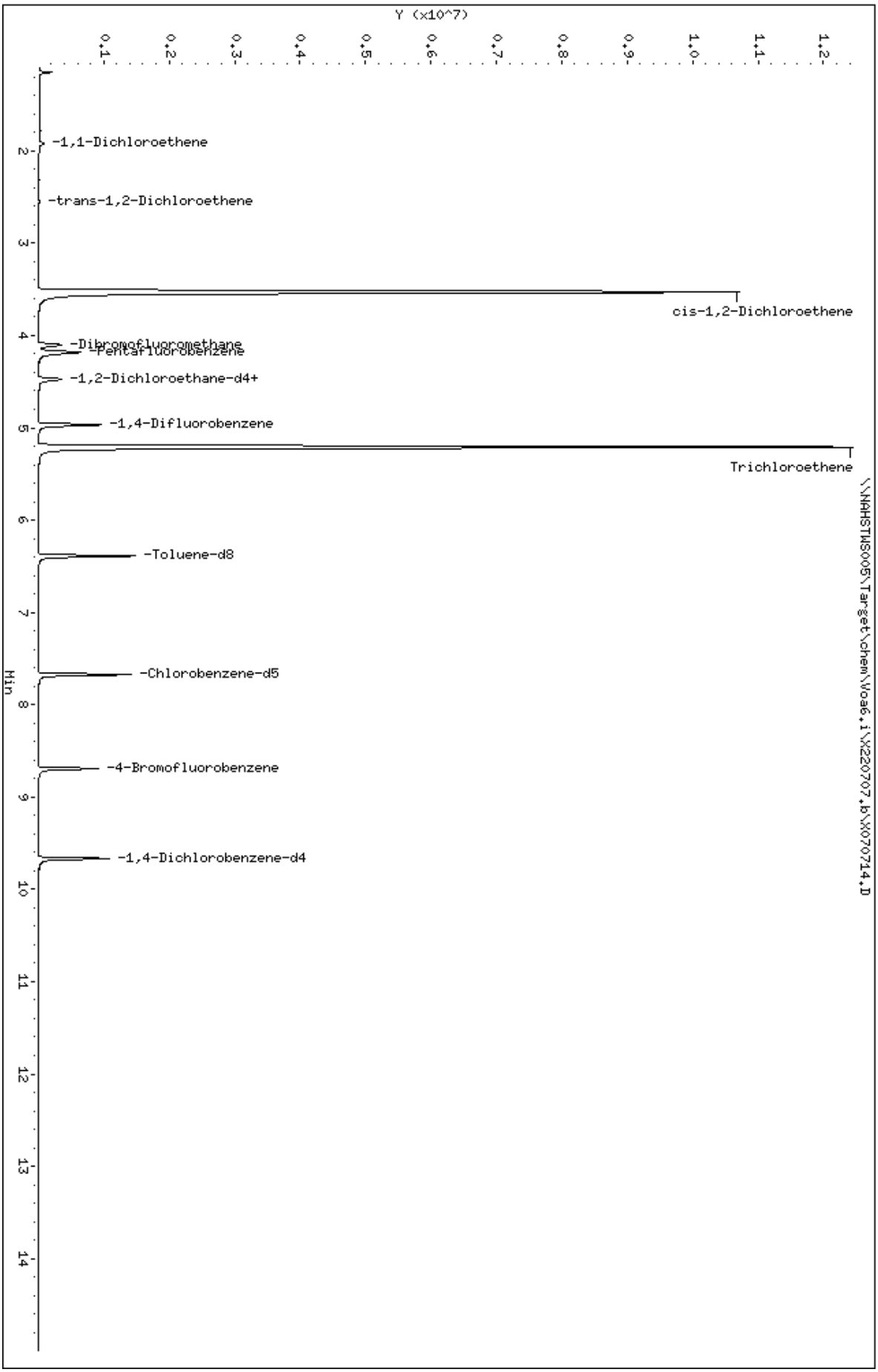
Name	Value	Description
DF	25.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	576122	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	829347	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	752140	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	310659	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	265212	49.1315	49.13
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	300840	46.0040	46.00
$ 30 Dibromofluoromethane	113	4.102	4.103	(0.980)	253418	47.6787	47.67
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	920479	49.2833	49.28
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	11600	2.10468	52.61(a)
33 1,2-Dichloroethane	62	4.567	4.560	(0.919)	10683	1.55441	38.86(a)
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	5673033	850.763	21269.08(A)
38 Trichloroethene	130	5.208	5.208	(1.048)	4283835	689.762	17244.05(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	121372	16.4710	411.77

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070714.D
Date : 07-JUL-2022 14:45
Client ID: HS220700Z0-04
Sample Info: HS220700Z0-04;HS220700Z0-04;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070714.D Page 2

Date : 07-JUL-2022 14:45

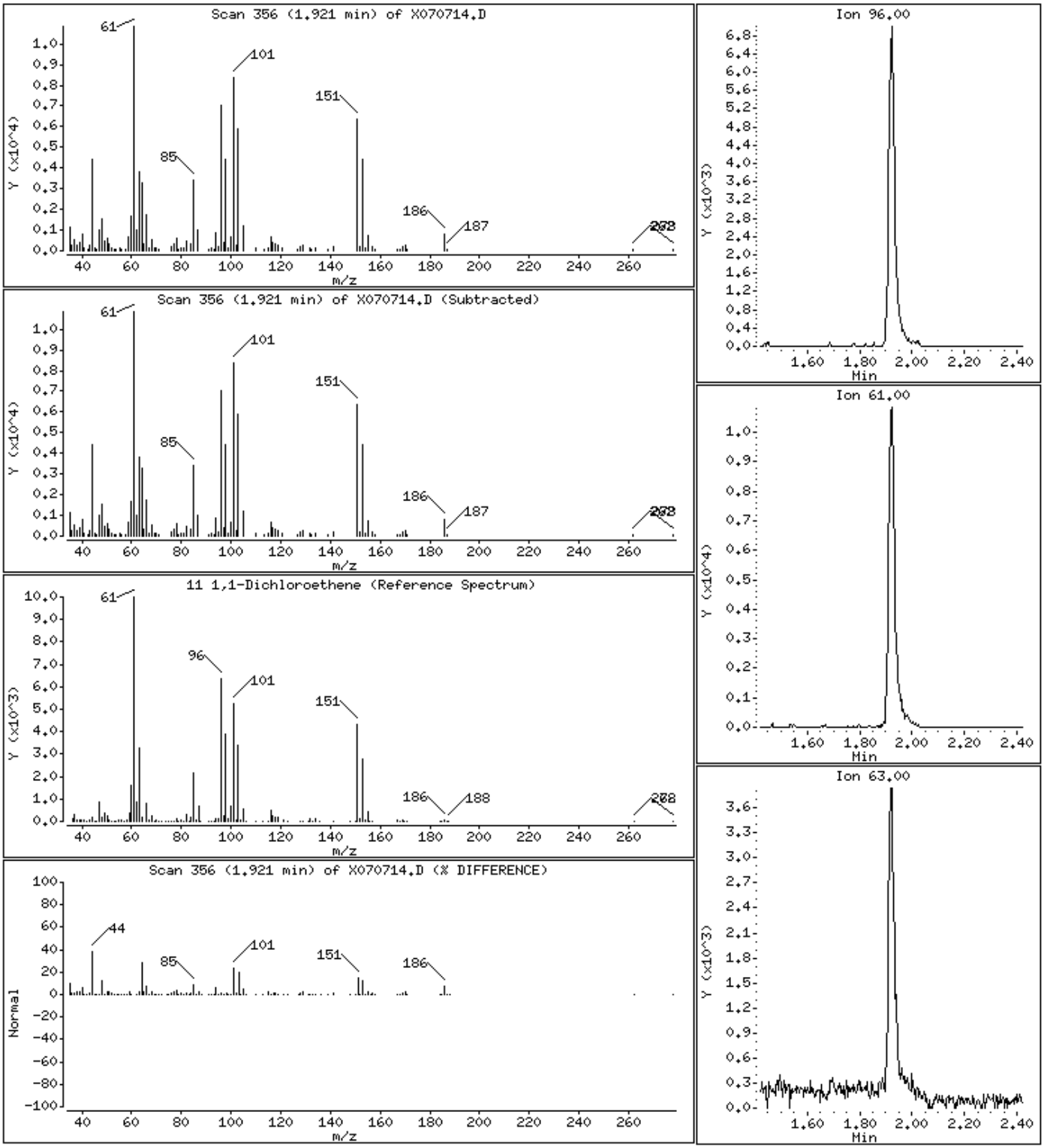
Client ID: HS22070020-04 Instrument: voa6.i

Sample Info: HS22070020-04;HS22070020-04;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

11 1,1-Dichloroethene Concentration: 52.61 ug/l



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070714.D

Date : 07-JUL-2022 14:45

Client ID: HS22070020-04

Instrument: voa6.i

Sample Info: HS22070020-04;HS22070020-04;;;

Purge Volume: 5.0

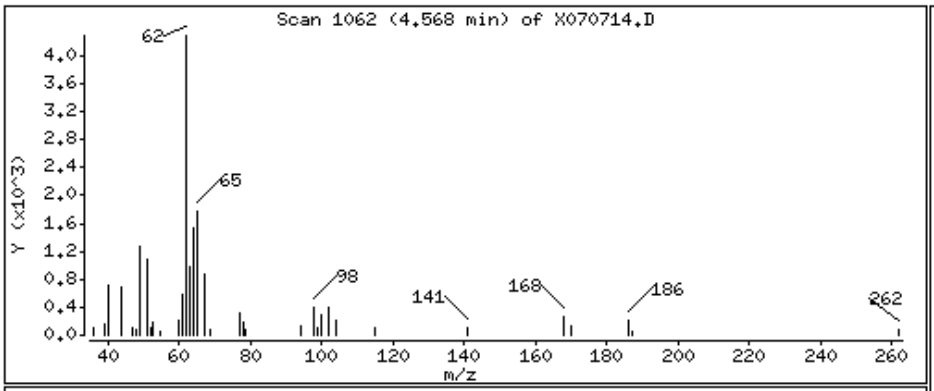
Operator: PC

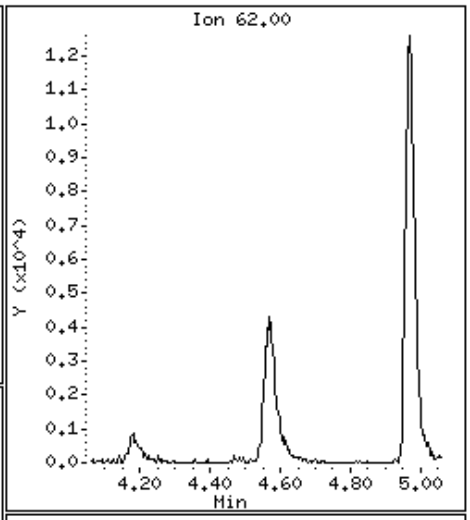
Column phase: DB624

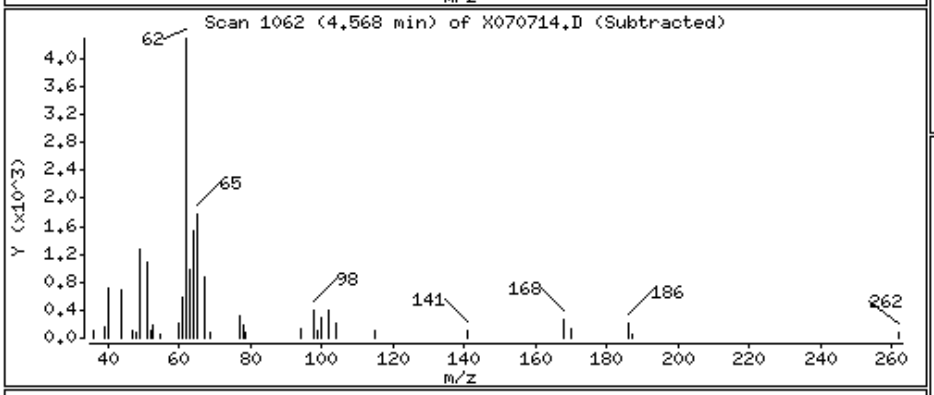
Column diameter: 0.18

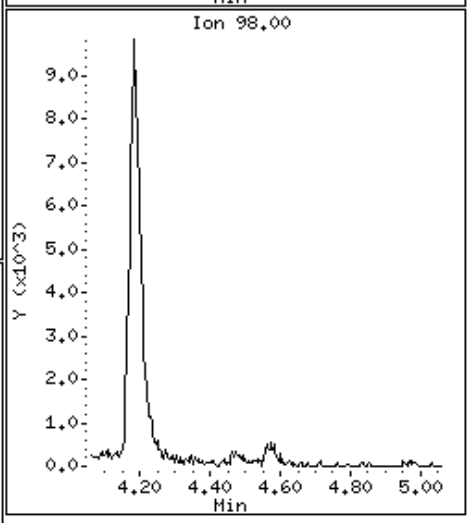
33 1,2-Dichloroethane

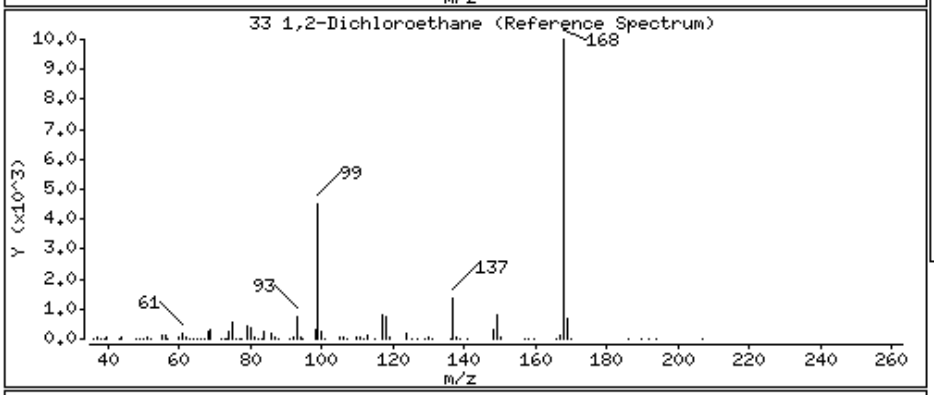
Concentration: 38.86 ug/l

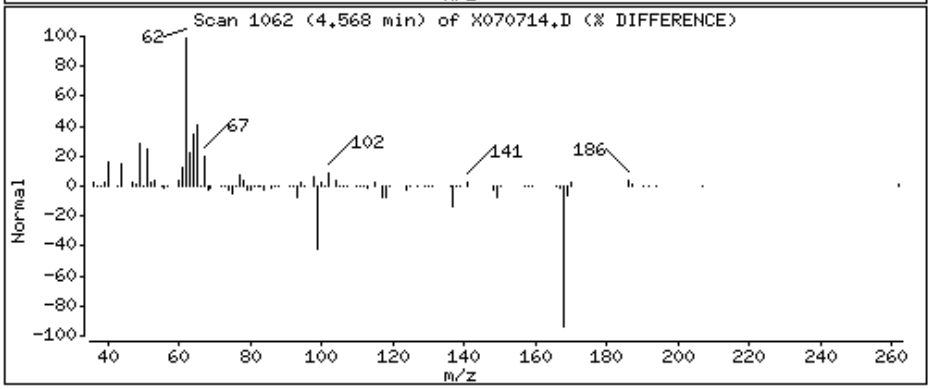












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070714.D

Date : 07-JUL-2022 14:45

Client ID: HS22070020-04

Instrument: voa6.i

Sample Info: HS22070020-04;HS22070020-04;;;

Purge Volume: 5.0

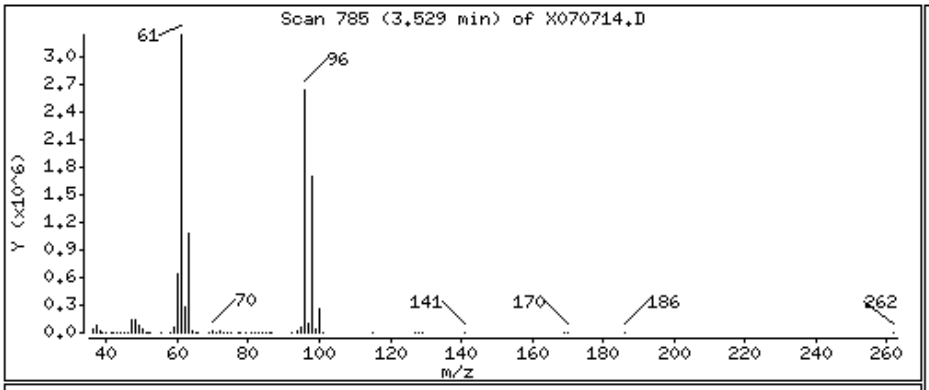
Operator: PC

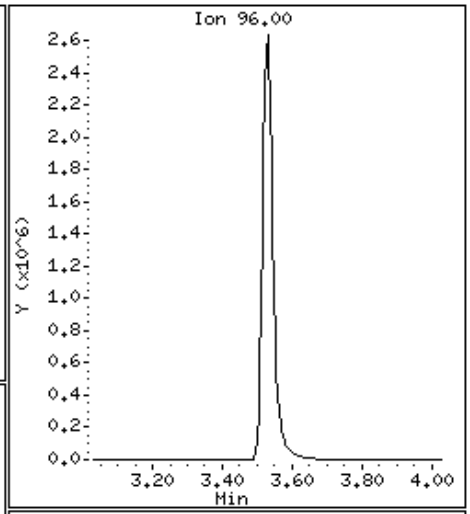
Column phase: DB624

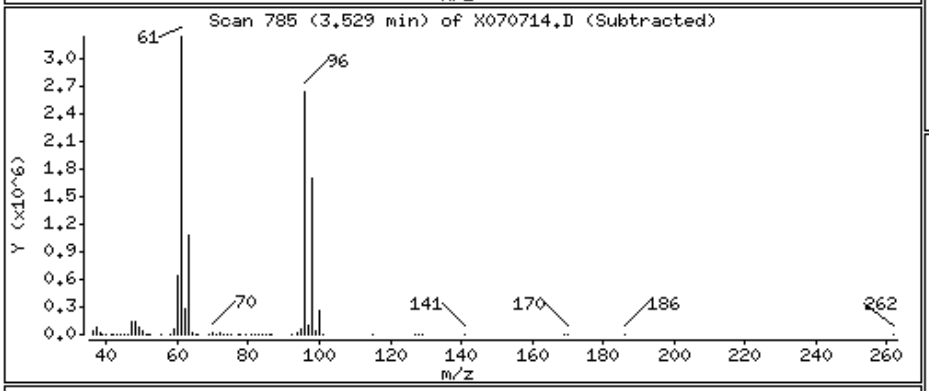
Column diameter: 0.18

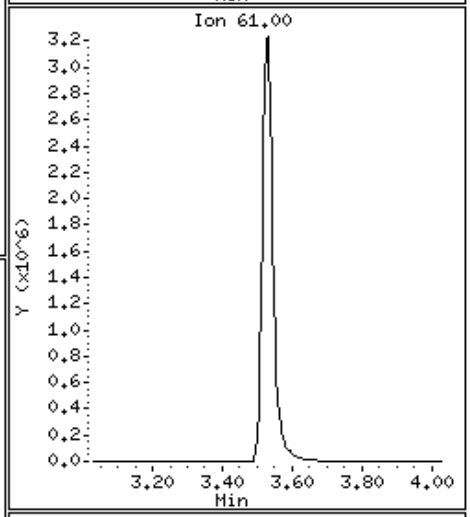
27 cis-1,2-Dichloroethene

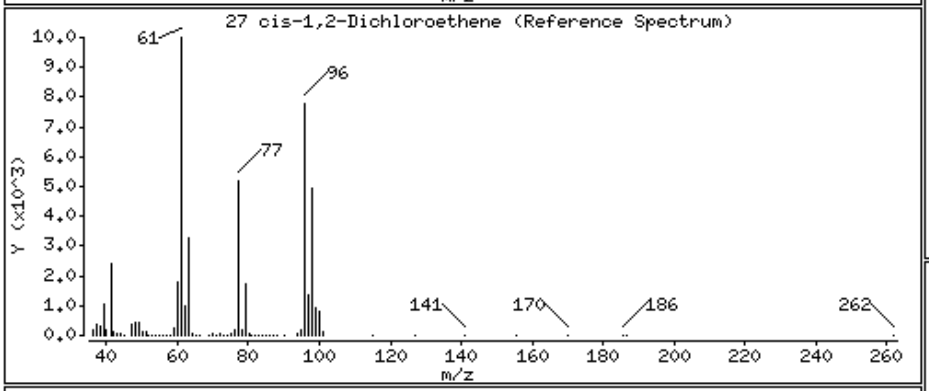
Concentration: 21269.08 ug/l

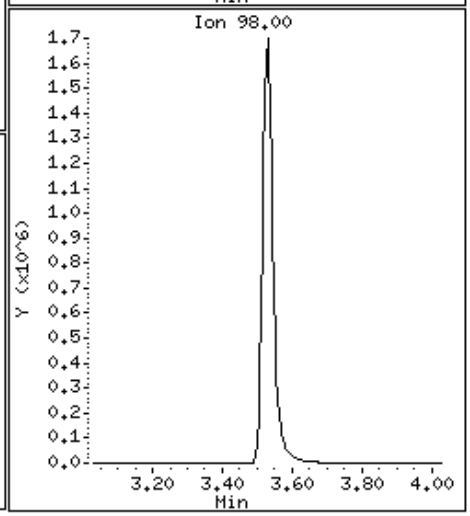


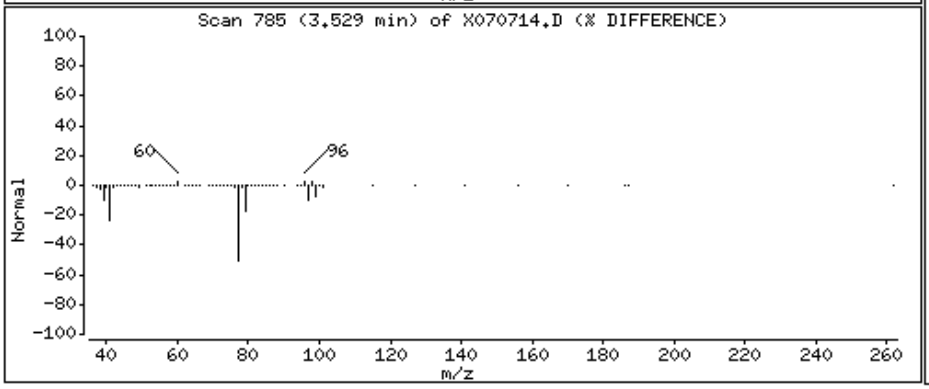












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070714.D Page 5

Date : 07-JUL-2022 14:45

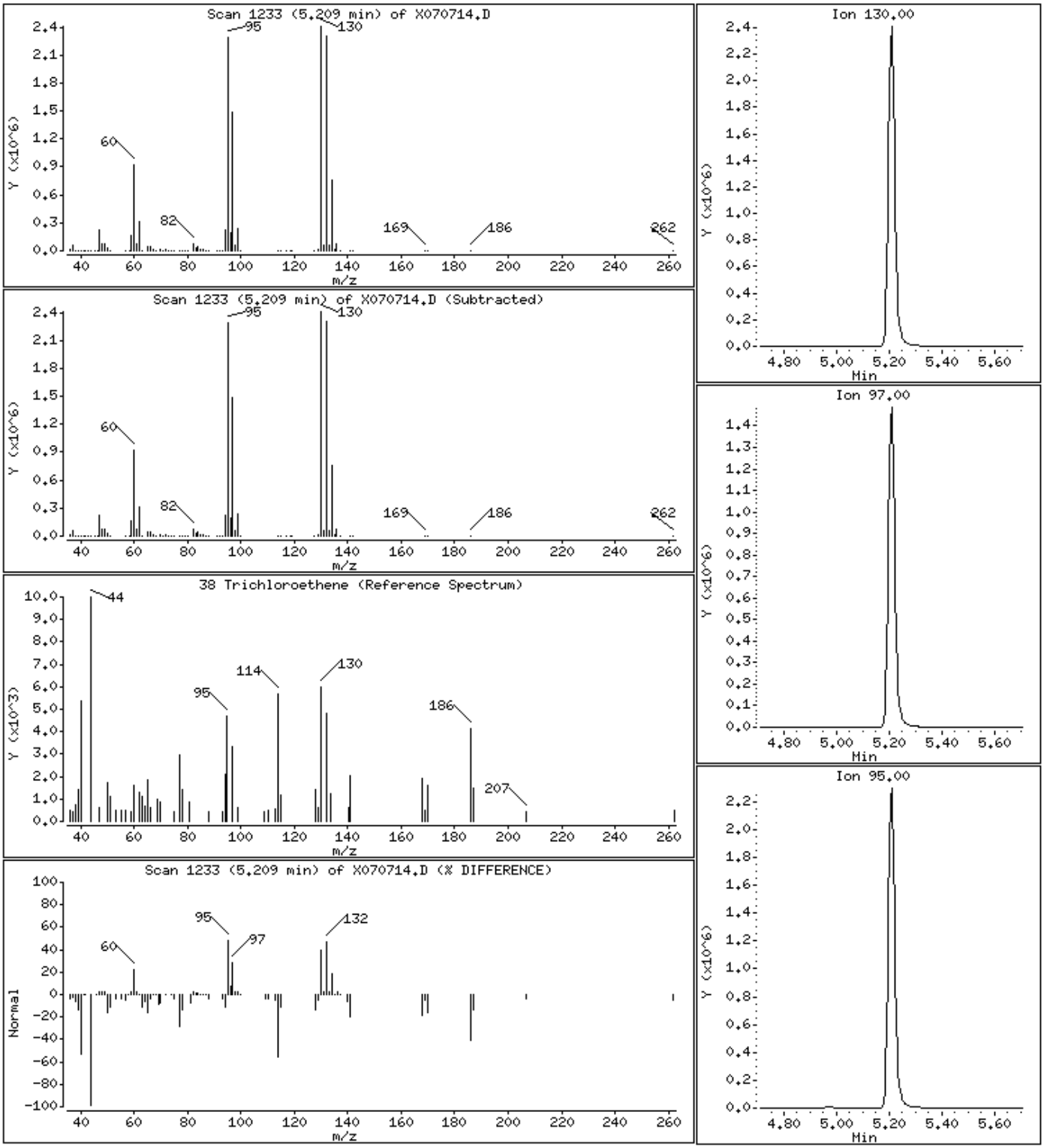
Client ID: HS22070020-04 Instrument: voa6.i

Sample Info: HS22070020-04;HS22070020-04;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

38 Trichloroethene Concentration: 17244.05 ug/l



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Date : 07-JUL-2022 14:45

Client ID: HS22070020-04

Instrument: voa6.i

Sample Info: HS22070020-04;HS22070020-04;;;

Purge Volume: 5.0

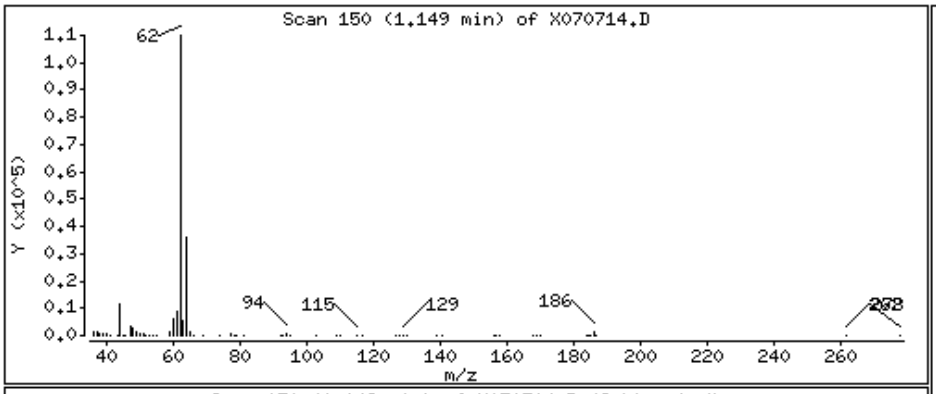
Operator: PC

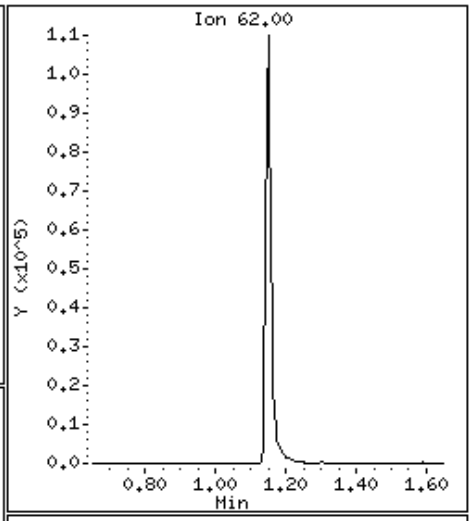
Column phase: DB624

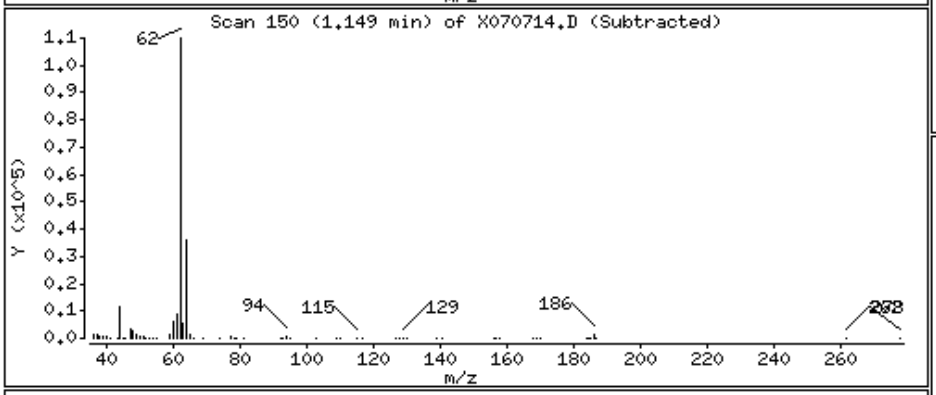
Column diameter: 0.18

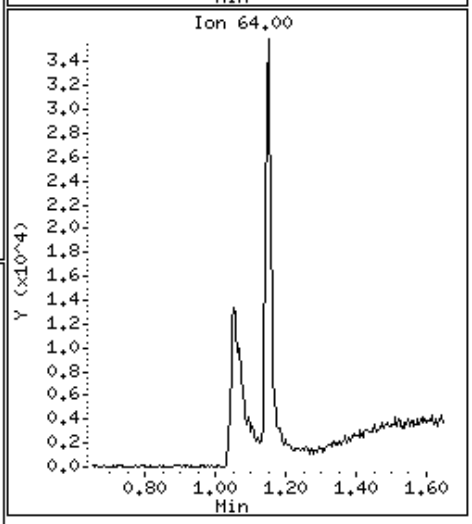
5 Vinyl Chloride

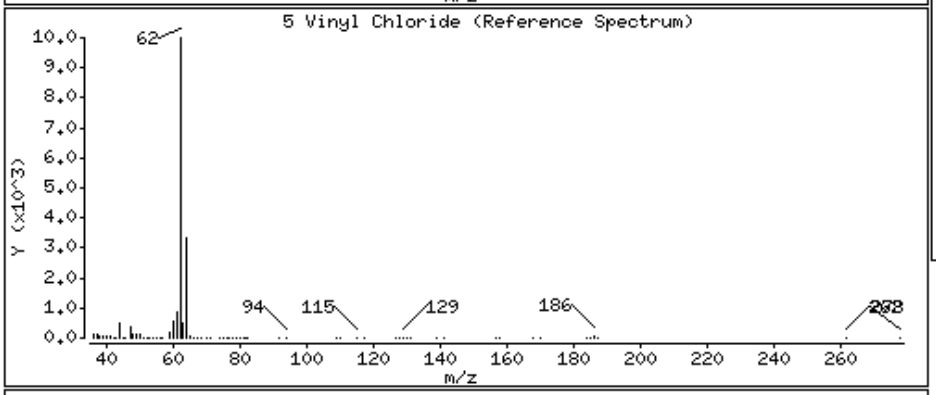
Concentration: 411.77 ug/l

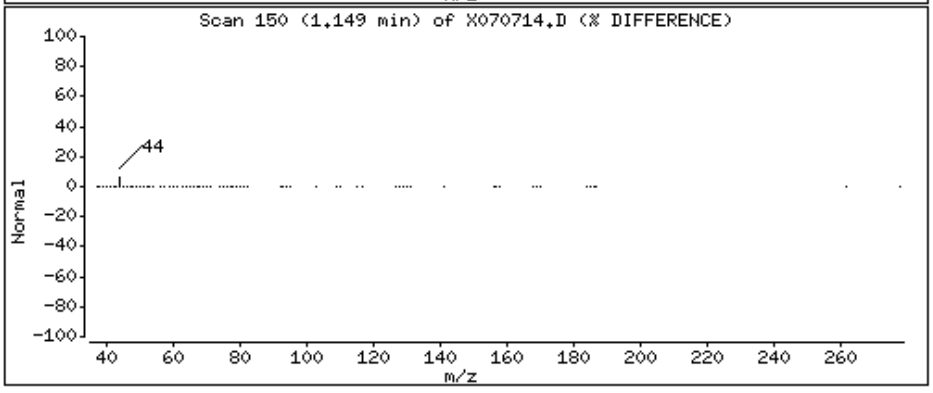












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Inj Date : 07-JUL-2022 14:45
InstruID : voa6.i
LabSampID : HS22070020-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070715.D Page 1
Report Date: 19-Jul-2022 13:45

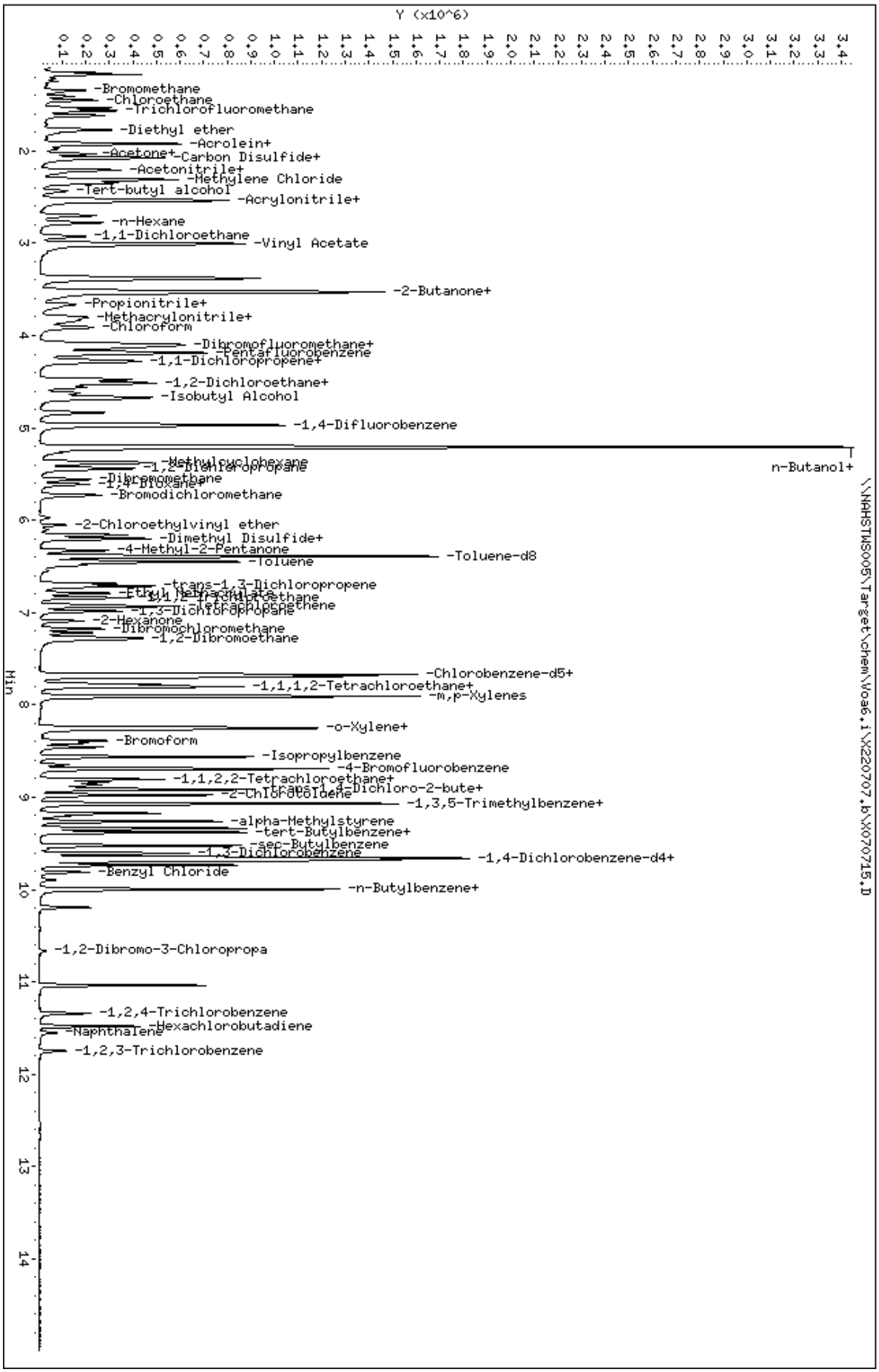
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070715.D
Lab Smp Id: HS22070020-01MS Client Smp ID: HS22070020-01MS
Inj Date : 07-JUL-2022 15:06
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-01MS;HS22070020-01MS;3;;MS
Misc Info : HS22052000V6;WATER;0;250;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:44 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 14 QC Sample: MS
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	250.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	628349	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	893831	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	773639	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	348111	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	299514	50.9156	50.91
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	347573	51.7121	51.71
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	278992	48.1301	48.13
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1041943	54.2363	54.23
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	87824	19.9676	4991.90
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	111445	18.5397	4634.92
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	149637	20.2019	5050.48
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	689434	94.7981	23699.52
17 Methylene Chloride	84	2.311	2.311	(0.552)	127576	17.8745	4468.63
38 Trichloroethene	130	5.208	5.208	(1.048)	1180000	176.291	44072.68
5 Vinyl Chloride	62	1.149	1.149	(0.275)	142625	17.7464	4436.60



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070715.D
Date : 07-JUL-2022 15:06
Client ID: HS220700Z0-01MS
Sample Info: HS220700Z0-01MS;HS220700Z0-01MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070715.D
Inj Date : 07-JUL-2022 15:06
InstruID : voa6.i
LabSampID : HS22070020-01MS

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070716.D Page 1
Report Date: 19-Jul-2022 13:45

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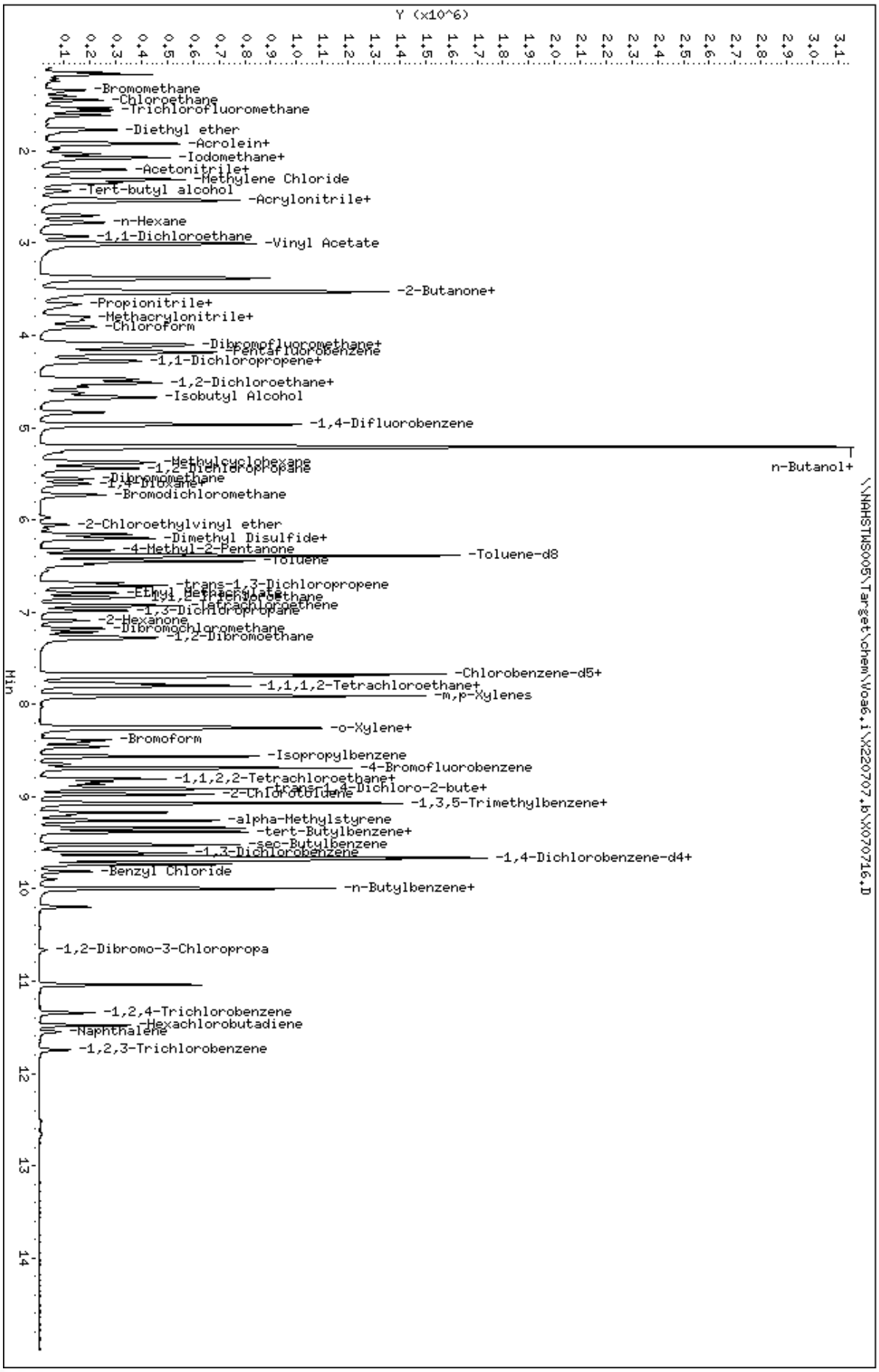
Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070716.D
Lab Smp Id: HS22070020-01MSD Client Smp ID: HS22070020-01MSD
Inj Date : 07-JUL-2022 15:27
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-01MSD;HS22070020-01MSD;3;;MSD
Misc Info : HS22052000V6;WATER;0;250;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:44 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 14 QC Sample: MSD
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	250.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	610592	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	866659	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	744549	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	332978	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	290345	50.7895	50.78
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	338224	52.2908	52.29
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	272292	48.3416	48.34
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1015547	54.9276	54.92
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	84051	19.8564	4964.11
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	102490	17.5458	4386.44
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	146340	20.3762	5094.06
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	649212	91.8636	22965.89
17 Methylene Chloride	84	2.307	2.311	(0.551)	120238	17.3552	4338.79
38 Trichloroethene	130	5.208	5.208	(1.048)	1081006	166.565	41641.15
5 Vinyl Chloride	62	1.149	1.149	(0.275)	143470	18.3707	4592.67



Data File: \\NAHSTWS005\Target\chem\Woa6.i\X220707.b\X070716.D
Date : 07-JUL-2022 15:27
Client ID: HS220700Z0-01HSD
Sample Info: HS220700Z0-01HSD;HS220700Z0-01HSD;3;;HSD
Purge Volume: 5.0
Column phase: DB624

Instrument: woa6.i
Operator: PC
Column diameter: 0.18

\\NAHSTWS005\Target\chem\Woa6.i\X220707.b\X070716.D

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070716.D
Inj Date : 07-JUL-2022 15:27
InstruID : voa6.i
LabSampID : HS22070020-01MSD

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070717.D Page 1
Report Date: 19-Jul-2022 13:45

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070717.D
Lab Smp Id: HS22070020-04 Client Smp ID: HS22070020-04
Inj Date : 07-JUL-2022 15:48
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-04;HS22070020-04;;;
Misc Info : HS22052000V6;WATER;0;250;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:44 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 15
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

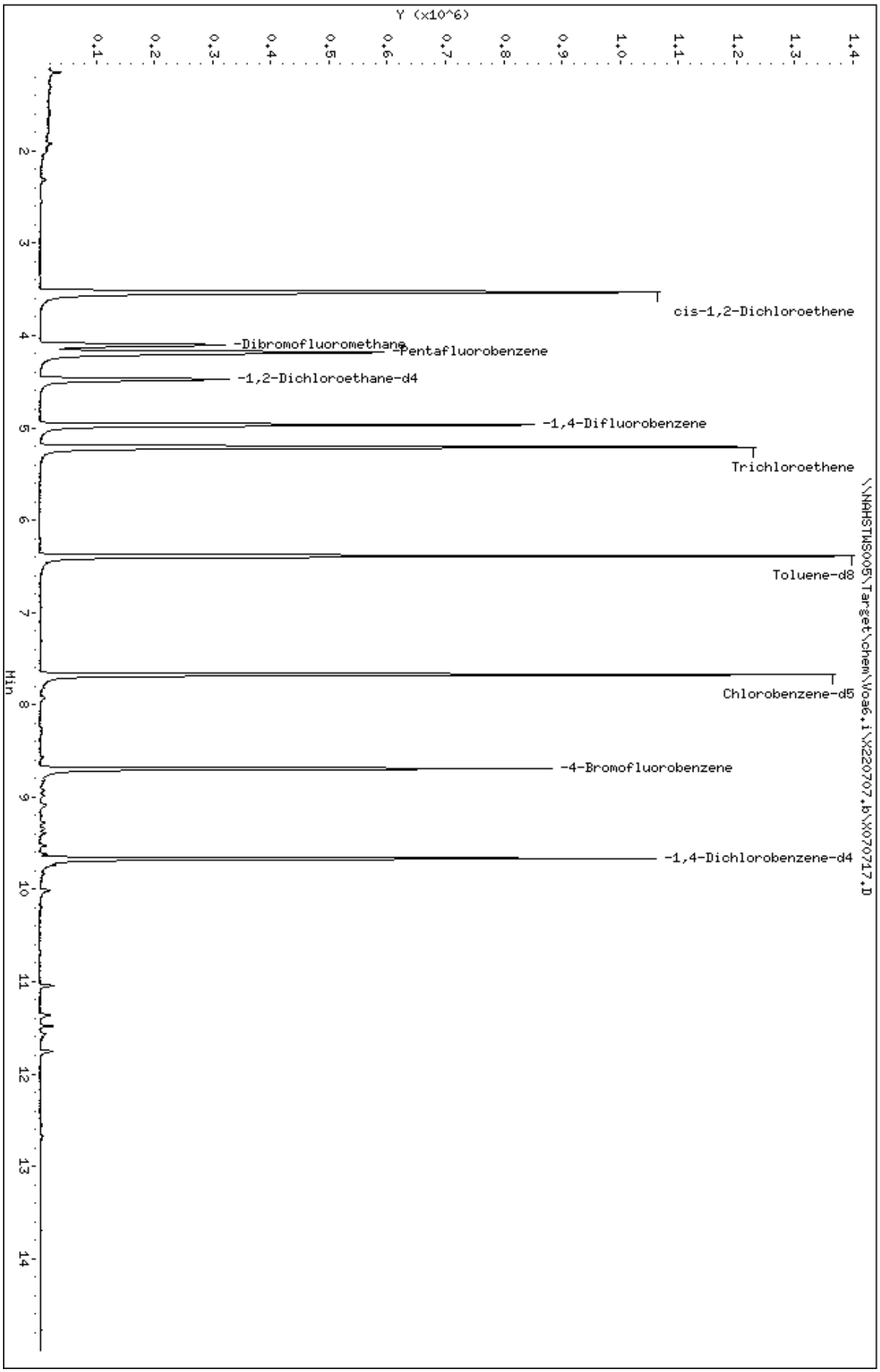
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	250.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	557063	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	741529	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	735114	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	282236	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	239261	45.7623	45.76
$ 69 4-Bromofluorobenzene	95	8.695	8.691	(1.133)	296289	46.3599	46.35
$ 30 Dibromofluoromethane	113	4.102	4.103	(0.980)	231375	45.0046	45.00
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	911262	49.9198	49.91
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	579678	89.9064	22476.59
38 Trichloroethene	130	5.208	5.208	(1.048)	441767	79.5551	19888.77
5 Vinyl Chloride	62	1.149	1.149	(0.275)	11771	1.65206	413.01(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070717.D
Date : 07-JUL-2022 15:48
Client ID: HS220700Z0-04
Sample Info: HS220700Z0-04;HS220700Z0-04;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070717.D Page 2

Date : 07-JUL-2022 15:48

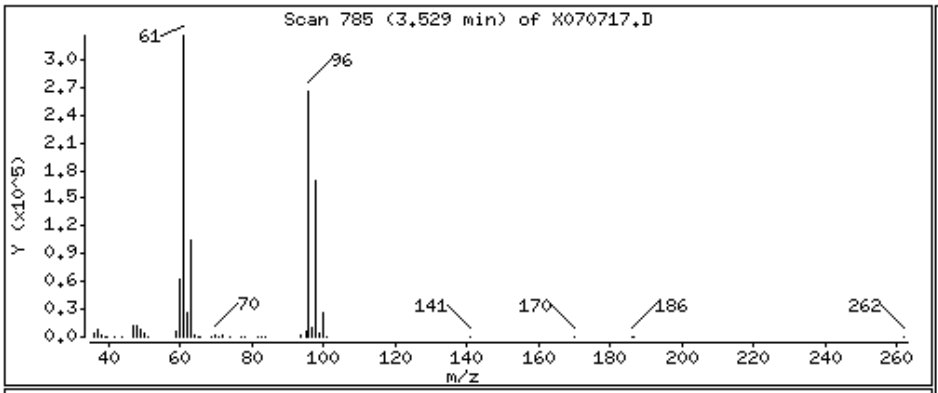
Client ID: HS22070020-04 Instrument: voa6.i

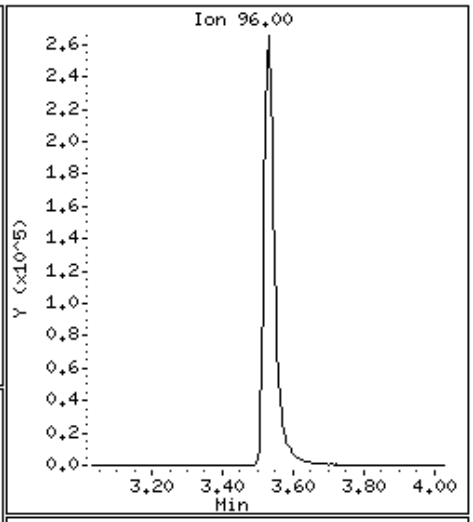
Sample Info: HS22070020-04;HS22070020-04;;;

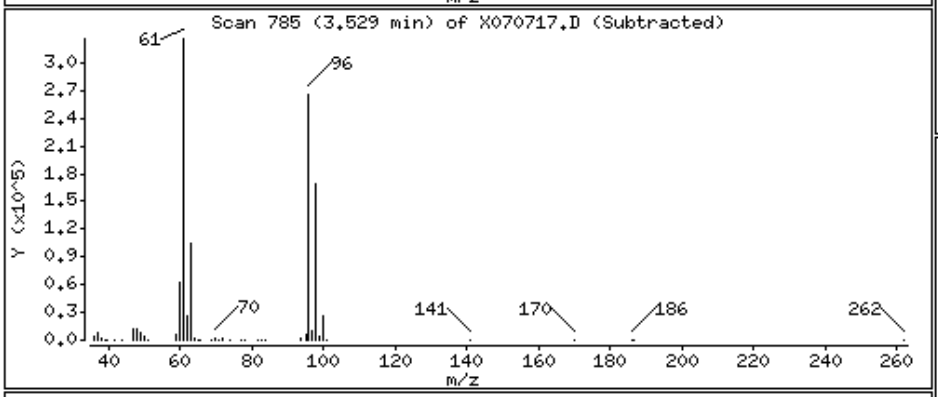
Purge Volume: 5.0 Operator: PC

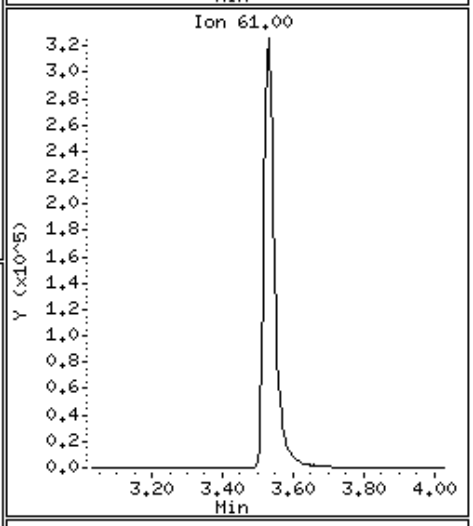
Column phase: DB624 Column diameter: 0.18

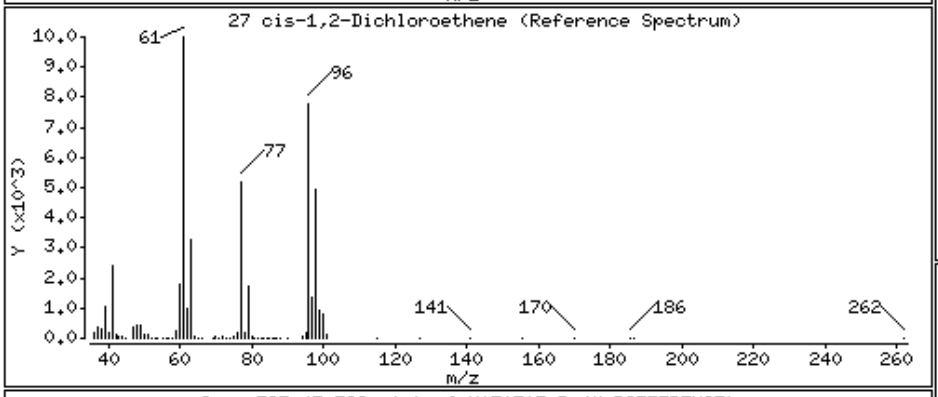
27 cis-1,2-Dichloroethene Concentration: 22476.59 ug/l

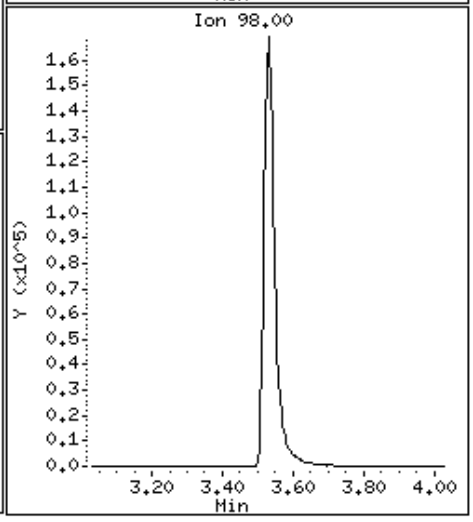


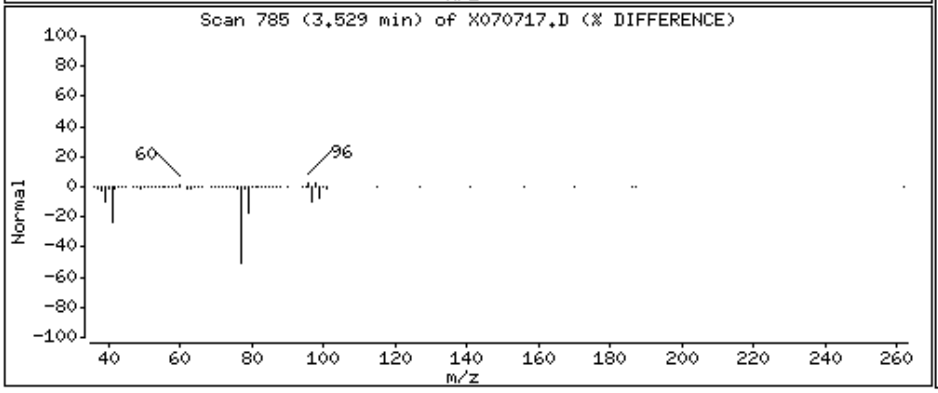












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070717.D Page 3

Date : 07-JUL-2022 15:48

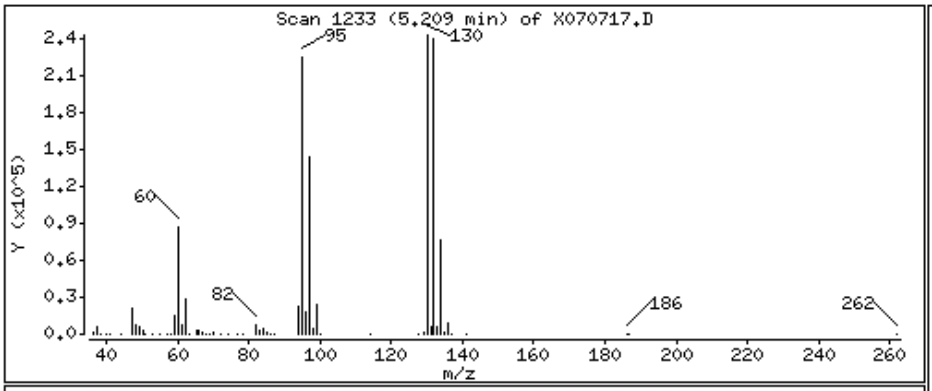
Client ID: HS22070020-04 Instrument: voa6.i

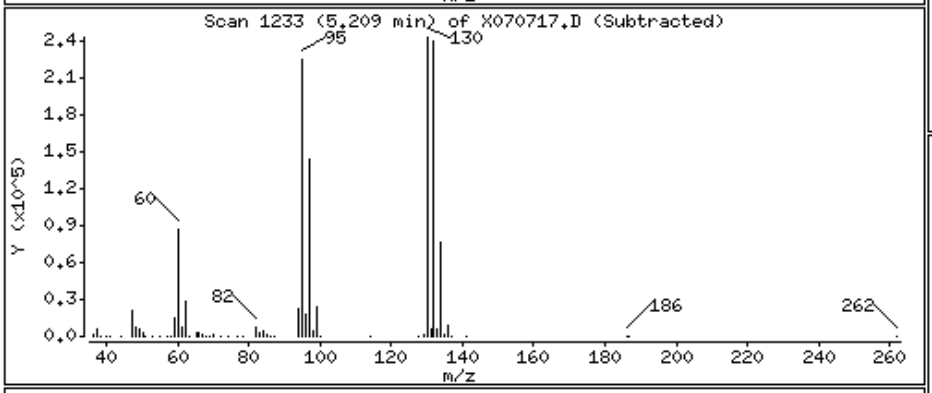
Sample Info: HS22070020-04;HS22070020-04;;;

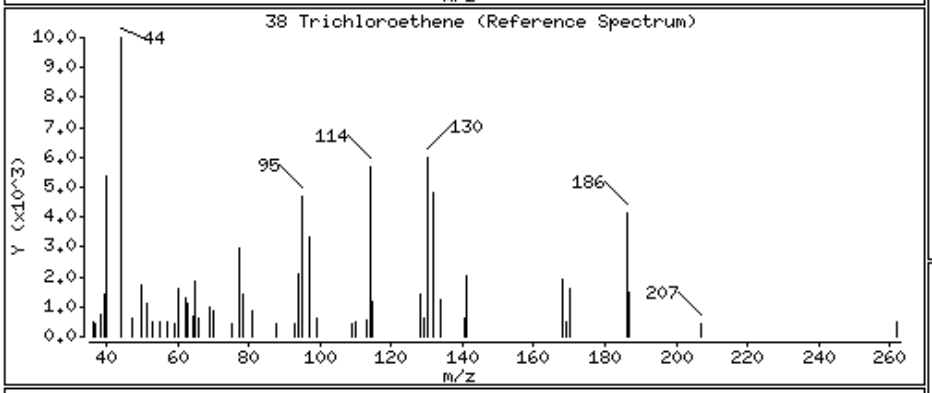
Purge Volume: 5.0 Operator: PC

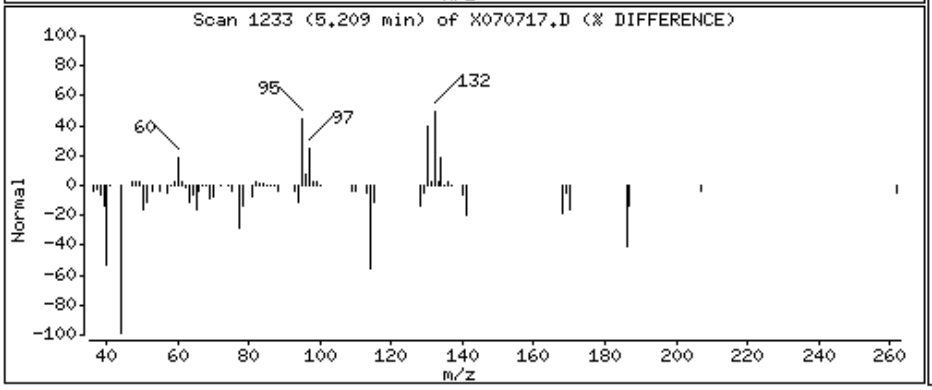
Column phase: DB624 Column diameter: 0.18

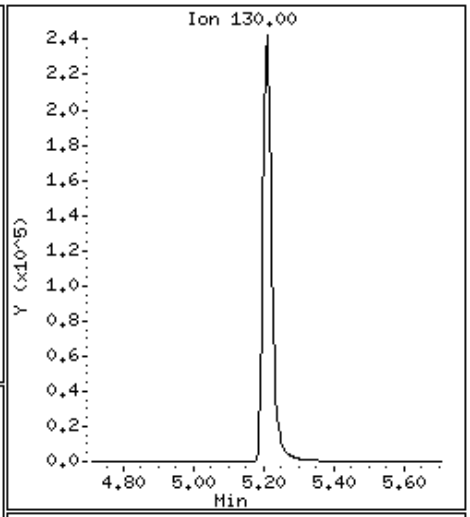
38 Trichloroethene Concentration: 19888.77 ug/l

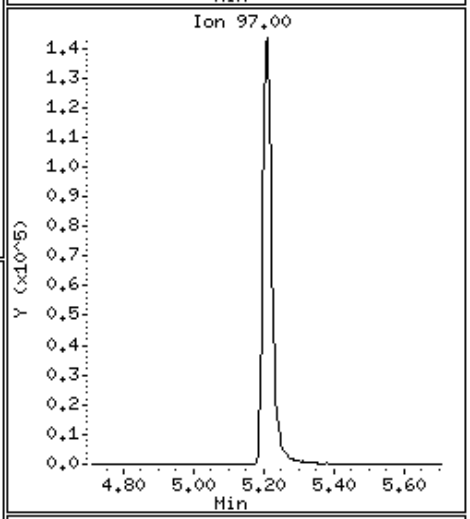


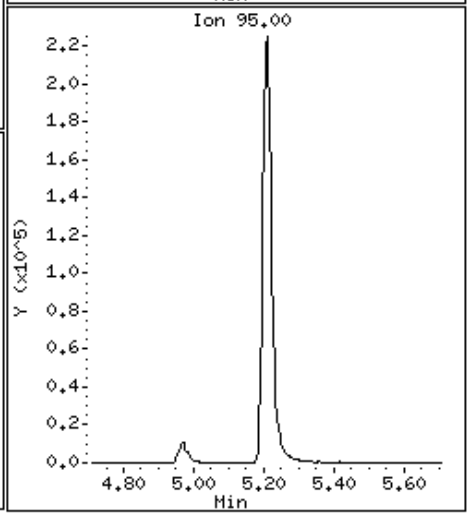












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070717.D

Date : 07-JUL-2022 15:48

Client ID: HS22070020-04

Instrument: voa6.i

Sample Info: HS22070020-04;HS22070020-04;;;

Purge Volume: 5.0

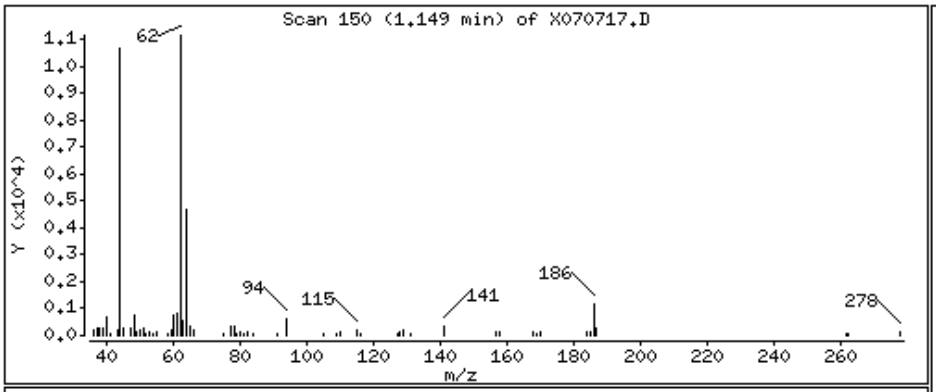
Operator: PC

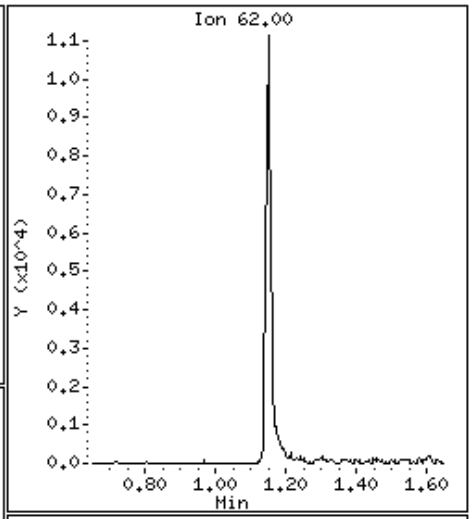
Column phase: DB624

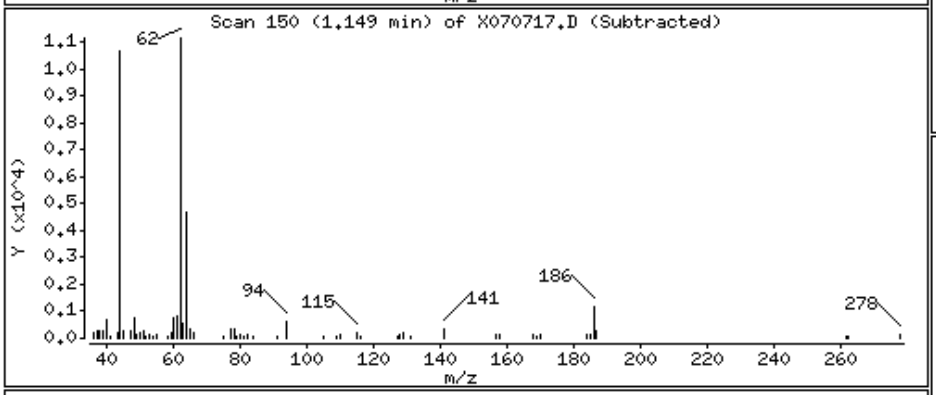
Column diameter: 0.18

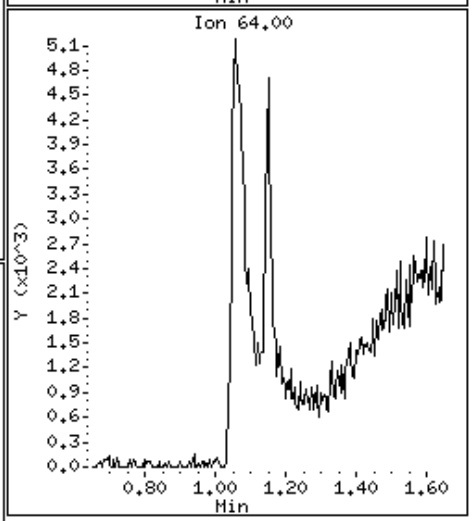
5 Vinyl Chloride

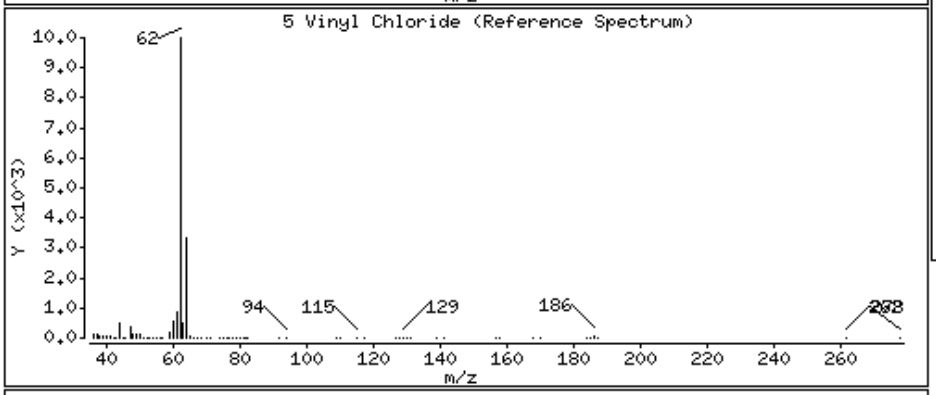
Concentration: 413.01 ug/l

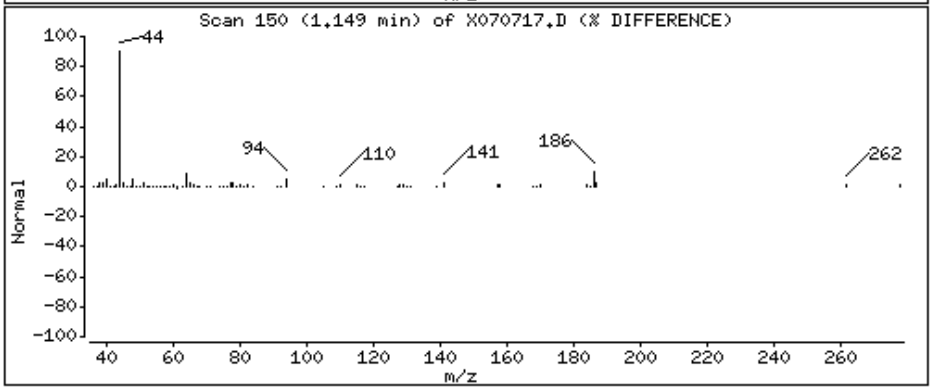












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070717.D
Inj Date : 07-JUL-2022 15:48
InstruID : voa6.i
LabSampID : HS22070020-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070719.D Page 1
Report Date: 19-Jul-2022 13:45

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070719.D
Lab Smp Id: HS22070020-09 Client Smp ID: HS22070020-09
Inj Date : 07-JUL-2022 16:30
Operator : PC Inst ID: voa6.i
Smp Info : HS22070020-09;HS22070020-09;;;
Misc Info : HS22052000V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:44 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 17
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

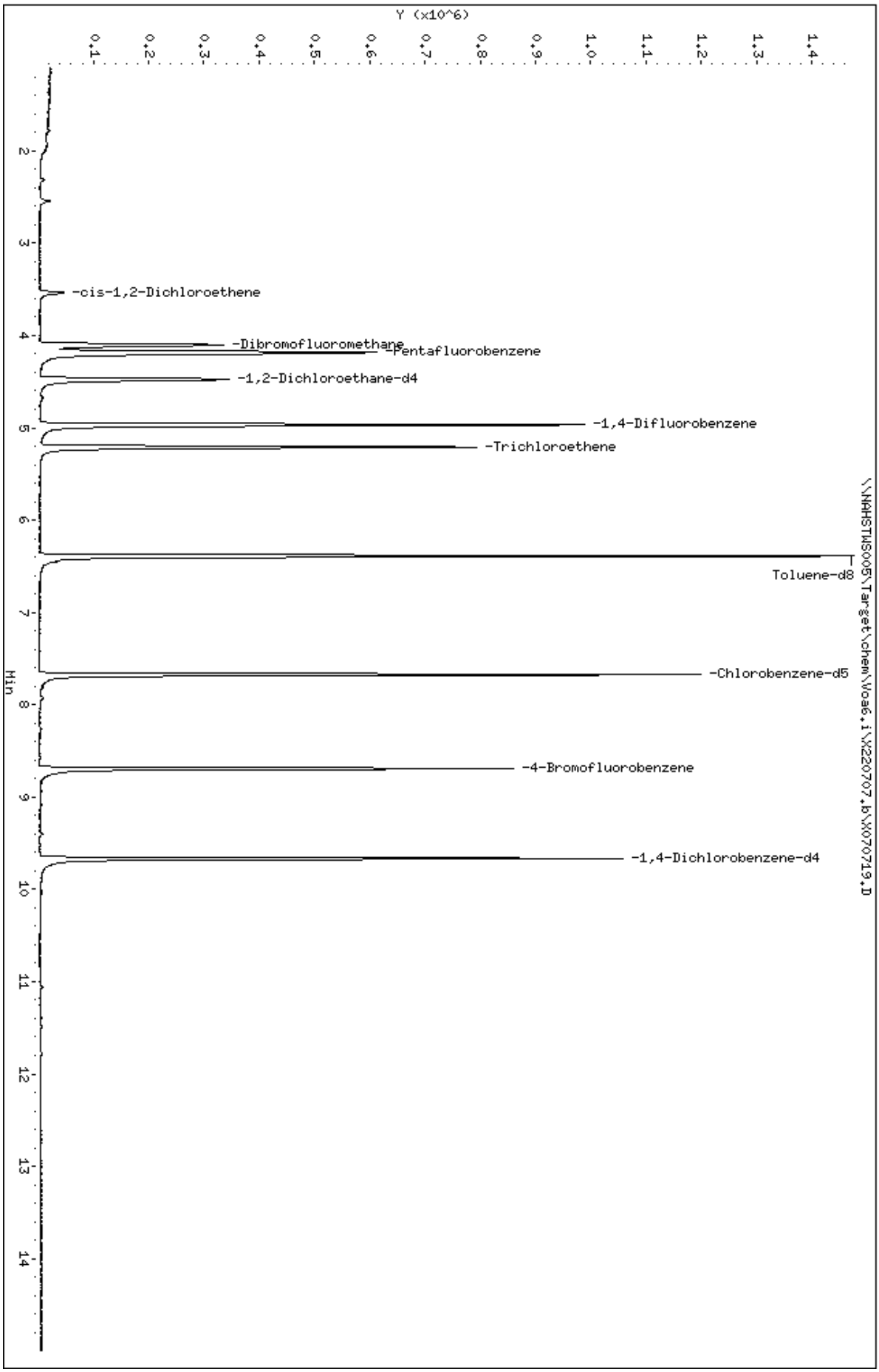
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	25.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	558637	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	826355	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	645655	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	288300	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	256581	49.0177	49.01
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	288599	51.4476	51.44
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	240970	46.7501	46.75
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	937121	58.4493	58.44
27 cis-1,2-Dichloroethene	96	3.537	3.529	(0.845)	26133	4.04173	101.04(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	272487	44.0334	1100.83

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070719.D
Date : 07-JUL-2022 16:30
Client ID: HS220700 20-09
Sample Info: HS220700 20-09;HS220700 20-09;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070719.D Page 2

Date : 07-JUL-2022 16:30

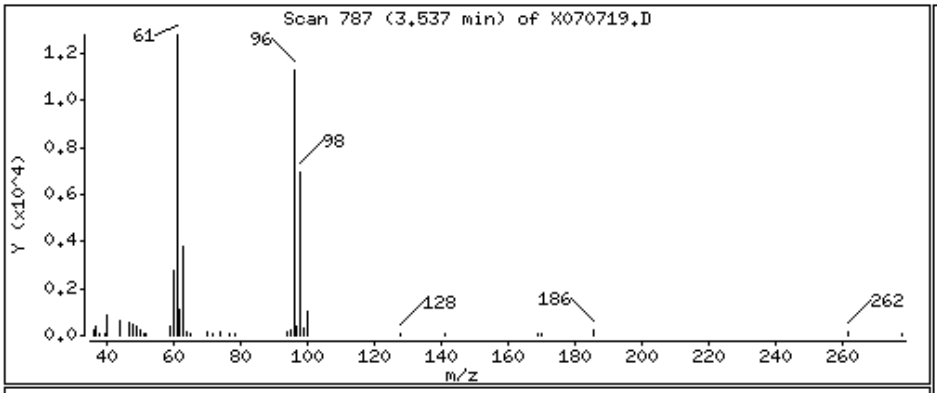
Client ID: HS22070020-09 Instrument: voa6.i

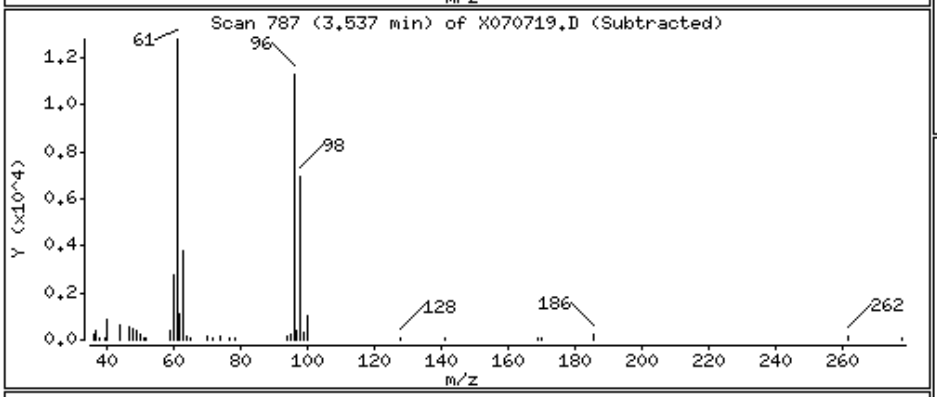
Sample Info: HS22070020-09;HS22070020-09;;;

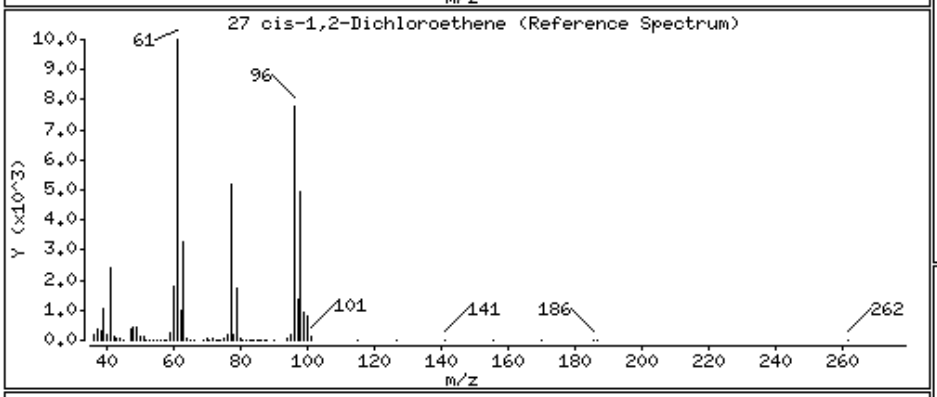
Purge Volume: 5.0 Operator: PC

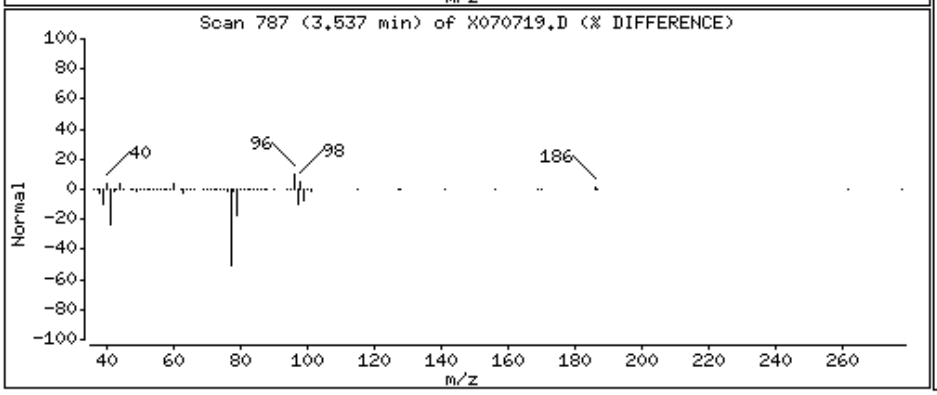
Column phase: DB624 Column diameter: 0.18

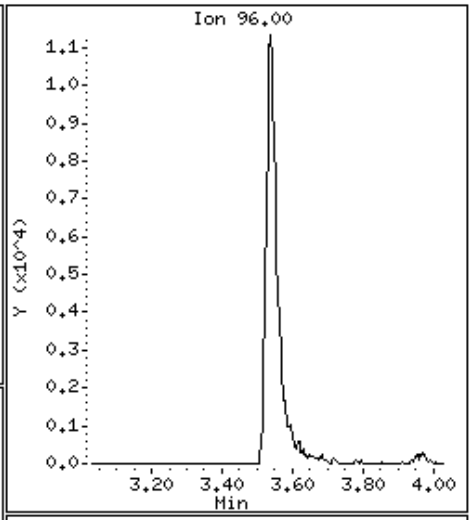
27 cis-1,2-Dichloroethene Concentration: 101.04 ug/l

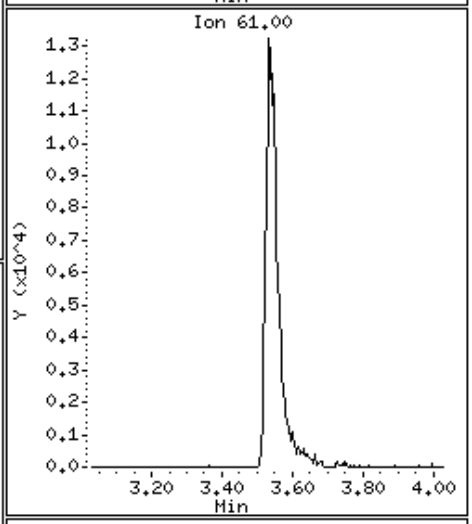


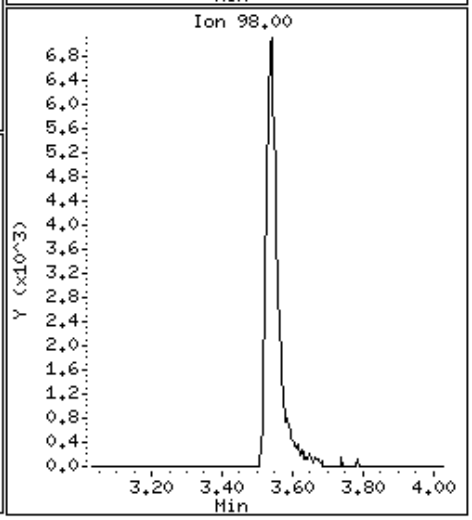












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070719.D Page 3

Date : 07-JUL-2022 16:30

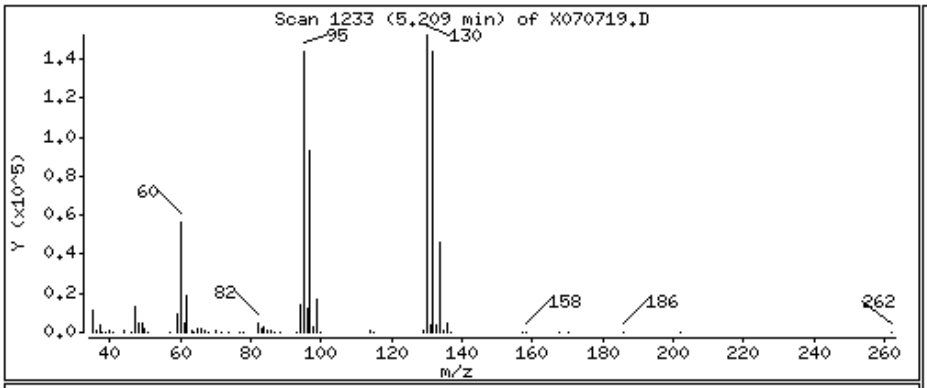
Client ID: HS22070020-09 Instrument: voa6.i

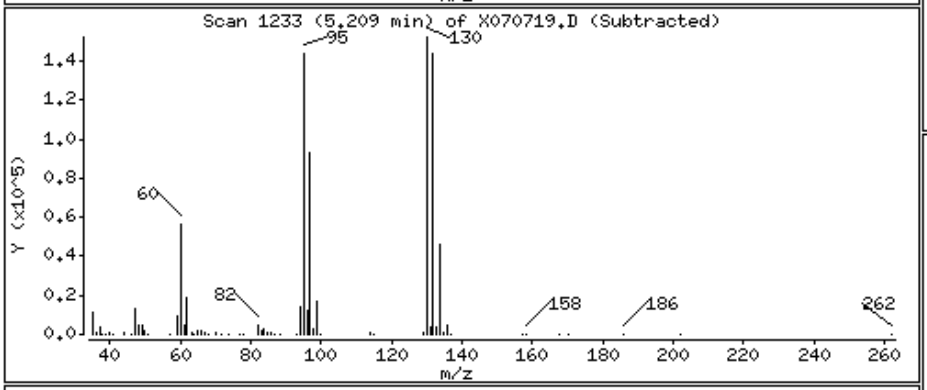
Sample Info: HS22070020-09;HS22070020-09;;;

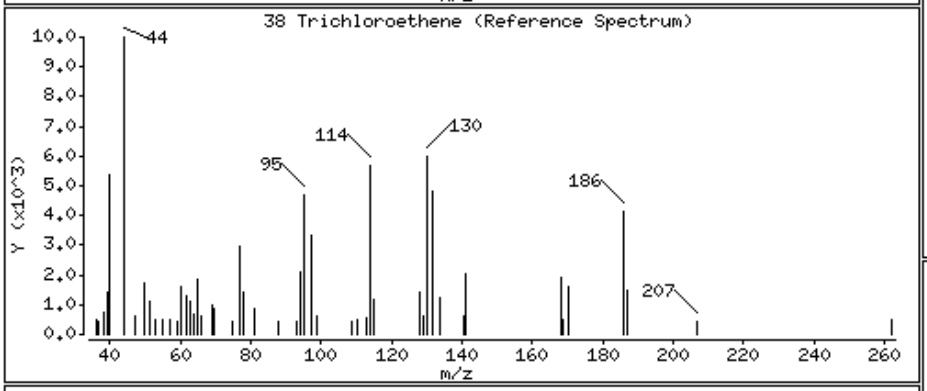
Purge Volume: 5.0 Operator: PC

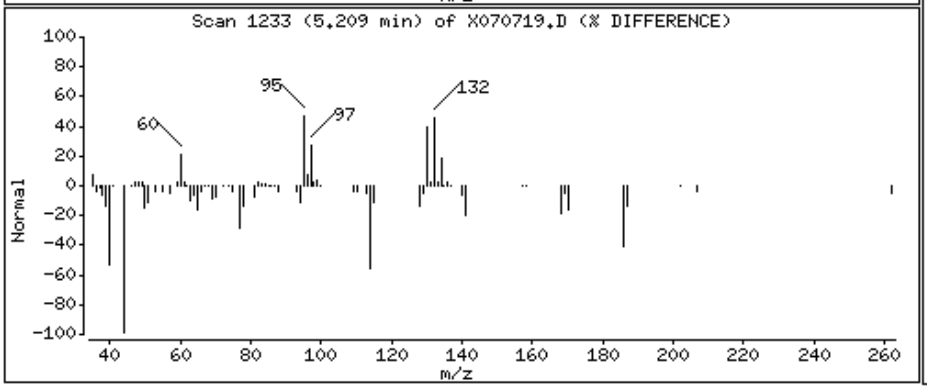
Column phase: DB624 Column diameter: 0.18

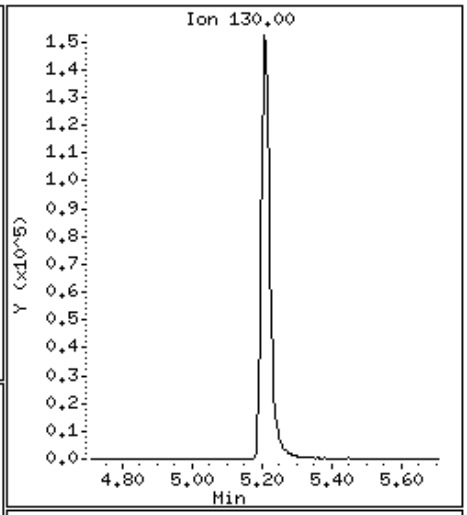
38 Trichloroethene Concentration: 1100.83 ug/l

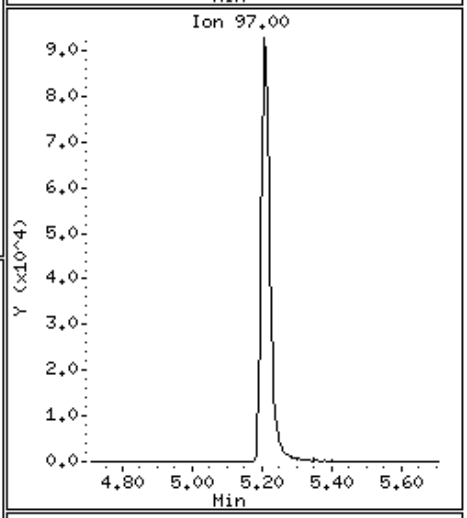


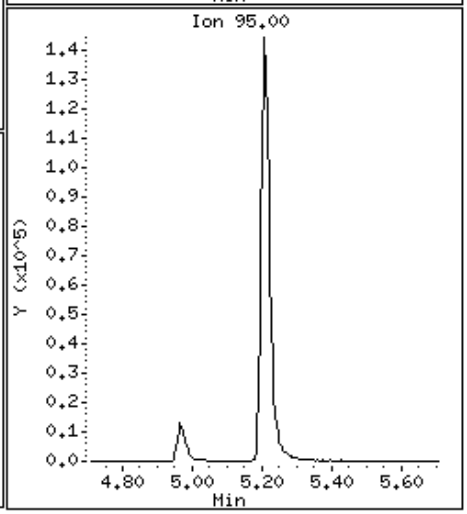












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070719.D
Inj Date : 07-JUL-2022 16:30
InstruID : voa6.i
LabSampID : HS22070020-09

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070720.D Page 1
Report Date: 19-Jul-2022 13:45

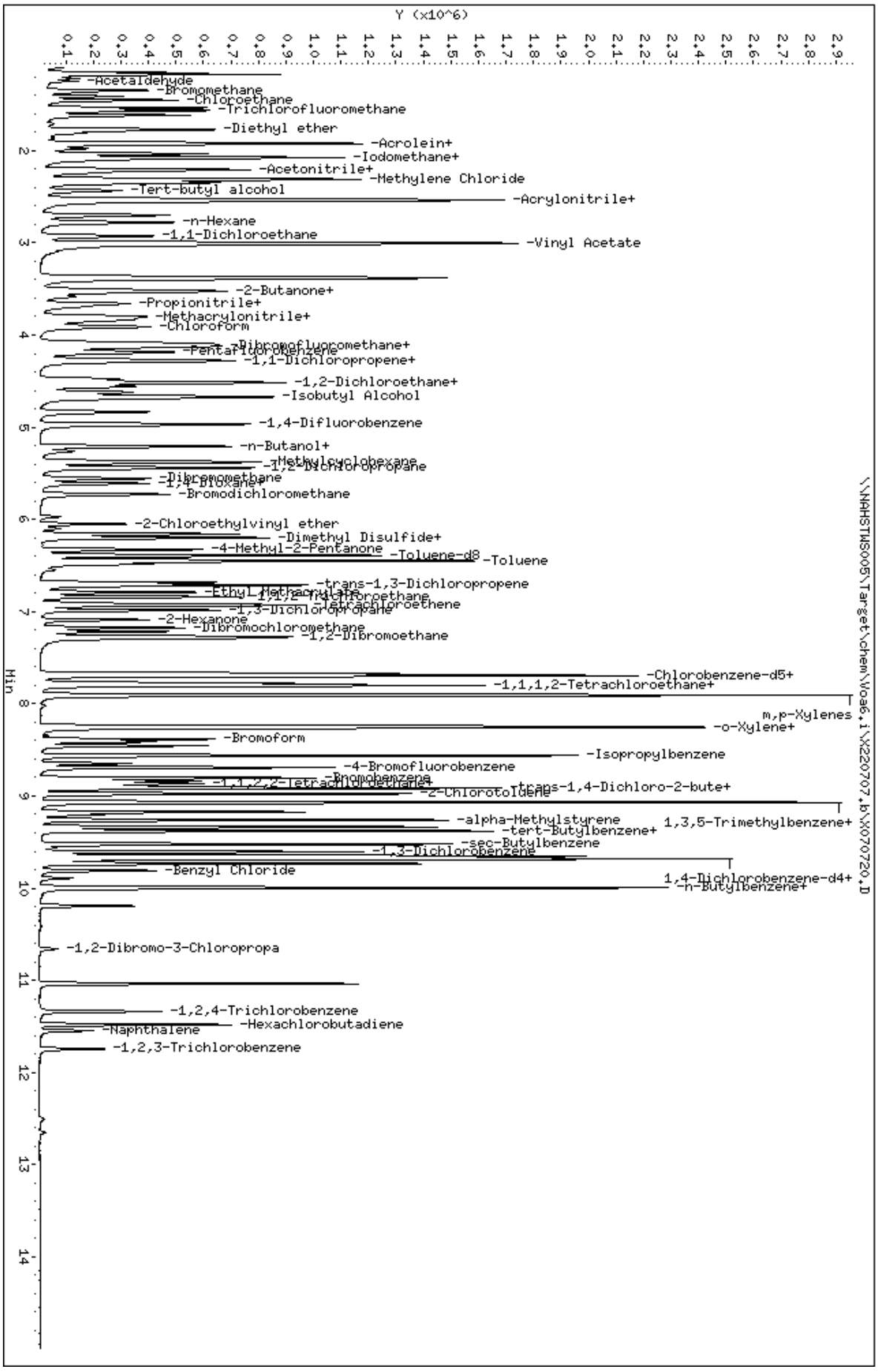
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070720.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 07-JUL-2022 16:51
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\8260W.m
Meth Date : 19-Jul-2022 13:45 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	437090	50.0000	
*	36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	662385	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	603418	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	289877	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	202629	50.0000	49.48
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	306578	50.0000	58.52
$	30 Dibromofluoromethane	113	4.102	4.102	(0.980)	202533	50.0000	50.24
$	48 Toluene-d8	98	6.389	6.389	(0.833)	762968	50.0000	50.91
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	168081	50.0000	48.99
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	226406	50.0000	54.14
	33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	260015	50.0000	47.36
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	245901	50.0000	48.60
	17 Methylene Chloride	84	2.307	2.307	(0.551)	271939	50.0000	53.48
	38 Trichloroethene	130	5.208	5.208	(1.048)	244754	50.0000	49.34
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	296104	50.0000	52.96



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220707.b\X070720.D
Date : 07-JUL-2022 16:51
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220707.b\X070720.D
Inj Date : 07-JUL-2022 16:51
InstruID : voa6.i
LabSampID : CCV-END

NO MANUAL INTEGRATIONS

HS22070020 RSK175

ALS WO# HS22070020

FID04 -Logbook

Batch: 26730 **Analyst:** Nosa Izekor

Date: 01-24-2017 **Reviewer:**

Method: RSK 175 ICAL **Laboratory:** Houston

Comments: Target Sequence 170124

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	p
1	ICAL1	CALIB_1	01-24-2017 09:06 am	1.00	0.00 mL	0.00 mL	001.D	Liquid	Y	N
2	ICAL2	CALIB_2	01-24-2017 09:30 am	1.00	0.00 mL	0.00 mL	002.D	Liquid	Y	N
3	ICAL3	CALIB_3	01-24-2017 09:59 am	1.00	0.00 mL	0.00 mL	003.D	Liquid	Y	N
4	ICAL4	CALIB_4	01-24-2017 10:15 am	1.00	0.00 mL	0.00 mL	004.D	Liquid	Y	N
5	ICAL5	CALIB_5	01-24-2017 10:39 am	1.00	0.00 mL	0.00 mL	005.D	Liquid	Y	N
6	ICAL6	CALIB_6	01-24-2017 10:57 am	1.00	0.00 mL	0.00 mL	006.D	Liquid	Y	N
7	ICAL7	CALIB_7	01-24-2017 11:13 am	1.00	0.00 mL	0.00 mL	007.D	Liquid	Y	N
8	ICV	METHSPIKI	01-24-2017 12:05 pm	1.00	0.00 mL	0.00 mL	008.D	Liquid	Y	N
9	LCS-170124	LCS	01-24-2017 12:24 pm	1.00	0.00 mL	0.00 mL	009.D	Liquid	Y	N
10	LCSD-170124	LCSD	01-24-2017 12:40 pm	1.00	0.00 mL	0.00 mL	010.D	Liquid	Y	N
11	MBLK-170124	MBLK	01-24-2017 12:57 pm	1.00	0.00 mL	0.00 mL	011.D	Liquid	Y	N
12	HS17010778-01	SAMP	01-24-2017 01:14 pm	1.00	0.00 mL	0.00 mL	012.D	Liquid	Y	N
13	HS17010779-01	SAMP	01-24-2017 01:31 pm	1.00	0.00 mL	0.00 mL	013.D	Liquid	Y	N
14	HS17010779-01DUP	SAMP	01-24-2017 01:47 pm	1.00	0.00 mL	0.00 mL	014.D	Liquid	Y	N
15	CCV	CCV	01-24-2017 02:01 pm	1.00	0.00 mL	0.00 mL	015.D	Liquid	Y	N

Chemical	Value
ICAL STD ID	30010700217
ICV STD ID	30010700610

FORM 3
WATER GASES METHOD SPIKE RECOVERY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22070020

Matrix Spike - ENG SC Sample No.: ICV

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE AMOUNT ()	% REC #	QC. LIMITS REC.
Ethene	16.800	19.090	114	75-125
Methane	9.647	9.597	99	75-125
Ethane	18.043	19.657	109	75-125
Propane	26.463	27.238	103	75-125
N-Butane	34.955	36.010	103	75-125

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

_____

FORM III GASES

FORM 6
GASES INITIAL CALIBRATION DATA

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22070020

Instrument ID: FID-4 Calibration Date(s): 01/24/17 01/24/17

Column: RTX-PLOT ID: 0.53 (mm) Calibration Time(s): 0906 1113

LAB FILE ID: RF10: 001 RF25: 002 RF50: 003
RF100: 004 RF250: 005 RF500: 006

COMPOUND	RF10	RF25	RF50	RF100	RF250	RF500
Ethene	535.608	567.359	564.985	516.024	665.282	425.678
Methane	968.912	978.238	1019.699	880.798	960.713	930.704
Ethane	602.493	670.177	658.908	597.201	808.513	817.630
Propane	500	1279	2602	4785	18294	38286
N-Butane	438	936	2034	3864	18446	42817

FORM VI GASES

FORM 6
GASES INITIAL CALIBRATION DATA

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS2207002

Instrument ID: FID-4 Calibration Date(s): 01/24/17 01/24/17

Column: RTX-PLOT ID: 0.53 (mm) Calibration Time(s): 0906 1113

RF1000: 007

COMPOUND	RF1000	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	M
Ethene	828.858	AVRG		586.256273		21.932	
Methane	1081.580	AVRG		974.377787		6.550	
Ethane	999.335	AVRG		736.322546		19.885	
Propane	96509	2ORDR	0.97987006	1.529e-003	-4.58e-009	0.9991365	(
N-Butane	114164	2ORDR	2.46870151	1.834e-003	-5.54e-009	0.9980766	(

FORM VI GASES

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\001.D
Lab Smp Id: ICAL1 Client Smp ID: ICAL1
Inj Date : 24-JAN-2017 09:06
Operator : JA Inst ID: FID-4.i
Smp Info : ICAL1;ICAL1;;;
Misc Info :
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:06 Cal File: 001.D
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.030	0.013	374	0.38600	0.383(a)
2 Ethene	1.553	1.556	-0.003	361	0.67400	0.615(a)
3 Ethane	1.716	1.723	-0.007	435	0.72200	0.590(a)
4 Propane	4.073	4.113	-0.040	500	1.05900	1.743
5 N-Butane	7.640	7.690	-0.050	438	1.39800	3.271

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\001.D

Date : 24-JAN-2017 09:06

Client ID: ICAL1

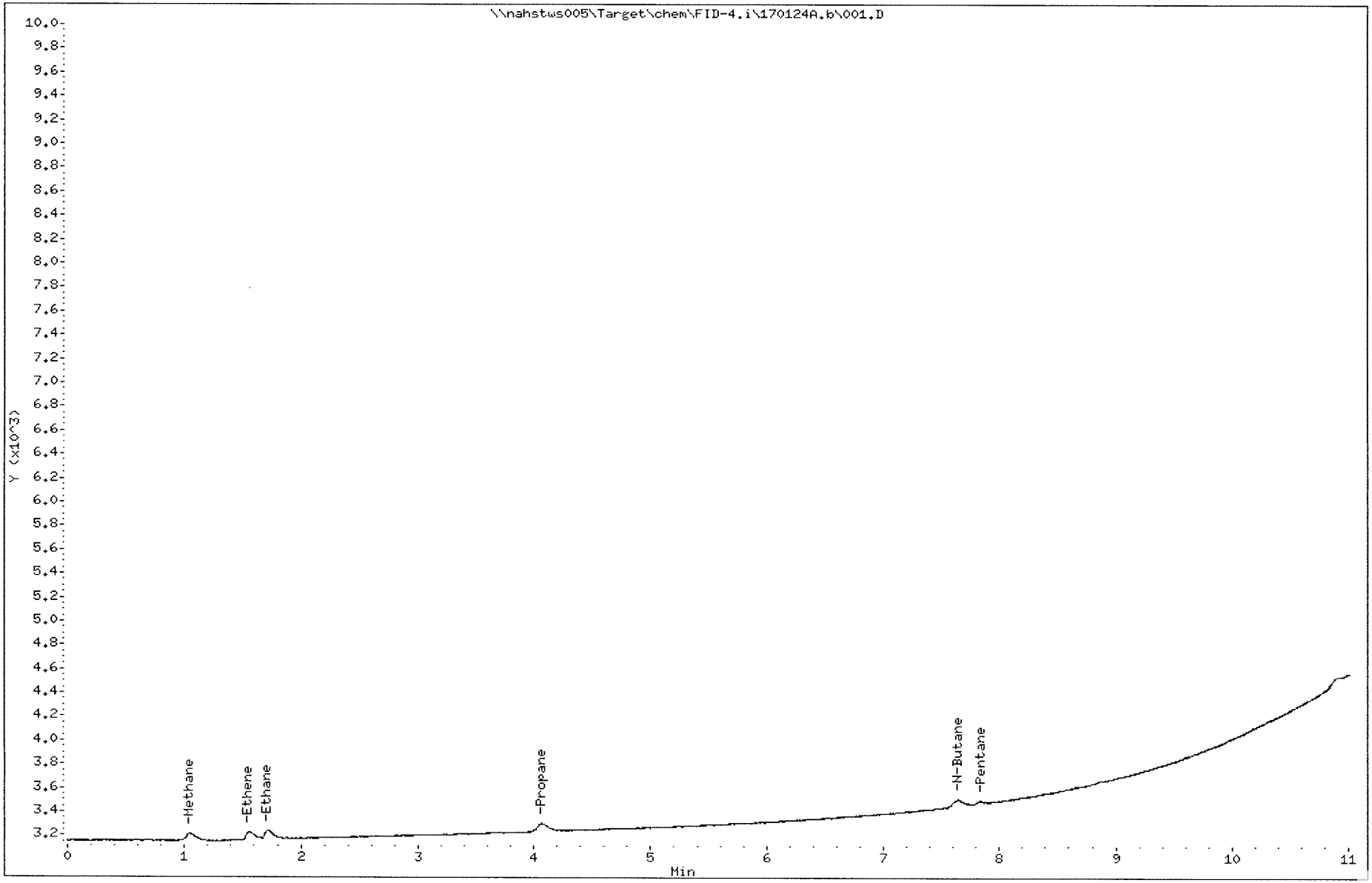
Instrument: FID-4.i

Sample Info: ICAL1;ICAL1;;;

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\002.D
Lab Smp Id: ICAL2 Client Smp ID: ICAL2
Inj Date : 24-JAN-2017 09:30
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL2;ICAL2;;;
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:59 Cal File: 003.D
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.023	1.030	-0.007	944	0.96500	0.968
2 Ethene	1.560	1.556	0.004	956	1.68500	1.630
3 Ethane	1.723	1.723	0.000	1209	1.80400	1.641
4 Propane	4.123	4.113	0.010	1279	2.64600	2.927
5 N-Butane	7.716	7.690	0.026	936	3.49600	4.180

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\002.D

Date : 24-JAN-2017 09:30

Client ID: ICAL2

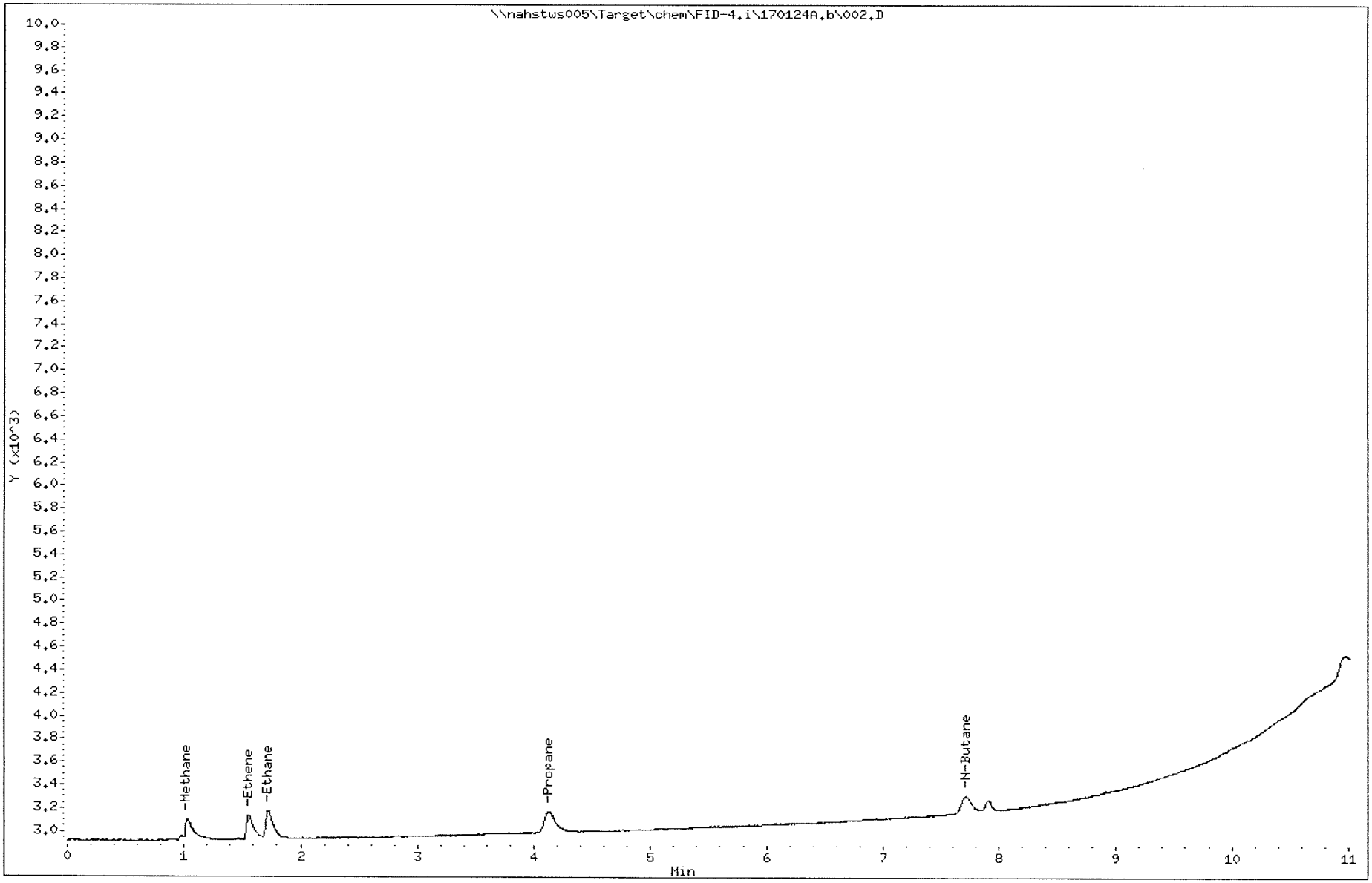
Instrument: FID-4.i

Sample Info: ICAL2;ICAL2;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\003.D
Lab Smp Id: ICAL3 Client Smp ID: ICAL3
Inj Date : 24-JAN-2017 09:59
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL3;ICAL3;;;
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 3 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.030	0.013	1967	1.92900	2.018
2 Ethene	1.570	1.556	0.014	1904	3.37000	3.247
3 Ethane	1.736	1.723	0.013	2378	3.60900	3.229
4 Propane	4.123	4.113	0.010	2602	5.29300	4.926
5 N-Butane	7.703	7.690	0.013	2034	6.99100	6.176

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\003.D

Date : 24-JAN-2017 09:59

Client ID: ICAL3

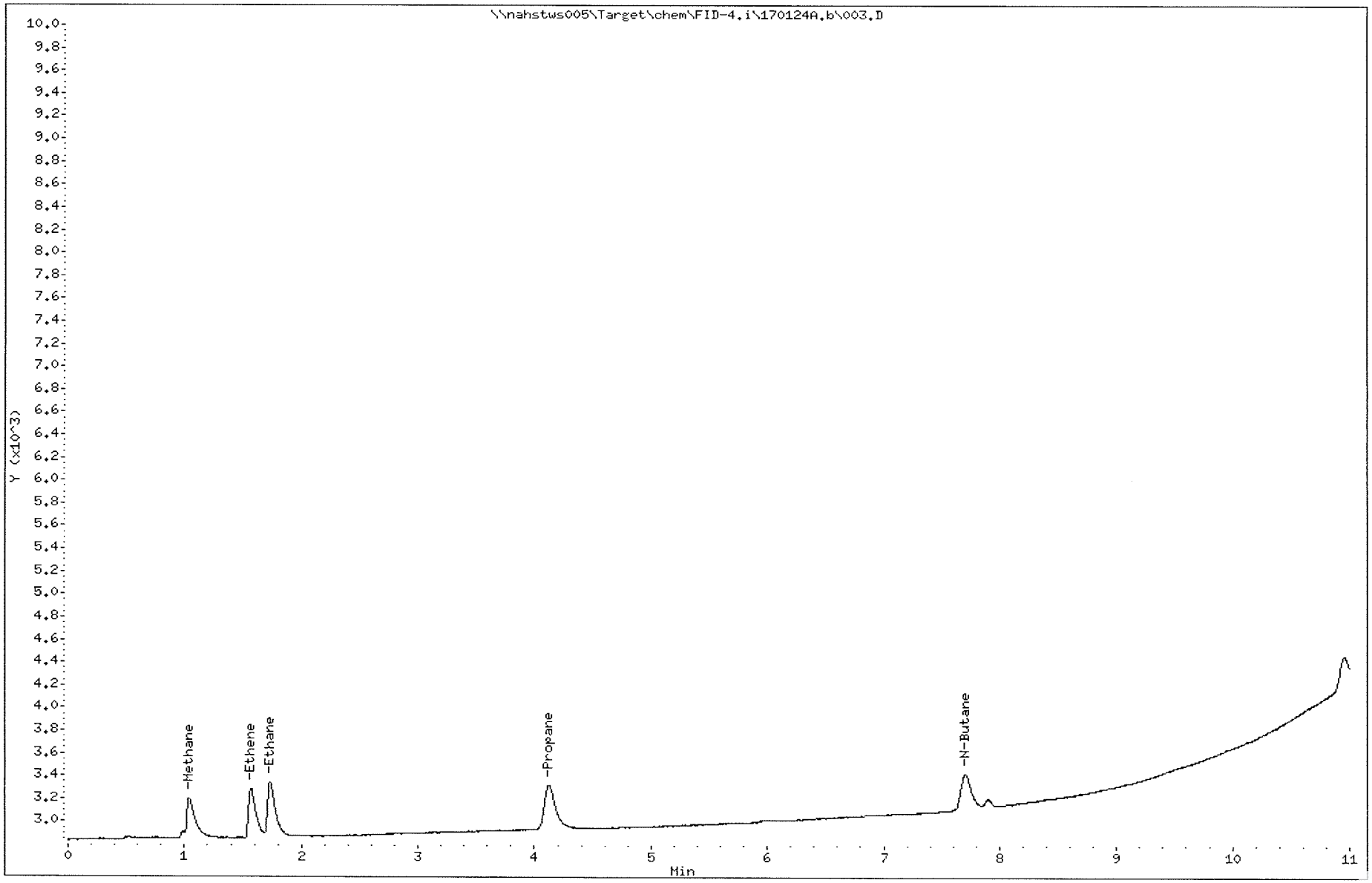
Instrument: FID-4.i

Sample Info: ICAL3;ICAL3;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\004.D
Lab Smp Id: ICAL4 Client Smp ID: ICAL4
Inj Date : 24-JAN-2017 10:15
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL4;ICAL4;;;
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:30 Cal File: 002.D
Als bottle: 4 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	1.033	1.030	0.003	3399	3.85900	3.488
2 Ethene	1.563	1.556	0.007	3478	6.74000	5.932
3 Ethane	1.726	1.723	0.003	4310	7.21700	5.853
4 Propane	4.120	4.113	0.007	4785	10.5850	8.190
5 N-Butane	7.703	7.690	0.013	3864	13.9820	9.473(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\004.D

Date : 24-JAN-2017 10:15

Client ID: ICAL4

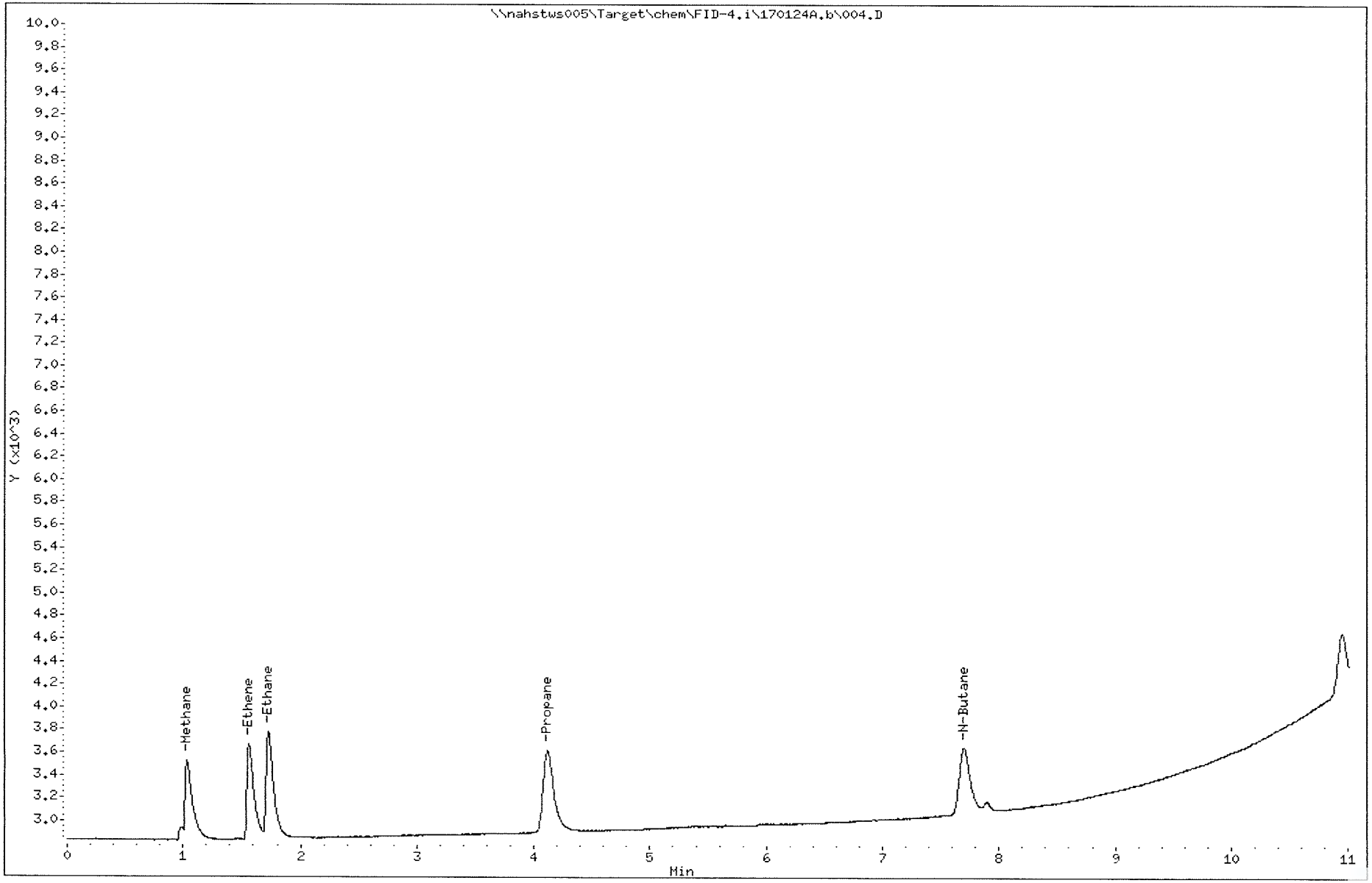
Sample Info: ICAL4;ICAL4;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\005.D
Lab Smp Id: ICAL5 Client Smp ID: ICAL5
Inj Date : 24-JAN-2017 10:39
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL5;ICAL5;;;
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:39 Cal File: 005.D
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	1.043	1.030	0.013	9268	9.64700	9.511
2 Ethene	1.570	1.556	0.014	11210	16.8500	19.121
3 Ethane	1.733	1.723	0.010	14588	18.0430	19.811
4 Propane	4.120	4.113	0.007	18294	26.4630	27.415
5 N-Butane	7.700	7.690	0.010	18446	34.9550	34.419(M)

QC Flag Legend

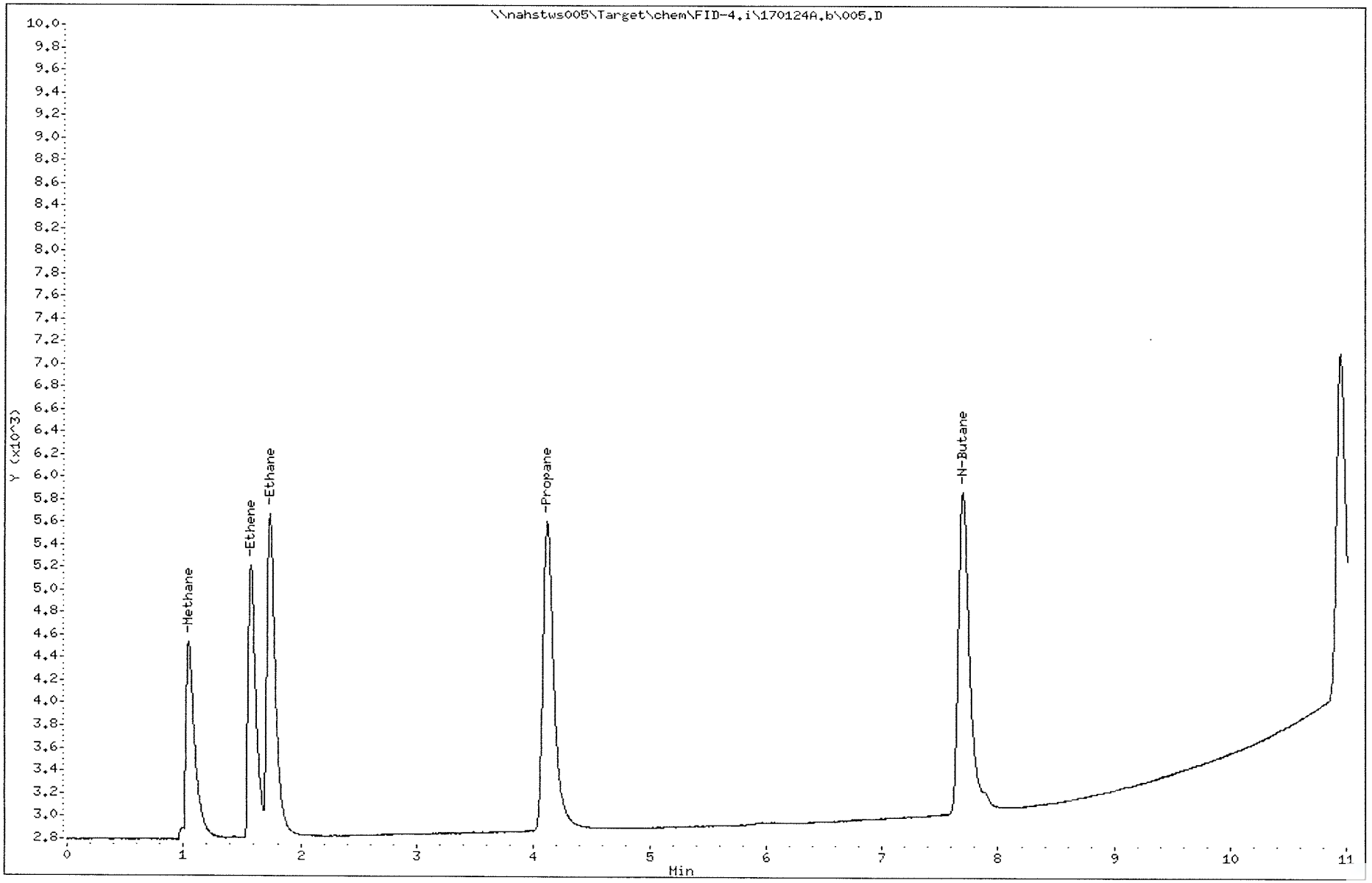
M - Compound response manually integrated.

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\005.D
Date : 24-JAN-2017 10:39
Client ID: ICAL5
Sample Info: ICAL5;ICAL5;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\006.D
Lab Smp Id: ICAL6 Client Smp ID: ICAL6
Inj Date : 24-JAN-2017 10:57
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL6;ICAL6;;;
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:39 Cal File: 005.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

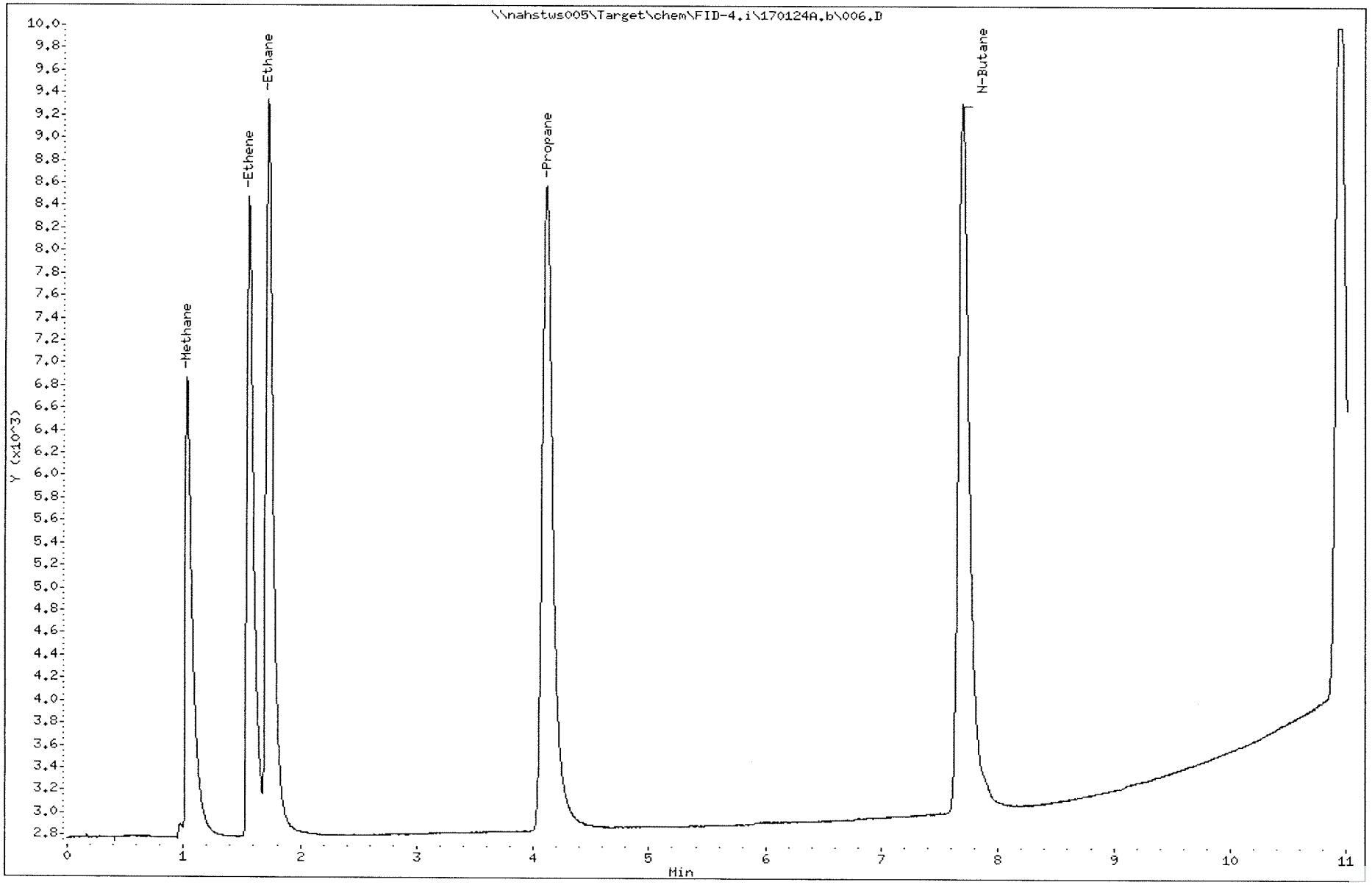
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.023	1.030	-0.007	17957	19.2940	18.429
2 Ethene	1.550	1.556	-0.006	22910	53.8200	39.078
3 Ethane	1.716	1.723	-0.007	29505	36.0860	40.070
4 Propane	4.110	4.113	-0.003	38286	52.9260	52.796
5 N-Butane	7.696	7.690	0.006	42817	69.9110	70.855

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\006.D
Date : 24-JAN-2017 10:57
Client ID: ICAL6
Sample Info: ICAL6;ICAL6;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\007.D
Lab Smp Id: ICAL7 Client Smp ID: ICAL7
Inj Date : 24-JAN-2017 11:13
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL7;ICAL7;;;
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:57 Cal File: 006.D
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.030	1.030	0.000	41736	38.5880	42.833(A)
2 Ethene	1.556	1.556	0.000	55865	67.4000	95.291(A)
3 Ethane	1.723	1.723	0.000	72124	72.1720	97.951(A)
4 Propane	4.113	4.113	0.000	96509	105.852	105.844
5 N-Butane	7.690	7.690	0.000	114164	139.821	139.707

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\007.D

Date : 24-JAN-2017 11:13

Client ID: ICAL7

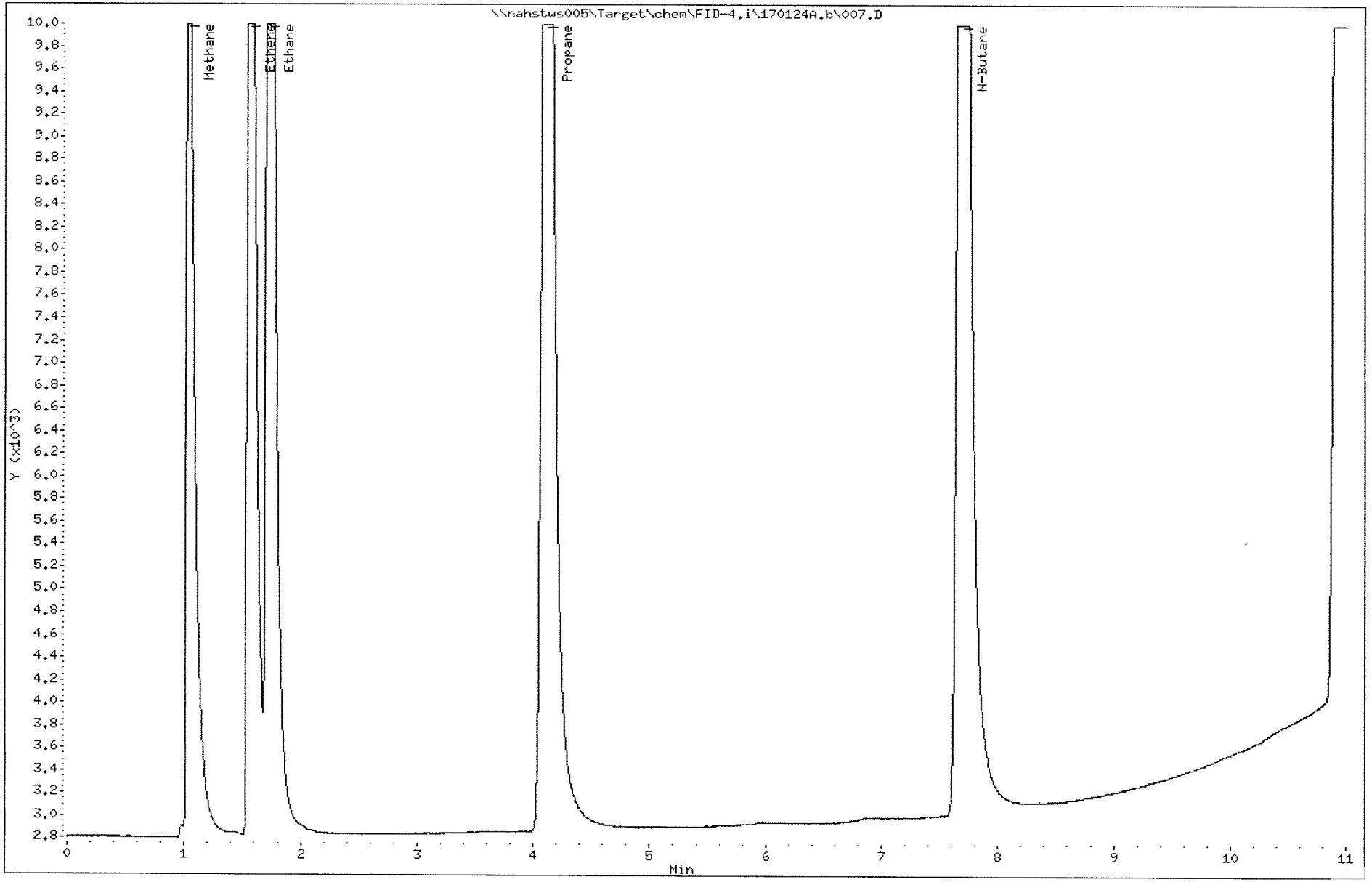
Sample Info: ICAL7;ICAL7;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\008.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 24-JAN-2017 12:05
Operator : MA Inst ID: FID-4.i
Smp Info : ICV;ICV;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 8 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

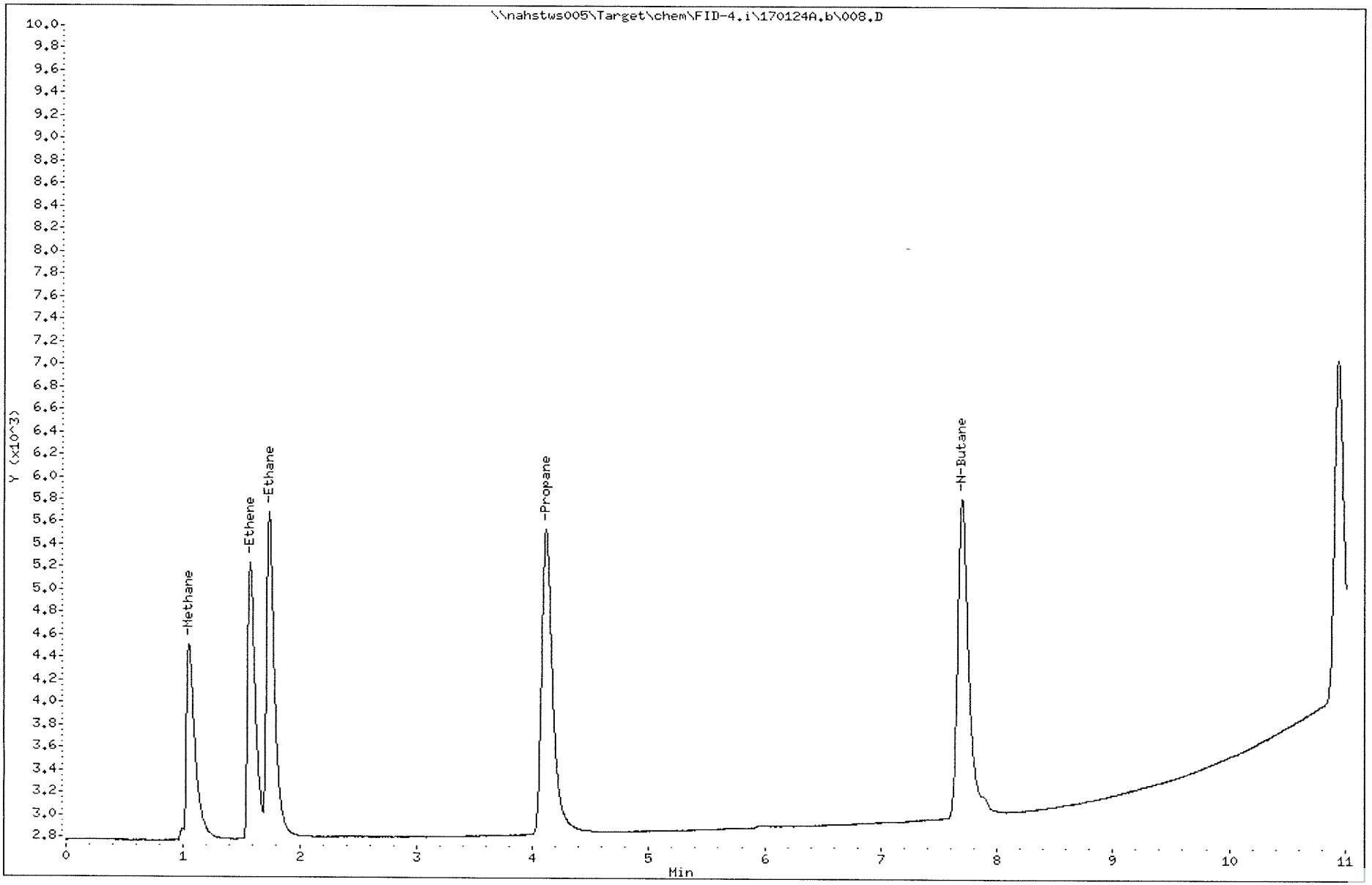
					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	1.046	1.030	0.016	9352	9.59792	9.597
2 Ethene	1.573	1.556	0.017	11192	19.0906	19.090
3 Ethane	1.736	1.723	0.013	14474	19.6571	19.657
4 Propane	4.116	4.113	0.003	18164	27.2381	27.238
5 N-Butane	7.696	7.690	0.006	19425	36.0103	36.010

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\008.D
Date : 24-JAN-2017 12:05
Client ID: ICV
Sample Info: ICV;ICV;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA
Column diameter: 0.53



FID04 -Logbook

Batch: 50295 **Analyst:** Purvi Lad

Date: 07-11-2022 **Reviewer:**

Method: RSK175 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	RSK-CCV	CCV	07-11-2022 08:51 am	1.00	0.00 mL	0.00 mL	001.D	Liquid	Y	NA
2	MBLK-220711	MBLK	07-11-2022 09:00 am	1.00	0.00 mL	0.00 mL	002.D	Liquid	Y	NA
3	LCS-220711	LCS	07-11-2022 09:10 am	1.00	0.00 mL	0.00 mL	003.D	Liquid	Y	NA
4	HS22061645-01	SAMP	07-11-2022 09:19 am	1.00	0.00 mL	0.00 mL	004.D	Liquid	Y	<2
5	HS22061645-02	SAMP	07-11-2022 09:27 am	1.00	0.00 mL	0.00 mL	005.D	Liquid	Y	<2
6	HS22061645-03	SAMP	07-11-2022 09:36 am	1.00	0.00 mL	0.00 mL	006.D	Liquid	Y	<2
7	HS22061645-04	SAMP	07-11-2022 09:46 am	1.00	0.00 mL	0.00 mL	007.D	Liquid	Y	<2
8	HS22061645-05	SAMP	07-11-2022 09:56 am	1.00	0.00 mL	0.00 mL	008.D	Liquid	Y	<2
9	HS22061645-06	SAMP	07-11-2022 10:05 am	1.00	0.00 mL	0.00 mL	009.D	Liquid	Y	<2
10	HS22061645-10	SAMP	07-11-2022 10:15 am	1.00	0.00 mL	0.00 mL	010.D	Liquid	Y	<2
11	RSK-CCV	CCV	07-11-2022 10:26 am	1.00	0.00 mL	0.00 mL	011.D	Liquid	Y	NA
12	HS22061645-01	SAMP	07-11-2022 10:37 am	100.0(	0.00 mL	0.00 mL	012.D	Liquid	Y	<2
13	HS22061645-02	SAMP	07-11-2022 10:45 am	20.00	0.00 mL	0.00 mL	013.D	Liquid	Y	<2
14	HS22061645-03	SAMP	07-11-2022 10:54 am	20.00	0.00 mL	0.00 mL	014.D	Liquid	Y	<2
15	HS22061645-04	SAMP	07-11-2022 11:04 am	200.0(	0.00 mL	0.00 mL	015.D	Liquid	Y	<2
16	HS22061645-10	SAMP	07-11-2022 11:17 am	400.0(	0.00 mL	0.00 mL	016.D	Liquid	Y	<2
17	HS22070020-01	SAMP	07-11-2022 11:28 am	1.00	0.00 mL	0.00 mL	017.D	Liquid	Y	<2
18	HS22070020-01MS	MS	07-11-2022 11:36 am	1.00	0.00 mL	0.00 mL	018.D	Liquid	Y	NA
19	HS22070020-01MSD	MSD	07-11-2022 11:53 am	1.00	0.00 mL	0.00 mL	019.D	Liquid	Y	NA
20	HS22070020-02	SAMP	07-11-2022 12:02 pm	1.00	0.00 mL	0.00 mL	020.D	Liquid	Y	<2
21	HS22070020-04	SAMP	07-11-2022 12:10 pm	1.00	0.00 mL	0.00 mL	021.D	Liquid	Y	<2
22	RSK-CCV	CCV	07-11-2022 12:24 pm	1.00	0.00 mL	0.00 mL	022.D	Liquid	Y	NA
23	HS22070020-01	SAMP	07-11-2022 12:36 pm	100.0(	0.00 mL	0.00 mL	023.D	Liquid	Y	<2
24	HS22070020-02	SAMP	07-11-2022 12:46 pm	10.00	0.00 mL	0.00 mL	024.D	Liquid	Y	<2
25	HS22070326-03	SAMP	07-11-2022 12:58 pm	1.00	0.00 mL	0.00 mL	025.D	Liquid	Y	<2
26	HS22070326-04	SAMP	07-11-2022 01:06 pm	1.00	0.00 mL	0.00 mL	026.D	Liquid	Y	<2
27	HS22070326-05	SAMP	07-11-2022 01:17 pm	1.00	0.00 mL	0.00 mL	027.D	Liquid	Y	<2
28	HS22070326-07	SAMP	07-11-2022 01:25 pm	1.00	0.00 mL	0.00 mL	028.D	Liquid	Y	<2
29	HS22070326-07MS	MS	07-11-2022 01:35 pm	1.00	0.00 mL	0.00 mL	029.D	Liquid	Y	NA
30	HS22070326-07MSD	MSD	07-11-2022 01:43 pm	1.00	0.00 mL	0.00 mL	030.D	Liquid	Y	NA
31	HS22070326-11	SAMP	07-11-2022 01:53 pm	1.00	0.00 mL	0.00 mL	031.D	Liquid	Y	<2
32	HS22070326-03	SAMP	07-11-2022 02:02 pm	100.0(	0.00 mL	0.00 mL	032.D	Liquid	Y	<2
33	RSK-CCV	CCV	07-11-2022 02:23 pm	1.00	0.00 mL	0.00 mL	033.D	Liquid	Y	NA
34	HS22070326-04	SAMP	07-11-2022 02:34 pm	50.00	0.00 mL	0.00 mL	034.D	Liquid	Y	<2
35	HS22070326-05	SAMP	07-11-2022 02:42 pm	50.00	0.00 mL	0.00 mL	035.D	Liquid	Y	<2
36	HS22070326-07	SAMP	07-11-2022 02:52 pm	100.0(	0.00 mL	0.00 mL	036.D	Liquid	Y	<2
37	HS22070326-11	SAMP	07-11-2022 03:05 pm	10.00	0.00 mL	0.00 mL	037.D	Liquid	Y	<2
38	RSK-CCV	CCV	07-11-2022 03:16 pm	1.00	0.00 mL	0.00 mL	038.D	Liquid	Y	NA

FID04 -Logbook

Chemical	Value
pH Paper	300107067-03
CCV/LC/LSD/MS/MSD	300107064-16/63-06

FORM 7B
GASES CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22070020

Instrument ID: FID-4 Calibration Date: 07/11/22 Time: 0851

Lab File ID: 001 Init. Calib. Date(s): 01/24/17 01/24/17

Init. Calib. Times: 0906 1113

GC Column: RTX-PLOT ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF250.00 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Ethane	719.48900	811.22873	0.01	-12.75	20.00	AVRG
Methane	974.99200	857.98694	0.01	12.00	20.00	AVRG
Ethene	585.76000	682.49258	0.01	-16.51	20.00	AVRG

FORM VII GASES

FORM 7B
GASES CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22070020

Instrument ID: FID-4 Calibration Date: 07/11/22 Time: 1026

Lab File ID: 011 Init. Calib. Date(s): 01/24/17 01/24/17

Init. Calib. Times: 0906 1113

GC Column: RTX-PLOT ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF250.00 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Ethane	719.48900	833.23172	0.01	-15.81	20.00	AVRG
Methane	974.99200	1032.3417	0.01	-5.88	20.00	AVRG
Ethene	585.76000	676.08309	0.01	-15.42	20.00	AVRG

FORM VII GASES

FORM 7B
GASES CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22070020

Instrument ID: FID-4 Calibration Date: 07/11/22 Time: 1224

Lab File ID: 022 Init. Calib. Date(s): 01/24/17 01/24/17

Init. Calib. Times: 0906 1113

GC Column: RTX-PLOT ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF250.00 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Ethane	719.48900	799.58987	0.01	-11.13	20.00	AVRG
Methane	974.99200	841.19415	0.01	13.72	20.00	AVRG
Ethene	585.76000	664.80712	0.01	-13.49	20.00	AVRG

FORM VII GASES

FORM 7B
GASES CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22070020

Instrument ID: FID-4 Calibration Date: 07/11/22 Time: 1423

Lab File ID: 033 Init. Calib. Date(s): 01/24/17 01/24/17

Init. Calib. Times: 0906 1113

GC Column: RTX-PLOT ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF250.00 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Ethane	719.48900	786.84254	0.01	-9.36	20.00	AVRG
Methane	974.99200	964.54856	0.01	1.07	20.00	AVRG
Ethene	585.76000	689.67359	0.01	-17.74	20.00	AVRG

FORM VII GASES

FORM 7B
GASES CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22070020

Instrument ID: FID-4 Calibration Date: 07/11/22 Time: 1516

Lab File ID: 038 Init. Calib. Date(s): 01/24/17 01/24/17

Init. Calib. Times: 0906 1113

GC Column: RTX-PLOT ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF250.00 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Ethane	719.48900	744.38841	0.01	-3.46	20.00	AVRG
Methane	974.99200	886.28589	0.01	9.10	20.00	AVRG
Ethene	585.76000	623.62018	0.01	-6.46	20.00	AVRG

FORM VII GASES

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\001.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 08:51
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

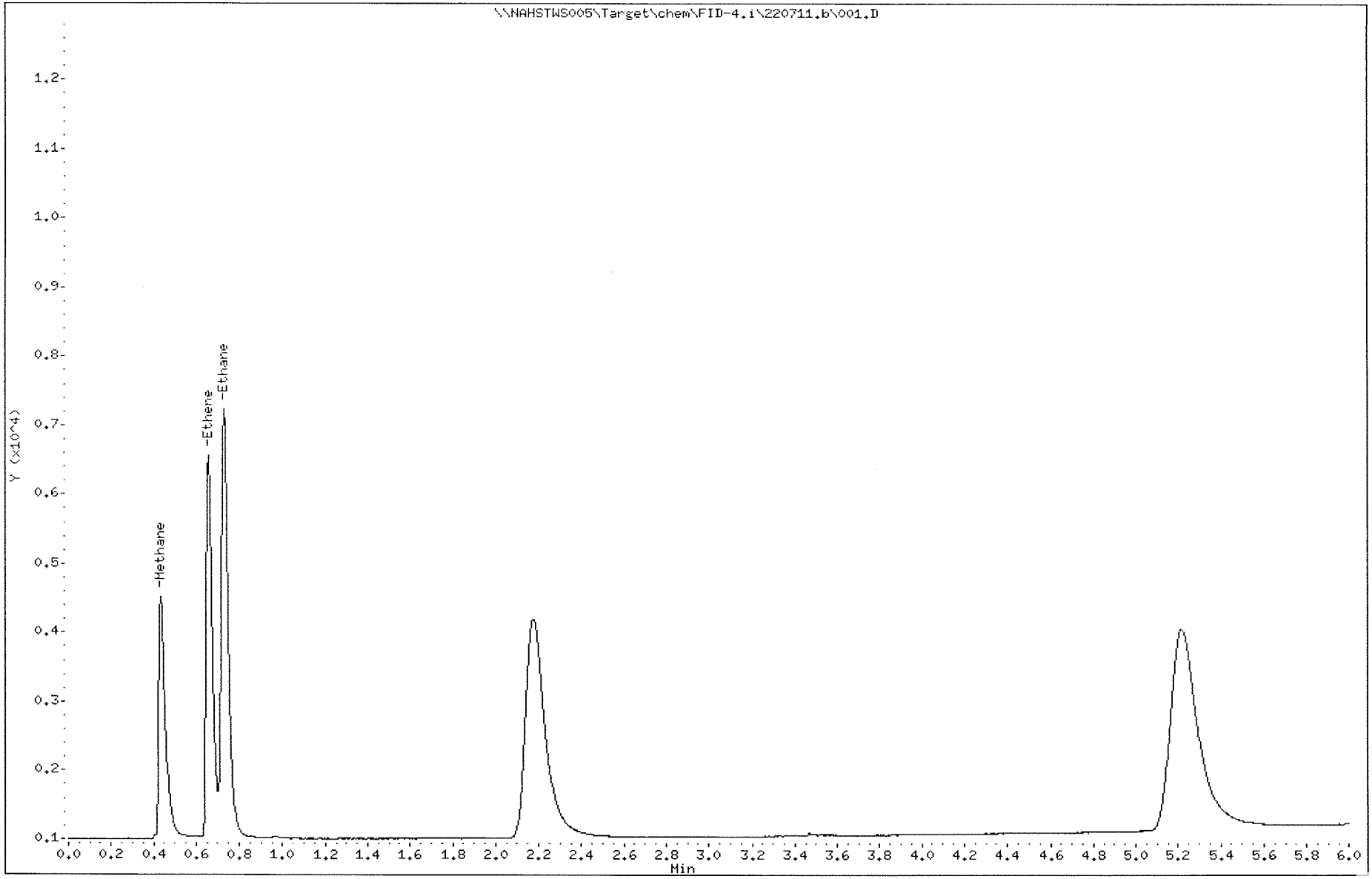
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.433	0.436	-0.003	8277	9.64700	8.489
2 Ethene	0.656	0.656	0.000	11500	16.8500	19.632
3 Ethane	0.730	0.733	-0.003	14637	18.0430	20.343

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\001.D
Date : 11-JUL-2022 08:51
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



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Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\002.D
Lab Smp Id: MBLK-220711 Client Smp ID: MBLK-220711
Inj Date : 11-JUL-2022 09:00
Operator : PL Inst ID: FID-4.i
Smp Info : MBLK-220711;MBLK-220711;3;;BLANK
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
==========	====	========	========	========	========	========

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\002.D

Date : 11-JUL-2022 09:00

Client ID: MBLK-220711

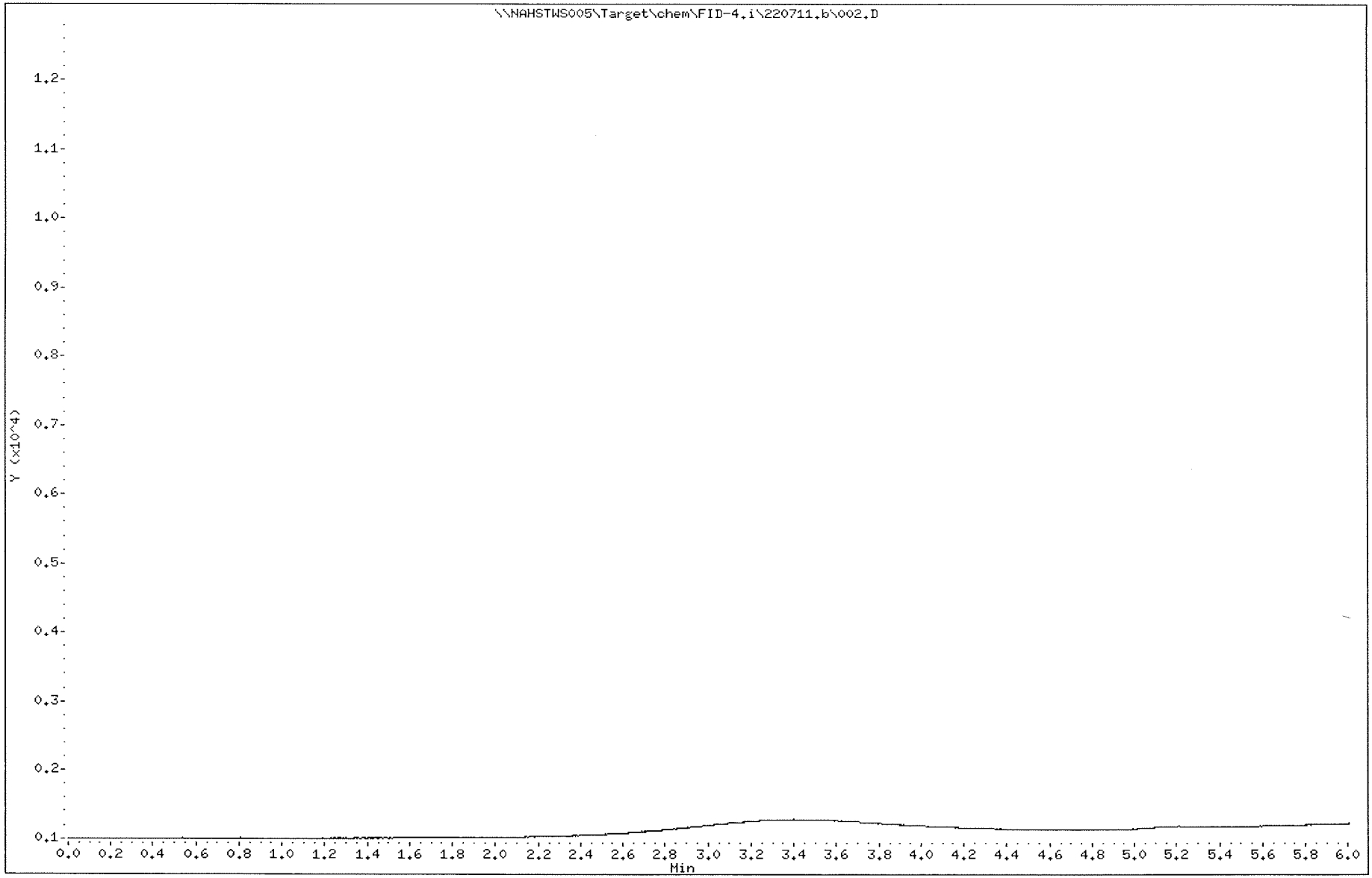
Instrument: FID-4.i

Sample Info: MBLK-220711;MBLK-220711;3;;BLANK

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\003.D
Lab Smp Id: LCS-220711 Client Smp ID: LCS-220711
Inj Date : 11-JUL-2022 09:10
Operator : PL Inst ID: FID-4.i
Smp Info : LCS-220711;LCS-220711;3;;LCS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

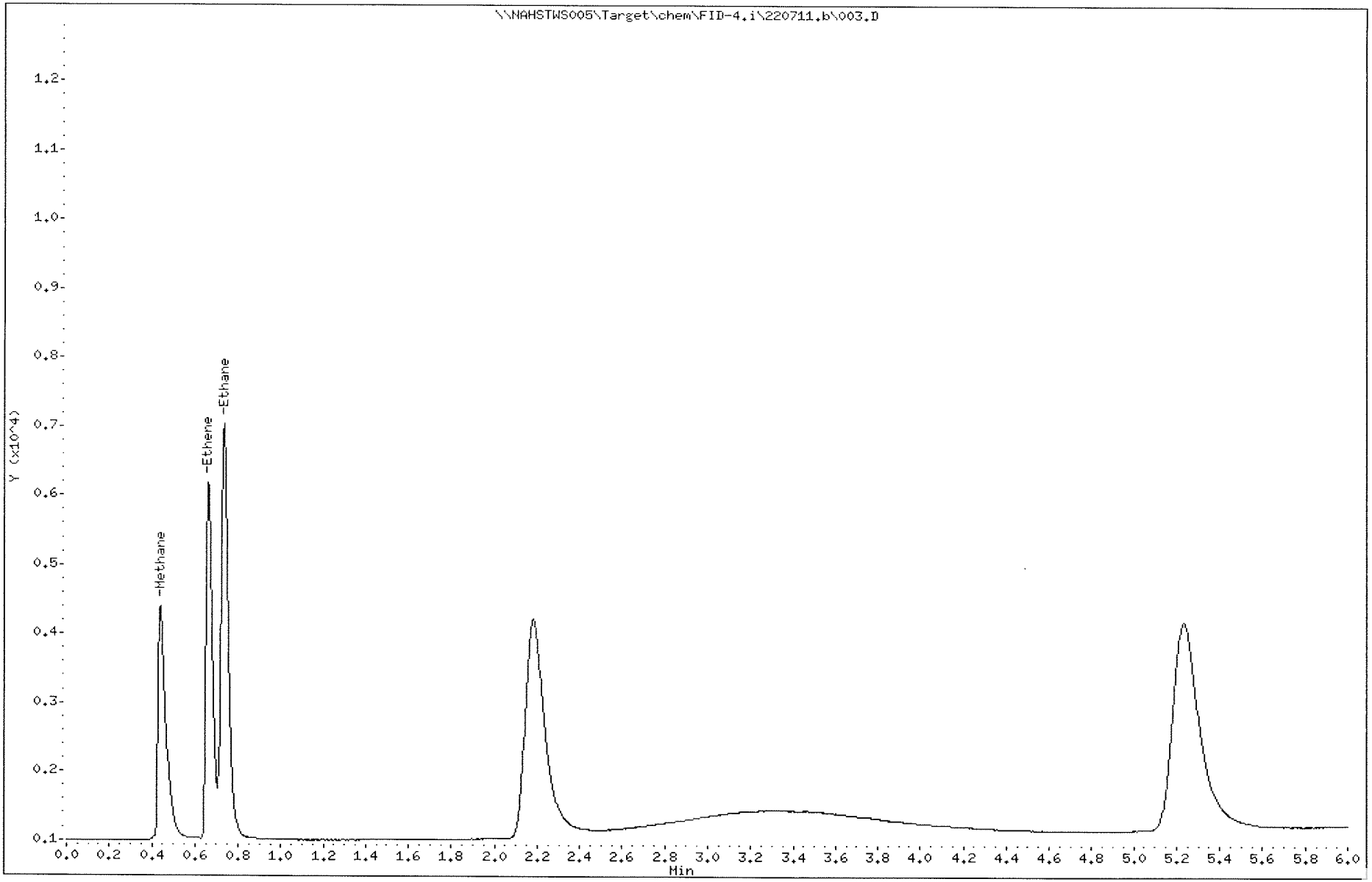
					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.440	0.436	0.004	9129	9.36315	9.363
2 Ethene	0.660	0.656	0.004	11090	18.9327	18.932
3 Ethane	0.733	0.733	0.000	14796	20.5646	20.564

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\003.D
Date : 11-JUL-2022 09:10
Client ID: LCS-220711
Sample Info: LCS-220711;LCS-220711;3;;LCS

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\011.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 10:26
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

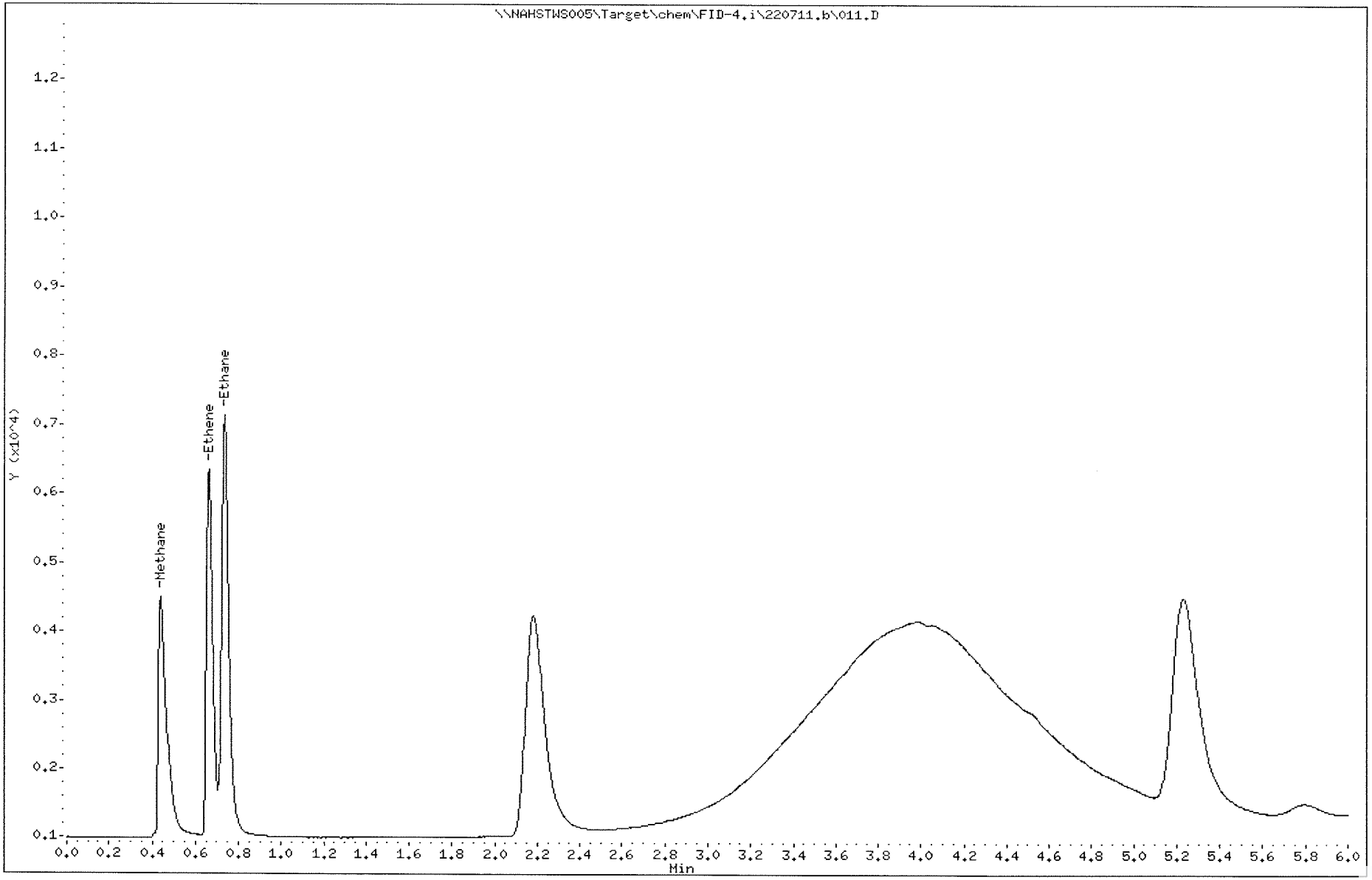
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	0.440	0.436	0.004	9959	9.64700	10.214
2 Ethene	0.663	0.656	0.007	11392	16.8500	19.448
3 Ethane	0.733	0.733	0.000	15034	18.0430	20.895

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\011.D
Date : 11-JUL-2022 10:26
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\017.D
Lab Smp Id: HS22070020-01 Client Smp ID: HS22070020-01
Inj Date : 11-JUL-2022 11:28
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-01;HS22070020-01
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.436	0.000	1296757	1330.02	1330.017(A)
2 Ethene	0.660	0.656	0.004	9838	16.7953	16.795

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\017.D

Date : 11-JUL-2022 11:28

Client ID: HS22070020-01

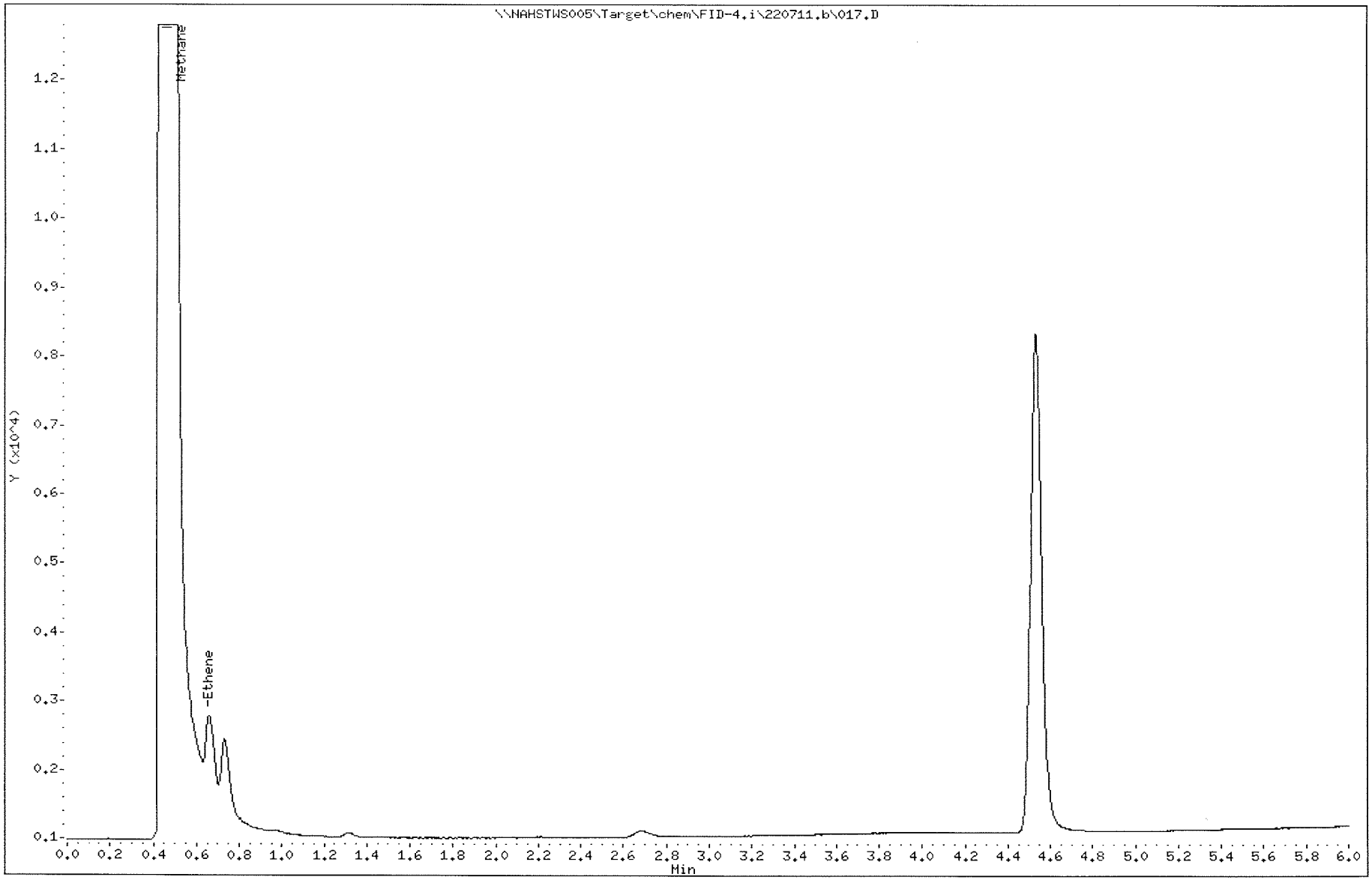
Instrument: FID-4.i

Sample Info: HS22070020-01;HS22070020-01

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\018.D
Lab Smp Id: HS22070020-01MS Client Smp ID: HS22070020-01MS
Inj Date : 11-JUL-2022 11:36
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-01MS;HS22070020-01MS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 18 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.436	0.000	1228226	1259.73	1259.728(AR)
2 Ethene	0.656	0.656	0.000	15372	26.2428	26.242(R)
3 Ethane	0.730	0.733	-0.003	18317	25.4583	25.458(RM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\018.D

Date : 11-JUL-2022 11:36

Client ID: HS22070020-01MS

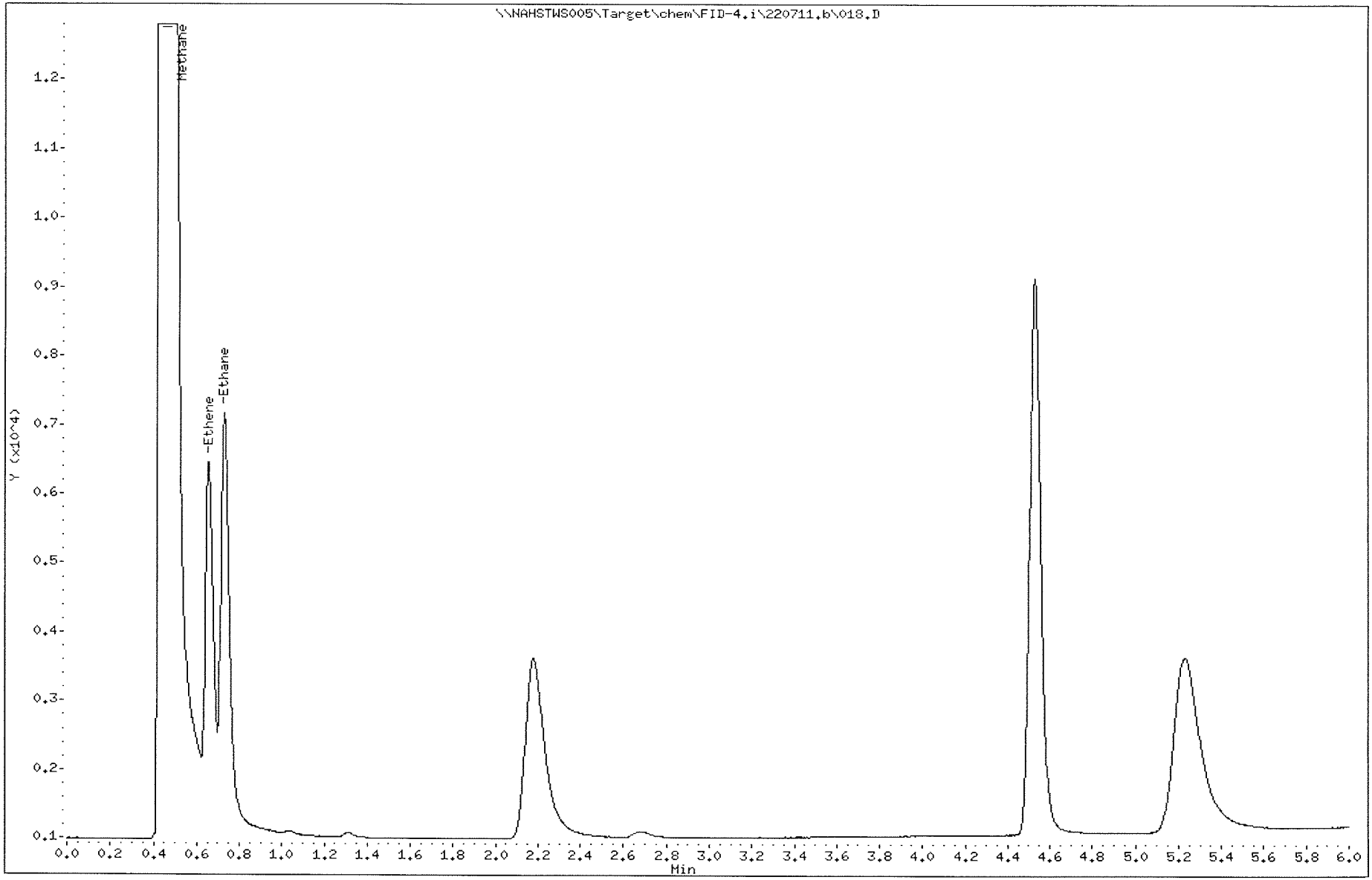
Sample Info: HS22070020-01MS;HS22070020-01MS

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\018.D
Lab Smp Id: HS22070020-01MS Client Smp ID: HS22070020-01MS
Inj Date : 11-JUL-2022 11:36
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-01MS;HS22070020-01MS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 18 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.436	0.000	1228226	1259.73	1259.728(AR)
2 Ethene	0.656	0.656	0.000	15372	26.2428	26.242(R)
3 Ethane	0.730	0.733	-0.003	20237	28.1269	28.126(R)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\018.D

Date : 11-JUL-2022 11:36

Client ID: HS22070020-01MS

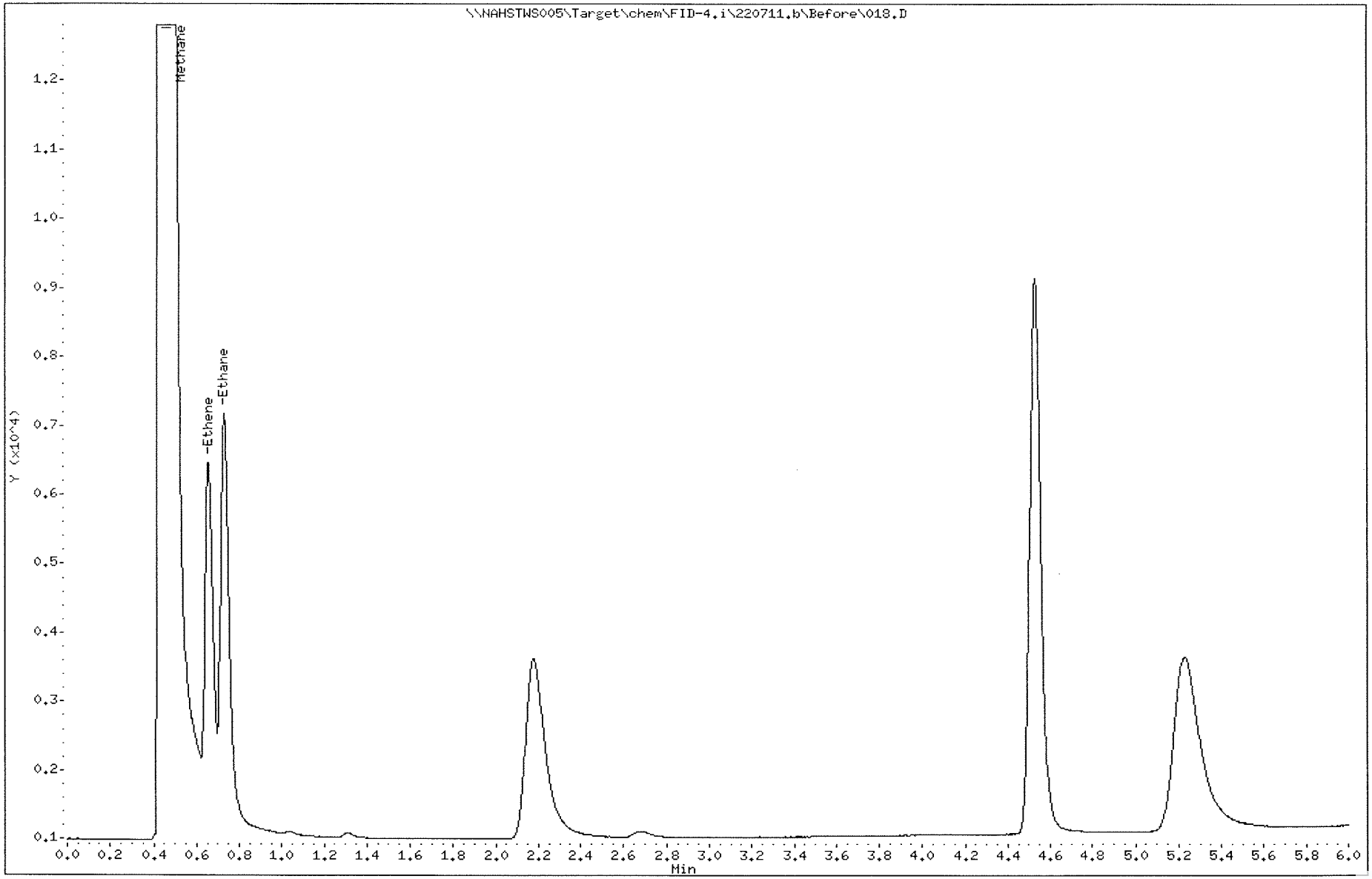
Instrument: FID-4.i

Sample Info: HS22070020-01MS;HS22070020-01MS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\019.D
Lab Smp Id: HS22070020-01MSD Client Smp ID: HS22070020-01MSD
Inj Date : 11-JUL-2022 11:53
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-01MSD;HS22070020-01MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 19 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.440	0.436	0.004	1247365	1279.36	1279.358(AR)
2 Ethene	0.656	0.656	0.000	15798	26.9701	26.970(RM)
3 Ethane	0.730	0.733	-0.003	16788	23.3332	23.333(RM)

QC Flag Legend

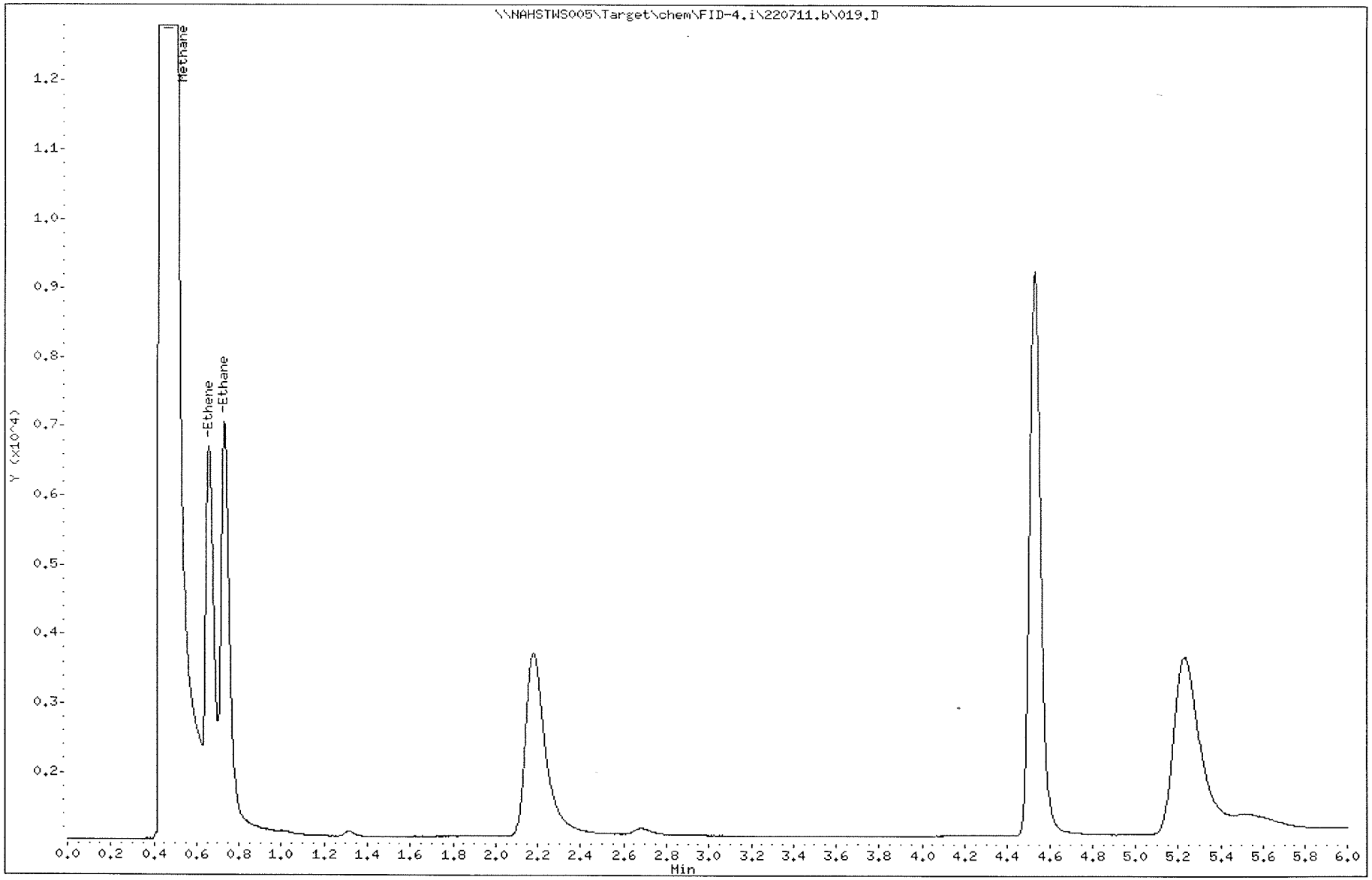
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\019.D
Date : 11-JUL-2022 11:53
Client ID: HS22070020-01MSD
Sample Info: HS22070020-01MSD;HS22070020-01MSD

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\019.D
Lab Smp Id: HS22070020-01MSD Client Smp ID: HS22070020-01MSD
Inj Date : 11-JUL-2022 11:53
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-01MSD;HS22070020-01MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 19 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.440	0.436	0.004	1247365	1279.36	1279.358(AR)
2 Ethene	0.656	0.656	0.000	32140	54.8688	54.868(R)

QC Flag Legend

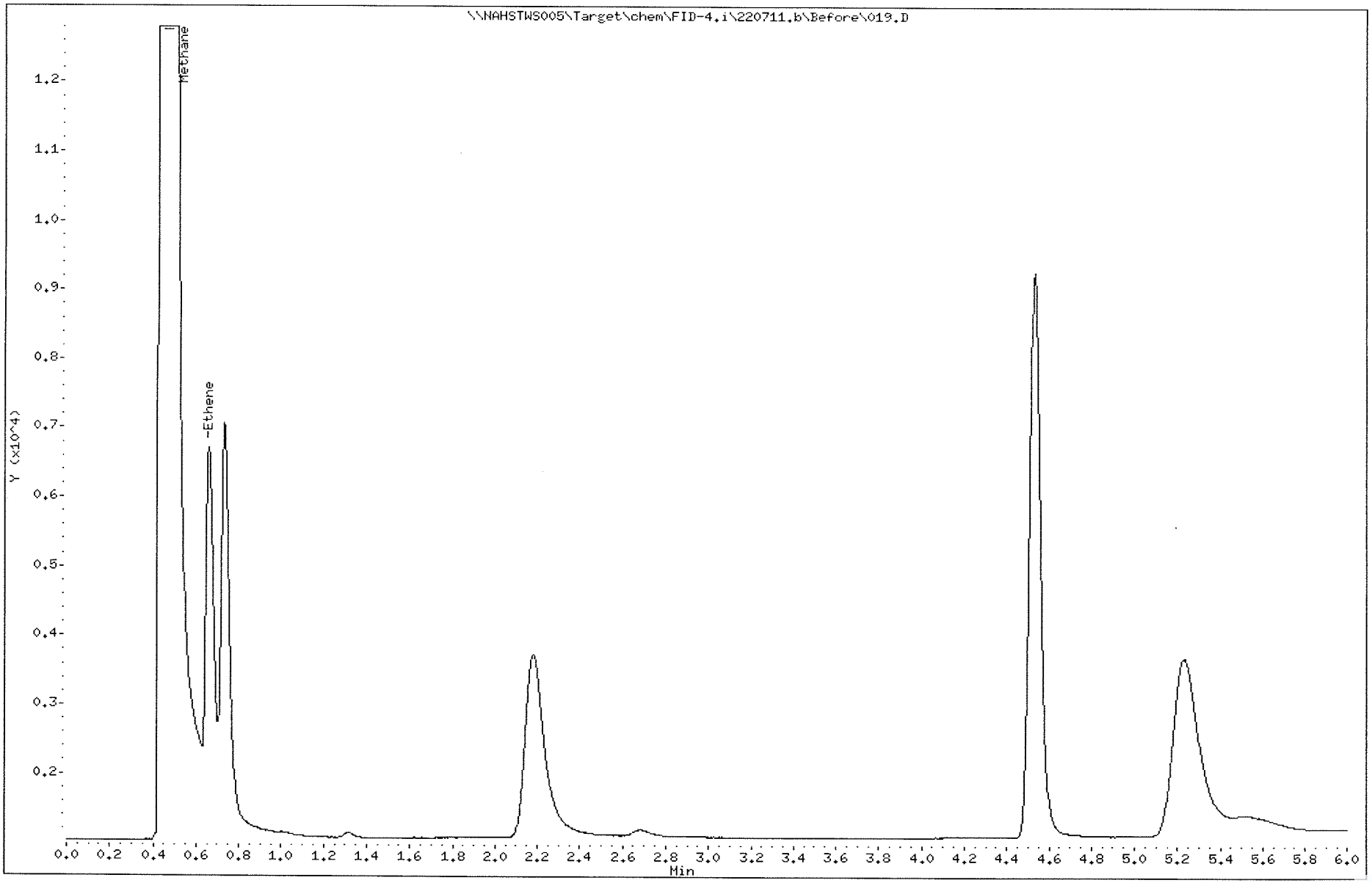
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\019.D
Date : 11-JUL-2022 11:53
Client ID: HS22070020-01MSD
Sample Info: HS22070020-01MSD;HS22070020-01MSD

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\020.D
Lab Smp Id: HS22070020-02 Client Smp ID: HS22070020-02
Inj Date : 11-JUL-2022 12:02
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-02;HS22070020-02
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.436	0.436	0.000	110001	112.822	112.822(A)
2 Ethene	0.653	0.656	-0.003	6422	10.9635	10.963(M)

QC Flag Legend

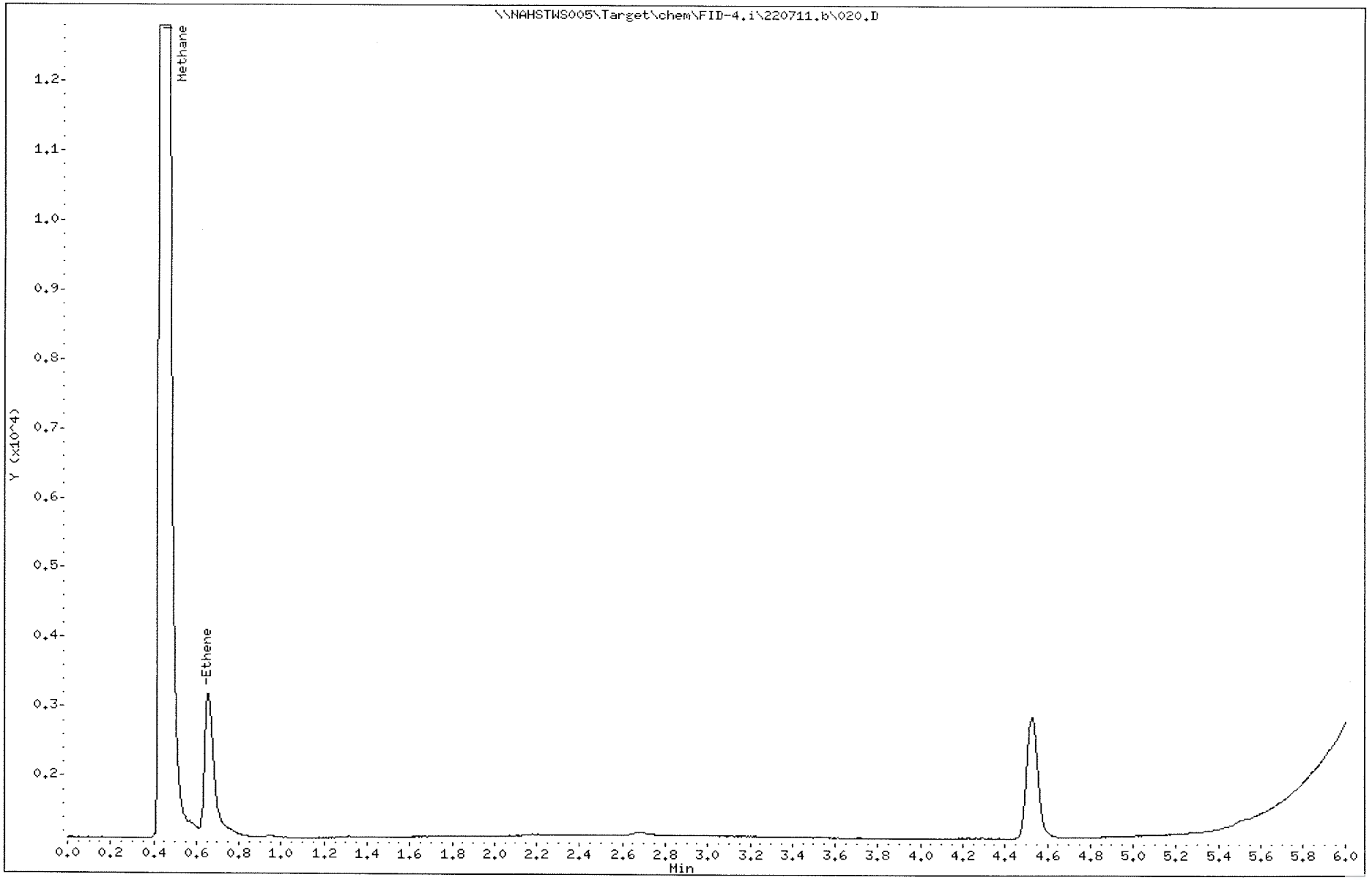
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\020.D
Date : 11-JUL-2022 12:02
Client ID: HS22070020-02
Sample Info: HS22070020-02;HS22070020-02

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\020.D
Lab Smp Id: HS22070020-02 Client Smp ID: HS22070020-02
Inj Date : 11-JUL-2022 12:02
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-02;HS22070020-02
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.436	0.000	110001	112.822	112.822(A)
2 Ethene	0.653	0.656	-0.003	7305	12.4710	12.470

QC Flag Legend

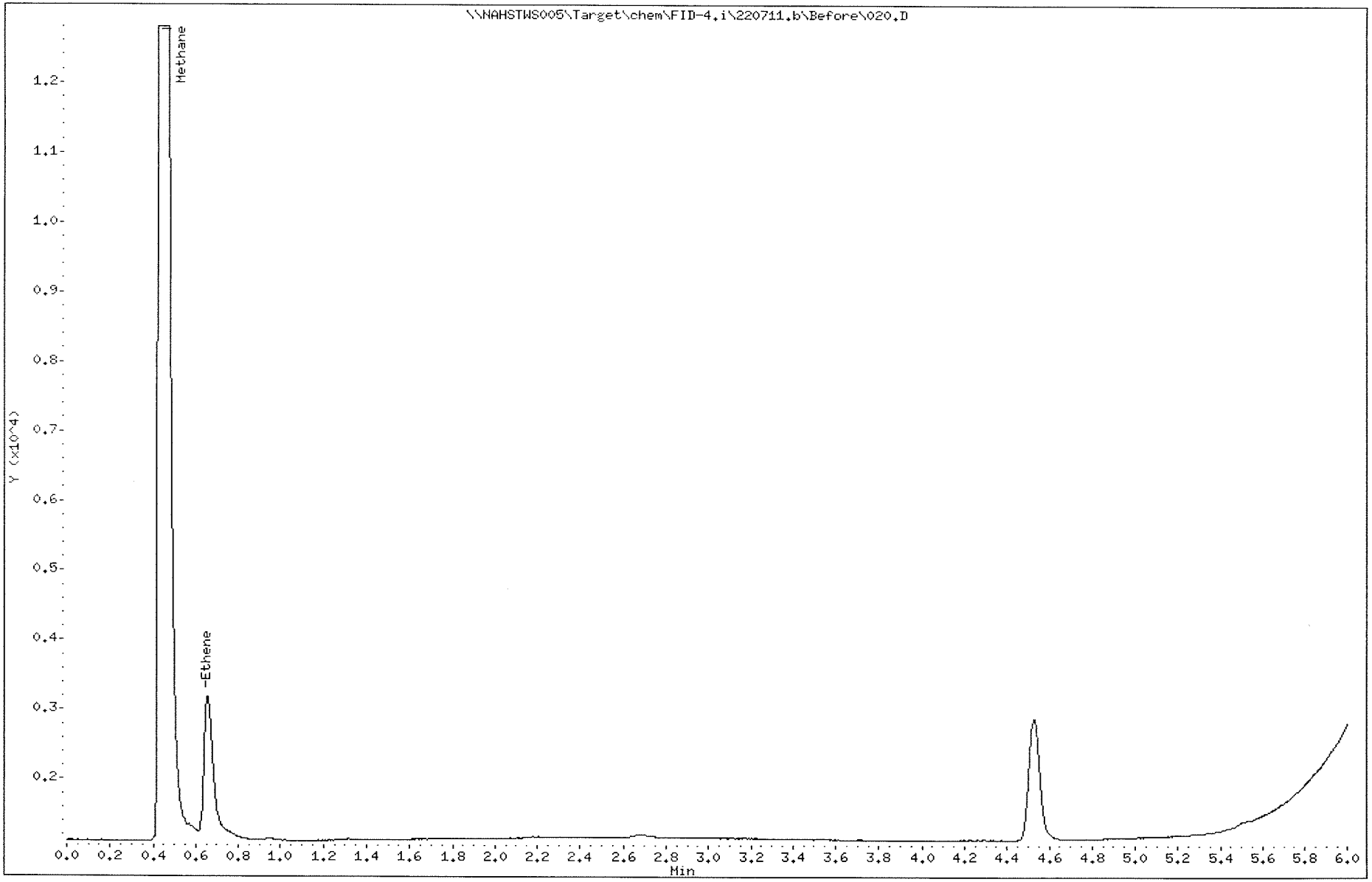
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\020.D
Date : 11-JUL-2022 12:02
Client ID: HS22070020-02
Sample Info: HS22070020-02;HS22070020-02

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\021.D
Lab Smp Id: HS22070020-04 Client Smp ID: HS22070020-04
Inj Date : 11-JUL-2022 12:10
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-04;HS22070020-04
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

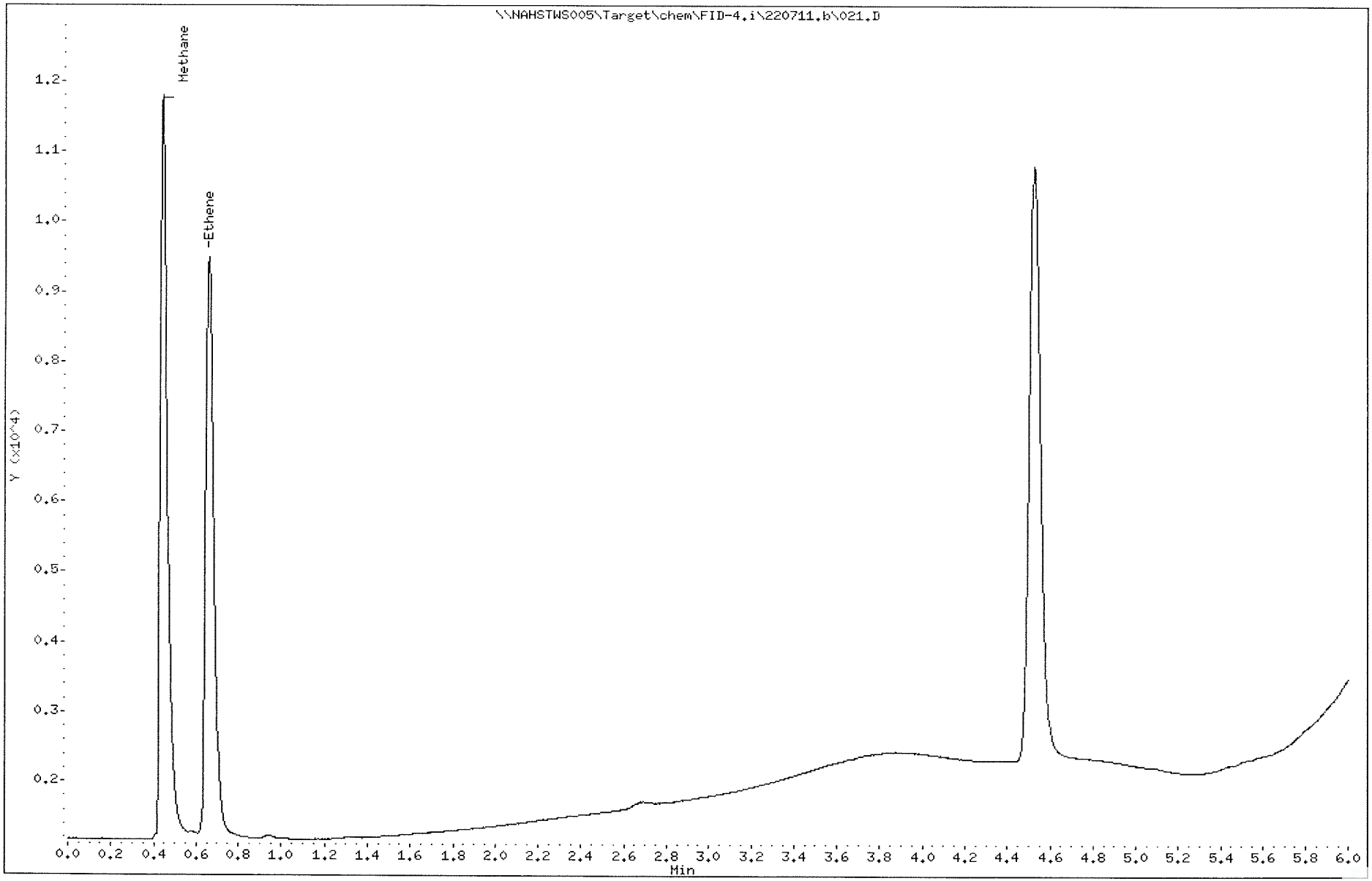
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.440	0.436	0.004	26484	27.1633	27.163
2 Ethene	0.656	0.656	0.000	24482	41.7952	41.795

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\021.D
Date : 11-JUL-2022 12:10
Client ID: HS22070020-04
Sample Info: HS22070020-04;HS22070020-04

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\022.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 12:24
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	0.436	0.436	0.000	8115	9.64700	8.323
2 Ethene	0.660	0.656	0.004	11202	16.8500	19.123(M)
3 Ethane	0.730	0.733	-0.003	14427	18.0430	20.051(M)

QC Flag Legend

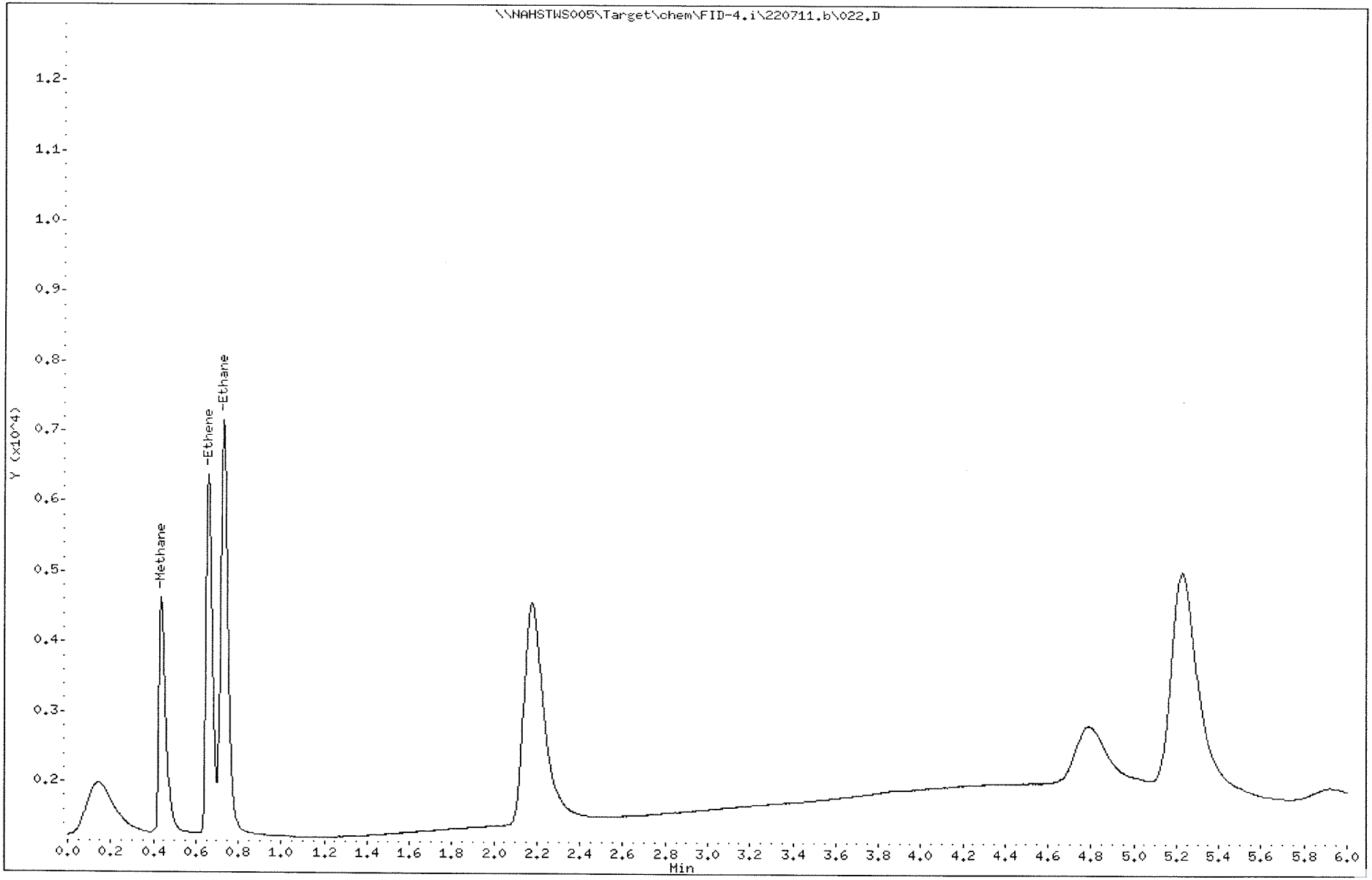
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\022.D
Date : 11-JUL-2022 12:24
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\022.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 12:24
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

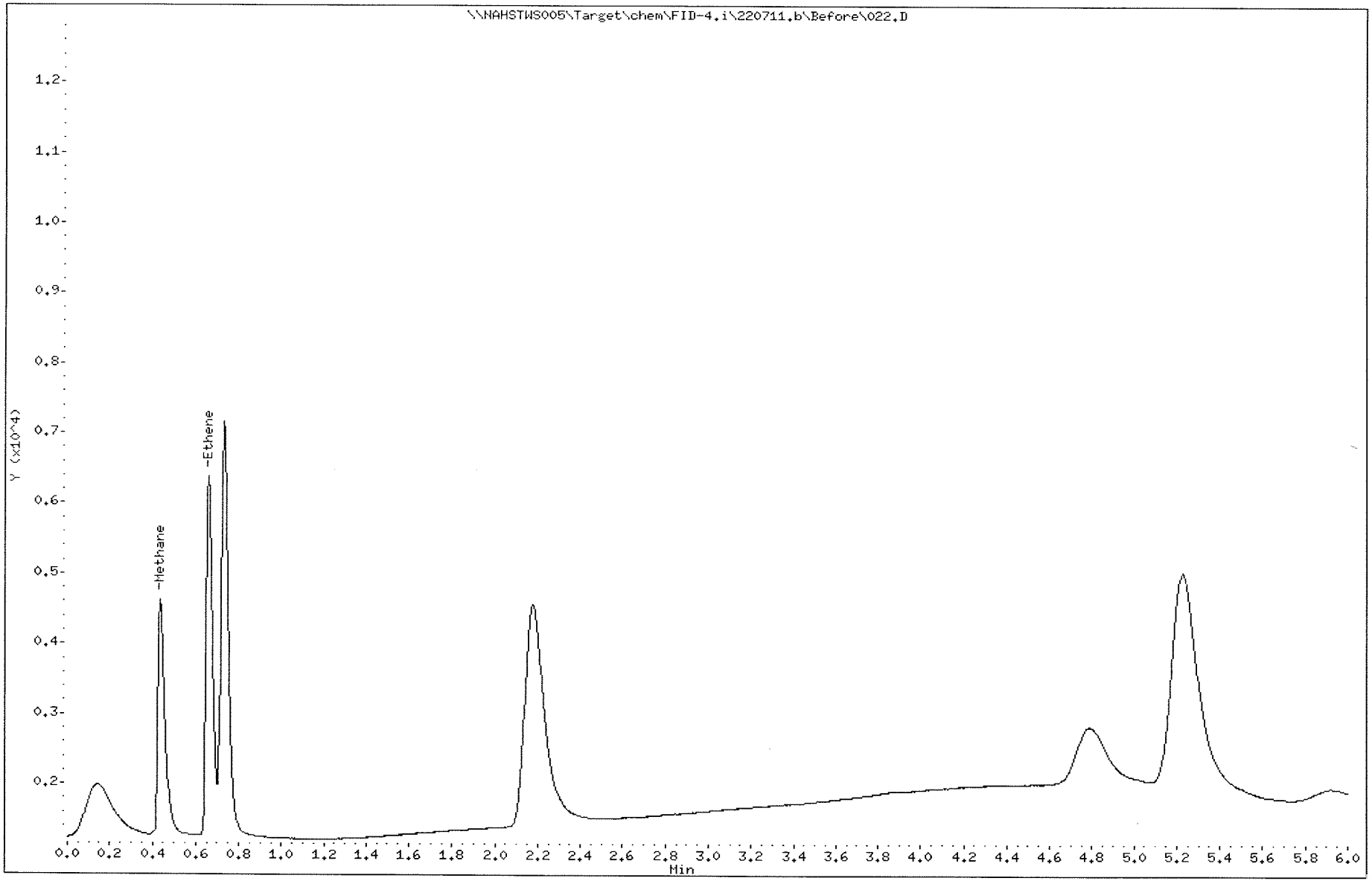
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	0.436	0.436	0.000	8115	9.64700	8.323
2 Ethene	0.660	0.656	0.004	25473	16.8500	43.487

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\022.D
Date : 11-JUL-2022 12:24
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\023.D Page 1
Report Date: 19-Jul-2022 14:18

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\023.D
Lab Smp Id: HS22070020-01 Client Smp ID: HS22070020-01
Inj Date : 11-JUL-2022 12:36
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-01;HS22070020-01
Misc Info : ;1;0;100
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 23
Dil Factor: 100.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.450	0.436	0.014	10837	11.1150	1111.495(M)

QC Flag Legend

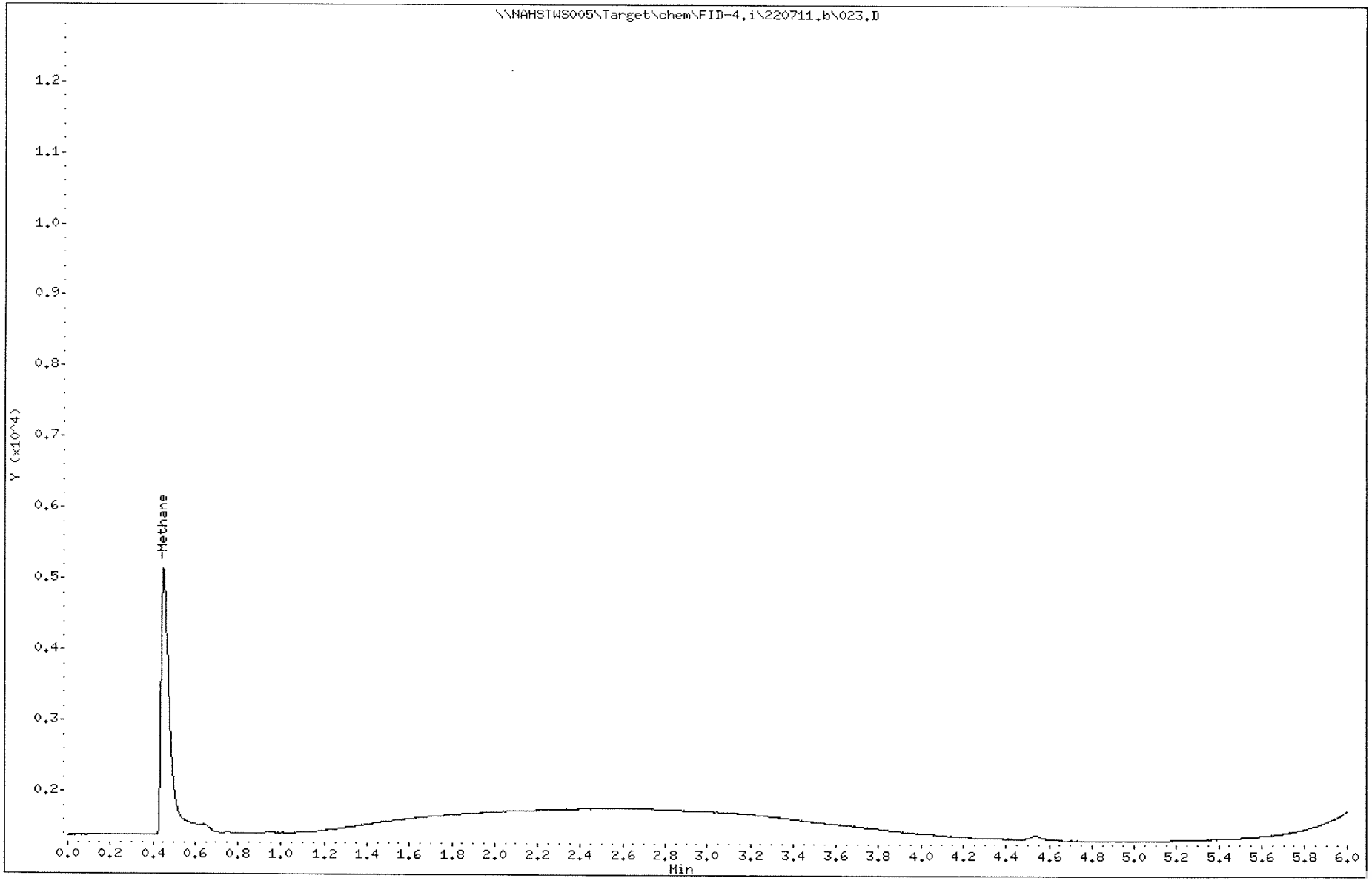
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\023.D
Date : 11-JUL-2022 12:36
Client ID: HS22070020-01
Sample Info: HS22070020-01;HS22070020-01

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\023.D
Lab Smp Id: HS22070020-01 Client Smp ID: HS22070020-01
Inj Date : 11-JUL-2022 12:36
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-01;HS22070020-01
Misc Info : ;1;0;100
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 23
Dil Factor: 100.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

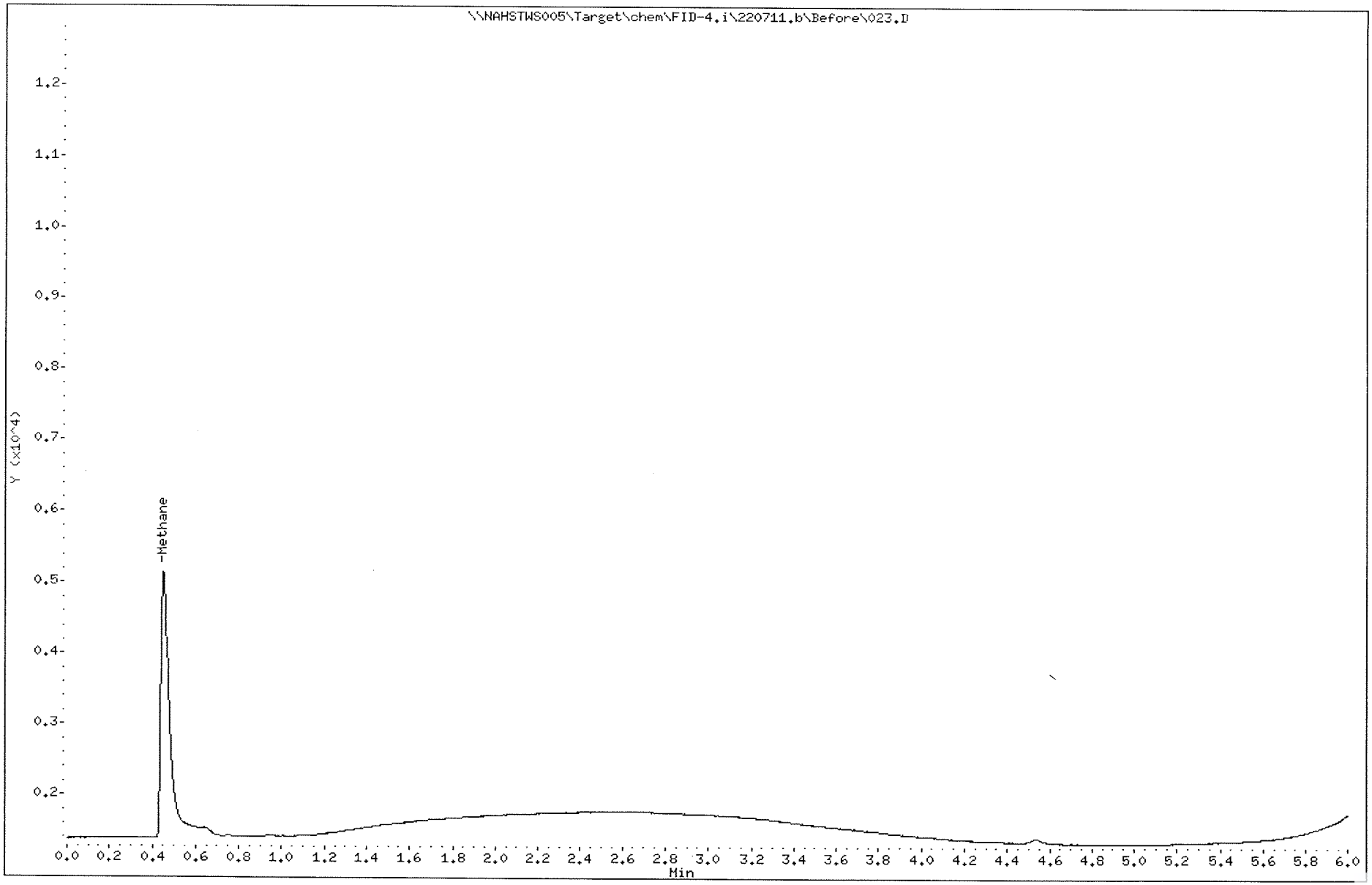
					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.450	0.436	0.014	11358	11.6493	1164.932

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\023.D
Date : 11-JUL-2022 12:36
Client ID: HS22070020-01
Sample Info: HS22070020-01;HS22070020-01

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\024.D
Lab Smp Id: HS22070020-02 Client Smp ID: HS22070020-02
Inj Date : 11-JUL-2022 12:46
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-02;HS22070020-02
Misc Info : ;1;0;10
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 24
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.443	0.436	0.007	11518	11.8134	118.134
2 Ethene	0.663	0.656	0.007	907	1.54841	15.484(M)

QC Flag Legend

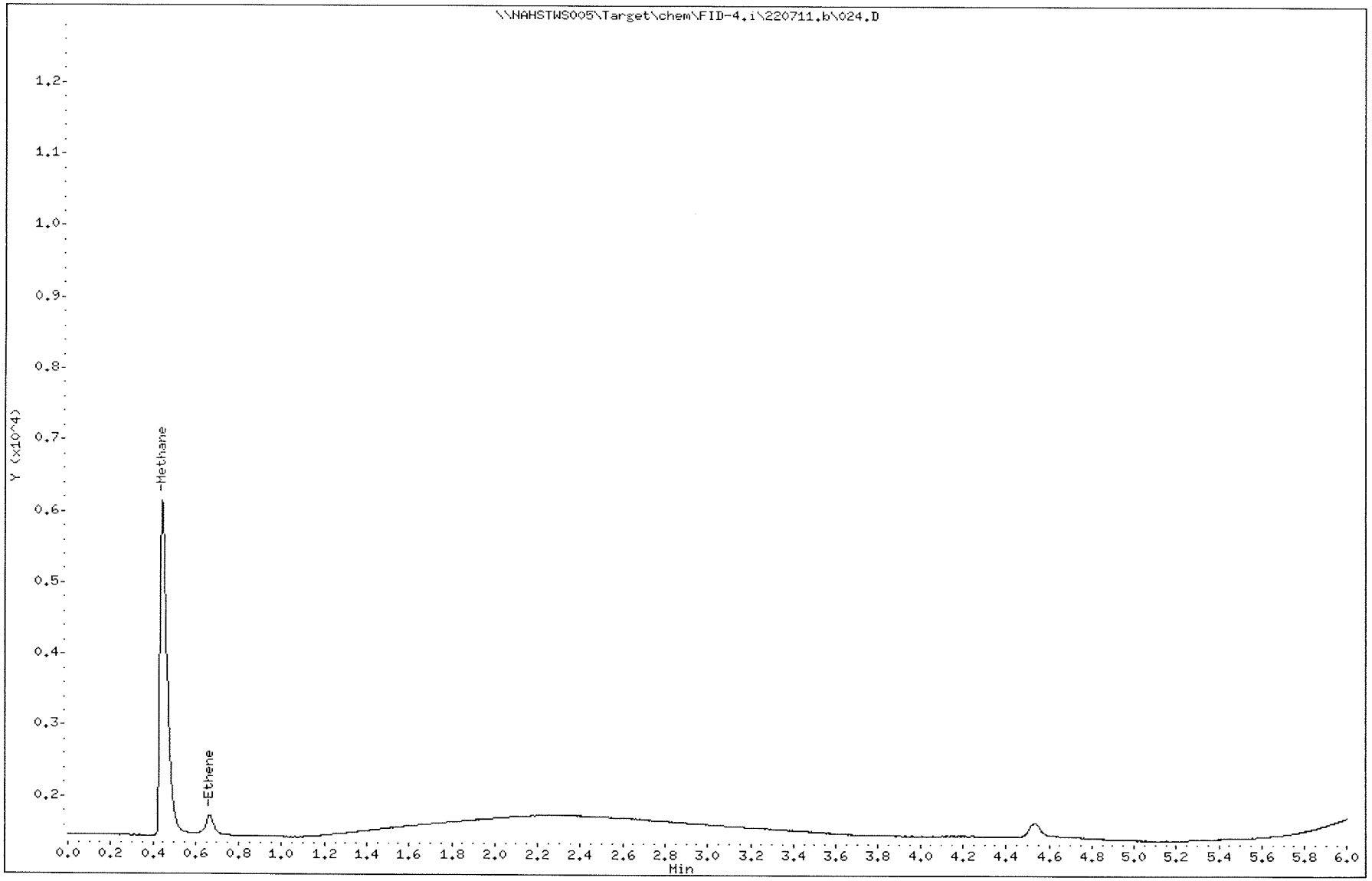
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\024.D
Date : 11-JUL-2022 12:46
Client ID: HS22070020-02
Sample Info: HS22070020-02;HS22070020-02

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\024.D
Lab Smp Id: HS22070020-02 Client Smp ID: HS22070020-02
Inj Date : 11-JUL-2022 12:46
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-02;HS22070020-02
Misc Info : ;1;0;10
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 24
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

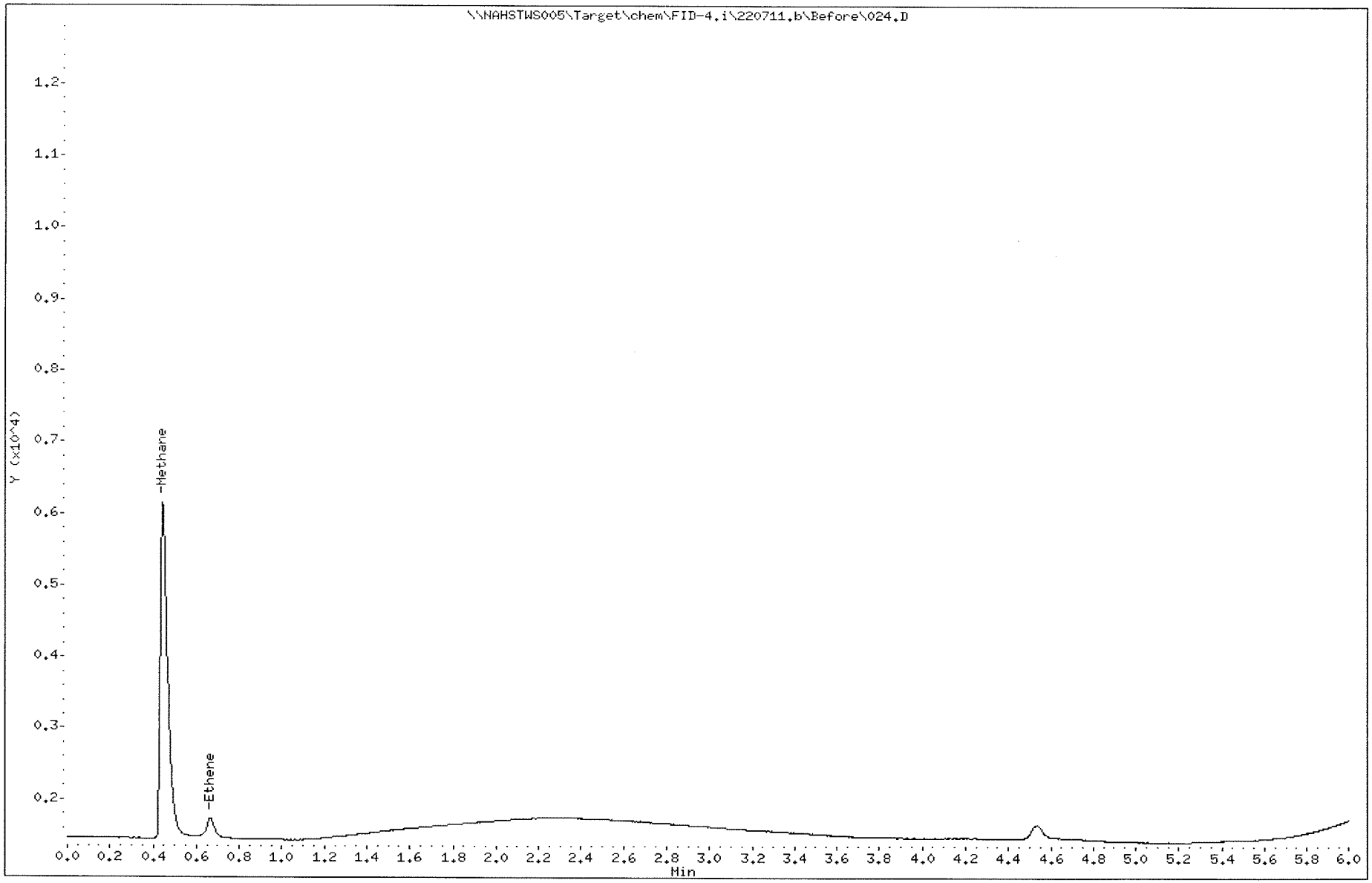
					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.443	0.436	0.007	11507	11.8021	118.021
2 Ethene	0.666	0.656	0.010	933	1.59280	15.928

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\024.D
Date : 11-JUL-2022 12:46
Client ID: HS22070020-02
Sample Info: HS22070020-02;HS22070020-02

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\029.D
Lab Smp Id: HS22070326-07MS Client Smp ID: HS22070326-07MS
Inj Date : 11-JUL-2022 13:35
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-07MS;HS22070326-07MS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 29 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.440	0.436	0.004	729952	748.675	748.674(AR)
2 Ethene	0.660	0.656	0.004	14188	24.2215	24.221(R)
3 Ethane	0.733	0.733	0.000	16168	22.4715	22.471(M)

QC Flag Legend

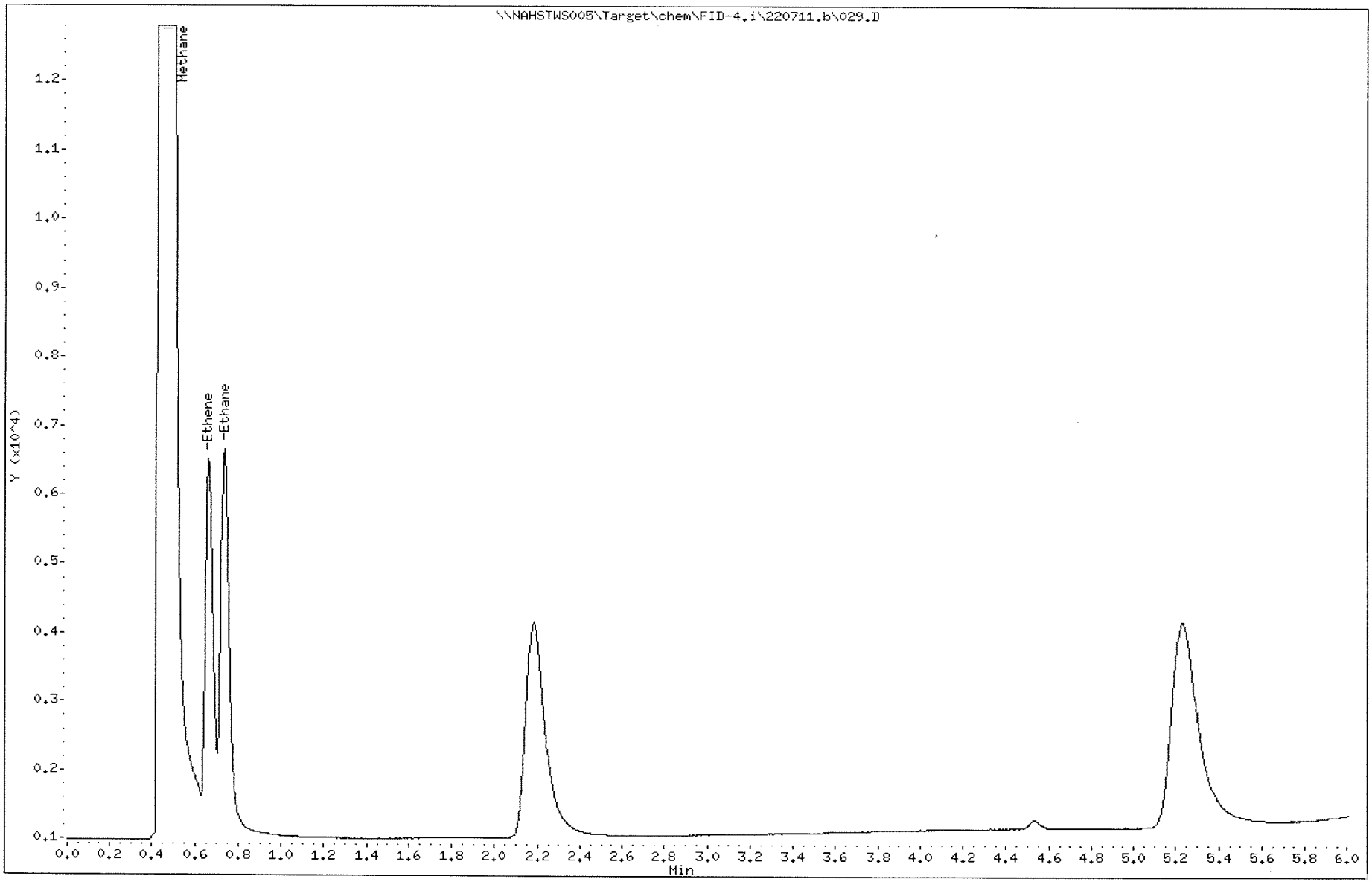
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\029.D
Date : 11-JUL-2022 13:35
Client ID: HS22070326-07MS
Sample Info: HS22070326-07MS;HS22070326-07MS

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\029.D
Lab Smp Id: HS22070326-07MS Client Smp ID: HS22070326-07MS
Inj Date : 11-JUL-2022 13:35
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-07MS;HS22070326-07MS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 29 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.440	0.436	0.004	729952	748.675	748.674(AR)
2 Ethene	0.660	0.656	0.004	14188	24.2215	24.221(R)
3 Ethane	0.733	0.733	0.000	17158	23.8475	23.847(R)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\029.D

Date : 11-JUL-2022 13:35

Client ID: HS22070326-07MS

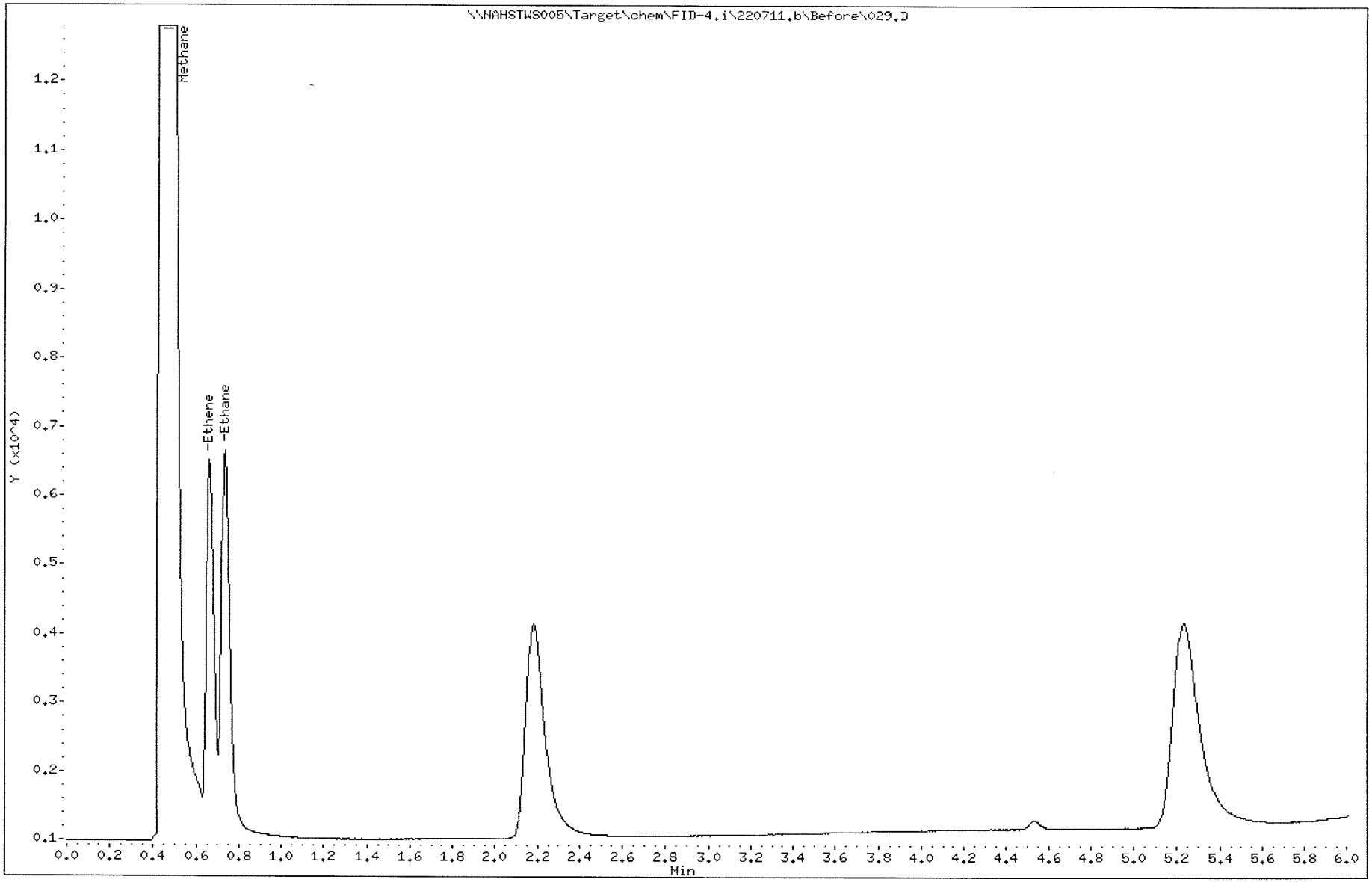
Sample Info: HS22070326-07MS;HS22070326-07MS

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\030.D
Lab Smp Id: HS22070326-07MSD Client Smp ID: HS22070326-07MSD
Inj Date : 11-JUL-2022 13:43
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-07MSD;HS22070326-07MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 30 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.436	0.000	838460	859.966	859.965(AR)
2 Ethene	0.660	0.656	0.004	13646	23.2962	23.296(RM)
3 Ethane	0.733	0.733	0.000	14618	20.3172	20.317(M)

QC Flag Legend

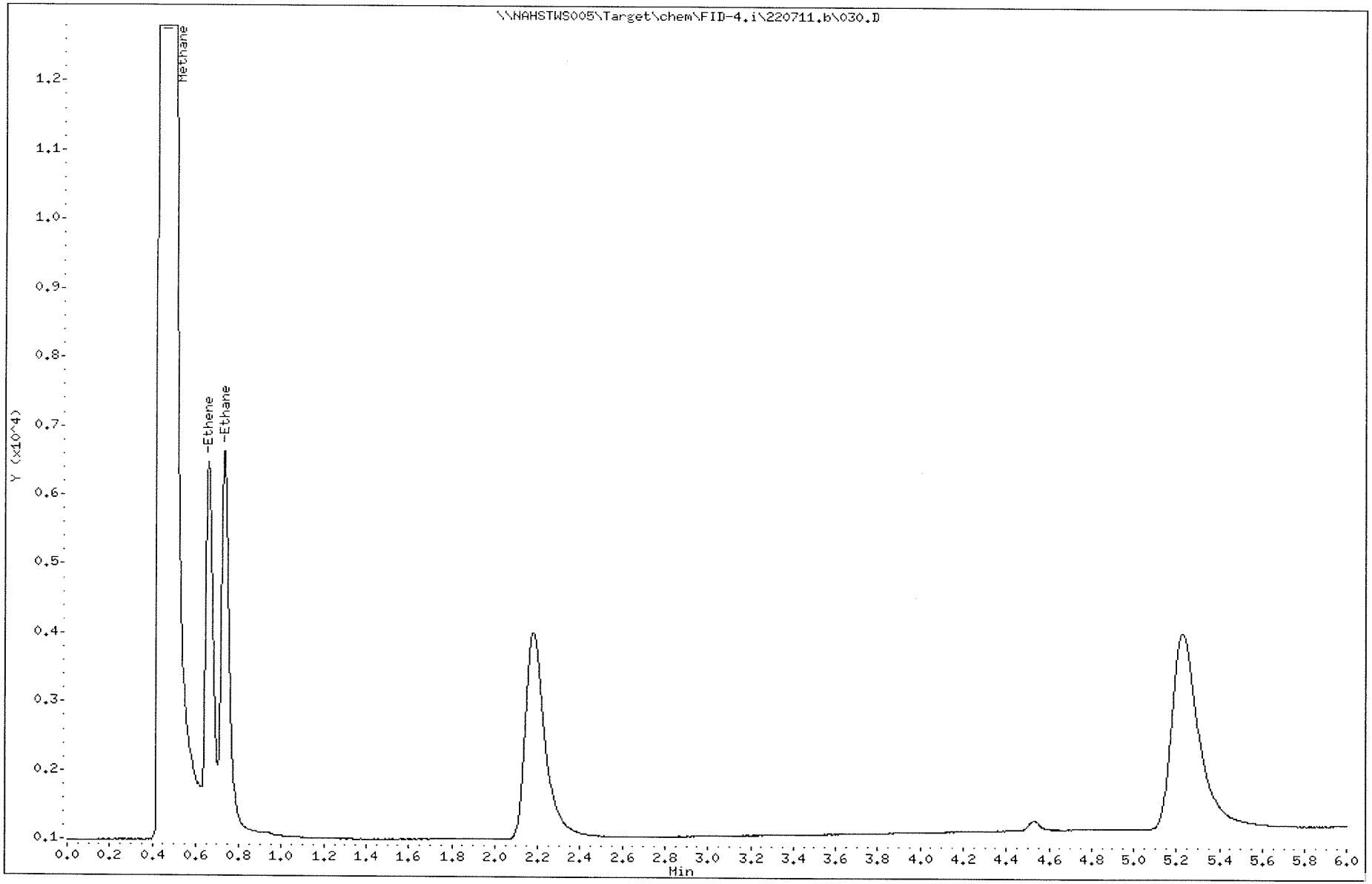
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\030.D
Date : 11-JUL-2022 13:43
Client ID: HS22070326-07MSD
Sample Info: HS22070326-07MSD;HS22070326-07MSD

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\030.D
Lab Smp Id: HS22070326-07MSD Client Smp ID: HS22070326-07MSD
Inj Date : 11-JUL-2022 13:43
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-07MSD;HS22070326-07MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 30 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.436	0.436	0.000	838460	859.966	859.965(AR)
2 Ethene	0.660	0.656	0.004	27996	47.7943	47.794(R)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\030.D

Date : 11-JUL-2022 13:43

Client ID: HS22070326-07MSD

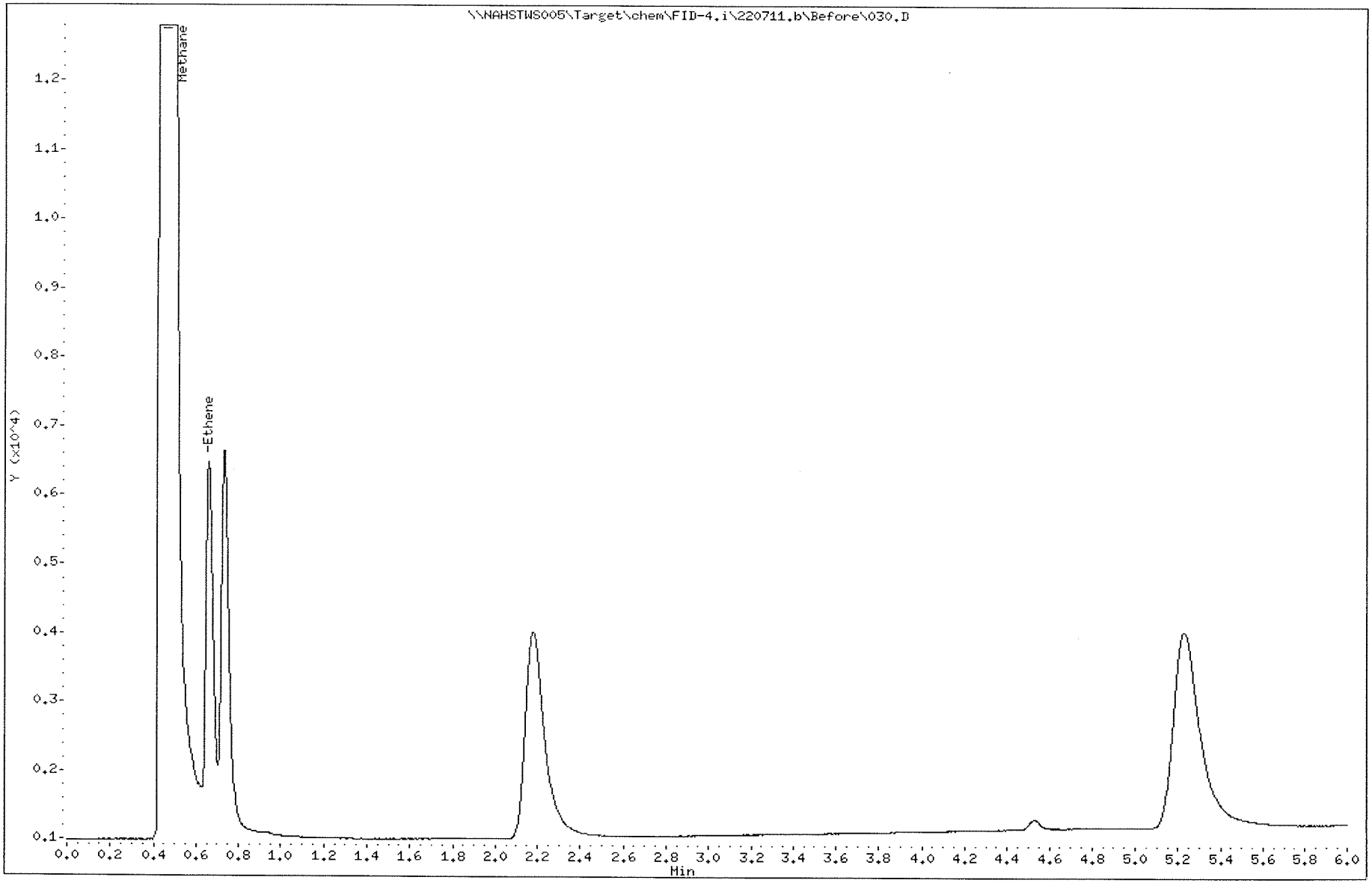
Sample Info: HS22070326-07MSD;HS22070326-07MSD

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\033.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 14:23
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.436	0.436	0.000	9305	9.64700	9.543
2 Ethene	0.660	0.656	0.004	11621	16.8500	19.839(M)
3 Ethane	0.730	0.733	-0.003	14197	18.0430	19.732(M)

QC Flag Legend

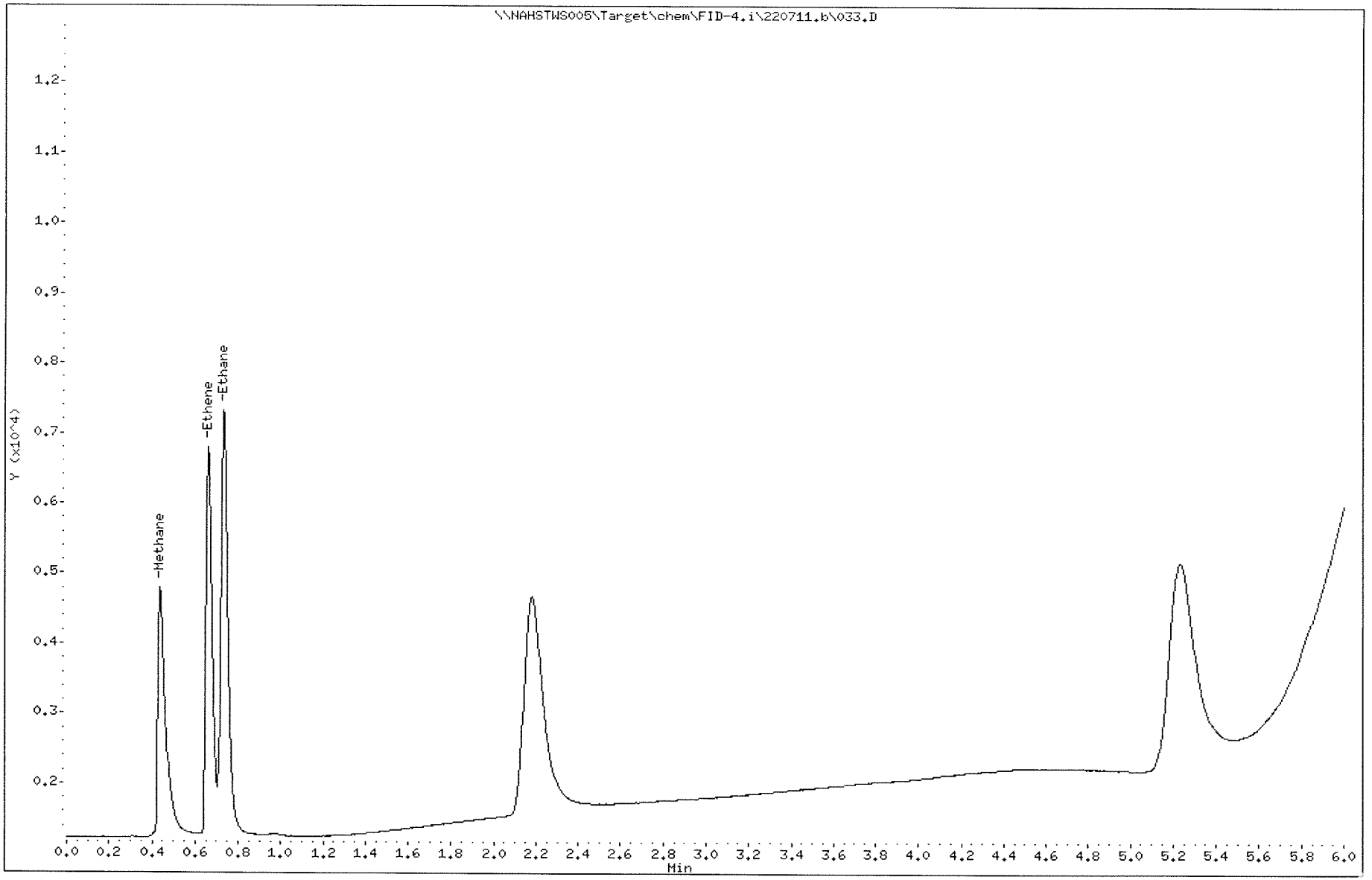
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\033.D
Date : 11-JUL-2022 14:23
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\033.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 14:23
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	0.436	0.436	0.000	9305	9.64700	9.543
2 Ethene	0.660	0.656	0.004	25675	16.8500	43.831

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\033.D

Date : 11-JUL-2022 14:23

Client ID: RSK-CCV

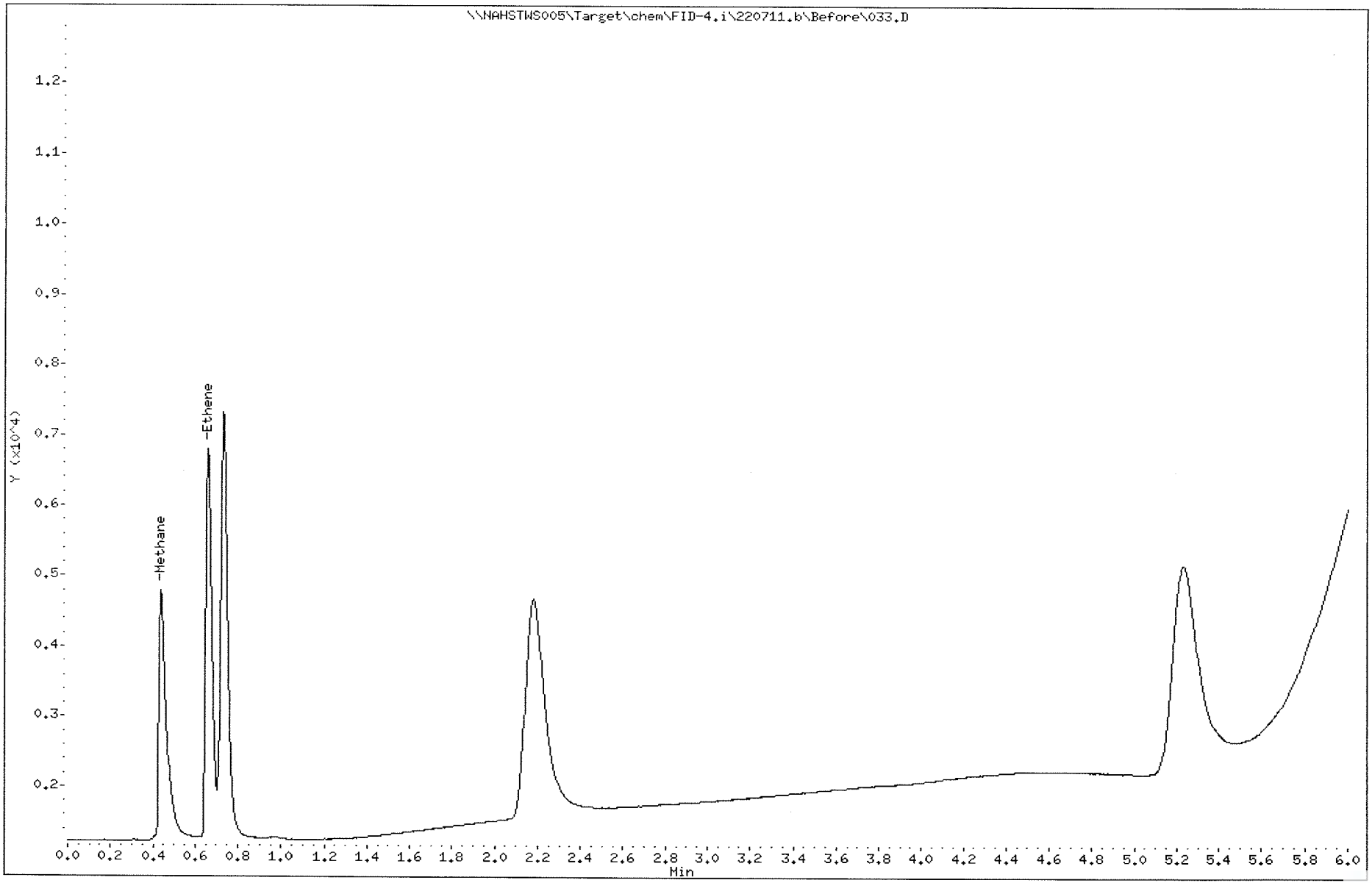
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\038.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 15:16
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 38 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.436	0.436	0.000	8550	9.64700	8.769
2 Ethene	0.656	0.656	0.000	10508	16.8500	17.939(M)
3 Ethane	0.730	0.733	-0.003	13431	18.0430	18.667(M)

QC Flag Legend

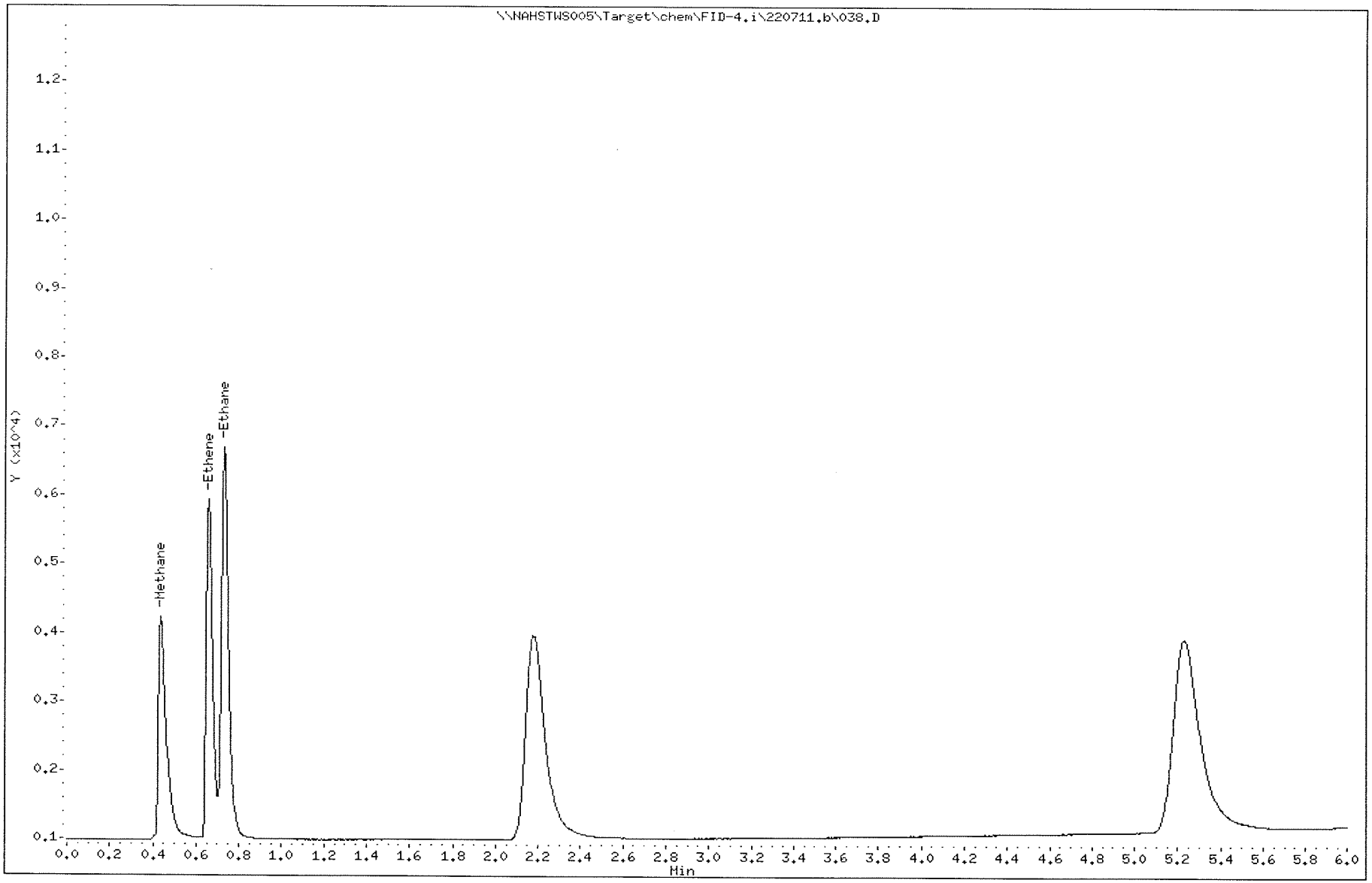
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\038.D
Date : 11-JUL-2022 15:16
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\038.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 15:16
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 38 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

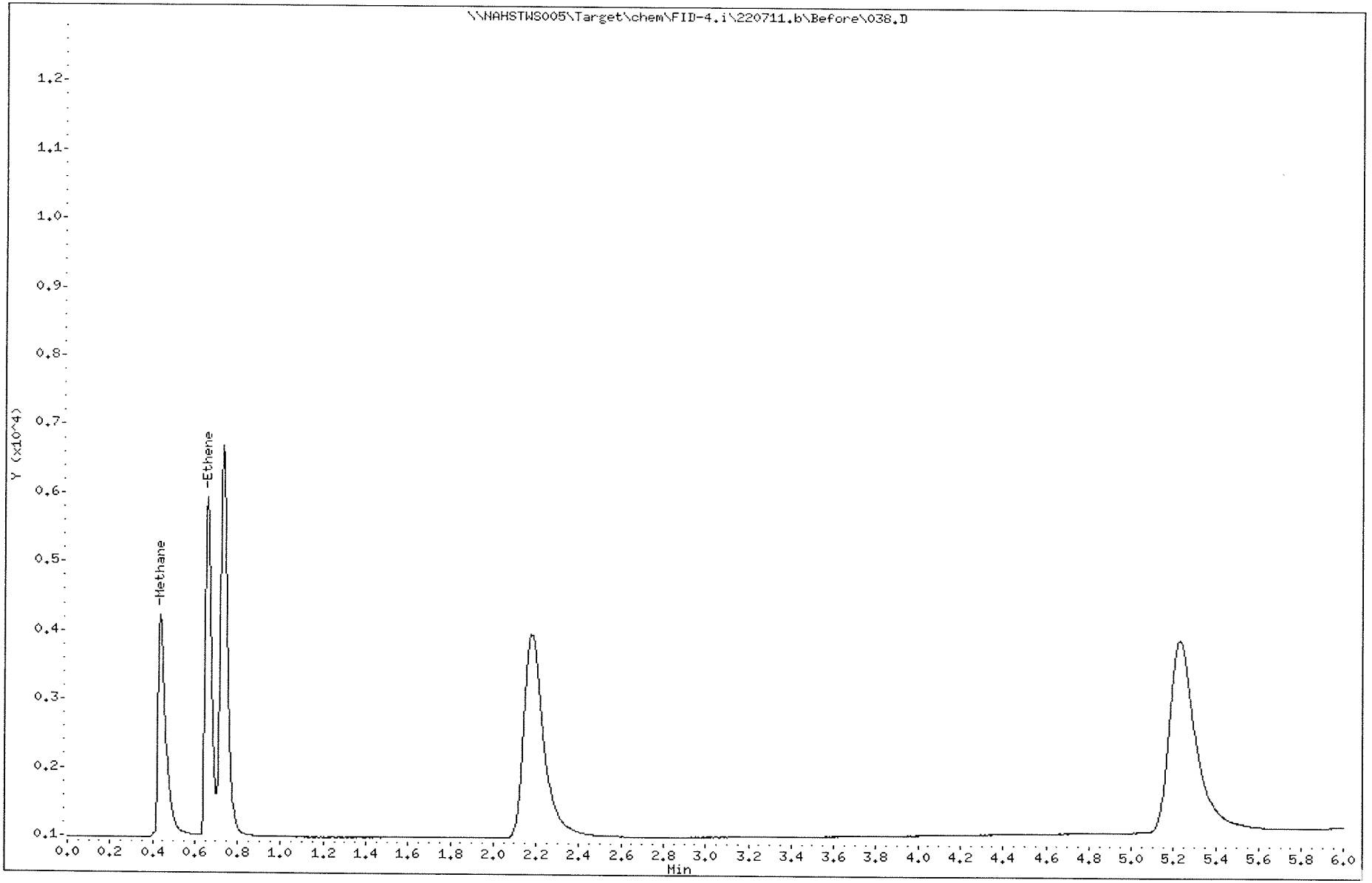
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	0.436	0.436	0.000	8550	9.64700	8.769
2 Ethene	0.656	0.656	0.000	23814	16.8500	40.654

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\038.D
Date : 11-JUL-2022 15:16
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



HS22070020 Wet Chemistry

ALS WO# HS22070020

C:\TOC-L\Data\2022_06_07_002.tlx

HS2207020

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Diluti	Result
1	Standard	NPOC	CAL	3100605703	06_07_2022	1.000	
2	Unknown	NPOC	ICV	3100605711	06_07_2022	1.000	NPOC:9.599mg/L
3	Unknown	NPOC	ICB		06_07_2022	1.000	NPOC:0.1185mg/

C:\TOC-L\Data\2022_06_07_002.tlx

	Notes	Status	Date / Time	Vial
1		Completed	6/7/2022 6:42:31 PM	1, 2, 3, 4, 5,
2		Completed	6/7/2022 6:53:59 PM	8
3		Completed	6/7/2022 7:04:57 PM	9

TOC-Control L Report

2022_06_07_002.tlx

Instr.Information

Instrument Options	TOC/ASI/IC Unit/
Catalyst	Regular Sensitivity

Cal. Curve

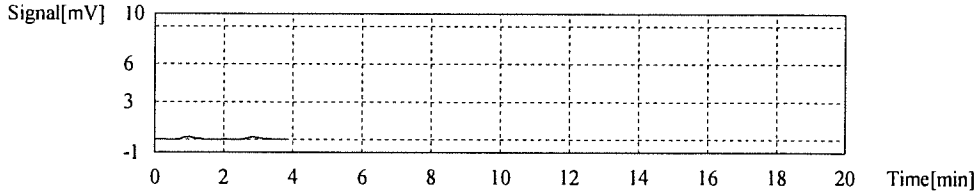
Sample Name:	CAL
Sample ID:	3100605703
Cal. Curve:	06_07_2022_CAL.2022_06_07_17_25_51.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.5059	50uL	1.000	*******		6/7/2022 5:33:20 PM
2	0.4436	50uL	1.000	*******		6/7/2022 5:36:04 PM

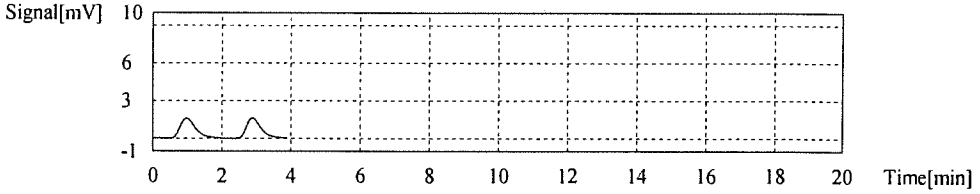
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	0.4748



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	4.733	50uL	1.000	*******		6/7/2022 5:44:04 PM
2	4.778	50uL	1.000	*******		6/7/2022 5:46:49 PM

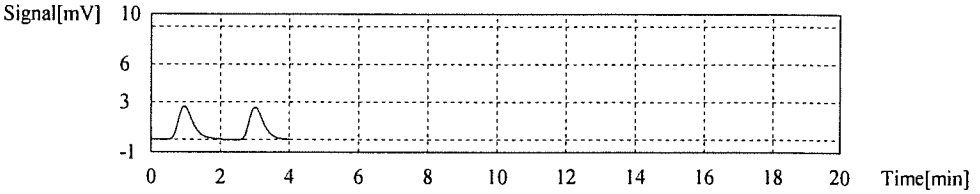
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	4.756



Conc: 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	7.782	50uL	1.000	*******		6/7/2022 5:54:55 PM
2	7.707	50uL	1.000	*******		6/7/2022 5:57:36 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	7.745



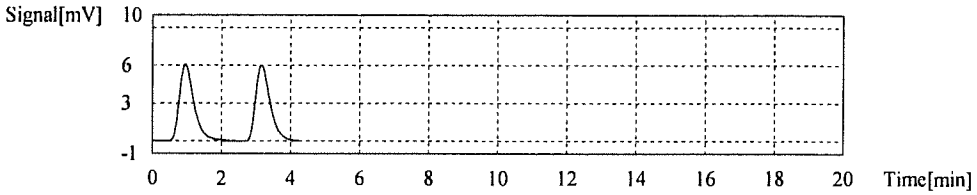
TOC-Control L Report

2022_06_07_002.tlx

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	17.83	50uL	1.000	*******		6/7/2022 6:05:52 PM
2	17.74	50uL	1.000	*******		6/7/2022 6:08:28 PM

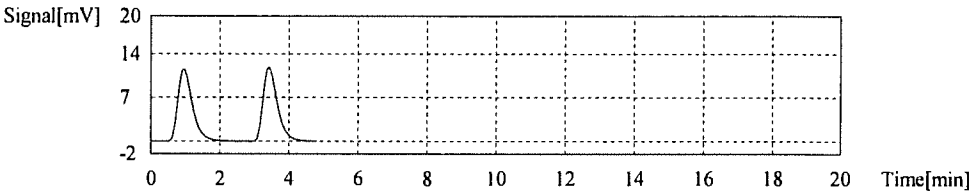
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 17.79



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	34.34	50uL	1.000	*******		6/7/2022 6:17:00 PM
2	34.33	50uL	1.000	*******		6/7/2022 6:19:35 PM

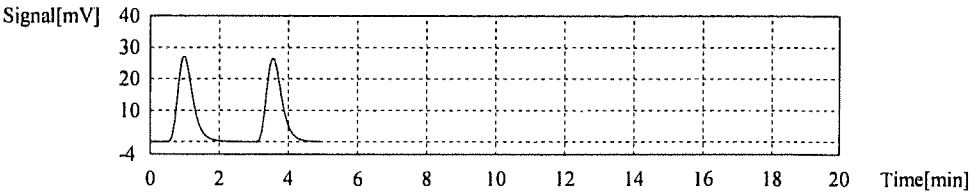
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 34.34



Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	84.01	50uL	1.000	*******		6/7/2022 6:28:26 PM
2	83.63	50uL	1.000	*******		6/7/2022 6:31:03 PM

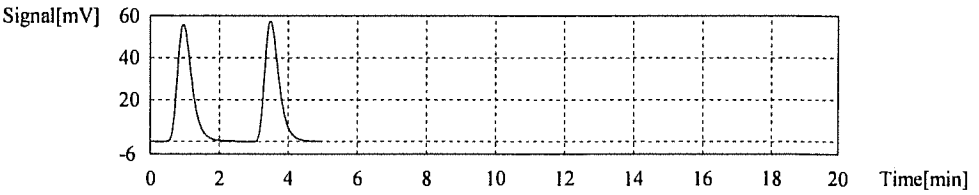
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 83.82



Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	167.5	50uL	1.000	*******		6/7/2022 6:39:49 PM
2	169.4	50uL	1.000	*******		6/7/2022 6:42:31 PM

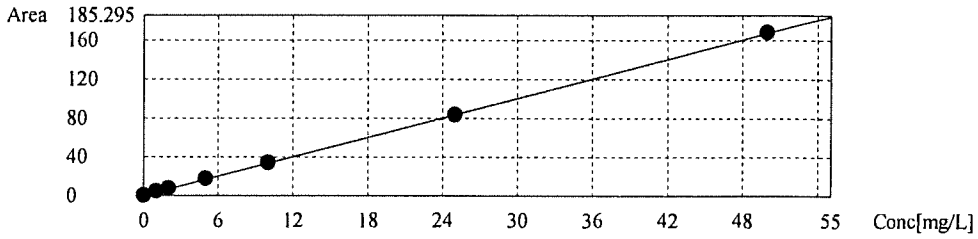
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 168.4



TOC-Control L Report

2022_06_07_002.tlx

Slope:	3.345
Intercept	0.000
r^2	1.0000
r	1.0000
RSE(%)	N/A
Zero Shift	Yes



Sample

Sample Name:	ICV
Sample ID:	3100605711
Origin:	06_07_2022_CAL.cal
Status	Completed
Chk. Result	

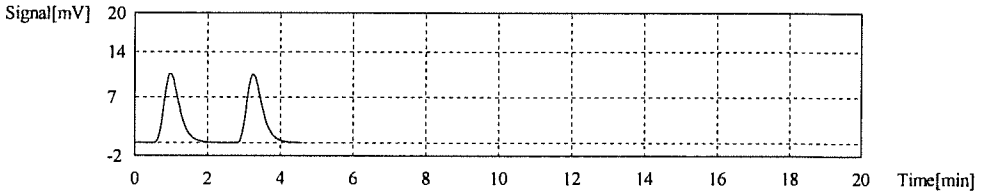
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.599mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.11	9.601mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	6/7/2022 6:50:57 PM
2	32.10	9.598mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	6/7/2022 6:53:59 PM

Mean Area	32.11
Mean Conc.	9.599mg/L



Sample

Sample Name:	ICB
Sample ID:	
Origin:	06_07_2022_CAL.cal
Status	Completed
Chk. Result	

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1185mg/L

1. Det

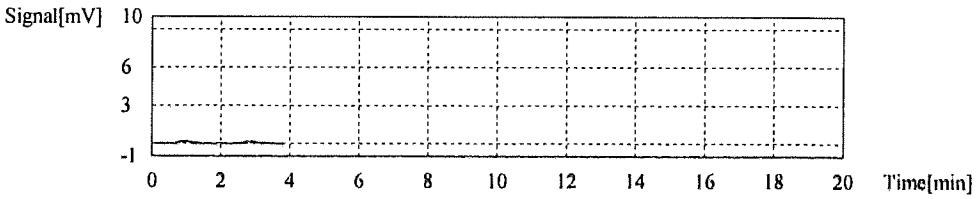
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3661	0.1095mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	6/7/2022 7:01:57 PM
2	0.4267	0.1276mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	6/7/2022 7:04:57 PM

TOC-Control L Report

2022_06_07_002.tlx

Mean Area	0.3964
Mean Conc.	0.1185mg/L



C:\TOC-L\Data\2022_07_15_001.tlx

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Dilut	Result
1	Unknown	NPOC	RINSE		06_07_2022	1.000	NPOC:0.1177mg/
2	Unknown	NPOC	RINSE		06_07_2022	1.000	NPOC:0.1578mg/
3	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.35mg/L
4	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.2327mg/
5	Unknown	NPOC	MBLK-07152022		06_07_2022	1.000	NPOC:0.1768mg/
6	Unknown	NPOC	LCS-07152022	3100605711	06_07_2022	1.000	NPOC:9.557mg/L
7	Unknown	NPOC	LCSD-07152022		06_07_2022	1.000	NPOC:9.706mg/L
8	Unknown	NPOC	HS22061655-03	TOC_W	06_07_2022	1.000	NPOC:4.179mg/L
9	Unknown	NPOC	HS22070154-02		06_07_2022	1.000	NPOC:16.70mg/L
10	Unknown	NPOC	HS22070154-02MS		06_07_2022	1.000	NPOC:26.72mg/L
11	Unknown	NPOC	CCV		06_07_2022	1.000	NPOC:25.05mg/L
12	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.1927mg/
13	Unknown	NPOC	MBLK2-07152022		06_07_2022	1.000	NPOC:0.1524mg/
14	Unknown	NPOC	LCS2-07152022	3100605711	06_07_2022	1.000	NPOC:9.733mg/L
15	Unknown	NPOC	LCSD2-07152022		06_07_2022	1.000	NPOC:9.761mg/L
16	Unknown	NPOC	HS22070582-01		06_07_2022	1.000	NPOC:1.741mg/L
17	Unknown	NPOC	HS22070020-01		06_07_2022	1.000	NPOC:4.299mg/L
18	Unknown	NPOC	HS22070020-01MS		06_07_2022	1.000	NPOC:14.33mg/L
19	Unknown	NPOC	HS22070020-02		06_07_2022	1.000	NPOC:63.01mg/L
20	Unknown	NPOC	HS22070020-03	TOC_W 5310B	06_07_2022	1.000	NPOC:23.41mg/L
21	Unknown	NPOC	HS22070020-09		06_07_2022	1.000	NPOC:2.685mg/L
22	Unknown	NPOC	HS22070064-01		06_07_2022	1.000	NPOC:11.98mg/L
23	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.80mg/L
24	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.1924mg/
25	Unknown	NPOC	HS22070069-01		06_07_2022	1.000	NPOC:187.2mg/L
26	Unknown	NPOC	HS22070069-02		06_07_2022	1.000	NPOC:44.70mg/L
27	Unknown	NPOC	HS22070069-03		06_07_2022	1.000	NPOC:65.88mg/L
28	Unknown	NPOC	HS22070440-01		06_07_2022	1.000	NPOC:16.12mg/L
29	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:25.16mg/L
30	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.2454mg/
31	Unknown	NPOC	MBLK3-07152022		06_07_2022	1.000	NPOC:0.1713mg/
32	Unknown	NPOC	LCS3-07152022	3100605711	06_07_2022	1.000	NPOC:9.822mg/L
33	Unknown	NPOC	LCSD3-07152022		06_07_2022	1.000	NPOC:9.815mg/L
34	Unknown	NPOC	HS22070652-01DF10		06_07_2022	1.000	NPOC:0.4600mg/
35	Unknown	NPOC	HS22070652-01MSDF10		06_07_2022	1.000	NPOC:9.843mg/L
36	Unknown	NPOC	HS22070652-02DF10		06_07_2022	1.000	NPOC:0.5181mg/
37	Unknown	NPOC	HS22070652-03DF10		06_07_2022	1.000	NPOC:1.308mg/L
38	Unknown	NPOC	HS22070652-04DF10	TOC_W DISS 415.1	06_07_2022	1.000	NPOC:1.286mg/L
39	Unknown	NPOC	HS22070652-05DF10		06_07_2022	1.000	NPOC:1.262mg/L
40	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.58mg/L
41	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.2642mg/
42	Unknown	NPOC	MBLK4-07152022		06_07_2022	1.000	NPOC:0.1737mg/
43	Unknown	NPOC	LCS4-07152022	3100605711	06_07_2022	1.000	NPOC:9.638mg/L
44	Unknown	NPOC	LCSD4-07152022		06_07_2022	1.000	NPOC:9.758mg/L
45	Unknown	NPOC	HS22070652-01DF10		06_07_2022	1.000	NPOC:0.5034mg/
46	Unknown	NPOC	HS22070652-01MSDF10		06_07_2022	1.000	NPOC:9.615mg/L
47	Unknown	NPOC	HS22070652-02DF10		06_07_2022	1.000	NPOC:0.5264mg/
48	Unknown	NPOC	HS22070652-03DF10		06_07_2022	1.000	NPOC:4.663mg/L
49	Unknown	NPOC	HS22070652-04DF10	TOC_W	06_07_2022	1.000	NPOC:4.255mg/L
50	Unknown	NPOC	HS22070652-05DF10		06_07_2022	1.000	NPOC:3.438mg/L
51	Unknown	NPOC	HS22070020-02DF10		06_07_2022	1.000	NPOC:6.136mg/L

C:\TOC-L\Data\2022_07_15_001.tlx

	Notes	Status	Date / Time	Vial
1		Completed	7/15/2022 9:39:31 AM	2
2		Completed	7/15/2022 9:51:48 AM	3
3		Completed	7/15/2022 10:06:07 AM	1
4		Completed	7/15/2022 10:18:24 AM	2
5		Completed	7/15/2022 10:30:41 AM	3
6		Completed	7/15/2022 10:44:14 AM	4
7		Completed	7/15/2022 11:04:19 AM	5
8		Completed	7/15/2022 11:17:35 AM	6
9		Completed	7/15/2022 11:31:50 AM	7
10		Completed	7/15/2022 11:46:05 AM	8
11		Completed	7/15/2022 12:00:38 PM	1
12		Completed	7/15/2022 12:12:55 PM	2
13		Completed	7/15/2022 12:53:39 PM	3
14		Completed	7/15/2022 1:07:18 PM	4
15		Completed	7/15/2022 1:20:58 PM	5
16		Completed	7/15/2022 1:33:20 PM	9
17		Completed	7/15/2022 1:46:12 PM	10
18		Completed	7/15/2022 1:59:55 PM	11
19		Completed	7/15/2022 2:14:49 PM	12
20		Completed	7/15/2022 2:29:16 PM	13
21		Completed	7/15/2022 2:42:01 PM	14
22		Completed	7/15/2022 2:55:55 PM	15
23		Completed	7/15/2022 3:10:06 PM	1
24		Completed	7/15/2022 3:22:23 PM	2
25		Completed	7/15/2022 3:37:37 PM	16
26		Completed	7/15/2022 3:52:00 PM	17
27		Completed	7/15/2022 4:06:27 PM	18
28		Completed	7/15/2022 4:20:27 PM	19
29		Completed	7/15/2022 4:34:46 PM	1
30		Completed	7/15/2022 4:47:07 PM	2
31		Completed	7/15/2022 5:54:02 PM	3
32		Completed	7/15/2022 6:07:37 PM	4
33		Completed	7/15/2022 6:21:05 PM	5
34		Completed	7/15/2022 6:33:25 PM	6
35		Completed	7/15/2022 6:46:52 PM	7
36		Completed	7/15/2022 6:59:12 PM	8
37		Completed	7/15/2022 7:11:42 PM	9
38		Completed	7/15/2022 7:24:03 PM	10
39		Completed	7/15/2022 7:36:25 PM	11
40		Completed	7/15/2022 7:50:27 PM	1
41		Completed	7/15/2022 8:02:47 PM	2
42		Completed	7/15/2022 8:15:07 PM	3
43		Completed	7/15/2022 8:28:50 PM	4
44		Completed	7/15/2022 8:42:24 PM	5
45		Completed	7/15/2022 8:54:48 PM	12
46		Completed	7/15/2022 9:08:38 PM	13
47		Completed	7/15/2022 9:20:58 PM	14
48		Completed	7/15/2022 9:34:14 PM	15
49		Completed	7/15/2022 9:47:22 PM	16
50		Completed	7/15/2022 10:00:09 PM	17
51		Completed	7/15/2022 10:13:28 PM	18

C:\TOC-L\Data\2022_07_15_001.tlx

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Diluti	Result
52	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.76mg/L
53	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.2799mg/
54	Unknown	NPOC	HS22070069-01DF10		06_07_2022	1.000	NPOC:17.03mg/L
55	Unknown	NPOC	HS22070069-03DF10		06_07_2022	1.000	NPOC:6.224mg/L
56	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:25.34mg/L
57	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.1737mg/
58	Unknown	NPOC	MBLK5-07152022		06_07_2022	1.000	NPOC:0.1850mg/
59	Unknown	NPOC	LCS5-07152022	3100605711	06_07_2022	1.000	NPOC:9.657mg/L
60	Unknown	NPOC	LCSD5-07152022		06_07_2022	1.000	NPOC:9.700mg/L
61	Unknown	NPOC	HS22070477-07		06_07_2022	1.000	NPOC:1.916mg/L
62	Unknown	NPOC	HS22070477-07MS		06_07_2022	1.000	NPOC:11.41mg/L
63	Unknown	NPOC	HS22070477-08		06_07_2022	1.000	NPOC:0.5754mg/
64	Unknown	NPOC	HS22070477-09		06_07_2022	1.000	NPOC:1.337mg/L
65	Unknown	NPOC	HS22070478-01		06_07_2022	1.000	NPOC:0.5219mg/
66	Unknown	NPOC	HS22070478-02	TOC_W DISS 5310B	06_07_2022	1.000	NPOC:0.6237mg/
67	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:25.09mg/L
68	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.1239mg/

C:\TOC-L\Data\2022_07_15_001.tlx

	Notes	Status	Date / Time	Vial
52		Completed	7/15/2022 10:27:45 PM	1
53		Completed	7/15/2022 10:40:05 PM	2
54		Completed	7/15/2022 10:54:29 PM	19
55		Completed	7/15/2022 11:07:47 PM	20
56		Completed	7/15/2022 11:22:06 PM	21
57		Completed	7/15/2022 11:34:25 PM	22
58		Completed	7/15/2022 11:46:47 PM	3
59		Completed	7/16/2022 12:00:34 AM	4
60		Completed	7/16/2022 12:14:10 AM	5
61		Completed	7/16/2022 12:26:50 AM	23
62		Completed	7/16/2022 12:40:20 AM	24
63		Completed	7/16/2022 12:52:40 AM	25
64		Completed	7/16/2022 1:05:01 AM	26
65		Completed	7/16/2022 1:17:23 AM	27
66		Completed	7/16/2022 1:29:44 AM	28
67		Completed	7/16/2022 1:44:26 AM	21
68		Completed	7/16/2022 1:56:46 AM	22

TOC-Control L Report

2022_07_15_001.tlx

Instr.Information
Instrument Options TOC/ASI/IC Unit
Catalyst Regular Sensitivity

Sample
Sample Name: CCV
Sample ID:
Origin: 06_07_3033_CAL.cal
Status Completed
Chk. Result

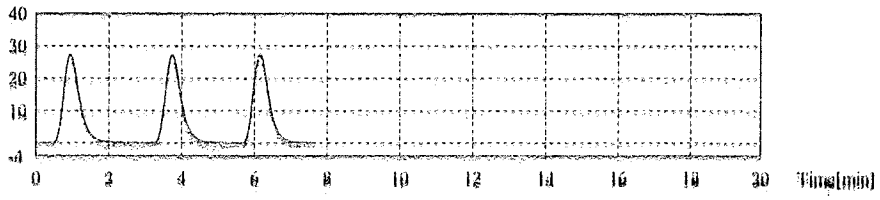
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.05mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.62	25.00mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 11:55:13 AM
2	83.67	25.02mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 11:57:54 AM
3	84.09	25.14mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:00:38 PM

Mean Area 83.79
Mean Conc. 25.05mg/L



Sample
Sample Name: CCB
Sample ID:
Origin: 06_07_3033_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1927mg/L

1. Det

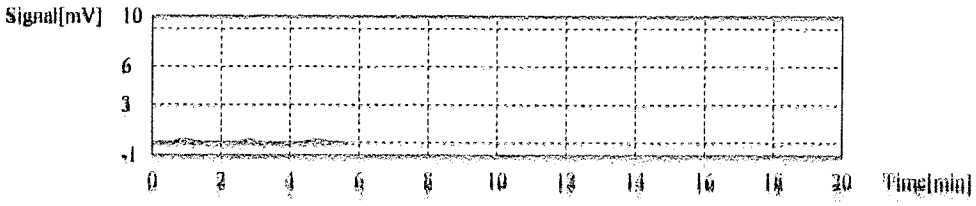
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6698	0.2003mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:08:41 PM
2	0.5899	0.1764mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:10:48 PM
3	0.6734	0.2013mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:12:55 PM

TOC-Control L Report

2022_07_15_001.tlx

Mean Area 0.6444
Mean Conc. 0.1927mg/L



Sample

Sample Name: MBLK2-07152022
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

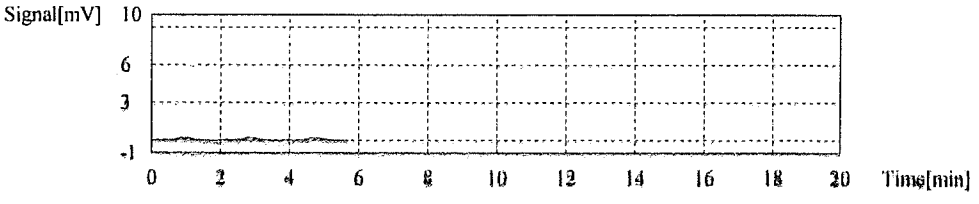
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1524mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	0.4627	0.1383mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:49:24 PM
2	0.5526	0.1652mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:51:32 PM
3	0.5134	0.1535mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 12:53:39 PM

Mean Area 0.5096
Mean Conc. 0.1524mg/L



Sample

Sample Name: LCS2-07152022
Sample ID: 3100605711
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.733mg/L

1. Det

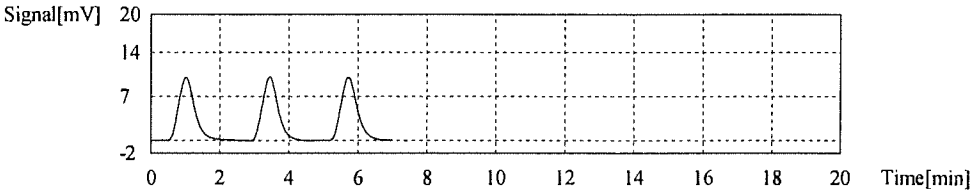
Anal.: NPOC

TOC-Control L Report

2022_07_15_001.tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.59	9.744mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:02:13 PM
2	32.30	9.657mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:04:46 PM
3	32.77	9.798mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:07:18 PM

Mean Area 32.55
Mean Conc. 9.733mg/L



Sample

Sample Name: LCSD2-07152022
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

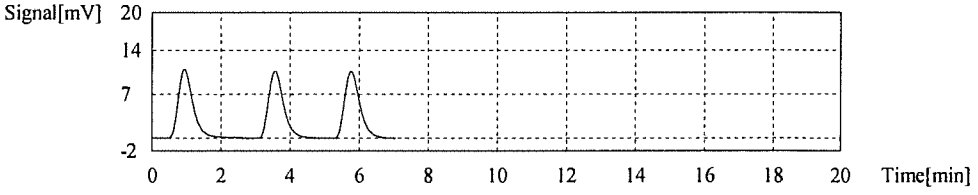
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.761mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.75	9.792mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:16:04 PM
2	32.39	9.684mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:18:31 PM
3	32.80	9.807mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:20:58 PM

Mean Area 32.65
Mean Conc. 9.761mg/L



Sample

Sample Name: HS22070020-01
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.299mg/L

1. Det

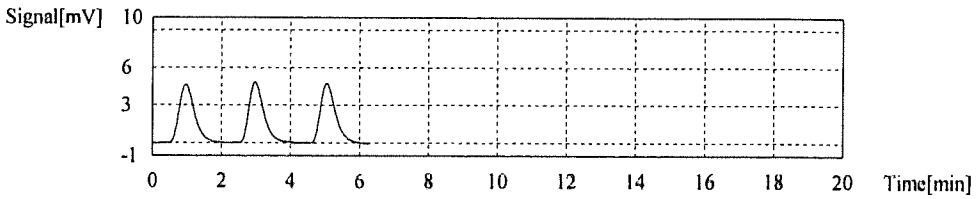
TOC-Control L Report

2022_07_15_001.tlx

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.26	4.264mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:41:32 PM
2	14.29	4.273mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:43:49 PM
3	14.58	4.359mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:46:12 PM

Mean Area 14.38
Mean Conc. 4.299mg/L



Sample

Sample Name: HS22070020-01MS
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

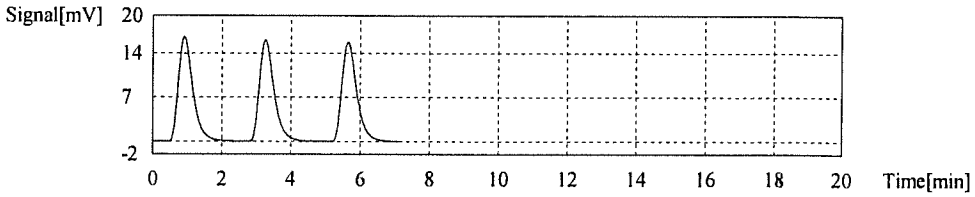
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:14.33mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	48.50	14.50mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:54:41 PM
2	47.66	14.25mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:57:18 PM
3	47.58	14.23mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 1:59:55 PM

Mean Area 47.91
Mean Conc. 14.33mg/L



Sample

Sample Name: HS22070020-02
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:63.01mg/L

TOC-Control L Report

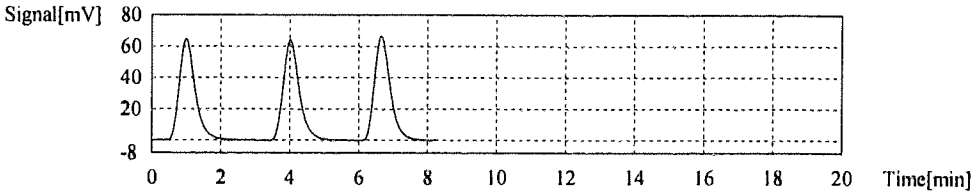
2022_07_15_001.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	209.3	62.58mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 2:09:03 PM
2	210.4	62.91mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 2:11:59 PM
3	212.5	63.54mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 2:14:49 PM

Mean Area 210.7
Mean Conc. 63.01mg/L



Sample

Sample Name: HS22070020-03
Sample ID: TOC_W 5310B
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

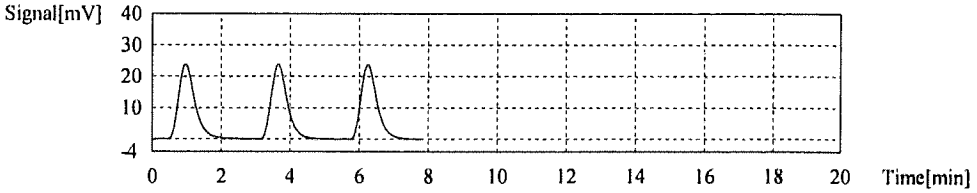
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.41mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	79.05	23.64mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 2:23:37 PM
2	77.77	23.25mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 2:26:29 PM
3	78.02	23.33mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 2:29:16 PM

Mean Area 78.28
Mean Conc. 23.41mg/L



Sample

Sample Name: HS22070020-09
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

TOC-Control L Report

2022_07_15_001.tlx

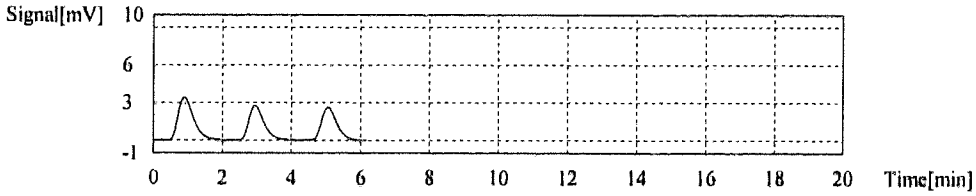
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.685mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.62	3.175mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 2:37:26 PM
2	8.389	2.508mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 2:39:45 PM
3	7.929	2.371mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 2:42:01 PM

Mean Area 8.979
Mean Conc. 2.685mg/L



Sample

Sample Name: CCV
Sample ID: 320016206
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

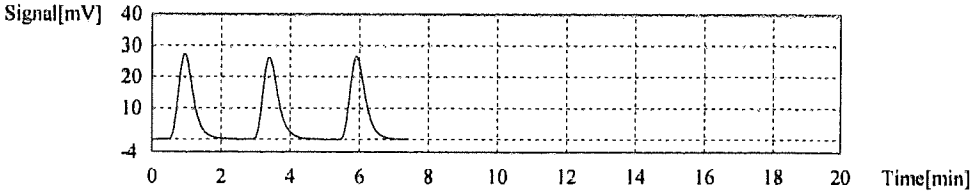
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.80mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.58	24.69mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 3:04:38 PM
2	82.52	24.67mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 3:07:24 PM
3	83.74	25.04mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 3:10:06 PM

Mean Area 82.95
Mean Conc. 24.80mg/L



Sample

TOC-Control L Report

2022_07_15_001.tlx

Sample Name: CCB
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

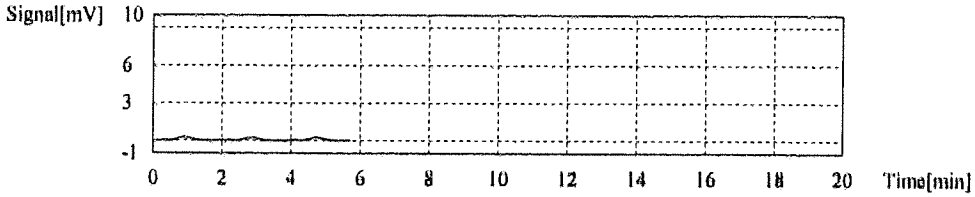
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1924mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date/Time
1	0.6767	0.2023mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 3:18:09 PM
2	0.6688	0.2000mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 3:20:17 PM
3	0.5845	0.1748mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/15/2022 3:22:23 PM

Mean Area 0.6433
Mean Conc. 0.1924mg/L



C:\TOC-L\Data\2022_07_16_001.tlx

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Dilut	Result
1	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:25.36mg/L
2	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.1123mg/
3	Unknown	NPOC	MBLK-07162022		06_07_2022	1.000	NPOC:0.09310m
4	Unknown	NPOC	LCS-07162022	3100605711	06_07_2022	1.000	NPOC:9.688mg/L
5	Unknown	NPOC	LCSD-07162022		06_07_2022	1.000	NPOC:9.713mg/L
6	Unknown	NPOC	HS22070547-01	TOC_DISS_5310B	06_07_2022	1.000	NPOC:1.378mg/L
7	Unknown	NPOC	HS22070547-01MS		06_07_2022	1.000	NPOC:11.54mg/L
8	Unknown	NPOC	HS22070547-02		06_07_2022	1.000	NPOC:1.651mg/L
9	Unknown	NPOC	HS22070547-03		06_07_2022	1.000	NPOC:1.711mg/L
10	Unknown	NPOC	HS22070547-04		06_07_2022	1.000	NPOC:1.968mg/L
11	Unknown	NPOC	HS22070547-05		06_07_2022	1.000	NPOC:0.8946mg/
12	Unknown	NPOC	HS22070547-06		06_07_2022	1.000	NPOC:2.022mg/L
13	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.89mg/L
14	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.1549mg/
15	Unknown	NPOC	HS22070547-07		06_07_2022	1.000	NPOC:3.727mg/L
16	Unknown	NPOC	HS22070547-08		06_07_2022	1.000	NPOC:3.607mg/L
17	Unknown	NPOC	HS22070547-09		06_07_2022	1.000	NPOC:3.570mg/L
18	Unknown	NPOC	HS22070547-10DF10		06_07_2022	1.000	NPOC:0.3443mg/
19	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.90mg/L
20	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.1835mg/
21	Unknown	NPOC	MBLK-07162022		06_07_2022	1.000	NPOC:0.1342mg/
22	Unknown	NPOC	LCS-07162022	3100605711	06_07_2022	1.000	NPOC:9.652mg/L
23	Unknown	NPOC	LCSD-07162022		06_07_2022	1.000	NPOC:9.751mg/L
24	Unknown	NPOC	HS22070547-11	TOC_DISS_5310B	06_07_2022	1.000	NPOC:2.190mg/L
25	Unknown	NPOC	HS22070547-11MS		06_07_2022	1.000	NPOC:11.62mg/L
26	Unknown	NPOC	HS22070547-12		06_07_2022	1.000	NPOC:2.863mg/L
27	Unknown	NPOC	HS22070547-13		06_07_2022	1.000	NPOC:2.641mg/L
28	Unknown	NPOC	HS22070547-14		06_07_2022	1.000	NPOC:1.650mg/L
29	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:25.44mg/L
30	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.1717mg/
31	Unknown	NPOC	MBLK-07162022		06_07_2022	1.000	NPOC:0.1469mg/
32	Unknown	NPOC	LCS-07162022	3100605711	06_07_2022	1.000	NPOC:9.630mg/L
33	Unknown	NPOC	LCSD-07162022		06_07_2022	1.000	NPOC:9.723mg/L
34	Unknown	NPOC	HS22070154-03	TOC_W	06_07_2022	1.000	NPOC:16.47mg/L
35	Unknown	NPOC	HS22070398-01		06_07_2022	1.000	NPOC:3.485mg/L
36	Unknown	NPOC	HS22070398-02		06_07_2022	1.000	NPOC:3.385mg/L
37	Unknown	NPOC	HS22070212-01		06_07_2022	1.000	NPOC:4.280mg/L
38	Unknown	NPOC	HS22070020-02	TOC_W 5310B	06_07_2022	1.000	NPOC:12.21mg/L
39	Unknown	NPOC	HS22070069-01		06_07_2022	1.000	NPOC:16.28mg/L
40	Unknown	NPOC	HS22070069-03		06_07_2022	1.000	NPOC:11.95mg/L
41	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:25.68mg/L
42	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.1314mg/
43	Unknown	NPOC	HS22070047-01		06_07_2022	1.000	NPOC:11.93mg/L
44	Unknown	NPOC	HS22070047-01MS		06_07_2022	1.000	NPOC:21.39mg/L
45	Unknown	NPOC	HS22070141-01		06_07_2022	1.000	NPOC:21.80mg/L
46	Unknown	NPOC	HS22070217-01		06_07_2022	1.000	NPOC:13.55mg/L
47	Unknown	NPOC	HS22070424-01		06_07_2022	1.000	NPOC:0.1774mg/
48	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:25.75mg/L
49	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.2291mg/

C:\TOC-L\Data\2022_07_16_001.tlx

	Notes	Status	Date / Time	Vial
1		Completed	7/16/2022 12:01:41 PM	1
2		Completed	7/16/2022 12:14:01 PM	2
3		Completed	7/16/2022 12:26:21 PM	3
4		Completed	7/16/2022 12:39:58 PM	4
5		Completed	7/16/2022 12:53:20 PM	5
6		Completed	7/16/2022 1:06:59 PM	6
7		Completed	7/16/2022 1:18:39 PM	7
8		Completed	7/16/2022 1:32:37 PM	8
9		Completed	7/16/2022 1:46:50 PM	9
10		Completed	7/16/2022 2:01:09 PM	10
11		Completed	7/16/2022 2:15:22 PM	11
12		Completed	7/16/2022 2:29:35 PM	12
13		Completed	7/16/2022 2:44:28 PM	1
14		Completed	7/16/2022 2:56:47 PM	2
15		Completed	7/16/2022 3:07:41 PM	13
16		Completed	7/16/2022 3:18:49 PM	14
17		Completed	7/16/2022 3:29:56 PM	15
18		Completed	7/16/2022 3:43:54 PM	16
19		Completed	7/16/2022 3:58:34 PM	1
20		Completed	7/16/2022 4:10:51 PM	2
21		Completed	7/16/2022 4:23:08 PM	3
22		Completed	7/16/2022 4:36:58 PM	4
23		Completed	7/16/2022 4:50:37 PM	5
24		Completed	7/16/2022 5:01:29 PM	17
25		Completed	7/16/2022 5:12:58 PM	18
26		Completed	7/16/2022 5:27:01 PM	19
27		Completed	7/16/2022 5:41:19 PM	20
28		Completed	7/16/2022 5:55:32 PM	21
29		Completed	7/16/2022 6:10:24 PM	22
30		Completed	7/16/2022 6:22:41 PM	23
31		Completed	7/16/2022 6:35:01 PM	3
32		Completed	7/16/2022 6:48:29 PM	4
33		Completed	7/16/2022 7:02:00 PM	5
34		Completed	7/16/2022 7:13:19 PM	24
35		Completed	7/16/2022 7:27:23 PM	25
36		Completed	7/16/2022 7:38:39 PM	26
37		Completed	7/16/2022 7:50:09 PM	27
38		Completed	7/16/2022 8:01:45 PM	28
39		Completed	7/16/2022 8:13:47 PM	29
40		Completed	7/16/2022 8:25:25 PM	30
41		Completed	7/16/2022 8:40:18 PM	22
42		Completed	7/16/2022 8:52:38 PM	23
43		Completed	7/16/2022 9:03:41 PM	31
44		Completed	7/16/2022 9:15:14 PM	32
45		Completed	7/16/2022 9:27:18 PM	33
46		Completed	7/16/2022 9:41:58 PM	34
47		Completed	7/16/2022 9:56:12 PM	35
48		Completed	7/16/2022 10:11:24 PM	22
49		Completed	7/16/2022 10:23:43 PM	23

TOC-Control L Report

2022_07_16_001.tlx

Instr.Information

Instrument Options: TOC/ASI/IC Unit/
Catalyst: Regular Sensitivity

Sample

Sample Name: CCV
Sample ID: 330016306
Origin: 06_07_2022_CAL.cal
Status: Completed
Chk. Result:

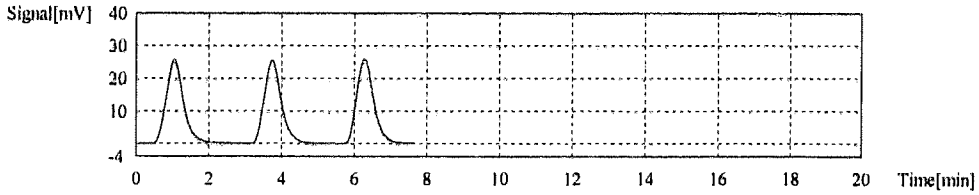
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.44mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	85.09	25.44mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 6:05:01 PM
2	84.35	25.22mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 6:07:49 PM
3	85.79	25.65mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 6:10:24 PM

Mean Area: 85.08
Mean Conc.: 25.44mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06_07_2022_CAL.cal
Status: Completed
Chk. Result:

Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1717mg/L

1. Det

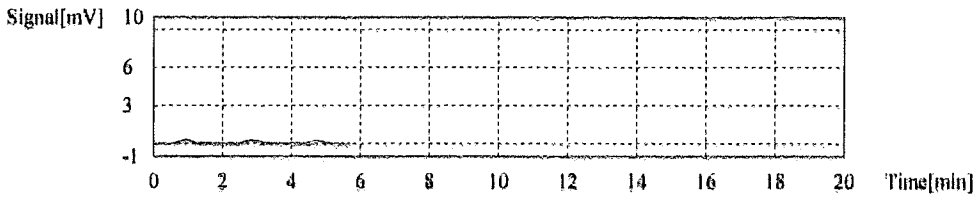
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	0.6177	0.1847mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 6:18:27 PM
2	0.6403	0.1914mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 6:20:34 PM
3	0.4649	0.1390mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 6:22:41 PM

TOC-Control L Report

2022_07_16_001.tlx

Mean Area 0.5743
Mean Conc. 0.1717mg/L



Sample

Sample Name: MBLK-07162022
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

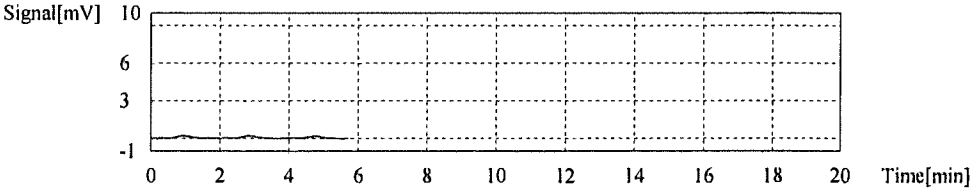
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1469mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5432	0.1624mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 6:30:47 PM
2	0.5469	0.1635mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 6:32:54 PM
3	0.3837	0.1147mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 6:35:01 PM

Mean Area 0.4913
Mean Conc. 0.1469mg/L



Sample

Sample Name: LCS-07162022
Sample ID: 3100605711
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.630mg/L

1. Det

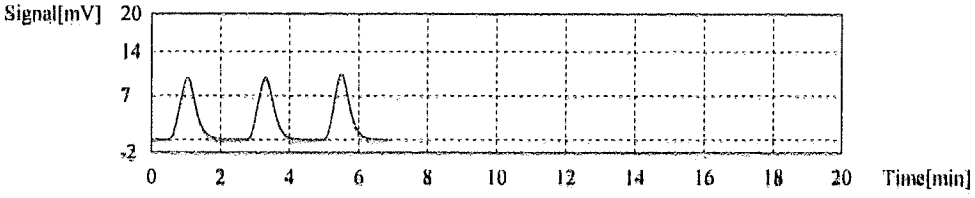
Anal.: NPOC

TOC-Control L Report

2022_07_16_001.tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	31.91	9.541mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 6:43:27 PM
2	31.94	9.550mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 6:45:55 PM
3	32.77	9.798mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 6:48:29 PM

Mean Area 32.21
Mean Conc. 9.630mg/L



Sample

Sample Name: LCSD-07162022
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

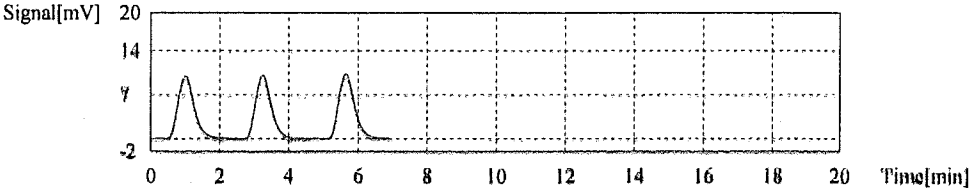
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.723mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.26	9.646mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 6:56:53 PM
2	32.38	9.681mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 6:59:32 PM
3	32.92	9.843mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 7:02:00 PM

Mean Area 32.52
Mean Conc. 9.723mg/L



Sample

Sample Name: HS22070020-02
Sample ID: TOC_W 5310B
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:12.21mg/L

1. Det

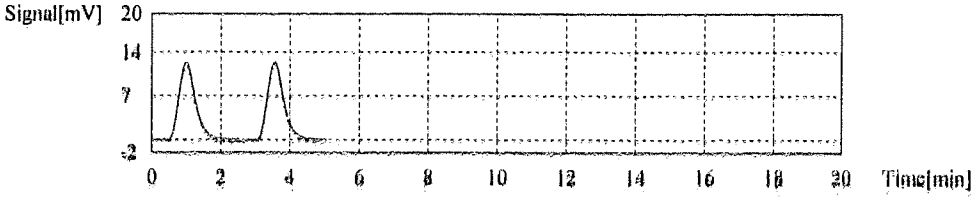
TOC-Control L Report

2022_07_16_001.tlx

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	40.73	12.18mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 7:58:47 PM
2	40.96	12.25mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 8:01:45 PM

Mean Area 40.84
Mean Conc. 12.21mg/L



Sample

Sample Name: CCV
Sample ID: 330016306
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

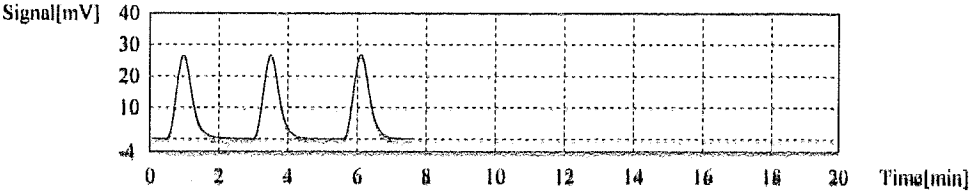
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.68mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	84.64	25.31mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 8:34:39 PM
2	86.09	25.74mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 8:37:31 PM
3	86.95	26.00mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 8:40:18 PM

Mean Area 85.89
Mean Conc. 25.68mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1314mg/L

1. Det

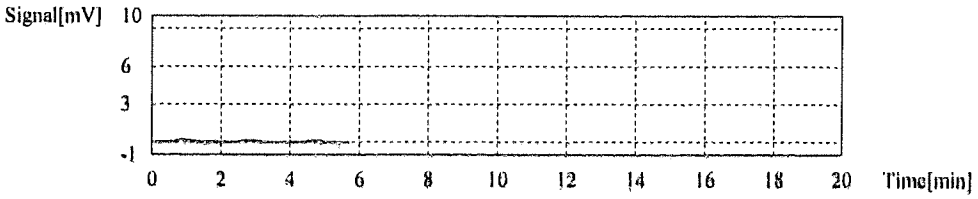
TOC-Control L Report

2022_07_16_001.tlx

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4922	0.1472mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 8:48:22 PM
2	0.4272	0.1277mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 8:50:30 PM
3	0.3989	0.1193mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 8:52:38 PM

Mean Area 0.4394
Mean Conc. 0.1314mg/L



Sample

Sample Name: [illegible]
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

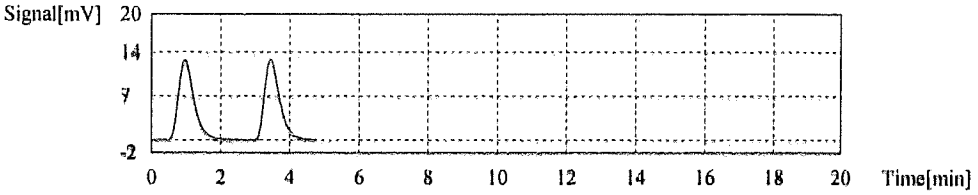
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.93mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	40.11	11.99mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 9:00:56 PM
2	39.68	11.86mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 9:03:41 PM

Mean Area 39.89
Mean Conc. 11.93mg/L



Sample

Sample Name: HS22070047-01MS
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:21.39mg/L

1. Det

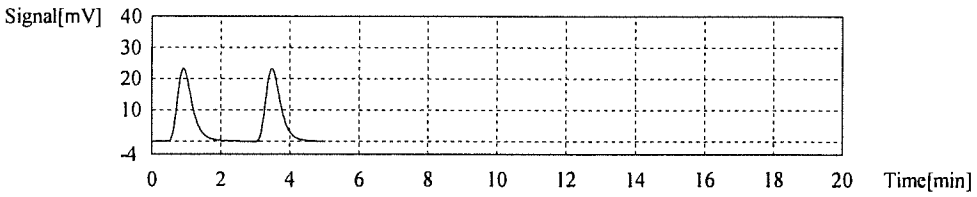
TOC-Control L Report

2022_07_16_001.tlx

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	71.33	21.33mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 9:12:19 PM
2	71.74	21.45mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 9:15:14 PM

Mean Area 71.53
Mean Conc. 21.39mg/L



Sample

Sample Name: CCV
Sample ID: 320016206
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

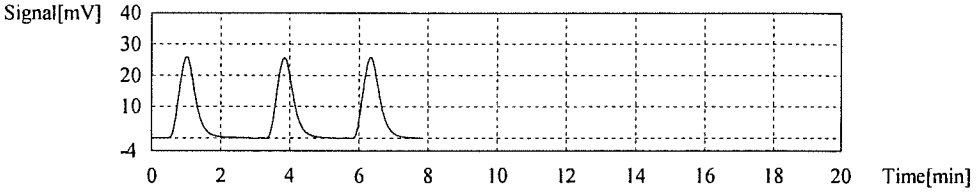
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.75mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	85.31	25.51mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 10:05:54 PM
2	85.93	25.69mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 10:08:39 PM
3	87.08	26.04mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 10:11:24 PM

Mean Area 86.11
Mean Conc. 25.75mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2291mg/L

1. Det

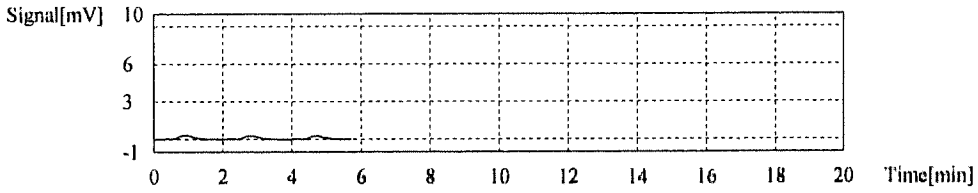
TOC-Control L Report

2022_07_16_001.tlx

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8358	0.2499mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 10:19:27 PM
2	0.7593	0.2270mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 10:21:35 PM
3	0.7041	0.2105mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/16/2022 10:23:43 PM

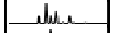
Mean Area 0.7664
Mean Conc. 0.2291mg/L



HS22070020 9056_W IC

ALS WO# HS22070020

Sequence: 070122
Last Update Operator: alshs.nouser

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method	Processing Method	Volume	Status	Inject Time
	STD1		Calibratio	RA1	1.00	1	Anions Program IS	Anions Processing M	5.0	Finished	6/12/2022 7:43:36 PM -05:00
	STD2		Calibratio	RA2	1.00	2	Anions Program IS	Anions Processing M	5.0	Finished	6/12/2022 7:48:55 PM -05:00
	STD3		Calibratio	RA3	1.00	3	Anions Program IS	Anions Processing M	5.0	Finished	6/12/2022 7:54:13 PM -05:00
	STD4		Calibratio	RA4	1.00	4	Anions Program IS	Anions Processing M	5.0	Finished	6/12/2022 7:59:31 PM -05:00
	STD5		Calibratio	RA5	1.00	5	Anions Program IS	Anions Processing M	5.0	Finished	6/12/2022 8:04:49 PM -05:00
	STD6		Calibratio	RA6	1.00	6	Anions Program IS	Anions Processing M	5.0	Finished	6/12/2022 8:10:07 PM -05:00
	ICV		Unknown	RA7	1.00		Anions Program IS	Anions Processing M	5.0	Finished	6/12/2022 8:15:25 PM -05:00
	ICB		Unknown	R7	1.00		Anions Program IS	Anions Processing M	5.0	Finished	6/12/2022 8:26:02 PM -05:00
	CCV		Unknown	R1	1.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 1:02:48 PM -05:00
	CCB		Unknown	R4	1.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 1:18:42 PM -05:00
	LCS	9056-AN	Unknown	R2	1.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 1:29:18 PM -05:00
	HS22070020-01		Unknown	RC6	1.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 1:34:36 PM -05:00
	HS22070020-01MS		Unknown	RC7	1.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 1:39:54 PM -05:00
	HS22070020-01MSD		Unknown	RC8	1.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 1:45:12 PM -05:00
	HS22070020-01DF10		Unknown	RD1	10.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 1:50:30 PM -05:00
	HS22070020-02DF5		Unknown	RD2	5.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 1:55:48 PM -05:00
	HS22070020-02DF50		Unknown	RD3	50.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 2:01:06 PM -05:00
	HS22070020-02DF500		Unknown	RD4	500.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 2:06:25 PM -05:00
	MBLK		Unknown	R5	1.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 2:22:19 PM -05:00
	CCV1		Unknown	R3	1.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 2:27:37 PM -05:00
	CCB		Unknown	R7	1.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 2:38:13 PM -05:00
	HS22070020-04DF2		Unknown	RD7	2.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 2:43:31 PM -05:00
	HS22070020-04DF10		Unknown	RD8	10.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 2:48:49 PM -05:00
	HS22070020-04DF50		Unknown	RE1	50.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 2:54:07 PM -05:00
	CCV		Unknown	R1	1.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 3:47:07 PM -05:00
	CCB		Unknown	R4	1.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 3:57:43 PM -05:00
	CCV1		Unknown	R3	1.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 5:06:37 PM -05:00
	CCB		Unknown	R7	1.00		Anions Program IS	Anions Processing M	5.0	Finished	7/1/2022 5:17:13 PM -05:00

Sequence: 061522
Injection #6: STD6

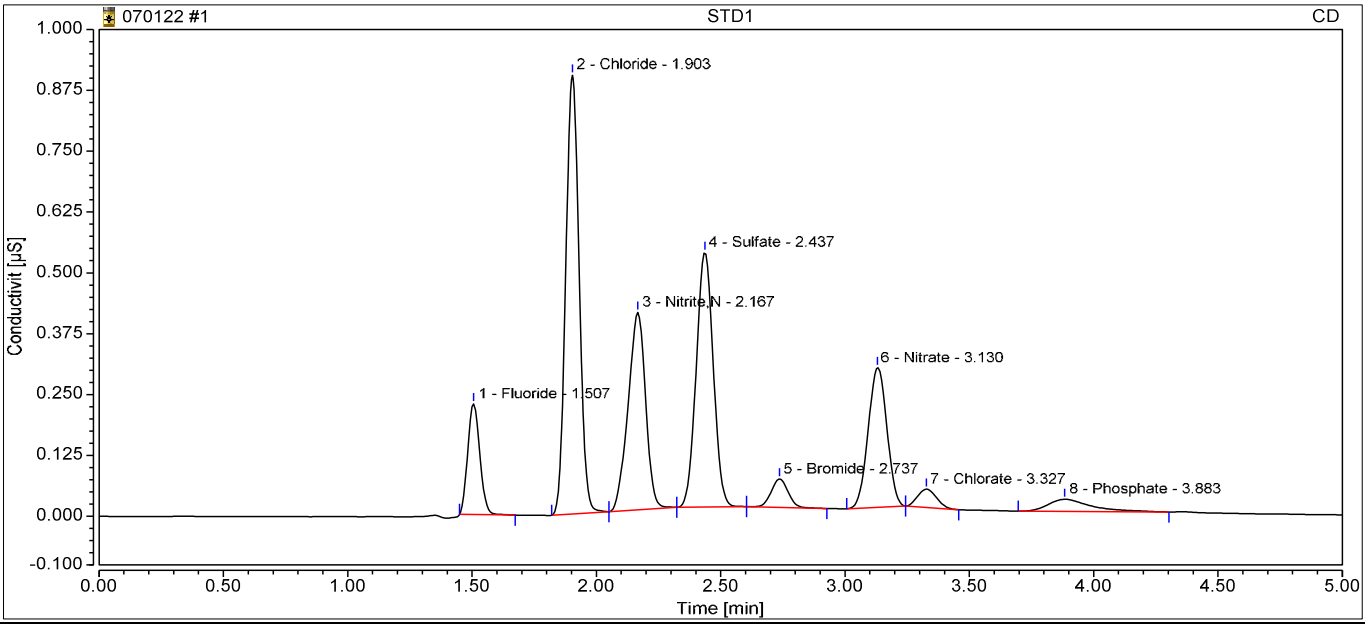
Calibration

Peak No.	Peak Name	Cal.Type	Eval.Type	Number of Points	Rel.Std.Dev. %	Coeff.of Determination	C0 (Offset)	C1 (Slope)	C2 (Curve)
1	*Fluoride*	*Lin, WithOffset, 1/*	*Area*	*6*	*26.4691*	*0.99701*	*-0.0097*	*0.2161*	*0.0000*
2	Chloride	Lin, WithOffset, 1/	Area	6	5.8427	0.99984	-0.0218	0.1418	0.0000
3	Nitrite,N	Lin, WithOffset, 1/	Area	6	26.3006	0.99568	0.0108	0.2746	0.0000
4	Sulfate	Lin, WithOffset, 1/	Area	6	5.9882	0.99984	-0.0169	0.1061	0.0000
5	Bromide	Lin, WithOffset, 1/	Area	6	19.1083	0.99846	-0.0030	0.0626	0.0000
6	Nitrate	Lin, WithOffset, 1/	Area	6	7.6223	0.99974	-0.0112	0.3307	0.0000
7	Chlorate	Lin, WithOffset, 1/	Area	6	16.8078	0.99862	-0.0007	0.0400	0.0000
8	Phosphate	Quad, WithOffset,	Area	6	20.1620	0.99899	-0.0094	0.1193	0.0006
Maximum					**26.4691**	0.99984			
Minimum					5.8427	**0.99568**			

1 STD1

Sample Name:	**STD1**	*Injection Volume:*	**5.00**
Vial Number:	**RA1**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/12/2022 19:43**	*Sample Weight:*	**1.0000**

Run Time:



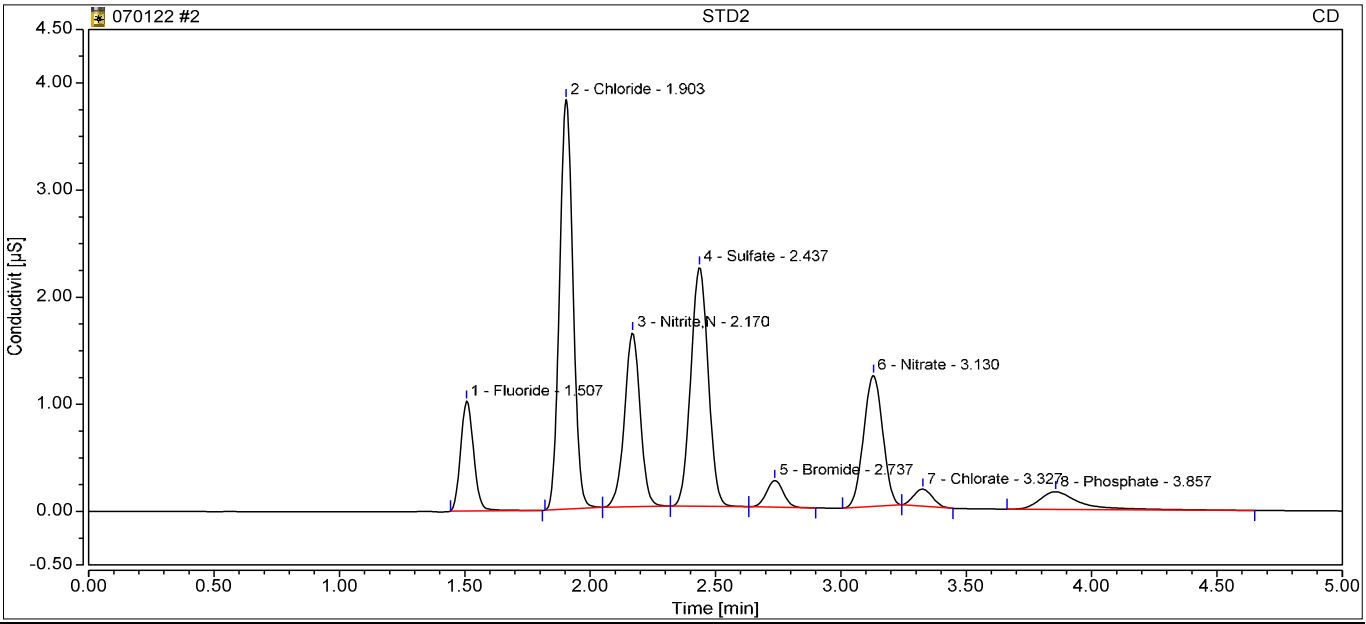
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.013	0.1044	0.1044	1.0000
2	1.90	Chloride	BMB	0.056	0.5484	0.5484	1.0000
3	2.17	Nitrite,N	BMB	0.033	0.0810	0.0810	1.0000
4	2.44	Sulfate	BMB	0.042	0.5504	0.5504	1.0000
5	2.74	Bromide	BMB	0.005	0.1216	0.1216	1.0000
6	3.13	Nitrate	BMB	0.025	0.1097	0.1097	1.0000
7	3.33	Chlorate	BMB	0.003	0.1000	0.1000	1.0000
8	3.88	Phosphate	BMB	0.005	0.1206	0.1206	1.0000
Total:			**0.000**	**0.181**		**1.74**	

2 STD2

Sample Name:	**STD2**	*Injection Volume:*	**5.00**
Vial Number:	**RA2**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/12/2022 19:48**	*Sample Weight:*	**1.0000**

Run Time:

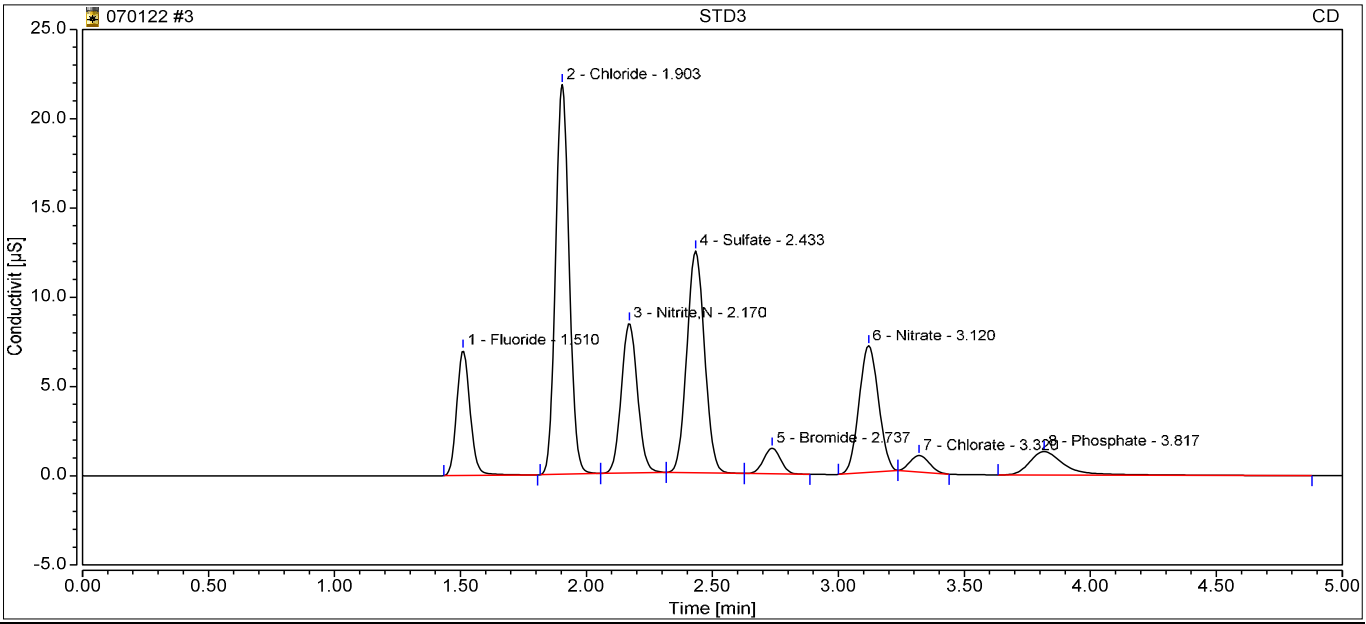


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.062	0.3309	0.3309	1.0000
2	1.90	Chloride	BMB	0.237	1.8250	1.8250	1.0000
3	2.17	Nitrite,N	BMB	0.118	0.3914	0.3914	1.0000
4	2.44	Sulfate	BMB	0.180	1.8530	1.8530	1.0000
5	2.74	Bromide	BMB	0.019	0.3561	0.3561	1.0000
6	3.13	Nitrate	BMB	0.108	0.3602	0.3602	1.0000
7	3.33	Chlorate	BMB	0.014	0.3632	0.3632	1.0000
8	3.86	Phosphate	BMB	0.031	0.3376	0.3376	1.0000
Total:			**0.000**	**0.769**		**5.82**	

3 STD3			
Sample Name:	**STD3**	*Injection Volume:*	**5.00**
Vial Number:	**RA3**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/12/2022 19:54**	*Sample Weight:*	**1.0000**

Run Time:



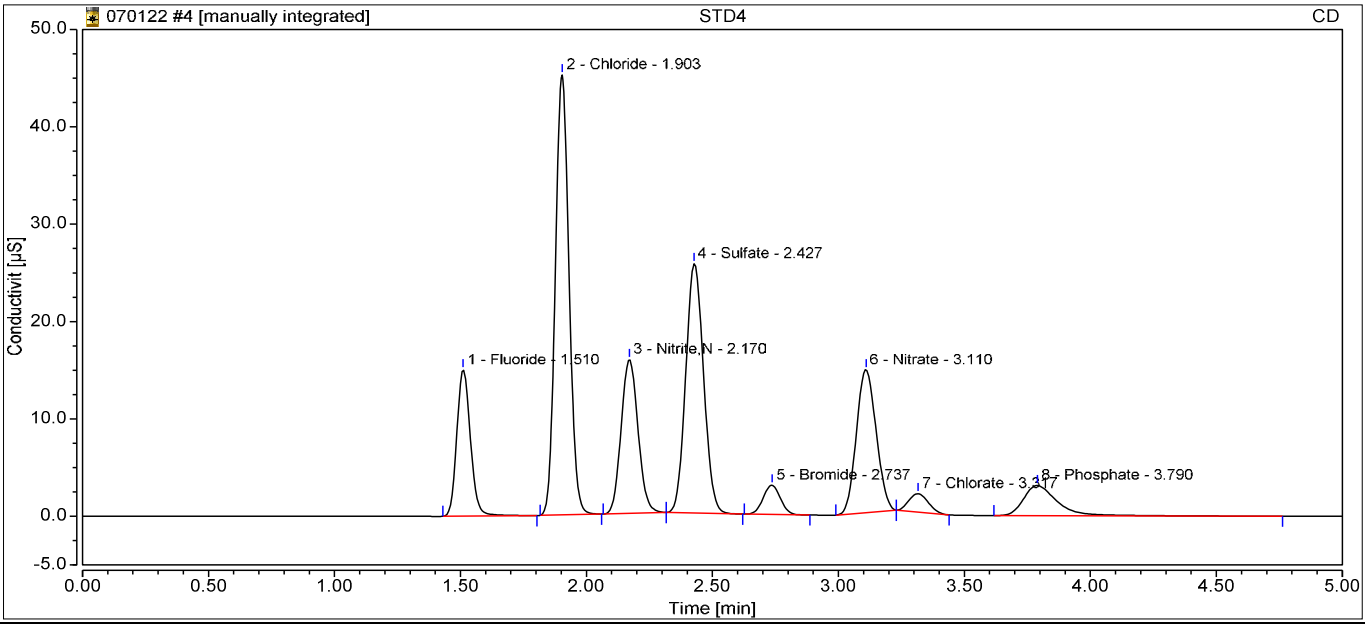
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.433	2.0503	2.0503	1.0000
2	1.90	Chloride	BMB	1.366	9.7882	9.7882	1.0000
3	2.17	Nitrite,N	BMB	0.624	2.2318	2.2318	1.0000
4	2.43	Sulfate	BMB	1.012	9.6989	9.6989	1.0000
5	2.74	Bromide	BMB	0.113	1.8543	1.8543	1.0000
6	3.12	Nitrate	BMB	0.635	1.9555	1.9555	1.0000
7	3.32	Chlorate	BMB	0.081	2.0522	2.0522	1.0000
8	3.82	Phosphate	BMB	0.211	1.8314	1.8314	1.0000
Total:			**0.000**	**4.476**		**31.46**	

4 STD4

Sample Name:	**STD4**	*Injection Volume:*	**5.00**
Vial Number:	**RA4**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/12/2022 19:59**	*Sample Weight:*	**1.0000**

Run Time:



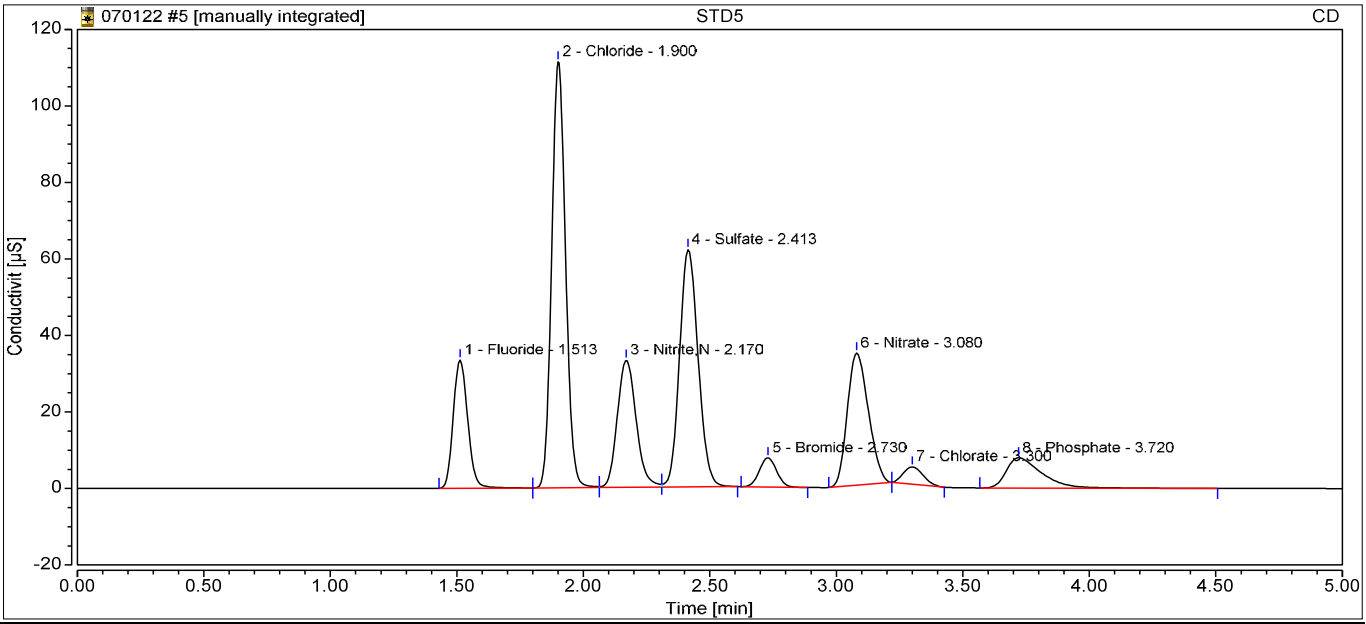
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.947	4.4264	4.4264	1.0000
2	1.90	Chloride	BMB	2.841	20.1942	20.1942	1.0000
3	2.17	Nitrite,N	BMb*	1.227	4.4291	4.4291	1.0000
4	2.43	Sulfate	bMB*	2.105	19.9970	19.9970	1.0000
5	2.74	Bromide	BMB	0.239	3.8700	3.8700	1.0000
6	3.11	Nitrate	BMB	1.337	4.0782	4.0782	1.0000
7	3.32	Chlorate	BMB	0.170	4.2596	4.2596	1.0000
8	3.79	Phosphate	BMB	0.484	4.0508	4.0508	1.0000
Total:			**0.000**	**9.351**		**65.31**	

5 STD5

Sample Name:	**STD5**	*Injection Volume:*	**5.00**
Vial Number:	**RA5**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/12/2022 20:04**	*Sample Weight:*	**1.0000**

Run Time:

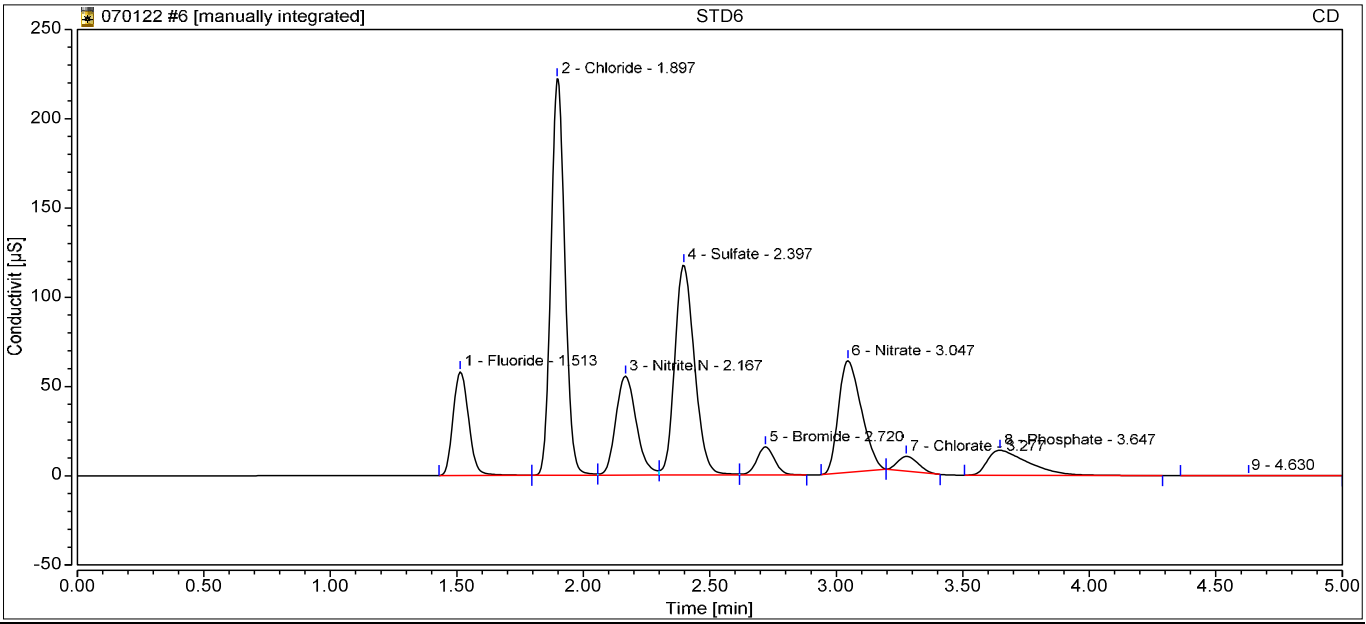


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMb*	2.229	10.3595	10.3595	1.0000
2	1.90	Chloride	bM *	7.078	50.0739	50.0739	1.0000
3	2.17	Nitrite,N	M *	2.867	10.4035	10.4035	1.0000
4	2.41	Sulfate	MB*	5.277	49.8959	49.8959	1.0000
5	2.73	Bromide	BMB	0.604	9.6932	9.6932	1.0000
6	3.08	Nitrate	BMB	3.328	10.0976	10.0976	1.0000
7	3.30	Chlorate	BMB	0.412	10.2967	10.2967	1.0000
8	3.72	Phosphate	BMB	1.283	10.2769	10.2769	1.0000
Total:			**0.000**	**23.078**		**161.10**	

6 STD6			
Sample Name:	**STD6**	*Injection Volume:*	**5.00**
Vial Number:	**RA6**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/12/2022 20:10**	*Sample Weight:*	**1.0000**

Run Time:

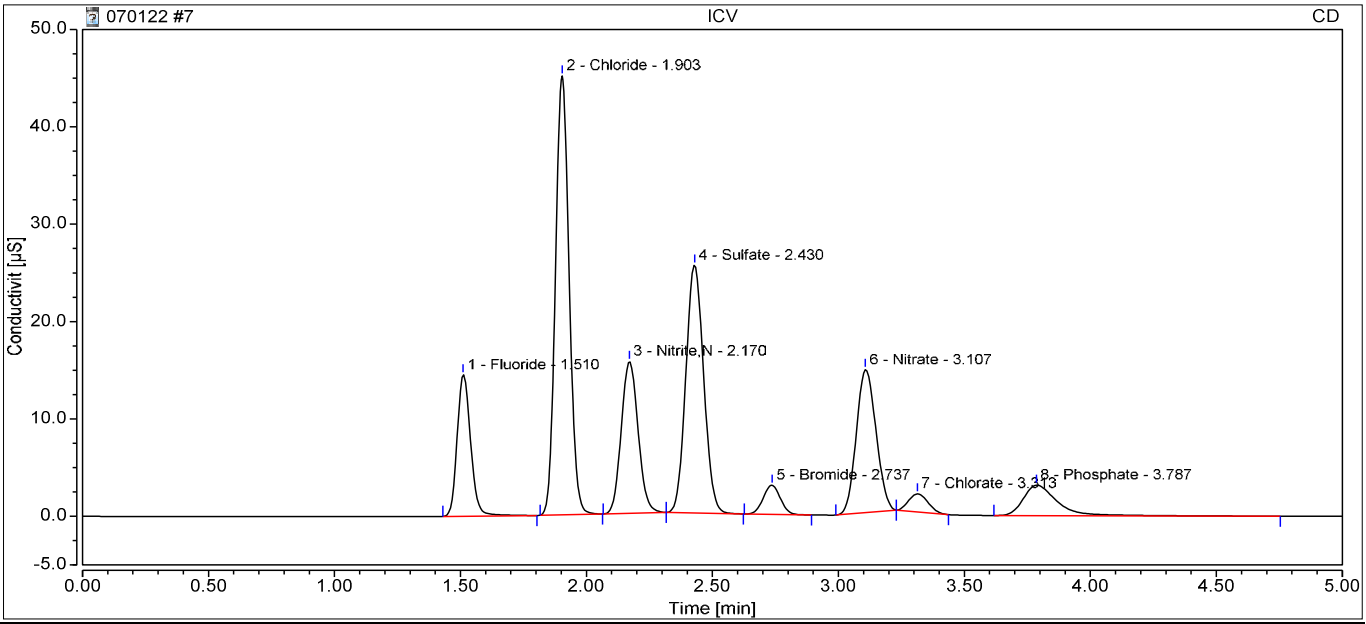


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMb*	4.146	19.2286	19.2286	1.0000
2	1.90	Chloride	bM *	14.167	100.0702	100.0702	1.0000
3	2.17	Nitrite,N	M *	5.217	18.9633	18.9633	1.0000
4	2.40	Sulfate	M *	10.646	100.5049	100.5049	1.0000
5	2.72	Bromide	MB*	1.287	20.6049	20.6049	1.0000
6	3.05	Nitrate	BMB	6.569	19.8987	19.8987	1.0000
7	3.28	Chlorate	BMB	0.777	19.4282	19.4282	1.0000
8	3.65	Phosphate	BMB	2.612	19.8798	19.8798	1.0000
Total:			**0.000**	**45.421**		**318.58**	

7 ICV			
Sample Name:	**ICV**	*Injection Volume:*	**5.00**
Vial Number:	**RA7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/12/2022 20:15**	*Sample Weight:*	**1.0000**

Run Time:



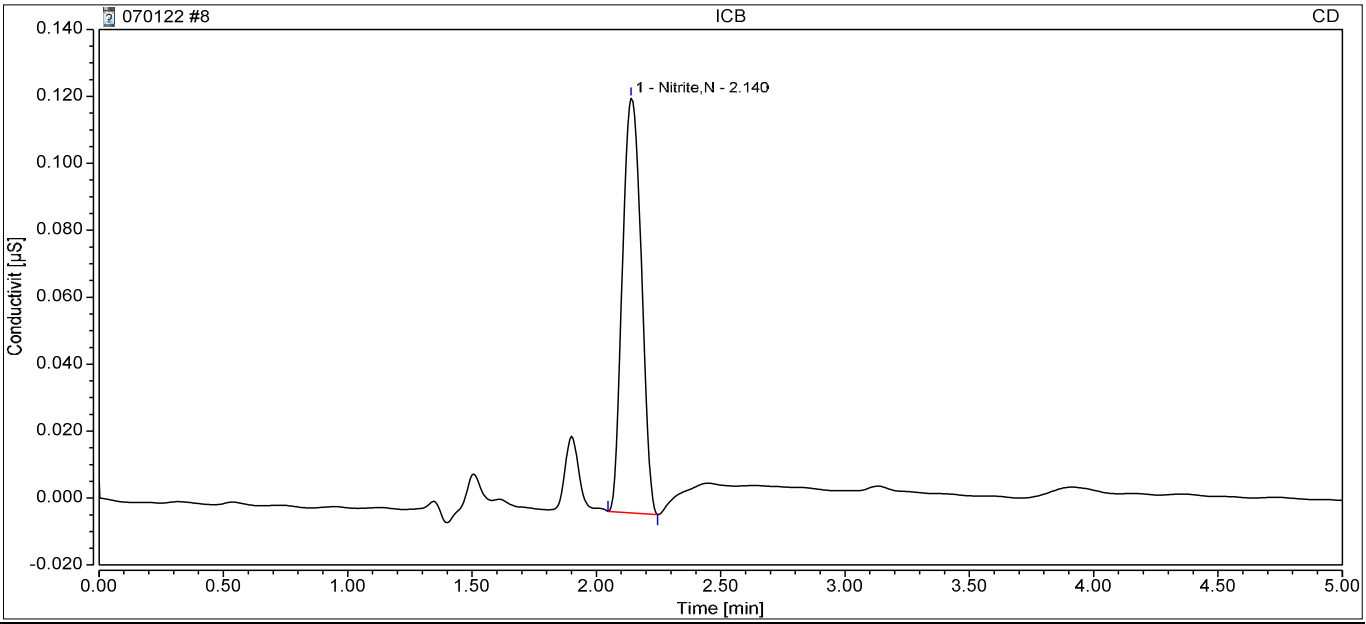
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.906	4.2360	4.2360	1.0000
2	1.90	Chloride	BMB	2.829	20.1029	20.1029	1.0000
3	2.17	Nitrite,N	BMB	1.206	4.3541	4.3541	1.0000
4	2.43	Sulfate	BMB	2.088	19.8413	19.8413	1.0000
5	2.74	Bromide	BMB	0.236	3.8269	3.8269	1.0000
6	3.11	Nitrate	BMB	1.333	4.0636	4.0636	1.0000
7	3.31	Chlorate	BMB	0.166	4.1702	4.1702	1.0000
8	3.79	Phosphate	BMB	0.491	4.1057	4.1057	1.0000
Total:			**0.000**	**9.255**		**64.70**	

8 ICB

Sample Name:	**ICB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**06/12/2022 20:26**	*Sample Weight:*	**1.0000**

Run Time:



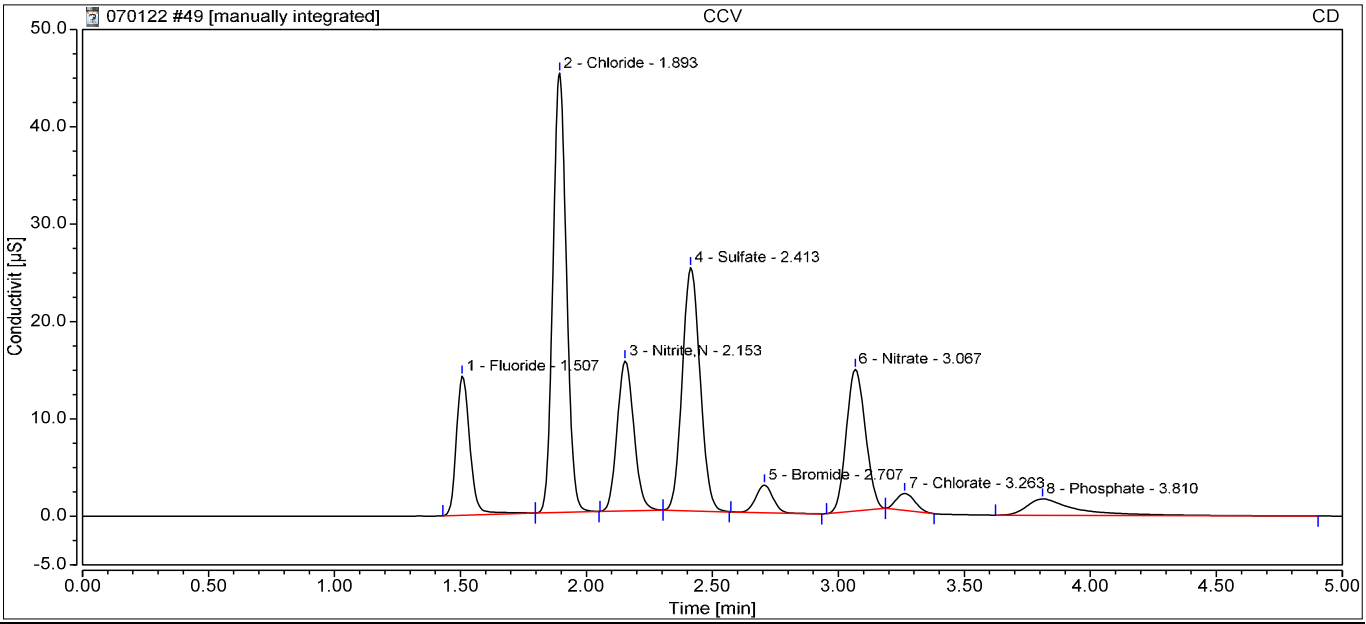
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
1	2.14	Nitrite,N	BMB	0.011	0.0002	0.0002	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.011**		**0.00**	

49 CCV

Sample Name:	**CCV**	*Injection Volume:*	**5.00**
Vial Number:	**R1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/01/2022 13:02**	*Sample Weight:*	**1.0000**

Run Time:



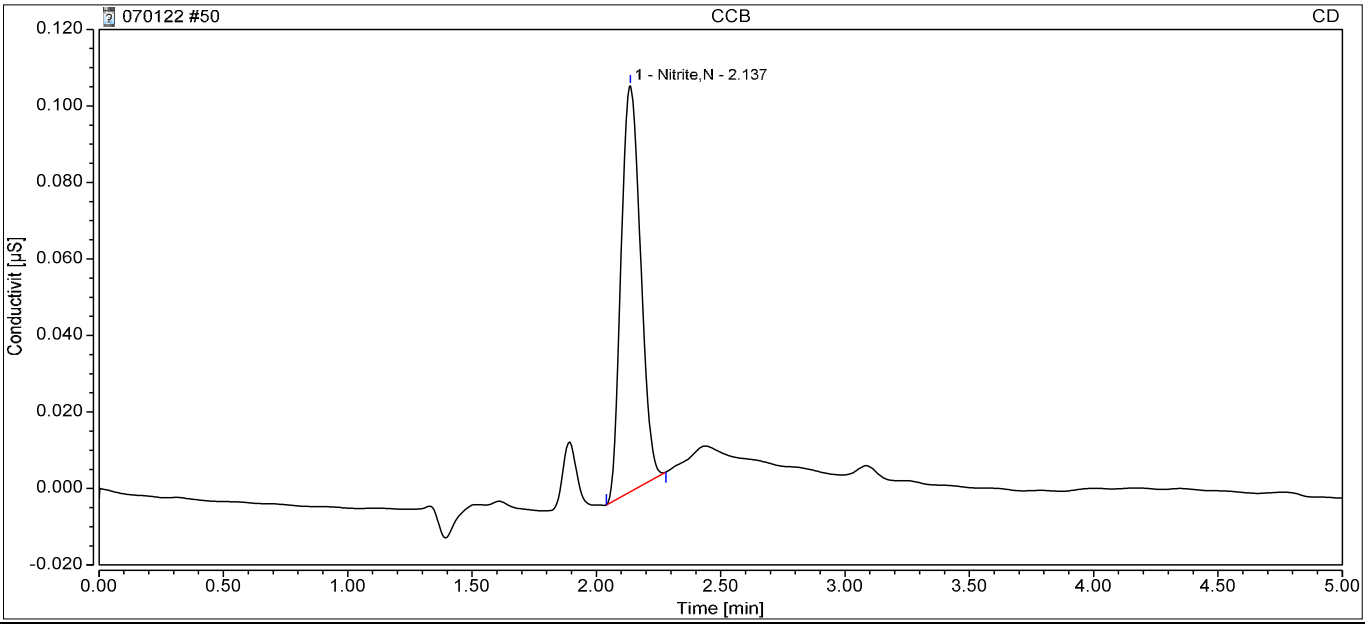
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.890	4.1607	4.1607	1.0000
2	1.89	Chloride	BMB	2.801	19.9098	19.9098	1.0000
3	2.15	Nitrite,N	BMb*	1.183	4.2692	4.2692	1.0000
4	2.41	Sulfate	bM *	2.047	19.4543	19.4543	1.0000
5	2.71	Bromide	MB*	0.223	3.6044	3.6044	1.0000
6	3.07	Nitrate	BMB	1.281	3.9082	3.9082	1.0000
7	3.26	Chlorate	BMB	0.152	3.8093	3.8093	1.0000
8	3.81	Phosphate	BMB	0.382	3.2236	3.2236	1.0000
Total:			**0.000**	**8.958**		**62.34**	

50 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/01/2022 13:18**	*Sample Weight:*	**1.0000**

Run Time:



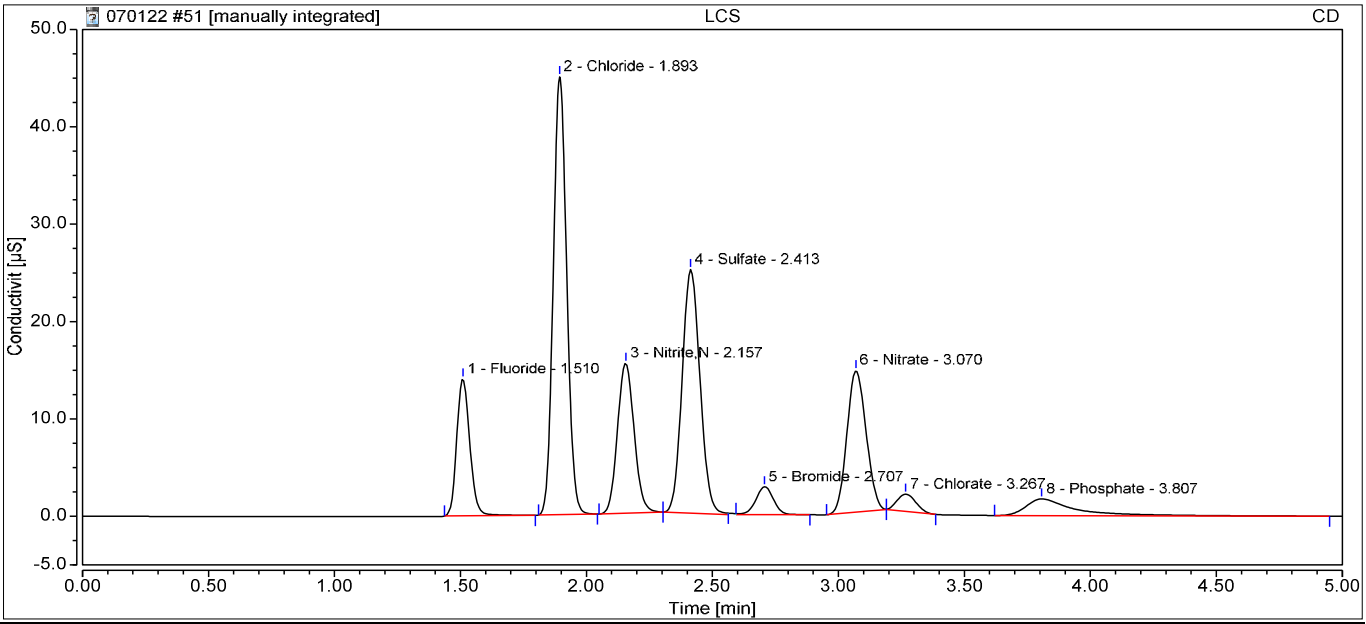
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
1	2.14	Nitrite,N	BMB	0.010	n.a.	n.a.	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.010**		**0.00**	

51 LCS

Sample Name:	**LCS**	*Injection Volume:*	**5.00**
Vial Number:	**R2**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/01/2022 13:29**	*Sample Weight:*	**1.0000**

Run Time:



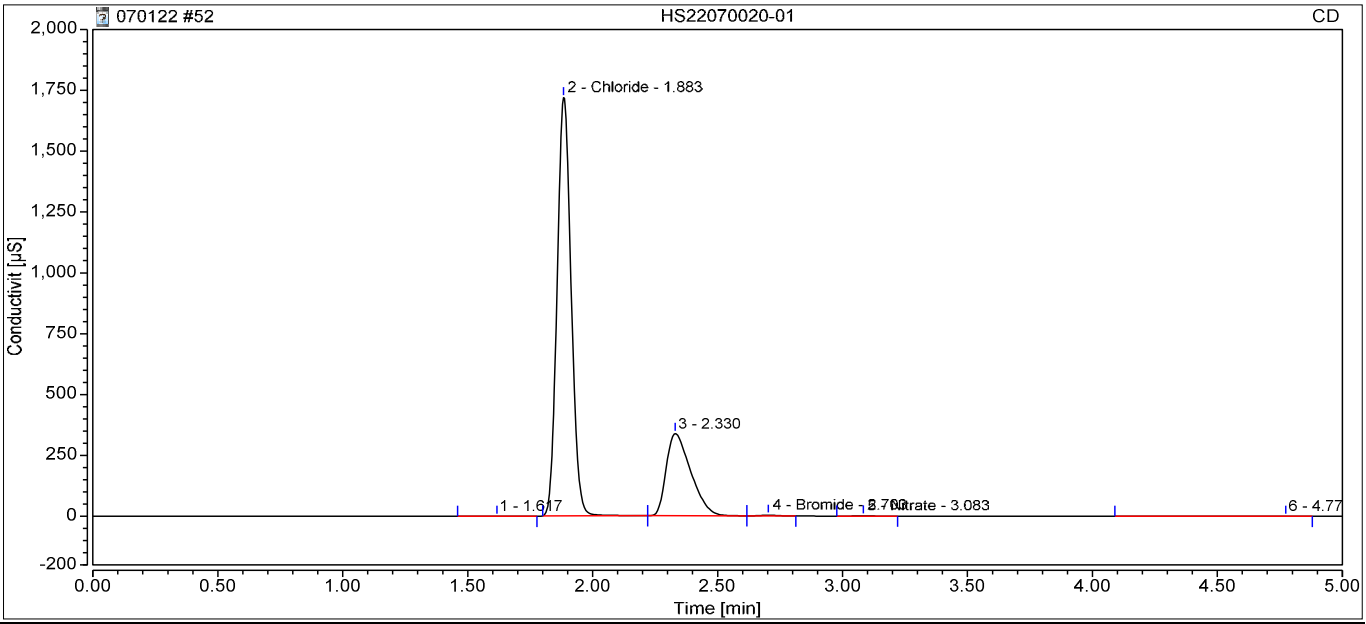
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.852	3.9850	3.9850	1.0000
2	1.89	Chloride	BMB	2.781	19.7642	19.7642	1.0000
3	2.16	Nitrite,N	BMb*	1.178	4.2501	4.2501	1.0000
4	2.41	Sulfate	bM *	2.053	19.5056	19.5056	1.0000
5	2.71	Bromide	MB*	0.233	3.7645	3.7645	1.0000
6	3.07	Nitrate	BMB	1.279	3.9013	3.9013	1.0000
7	3.27	Chlorate	BMB	0.153	3.8279	3.8279	1.0000
8	3.81	Phosphate	BMB	0.388	3.2760	3.2760	1.0000
Total:			**0.000**	**8.915**		**62.27**	

52 HS22070020-01

Sample Name:	**HS22070020-01**	*Injection Volume:*	**5.00**
Vial Number:	**RC6**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/01/2022 13:34**	*Sample Weight:*	**1.0000**

Run Time:



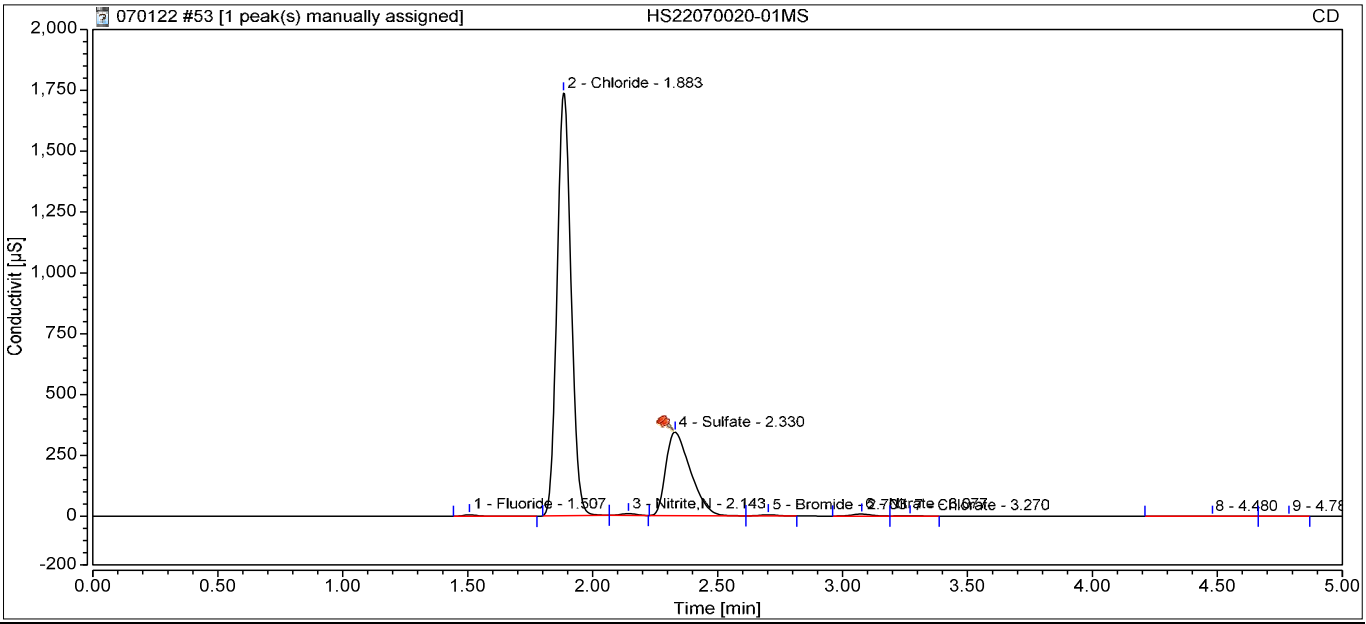
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
2	1.88	Chloride	BMB	112.151	791.1428	791.1428	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
4	2.70	Bromide	BMB	0.219	3.5414	3.5414	1.0000
5	3.08	Nitrate	BMB	0.057	0.2067	0.2067	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**112.427**		**794.89**	

53 HS22070020-01MS

Sample Name:	**HS22070020-01MS**	*Injection Volume:*	**5.00**
Vial Number:	**RC7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/01/2022 13:39**	*Sample Weight:*	**1.0000**

Run Time:



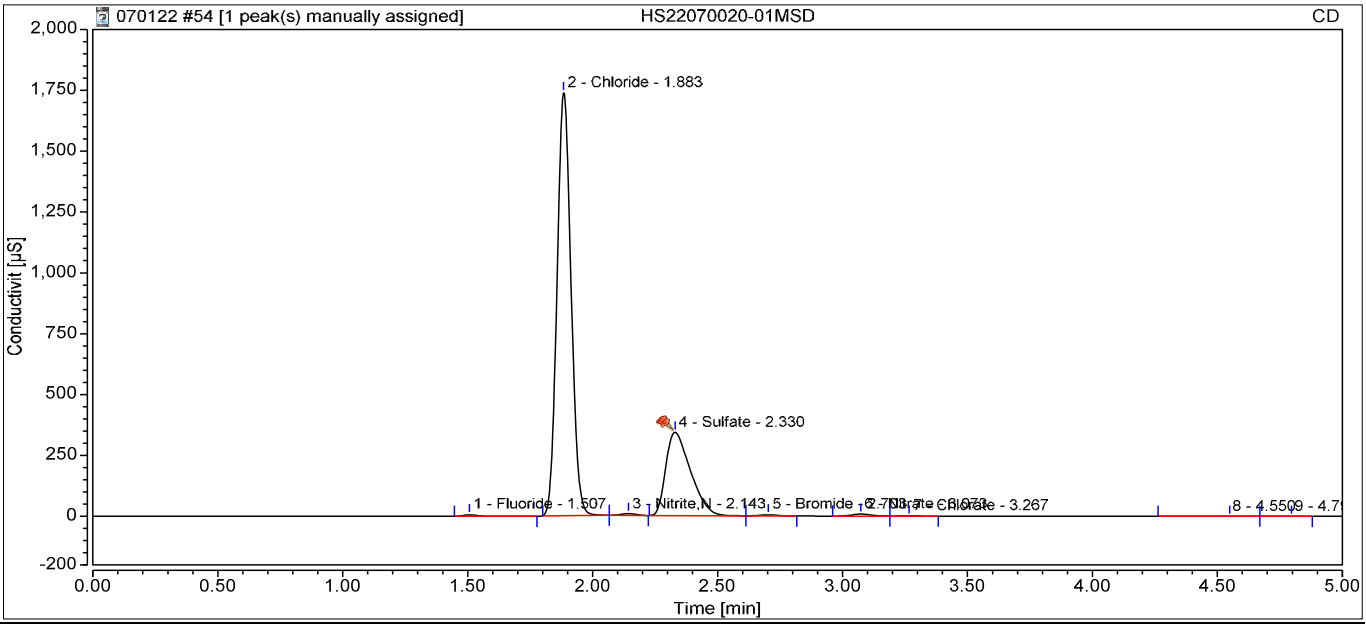
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.436	2.0603	2.0603	1.0000
2	1.88	Chloride	BMB	112.949	796.7686	796.7686	1.0000
3	2.14	Nitrite,N	BMB	0.517	1.8453	1.8453	1.0000
4	2.33	Sulfate	BMB^	39.146	369.1365	369.1365	1.0000
5	2.70	Bromide	BMB	0.343	5.5341	5.5341	1.0000
6	3.08	Nitrate	BMB	0.729	2.2397	2.2397	1.0000
7	3.27	Chlorate	BMB	0.076	1.9206	1.9206	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**154.198**		**1179.51**	

54 HS22070020-01MSD

Sample Name:	**HS22070020-01MSD**	*Injection Volume:*	**5.00**
Vial Number:	**RC8**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/01/2022 13:45**	*Sample Weight:*	**1.0000**

Run Time:



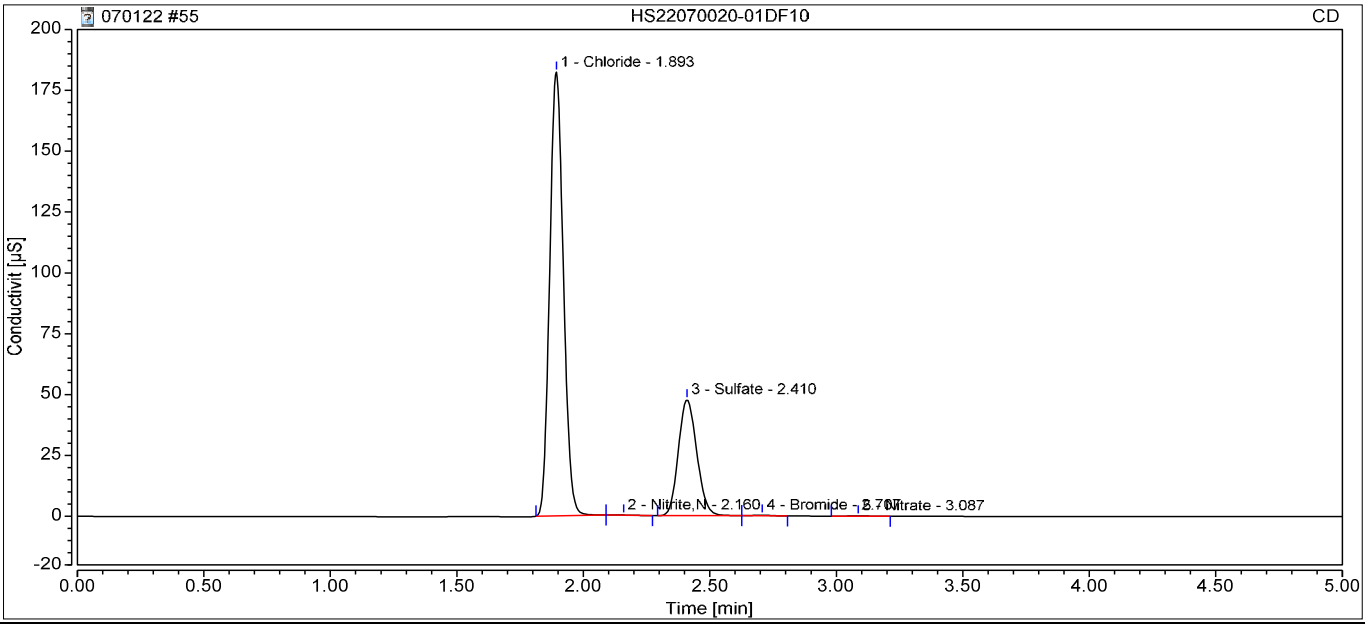
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.433	2.0462	2.0462	1.0000
2	1.88	Chloride	BMB	112.932	796.6495	796.6495	1.0000
3	2.14	Nitrite,N	BMB	0.518	1.8479	1.8479	1.0000
4	2.33	Sulfate	BMB^	39.176	369.4114	369.4114	1.0000
5	2.70	Bromide	BMB	0.343	5.5322	5.5322	1.0000
6	3.07	Nitrate	BMB	0.736	2.2609	2.2609	1.0000
7	3.27	Chlorate	BMB	0.076	1.9244	1.9244	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**154.215**		**1179.67**	

55 HS22070020-01DF10

Sample Name:	**HS22070020-01DF10**	*Injection Volume:*	**5.00**
Vial Number:	**RD1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**10.0000**
Recording Time:	**07/01/2022 13:50**	*Sample Weight:*	**1.0000**

Run Time:



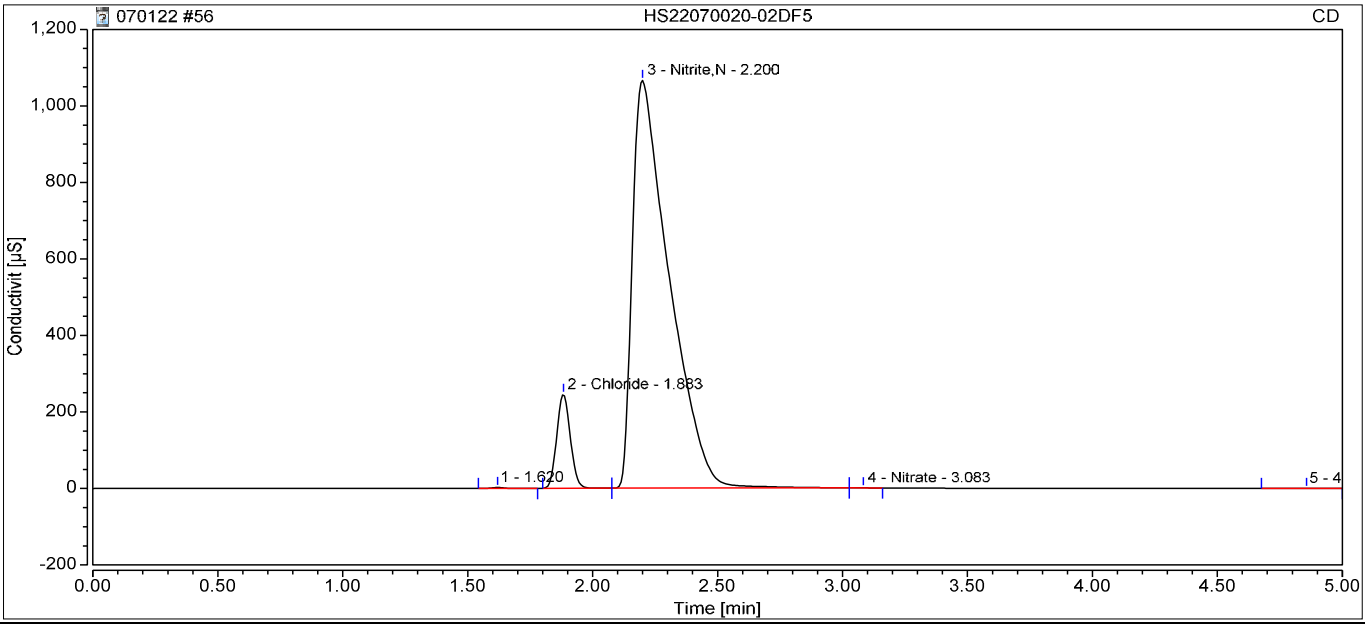
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	10.0000
1	1.89	Chloride	BMB	11.407	80.6029	806.0285	10.0000
2	2.16	Nitrite,N	BMB	0.005	n.a.	n.a.	10.0000
3	2.41	Sulfate	BMB	4.020	38.0457	380.4570	10.0000
4	2.71	Bromide	BMB	0.018	0.3360	3.3597	10.0000
5	3.09	Nitrate	BMB	0.010	0.0634	0.6337	10.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	10.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	10.0000
Total:			**0.000**	**15.459**		**1190.48**	

56 HS22070020-02DF5

Sample Name:	**HS22070020-02DF5**	*Injection Volume:*	**5.00**
Vial Number:	**RD2**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**5.0000**
Recording Time:	**07/01/2022 13:55**	*Sample Weight:*	**1.0000**

Run Time:



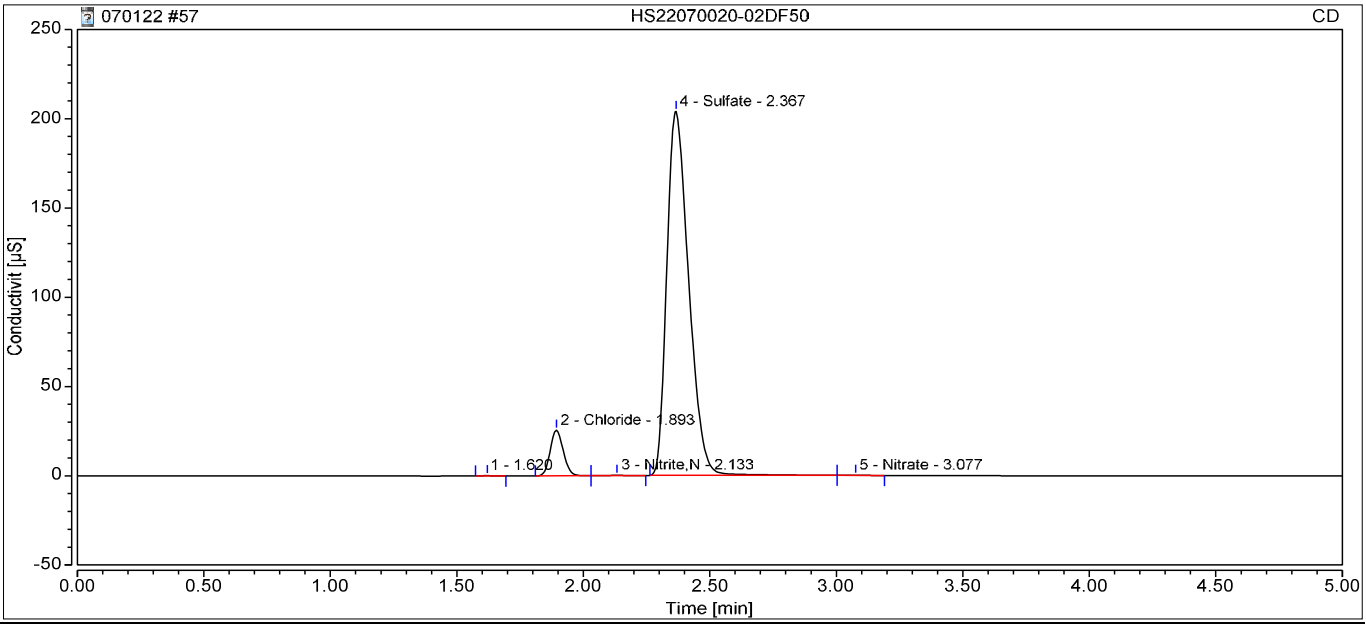
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	5.0000
2	1.88	Chloride	BMB	15.494	109.4300	547.1499	5.0000
3	2.20	Nitrite,N	BMB	181.441	660.8238	3304.1191	5.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	5.0000
4	3.08	Nitrate	BMB	0.006	0.0536	0.2682	5.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	5.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	5.0000
Total:			**0.000**	**196.941**		**3851.54**	

57 HS22070020-02DF50

Sample Name:	**HS22070020-02DF50**	*Injection Volume:*	**5.00**
Vial Number:	**RD3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**50.0000**
Recording Time:	**07/01/2022 14:01**	*Sample Weight:*	**1.0000**

Run Time:



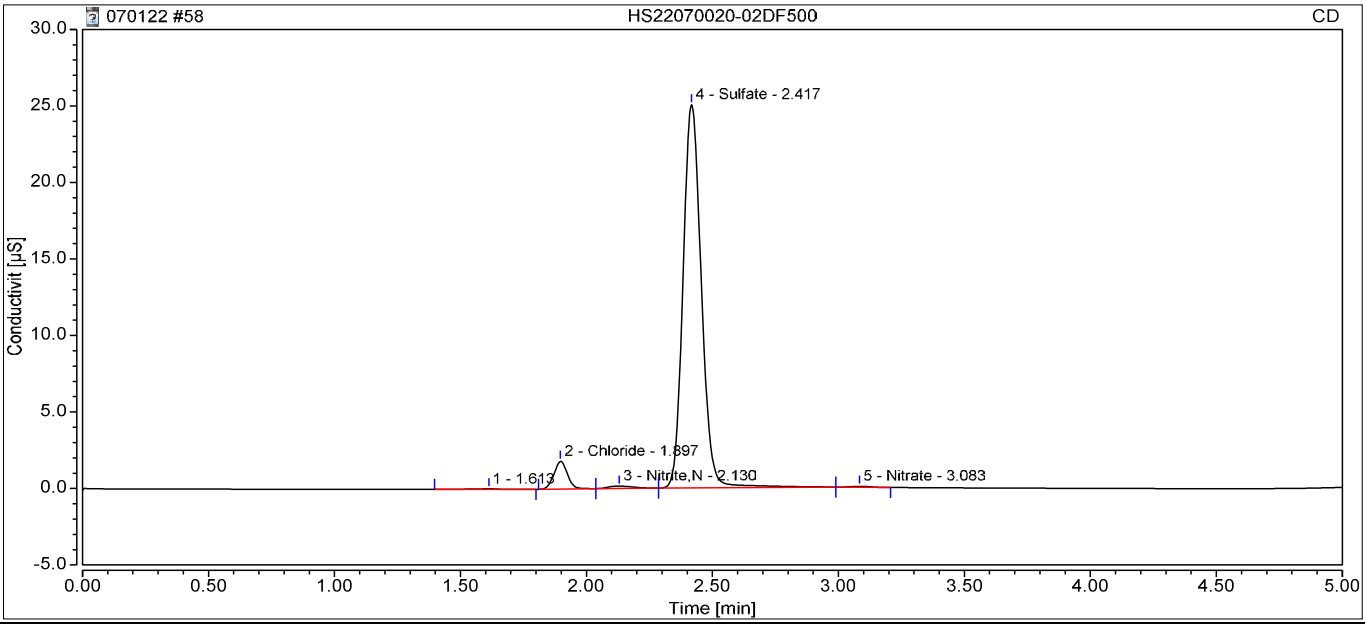
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	50.0000
2	1.89	Chloride	BMB	1.535	10.9811	549.0554	50.0000
3	2.13	Nitrite,N	BMB	0.021	0.0355	1.7765	50.0000
4	2.37	Sulfate	BMB	20.437	192.7879	9639.3928	50.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	50.0000
5	3.08	Nitrate	BMB	0.005	0.0489	2.4426	50.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	50.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	50.0000
Total:			**0.000**	**21.998**		**10192.67**	

58 HS22070020-02DF500

Sample Name:	**HS22070020-02DF500**	*Injection Volume:*	**5.00**
Vial Number:	**RD4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**500.0000**
Recording Time:	**07/01/2022 14:06**	*Sample Weight:*	**1.0000**

Run Time:



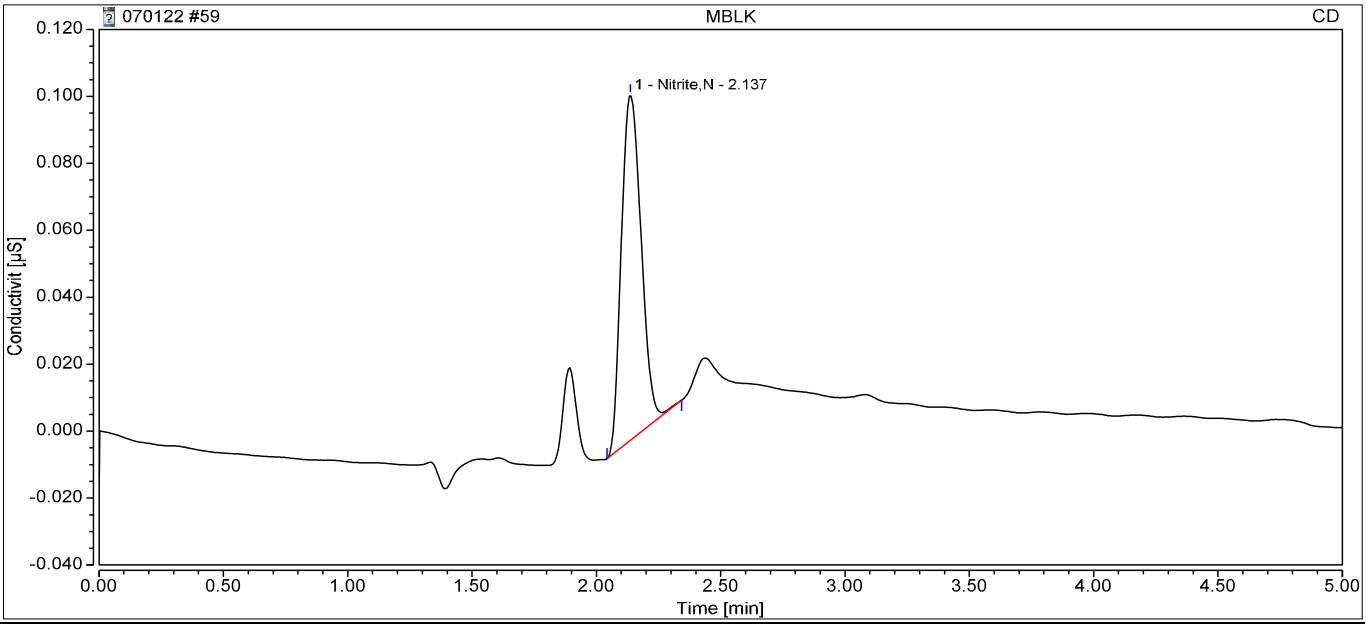
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	500.0000
2	1.90	Chloride	BMB	0.111	0.9385	469.2667	500.0000
3	2.13	Nitrite,N	BMB	0.017	0.0214	10.6834	500.0000
4	2.42	Sulfate	BMB	2.108	20.0261	10013.0595	500.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	500.0000
5	3.08	Nitrate	BMB	0.005	0.0494	24.6988	500.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	500.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	500.0000
Total:			**0.000**	**2.241**		**10517.71**	

59 MBLK

Sample Name:	**MBLK**	*Injection Volume:*	**5.00**
Vial Number:	**R5**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/01/2022 14:22**	*Sample Weight:*	**1.0000**

Run Time:



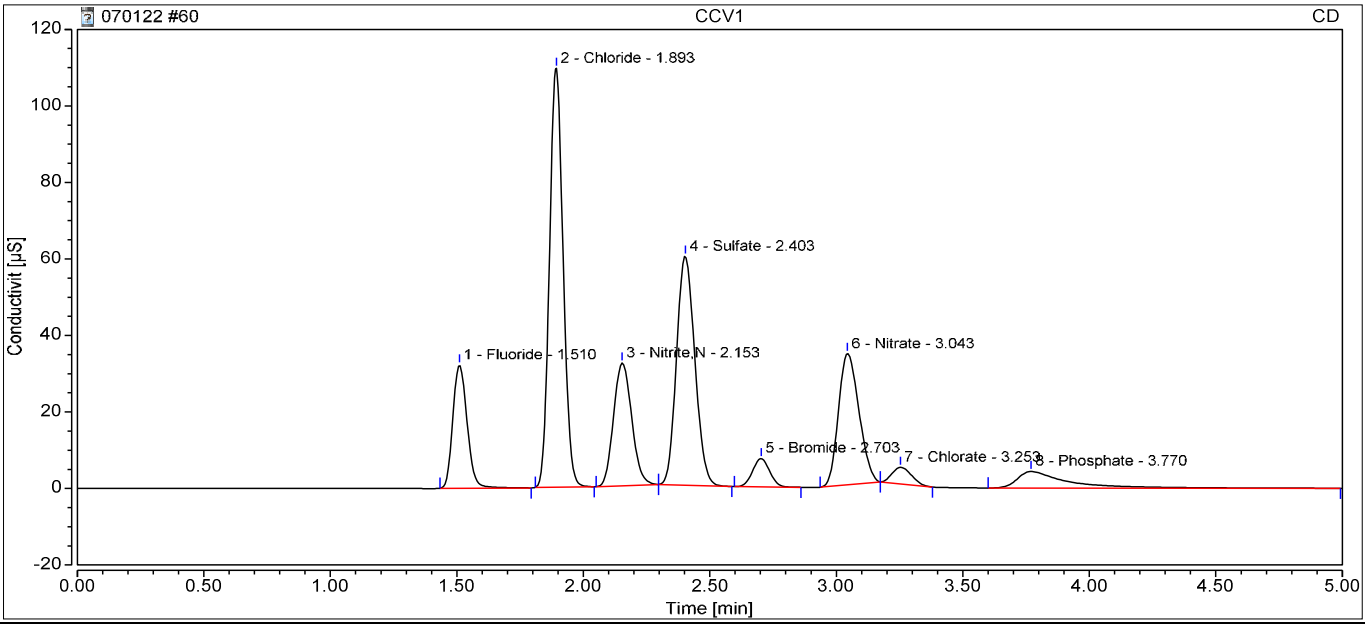
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
1	2.14	Nitrite,N	BMB	0.010	n.a.	n.a.	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.010**		**0.00**	

60 CCV1

Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**R3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/01/2022 14:27**	*Sample Weight:*	**1.0000**

Run Time:



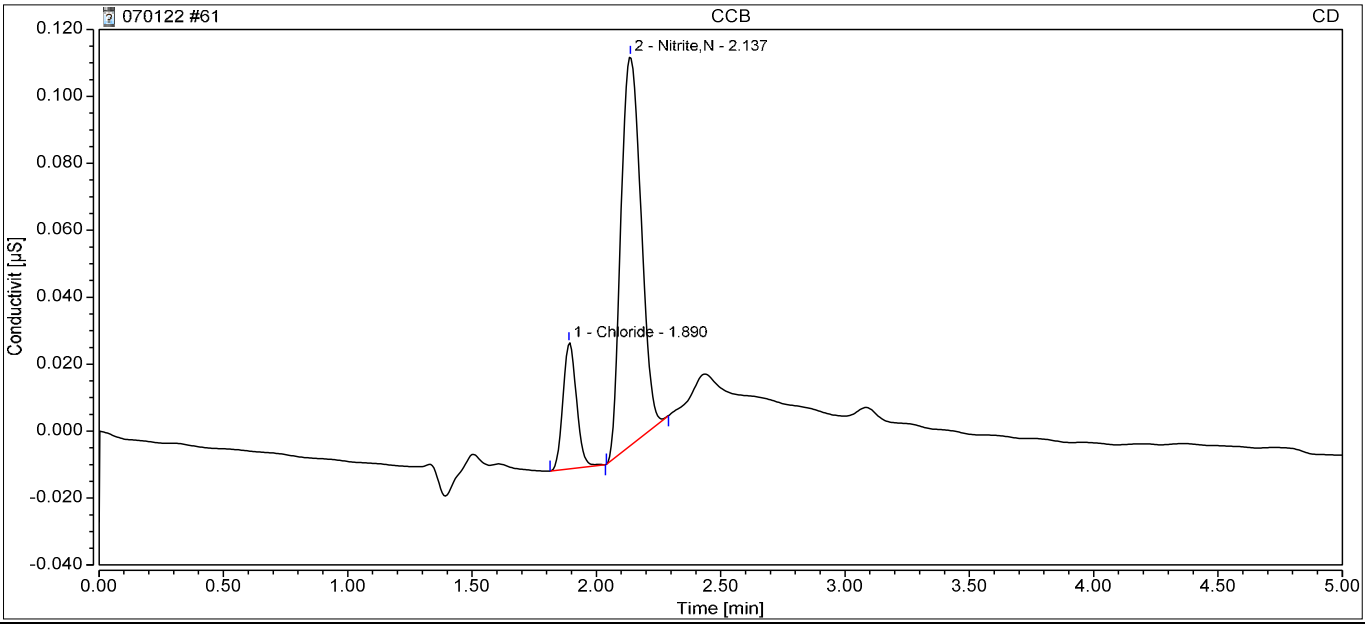
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	2.112	9.8144	9.8144	1.0000
2	1.89	Chloride	BMB	6.833	48.3459	48.3459	1.0000
3	2.15	Nitrite,N	BMB	2.670	9.6861	9.6861	1.0000
4	2.40	Sulfate	BMB	5.024	47.5141	47.5141	1.0000
5	2.70	Bromide	BMB	0.575	9.2365	9.2365	1.0000
6	3.04	Nitrate	BMB	3.214	9.7540	9.7540	1.0000
7	3.25	Chlorate	BMB	0.385	9.6442	9.6442	1.0000
8	3.77	Phosphate	BMB	0.997	8.0884	8.0884	1.0000
Total:			**0.000**	**21.810**		**152.08**	

61 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/01/2022 14:38**	*Sample Weight:*	**1.0000**

Run Time:



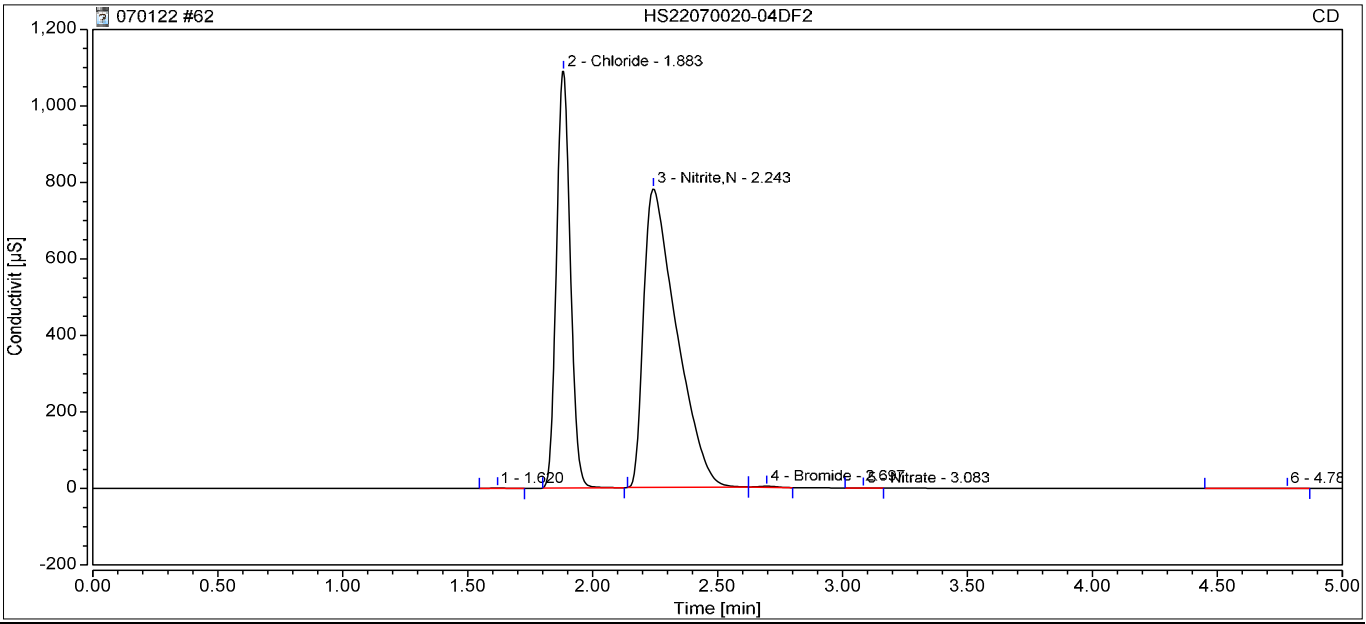
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
1	1.89	Chloride	BMB	0.002	0.1703	0.1703	1.0000
2	2.14	Nitrite,N	BMB	0.011	0.0002	0.0002	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.013**		**0.17**	

62 HS22070020-04DF2

Sample Name:	**HS22070020-04DF2**	*Injection Volume:*	**5.00**
Vial Number:	**RD7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**2.0000**
Recording Time:	**07/01/2022 14:43**	*Sample Weight:*	**1.0000**

Run Time:



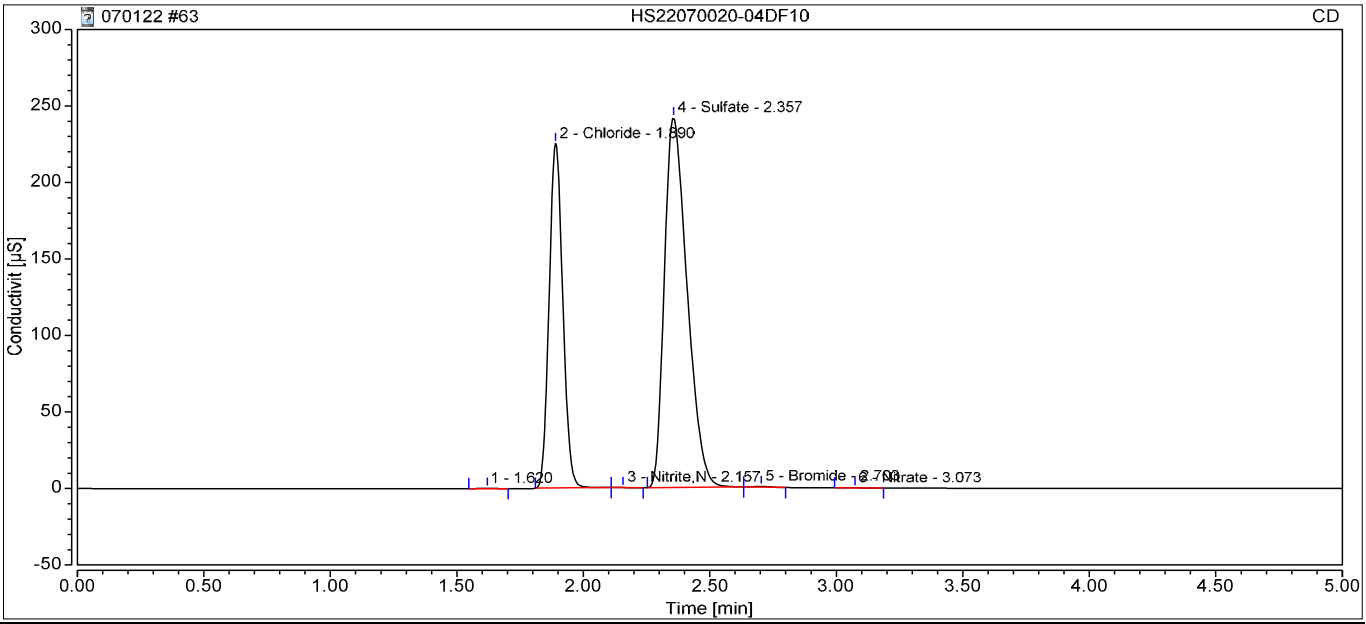
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	2.0000
2	1.88	Chloride	BMB	70.273	495.7793	991.5586	2.0000
3	2.24	Nitrite,N	BMB	118.715	432.3561	864.7122	2.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	2.0000
4	2.70	Bromide	BMB	0.205	3.3222	6.6445	2.0000
5	3.08	Nitrate	BMB	0.004	0.0467	0.0934	2.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	2.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	2.0000
Total:			**0.000**	**189.197**		**1863.01**	

63 HS22070020-04DF10

Sample Name:	**HS22070020-04DF10**	*Injection Volume:*	**5.00**
Vial Number:	**RD8**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**10.0000**
Recording Time:	**07/01/2022 14:48**	*Sample Weight:*	**1.0000**

Run Time:



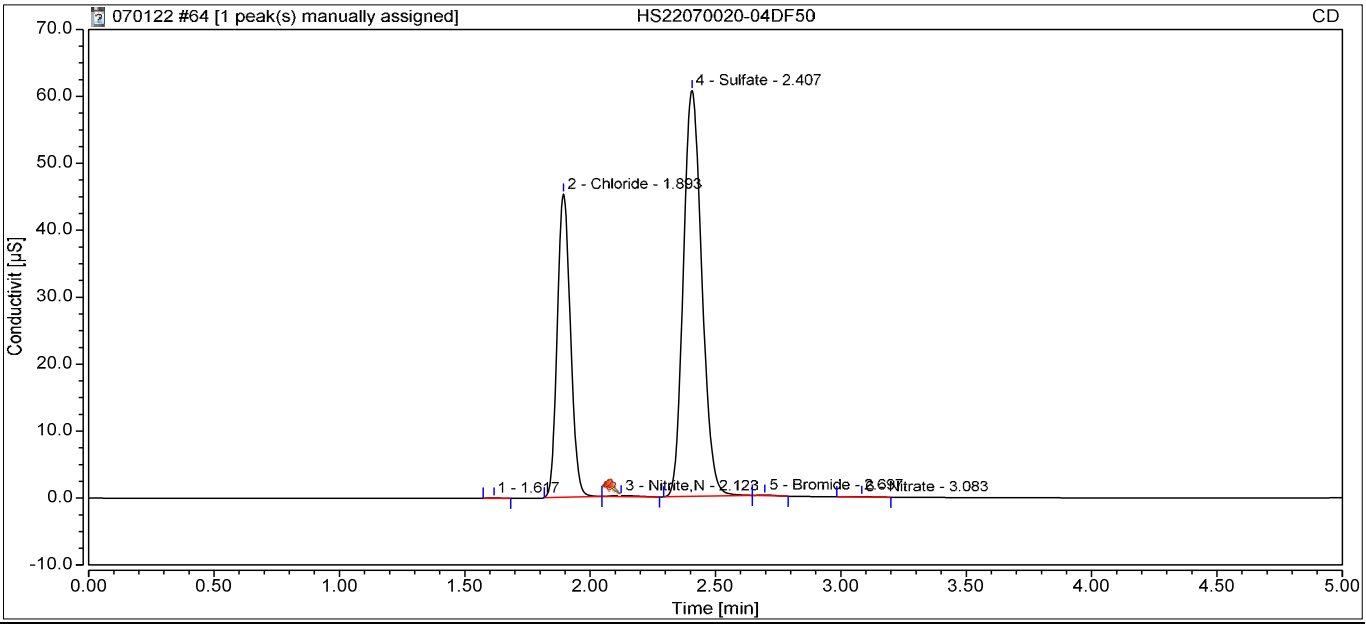
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	10.0000
2	1.89	Chloride	BMB	14.060	99.3147	993.1469	10.0000
3	2.16	Nitrite,N	BMB	0.002	n.a.	n.a.	10.0000
4	2.36	Sulfate	BMB	25.135	237.0748	2370.7484	10.0000
5	2.70	Bromide	BMB	0.037	0.6384	6.3838	10.0000
6	3.07	Nitrate	BMB	0.005	0.0489	0.4892	10.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	10.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	10.0000
Total:			**0.000**	**39.239**		**3370.77**	

64 HS22070020-04DF50

Sample Name:	**HS22070020-04DF50**	*Injection Volume:*	**5.00**
Vial Number:	**RE1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**50.0000**
Recording Time:	**07/01/2022 14:54**	*Sample Weight:*	**1.0000**

Run Time:

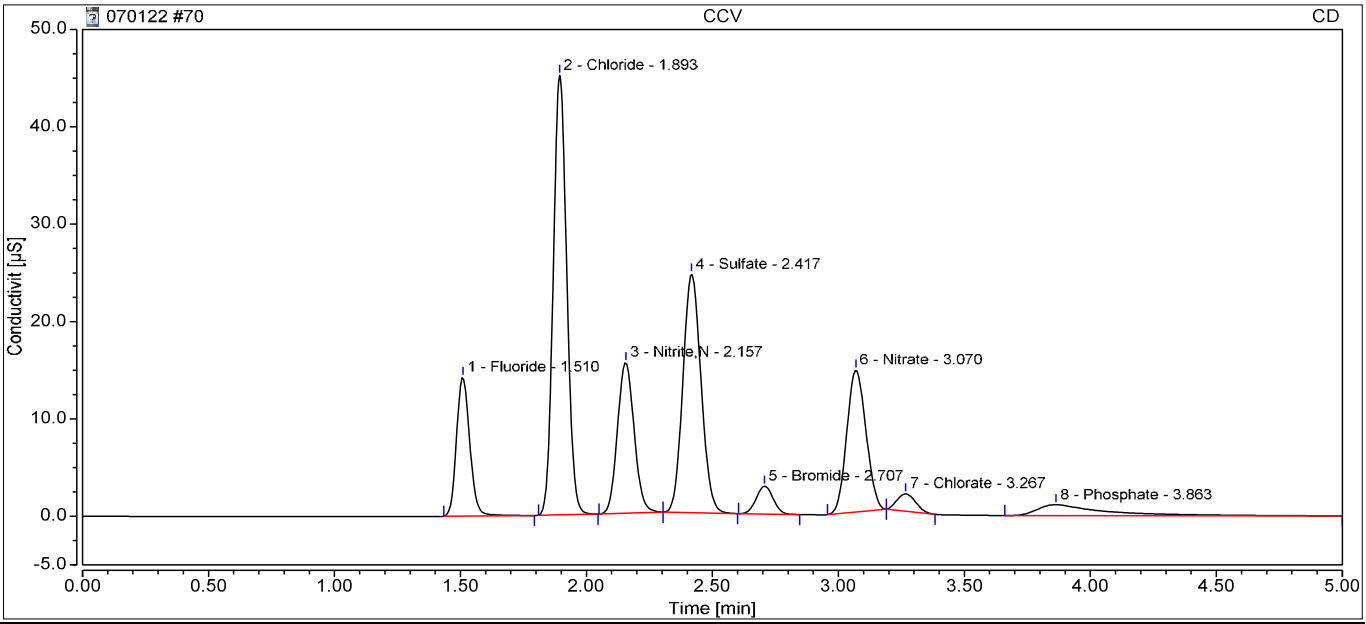


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	50.0000
2	1.89	Chloride	BMB	2.766	19.6590	982.9481	50.0000
3	2.12	Nitrite,N	BMB^	0.017	0.0237	1.1860	50.0000
4	2.41	Sulfate	BMB	5.192	49.1012	2455.0585	50.0000
5	2.70	Bromide	BMB	0.006	0.1426	7.1306	50.0000
6	3.08	Nitrate	BMB	0.005	0.0501	2.5035	50.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	50.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	50.0000
Total:			**0.000**	**7.987**		**3448.83**	

70 CCV			
Sample Name:	**CCV**	*Injection Volume:*	**5.00**
Vial Number:	**R1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/01/2022 15:47**	*Sample Weight:*	**1.0000**

Run Time:



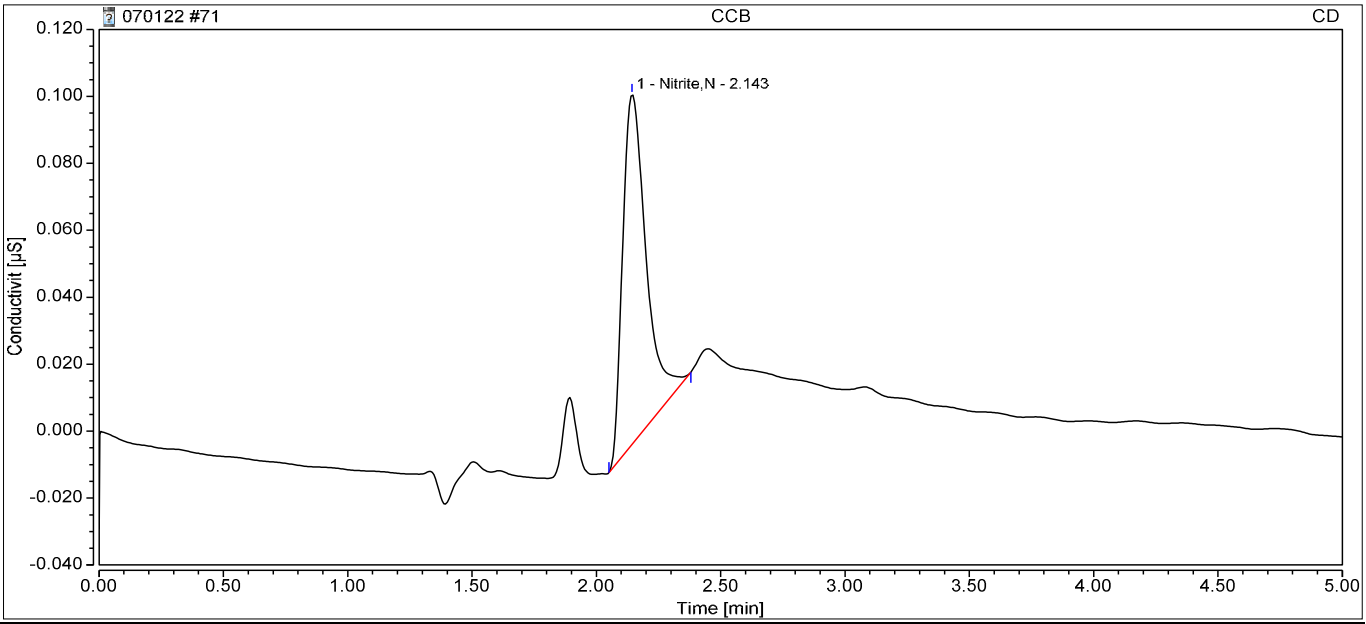
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	0.874	4.0897	4.0897	1.0000
2	1.89	Chloride	BMB	2.801	19.9099	19.9099	1.0000
3	2.16	Nitrite,N	BMB	1.188	4.2868	4.2868	1.0000
4	2.42	Sulfate	BMB	2.045	19.4302	19.4302	1.0000
5	2.71	Bromide	BMB	0.222	3.6004	3.6004	1.0000
6	3.07	Nitrate	BMB	1.289	3.9332	3.9332	1.0000
7	3.27	Chlorate	BMB	0.154	3.8576	3.8576	1.0000
8	3.86	Phosphate	BMB	0.345	2.9224	2.9224	1.0000
Total:			**0.000**	**8.918**		**62.03**	

71 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/01/2022 15:57**	*Sample Weight:*	**1.0000**

Run Time:

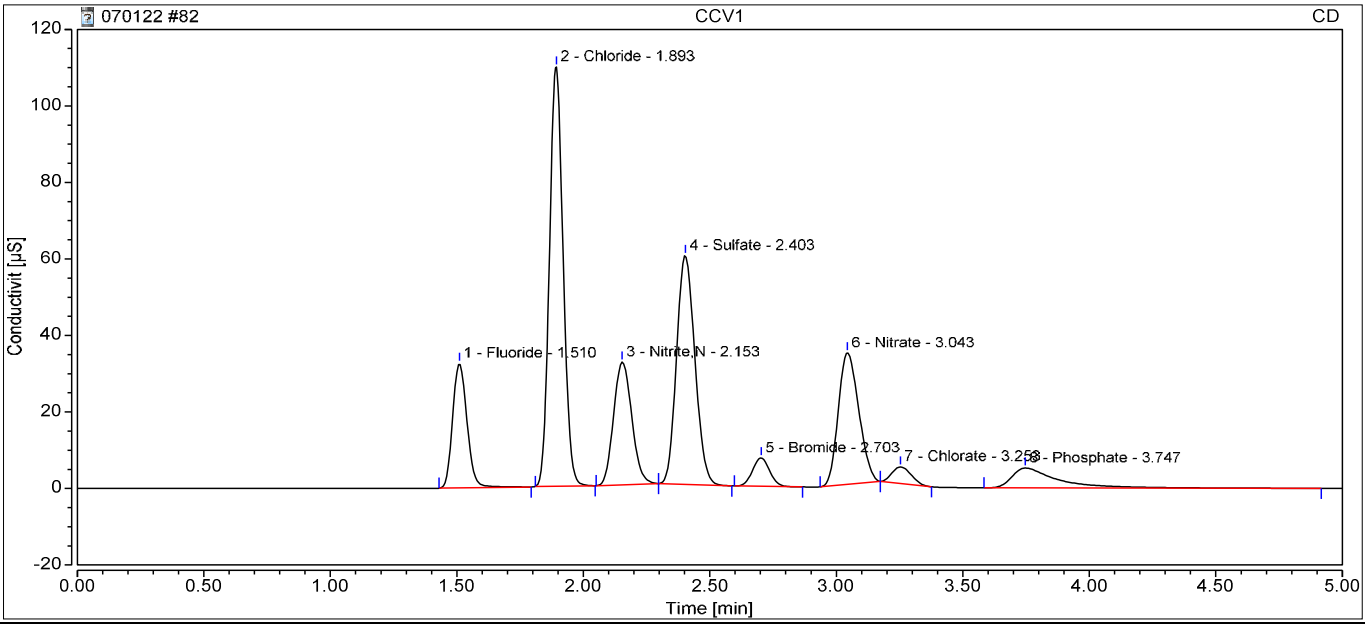


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
1	2.14	Nitrite,N	BMB	0.011	0.0020	0.0020	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.011**		**0.00**	

82 CCV1			
Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**R3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/01/2022 17:06**	*Sample Weight:*	**1.0000**

Run Time:



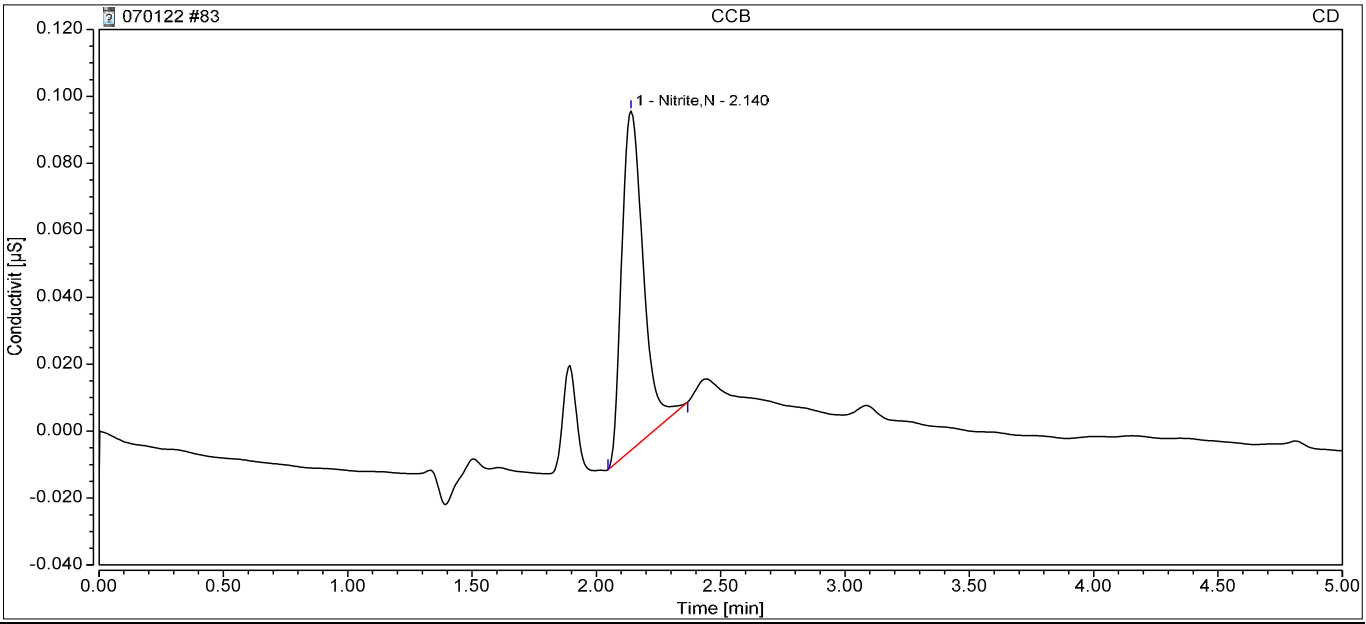
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.51	Fluoride	BMB	2.152	10.0034	10.0034	1.0000
2	1.89	Chloride	BMB	6.858	48.5199	48.5199	1.0000
3	2.15	Nitrite,N	BMB	2.678	9.7148	9.7148	1.0000
4	2.40	Sulfate	BMB	5.036	47.6235	47.6235	1.0000
5	2.70	Bromide	BMB	0.582	9.3415	9.3415	1.0000
6	3.04	Nitrate	BMB	3.228	9.7948	9.7948	1.0000
7	3.25	Chlorate	BMB	0.388	9.7202	9.7202	1.0000
8	3.75	Phosphate	BMB	1.103	8.9088	8.9088	1.0000
Total:			**0.000**	**22.025**		**153.63**	

83 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/01/2022 17:17**	*Sample Weight:*	**1.0000**

Run Time:



Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
1	2.14	Nitrite,N	BMB	0.010	n.a.	n.a.	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.010**		**0.00**	

HS22070020 SUB Pace Analytical Lab Level IV Report 222070757

ALS WO# HS22070020

Pace Analytical®

LELAP CERTIFICATE NUMBER: 01955
DOD-ELAP ACCREDITATION NUMBER: 74960

ANALYTICAL RESULTS

PERFORMED BY

Pace Analytical Gulf Coast
7979 Innovation Park Dr.
Baton Rouge, LA 70820
(225) 769-4900

Report Date 07/16/2022

Report # 222070757

Project HS22070020

Samples Collected 6/30/22

Deliver To	***Additional Recipients***
Dane Wacasey ALS 10450 Stancliff Rd., Ste 210 Houston, TX 770994338	Jumoke Lawal, ALS Houston

PJLA Testing DoD ELAP

ISO 17025

NELAP ACCREDITED TNI LABORATORY

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with Pace Gulf Coast's Standard Operating Procedures.

Common Abbreviations that may be Utilized in this Report

ND	Indicates the result was Not Detected at the specified reporting limit
NO	Indicates the sample did not ignite when preliminary test performed for EPA Method 1030
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
DL	Detection Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
RE	Re-analysis
CF	HPLC or GC Confirmation
00:01	Reported as a time equivalent to 12:00 AM

Reporting Flags that may be Utilized in this Report

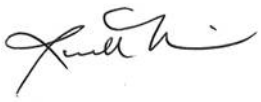
J or I	Indicates the result is between the MDL and LOQ
J	DOD flag on analyte in the parent sample for MS/MSD outside acceptance criteria
U	Indicates the compound was analyzed for but not detected
B or V	Indicates the analyte was detected in the associated Method Blank
Q	Indicates a non-compliant QC Result (See Q Flag Application Report)
*****	Indicates a non-compliant or not applicable QC recovery or RPD – see narrative
E	Organics - The result is estimated because it exceeded the instrument calibration range
E	Metals - % diference for the serial dilution is > 10%
L	Reporting Limits adjusted to meet risk-based limit.
P	RPD between primary and confirmation result is greater than 40
DL	Diluted analysis – when appended to Client Sample ID

Sample receipt at Pace Gulf Coast is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of Pace Gulf Coast. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with The NELAC Institute (TNI) Standard 2009 and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.



Authorized Signature
Pace Gulf Coast Report 222070757

Certifications

Certification	Certification Number
DOD ELAP	74960
Alabama	01955
Arkansas	88-0655
Colorado	01955
Delaware	01955
Florida	E87854
Georgia	01955
Hawaii	01955
Idaho	01955
Illinois	200048
Indiana	01955
Kansas	E-10354
Kentucky	95
Louisiana	01955
Maryland	01955
Massachusetts	01955
Michigan	01955
Mississippi	01955
Missouri	01955
Montana	N/A
Nebraska	01955
New Mexico	01955
North Carolina	618
North Dakota	R-195
Oklahoma	9403
South Carolina	73006001
South Dakota	01955
Tennessee	01955
Texas	T104704178
Vermont	01955
Virginia	460215
Washington	C929
USDA Soil Permit	P330-16-00234

Case Narrative

Client: ALS Environmental - Houston, TX **Report:** 222070757

Pace Analytical Gulf Coast received and analyzed the sample(s) listed
on the Report Sample Summary page of this report. Receipt of the sample(s) is documented
by the attached chain of custody. This applies only to the sample(s) listed in this report.
No sample integrity or quality control exceptions were identified unless noted below.

This report was completed in accordance with DOD QSM 5.3 as specified in the contract.

VOLATILES GAS CHROMATOGRAPHY

In the EPA RSK-175 analysis for analytical batch 745070, the MS/MSD recoveries and RPDs are not applicable to Carbon Dioxide because the spike was diluted out of the samples. The LCS recovery is acceptable.

Sample Summary

Lab ID	Client ID	Matrix	Collect Date	Receive Date
22207075701	16WW16-220630	Water	6/30/22 07:10	7/07/22 09:49
22207075702	16WW35-220630	Water	6/30/22 08:10	7/07/22 09:49
22207075703	16WW48-220630	Water	6/30/22 09:40	7/07/22 09:49
22207075704	16WW16-220630 MS	Water	6/30/22 07:10	7/07/22 09:49
22207075705	16WW16-220630 MSD	Water	6/30/22 07:10	7/07/22 09:49

Test Summary

EPA RSK-175					
Lab ID	**Client ID**	**Matrix**	**Batch**	**Instru**	**RunDate**
22207075701	16WW16-220630	Water	745070	GCV8B	7/11/22 15:22
22207075702	16WW35-220630	Water	745070	GCV8B	7/11/22 15:29
22207075703	16WW48-220630	Water	745070	GCV8B	7/11/22 15:43
22207075704	16WW16-220630 MS	Water	745070	GCV8B	7/11/22 15:49
22207075705	16WW16-220630 MSD	Water	745070	GCV8B	7/11/22 15:55

Manual Integrations

Manual Integrations for LC and IC (if performed) are documented in the raw data.
No other manual integrations were performed by Pace Gulf Coast.

Q Flag Summary

NO Q FLAGS FOR THIS WORKORDER

Detect Summary

Results and Detection Limits are adjusted for dilution and moisture when applicable

EPA RSK-175						
Lab ID	**Client ID**	**Parameter**	**Units**	**Result**	**Dil.**	**%Moist**
22207075701	16WW16-220630	Carbon Dioxide	ug/L	196000J	30	NA
22207075702	16WW35-220630	Carbon Dioxide	ug/L	312000	30	NA
22207075703	16WW48-220630	Carbon Dioxide	ug/L	385000	30	NA

EPA RSK-175

Form 1D

Results

1D

ORGANICS ANALYSIS DATA SHEET

Report No:	222070757	Client Sample ID:	16WW16-220630
Collect Date:	06/30/22 Time: 0710	GCAL Sample ID:	22207075701
Matrix:	Water % Moisture: NA	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8019
Injection Vol.:	1 (µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	30 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1522
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

CONCENTRATION UNITS: ug/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
124-38-9	Carbon Dioxide	196000	J	3810	11600	27000

FORM I ORG-1

Data File: /var/chem/gcv8b.i/2220711p.b/v8019.d Page 1
Report Date: 11-Jul-2022 15:33

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8019.d
Lab Smp Id: 22207075701
Inj Date : 11-JUL-2022 15:22
Operator : BDP Inst ID: gcv8b.i
Smp Info : 22207075701*30
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 13:58 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1
Dil Factor: 30.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Carbon Dioxide	1.003	1.014	-0.011	24643428	6532.60	196000

Data File: /var/chem/gcv8b.i/2220711p.b/v8019.d

Page 1

Date : 11-JUL-2022 15:22

Client ID:

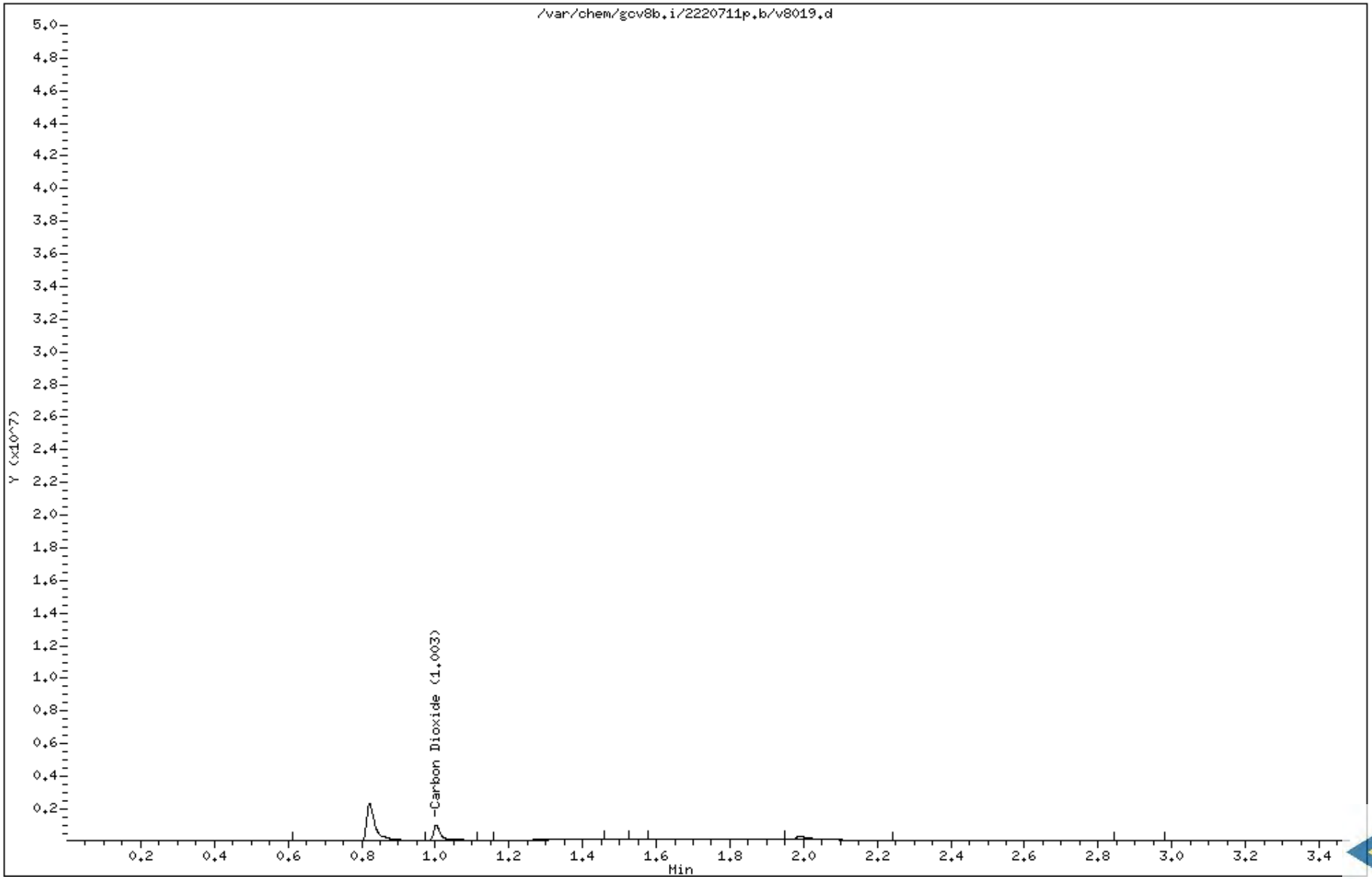
Instrument: gcv8b.i

Sample Info: 22207075701*30

Operator: BDP

Column phase: GS-Q-30

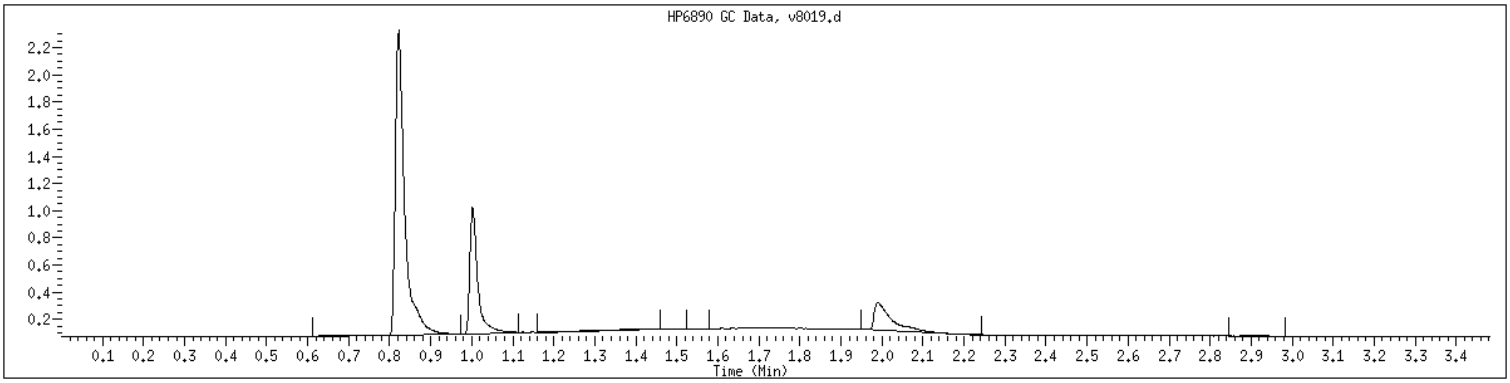
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8019.d Page: 1
Report Date: 07/11/2022 15:33

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 22207075701 SampleType : SAMPLE
Injection Date: 07/11/2022 15:22 Instrument : gcv8b.i
Operator : BDP
Sample Info : 22207075701*30
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 30.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Report No:	222070757	Client Sample ID:	16WW35-220630
Collect Date:	06/30/22 Time: 0810	GCAL Sample ID:	22207075702
Matrix:	Water % Moisture: NA	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8020
Injection Vol.:	1 (µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	30 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1529
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

CONCENTRATION UNITS: ug/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
124-38-9	Carbon Dioxide	312000		3810	11600	27000

FORM I ORG-1

Data File: /var/chem/gcv8b.i/2220711p.b/v8020.d Page 1
Report Date: 11-Jul-2022 15:39

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8020.d
Lab Smp Id: 22207075702
Inj Date : 11-JUL-2022 15:29
Operator : BDP Inst ID: gcv8b.i
Smp Info : 22207075702*30
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 13:58 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1
Dil Factor: 30.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Carbon Dioxide	0.995	1.014	-0.019	39232791	10400.0	312000

Data File: /var/chem/gcv8b.i/2220711p.b/v8020.d

Page 1

Date : 11-JUL-2022 15:29

Client ID:

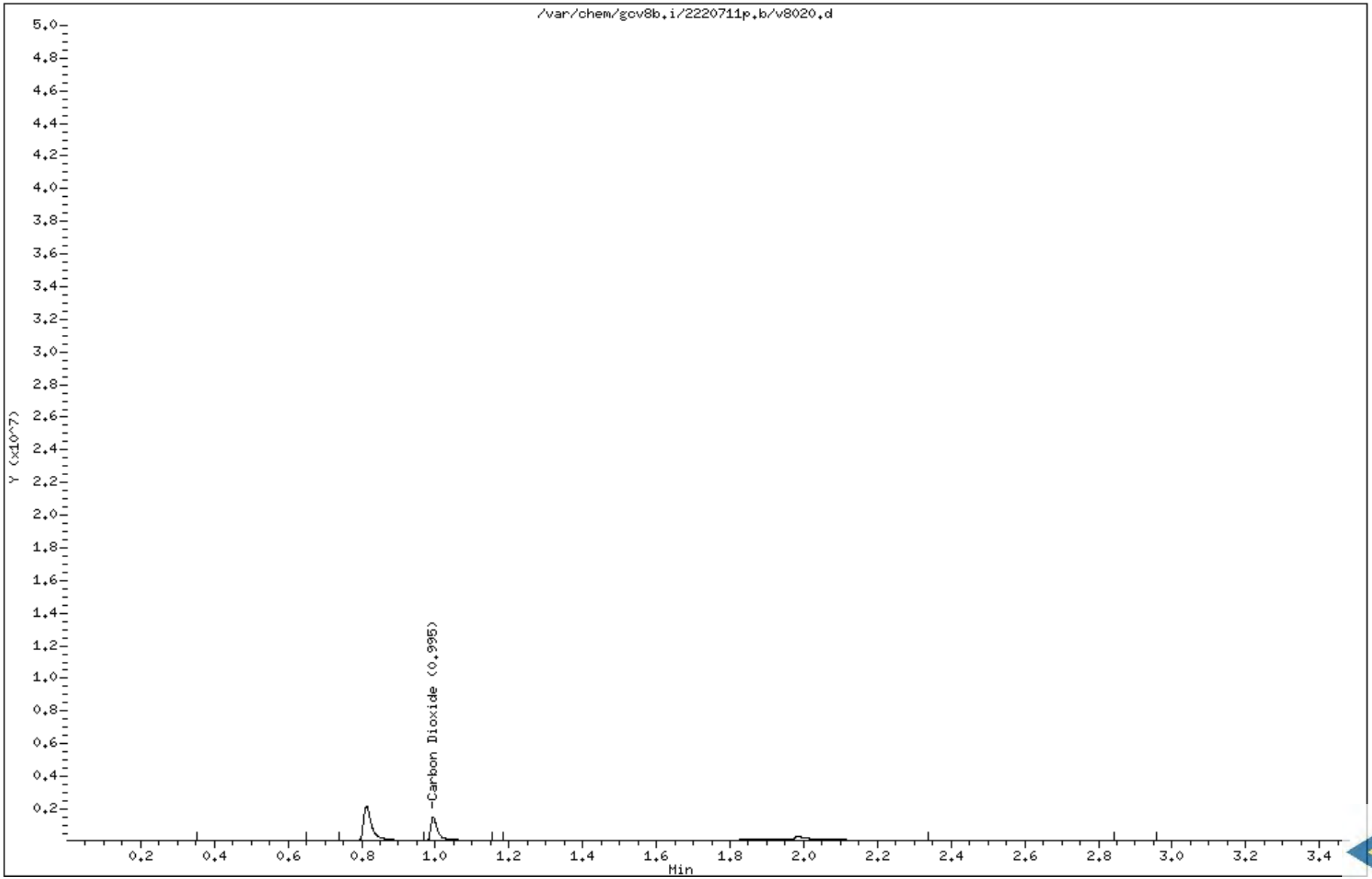
Instrument: gcv8b.i

Sample Info: 22207075702*30

Operator: BDP

Column phase: GS-Q-30

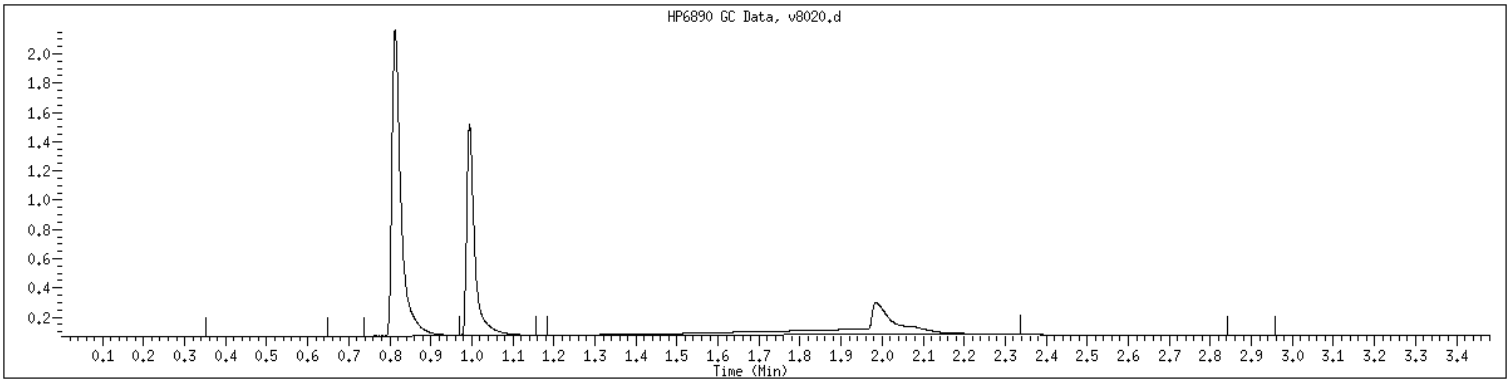
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8020.d Page: 1
Report Date: 07/11/2022 15:39

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 22207075702	SampleType	: SAMPLE
Injection Date	: 07/11/2022 15:29	Instrument	: gcv8b.i
Operator	: BDP		
Sample Info	: 22207075702*30		
Misc Info	: 2131877		
Method	: /var/chem/gcv8b.i/2220711p.b/CO2h.m		
Dilution	: 30.0		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: co2



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Report No:	222070757	Client Sample ID:	16WW48-220630
Collect Date:	06/30/22 Time: 0940	GCAL Sample ID:	22207075703
Matrix:	Water % Moisture: NA	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8022
Injection Vol.:	1 (µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	30 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1543
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

CONCENTRATION UNITS: ug/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
124-38-9	Carbon Dioxide	385000		3810	11600	27000

FORM I ORG-1

Data File: /var/chem/gcv8b.i/2220711p.b/v8022.d Page 1
Report Date: 11-Jul-2022 15:53

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8022.d
Lab Smp Id: 22207075703
Inj Date : 11-JUL-2022 15:43
Operator : BDP Inst ID: gcv8b.i
Smp Info : 22207075703*30
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 15:46 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1
Dil Factor: 30.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Carbon Dioxide	1.002	0.996	0.006	48418224	12834.9	385000

Data File: /var/chem/gcv8b.i/2220711p.b/v8022.d

Date : 11-JUL-2022 15:43

Client ID:

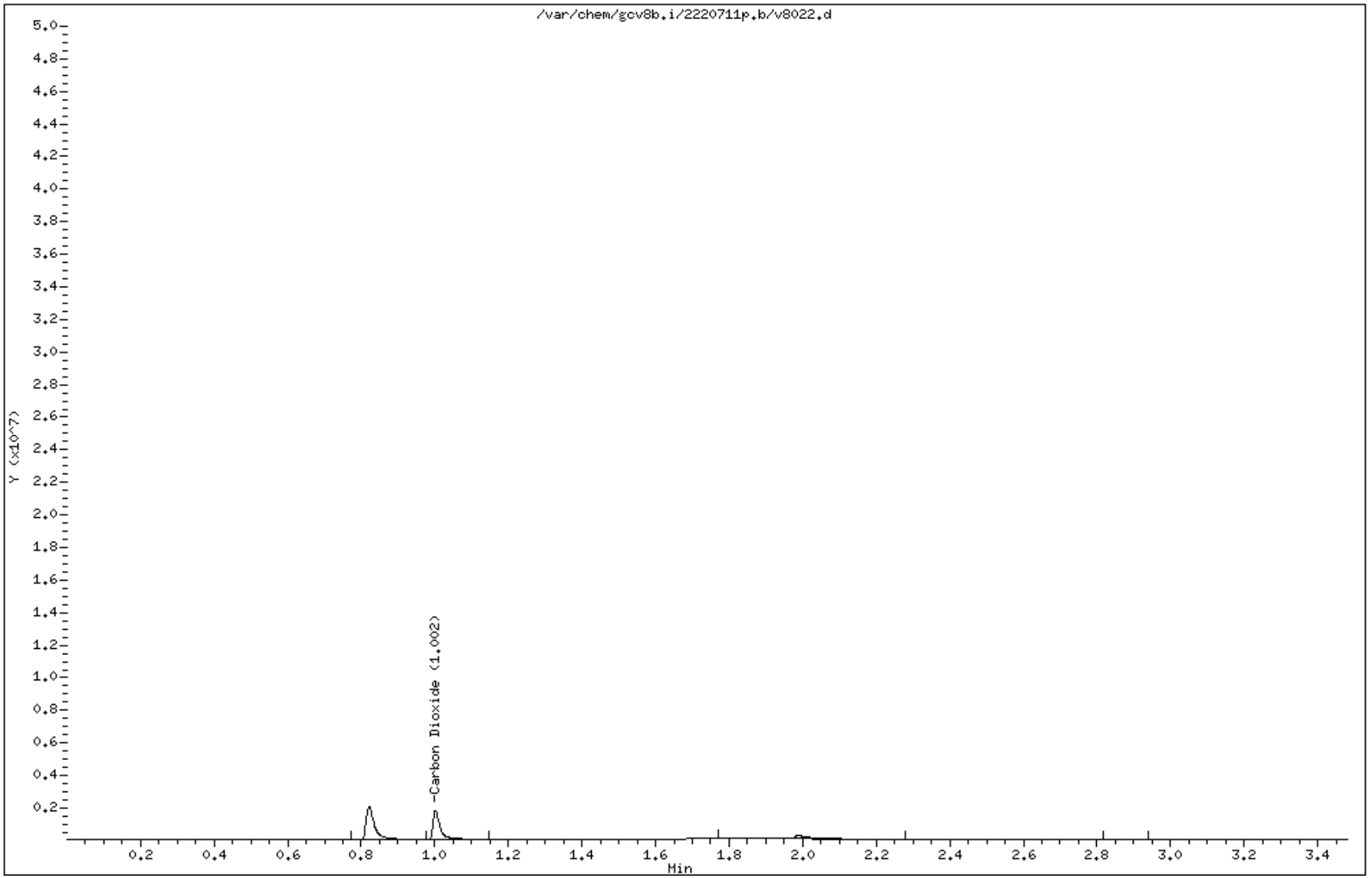
Instrument: gcv8b.i

Sample Info: 22207075703*30

Operator: BDP

Column phase: GS-Q-30

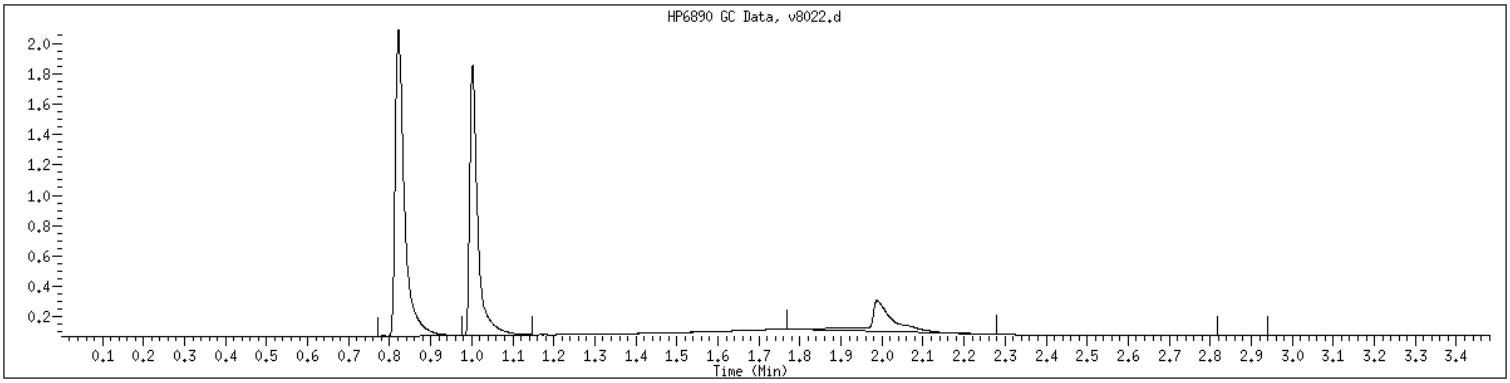
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8022.d Page: 1
Report Date: 07/11/2022 15:53

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 22207075703 SampleType : SAMPLE
Injection Date: 07/11/2022 15:43 Instrument : gcv8b.i
Operator : BDP
Sample Info : 22207075703*30
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 30.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Report No:	222070757	Client Sample ID:	16WW16-220630 MS
Collect Date:	06/30/22 Time: 0710	GCAL Sample ID:	22207075704
Matrix:	Water % Moisture: NA	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8023
Injection Vol.:	1 (µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	30 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1549
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

CONCENTRATION UNITS: ug/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
124-38-9	Carbon Dioxide	203000		3810	11600	27000

FORM I ORG-1

Data File: /var/chem/gcv8b.i/2220711p.b/v8023.d Page 1
Report Date: 11-Jul-2022 15:59

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8023.d
Lab Smp Id: 22207075704
Inj Date : 11-JUL-2022 15:49
Operator : BDP Inst ID: gcv8b.i
Smp Info : 22207075704*30
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 15:46 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1 QC Sample: MS
Dil Factor: 30.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Carbon Dioxide	0.995	0.996	-0.001	25559981	6775.56	203000(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /var/chem/gcv8b.i/2220711p.b/v8023.d

Date : 11-JUL-2022 15:49

Client ID:

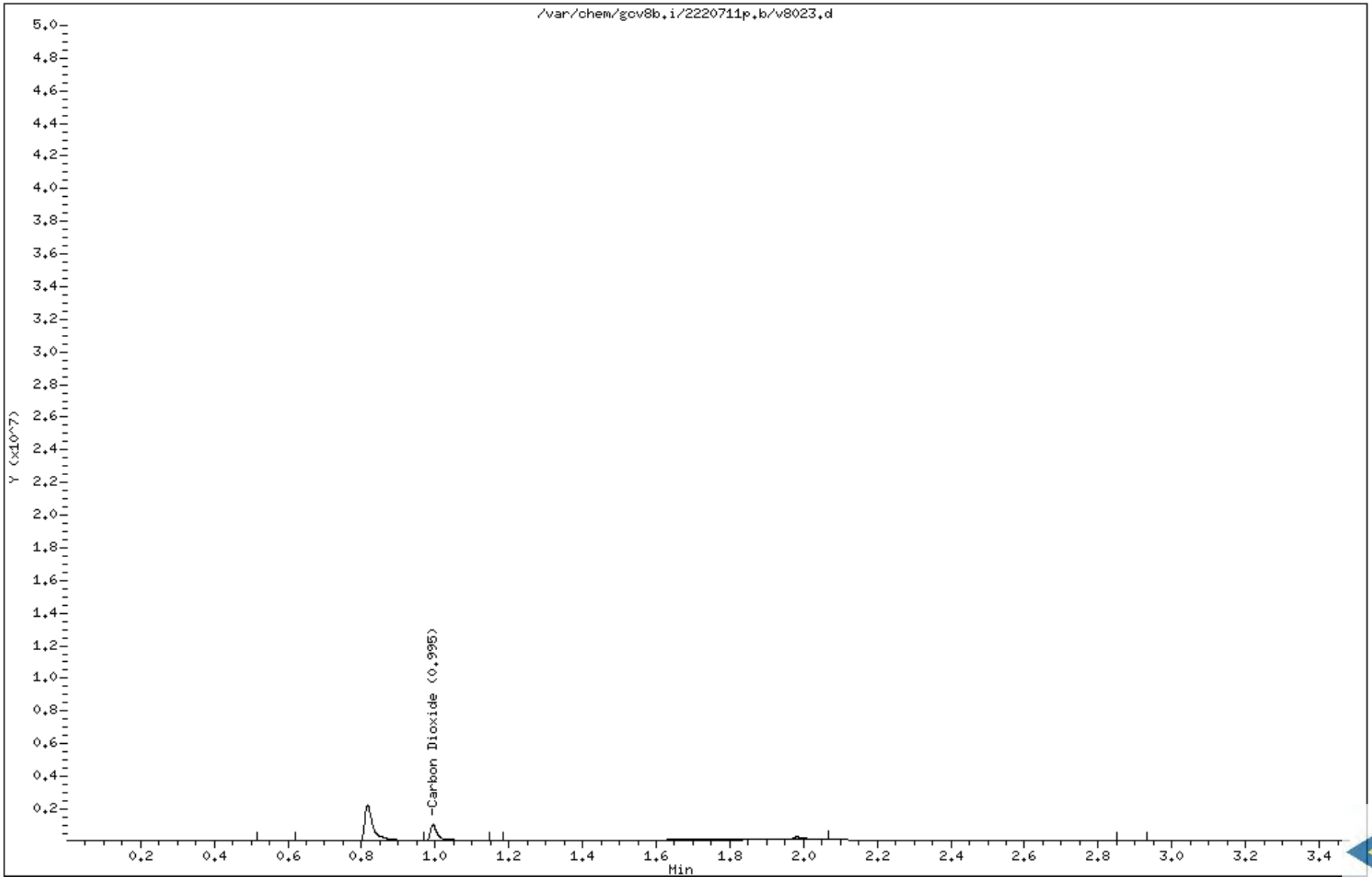
Instrument: gcv8b.i

Sample Info: 22207075704*30

Operator: BDP

Column phase: GS-Q-30

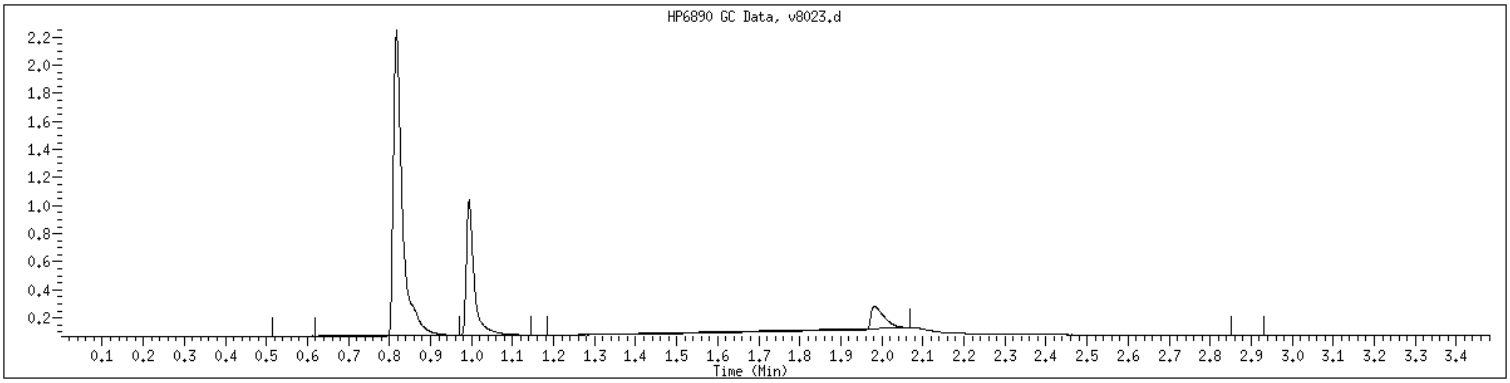
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8023.d Page: 1
Report Date: 07/11/2022 15:59

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 22207075704 SampleType : MS
Injection Date: 07/11/2022 15:49 Instrument : gcv8b.i
Operator : BDP
Sample Info : 22207075704*30
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 30.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Report No:	222070757	Client Sample ID:	16WW16-220630 MSD
Collect Date:	06/30/22 Time: 0710	GCAL Sample ID:	22207075705
Matrix:	Water % Moisture: NA	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8024
Injection Vol.:	1 (µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	30 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1555
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

CONCENTRATION UNITS: ug/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
124-38-9	Carbon Dioxide	215000		3810	11600	27000

FORM I ORG-1

Data File: /var/chem/gcv8b.i/2220711p.b/v8024.d Page 1
Report Date: 11-Jul-2022 16:05

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8024.d
Lab Smp Id: 22207075705
Inj Date : 11-JUL-2022 15:55
Operator : BDP Inst ID: gcv8b.i
Smp Info : 22207075705*30
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 15:46 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1 QC Sample: MSD
Dil Factor: 30.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Carbon Dioxide	0.997	0.996	0.001	26977915	7151.43	214000(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /var/chem/gcv8b.i/2220711p.b/v8024.d

Date : 11-JUL-2022 15:55

Client ID:

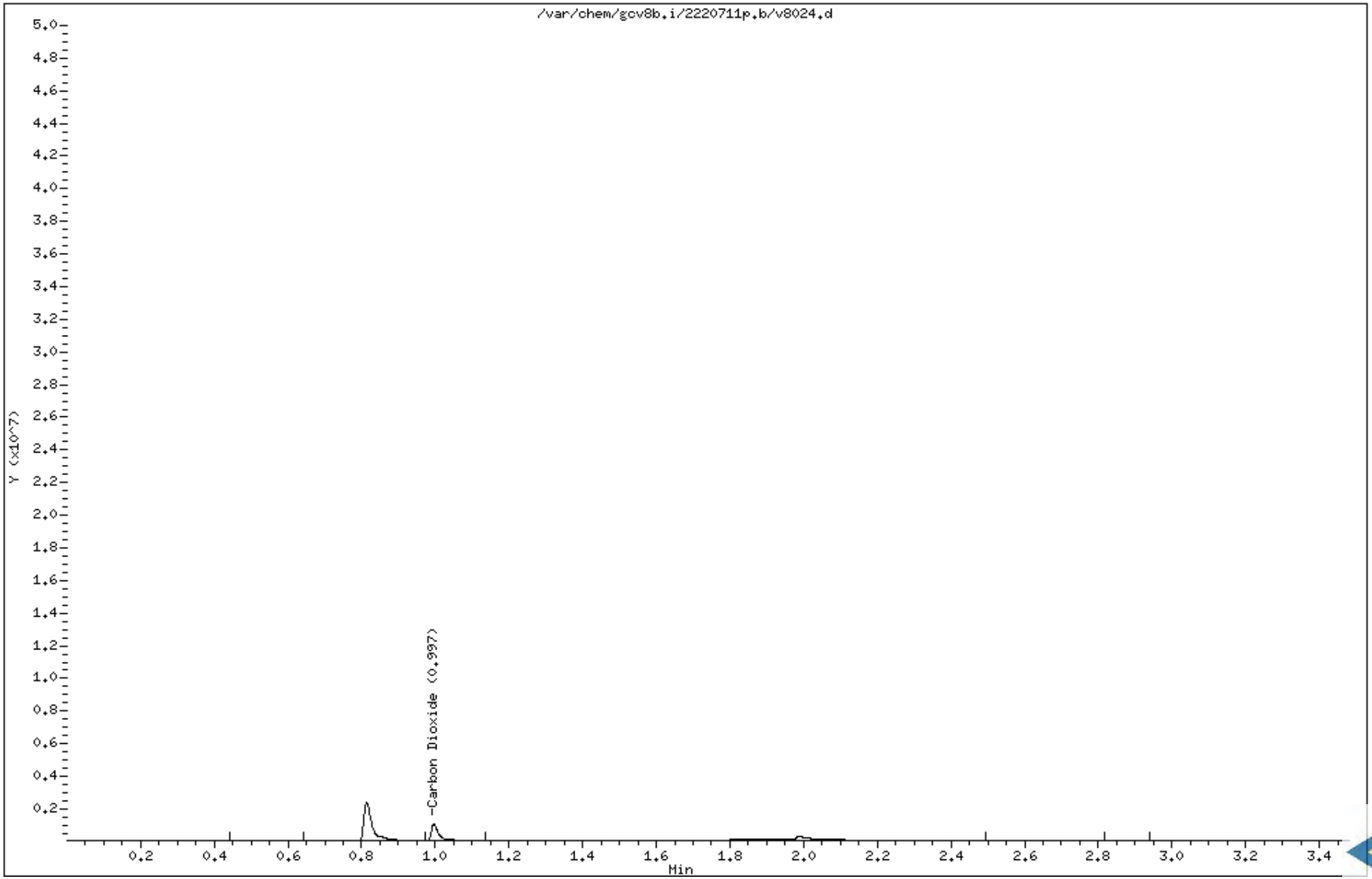
Instrument: gcv8b.i

Sample Info: 22207075705*30

Operator: BDP

Column phase: GS-Q-30

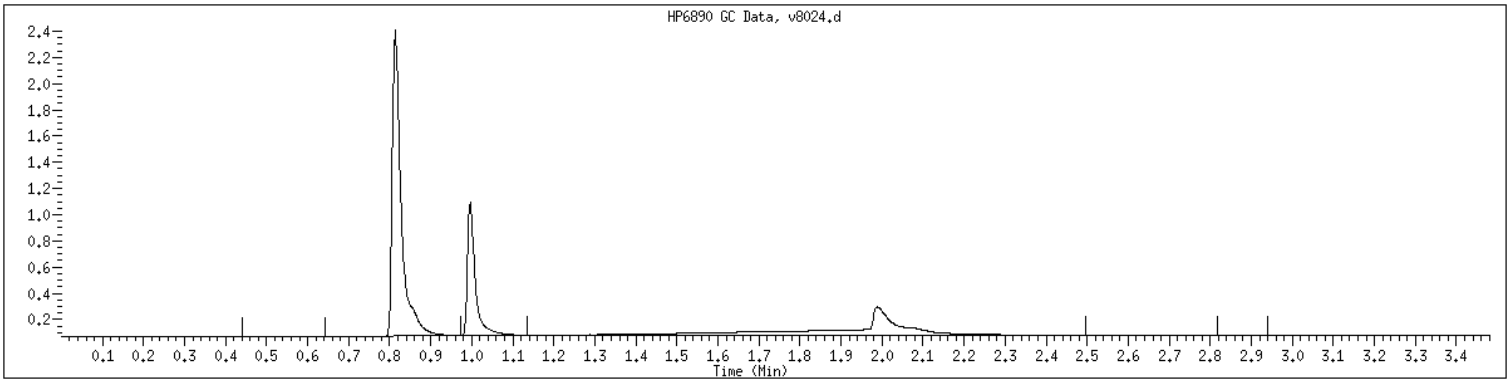
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8024.d Page: 1
Report Date: 07/11/2022 16:05

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 22207075705 SampleType : MSD
Injection Date: 07/11/2022 15:55 Instrument : gcv8b.i
Operator : BDP
Sample Info : 22207075705*30
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 30.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Report No:	222070757	Client Sample ID:	MB2369016
Collect Date:	NA Time: NA	GCAL Sample ID:	2369016
Matrix:	Water % Moisture: NA	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8010
Injection Vol.:	1 (µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	1 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1339
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

CONCENTRATION UNITS: ug/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
124-38-9	Carbon Dioxide	386	U	127	386	900

FORM I ORG-1

Data File: /var/chem/gcv8b.i/2220711p.b/v8010.d Page 1
Report Date: 11-Jul-2022 16:03

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8010.d
Lab Smp Id: 2369016
Inj Date : 11-JUL-2022 13:39
Operator : BDP Inst ID: gcv8b.i
Smp Info : BLANK
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 15:46 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)

Data File: /var/chem/gcv8b.i/2220711p.b/v8010.d

Page 1

Date : 11-JUL-2022 13:39

Client ID:

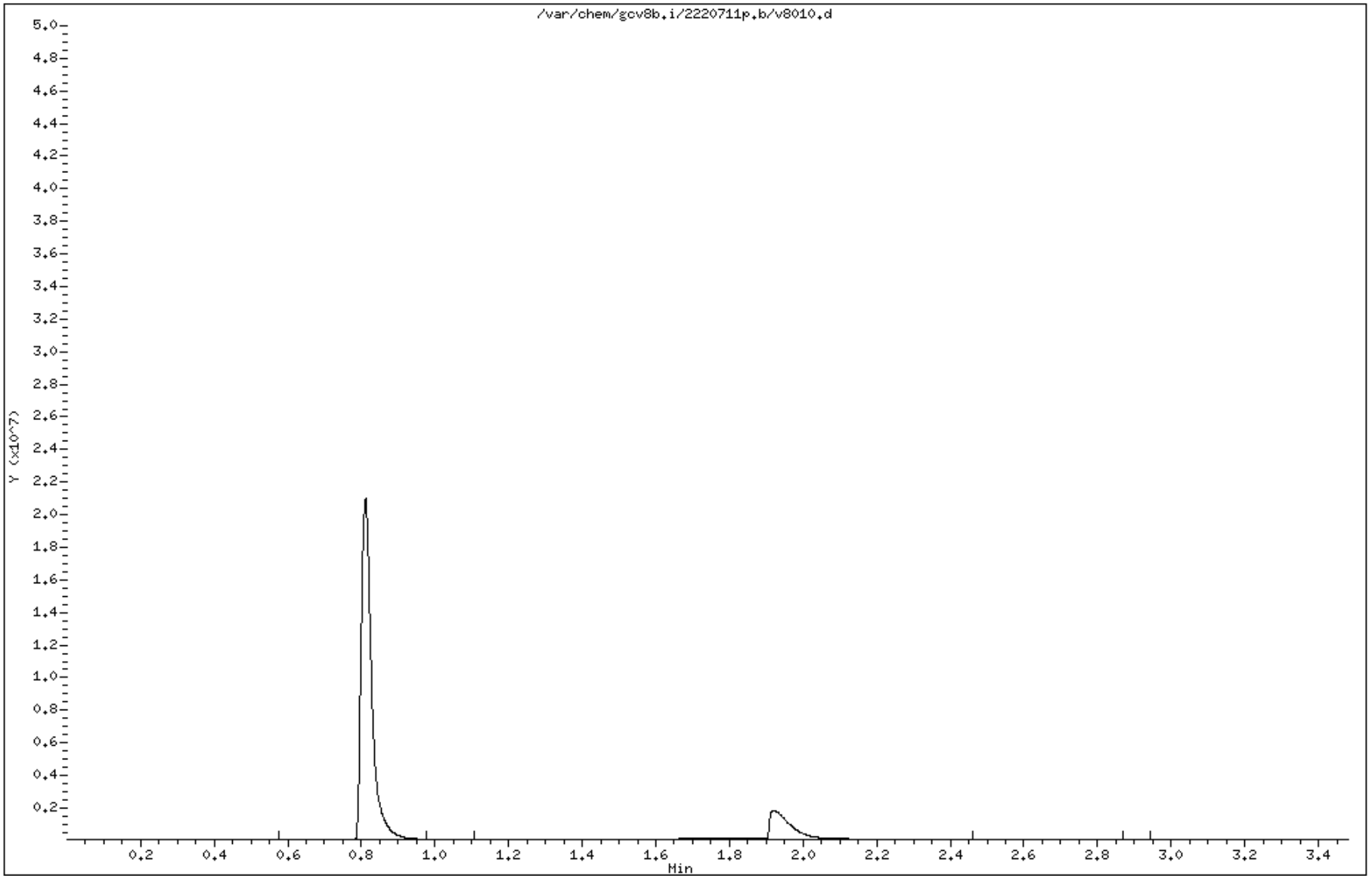
Instrument: gcv8b.i

Sample Info: BLANK

Operator: BDP

Column phase: GS-Q-30

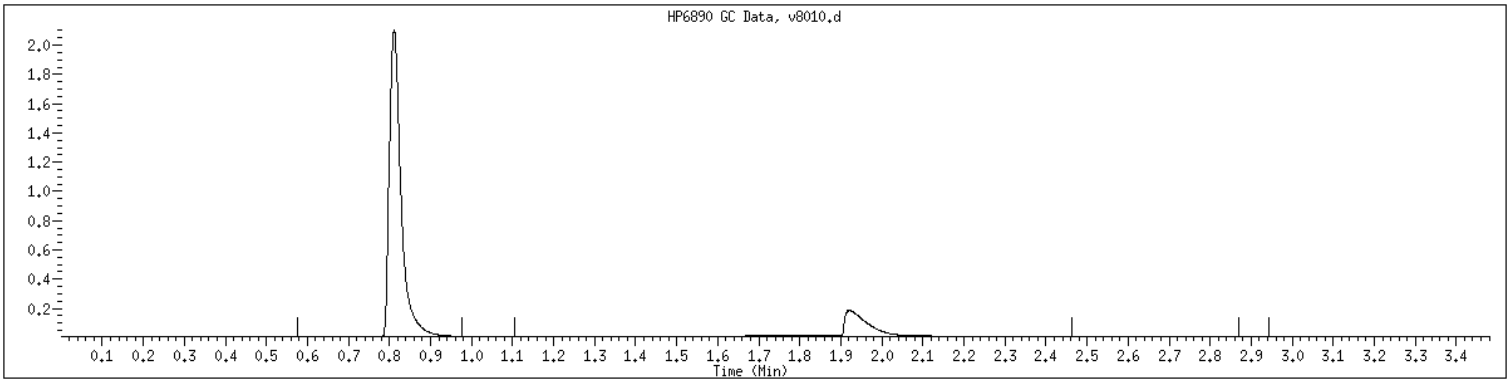
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8010.d Page: 1
Report Date: 07/11/2022 16:03

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 2369016	SampleType	: BLANK
Injection Date	: 07/11/2022 13:39	Instrument	: gcv8b.i
Operator	: BDP		
Sample Info	: BLANK		
Misc Info	: 2131877		
Method	: /var/chem/gcv8b.i/2220711p.b/CO2h.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: co2



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Report No:	222070757	Client Sample ID:	LCS2369017
Collect Date:	NA Time: NA	GCAL Sample ID:	2369017
Matrix:	Water % Moisture: NA	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8008
Injection Vol.:	1 (µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	1 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1325
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

CONCENTRATION UNITS: ug/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
124-38-9	Carbon Dioxide	9190		127	386	900

FORM I ORG-1

Data File: /var/chem/gcv8b.i/2220711p.b/v8008.d Page 1
Report Date: 11-Jul-2022 13:58

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8008.d
Lab Smp Id: 2369017
Inj Date : 11-JUL-2022 13:25
Operator : BDP Inst ID: gcv8b.i
Smp Info : LCS
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 13:58 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Carbon Dioxide	0.989	1.014	-0.025	34652282	9185.79	9180

Data File: /var/chem/gcv8b.i/2220711p.b/v8008.d

Date : 11-JUL-2022 13:25

Client ID:

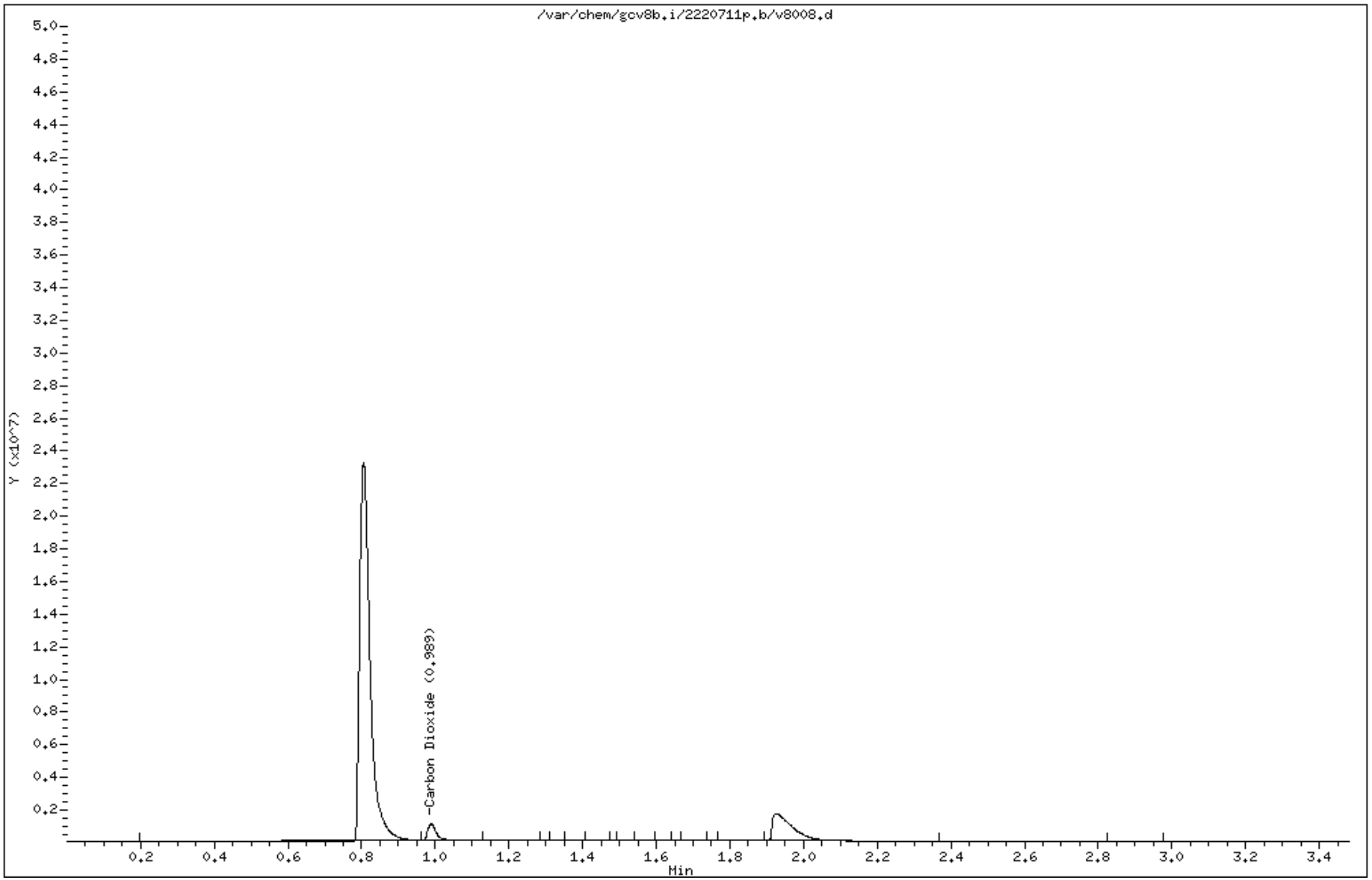
Instrument: gcv8b.i

Sample Info: LCS

Operator: BDP

Column phase: GS-Q-30

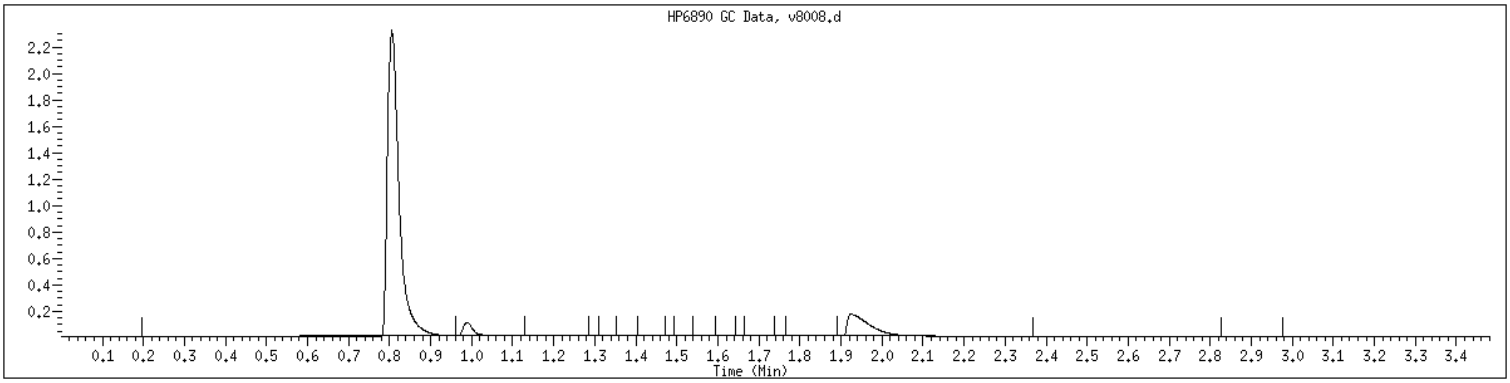
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8008.d Page: 1
Report Date: 07/11/2022 13:58

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 2369017 SampleType : LCS
Injection Date: 07/11/2022 13:25 Instrument : gcv8b.i
Operator : BDP
Sample Info : LCS
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 1.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Report No:	222070757	Client Sample ID:	LCSD2369018
Collect Date:	NA Time: NA	GCAL Sample ID:	2369018
Matrix:	Water % Moisture: NA	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8009
Injection Vol.:	1 (µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	1 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1331
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

CONCENTRATION UNITS: ug/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
124-38-9	Carbon Dioxide	9360		127	386	900

FORM I ORG-1

Data File: /var/chem/gcv8b.i/2220711p.b/v8009.d Page 1
Report Date: 11-Jul-2022 13:58

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8009.d
Lab Smp Id: 2369018
Inj Date : 11-JUL-2022 13:31
Operator : BDP Inst ID: gcv8b.i
Smp Info : LCSD
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 13:58 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Carbon Dioxide	0.993	1.014	-0.021	35296803	9356.64	9360

Data File: /var/chem/gcv8b.i/2220711p.b/v8009.d

Page 1

Date : 11-JUL-2022 13:31

Client ID:

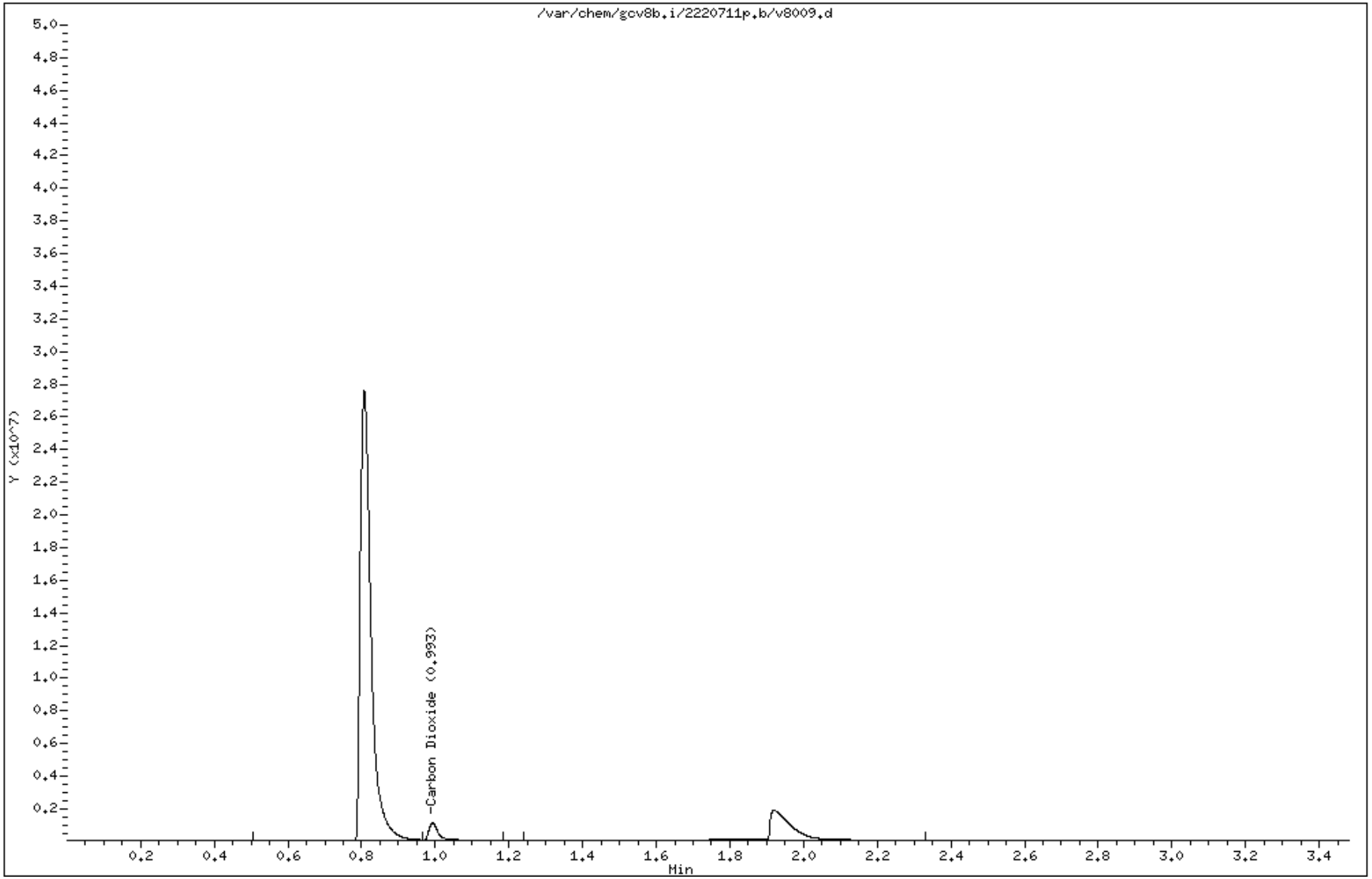
Instrument: gcv8b.i

Sample Info: LCSD

Operator: BDP

Column phase: GS-Q-30

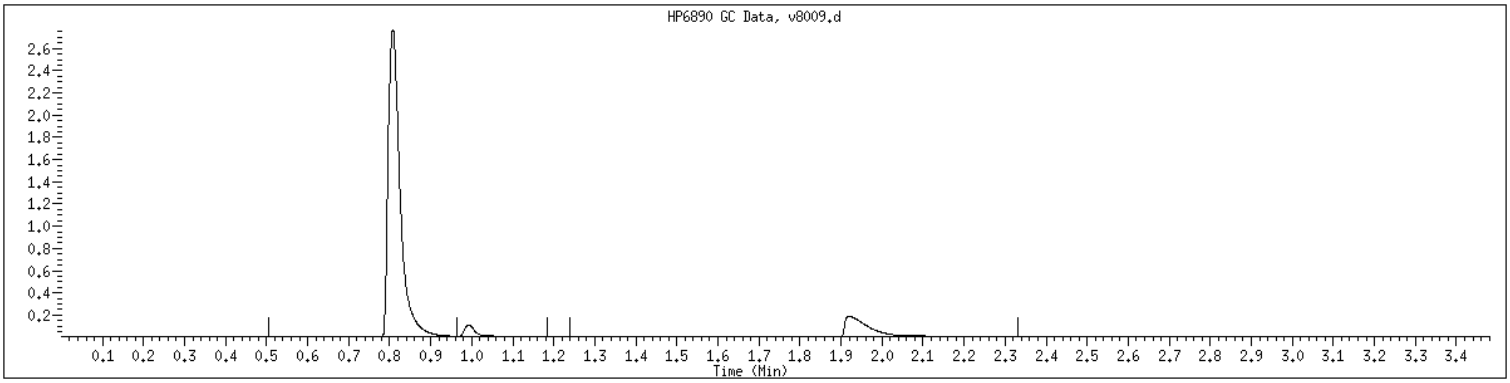
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8009.d Page: 1
Report Date: 07/11/2022 13:58

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 2369018	SampleType	: LCSD
Injection Date	: 07/11/2022 13:31	Instrument	: gcv8b.i
Operator	: BDP		
Sample Info	: LCSD		
Misc Info	: 2131877		
Method	: /var/chem/gcv8b.i/2220711p.b/CO2h.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: co2



NO MANUAL INTEGRATIONS

EPA RSK-175

Form 3E

Spikes

3E

WATER ORGANICS MS/MSD RECOVERY

Report No:	222070757	Parent Sample ID:	16WW16-220630
Prep Method:	NA	Prep Batch:	NA
Analytical Method:	RSK-175	Analytical Batch:	745070

GCAL QC ID: ***22207075704***

ANALYTE	*UNITS*	*SPIKE ADDED*	*SAMPLE RESULT*	*MS RESULT*	*MS % REC*	#	*QC LIMITS*
Carbon Dioxide	ug/L	5800	196000	203000	121		38 - 147

GCAL QC ID: ***22207075705***

ANALYTE	*UNITS*	*SPIKE ADDED*	*MSD RESULT*	*MSD % REC*	#	*% RPD*	#	*QC LIMITS REC*	*QC LIMITS RPD*
Carbon Dioxide	ug/L	5800	215000	328	*	6		38 - 147	0 - 40

RPD : 0 out of 1 outside limits

Spike Recovery: 1 out of 2 outside limits

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

FORM III ORG-1

3E

WATER ORGANICS LCS/LCSD RECOVERY

Report No: 222070757

Prep Method: NA

Prep Batch: NA

Analytical Method: RSK-175

Analytical Batch: 745070

GCAL QC ID: 2369017

ANALYTE	*UNITS*	*SPIKE ADDED*	*SAMPLE RESULT*	*LCS RESULT*	*LCS % REC*	#	*QC LIMITS*
Carbon Dioxide	ug/L	8700	0	9190	106		38 - 147

GCAL QC ID: 2369018

ANALYTE	*UNITS*	*SPIKE ADDED*	*LCSD RESULT*	*LCSD % REC*	#	*% RPD*	#	*QC LIMITS REC*	*RPD*
Carbon Dioxide	ug/L	8700	9360	108		2		38 - 147	0 - 40

RPD : 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

FORM III ORG-1

EPA RSK-175

Form 4C

Method Blanks

4C

ORGANIC METHOD BLANK SUMMARY

Report No:	222070757	Method Blank ID:	2369016
Matrix:	Water	Instrument ID:	GCV8B
Sample Amt:	5 mL	Lab File ID:	2220711p/v8010
Injection Vol.:	(µL)	GC Column:	GS-Q-30 ID .53 (mm)
Prep Final Vol.:	NA (µL)	Dilution Factor:	1 Analyst: BDP
Prep Date:	NA	Analysis Date:	07/11/22 Time: 1339
Prep Batch:	NA	Analytical Batch:	745070
Prep Method:	NA	Analytical Method:	RSK-175

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

	CLIENT SAMPLE ID	GCAL SAMPLE ID	DATE ANALYZED	TIME ANALYZED	INSTRUMENT ID
1.	LCS2369017	2369017	07/11/22	1325	GCV8B
2.	LCSD2369018	2369018	07/11/22	1331	GCV8B
3.	16WW16-220630	22207075701	07/11/22	1522	GCV8B
4.	16WW35-220630	22207075702	07/11/22	1529	GCV8B
5.	16WW48-220630	22207075703	07/11/22	1543	GCV8B
6.	16WW16-220630 MS	22207075704	07/11/22	1549	GCV8B
7.	16WW16-220630 MSD	22207075705	07/11/22	1555	GCV8B

EPA RSK-175

Form 6E

Calibrations

6E

ORGANICS INITIAL CALIBRATION DATA

				LabQC ID - FileID - Conc	1201 ~ 2220711p/v8006 ~ mix	
Report No:	222070757	Instrument ID:	GCV8B	1202 ~ 2220711p/v8002 ~ mix	1203 ~ 2220711p/v8003 ~ mix	
GC Column:	GS-Q-30 ID .53 (mm)	Analyst:	BDP	1204 ~ 2220711p/v8004 ~ mix	1205 ~ 2220711p/v8005 ~ mix	
Calib. Date 1:	07/11/22 Time 1: 1112	Analytical Batch:	745070			
Calib. Date 2:	07/11/22 Time 2: 1151	Analytical Method:	RSK-175			

ANALYTE	*1201*	*1202*	*1203*	*1204*	*1205*	*1206*	*1207*	*1208*	*1209*	*$\overline{RF}$ / m / A*	*b / B*	*C*	*FIT*	*TYPE*
Carbon Dioxide	2973	3081	4170	4306	4333					3772			18.14	A

FIT = %RSD for Average Curve and the Coefficient of Determination (r2) for Linear and Quadratic

Curve Types: A - Averaged, L - Linear Regression, W - Weighted Linear, Q - Quadratic

For curve types L and Q, the RRF and RSP (Response) are shown on separate lines to allow for evaluation against minimum RRF

$\overline{RF}$ = Mean Response Factor For Average Curve

m,b = Slope and Intercept For Linear Curve

A,B,C = Coefficents For Quadratic Curve

FORM V I SVOA

Data File: /var/chem/gcv8b.i/2220711p.b/v8006.d Page 1
Report Date: 11-Jul-2022 16:07

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8006.d
Lab Smp Id: 1201
Inj Date : 11-JUL-2022 11:51
Operator : BDP Inst ID: gcv8b.i
Smp Info : 1201
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 16:07 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Carbon Dioxide	1.014	1.014	0.000	2568676	864.000	681

Data File: /var/chem/gcv8b.i/2220711p.b/v8006.d

Date : 11-JUL-2022 11:51

Client ID:

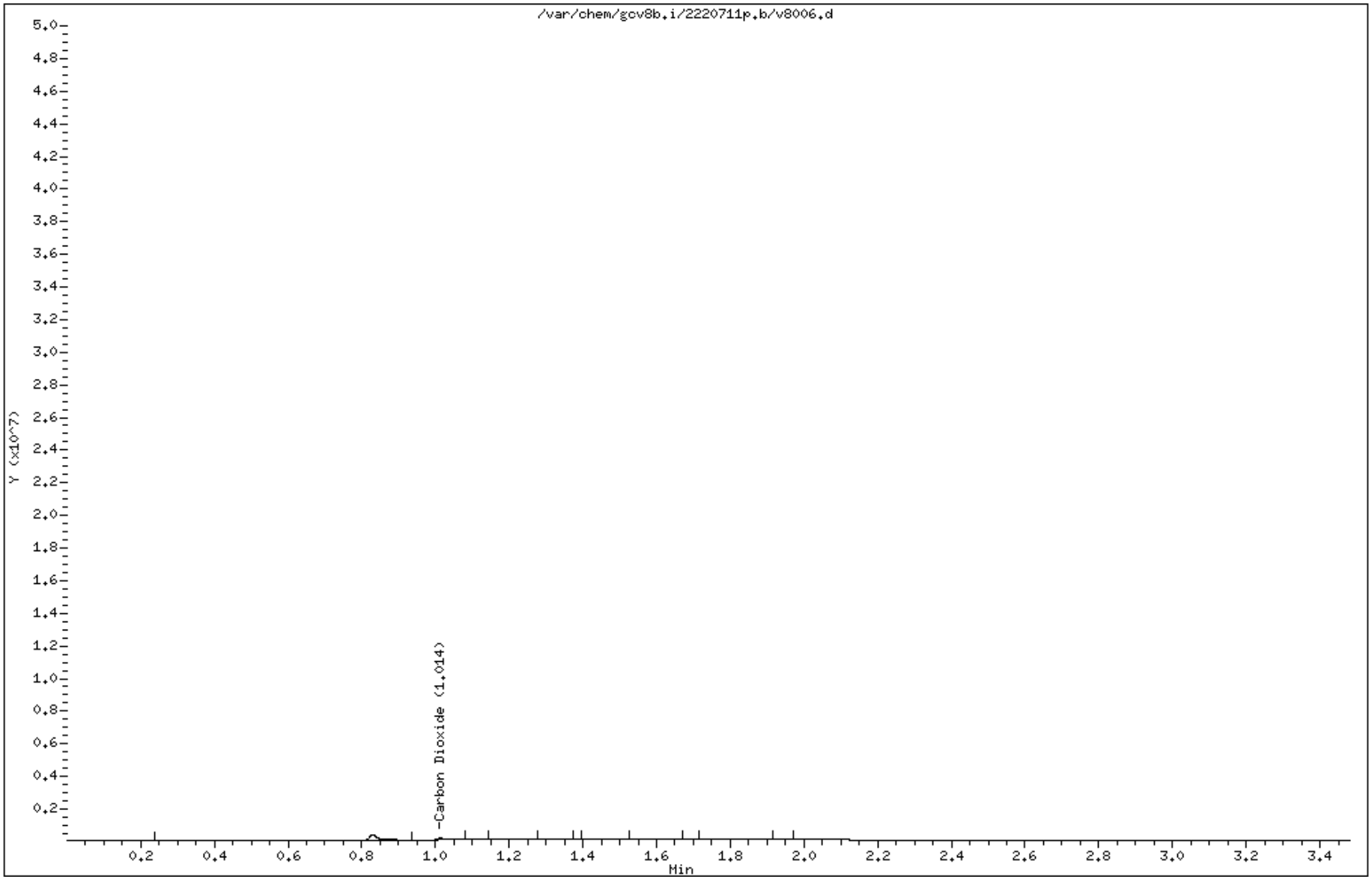
Instrument: gcv8b.i

Sample Info: 1201

Operator: BDP

Column phase: GS-Q-30

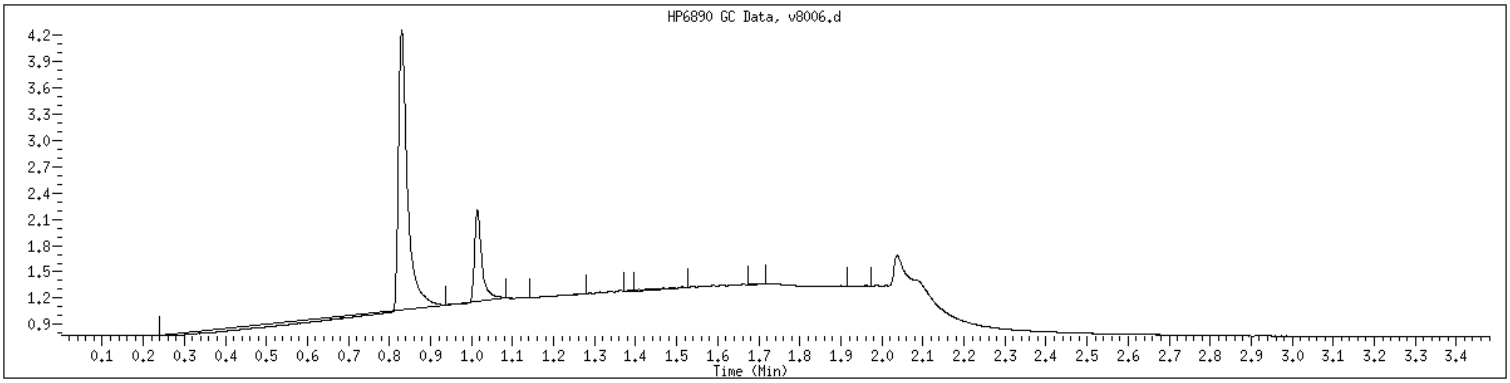
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8006.d Page: 1
Report Date: 07/11/2022 16:07

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 1201 SampleType : CALIB_1
Injection Date: 07/11/2022 11:51 Instrument : gcv8b.i
Operator : BDP
Sample Info : 1201
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 1.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

Data File: /var/chem/gcv8b.i/2220711p.b/v8002.d Page 1
Report Date: 11-Jul-2022 16:07

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8002.d
Lab Smp Id: 1202
Inj Date : 11-JUL-2022 11:12
Operator : BDP Inst ID: gcv8b.i
Smp Info : 1202
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 16:07 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:12 Cal File: v8002.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Carbon Dioxide	1.022	1.022	0.000	5329358	1730.00	1410

Data File: /var/chem/gcv8b.i/2220711p.b/v8002.d

Date : 11-JUL-2022 11:12

Client ID:

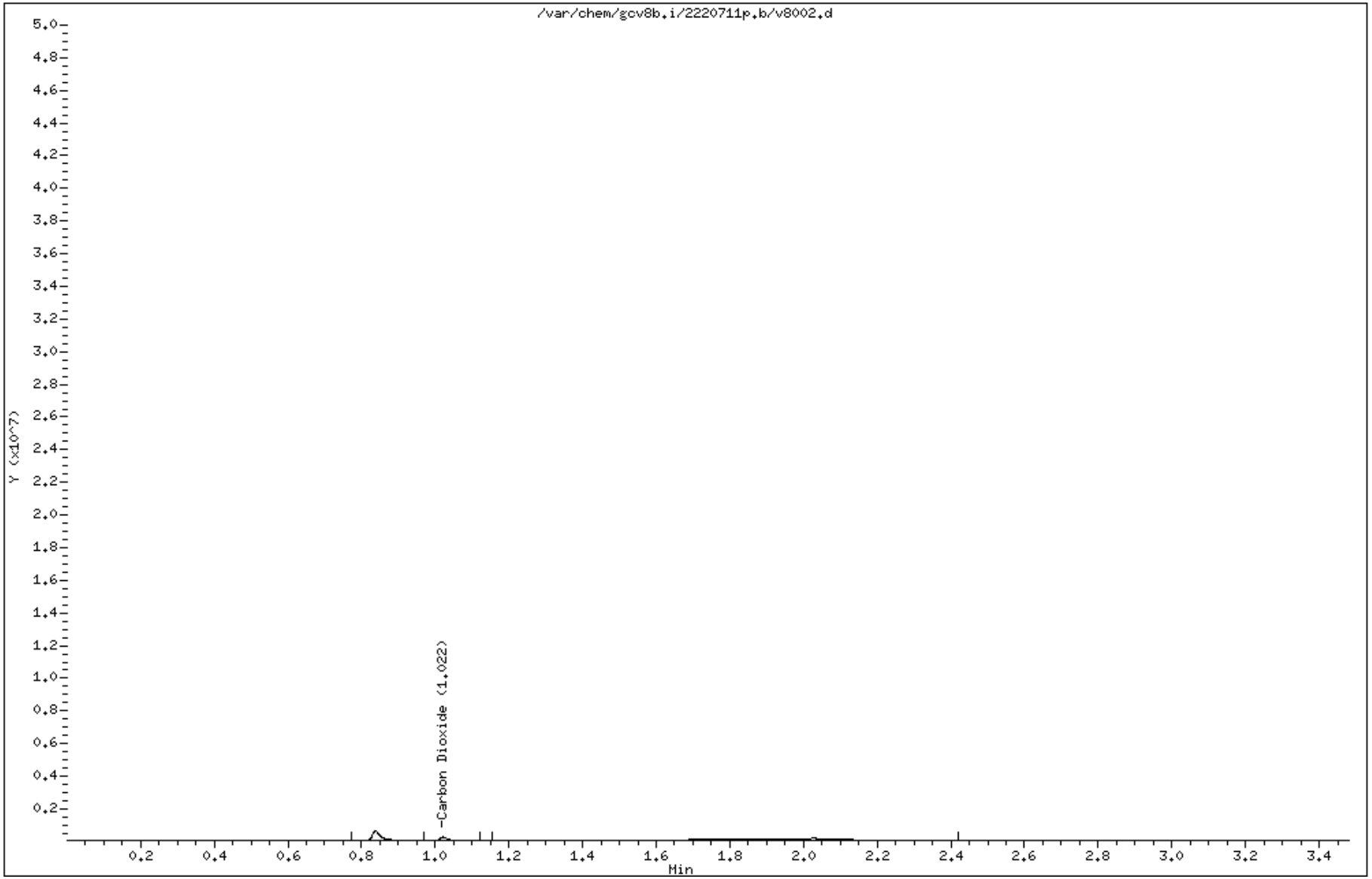
Instrument: gcv8b.i

Sample Info: 1202

Operator: BDP

Column phase: GS-Q-30

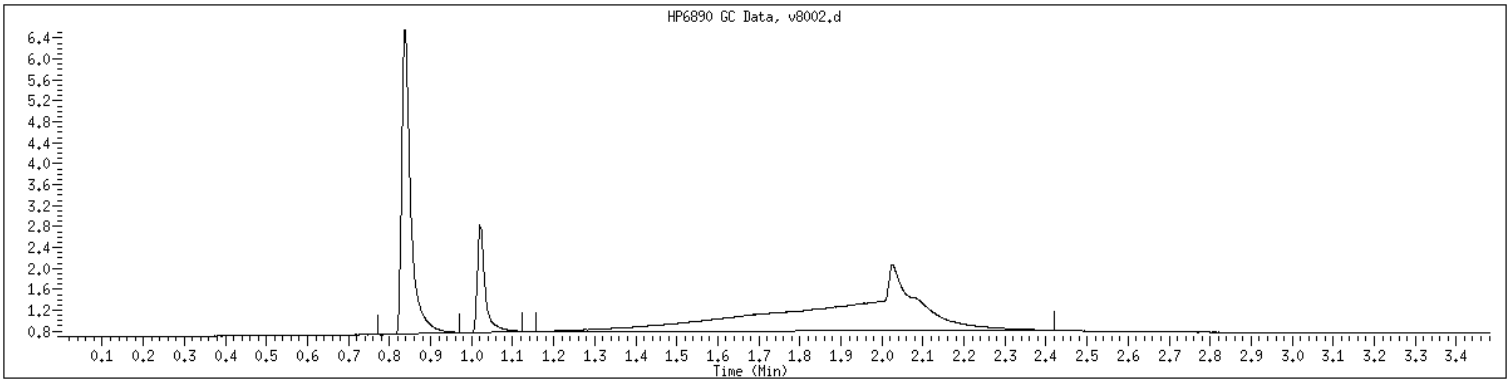
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8002.d Page: 1
Report Date: 07/11/2022 16:07

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 1202 SampleType : CALIB_2
Injection Date: 07/11/2022 11:12 Instrument : gcv8b.i
Operator : BDP
Sample Info : 1202
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 1.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

Data File: /var/chem/gcv8b.i/2220711p.b/v8003.d Page 1
Report Date: 11-Jul-2022 16:07

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8003.d
Lab Smp Id: 1203
Inj Date : 11-JUL-2022 11:20
Operator : BDP Inst ID: gcv8b.i
Smp Info : 1203
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 16:07 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:20 Cal File: v8003.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Carbon Dioxide	1.019	1.019	0.000	36025080	8640.00	9550

Data File: /var/chem/gcv8b.i/2220711p.b/v8003.d

Page 1

Date : 11-JUL-2022 11:20

Client ID:

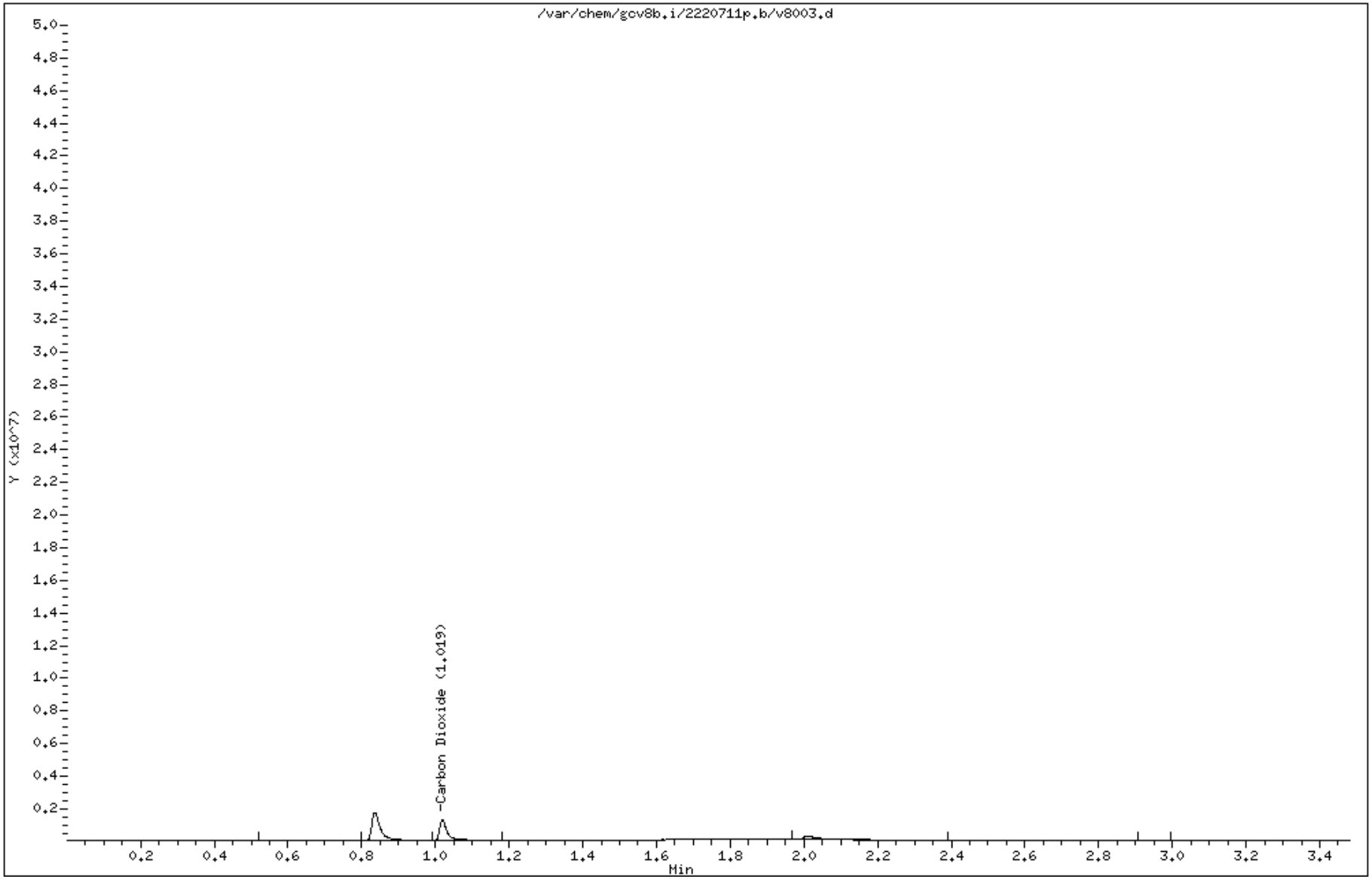
Instrument: gcv8b.i

Sample Info: 1203

Operator: BDP

Column phase: GS-Q-30

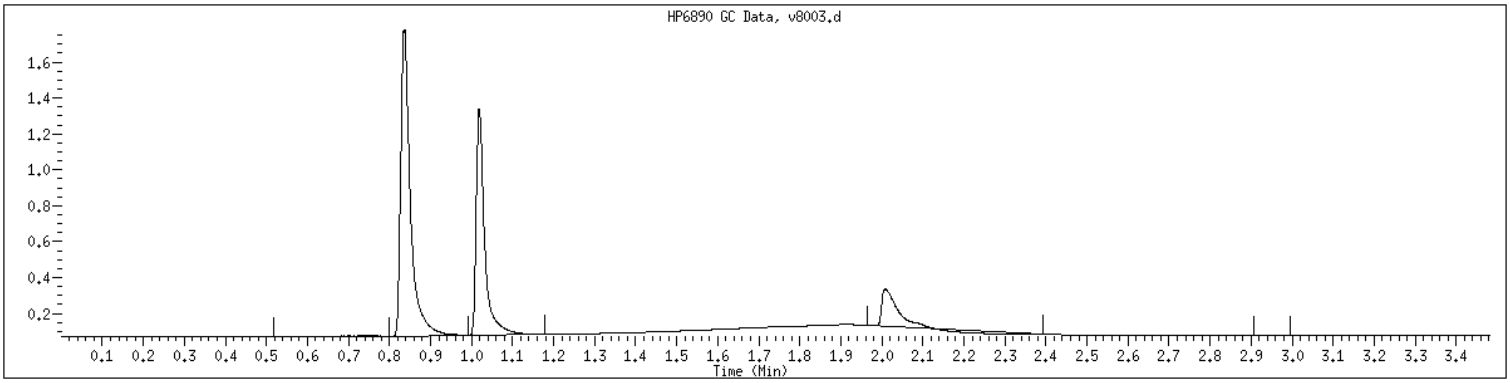
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8003.d Page: 1
Report Date: 07/11/2022 16:07

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1203	SampleType	: CALIB_3
Injection Date	: 07/11/2022 11:20	Instrument	: gcv8b.i
Operator	: BDP		
Sample Info	: 1203		
Misc Info	: 2131877		
Method	: /var/chem/gcv8b.i/2220711p.b/CO2h.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: co2



NO MANUAL INTEGRATIONS

Data File: /var/chem/gcv8b.i/2220711p.b/v8004.d Page 1
Report Date: 11-Jul-2022 16:07

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8004.d
Lab Smp Id: 1204
Inj Date : 11-JUL-2022 11:27
Operator : BDP Inst ID: gcv8b.i
Smp Info : 1204
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 16:07 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:27 Cal File: v8004.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
==========	==	======	======	========	=======	=======
1 Carbon Dioxide	1.018	1.018	0.000	59417265	13800.0	15800

Data File: /var/chem/gcv8b.i/2220711p.b/v8004.d

Date : 11-JUL-2022 11:27

Client ID:

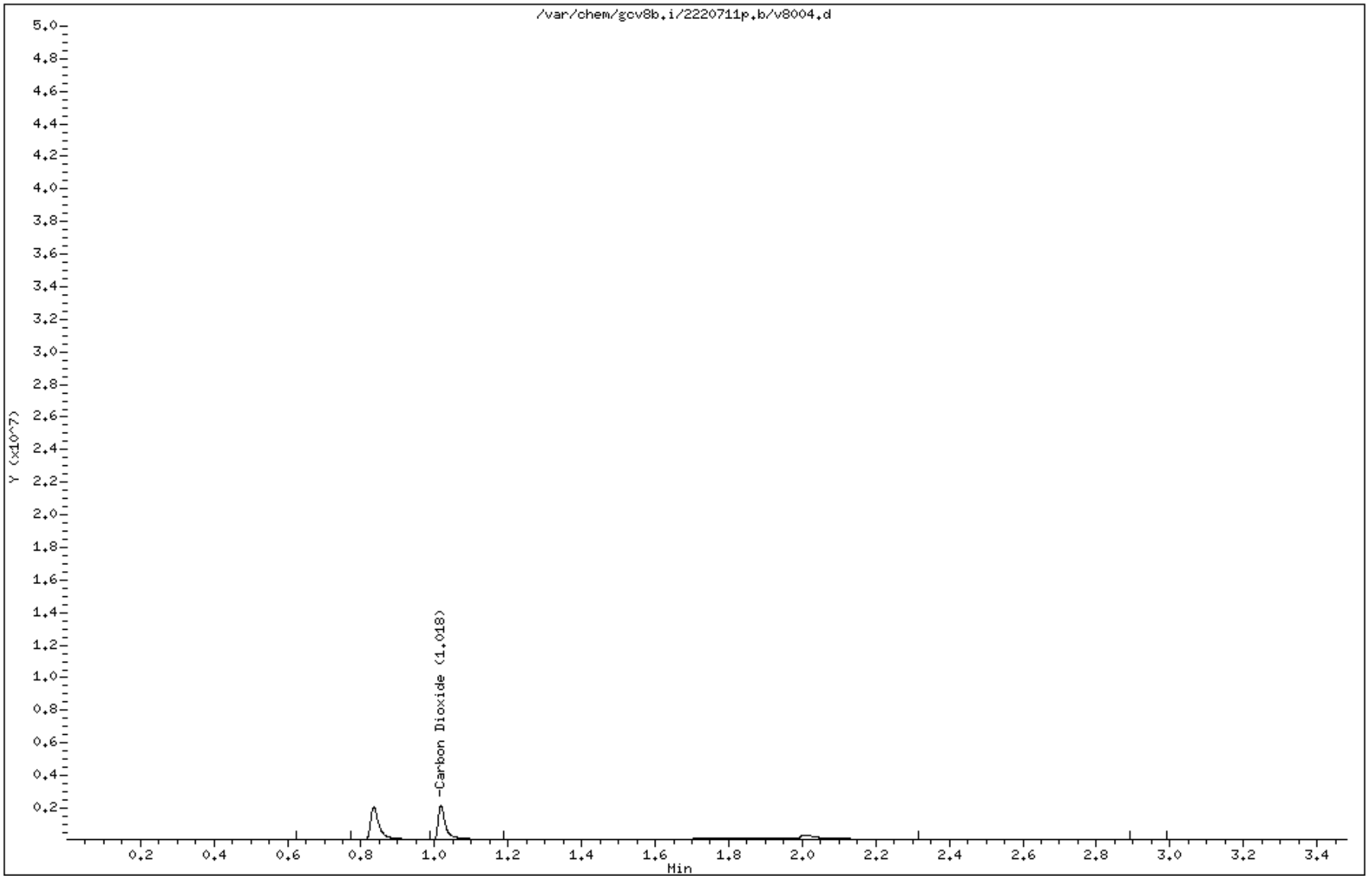
Instrument: gcv8b.i

Sample Info: 1204

Operator: BDP

Column phase: GS-Q-30

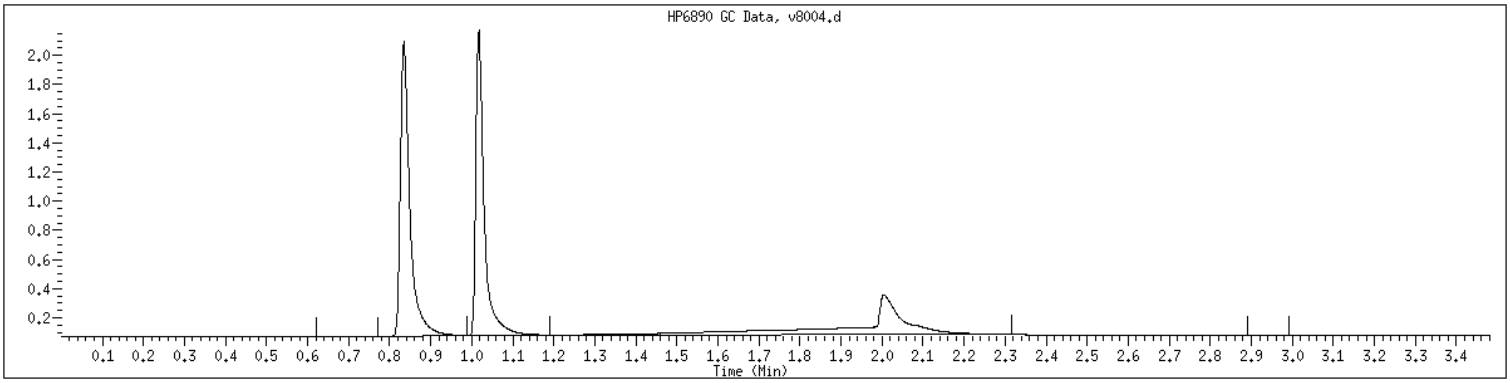
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8004.d Page: 1
Report Date: 07/11/2022 16:07

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1204	SampleType	: CALIB_4
Injection Date	: 07/11/2022 11:27	Instrument	: gcv8b.i
Operator	: BDP		
Sample Info	: 1204		
Misc Info	: 2131877		
Method	: /var/chem/gcv8b.i/2220711p.b/CO2h.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: co2



NO MANUAL INTEGRATIONS

Data File: /var/chem/gcv8b.i/2220711p.b/v8005.d Page 1
Report Date: 11-Jul-2022 16:07

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8005.d
Lab Smp Id: 1205
Inj Date : 11-JUL-2022 11:33
Operator : BDP Inst ID: gcv8b.i
Smp Info : 1205
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 16:07 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:33 Cal File: v8005.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Carbon Dioxide	1.010	1.010	0.000	74963821	17300.0	19900

Data File: /var/chem/gcv8b.i/2220711p.b/v8005.d

Date : 11-JUL-2022 11:33

Client ID:

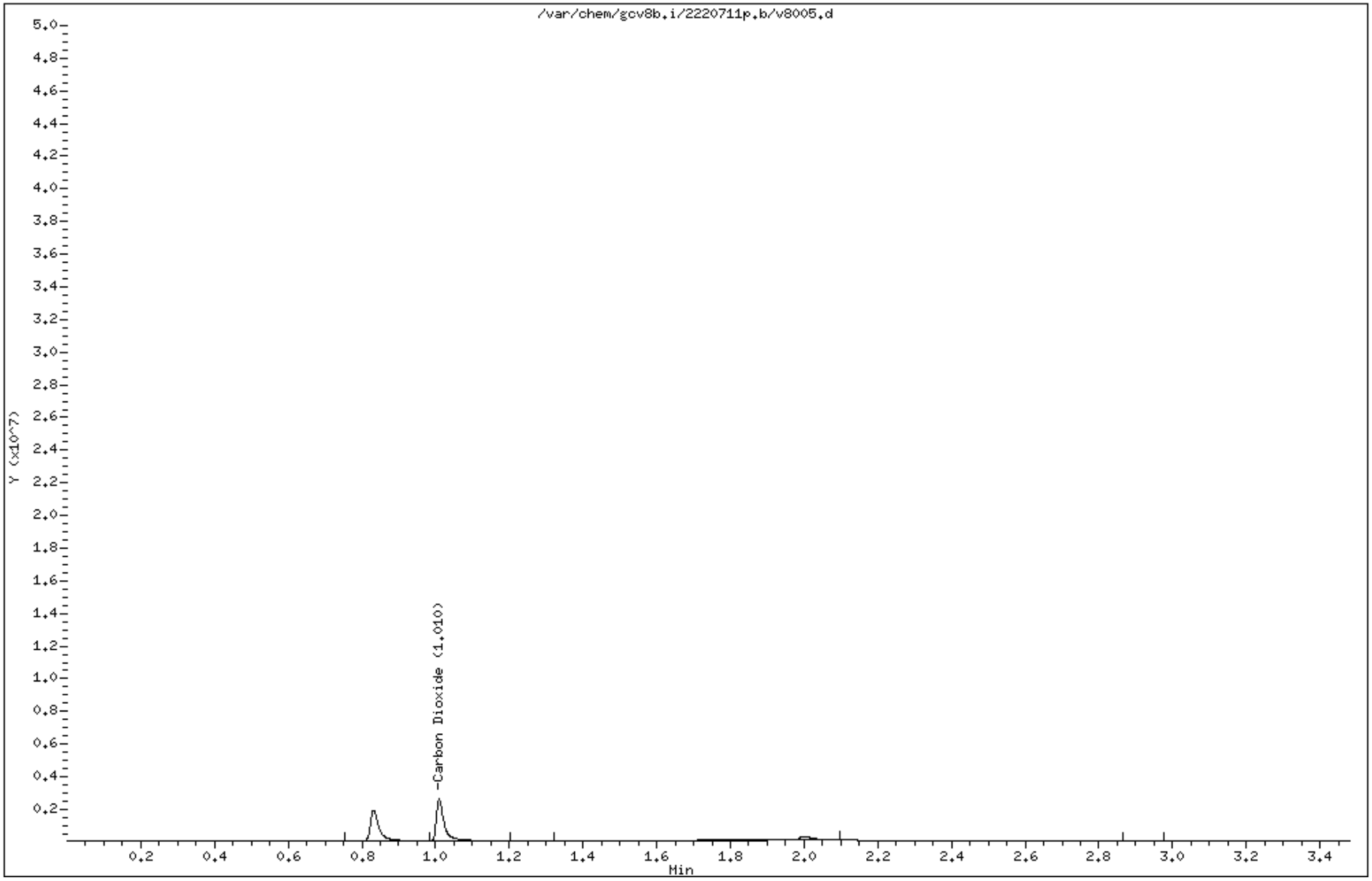
Instrument: gcv8b.i

Sample Info: 1205

Operator: BDP

Column phase: GS-Q-30

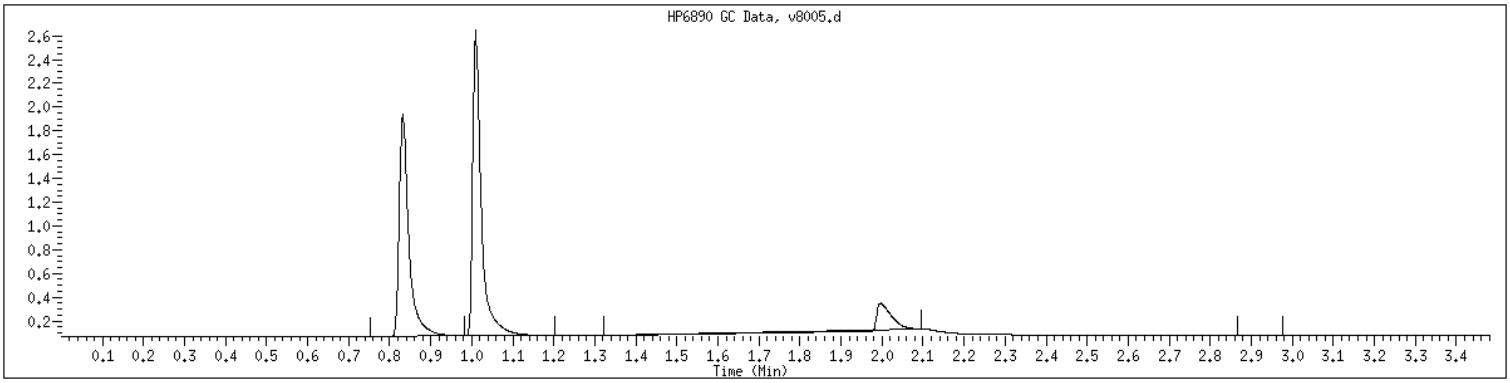
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8005.d Page: 1
Report Date: 07/11/2022 16:07

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 1205 SampleType : CALIB_5
Injection Date: 07/11/2022 11:33 Instrument : gcv8b.i
Operator : BDP
Sample Info : 1205
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 1.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

EPA RSK-175

Form 6I

ICAL Verifications

6I

ORGANICS INITIAL CALIBRATION VERIFICATION

Report No:	222070757	Instrument ID:	GCV8B
Analysis Date:	07/11/22 1159	Lab File ID:	2220711p/v8007
Analytical Method:	EPA RSK-175	Analytical Batch:	745070

ANALYTE	*UNITS*	*TRUE*	*FOUND*	*%REC*	*LCL*	*UCL*	*Q*
Carbon Dioxide	ug/L	8700	10000	115	80	120	

Data File: /var/chem/gcv8b.i/2220711p.b/v8007.d Page 1
Report Date: 11-Jul-2022 16:07

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8007.d
Lab Smp Id: 1600
Inj Date : 11-JUL-2022 11:59
Operator : BDP Inst ID: gcv8b.i
Smp Info : 1600
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 16:07 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Carbon Dioxide	1.016	1.014	0.002	37802793	10020.9	10000

Data File: /var/chem/gcv8b.i/2220711p.b/v8007.d

Date : 11-JUL-2022 11:59

Client ID:

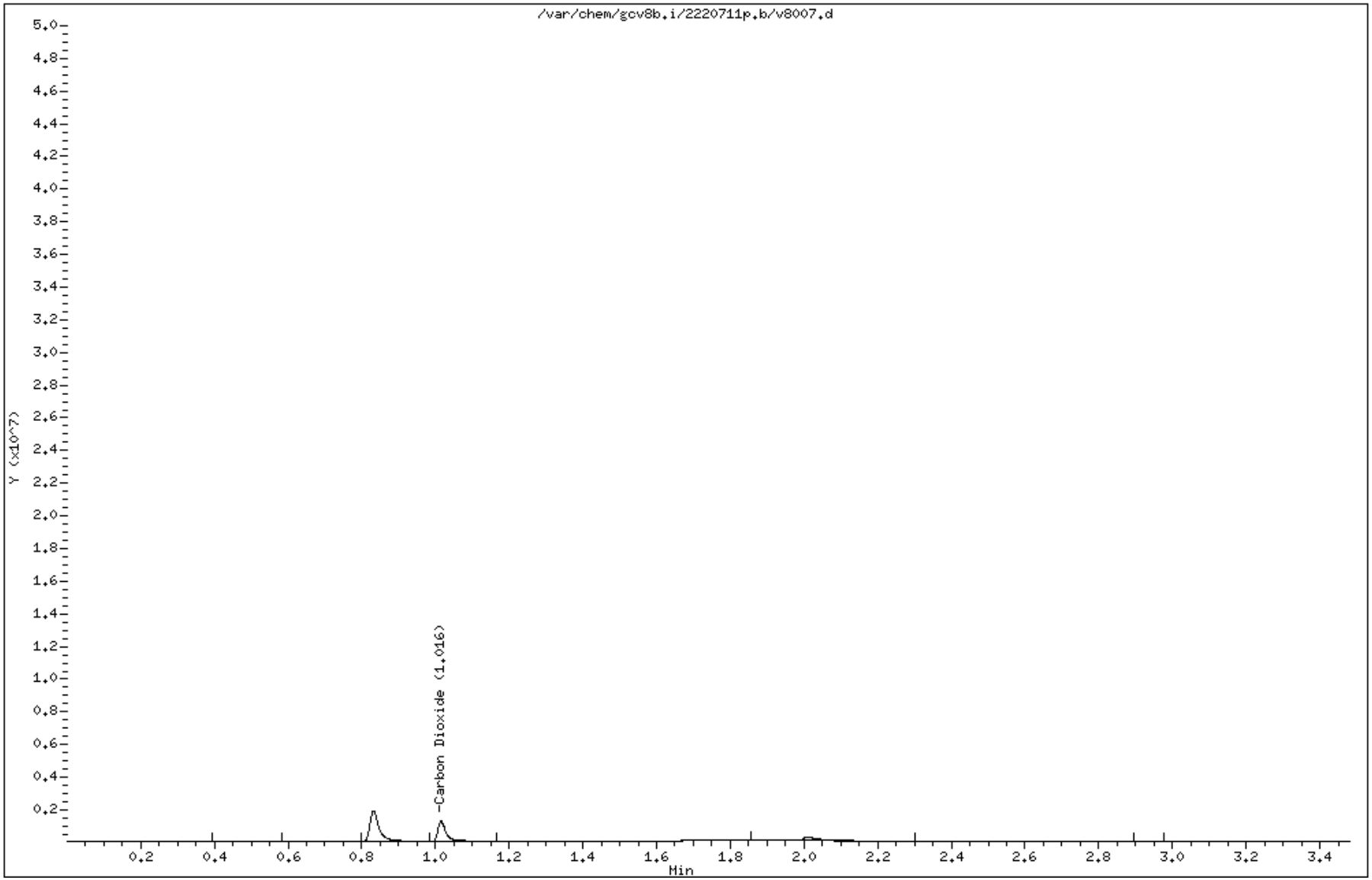
Instrument: gcv8b.i

Sample Info: 1600

Operator: BDP

Column phase: GS-Q-30

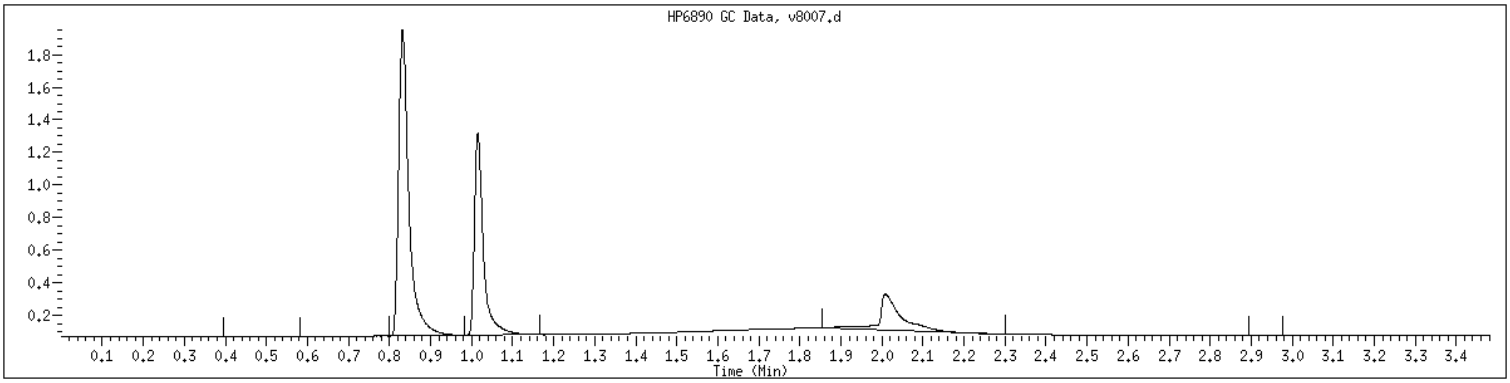
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8007.d Page: 1
Report Date: 07/11/2022 16:07

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1600	SampleType	: LCS
Injection Date	: 07/11/2022 11:59	Instrument	: gcv8b.i
Operator	: BDP		
Sample Info	: 1600		
Misc Info	: 2131877		
Method	: /var/chem/gcv8b.i/2220711p.b/CO2h.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: co2



NO MANUAL INTEGRATIONS

EPA RSK-175

Form 7E

CCAL Verifications

7E

ORGANICS CONTINUING CALIBRATION CHECK

Report No:	222070757			CCAL ID:	1400
GC Column:	GS-Q-30	ID .53	(mm)	Instrument ID:	GCV8B
Injection Vol.:	1.0		(µL)	Lab File ID:	2220711p/v8021
Init. Calib. Date 1:	07/11/22	Time 1: 1112		Analyst:	BDP
Init. Calib. Date 2:	07/11/22	Time 2: 1151		Analytical Batch:	745070
Analysis Date:	07/11/22	Time: 1535		Analytical Method:	RSK-175

ANALYTE	*RRF*	*RRF CCV*	*%D/%Drift*	*Max %D/ % Drift*	*TYPE*	*Q*
Carbon Dioxide	3772	4464	-18.3	20	A	

FORM V II SV

Data File: /var/chem/gcv8b.i/2220711p.b/v8021.d Page 1
Report Date: 11-Jul-2022 15:46

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8021.d
Lab Smp Id: 1400
Inj Date : 11-JUL-2022 15:35
Operator : BDP Inst ID: gcv8b.i
Smp Info : 1400
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 15:46 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
==========	==	======	======	========	=======	=======
1 Carbon Dioxide	0.996	0.996	0.000	38564970	8640.00	10200

Data File: /var/chem/gcv8b.i/2220711p.b/v8021.d

Date : 11-JUL-2022 15:35

Client ID:

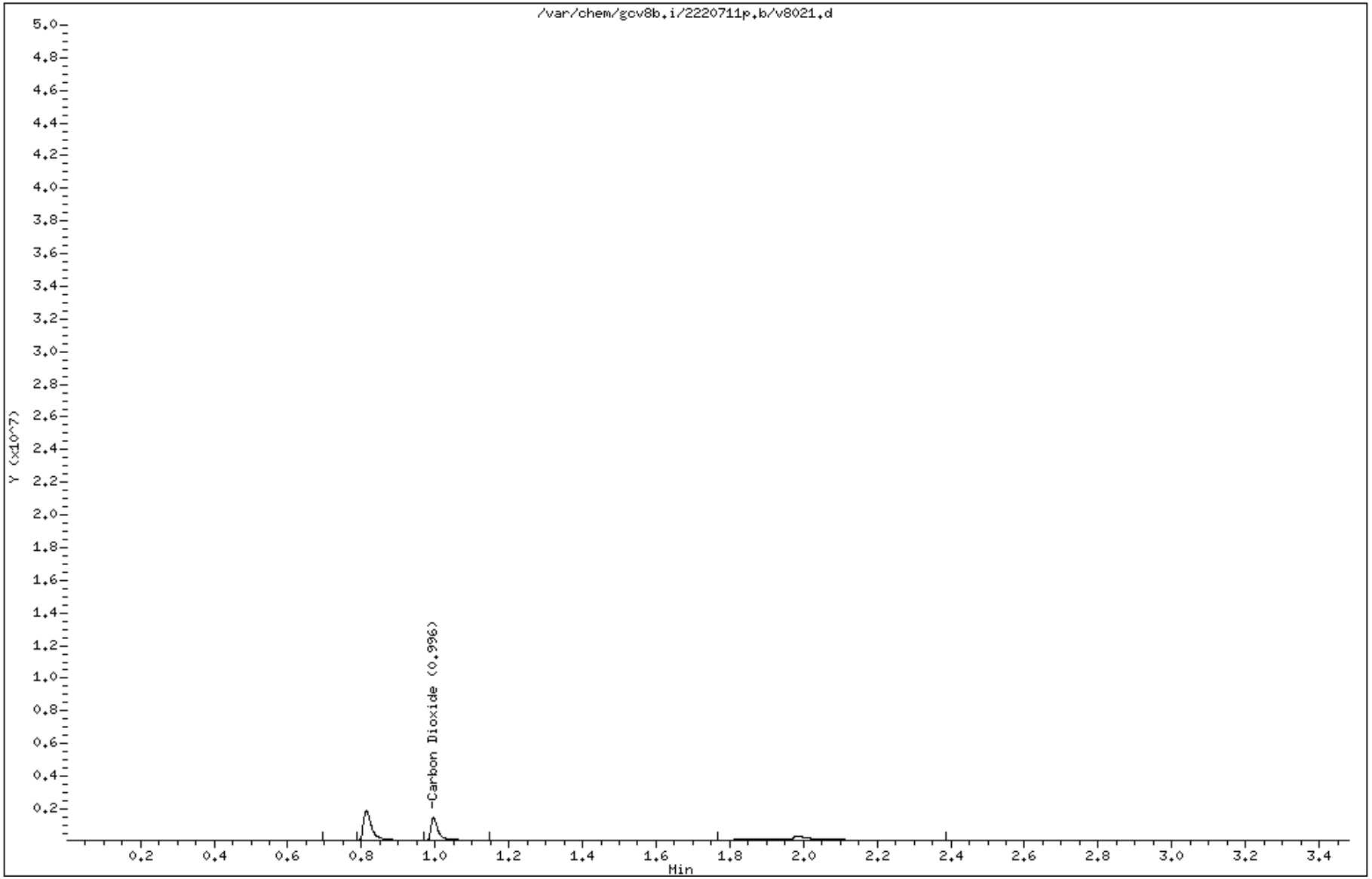
Instrument: gcv8b.i

Sample Info: 1400

Operator: BDP

Column phase: GS-Q-30

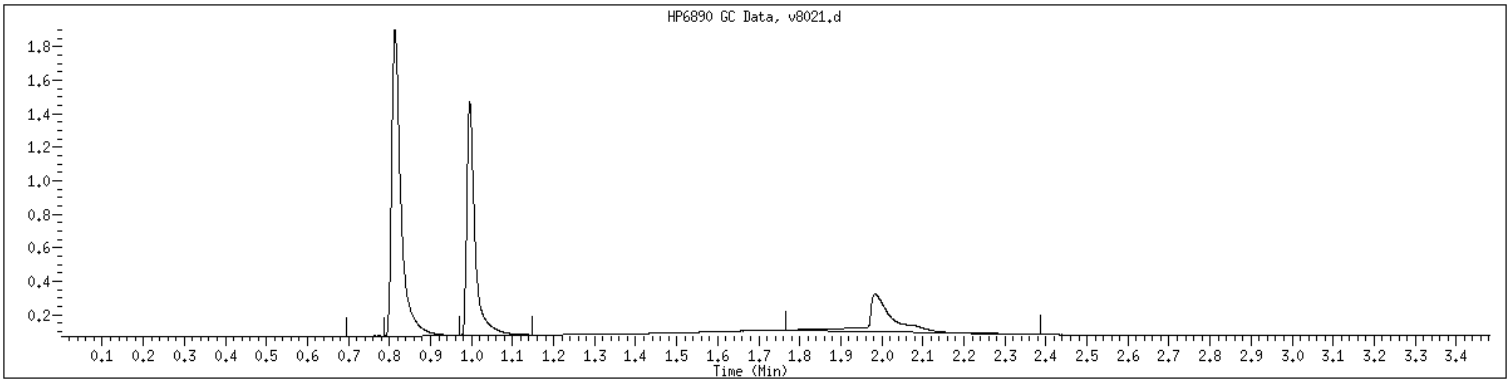
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8021.d Page: 1
Report Date: 07/11/2022 15:46

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1400	SampleType	: CCALIB_3
Injection Date	: 07/11/2022 15:35	Instrument	: gcv8b.i
Operator	: BDP		
Sample Info	: 1400		
Misc Info	: 2131877		
Method	: /var/chem/gcv8b.i/2220711p.b/CO2h.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: co2



NO MANUAL INTEGRATIONS

7E

ORGANICS CONTINUING CALIBRATION CHECK

Report No:	222070757			CCAL ID:	1400
GC Column:	GS-Q-30	ID .53	(mm)	Instrument ID:	GCV8B
Injection Vol.:	1.0		(µL)	Lab File ID:	2220711p/v8025
Init. Calib. Date 1:	07/11/22	Time 1: 1112		Analyst:	BDP
Init. Calib. Date 2:	07/11/22	Time 2: 1151		Analytical Batch:	745070
Analysis Date:	07/11/22	Time: 1607		Analytical Method:	RSK-175

ANALYTE	*$\overline{RRF}$*	*RRF CCV*	*%D/%Drift*	*Max %D/ % Drift*	*TYPE*	*Q*
Carbon Dioxide	3772	4326	-14.6	20	A	

FORM V II SV

Data File: /var/chem/gcv8b.i/2220711p.b/v8025.d Page 1
Report Date: 11-Jul-2022 16:17

GCAL, Inc.

Data file : /var/chem/gcv8b.i/2220711p.b/v8025.d
Lab Smp Id: 1400
Inj Date : 11-JUL-2022 16:07
Operator : BDP Inst ID: gcv8b.i
Smp Info : 1400
Misc Info : 2131877
Comment :
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Meth Date : 11-Jul-2022 16:17 bdp Quant Type: ESTD
Cal Date : 11-JUL-2022 11:51 Cal File: v8006.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: co2.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
==========	==	======	======	========	=======	=======
1 Carbon Dioxide	0.995	0.995	0.000	37379809	8640.00	9910

Data File: /var/chem/gcv8b.i/2220711p.b/v8025.d

Page 1

Date : 11-JUL-2022 16:07

Client ID:

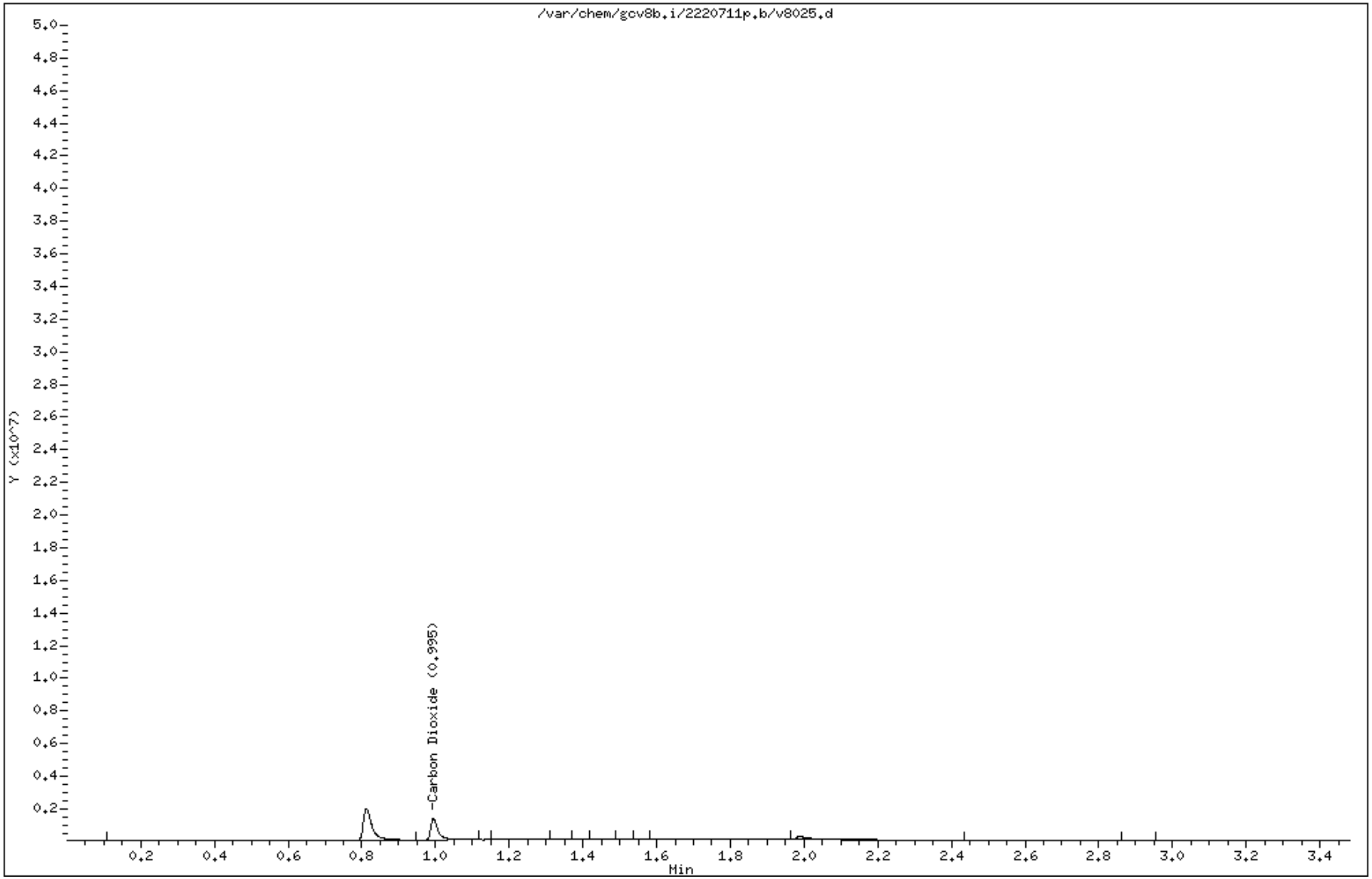
Instrument: gcv8b.i

Sample Info: 1400

Operator: BDP

Column phase: GS-Q-30

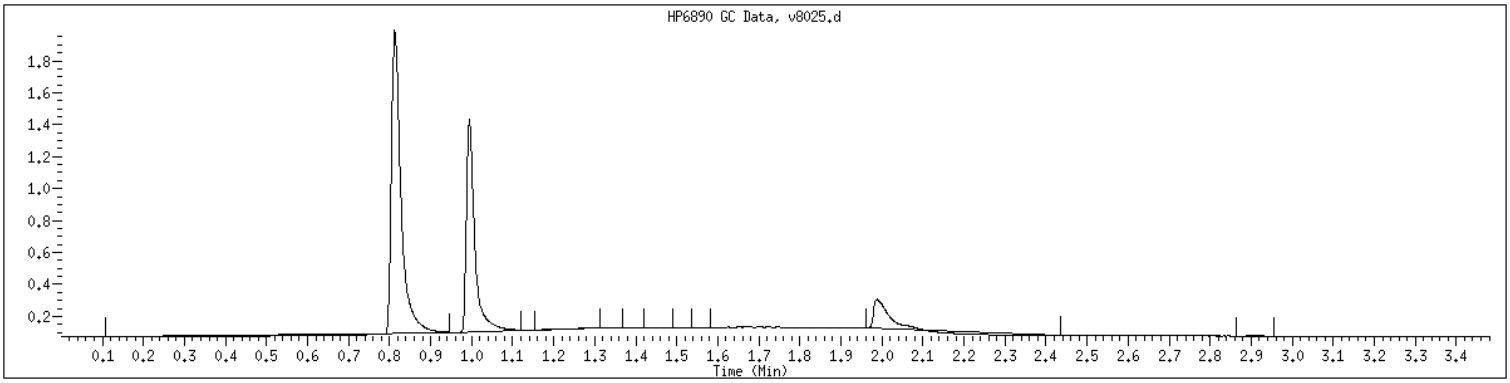
Column diameter: 0.53



Data file : /var/chem/gcv8b.i/2220711p.b/v8025.d Page: 1
Report Date: 07/11/2022 16:17

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 1400 SampleType : CCALIB_3
Injection Date: 07/11/2022 16:07 Instrument : gcv8b.i
Operator : BDP
Sample Info : 1400
Misc Info : 2131877
Method : /var/chem/gcv8b.i/2220711p.b/CO2h.m
Dilution : 1.0
Matrix : WATER
Integrator : HP Genie Compound Sublist: co2



NO MANUAL INTEGRATIONS

EPA RSK-175

RunLog

LABORATORY CHRONICLE: GCV DEPARTMENT

Date: 07/11/2022
Instrument: gcv8b.i
Method File: /var/chem/gcv8b.i/2220711p.b/CO2h.m
Batch: /var/chem/gcv8b.i/2220711p.b
Column-Detector: GS-Q-30

Sample ID	Method	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
1201	CO2h.m	v8001.d	0.00 ml	11-JUL-2022 11:05	1.0	BDP	1	co2
1202	CO2h.m	v8002.d	0.00 ml	11-JUL-2022 11:12	1.0	BDP	1	co2
1203	CO2h.m	v8003.d	0.00 ml	11-JUL-2022 11:20	1.0	BDP	1	co2
1204	CO2h.m	v8004.d	0.00 ml	11-JUL-2022 11:27	1.0	BDP	1	co2
1205	CO2h.m	v8005.d	0.00 ml	11-JUL-2022 11:33	1.0	BDP	1	co2
1201	CO2h.m	v8006.d	0.00 ml	11-JUL-2022 11:51	1.0	BDP	1	co2
1600	CO2h.m	v8007.d	0.00 ml	11-JUL-2022 11:59	1.0	BDP	1	co2
2369017	CO2h.m	v8008.d	0.00 ml	11-JUL-2022 13:25	1.0	BDP	1	co2
2369018	CO2h.m	v8009.d	0.00 ml	11-JUL-2022 13:31	1.0	BDP	1	co2
2369016	CO2h.m	v8010.d	0.00 ml	11-JUL-2022 13:39	1.0	BDP	1	co2
22207022901	CO2h.m	v8011.d	0.00 ml	11-JUL-2022 13:51	30.0	BDP	1	co2
22207022902	CO2h.m	v8012.d	0.00 ml	11-JUL-2022 13:57	30.0	BDP	1	co2
22207022903	CO2h.m	v8013.d	0.00 ml	11-JUL-2022 14:04	30.0	BDP	1	co2
22207022904	CO2h.m	v8014.d	0.00 ml	11-JUL-2022 14:10	30.0	BDP	1	co2
22207022904	CO2h.m	v8015.d	0.00 ml	11-JUL-2022 14:22	50.0	BDP	1	co2
22207022905	CO2h.m	v8016.d	0.00 ml	11-JUL-2022 14:47	30.0	BDP	1	co2
22207022906	CO2h.m	v8017.d	0.00 ml	11-JUL-2022 15:03	30.0	BDP	1	co2
22207022907	CO2h.m	v8018.d	0.00 ml	11-JUL-2022 15:12	30.0	BDP	1	co2
22207075701	CO2h.m	v8019.d	0.00 ml	11-JUL-2022 15:22	30.0	BDP	1	co2
22207075702	CO2h.m	v8020.d	0.00 ml	11-JUL-2022 15:29	30.0	BDP	1	co2
1400	CO2h.m	v8021.d	0.00 ml	11-JUL-2022 15:35	1.0	BDP	1	co2
22207075703	CO2h.m	v8022.d	0.00 ml	11-JUL-2022 15:43	30.0	BDP	1	co2
22207075704	CO2h.m	v8023.d	0.00 ml	11-JUL-2022 15:49	30.0	BDP	1	co2
22207075705	CO2h.m	v8024.d	0.00 ml	11-JUL-2022 15:55	30.0	BDP	1	co2
1400	CO2h.m	v8025.d	0.00 ml	11-JUL-2022 16:07	1.0	BDP	1	co2

Client ID: ALS Houston - ALS Environmental - Houston, TX
SDG: 222070757
PM: RWe

www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **19101**

SUBCONTRACT TO:

Pace Analytical
7979 Innovation Park Drive
Baton Rouge, LA 70820 **Phone:** +1 225 769 4900

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	Dane J. Wacasey
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	Dane.Wacasey@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS22070020
TSR:	Ron Martino

	LAB SAMPLE ID / ANALYSIS REQUESTED	CLIENT SAMPLE ID	MATRIX	COLLECT DATE / DUE DATE	
1.	**HS22070020-01**	**16WW16-220630**	**Water**	**30 Jun 2022 07:10**	1,4,5
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			18 Jul 2022	
2.	**HS22070020-02**	**16WW35-220630**	**Water**	**30 Jun 2022 08:10**	2
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			18 Jul 2022	
3.	**HS22070020-04**	**16WW48-220630**	**Water**	**30 Jun 2022 09:40**	3
	RSK175 CO2; LHAAP; DoD Level IV, EQUIS EDD			18 Jul 2022	

Comments: Sample 16WW16-220630 MS/MSD

Please analyze for the analysis listed above.
Send report to the emails shown above.

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: 7/5/2022 1800

Received By: _____ Date/Time: _____

Cooler ID(s): _____ Temperature(s): _____

Fed Ex
5789 1995 2680

7/7/22 0949
7/7/22 - 0949 = 42
5.6

Pace Analytical®

SAMPLE RECEIVING CHECKLIST

222070757

SAMPLE DELIVERY GROUP 222070757	
Client **PM** RWe ALS Houston - ALS Environmental - Houston, TX	**Transport Method** FEDEX
Profile Number 294458	**Received By** Roberts, George S.
Line Item(s) 1 - CO2	**Receive Date(s)** 07/07/22

CHECKLIST	YES	NO
Samples received with proper thermal preservation?	☑	☐
Radioactivity is <1600 cpm? If no, record cpm value in notes section.	☑	☐
COC relinquished and complete (including sampleIDs, collect times, and sampler)?	☑	☐
All containers received in good condition and within hold time?	☑	☐
All sample labels and containers received match the chain of custody?	☐	☐
Preservative added to any containers?	☐	☐
If received, was headspace for VOC water containers < 6mm?	☐	☐
Samples collected in containers provided by Pace Gulf Coast?	☐	☐

COOLERS

Airbill	Thermometer ID: E42	Temp °C
578919952680		5.6

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

HS22070020 - Sub Perch IV Rpt (E2200646)

ALS WO# HS22070020

July 25, 2022 Service Request No:E2200646

Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

Laboratory Results for: HS22070020

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory July 01, 2022
For your reference, these analyses have been assigned our service request number **E2200646.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Corey Grandits
Project Manager

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental

Certificate of Analysis

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Environmental

Client:	ALS	**Service Request No.:**	E2200646
Project:	HS22070020	**Date Received:**	07/01/22
Sample Matrix:	W		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Nine samples were received for analysis at ALS Environmental in Houston on 07/01/22.

The samples were received in good condition and are consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2200278: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in addition to a MS/MSD for this extraction batch. The LCS-DLCS recoveries met acceptance criteria. EQ278-06/07 MS/MSD recoveries met acceptance criteria. EQ278-04/05 MS/MSD failed, parent sample 581 ug/L.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: ALS Environmental - US **Service Request:**E2200646
Project: HS22070020

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2200646-001	16WW16-220630	6/30/2022	0710
E2200646-002	16WW35-220630	6/30/2022	0810
E2200646-003	16WW36-220630	6/30/2022	0855
E2200646-004	16WW48-220630	6/30/2022	0940
E2200646-005	16WW30-220630	6/30/2022	1025
E2200646-006	16WW29-220630	6/30/2022	1110
E2200646-007	16WW29-220630-FD	6/30/2022	1110
E2200646-008	16WW25-220630	6/30/2022	1200
E2200646-009	16WW26-220630	6/30/2022	1250

Service Request Summary

Folder #: **E2200646**
Client Name: ALS Environmental - US
Project Name: HS22070020
Project Number:

Report To: Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-575-2190
Cell Number:
Fax Number: 281-530-5887
E-mail: dane.wacasey@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 07/01/22
Internal Due Date: 7/18/2022
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS22070020
EDD: EQUIS
EFWEDD_LHAAP

13 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2200646-001	16WW16-220630	Water	06/30/22 0710	**IV**
E2200646-002	16WW35-220630	Water	06/30/22 0810	**IV**
E2200646-003	16WW36-220630	Water	06/30/22 0855	**IV**
E2200646-004	16WW48-220630	Water	06/30/22 0940	**IV**
E2200646-005	16WW30-220630	Water	06/30/22 1025	**IV**
E2200646-006	16WW29-220630	Water	06/30/22 1110	**IV**
E2200646-007	16WW29-220630-FD	Water	06/30/22 1110	**IV**
E2200646-008	16WW25-220630	Water	06/30/22 1200	**IV**
E2200646-009	16WW26-220630	Water	06/30/22 1250	**IV**

Service Request Summary

Folder #: **E2200646**
Client Name: ALS Environmental - US
Project Name: HS22070020
Project Number:

Report To: Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-575-2190
Cell Number:
Fax Number: 281-530-5887
E-mail: dane.wacasey@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 07/01/22
Internal Due Date: 7/18/2022
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS22070020
EDD: EQUIS
EFWEDD_LHAAP

13 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Test Comments:

Group	Test/Method	Samples	Comments
Semivoa GCMS	ClO4 DOD/6850	7	IV Due 7/25
Semivoa GCMS	ClO4 DOD/6850	2	MS/MSD

Data Qualifiers

Lab Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	Internal standard not within the specified limits. See case narrative.
J	Estimated Value. Concentration found below MRL.
K	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	Analyte was detected above the method reporting limit prior to normalization.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
L1	Laboratory control sample recovery outside the specified limits; results may be biased high.
L2	Laboratory control sample recovery outside the specified limits; results may be biased low.
L3	Laboratory control sample recovery outside the specified limits.
M	Matrix interference; results may be biased high.
M	The duplicate injection precision not met.
M1	Matrix interference due to coelution with a non-target compound; results may be biased high.

Data Qualifiers

Lab Standard

N	Presumptive evidence of a compound for TICs that have been identified based on a mass spectral library search.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
P	Pesticide/Aroclor target analyte > 40% difference for detected concentrations between GC columns
Q	Indicates as estimated value because the P and P + 2 theoretical abundance ratio does not meet method criteria.
R	Duplicate Precision not met.
R1	Duplicate precision not within the specified limits; however, the results are below the MRL and considered estimated.
S	Surrogate recovery not within specified limits.
S	The reported value was determined by the Method of Standard Additions (MSA).
T	Analyte is a tentatively identified compound, result is estimated.
U	Compound was analyzed for, but was not detected (ND).
V1	The continuing calibration verification standard was outside (biased high) the specified limits for this compound.
V2	The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
W	Result quantified, but the corresponding peak was detected outside the generated retention time window.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
X	See case narrative.
Y	Recovery outside limits
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

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ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793	5/27/2023
California Department of Health Services	2919-2023	4/30/2023
Department of Defense	L22-90	3/31/2024
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Hawaii Department of Health	2022	4/30/2023
Illinois Environmental Protection Agency	2000322022-9	5/9/2023
Kansas Department of Health and Environment	E-10352 2022	7/31/2022
Louisiana Department of Environmental Quality	03087-2022	6/30/2023
Louisiana Department of Health and Hospitals	LA028	12/31/2022
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343	6/30/2023
Michigan Depratment of Environmental Quality	9971-2022	4/30/2023
Minnesota Department of Health	2228443	12/31/2022
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2023
Nevada Department of Concervation and Natural Resources	TX026932022-1	7/31/2022
New Hampshire Environmental Laboratory Accreditation Program	209422	4/24/2023
New Jersey Department of Environmental Protection	TX008-2023	6/30/2023
New York Department of Health	11707	3/31/2023
Oklahoma Department of Environmental Quality	2021-080	8/31/2022
Oregon Environmental Laboratory Accreditation Program	TX200002	5/15/2023
Pennsylvania Department of Environmental Protection	68-03441-016	6/30/2023
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	04016-2022	4/30/2023
Texas Commision on Environmental Quality	T104704231-22-29	4/30/2023
United States Department of Agriculture	P330-19-00299	10/10/2022
Utah Department of Health Environmental Laboratory Certification	TX026932021-12	7/31/2022
Washington Department of Health	C819-2022	11/14/2022

Chain of Custody

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Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 19102**

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	Dane J. Wacasey
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	Dane.Wacasey@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS22070020
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS22070020-01**	**16WW16-220630**	**Water**	**30 Jun 2022 07:10**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			18 Jul 2022
2.	**HS22070020-02**	**16WW35-220630**	**Water**	**30 Jun 2022 08:10**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			18 Jul 2022
3.	**HS22070020-03**	**16WW36-220630**	**Water**	**30 Jun 2022 08:55**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			18 Jul 2022
4.	**HS22070020-04**	**16WW48-220630**	**Water**	**30 Jun 2022 09:40**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			18 Jul 2022
5.	**HS22070020-05**	**16WW30-220630**	**Water**	**30 Jun 2022 10:25**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			18 Jul 2022
6.	**HS22070020-06**	**16WW29-220630**	**Water**	**30 Jun 2022 11:10**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			18 Jul 2022
7.	**HS22070020-07**	**16WW29-220630-FD**	**Water**	**30 Jun 2022 11:10**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			18 Jul 2022
8.	**HS22070020-08**	**16WW25-220630**	**Water**	**30 Jun 2022 12:00**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 19102**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			18 Jul 2022
9.	**HS22070020-09**	**16WW26-220630**	**Water**	**30 Jun 2022 12:50**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			18 Jul 2022

Comments: Sample 16WW16-220630 & 16WW25-220630 MS/MSD

Please analyze for the analysis listed above.
Send report to the emails shown above.

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: Corey G Date/Time: 7/1/22 1109

Cooler ID(s): _____ Temperature(s): _____

ALS Environmental

Cooler Receipt Form

Project Chemist CH

Client/Project ALS-H

Thermometer ID IR31

Date/Time Received: 7-1-22 Initials: NELH Date/Time Logged in: 7-1-22 Initials CH

1. Method of delivery: ○ US Mail ○ Fed Ex ○ UPS ○ DHL ☒ Courier (ALS) ○ Client

2. Samples received in: ☒ Cooler ○ Box ○ Envelope ○ Other

3. Were custody seals on coolers? ○ Yes ☒ No
   Were they intact? ○ Yes ○ No ☒ N/A
   Were they signed and dated? ○ Yes ○ No ☒ N/A
   If yes, how many and where?

4. Packing Material: ○ Inserts ☒ Baggies ○ Bubble Wrap ○ Gel Packs ☒ Wet Ice ○ Sleeves ○ Other

5. Foreign or Regulated Soil? ○ Yes ○ No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		7-1-22	1109	CH	0.8°	☒
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ☒ Yes ○ No
7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ☒ Yes ○ No
8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ☒ Yes ○ No
9. Were appropriate bottles/containers and volumes received for the requested tests? ☒ Yes ○ No
10. Did sample labels and tags agree with custody documents? ☒ Yes ○ No

Notes, Discrepancies, & Resolutions:

Service request Label:

HS-HRMSCoolerReceipt R1.0

ALS Environmental - Houston HRMS

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SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6ºC.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10ºC.
- ✓ Air samples are shipped and stored cold, at 0 to 6ºC
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

Preparation Information Benchsheets

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 402386 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 7/6/22 11:18

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2200646-001	16WW16-220630	.01	6850/ClO4 DOD			Water	10mL	
2	E2200646-002	16WW35-220630	.01	6850/ClO4 DOD			Water	10mL	
3	E2200646-003	16WW36-220630	.01	6850/ClO4 DOD			Water	10mL	
4	E2200646-004	16WW48-220630	.01	6850/ClO4 DOD			Water	10mL	
5	E2200646-005	16WW30-220630	.01	6850/ClO4 DOD			Water	10mL	
6	E2200646-006	16WW29-220630	.01	6850/ClO4 DOD			Water	10mL	
7	E2200646-007	16WW29-220630-FD	.01	6850/ClO4 DOD			Water	10mL	
8	E2200646-008	16WW25-220630	.01	6850/ClO4 DOD			Water	10mL	
9	E2200646-009	16WW26-220630	.01	6850/ClO4 DOD			Water	10mL	
10	EQ2200278-01	MB		6850/ClO4 DOD			Liquid	10mL	
11	EQ2200278-02	LCS		6850/ClO4 DOD			Liquid	10mL	
12	EQ2200278-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
13	EQ2200278-04	16WW16-220630 MS	.01	6850/ClO4 DOD			Liquid	10mL	
14	EQ2200278-05	16WW16-220630 DMS	.01	6850/ClO4 DOD			Liquid	10mL	
15	EQ2200278-06	16WW25-220630 MS	.01	6850/ClO4 DOD			Liquid	10mL	
16	EQ2200278-07	16WW25-220630 DMS	.01	6850/ClO4 DOD			Liquid	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 222798 Logbook Ref: Perchlorate (1st Source) Expires On: 10/29/2022

EQ2200278-02	1.00µL	EQ2200278-03	1.00µL	EQ2200278-04	1.00µL	EQ2200278-05	1.00µL	EQ2200278-06	1.00µL	EQ2200278-07	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 223118 Logbook Ref: Perchlorate Internal Standard Expires On: 10/31/2022

E2200646-001	100.00µL	E2200646-002	100.00µL	E2200646-003	100.00µL	E2200646-004	100.00µL	E2200646-005	100.00µL	E2200646-006	100.00µL
E2200646-007	100.00µL	E2200646-008	100.00µL	E2200646-009	100.00µL	EQ2200278-01	100.00µL	EQ2200278-02	100.00µL	EQ2200278-03	100.00µL
EQ2200278-04	100.00µL	EQ2200278-05	100.00µL	EQ2200278-06	100.00µL	EQ2200278-07	100.00µL				

Preparation Materials

Water HPLC Grade	5/12/2022 Water (223055)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 Syringe Filters (222410)
6850 Luer-Lok Syringes	Luer-Lok Syringes (221305)	6850 Pipette Tips 50-1000 uL	6850 Pipette Tips (221929)		

Preparation Information Benchsheet

Prep Run#: 402386
Team: Semivoa GCMS/GRIVERA

Prep WorkFlow: GenExt28Day
Prep Method: Method

Status: Prepped
Prep Date/Time: 7/6/22 11:18

Preparation Steps

Step: Preparation
Started: 7/6/22 11:18
Finished: 7/6/22 11:50
By: GRIVERA
Comments

Comments: _____

Reviewed By: GR Date: 7/6/22

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____

Extracts Examined
Yes No

Analytical Results

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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 0710
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW16-220630	**Units:**	µg/L
Lab Code:	E2200646-001	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**581**		5.00	2.50	1.25	50	7/ 6/22	7/18/22 12:26	402386	770746	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 0810
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW35-220630	**Units:**	µg/L
Lab Code:	E2200646-002	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**419**		5.00	2.50	1.25	50	7/ 6/22	7/18/22 12:34	402386	770746	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 0855
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW36-220630	**Units:**	µg/L
Lab Code:	E2200646-003	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.500	0.250	0.125	5	7/ 6/22	7/18/22 16:00	402386	770746	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 0940
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW48-220630	**Units:**	µg/L
Lab Code:	E2200646-004	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**7.87**		0.500	0.250	0.125	5	7/ 6/22	7/18/22 16:08	402386	770746	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 1025
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW30-220630	**Units:**	µg/L
Lab Code:	E2200646-005	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.176**	J	0.500	0.250	0.125	5	7/ 6/22	7/19/22 10:23	402386	770867	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 1110
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW29-220630	**Units:**	µg/L
Lab Code:	E2200646-006	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/ 6/22	7/12/22 18:50	402386	770203	*

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 1110
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW29-220630-FD	**Units:**	µg/L
Lab Code:	E2200646-007	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/ 6/22	7/12/22 19:05	402386	770203	*

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 1200
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW25-220630	**Units:**	µg/L
Lab Code:	E2200646-008	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/ 6/22	7/12/22 19:13	402386	770203	*

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 1250
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW26-220630	**Units:**	µg/L
Lab Code:	E2200646-009	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/ 6/22	7/12/22 19:21	402386	770203	*

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2200278-01	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/ 6/22	7/12/22 15:23	402386	770203	

Accuracy & Precision

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www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020
Sample Matrix: Water

Service Request: E2200646
Date Analyzed: 7/12/22

Lab Control Sample Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 402386

	Lab Control Sample EQ2200278-02			Duplicate Lab Control Sample EQ2200278-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.115	0.100	115	0.107	0.100	107	84 - 119	7	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2200278-02	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.115**		0.100	0.0500	0.0250	1	7/ 6/22	7/12/22 15:55	402386	770203	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2200278-03	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.107**		0.100	0.0500	0.0250	1	7/ 6/22	7/12/22 16:11	402386	770203	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22
Sample Matrix:	Water	**Date Received:**	7/1/22
		Date Analyzed:	7/12/22

Matrix Spike Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Sample Name:	16WW16-220630	**Units:**	µg/L
Lab Code:	E2200646-001	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16WW16-220630MS				16WW16-220630DMS					
		Matrix Spike				**Duplicate Matrix Spike**					
		EQ2200278-04				EQ2200278-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	581	588	0.100	6407	#	598	0.100	17211	# 84 - 119	2	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 0710
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW16-220630	**Units:**	µg/L
Lab Code:	EQ2200278-04	**Basis:**	NA
Run Type:	Matrix Spike		

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**588**	E	0.100	0.0500	0.0250	1	7/ 6/22	7/12/22 17:39	402386	770203	*

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 0710
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW16-220630	**Units:**	µg/L
Lab Code:	EQ2200278-05	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**598**	E	0.100	0.0500	0.0250	1	7/ 6/22	7/12/22 17:47	402386	770203	*

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22
Sample Matrix:	Water	**Date Received:**	7/1/22
		Date Analyzed:	7/18/22

Matrix Spike Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Sample Name:	16WW25-220630	**Units:**	µg/L
Lab Code:	E2200646-008	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16WW25-220630MS				16WW25-220630DMS					
		Matrix Spike				**Duplicate Matrix Spike**					
		EQ2200278-06				EQ2200278-07					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	ND	0.105	0.100	105		0.112	0.100	112	84 - 119	6	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 1200
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW25-220630	**Units:**	µg/L
Lab Code:	EQ2200278-06	**Basis:**	NA
Run Type:	Matrix Spike		

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.105**		0.100	0.0500	0.0250	1	7/ 6/22	7/18/22 11:47	402386	770746	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Collected:**	6/30/22 1200
Sample Matrix:	Water	**Date Received:**	7/ 1/22
Sample Name:	16WW25-220630	**Units:**	µg/L
Lab Code:	EQ2200278-07	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.112**		0.100	0.0500	0.0250	1	7/ 6/22	7/18/22 11:55	402386	770746	

Initial Calibration

ALS Environmental - Houston HRMS
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20220601

1st Review: GRivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 6/1/2022
Cal. Std. xp: 9/4/2022
ICAL ID: **EC2200008**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100819-09 **B:** MeOH 217304

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	PERCHLORATE2		20220601_016	Perchlorate6850c.lcm	1x	☒	222804	6/1/2022 14:02
2	PERCHLORATE3		20220601_017	Perchlorate6850c.lcm	1x	☒	222806	6/1/2022 14:09
3	PERCHLORATE4		20220601_018	Perchlorate6850c.lcm	1x	☒	222807	6/1/2022 14:17
4	PERCHLORATE5		20220601_019	Perchlorate6850c.lcm	1x	☒	222808	6/1/2022 14:25
5	PERCHLORATE6		20220601_020	Perchlorate6850c.lcm	1x	☒	222809	6/1/2022 14:33
6	PERCHLORATE7		20220601_021	Perchlorate6850c.lcm	1x	☒	222810	6/1/2022 14:41
7	PERCHLORATE8		20220601_022	Perchlorate6850c.lcm	1x	☒	222811	6/1/2022 14:49
8	PERCHLORATE9		20220601_023	Perchlorate6850c.lcm	1x	☒	222812	6/1/2022 14:57
9	PERCHLORATE10		20220601_024	Perchlorate6850c.lcm	1x	☒	222813	6/1/2022 15:05
10	PERCHLORATE1		20220601_026	Perchlorate6850c.lcm	1x	☒	222805	6/1/2022 15:39
11	PERCHLORATEICV		20220601_028	Perchlorate6850c.lcm	1x	☒	222814	6/1/2022 15:55
12	IB		20220601_029	Perchlorate6850c.lcm	1x	☒		6/1/2022 16:03
13	ICS		20220601_030	Perchlorate6850c.lcm	1x	☒		6/1/2022 16:11
14	PERCHLORATE7		20220601_031	Perchlorate6850c.lcm	1x	☒	222810	6/1/2022 16:58
15	LODV		20220601_032	Perchlorate6850c.lcm	1x	☒	222817	6/1/2022 17:22
16	E2200484-001X5		20220601_033	Perchlorate6850c.lcm	5x	☒	DNU-analyze 1x	6/1/2022 17:30
17	E2200454-002X500		20220601_034	Perchlorate6850c.lcm	500x	☒		6/1/2022 17:38
18	E2200484-001		20220601_035	Perchlorate6850c.lcm	1x	☒	DNU-bad injection	6/1/2022 17:46
19	E2200454-003		20220601_036	Perchlorate6850c.lcm	1x	☒		6/1/2022 17:54
20	E2200454-004		20220601_037	Perchlorate6850c.lcm	1x	☒		6/1/2022 18:01
21	E2200454-005		20220601_038	Perchlorate6850c.lcm	1x	☒	Reanalyze- IR	6/1/2022 18:09
22	E2200454-006		20220601_039	Perchlorate6850c.lcm	1x	☒	Reanalyze- IR	6/1/2022 18:17
23	E2200454-007		20220601_040	Perchlorate6850c.lcm	1x	☒		6/1/2022 18:25
24	E2200454-008		20220601_041	Perchlorate6850c.lcm	1x	☒		6/1/2022 18:33
25	PERCHLORATE7		20220601_042	Perchlorate6850c.lcm	1x	☒	222810	6/1/2022 18:41
26	E2200470-001		20220601_043	Perchlorate6850c.lcm	1x	☒		6/1/2022 18:49
27	R2204439-003		20220601_044	Perchlorate6850c.lcm	1x	☒		6/1/2022 18:57
28	R2204439-007		20220601_045	Perchlorate6850c.lcm	1x	☒		6/1/2022 19:04
29	R2204439-009		20220601_046	Perchlorate6850c.lcm	1x	☒		6/1/2022 19:12
30	R2204582-011		20220601_047	Perchlorate6850c.lcm	1x	☒		6/1/2022 19:20
31	R2204582-030		20220601_048	Perchlorate6850c.lcm	1x	☒	Reanalyze- IR	6/1/2022 19:28
32	R2204582-035		20220601_049	Perchlorate6850c.lcm	1x	☒		6/1/2022 19:36
33	R2204616-004		20220601_050	Perchlorate6850c.lcm	1x	☒		6/1/2022 19:44
34	R2204616-011		20220601_051	Perchlorate6850c.lcm	1x	☒		6/1/2022 19:52
35	PERCHLORATE7		20220601_052	Perchlorate6850c.lcm	1x	☒	222810	6/1/2022 20:00
36	IB		20220601_053	Perchlorate6850c.lcm	1x	☒		6/1/2022 20:08
37	IB		20220601_054	Perchlorate6850c.lcm	1x	☒		6/1/2022 20:15
38	null		20220601_055	Perchlorate6850c.lcm	1x	☒		6/1/2022 20:20
39	null		20220601_056	Perchlorate6850c.lcm	1x	☒		6/1/2022 20:25

Initial Calibration - Detailed Report

Calibration ID: EC2200008 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2200008-01	PERCHLORATE2	20220601_016	06/01/2022 14:02
02	EC2200008-02	PERCHLORATE3	20220601_017	06/01/2022 14:09
03	EC2200008-03	PERCHLORATE4	20220601_018	06/01/2022 14:17
04	EC2200008-04	PERCHLORATE5	20220601_019	06/01/2022 14:25
05	EC2200008-05	PERCHLORATE6	20220601_020	06/01/2022 14:33
06	EC2200008-06	PERCHLORATE7	20220601_021	06/01/2022 14:41
07	EC2200008-07	PERCHLORATE8	20220601_022	06/01/2022 14:49
08	EC2200008-08	PERCHLORATE9	20220601_023	06/01/2022 14:57
09	EC2200008-09	PERCHLORATE10	20220601_024	06/01/2022 15:05
10	EC2200008-10	PERCHLORATE1	20220601_026	06/01/2022 15:39

Analyte **Curve Fit** **Weighting**

Perchlorate **Average RF** **RSD = 10.81** **Average RF = 0.1511**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.5000	0.1553	02	0.7000	0.1519	03	1.0000	0.1465	04	2.0000	0.1514
05	5.0000	0.1444	06	10.0000	0.1425	07	20.0000	0.1496	08	30.0000	0.1358
09	50.0000	0.1396	10	0.1000	0.1944						

Analyte

Perchlorate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.5000	0.514	2.7	02	0.7000	0.703	0.5	03	1.0000	0.969	-3.1
04	2.0000	2.00	0.2	05	5.0000	4.78	-4.4	06	10.0000	9.43	-5.7
07	20.0000	19.8	-1.0	08	30.0000	27.0	-10.2	09	50.0000	46.2	-7.7
10	0.1000	0.129	28.6								

Initial Calibration Verification Summary Report

Calibration ID:	EC2200008	**Instrument ID:**	E-LCMS-01
Datafile ID:	20220601_028	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2200008-11	T	Average RF	10	9.710	ng/mL	-2.9	<= 15

Insight Report

Printed at 6/2/2022 10:42:59 AM

Method File: I:\LCMS01\DATA\20220601\20220601.lcm
Project File: I:\LCMS01\DATA\20220601\20220601.damlp

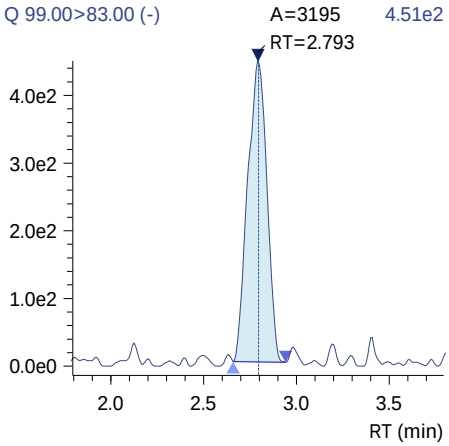
PERCHLORATE2

Sample ID: PERCHLORATE2
Date Acquired: 6/1/2022 2:02:03 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_016.lcd
Vial: 21 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.793	3195	41158	0.5136	ng/mL	27.57	18.52-34.39
Perchlorate 2	Auto	2.781	881	41158	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.777	41158	41158	1.0000	ng/mL	----	

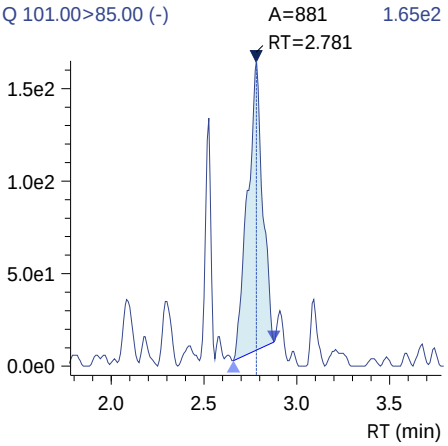
Perchlorate

Conc 0.5136



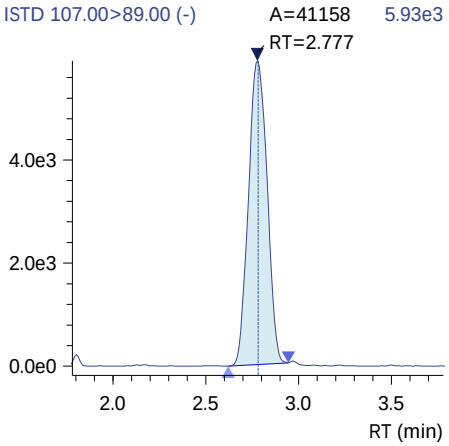
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 10:42:59 AM

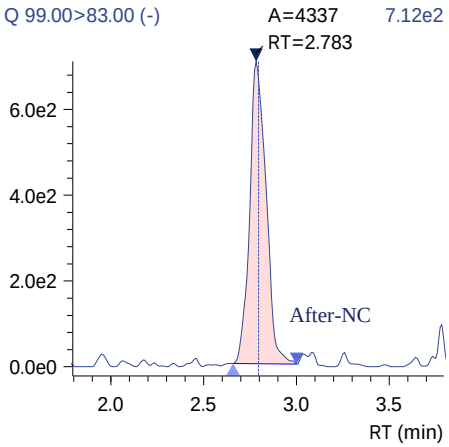
PERCHLORATE3

Sample ID: PERCHLORATE3
Date Acquired: 6/1/2022 2:09:55 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_017.lcd
Vial: 22 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI	2.783	4337	40792	0.7035	ng/mL	24.99	18.52-34.39
Perchlorate 2	M	2.843	1084	40792	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.787	40792	40792	1.0000	ng/mL	----	

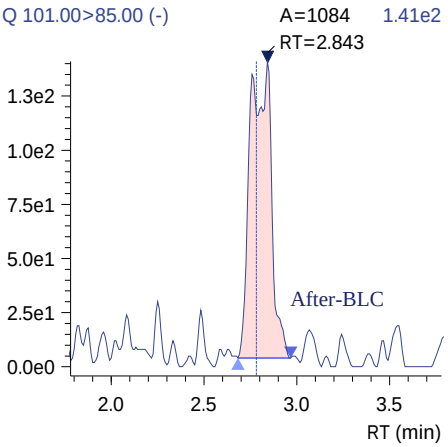
Perchlorate

Conc 0.7035



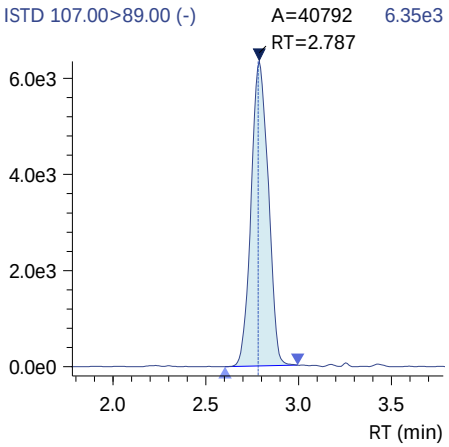
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 9:46:32 AM

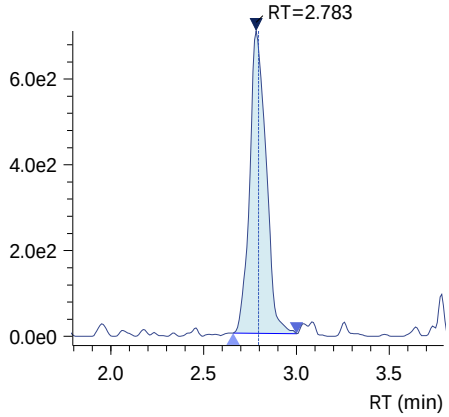
PERCHLORATE3

Sample ID: PERCHLORATE3
Date Acquired: 6/1/2022 2:09:55 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_017.lcd
Vial: 22 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 0.7205

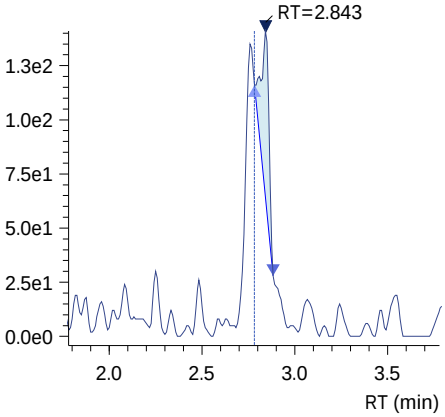
Q 99.00>83.00 (-) A=4337 7.12e2



Perchlorate 2

Conc 0.0000

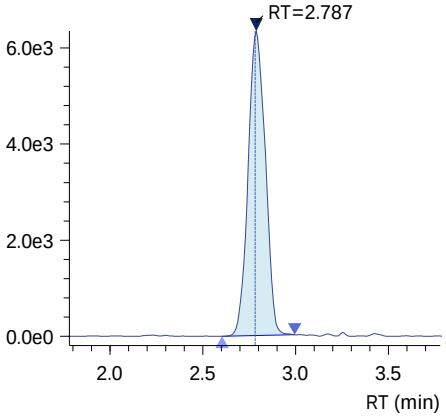
Q 101.00>85.00 (-) A=213 1.41e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=40792 6.35e3



Insight Report

Printed at 6/2/2022 10:42:59 AM

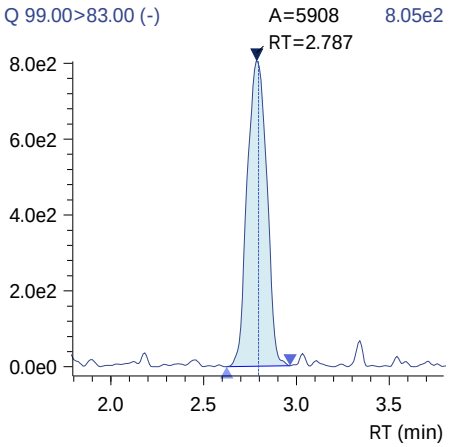
PERCHLORATE4

Sample ID: PERCHLORATE4
Date Acquired: 6/1/2022 2:17:52 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_018.lcd
Vial: 23 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.787	5908	40337	0.9691	ng/mL	25.81	18.52-34.39
Perchlorate 2	Auto	2.776	1525	40337	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.787	40337	40337	1.0000	ng/mL	----	

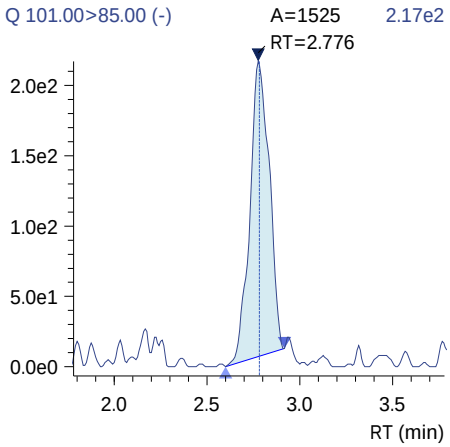
Perchlorate

Conc 0.9691



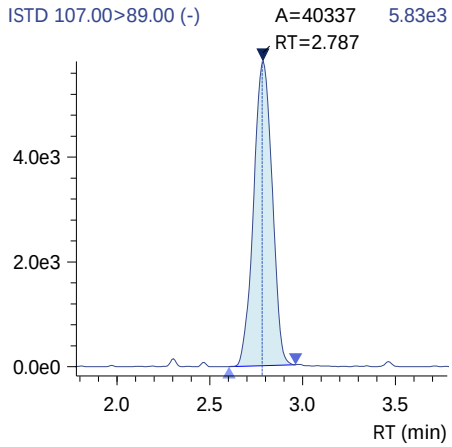
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 10:42:59 AM

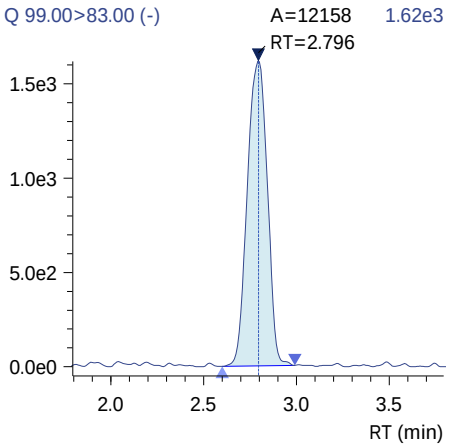
PERCHLORATE5

Sample ID: PERCHLORATE5
Date Acquired: 6/1/2022 2:25:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_019.lcd
Vial: 24 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.796	12158	40141	2.0041	ng/mL	27.57	18.52-34.39
Perchlorate 2	Auto	2.785	3352	40141	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.784	40141	40141	1.0000	ng/mL	----	

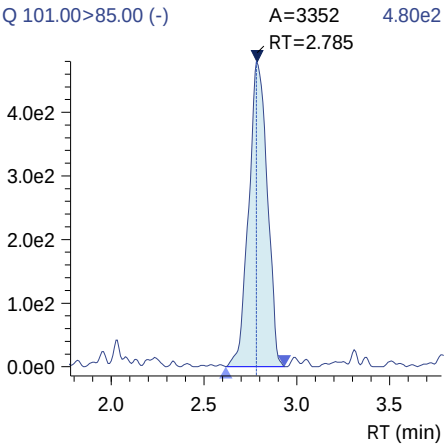
Perchlorate

Conc 2.0041



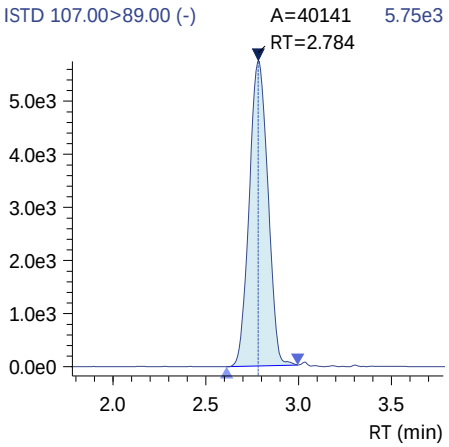
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 10:42:59 AM

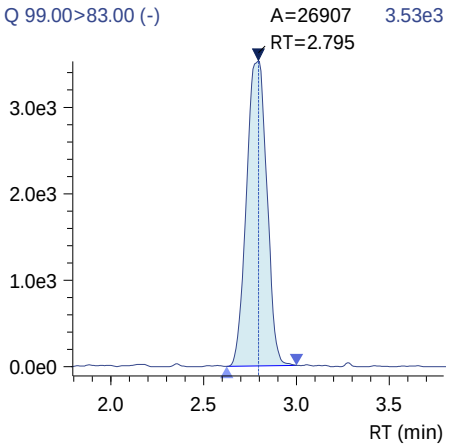
PERCHLORATE6

Sample ID: PERCHLORATE6
Date Acquired: 6/1/2022 2:33:43 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_020.lcd
Vial: 25 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.795	26907	37256	4.7788	ng/mL	24.81	18.52-34.39
Perchlorate 2	Auto	2.781	6676	37256	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.781	37256	37256	1.0000	ng/mL	----	

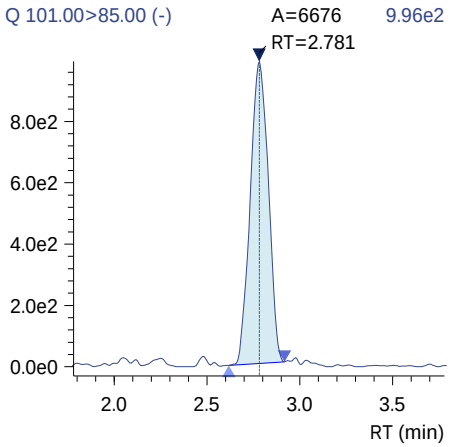
Perchlorate

Conc 4.7788



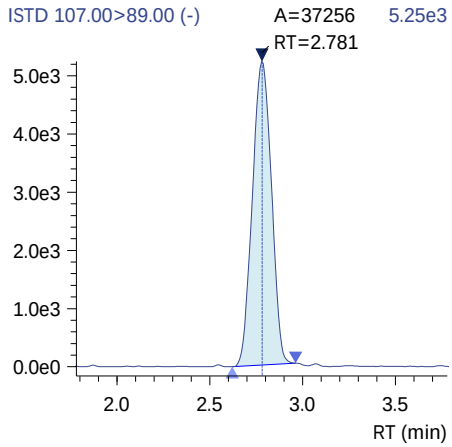
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 10:42:59 AM

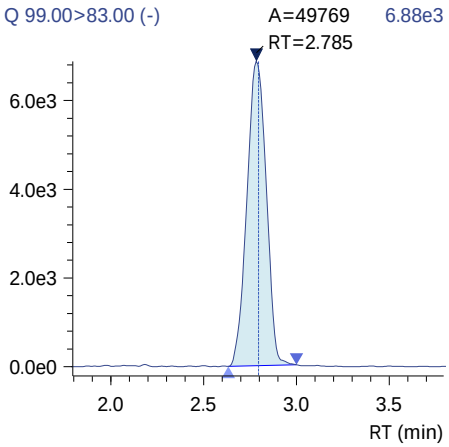
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 6/1/2022 2:41:37 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_021.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.785	49769	34931	9.4274	ng/mL	26.27	18.52-34.39
Perchlorate 2	Auto	2.789	13072	34931	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.782	34931	34931	1.0000	ng/mL	----	

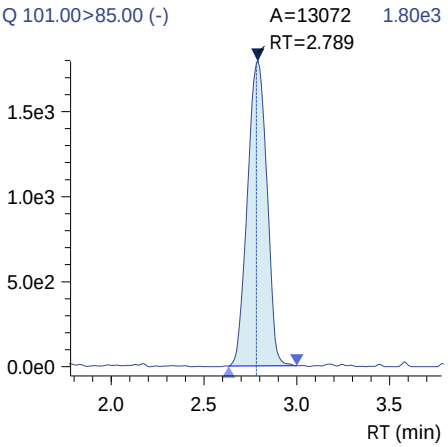
Perchlorate

Conc 9.4274



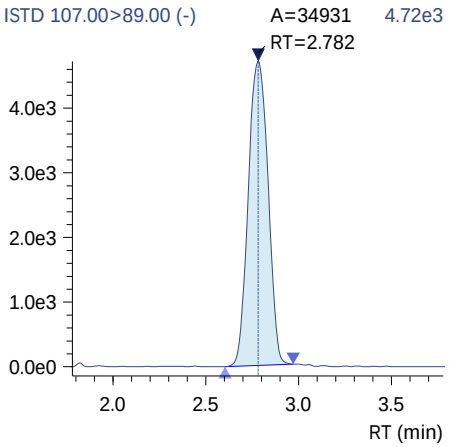
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 10:42:59 AM

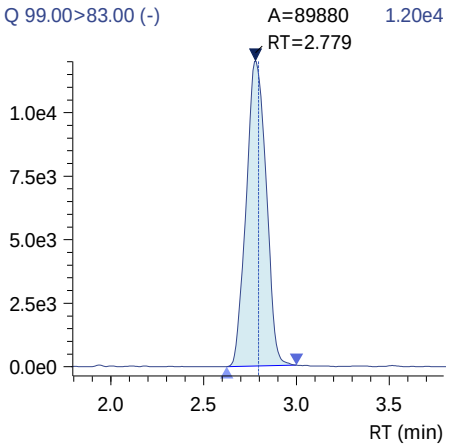
PERCHLORATE8

Sample ID: PERCHLORATE8
Date Acquired: 6/1/2022 2:49:32 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_022.lcd
Vial: 27 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.779	89880	30033	19.8021	ng/mL	26.40	18.52-34.39
Perchlorate 2	Auto	2.789	23731	30033	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.774	30033	30033	1.0000	ng/mL	----	

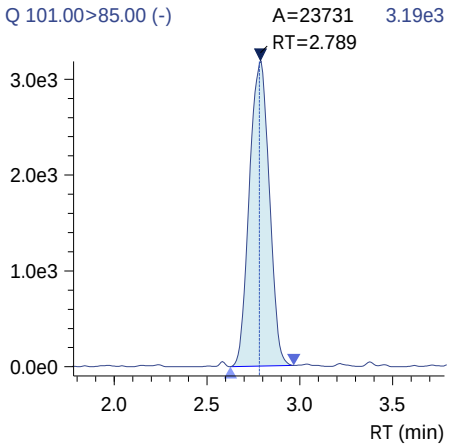
Perchlorate

Conc 19.8021



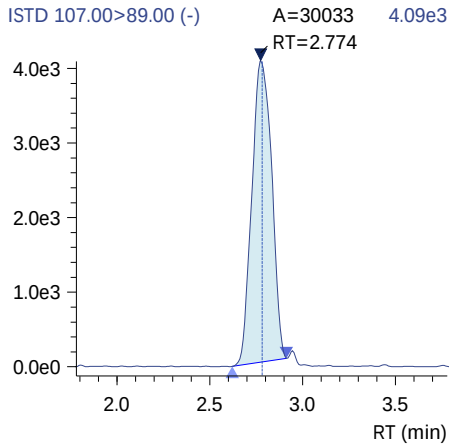
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 10:42:59 AM

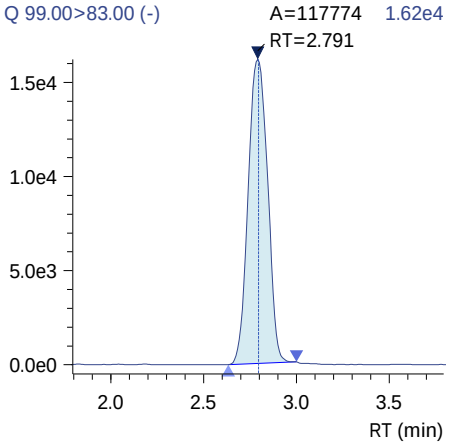
PERCHLORATE9

Sample ID: PERCHLORATE9
Date Acquired: 6/1/2022 2:57:25 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_023.lcd
Vial: 28 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.791	117774	28915	26.9509	ng/mL	26.79	18.52-34.39
Perchlorate 2	Auto	2.786	31550	28915	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.793	28915	28915	1.0000	ng/mL	----	

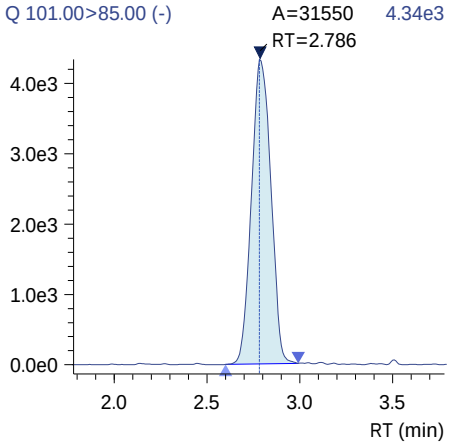
Perchlorate

Conc 26.9509



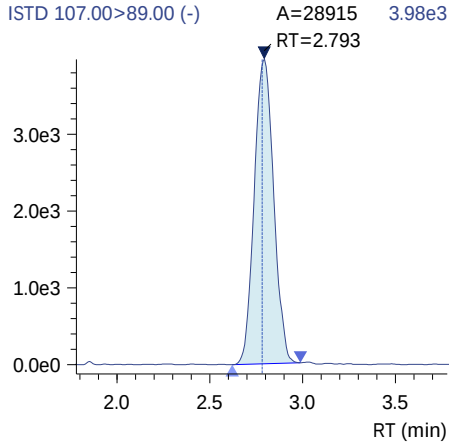
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 10:42:59 AM

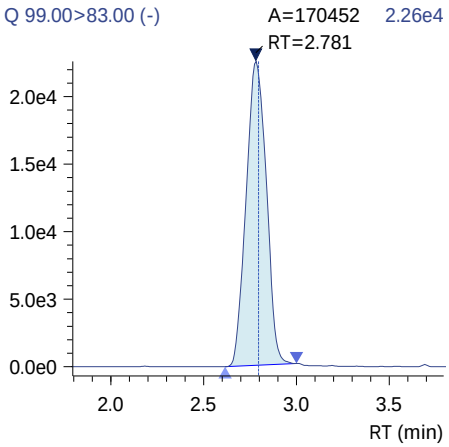
PERCHLORATE10

Sample ID: PERCHLORATE10
Date Acquired: 6/1/2022 3:05:17 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_024.lcd
Vial: 29 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.781	170452	24428	46.1701	ng/mL	25.87	18.52-34.39
Perchlorate 2	Auto	2.774	44101	24428	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.780	24428	24428	1.0000	ng/mL	----	

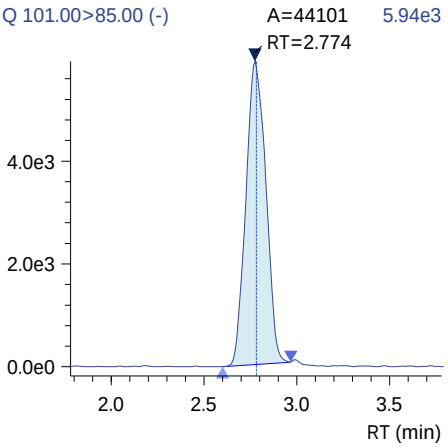
Perchlorate

Conc 46.1701



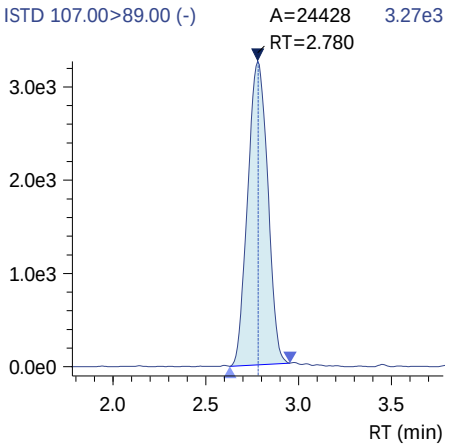
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 10:42:59 AM

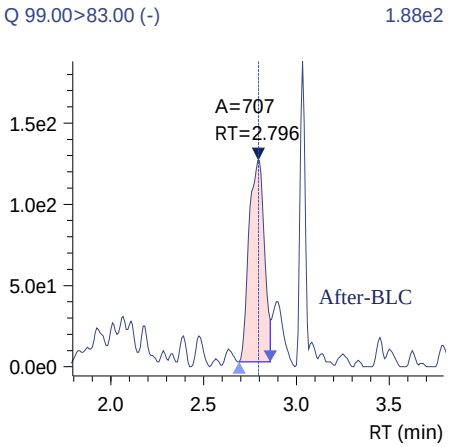
PERCHLORATE1

Sample ID: PERCHLORATE1
Date Acquired: 6/1/2022 3:39:38 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_026.lcd
Vial: 20 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	2.796	707	36372	0.1286	ng/mL	28.15	18.52-34.39
Perchlorate 2	M	2.750	199	36372	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.772	36372	36372	1.0000	ng/mL	----	

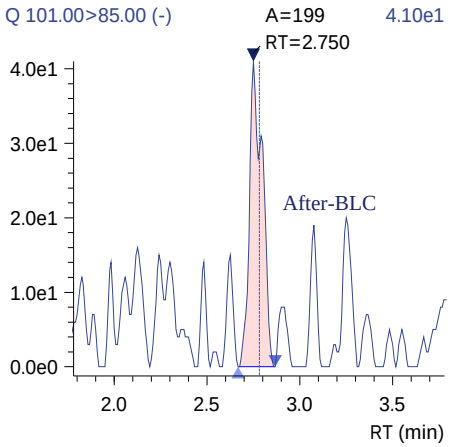
Perchlorate

Conc 0.1286



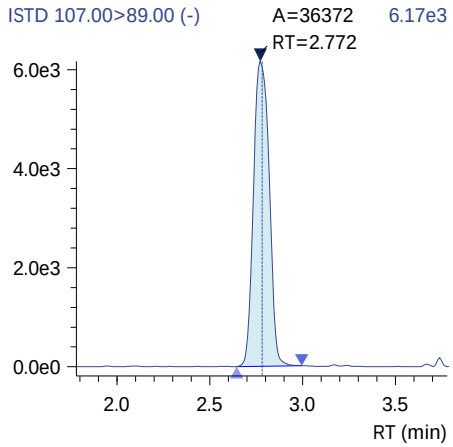
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 9:46:32 AM

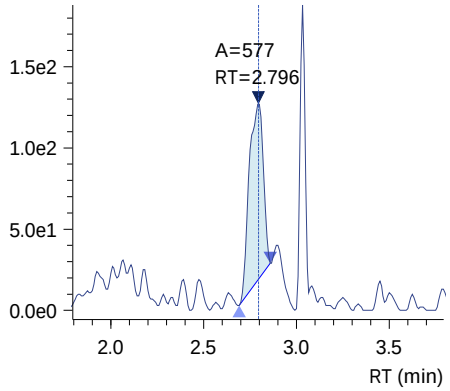
PERCHLORATE1

Sample ID: PERCHLORATE1
Date Acquired: 6/1/2022 3:39:38 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_026.lcd
Vial: 20 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 0.1075

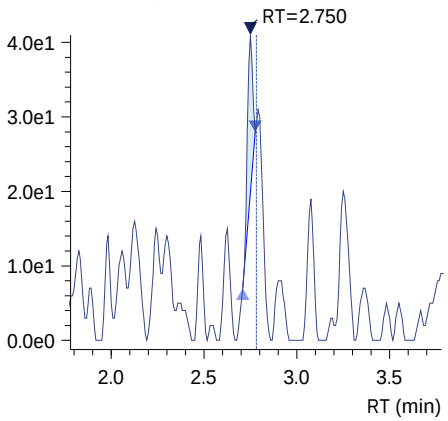
Q 99.00>83.00 (-) 1.88e2



Perchlorate 2

Conc 0.0000

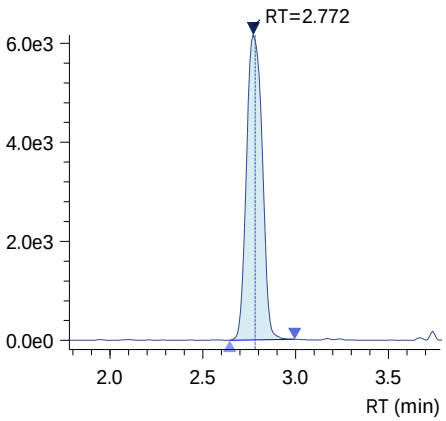
Q 101.00>85.00 (-) A=39 4.10e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=36372 6.17e3



Insight Report

Printed at 6/2/2022 10:42:59 AM

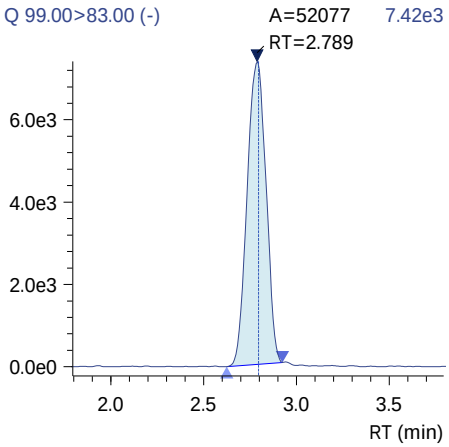
PERCHLORATEICV

Sample ID: PERCHLORATEICV
Date Acquired: 6/1/2022 3:55:25 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_028.lcd
Vial: 30 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.789	52077	35488	9.7098	ng/mL	26.93	18.52-34.39
Perchlorate 2	Auto	2.782	14023	35488	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.780	35488	35488	1.0000	ng/mL	----	

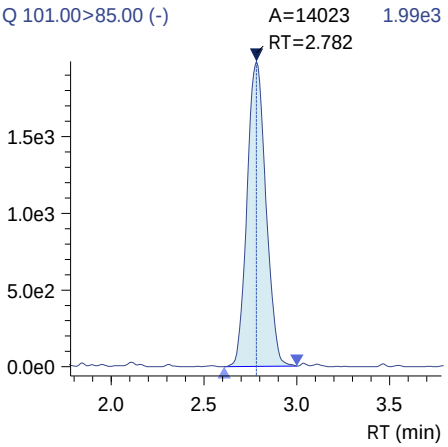
Perchlorate

Conc 9.7098



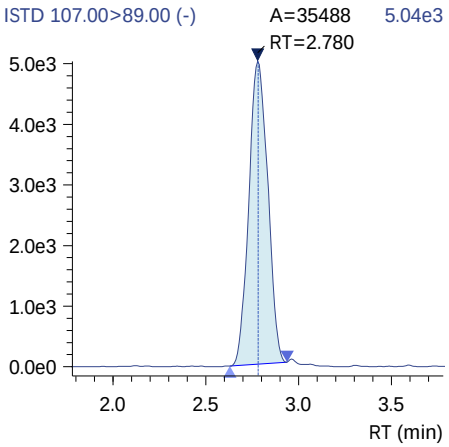
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



20220718

1st Review: GRivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 7/18/2022
Cal. Std. xp: 9/4/2022
ICAL ID: **EC2200009**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100820-02 **B:** MeOH 218535

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	PERCHLORATE1		20220718_005	Perchlorate6850c.lcm	1x	☒	222805	7/18/2022 9:27
2	PERCHLORATE2		20220718_006	Perchlorate6850c.lcm	1x	☒	222804	7/18/2022 9:35
3	PERCHLORATE3		20220718_007	Perchlorate6850c.lcm	1x	☒	222806	7/18/2022 9:43
4	PERCHLORATE4		20220718_008	Perchlorate6850c.lcm	1x	☒	222807	7/18/2022 9:51
5	PERCHLORATE5		20220718_009	Perchlorate6850c.lcm	1x	☒	222808	7/18/2022 9:59
6	PERCHLORATE6		20220718_010	Perchlorate6850c.lcm	1x	☒	222809	7/18/2022 10:07
7	PERCHLORATE7		20220718_011	Perchlorate6850c.lcm	1x	☒	222810	7/18/2022 10:15
8	PERCHLORATE8		20220718_012	Perchlorate6850c.lcm	1x	☒	222811	7/18/2022 10:23
9	PERCHLORATE9		20220718_013	Perchlorate6850c.lcm	1x	☒	222812	7/18/2022 10:31
10	PERCHLORATE10		20220718_014	Perchlorate6850c.lcm	1x	☒	222813	7/18/2022 10:39
11	PERCHLORATEICV		20220718_016	Perchlorate6850c.lcm	1x	☒	222814	7/18/2022 11:02
12	ICS		20220718_017	Perchlorate6850c.lcm	1x	☒		7/18/2022 11:18
13	LODV		20220718_018	Perchlorate6850c.lcm	1x	☒	222817	7/18/2022 11:26
14	PERCHLORATE7		20220718_019	Perchlorate6850c.lcm	1x	☒	222810	7/18/2022 11:39
15	EQ2200278-06		20220718_020	Perchlorate6850c.lcm	1x	☒		7/18/2022 11:47
16	EQ2200278-07		20220718_021	Perchlorate6850c.lcm	1x	☒		7/18/2022 11:55
17	E2200646-003		20220718_022	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/18/2022 12:03
18	E2200646-004		20220718_023	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/18/2022 12:11
19	E2200646-005		20220718_024	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/18/2022 12:18
20	E2200646-001		20220718_025	Perchlorate6850c.lcm	50x	☒		7/18/2022 12:26
21	E2200646-002		20220718_026	Perchlorate6850c.lcm	50x	☒		7/18/2022 12:34
22	PERCHLORATE7		20220718_027	Perchlorate6850c.lcm	1x	☒	222810	7/18/2022 12:42
23	EQ2200295-01		20220718_028	Perchlorate6850c.lcm	1x	☒		7/18/2022 12:50
24	EQ2200295-02		20220718_029	Perchlorate6850c.lcm	1x	☒		7/18/2022 12:58
25	EQ2200295-03		20220718_030	Perchlorate6850c.lcm	1x	☒		7/18/2022 13:30
26	K2207770-001DNU-INST		20220718_031	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/18/2022 13:38
27	PERCHLORATE7		20220718_032	Perchlorate6850c.lcm	1x	☒	222810	7/18/2022 14:09
28	E2200688-001		20220718_033	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/18/2022 14:17
29	E2200689-001		20220718_034	Perchlorate6850c.lcm	1x	☒	DNU-over ICAL range	7/18/2022 14:25
30	E2200690-001		20220718_035	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/18/2022 14:33
31	E2200690-002		20220718_036	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/18/2022 14:41
32	PERCHLORATE7		20220718_037	Perchlorate6850c.lcm	1x	☒	222810	7/18/2022 14:49
33	E2200665-003DNU-INST		20220718_038	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/18/2022 15:31
34	E2200646-003		20220718_039	Perchlorate6850c.lcm	5x	☒		7/18/2022 16:00
35	E2200646-004		20220718_040	Perchlorate6850c.lcm	5x	☒		7/18/2022 16:08
36	E2200646-005		20220718_041	Perchlorate6850c.lcm	5x	☒	DNU-INST out of range	7/18/2022 16:15
37	K2207770-001		20220718_042	Perchlorate6850c.lcm	5x	☒	DNU-INST out of range	7/18/2022 16:23
38	PERCHLORATE7		20220718_043	Perchlorate6850c.lcm	1x	☒	222810	7/18/2022 16:31
39	PERCHLORATE7		20220718_044	Perchlorate6850c.lcm	1x	☒	222810	7/18/2022 17:55
40	E2200665-005		20220718_045	Perchlorate6850c.lcm	1x	☒		7/18/2022 18:03
41	E2200665-006		20220718_046	Perchlorate6850c.lcm	1x	☒		7/18/2022 18:11
42	E2200665-007		20220718_047	Perchlorate6850c.lcm	1x	☒		7/18/2022 18:19
43	E2200665-008		20220718_048	Perchlorate6850c.lcm	10x	☒		7/18/2022 18:26
44	E2200665-009		20220718_049	Perchlorate6850c.lcm	1x	☒		7/18/2022 18:34
45	PERCHLORATE7		20220718_050	Perchlorate6850c.lcm	1x	☒	222810	7/18/2022 18:42
46	IB		20220718_051	Perchlorate6850c.lcm	1x	☒		7/18/2022 18:50
47	IB		20220718_052	Perchlorate6850c.lcm	1x	☒		7/18/2022 18:58
48	IB		20220718_053	Perchlorate6850c.lcm	1x	☒		7/18/2022 19:06
49	null		20220718_054	Perchlorate6850c.lcm	1x	☒		7/18/2022 19:11
50	null		20220718_055	Perchlorate6850c.lcm	1x	☒		7/18/2022 19:15

Initial Calibration - Detailed Report

Calibration ID: EC2200009 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2200009-01	PERCHLORATE1	20220718_005	07/18/2022 09:27
02	EC2200009-02	PERCHLORATE2	20220718_006	07/18/2022 09:35
03	EC2200009-03	PERCHLORATE3	20220718_007	07/18/2022 09:43
04	EC2200009-04	PERCHLORATE4	20220718_008	07/18/2022 09:51
05	EC2200009-05	PERCHLORATE5	20220718_009	07/18/2022 09:59
06	EC2200009-06	PERCHLORATE6	20220718_010	07/18/2022 10:07
07	EC2200009-07	PERCHLORATE7	20220718_011	07/18/2022 10:15
08	EC2200009-08	PERCHLORATE8	20220718_012	07/18/2022 10:23
09	EC2200009-09	PERCHLORATE9	20220718_013	07/18/2022 10:31
10	EC2200009-10	PERCHLORATE10	20220718_014	07/18/2022 10:39

Analyte **Curve Fit** **Weighting**

Perchlorate **Average RF** **RSD = 8.509** **Average RF = 0.1843**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.2272	02	0.5000	0.186	03	0.7000	0.1776	04	1.0000	0.1814
05	2.0000	0.1743	06	5.0000	0.1765	07	10.0000	0.1868	08	20.0000	0.1816
09	30.0000	0.1771	10	50.0000	0.1749						

Analyte

Perchlorate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.123	23.3	02	0.5000	0.504	0.9	03	0.7000	0.675	-3.6
04	1.0000	0.984	-1.6	05	2.0000	1.89	-5.5	06	5.0000	4.79	-4.3
07	10.0000	10.1	1.3	08	20.0000	19.7	-1.5	09	30.0000	28.8	-3.9
10	50.0000	47.4	-5.1								

Initial Calibration Verification Summary Report

Calibration ID:	EC2200009	**Instrument ID:**	E-LCMS-01
Datafile ID:	20220718_016	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2200009-11	T	Average RF	10	10.144	ng/mL	1.4	<= 15

Insight Report

Printed at 7/18/2022 1:42:23 PM

Method File: I:\LCMS01\DATA\20220718\20220718.lcm
Project File: I:\LCMS01\DATA\20220718\20220718-ICAL.damlp

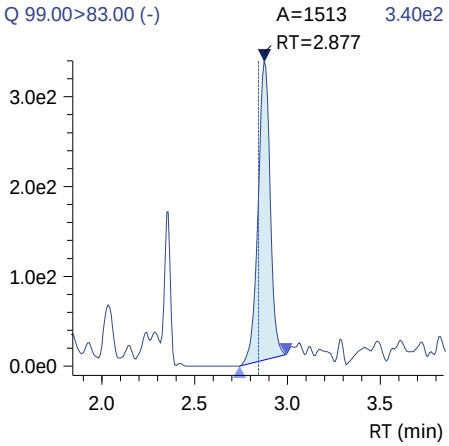
PERCHLORATE1

Sample ID: PERCHLORATE1
Date Acquired: 7/18/2022 9:27:54 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_005.lcd
Vial: 20 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.877	1513	66584	0.1233	ng/mL	35.76	18.15-33.72
Perchlorate 2	Auto	2.890	541	66584	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.874	66584	66584	1.0000	ng/mL	----	

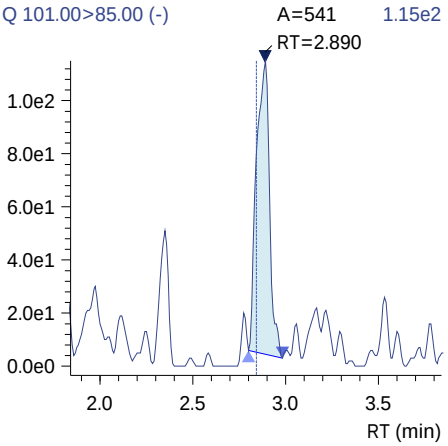
Perchlorate

Conc 0.1233



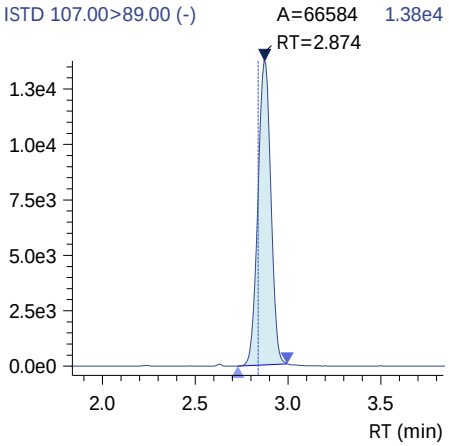
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 1:44:51 PM

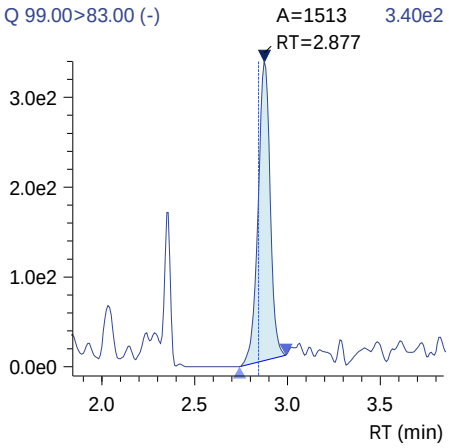
Method File: I:\LCMS01\DATA\20220718\20220718.lcm
Project File: I:\LCMS01\DATA\20220718\20220718-ICAL.damlp

PERCHLORATE1

Sample ID: PERCHLORATE1
Date Acquired: 7/18/2022 9:27:54 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_005.lcd
Vial: 20 | Inj. Volume: 25.0000uL | Tray: 1

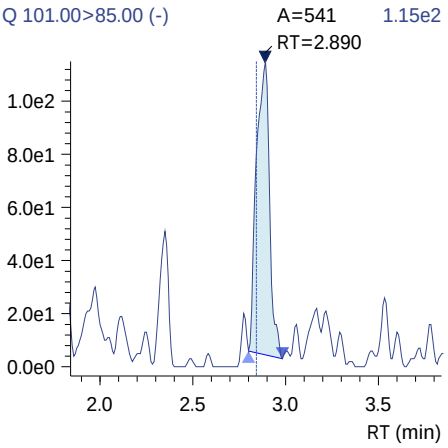
Perchlorate

Conc 0.1233



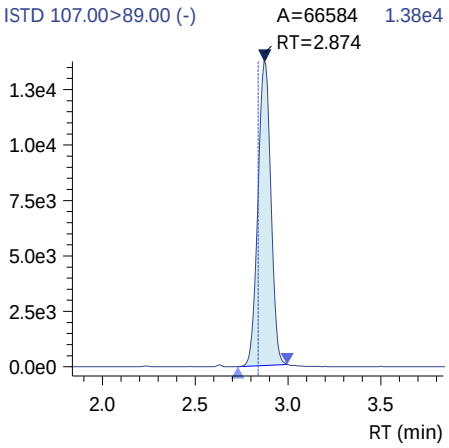
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 1:42:23 PM

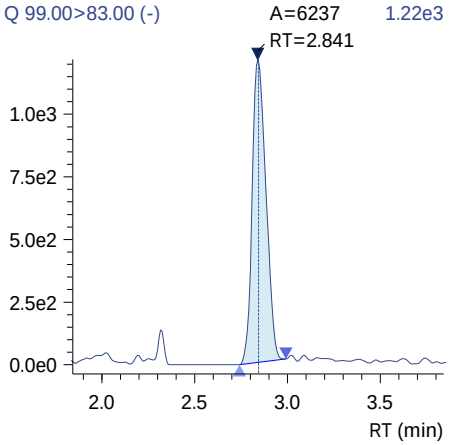
PERCHLORATE2

Sample ID: PERCHLORATE2
Date Acquired: 7/18/2022 9:35:47 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_006.lcd
Vial: 21 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.841	6237	67074	0.5044	ng/mL	31.78	18.15-33.72
Perchlorate 2	Auto	2.841	1982	67074	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.841	67074	67074	1.0000	ng/mL	----	

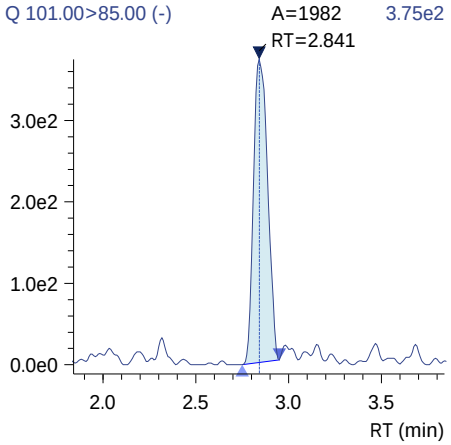
Perchlorate

Conc 0.5044



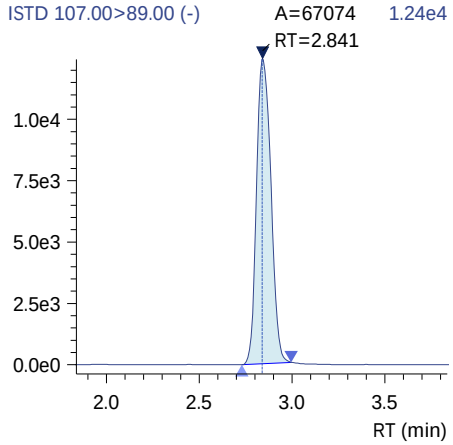
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 1:44:51 PM

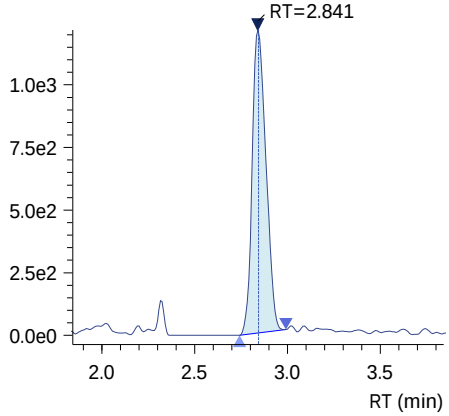
PERCHLORATE2

Sample ID: PERCHLORATE2
Date Acquired: 7/18/2022 9:35:47 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_006.lcd
Vial: 21 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 0.5044

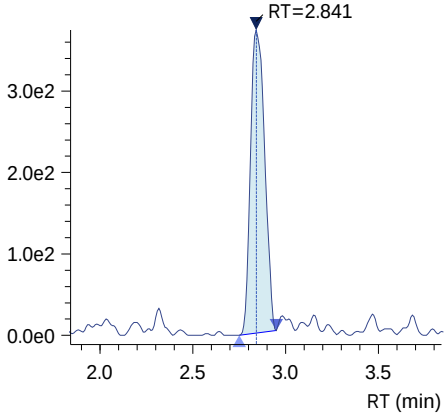
Q 99.00>83.00 (-) A=6237 1.22e3



Perchlorate 2

Conc 0.0000

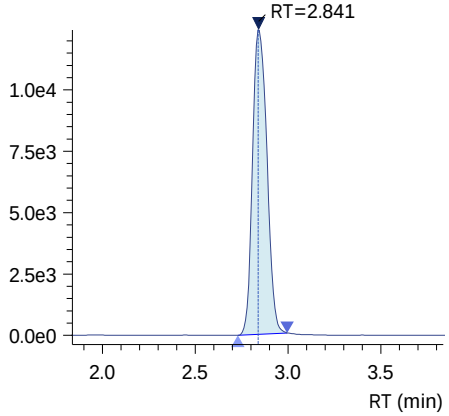
Q 101.00>85.00 (-) A=1982 3.75e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=67074 1.24e4



Insight Report

Printed at 7/18/2022 1:42:23 PM

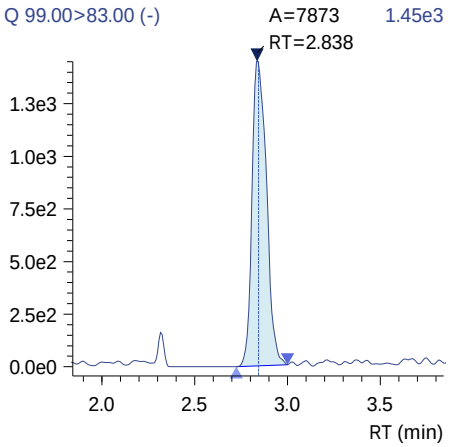
PERCHLORATE3

Sample ID: PERCHLORATE3
Date Acquired: 7/18/2022 9:43:43 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_007.lcd
Vial: 22 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.838	7873	63311	0.6746	ng/mL	39.11	18.15-33.72
Perchlorate 2	Auto	2.838	3079	63311	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.840	63311	63311	1.0000	ng/mL	----	

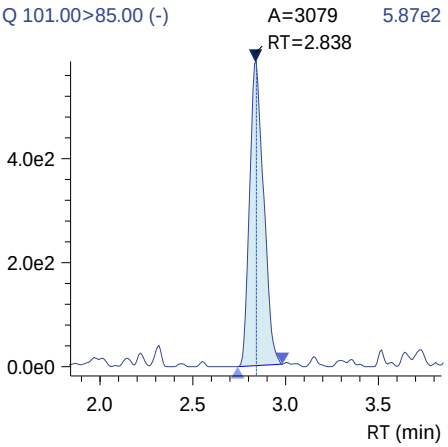
Perchlorate

Conc 0.6746



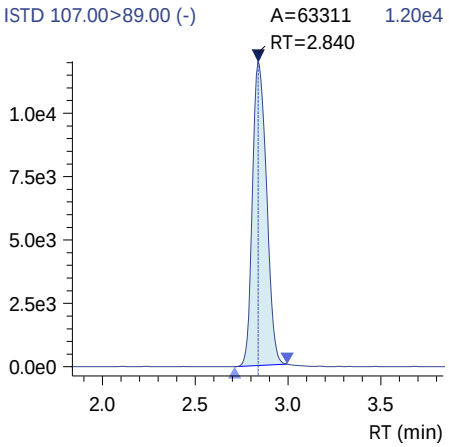
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 1:44:51 PM

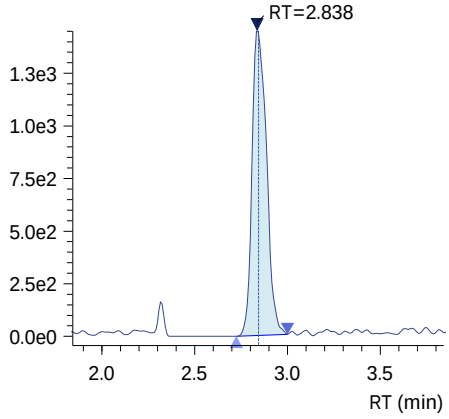
PERCHLORATE3

Sample ID: PERCHLORATE3
Date Acquired: 7/18/2022 9:43:43 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_007.lcd
Vial: 22 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 0.6746

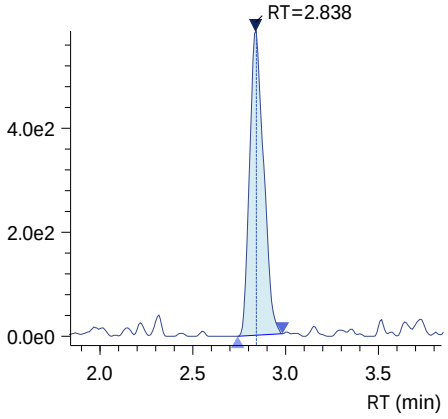
Q 99.00>83.00 (-) A=7873 1.45e3



Perchlorate 2

Conc 0.0000

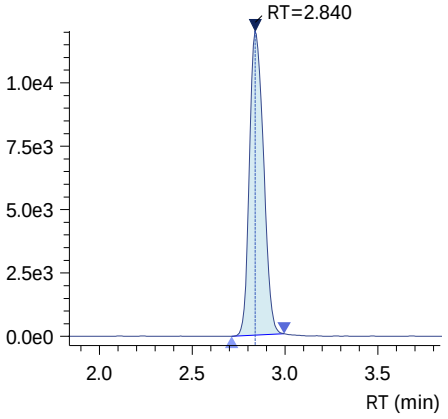
Q 101.00>85.00 (-) A=3079 5.87e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=63311 1.20e4



Insight Report

Printed at 7/18/2022 1:42:23 PM

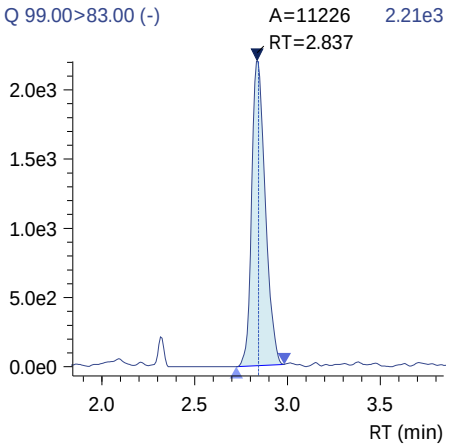
PERCHLORATE4

Sample ID: PERCHLORATE4
Date Acquired: 7/18/2022 9:51:39 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_008.lcd
Vial: 23 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.837	11226	61901	0.9838	ng/mL	33.81	18.15-33.72
Perchlorate 2	Auto	2.828	3795	61901	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.835	61901	61901	1.0000	ng/mL	----	

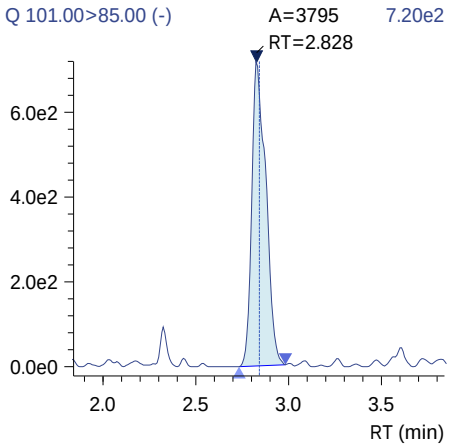
Perchlorate

Conc 0.9838



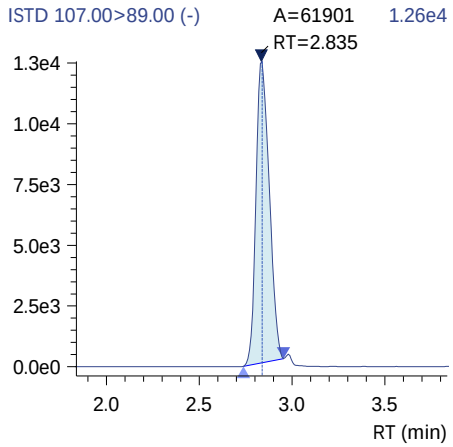
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 1:44:51 PM

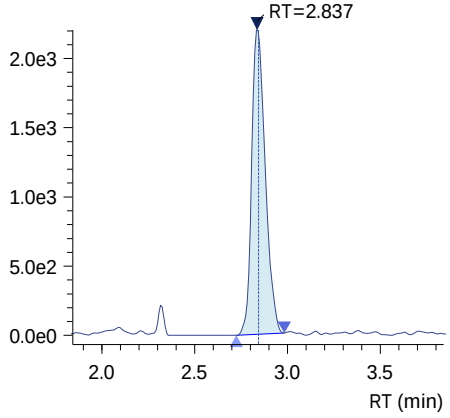
PERCHLORATE4

Sample ID: PERCHLORATE4
Date Acquired: 7/18/2022 9:51:39 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_008.lcd
Vial: 23 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 0.9838

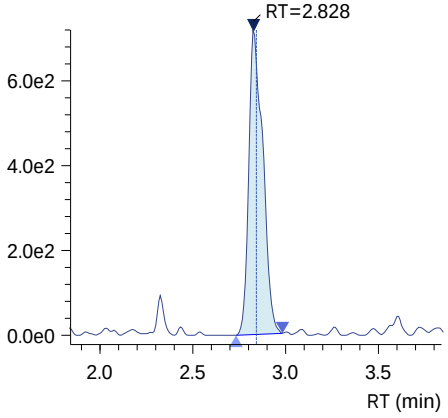
Q 99.00>83.00 (-) A=11226 2.21e3



Perchlorate 2

Conc 0.0000

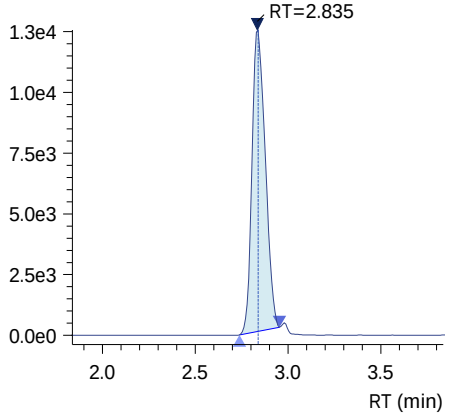
Q 101.00>85.00 (-) A=3795 7.20e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=61901 1.26e4



Insight Report

Printed at 7/18/2022 1:42:23 PM

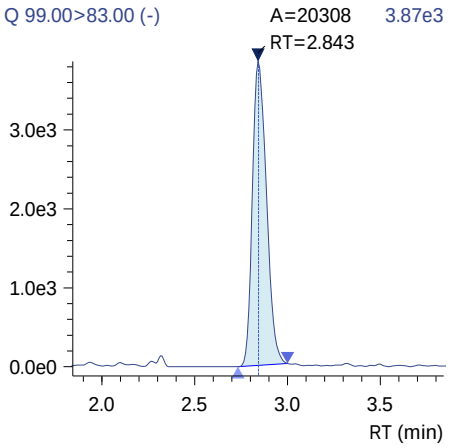
PERCHLORATE5

Sample ID: PERCHLORATE5
Date Acquired: 7/18/2022 9:59:33 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_009.lcd
Vial: 24 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.843	20308	58258	1.8910	ng/mL	35.50	18.15-33.72
Perchlorate 2	Auto	2.854	7210	58258	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.840	58258	58258	1.0000	ng/mL	----	

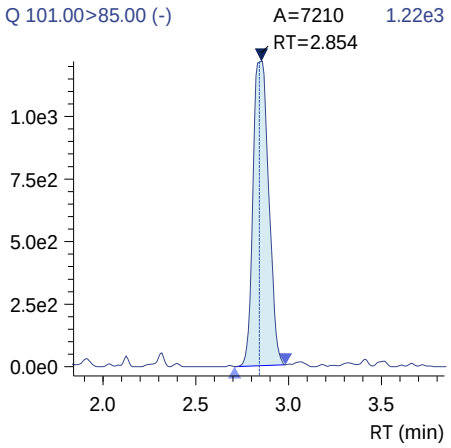
Perchlorate

Conc 1.8910



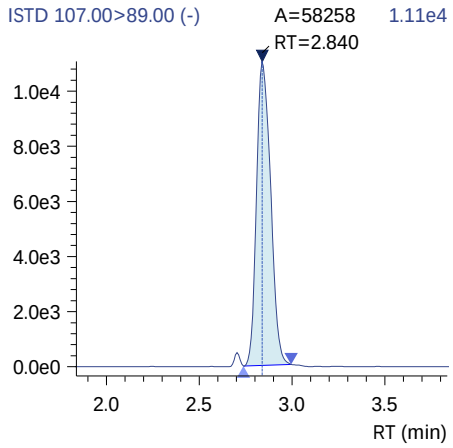
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 1:44:51 PM

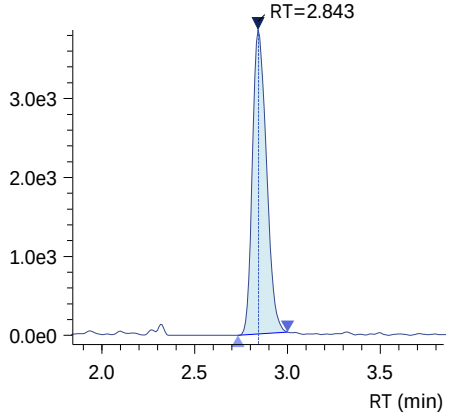
PERCHLORATE5

Sample ID: PERCHLORATE5
Date Acquired: 7/18/2022 9:59:33 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_009.lcd
Vial: 24 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 1.8910

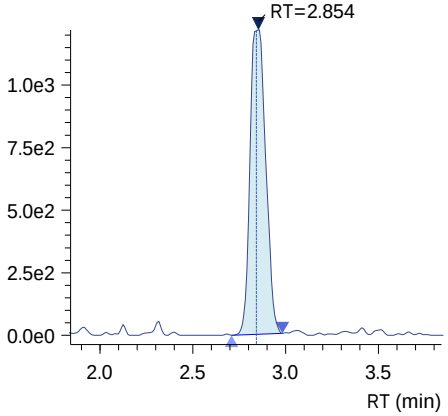
Q 99.00>83.00 (-) A=20308 3.87e3 RT=2.843



Perchlorate 2

Conc 0.0000

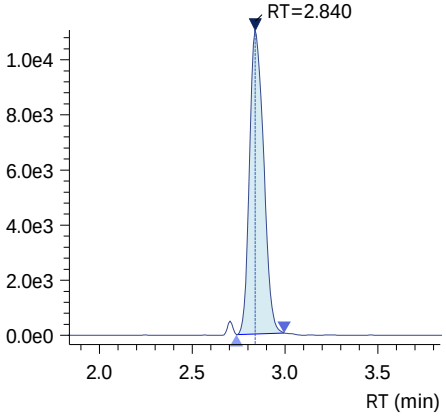
Q 101.00>85.00 (-) A=7210 1.22e3 RT=2.854



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=58258 1.11e4 RT=2.840



Insight Report

Printed at 7/18/2022 1:42:23 PM

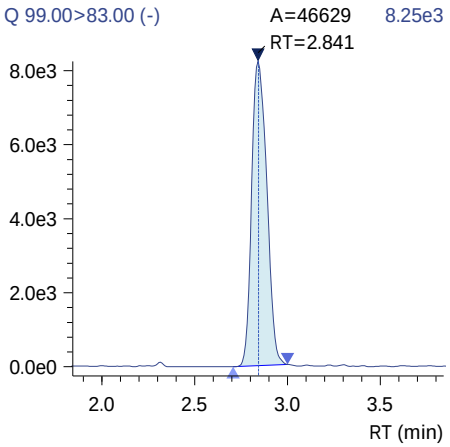
PERCHLORATE6

Sample ID: PERCHLORATE6
Date Acquired: 7/18/2022 10:07:26 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_010.lcd
Vial: 25 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.841	46629	52840	4.7871	ng/mL	34.25	18.15-33.72
Perchlorate 2	Auto	2.845	15971	52840	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.841	52840	52840	1.0000	ng/mL	----	

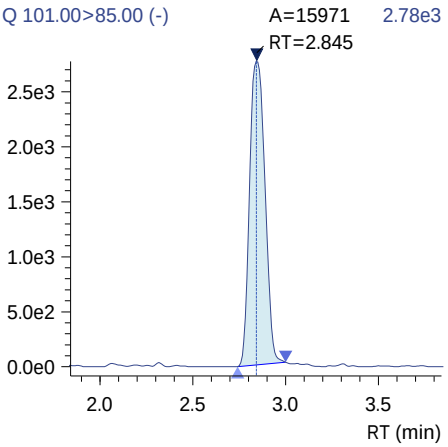
Perchlorate

Conc 4.7871



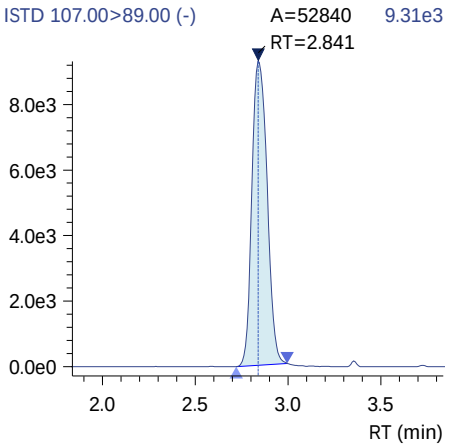
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 1:44:51 PM

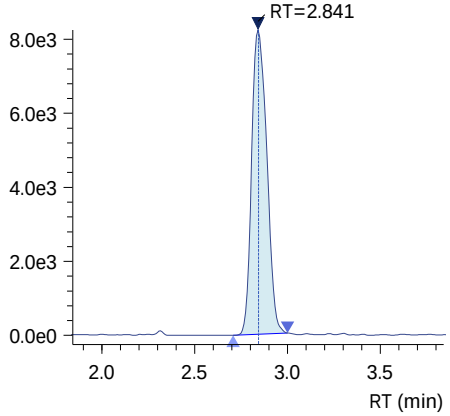
PERCHLORATE6

Sample ID: PERCHLORATE6
Date Acquired: 7/18/2022 10:07:26 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_010.lcd
Vial: 25 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 4.7871

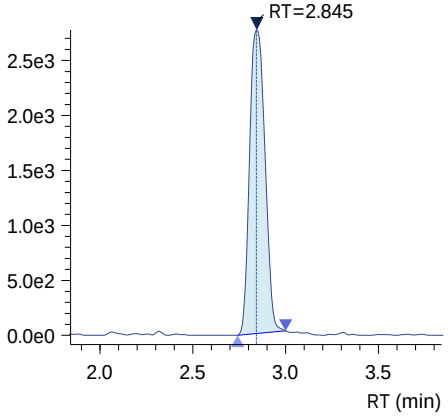
Q 99.00>83.00 (-) A=46629 8.25e3 RT=2.841



Perchlorate 2

Conc 0.0000

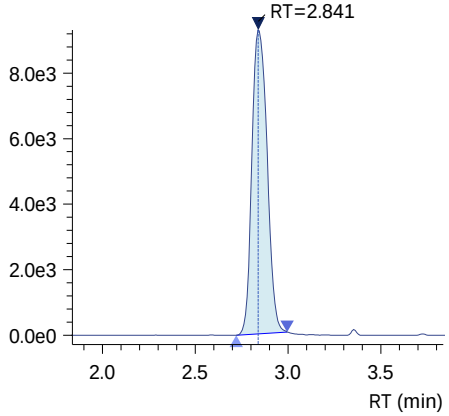
Q 101.00>85.00 (-) A=15971 2.78e3 RT=2.845



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=52840 9.31e3 RT=2.841



Insight Report

Printed at 7/18/2022 1:42:23 PM

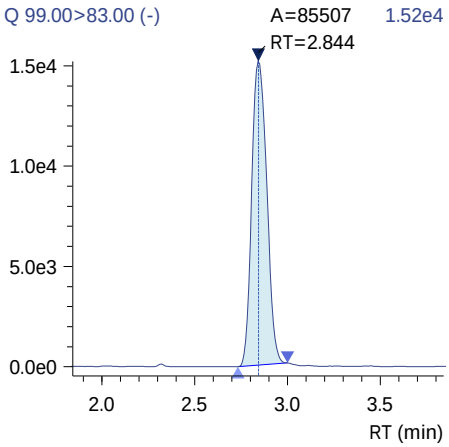
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/18/2022 10:15:20 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_011.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.844	85507	45769	10.1346	ng/mL	32.67	18.15-33.72
Perchlorate 2	Auto	2.842	27933	45769	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.838	45769	45769	1.0000	ng/mL	----	

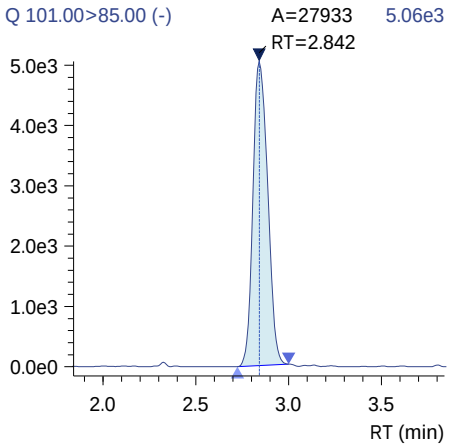
Perchlorate

Conc 10.1346



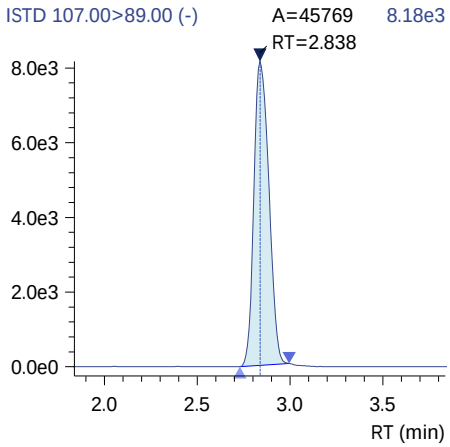
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

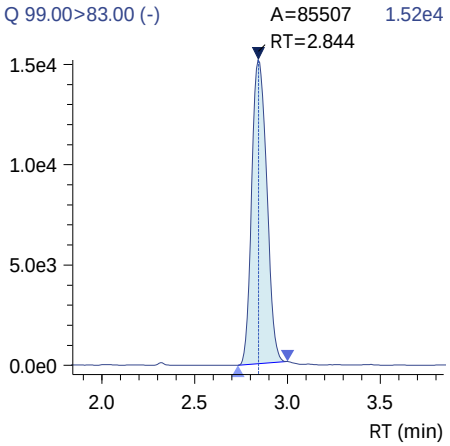
Printed at 7/18/2022 1:44:51 PM

PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/18/2022 10:15:20 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_011.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

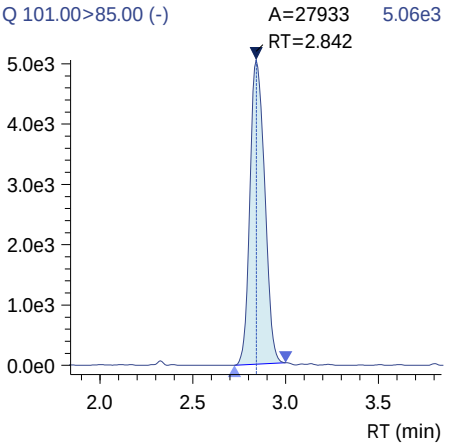
Perchlorate

Conc 10.1346



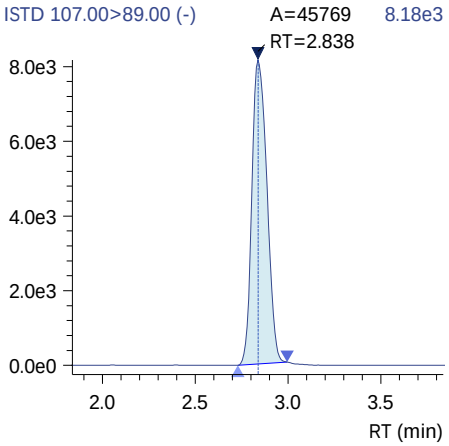
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 1:42:23 PM

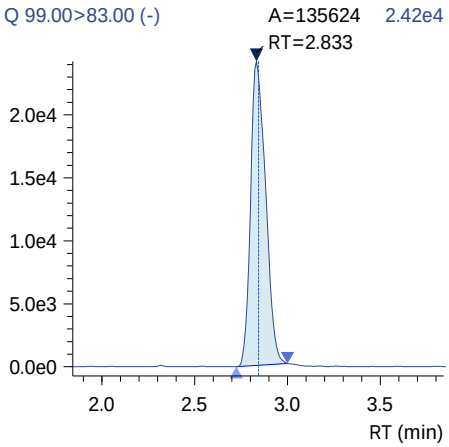
PERCHLORATE8

Sample ID: PERCHLORATE8
Date Acquired: 7/18/2022 10:23:13 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_012.lcd
Vial: 27 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.833	135624	37337	19.7049	ng/mL	33.61	18.15-33.72
Perchlorate 2	Auto	2.832	45581	37337	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.831	37337	37337	1.0000	ng/mL	----	

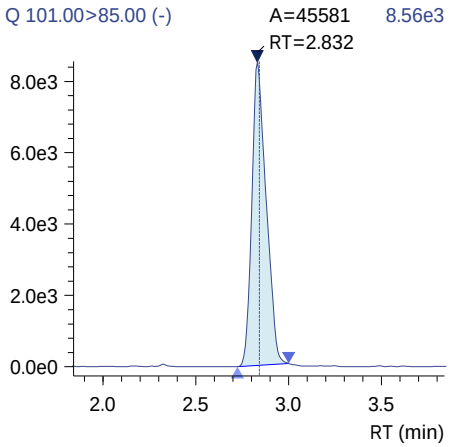
Perchlorate

Conc 19.7049



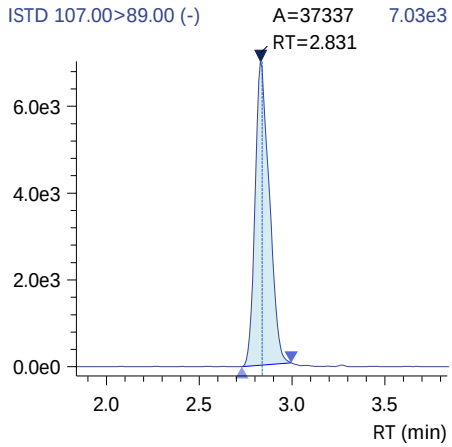
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

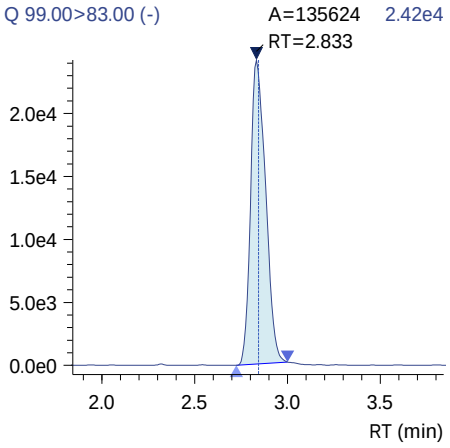
Printed at 7/18/2022 1:44:51 PM

PERCHLORATE8

Sample ID: PERCHLORATE8
Date Acquired: 7/18/2022 10:23:13 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_012.lcd
Vial: 27 | Inj. Volume: 25.0000uL | Tray: 1

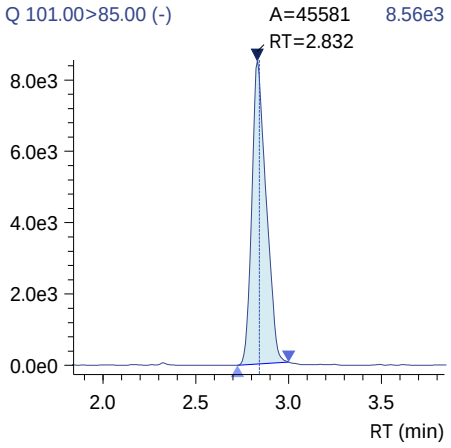
Perchlorate

Conc 19.7049



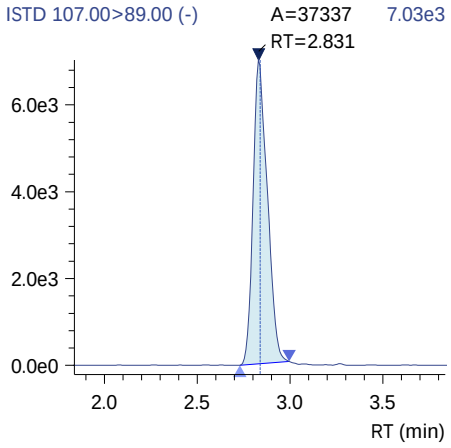
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 1:42:23 PM

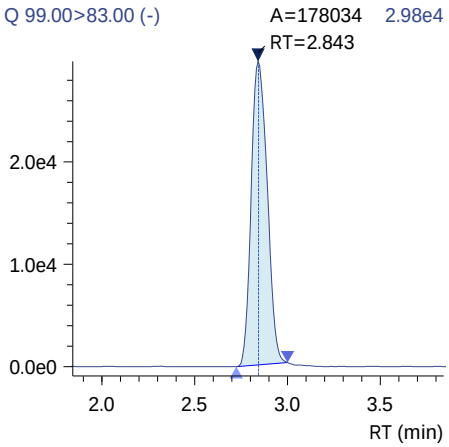
PERCHLORATE9

Sample ID: PERCHLORATE9
Date Acquired: 7/18/2022 10:31:09 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_013.lcd
Vial: 28 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.843	178034	33510	28.8208	ng/mL	33.72	18.15-33.72
Perchlorate 2	Auto	2.839	60031	33510	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.838	33510	33510	1.0000	ng/mL	----	

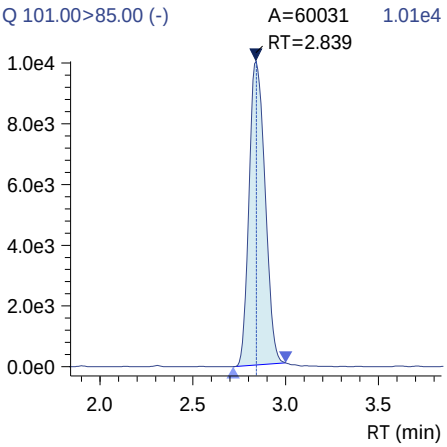
Perchlorate

Conc 28.8208



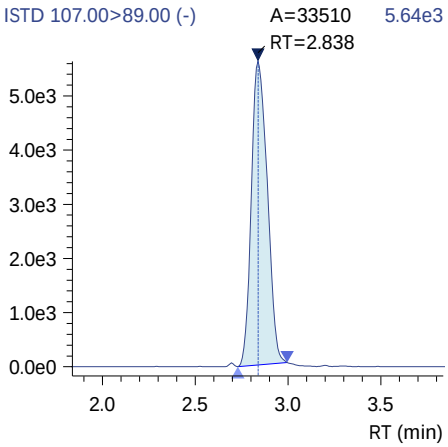
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 1:44:51 PM

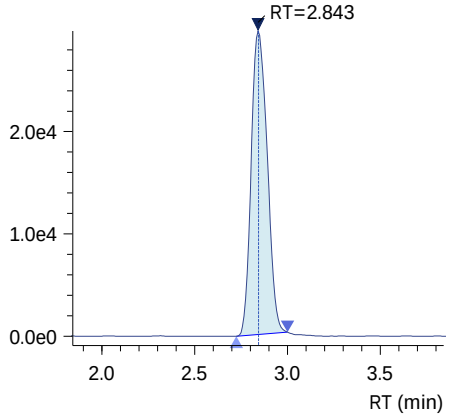
PERCHLORATE9

Sample ID: PERCHLORATE9
Date Acquired: 7/18/2022 10:31:09 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_013.lcd
Vial: 28 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 28.8208

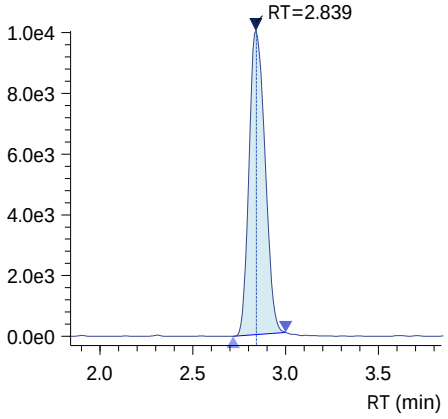
Q 99.00>83.00 (-) A=178034 2.98e4



Perchlorate 2

Conc 0.0000

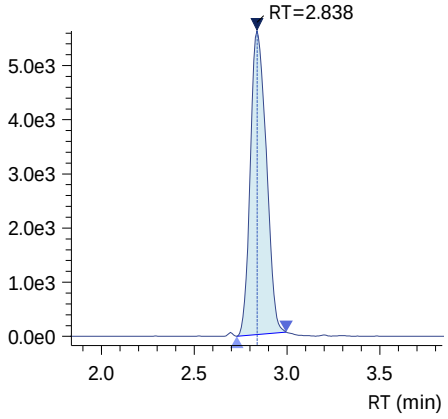
Q 101.00>85.00 (-) A=60031 1.01e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=33510 5.64e3



Insight Report

Printed at 7/18/2022 1:42:23 PM

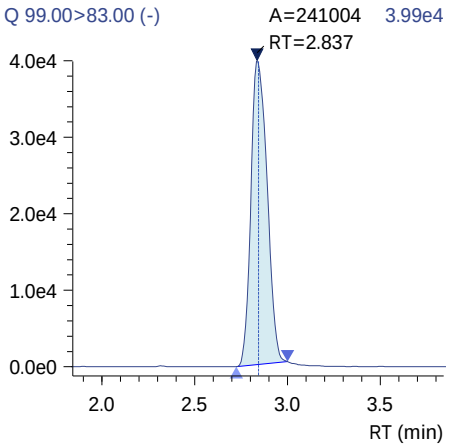
PERCHLORATE10

Sample ID: PERCHLORATE10
Date Acquired: 7/18/2022 10:39:04 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_014.lcd
Vial: 29 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.837	241004	27562	47.4341	ng/mL	32.19	18.15-33.72
Perchlorate 2	Auto	2.839	77583	27562	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.837	27562	27562	1.0000	ng/mL	----	

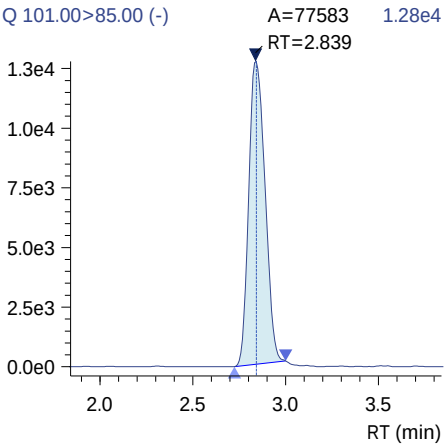
Perchlorate

Conc 47.4341



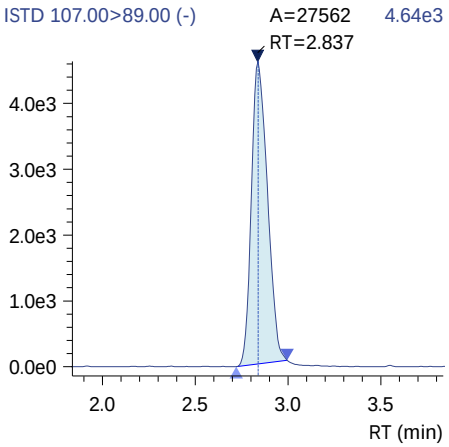
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

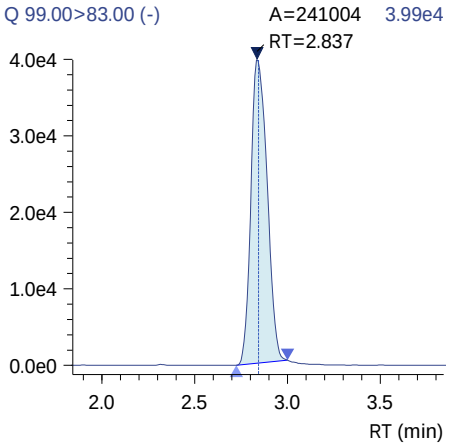
Printed at 7/18/2022 1:44:51 PM

PERCHLORATE10

Sample ID: PERCHLORATE10
Date Acquired: 7/18/2022 10:39:04 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_014.lcd
Vial: 29 | Inj. Volume: 25.0000uL | Tray: 1

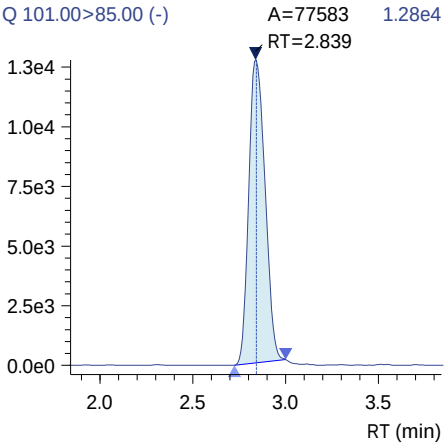
Perchlorate

Conc 47.4341



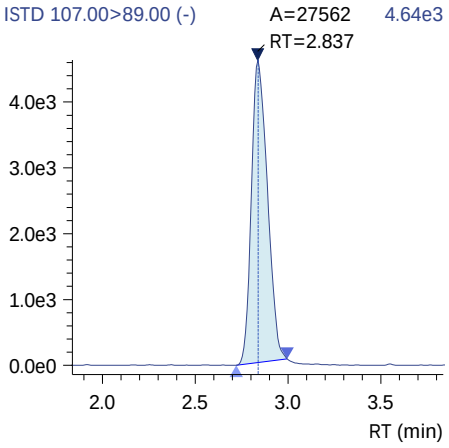
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 1:42:23 PM

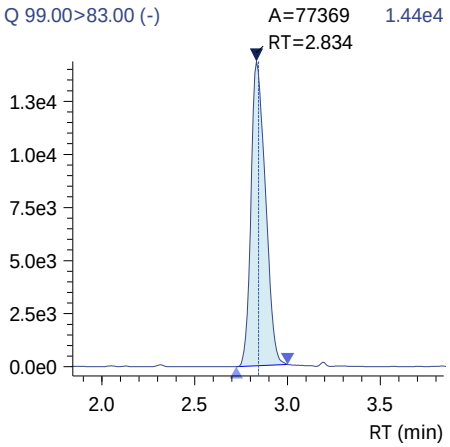
PERCHLORATEICV

Sample ID: PERCHLORATEICV
Date Acquired: 7/18/2022 11:02:47 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_016.lcd
Vial: 30 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.834	77369	41373	10.1444	ng/mL	33.88	18.15-33.72
Perchlorate 2	Auto	2.834	26210	41373	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.831	41373	41373	1.0000	ng/mL	----	

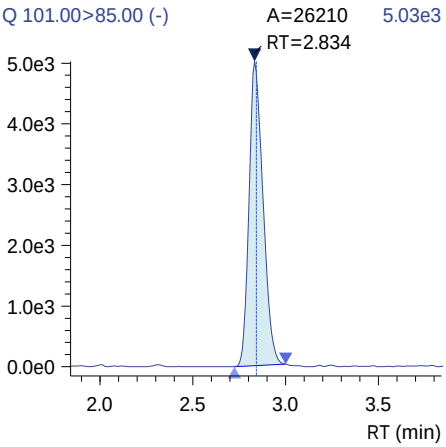
Perchlorate

Conc 10.1444



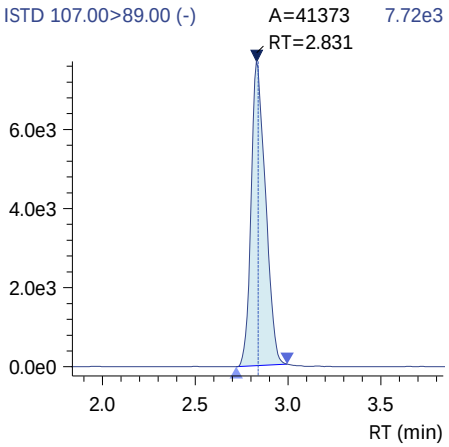
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

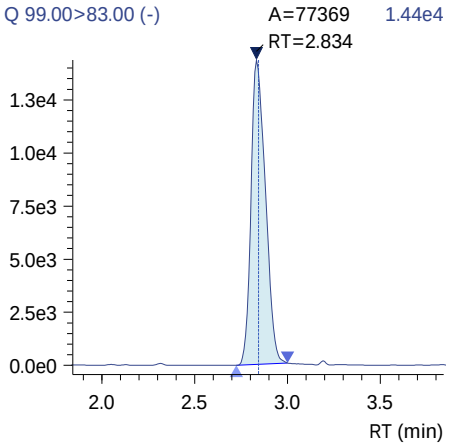
Printed at 7/18/2022 1:44:51 PM

PERCHLORATEICV

Sample ID: PERCHLORATEICV
Date Acquired: 7/18/2022 11:02:47 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_016.lcd
Vial: 30 | Inj. Volume: 25.0000uL | Tray: 1

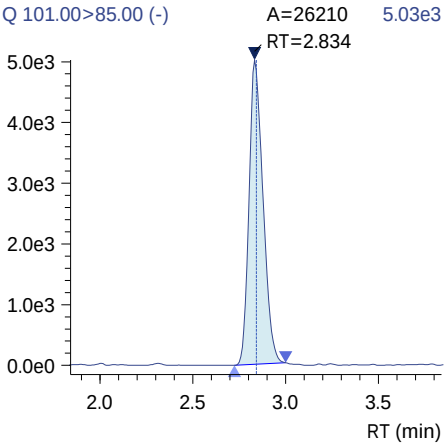
Perchlorate

Conc 10.1444



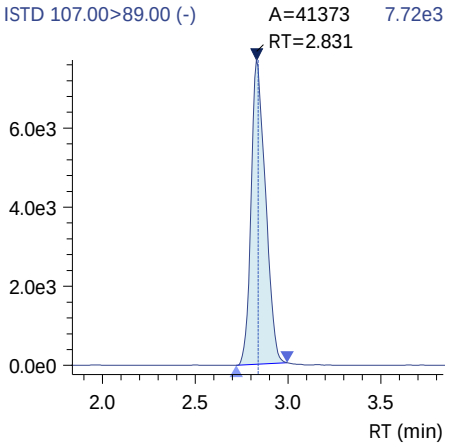
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Chromatograms and Selected Ion Monitoring

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 320, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20220712

1st Review: GRivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 6/1/2022
Cal. Std. xp: 9/4/2022
ICAL ID: **EC2200008**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100820-02 **B:** MeOH 218535

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	null		20220712_001	Perchlorate6850c.lcm	1x	☒		7/12/2022 10:05
2	null		20220712_002	Perchlorate6850c.lcm	1x	☒		7/12/2022 10:10
3	IB		20220712_003	Perchlorate6850c.lcm	1x	☒		7/12/2022 10:15
4	IB		20220712_004	Perchlorate6850c.lcm	1x	☒		7/12/2022 10:23
5	IB		20220712_005	Perchlorate6850c.lcm	1x	☒		7/12/2022 10:31
6	IB		20220712_006	Perchlorate6850c.lcm	1x	☒		7/12/2022 10:39
7	ICS		20220712_007	Perchlorate6850c.lcm	1x	☒		7/12/2022 10:47
8	PERCHLORATE7		20220712_008	Perchlorate6850c.lcm	1x	☒	222810	7/12/2022 11:03
9	LODV		20220712_009	Perchlorate6850c.lcm	1x	☒	222817	7/12/2022 11:19
10	EQ2200284-01		20220712_010	Perchlorate6850c.lcm	1x	☒		7/12/2022 11:26
11	EQ2200284-02		20220712_011	Perchlorate6850c.lcm	1x	☒		7/12/2022 11:50
12	EQ2200284-03		20220712_012	Perchlorate6850c.lcm	1x	☒		7/12/2022 11:58
13	E2200663-001		20220712_013	Perchlorate6850c.lcm	1x	☒		7/12/2022 12:06
14	R2205911-001		20220712_014	Perchlorate6850c.lcm	1x	☒		7/12/2022 12:14
15	R2205911-002		20220712_015	Perchlorate6850c.lcm	1x	☒		7/12/2022 12:22
16	R2205911-003		20220712_016	Perchlorate6850c.lcm	1x	☒		7/12/2022 12:30
17	R2205911-004		20220712_017	Perchlorate6850c.lcm	1x	☒		7/12/2022 13:23
18	PERCHLORATE7		20220712_018	Perchlorate6850c.lcm	1x	☒	222810	7/12/2022 13:31
19	EQ2200288-01		20220712_019	Perchlorate6850c.lcm	1x	☒		7/12/2022 13:39
20	EQ2200288-02		20220712_020	Perchlorate6850c.lcm	1x	☒		7/12/2022 13:46
21	EQ2200288-03		20220712_021	Perchlorate6850c.lcm	1x	☒		7/12/2022 13:54
22	K2207496-001		20220712_022	Perchlorate6850c.lcm	1x	☒		7/12/2022 14:20
23	K2207495-001		20220712_023	Perchlorate6850c.lcm	1x	☒		7/12/2022 14:28
24	E2200586-001RE		20220712_024	Perchlorate6850c.lcm	1x	☒	DNU- over ICAL range	7/12/2022 14:36
25	E2200586-002RE		20220712_025	Perchlorate6850c.lcm	1x	☒		7/12/2022 14:52
26	E2200586-003RE		20220712_026	Perchlorate6850c.lcm	1x	☒		7/12/2022 14:59
27	E2200586-001RE		20220712_027	Perchlorate6850c.lcm	10x	☒		7/12/2022 15:07
28	PERCHLORATE7		20220712_028	Perchlorate6850c.lcm	1x	☒	222810	7/12/2022 15:15
29	EQ2200278-01		20220712_029	Perchlorate6850c.lcm	1x	☒		7/12/2022 15:23
30	EQ2200278-02		20220712_030	Perchlorate6850c.lcm	1x	☒		7/12/2022 15:55
31	EQ2200278-03		20220712_031	Perchlorate6850c.lcm	1x	☒		7/12/2022 16:11
32	EQ2200287-01		20220712_032	Perchlorate6850c.lcm	1x	☒		7/12/2022 16:18
33	EQ2200287-02		20220712_033	Perchlorate6850c.lcm	1x	☒		7/12/2022 16:26
34	EQ2200287-03		20220712_034	Perchlorate6850c.lcm	1x	☒		7/12/2022 17:07
35	E2200664-001		20220712_035	Perchlorate6850c.lcm	1x	☒		7/12/2022 17:15
36	E2200664-002		20220712_036	Perchlorate6850c.lcm	1x	☒		7/12/2022 17:23
37	PERCHLORATE7		20220712_037	Perchlorate6850c.lcm	1x	☒	222810	7/12/2022 17:31
38	EQ2200278-04		20220712_038	Perchlorate6850c.lcm	1x	☒	DNU- over ICAL range	7/12/2022 17:39
39	EQ2200278-05		20220712_039	Perchlorate6850c.lcm	1x	☒	DNU- over ICAL range	7/12/2022 17:47
40	EQ2200278-06		20220712_040	Perchlorate6850c.lcm	1x	☒	Reanalyze -carryover	7/12/2022 17:54
41	EQ2200278-07		20220712_041	Perchlorate6850c.lcm	1x	☒	Reanalyze -carryover	7/12/2022 18:02
42	E2200646-001		20220712_042	Perchlorate6850c.lcm	1x	☒	DNU- over ICAL range	7/12/2022 18:10
43	E2200646-002		20220712_043	Perchlorate6850c.lcm	1x	☒	DNU- over ICAL range	7/12/2022 18:18
44	E2200646-003		20220712_044	Perchlorate6850c.lcm	1x	☒	Reanalyze -carryover	7/12/2022 18:26
45	E2200646-004		20220712_045	Perchlorate6850c.lcm	1x	☒	Reanalyze -carryover	7/12/2022 18:34
46	E2200646-005		20220712_046	Perchlorate6850c.lcm	1x	☒	Reanalyze -carryover	7/12/2022 18:42
47	E2200646-006		20220712_047	Perchlorate6850c.lcm	1x	☒		7/12/2022 18:50
48	PERCHLORATE7		20220712_048	Perchlorate6850c.lcm	1x	☒	222810	7/12/2022 18:58
49	E2200646-007		20220712_049	Perchlorate6850c.lcm	1x	☒		7/12/2022 19:05
50	E2200646-008		20220712_050	Perchlorate6850c.lcm	1x	☒		7/12/2022 19:13
51	E2200646-009		20220712_051	Perchlorate6850c.lcm	1x	☒		7/12/2022 19:21
52	EQ2200287-04		20220712_052	Perchlorate6850c.lcm	1x	☒		7/12/2022 19:29
53	EQ2200287-05		20220712_053	Perchlorate6850c.lcm	1x	☒		7/12/2022 19:37
54	E2200665-001		20220712_054	Perchlorate6850c.lcm	1x	☒		7/12/2022 19:45
55	E2200665-002		20220712_055	Perchlorate6850c.lcm	1x	☒		7/12/2022 19:53
56	E2200665-003		20220712_056	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/12/2022 20:01
57	PERCHLORATE7		20220712_057	Perchlorate6850c.lcm	1x	☒	222810	7/12/2022 20:08
58	E2200665-004		20220712_058	Perchlorate6850c.lcm	1x	☒		7/12/2022 20:16
59	E2200665-005		20220712_059	Perchlorate6850c.lcm	1x	☒	DNU-IR	7/12/2022 20:24
60	E2200665-006		20220712_060	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/12/2022 20:32
61	E2200665-007		20220712_061	Perchlorate6850c.lcm	1x	☒	DNU-IR	7/12/2022 20:40
62	E2200665-008		20220712_062	Perchlorate6850c.lcm	1x	☒	DNU- over ICAL range	7/12/2022 20:48
63	E2200665-009		20220712_063	Perchlorate6850c.lcm	1x	☒	DNU-IR	7/12/2022 20:56
64	E2200665-010		20220712_064	Perchlorate6850c.lcm	1x	☒		7/12/2022 21:04
65	E2200665-011		20220712_065	Perchlorate6850c.lcm	1x	☒		7/12/2022 21:12
66	PERCHLORATE7		20220712_066	Perchlorate6850c.lcm	1x	☒	222810	7/12/2022 21:20

20220712

1st Review: GRivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 6/1/2022
Cal. Std. xp: 9/4/2022
ICAL ID: **EC2200008**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100820-02 **B:** MeOH 218535

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
67	IB		20220712_067	Perchlorate6850c.lcm	1x	☒		7/12/2022 21:27
68	IB		20220712_068	Perchlorate6850c.lcm	1x	☒		7/12/2022 21:35
69	IB		20220712_069	Perchlorate6850c.lcm	1x	☒		7/12/2022 21:43
70	null		20220712_070	Perchlorate6850c.lcm	1x	☒		7/12/2022 21:48
71	null		20220712_071	Perchlorate6850c.lcm	1x	☒		7/12/2022 21:53

20220718

1st Review: GRivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 7/18/2022
Cal. Std. xp: 9/4/2022
ICAL ID: **EC2200009**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100820-02 **B:** MeOH 218535

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	PERCHLORATE1		20220718_005	Perchlorate6850c.lcm	1x	☒	222805	7/18/2022 9:27
2	PERCHLORATE2		20220718_006	Perchlorate6850c.lcm	1x	☒	222804	7/18/2022 9:35
3	PERCHLORATE3		20220718_007	Perchlorate6850c.lcm	1x	☒	222806	7/18/2022 9:43
4	PERCHLORATE4		20220718_008	Perchlorate6850c.lcm	1x	☒	222807	7/18/2022 9:51
5	PERCHLORATE5		20220718_009	Perchlorate6850c.lcm	1x	☒	222808	7/18/2022 9:59
6	PERCHLORATE6		20220718_010	Perchlorate6850c.lcm	1x	☒	222809	7/18/2022 10:07
7	PERCHLORATE7		20220718_011	Perchlorate6850c.lcm	1x	☒	222810	7/18/2022 10:15
8	PERCHLORATE8		20220718_012	Perchlorate6850c.lcm	1x	☒	222811	7/18/2022 10:23
9	PERCHLORATE9		20220718_013	Perchlorate6850c.lcm	1x	☒	222812	7/18/2022 10:31
10	PERCHLORATE10		20220718_014	Perchlorate6850c.lcm	1x	☒	222813	7/18/2022 10:39
11	PERCHLORATEICV		20220718_016	Perchlorate6850c.lcm	1x	☒	222814	7/18/2022 11:02
12	ICS		20220718_017	Perchlorate6850c.lcm	1x	☒		7/18/2022 11:18
13	LODV		20220718_018	Perchlorate6850c.lcm	1x	☒	222817	7/18/2022 11:26
14	PERCHLORATE7		20220718_019	Perchlorate6850c.lcm	1x	☒	222810	7/18/2022 11:39
15	EQ2200278-06		20220718_020	Perchlorate6850c.lcm	1x	☒		7/18/2022 11:47
16	EQ2200278-07		20220718_021	Perchlorate6850c.lcm	1x	☒		7/18/2022 11:55
17	E2200646-003		20220718_022	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/18/2022 12:03
18	E2200646-004		20220718_023	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/18/2022 12:11
19	E2200646-005		20220718_024	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/18/2022 12:18
20	E2200646-001		20220718_025	Perchlorate6850c.lcm	50x	☒		7/18/2022 12:26
21	E2200646-002		20220718_026	Perchlorate6850c.lcm	50x	☒		7/18/2022 12:34
22	PERCHLORATE7		20220718_027	Perchlorate6850c.lcm	1x	☒	222810	7/18/2022 12:42
23	EQ2200295-01		20220718_028	Perchlorate6850c.lcm	1x	☒		7/18/2022 12:50
24	EQ2200295-02		20220718_029	Perchlorate6850c.lcm	1x	☒		7/18/2022 12:58
25	EQ2200295-03		20220718_030	Perchlorate6850c.lcm	1x	☒		7/18/2022 13:30
26	K2207770-001DNU-INST		20220718_031	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/18/2022 13:38
27	PERCHLORATE7		20220718_032	Perchlorate6850c.lcm	1x	☒	222810	7/18/2022 14:09
28	E2200688-001		20220718_033	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/18/2022 14:17
29	E2200689-001		20220718_034	Perchlorate6850c.lcm	1x	☒	DNU-over ICAL range	7/18/2022 14:25
30	E2200690-001		20220718_035	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/18/2022 14:33
31	E2200690-002		20220718_036	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/18/2022 14:41
32	PERCHLORATE7		20220718_037	Perchlorate6850c.lcm	1x	☒	222810	7/18/2022 14:49
33	E2200665-003DNU-INST		20220718_038	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/18/2022 15:31
34	E2200646-003		20220718_039	Perchlorate6850c.lcm	5x	☒		7/18/2022 16:00
35	E2200646-004		20220718_040	Perchlorate6850c.lcm	5x	☒		7/18/2022 16:08
36	E2200646-005		20220718_041	Perchlorate6850c.lcm	5x	☒	DNU-INST out of range	7/18/2022 16:15
37	K2207770-001		20220718_042	Perchlorate6850c.lcm	5x	☒	DNU-INST out of range	7/18/2022 16:23
38	PERCHLORATE7		20220718_043	Perchlorate6850c.lcm	1x	☒	222810	7/18/2022 16:31
39	PERCHLORATE7		20220718_044	Perchlorate6850c.lcm	1x	☒	222810	7/18/2022 17:55
40	E2200665-005		20220718_045	Perchlorate6850c.lcm	1x	☒		7/18/2022 18:03
41	E2200665-006		20220718_046	Perchlorate6850c.lcm	1x	☒		7/18/2022 18:11
42	E2200665-007		20220718_047	Perchlorate6850c.lcm	1x	☒		7/18/2022 18:19
43	E2200665-008		20220718_048	Perchlorate6850c.lcm	10x	☒		7/18/2022 18:26
44	E2200665-009		20220718_049	Perchlorate6850c.lcm	1x	☒		7/18/2022 18:34
45	PERCHLORATE7		20220718_050	Perchlorate6850c.lcm	1x	☒	222810	7/18/2022 18:42
46	IB		20220718_051	Perchlorate6850c.lcm	1x	☒		7/18/2022 18:50
47	IB		20220718_052	Perchlorate6850c.lcm	1x	☒		7/18/2022 18:58
48	IB		20220718_053	Perchlorate6850c.lcm	1x	☒		7/18/2022 19:06
49	null		20220718_054	Perchlorate6850c.lcm	1x	☒		7/18/2022 19:11
50	null		20220718_055	Perchlorate6850c.lcm	1x	☒		7/18/2022 19:15

20220719

1st Review: GRivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 7/18/2022
Cal. Std. xp: 9/4/2022
ICAL ID: **EC2200009**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100820-02 **B:** MeOH 218535

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	null		20220719_001	Perchlorate6850c.lcm	1x	☒		7/19/2022 8:30
2	null		20220719_002	Perchlorate6850c.lcm	1x	☒		7/19/2022 8:35
3	IB		20220719_003	Perchlorate6850c.lcm	1x	☒		7/19/2022 8:41
4	IB		20220719_004	Perchlorate6850c.lcm	1x	☒		7/19/2022 8:48
5	IB		20220719_005	Perchlorate6850c.lcm	1x	☒		7/19/2022 8:56
6	IB		20220719_006	Perchlorate6850c.lcm	1x	☒		7/19/2022 9:04
7	LODV		20220719_007	Perchlorate6850c.lcm	1x	☒	222817	7/19/2022 9:12
8	ICS		20220719_008	Perchlorate6850c.lcm	1x	☒		7/19/2022 9:20
9	PERCHLORATE7		20220719_009	Perchlorate6850c.lcm	1x	☒	222810	7/19/2022 10:15
10	E2200646-005x5		20220719_010	Perchlorate6850c.lcm	5x	☒		7/19/2022 10:23
11	K2207770-001x5		20220719_011	Perchlorate6850c.lcm	5x	☒		7/19/2022 10:47
12	PERCHLORATE7		20220719_012	Perchlorate6850c.lcm	1x	☒	222810	7/19/2022 10:56
13	E2200690-001		20220719_013	Perchlorate6850c.lcm	1x	☒		7/19/2022 11:07
14	E2200690-002		20220719_014	Perchlorate6850c.lcm	1x	☒		7/19/2022 11:26
15	PERCHLORATE7		20220719_015	Perchlorate6850c.lcm	1x	☒	222810	7/19/2022 11:34
16	E2200689-001X500		20220719_016	Perchlorate6850c.lcm	500x	☒		7/19/2022 11:52
17	E2200688-001		20220719_017	Perchlorate6850c.lcm	1x	☒		7/19/2022 12:01
18	PERCHLORATE7		20220719_018	Perchlorate6850c.lcm	1x	☒	222810	7/19/2022 12:09

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020

Service Request: E2200646
Date Analyzed: 7/12/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220712\20220712_028

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 770203
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1511	0.1513	0.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020

Service Request: E2200646
Date Analyzed: 7/12/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220712\20220712_037

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 770203
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1511	0.1511	0.0	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020

Service Request: E2200646
Date Analyzed: 7/12/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220712\20220712_048

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 770203
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1511	0.1534	1.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020

Service Request: E2200646
Date Analyzed: 7/12/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220712\20220712_057

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 770203
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.95	0.1511	0.1504	-0.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020

Service Request: E2200646
Date Analyzed: 7/12/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220712\20220712_066

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 770203
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.60	0.1511	0.1450	-4.0	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020

Service Request: E2200646
Date Analyzed: 7/18/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220718\20220718_019

Calibration Date: 7/18/22
Calibration ID: EC2200009
Analysis Lot: 770746
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.78	0.1843	0.1802	-2.2	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020

Service Request: E2200646
Date Analyzed: 7/18/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220718\20220718_027

Calibration Date: 7/18/22
Calibration ID: EC2200009
Analysis Lot: 770746
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.71	0.1843	0.1790	-2.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020

Service Request: E2200646
Date Analyzed: 7/18/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220718\20220718_032

Calibration Date: 7/18/22
Calibration ID: EC2200009
Analysis Lot: 770746
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1843	0.1858	0.8	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020

Service Request: E2200646
Date Analyzed: 7/18/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220718\20220718_037

Calibration Date: 7/18/22
Calibration ID: EC2200009
Analysis Lot: 770746
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1843	0.1854	0.6	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020

Service Request: E2200646
Date Analyzed: 7/18/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220718\20220718_043

Calibration Date: 7/18/22
Calibration ID: EC2200009
Analysis Lot: 770746
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.74	0.1843	0.1795	-2.6	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020

Service Request: E2200646
Date Analyzed: 7/19/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220719\20220719_009

Calibration Date: 7/18/22
Calibration ID: EC2200009
Analysis Lot: 770867
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.87	0.1843	0.1819	-1.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020

Service Request: E2200646
Date Analyzed: 7/19/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220719\20220719_012

Calibration Date: 7/18/22
Calibration ID: EC2200009
Analysis Lot: 770867
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.71	0.1843	0.1791	-2.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020

Service Request: E2200646
Date Analyzed: 7/19/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220719\20220719_015

Calibration Date: 7/18/22
Calibration ID: EC2200009
Analysis Lot: 770867
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.4	0.1843	0.1917	4.0	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020

Service Request: E2200646
Date Analyzed: 7/19/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220719\20220719_018

Calibration Date: 7/18/22
Calibration ID: EC2200009
Analysis Lot: 770867
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.75	0.1843	0.1797	-2.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Analyzed:**	7/12/22 15:15

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220712\20220712_028	**Lab Code:**	EQ2200290-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	770203
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200290-03	35,939	2.84
Method Blank	EQ2200278-01	43,090	2.86
Lab Control Sample	EQ2200278-02	44,994	2.85
Duplicate Lab Control Sample	EQ2200278-03	45,192	2.85

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020

Service Request: E2200646
Date Analyzed: 7/12/22 17:31

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID: I:\LCMS01\DATA\20220712\20220712_037
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2200290-04
Analysis Lot: 770203
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200290-04	34,449	2.85
16WW16-220630MS	EQ2200278-04	13,456*	2.84
16WW16-220630DMS	EQ2200278-05	13,571*	2.83
16WW29-220630	E2200646-006	26,413	2.83

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020

Service Request: E2200646
Date Analyzed: 7/12/22 18:58

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID: I:\LCMS01\DATA\20220712\20220712_048
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2200290-05
Analysis Lot: 770203
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200290-05	28,691	2.86
16WW29-220630-FD	E2200646-007	27,543	2.83
16WW25-220630	E2200646-008	19,549	2.83
16WW26-220630	E2200646-009	24,618	2.84

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Analyzed:**	7/12/22 20:08

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220712\20220712_057	**Lab Code:**	EQ2200290-06
Instrument ID:	E-LCMS-01	**Analysis Lot:**	770203
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200290-06	29,254	2.87

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Analyzed:**	7/12/22 21:20

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220712\20220712_066	**Lab Code:**	EQ2200290-07
Instrument ID:	E-LCMS-01	**Analysis Lot:**	770203
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200290-07	27,714	2.86

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Analyzed:**	7/18/22 11:39

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220718\20220718_019	**Lab Code:**	EQ2200300-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	770746
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	51,415	2.84
	Upper Limit ==>	77,123	4.84
	Lower Limit ==>	25,708	0.84
Associated Analyses			
Continuing Calibration Verification	EQ2200300-01	42,801	2.84
16WW25-220630MS	EQ2200278-06	33,652	2.81
16WW25-220630DMS	EQ2200278-07	30,582	2.81
16WW16-220630	E2200646-001	28,113	2.84
16WW35-220630	E2200646-002	30,846	2.82

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Analyzed:**	7/18/22 12:42

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220718\20220718_027	**Lab Code:**	EQ2200300-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	770746
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	51,415	2.84
	Upper Limit ==>	77,123	4.84
	Lower Limit ==>	25,708	0.84
Associated Analyses			
Continuing Calibration Verification	EQ2200300-02	36,058	2.85

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Analyzed:**	7/18/22 14:09

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220718\20220718_032	**Lab Code:**	EQ2200300-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	770746
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	51,415	2.84
	Upper Limit ==>	77,123	4.84
	Lower Limit ==>	25,708	0.84
Associated Analyses			
Continuing Calibration Verification	EQ2200300-03	30,482	2.84

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Analyzed:**	7/18/22 14:49

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220718\20220718_037	**Lab Code:**	EQ2200300-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	770746
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	51,415	2.84
	Upper Limit ==>	77,123	4.84
	Lower Limit ==>	25,708	0.84
Associated Analyses			
Continuing Calibration Verification	EQ2200300-04	27,890	2.83
16WW36-220630	E2200646-003	31,421	2.82
16WW48-220630	E2200646-004	27,758	2.82

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Analyzed:**	7/18/22 16:31

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220718\20220718_043	**Lab Code:**	EQ2200300-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	770746
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	51,415	2.84
	Upper Limit ==>	77,123	4.84
	Lower Limit ==>	25,708	0.84
Associated Analyses			
Continuing Calibration Verification	EQ2200300-05	31,936	2.84

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070020

Service Request: E2200646
Date Analyzed: 7/19/22 10:15

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID: I:\LCMS01\DATA\20220719\20220719_009
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2200301-01
Analysis Lot: 770867
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	51,415	2.84
	Upper Limit ==>	77,123	4.84
	Lower Limit ==>	25,708	0.84
Associated Analyses			
Continuing Calibration Verification	EQ2200301-01	38,512	2.85
16WW30-220630	E2200646-005	35,779	2.86

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Analyzed:**	7/19/22 10:56

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220719\20220719_012	**Lab Code:**	EQ2200301-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	770867
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	51,415	2.84
	Upper Limit ==>	77,123	4.84
	Lower Limit ==>	25,708	0.84
Associated Analyses			
Continuing Calibration Verification	EQ2200301-02	38,732	2.83

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Analyzed:**	7/19/22 11:34

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220719\20220719_015	**Lab Code:**	EQ2200301-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	770867
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	51,415	2.84
	Upper Limit ==>	77,123	4.84
	Lower Limit ==>	25,708	0.84
Associated Analyses			
Continuing Calibration Verification	EQ2200301-03	35,168	2.84

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200646
Project:	HS22070020	**Date Analyzed:**	7/19/22 12:09

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220719\20220719_018	**Lab Code:**	EQ2200301-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	770867
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	51,415	2.84
	Upper Limit ==>	77,123	4.84
	Lower Limit ==>	25,708	0.84
Associated Analyses			
Continuing Calibration Verification	EQ2200301-04	36,355	2.84

Results flagged with an asterisk (*) indicate values outside control criteria.

Insight Report

Printed at 7/18/2022 10:38:07 AM

Method File: I:\LCMS01\DATA\20220712\20220601.lcm
Project File: I:\LCMS01\DATA\20220712\20220712.damlp

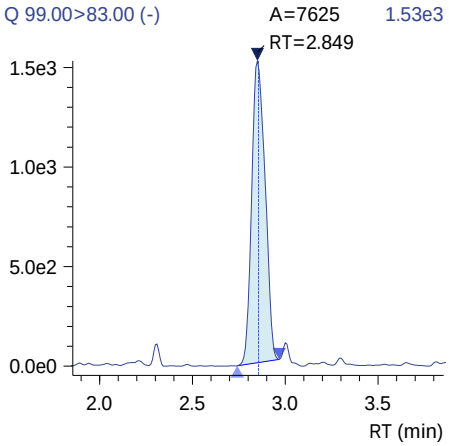
ICS

Sample ID: ICS
Date Acquired: 7/12/2022 10:47:31 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_007.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.849	7625	47727	1.0571	ng/mL	25.64	17.85-33.16
Perchlorate 2	Auto	2.841	1955	47727	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.846	47727	47727	1.0000	ng/mL	----	

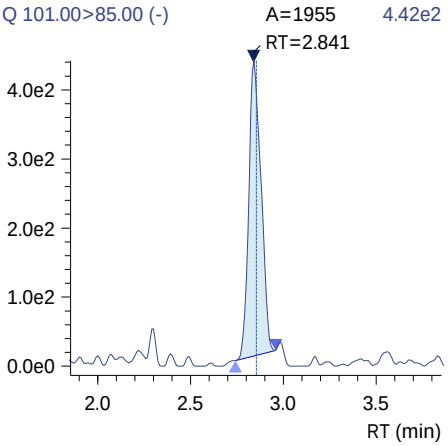
Perchlorate

Conc 1.0571



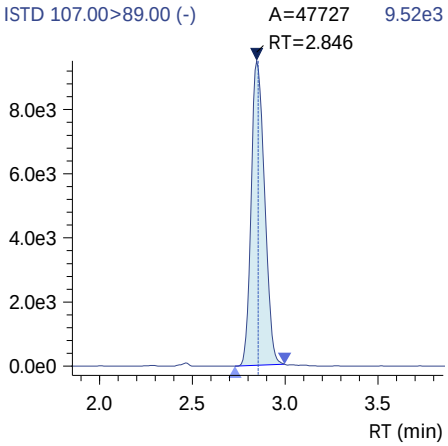
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:40:58 AM

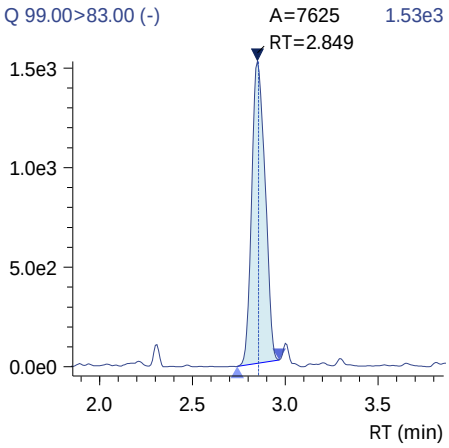
Method File: I:\LCMS01\DATA\20220712\20220601.lcm
Project File: I:\LCMS01\DATA\20220712\20220712.damlp

ICS

Sample ID: ICS
Date Acquired: 7/12/2022 10:47:31 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_007.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 1

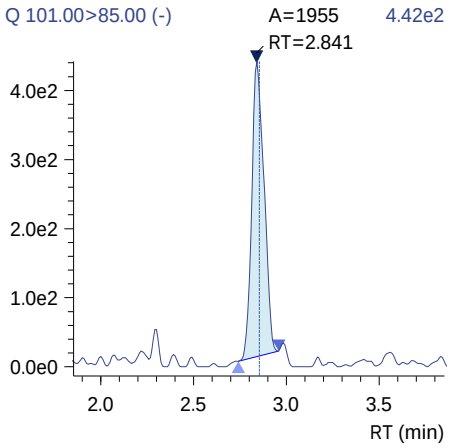
Perchlorate

Conc 1.0827



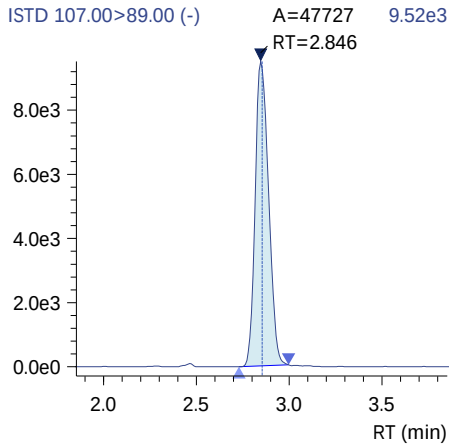
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:38:07 AM

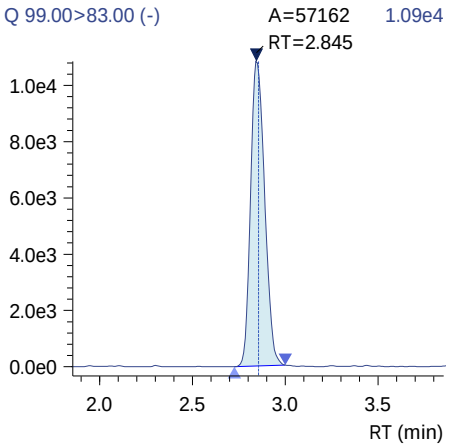
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 11:03:20 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_008.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.845	57162	37692	10.0347	ng/mL	24.30	17.85-33.16
Perchlorate 2	Auto	2.840	13889	37692	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.841	37692	37692	1.0000	ng/mL	----	

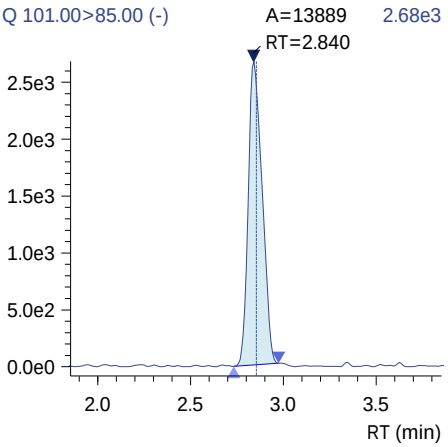
Perchlorate

Conc 10.0347



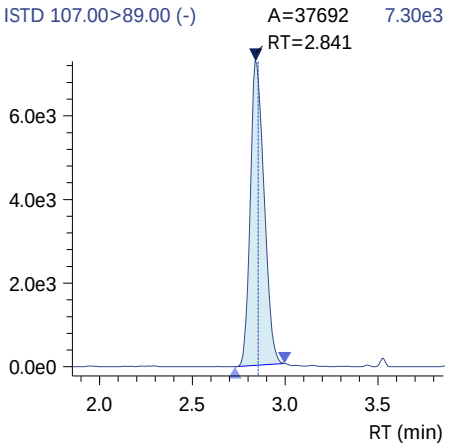
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

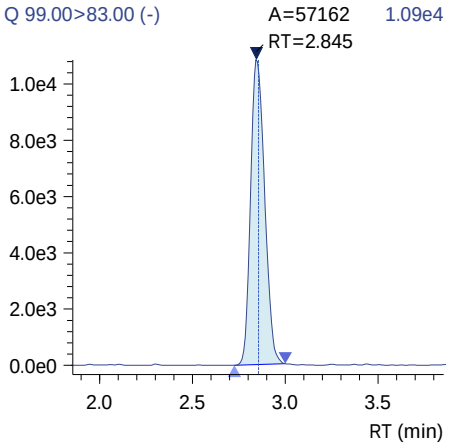
Printed at 7/18/2022 10:40:58 AM

PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 11:03:20 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_008.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

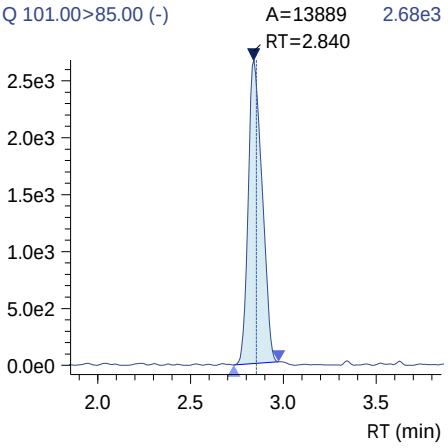
Perchlorate

Conc 10.2778



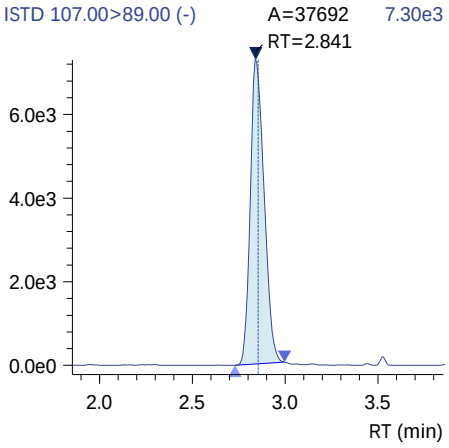
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:38:07 AM

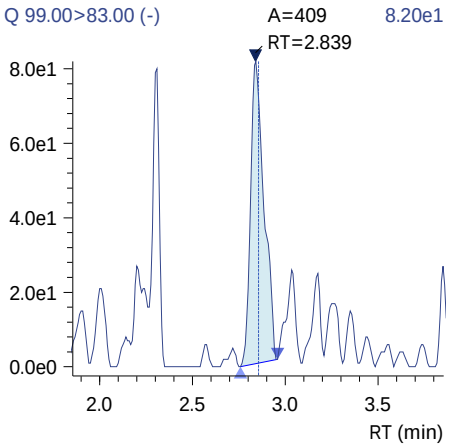
LODV

Sample ID: LODV
Date Acquired: 7/12/2022 11:19:07 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_009.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	2.839	409	41975	0.0645	ng/mL	22.25	17.85-33.16
Perchlorate 2	M	2.848	91	41975	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.839	41975	41975	1.0000	ng/mL	----	

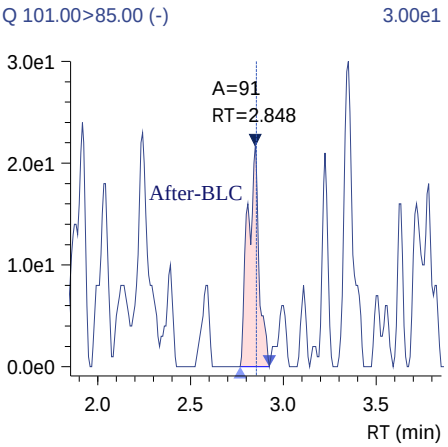
Perchlorate

Conc 0.0645



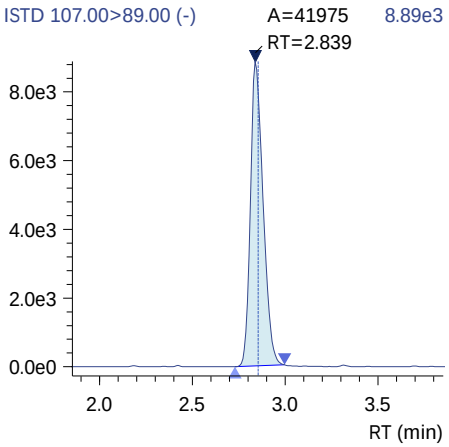
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

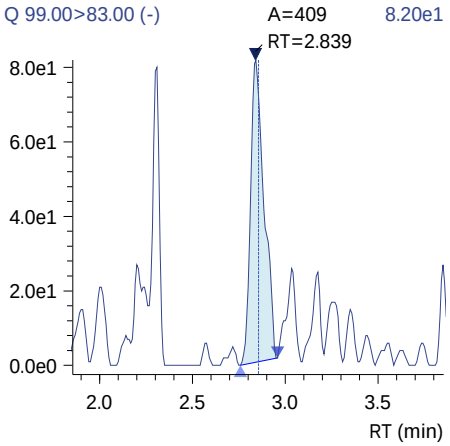
Printed at 7/18/2022 10:40:58 AM

LODV

Sample ID: LODV
Date Acquired: 7/12/2022 11:19:07 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_009.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 1

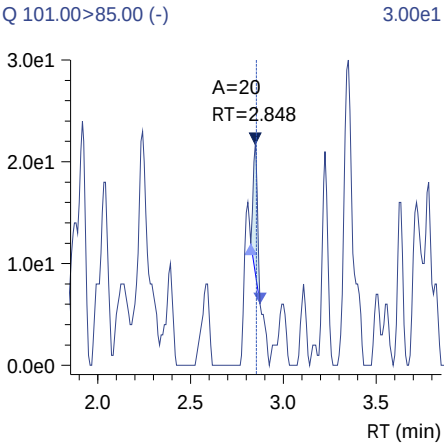
Perchlorate

Conc 0.0660



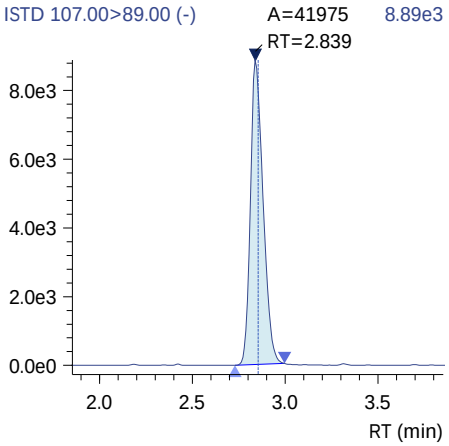
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:38:07 AM

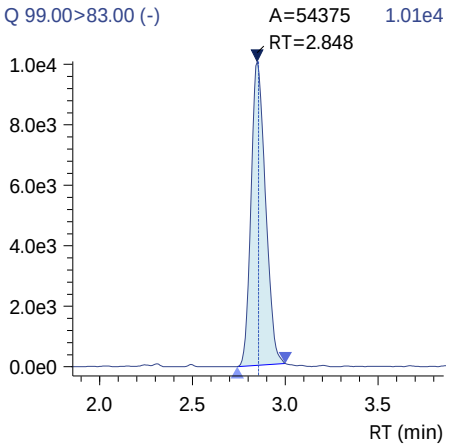
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 3:15:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_028.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.848	54375	35939	10.0110	ng/mL	24.99	17.85-33.16
Perchlorate 2	Auto	2.843	13586	35939	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.844	35939	35939	1.0000	ng/mL	----	

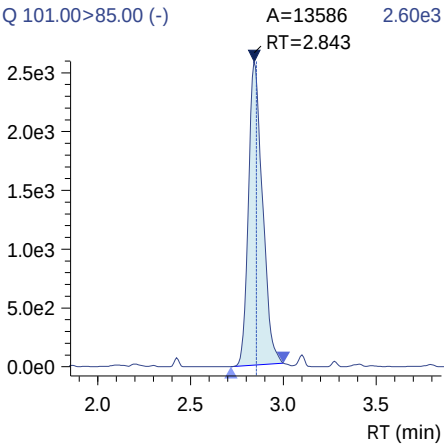
Perchlorate

Conc 10.0110



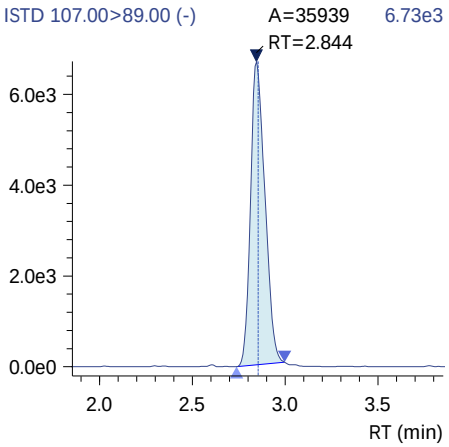
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:40:58 AM

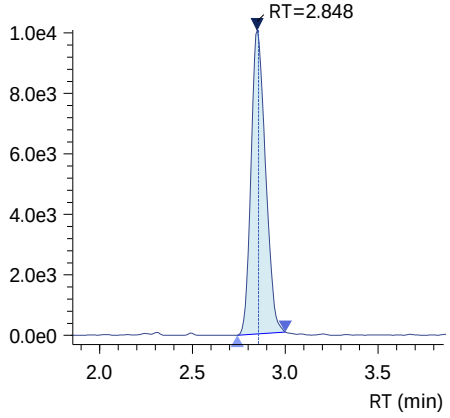
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 3:15:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_028.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.2535

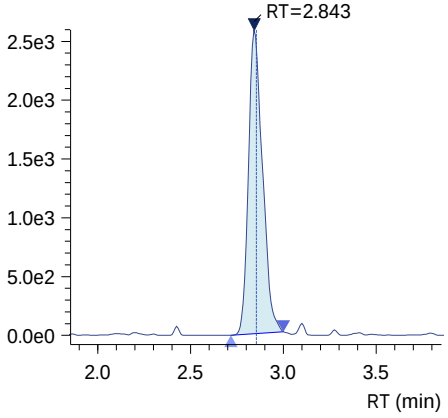
Q 99.00>83.00 (-) A=54375 1.01e4 RT=2.848



Perchlorate 2

Conc 0.0000

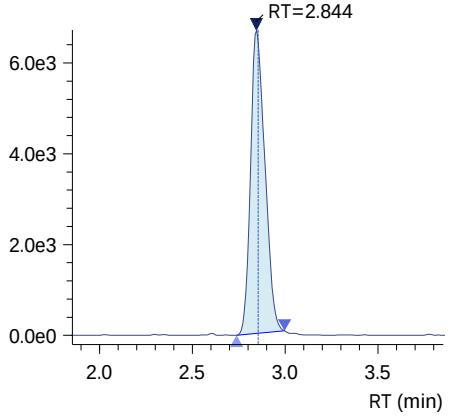
Q 101.00>85.00 (-) A=13586 2.60e3 RT=2.843



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=35939 6.73e3 RT=2.844



Insight Report

Printed at 7/18/2022 10:38:07 AM

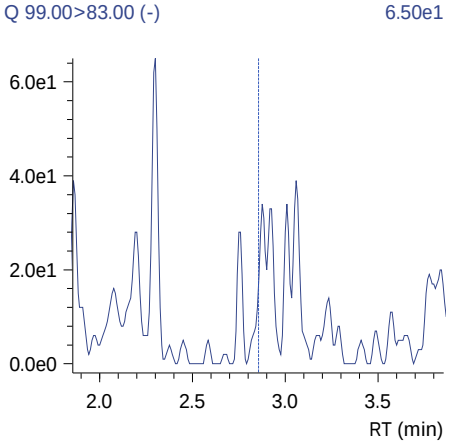
EQ2200278-01

Sample ID: EQ2200278-01
Date Acquired: 7/12/2022 3:23:34 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_029.lcd
Vial: 24 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	43090	----	ng/mL	0.00	17.85-33.16
Perchlorate 2	ND(W/B)	----	----	43090	----	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.857	43090	43090	1.0000	ng/mL	----	

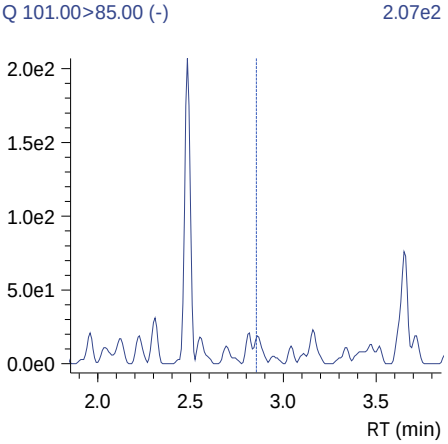
Perchlorate

Conc ----



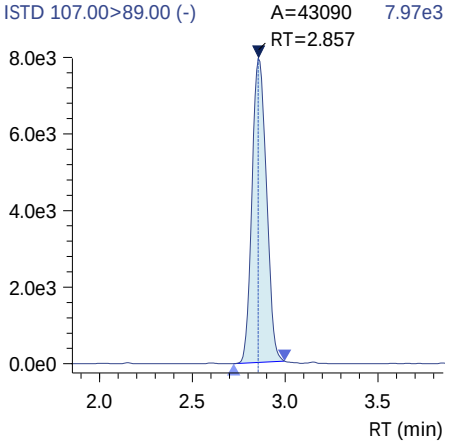
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

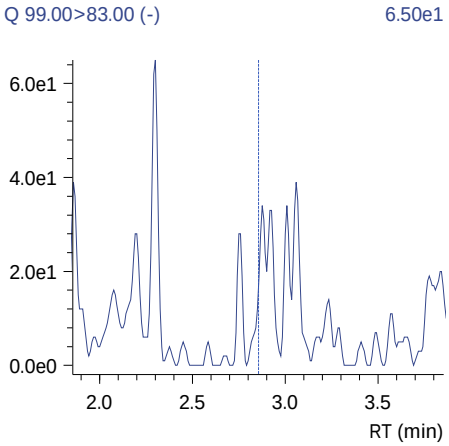
Printed at 7/18/2022 10:40:58 AM

EQ2200278-01

Sample ID: EQ2200278-01
Date Acquired: 7/12/2022 3:23:34 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_029.lcd
Vial: 24 | Inj. Volume: 25.0000uL | Tray: 6

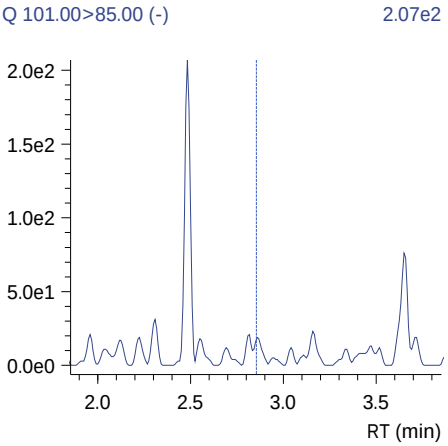
Perchlorate

Conc ----



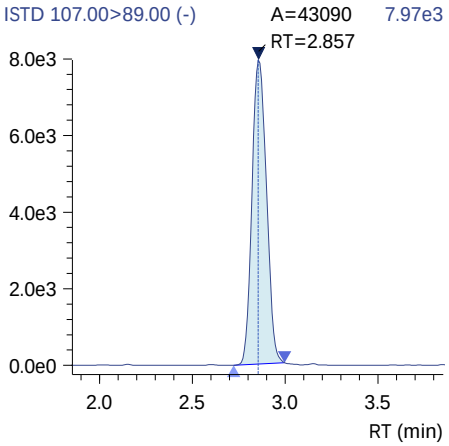
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:38:07 AM

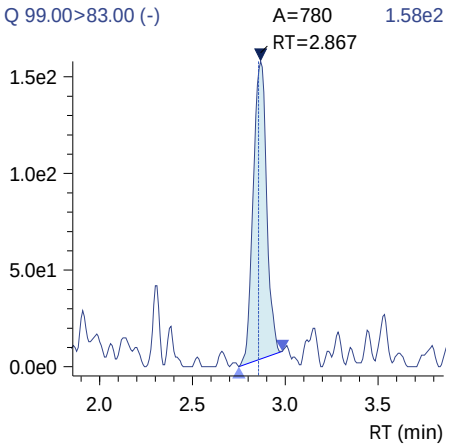
EQ2200278-02

Sample ID: EQ2200278-02
Date Acquired: 7/12/2022 3:55:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_030.lcd
Vial: 25 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.867	780	44994	0.1147	ng/mL	23.21	17.85-33.16
Perchlorate 2	Auto	2.853	181	44994	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.845	44994	44994	1.0000	ng/mL	----	

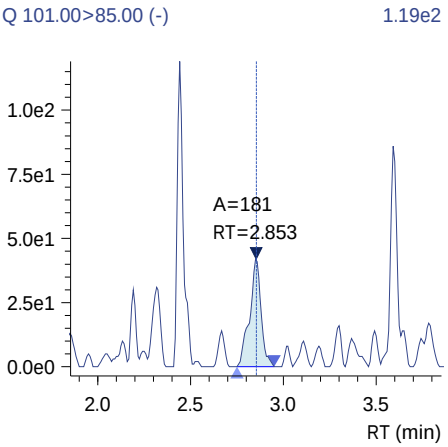
Perchlorate

Conc 0.1147



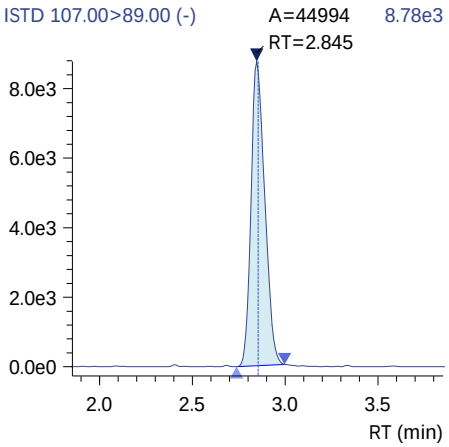
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

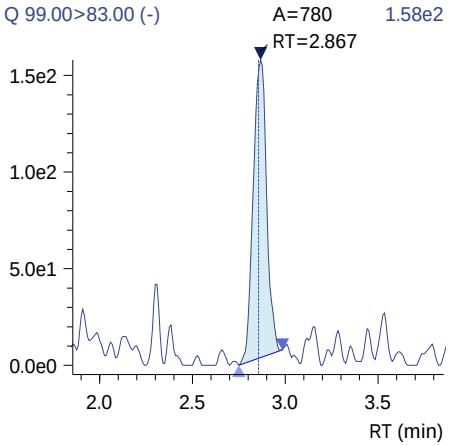
Printed at 7/18/2022 10:40:58 AM

EQ2200278-02

Sample ID: EQ2200278-02
Date Acquired: 7/12/2022 3:55:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_030.lcd
Vial: 25 | Inj. Volume: 25.0000uL | Tray: 6

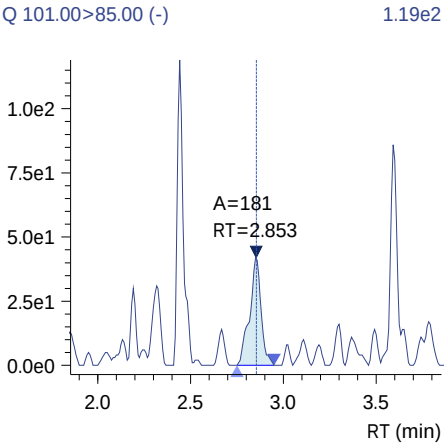
Perchlorate

Conc 0.1175



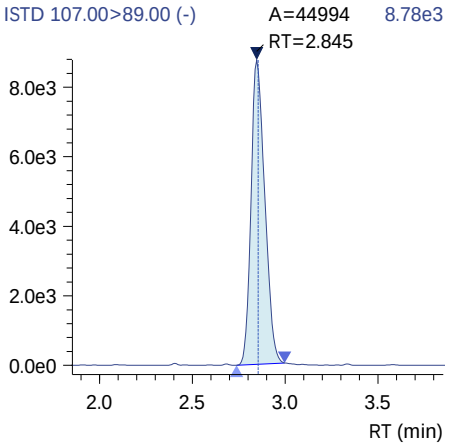
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:38:07 AM

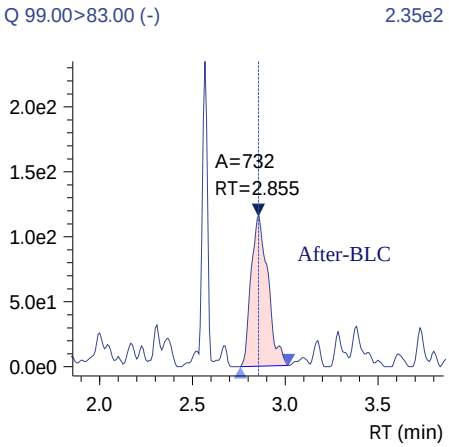
EQ2200278-03

Sample ID: EQ2200278-03
Date Acquired: 7/12/2022 4:11:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_031.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	2.855	732	45192	0.1072	ng/mL	27.87	17.85-33.16
Perchlorate 2	M	2.844	204	45192	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.850	45192	45192	1.0000	ng/mL	----	

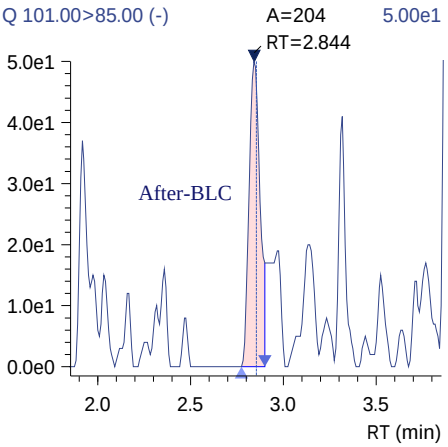
Perchlorate

Conc 0.1072



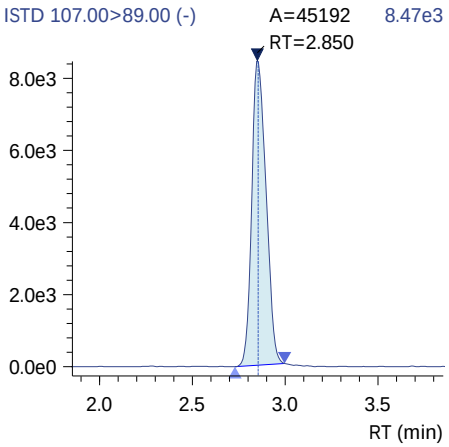
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

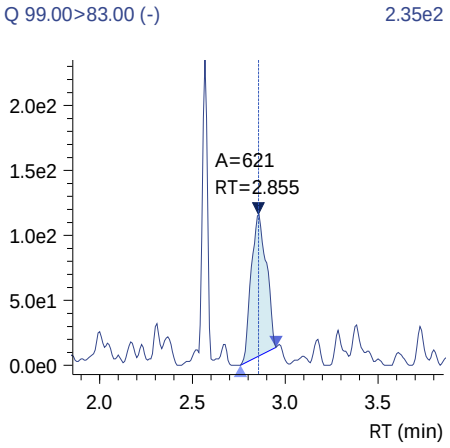
Printed at 7/18/2022 10:40:58 AM

EQ2200278-03

Sample ID: EQ2200278-03
Date Acquired: 7/12/2022 4:11:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_031.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 6

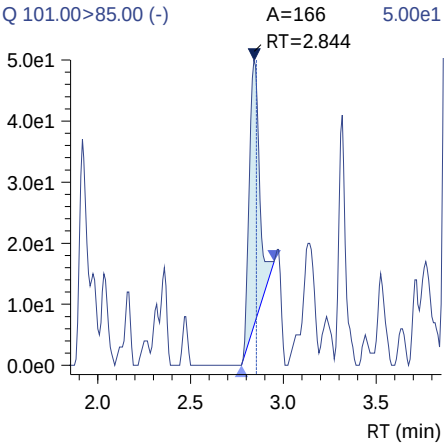
Perchlorate

Conc 0.0931



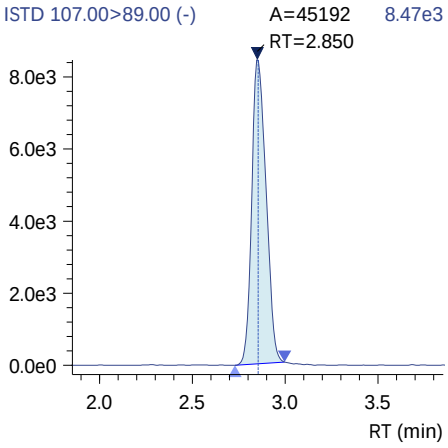
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:38:07 AM

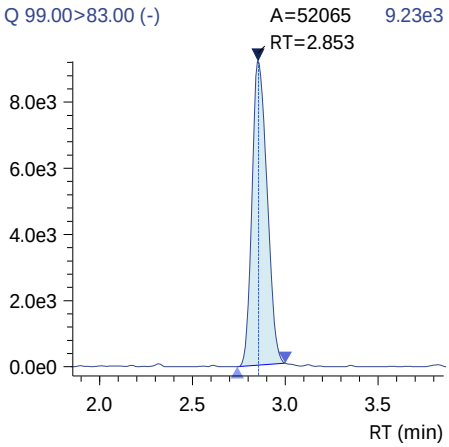
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 5:31:18 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_037.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.853	52065	34449	10.0004	ng/mL	25.49	17.85-33.16
Perchlorate 2	Auto	2.855	13272	34449	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.852	34449	34449	1.0000	ng/mL	----	

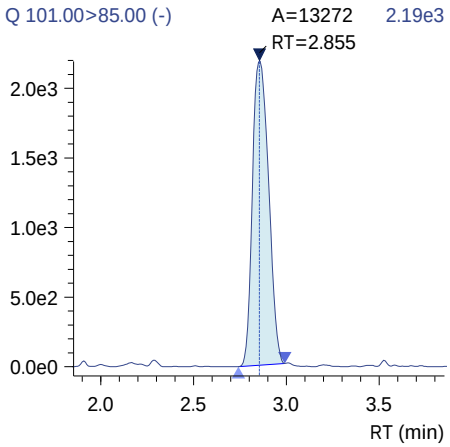
Perchlorate

Conc 10.0004



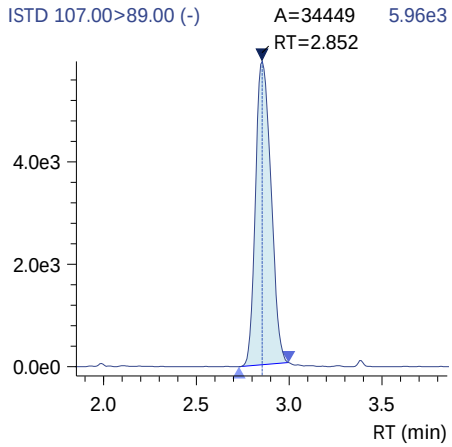
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:40:58 AM

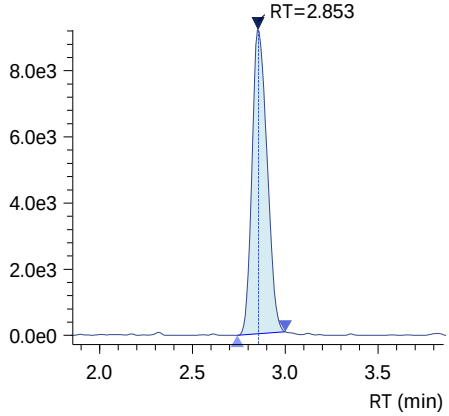
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 5:31:18 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_037.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.2426

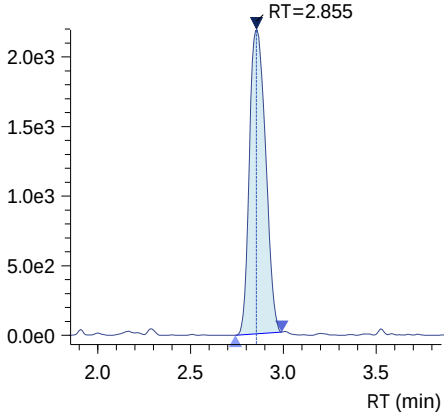
Q 99.00>83.00 (-) A=52065 9.23e3 RT=2.853



Perchlorate 2

Conc 0.0000

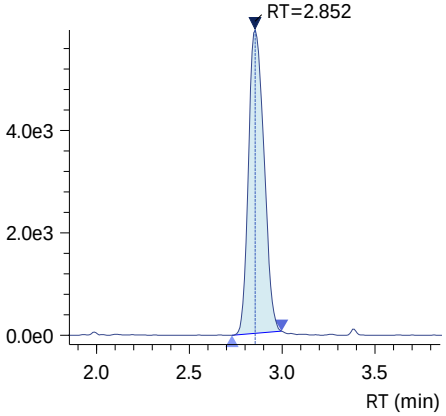
Q 101.00>85.00 (-) A=13272 2.19e3 RT=2.855



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=34449 5.96e3 RT=2.852



Insight Report

Printed at 7/25/2022 2:31:11 PM

Method File: I:\LCMS01\DATA\20220712\20220601.lcm
Project File: I:\LCMS01\DATA\20220712\20220712.damlp

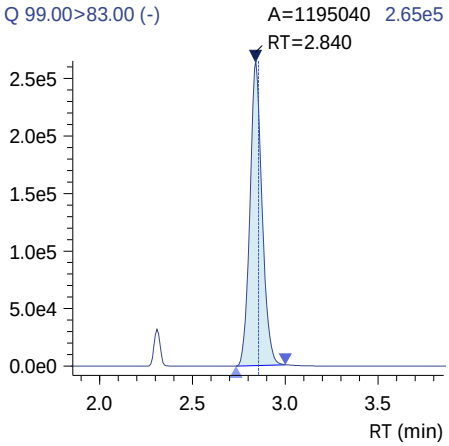
EQ2200278-04

Sample ID: EQ2200278-04
Date Acquired: 7/12/2022 5:39:09 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_038.lcd
Vial: 27 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.840	1195040	13456	587.6419	ng/mL	27.86	17.85-33.16
Perchlorate 2	Auto	2.837	332942	13456	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.839	13456	13456	1.0000	ng/mL	----	

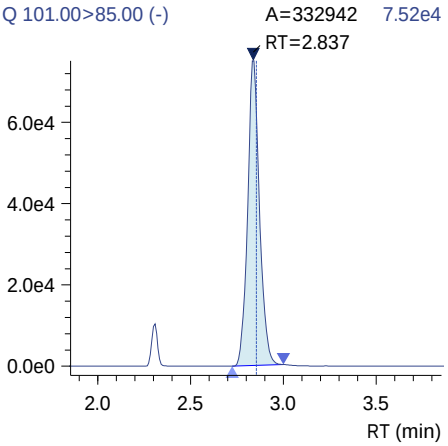
Perchlorate

Conc 587.6419



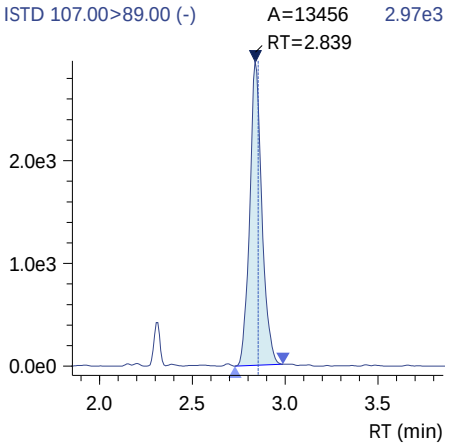
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2022 2:33:07 PM

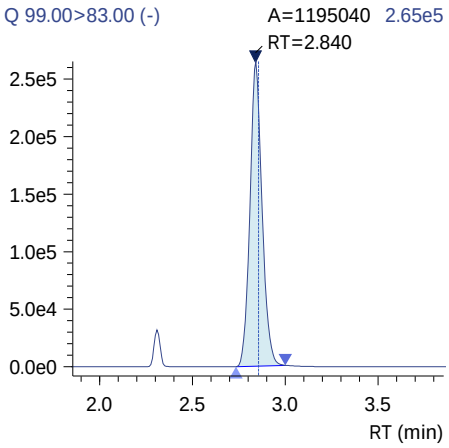
Method File: I:\LCMS01\DATA\20220712\20220601.lcm
Project File: I:\LCMS01\DATA\20220712\20220712.damlp

EQ2200278-04

Sample ID: EQ2200278-04
Date Acquired: 7/12/2022 5:39:09 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_038.lcd
Vial: 27 | Inj. Volume: 25.0000uL | Tray: 6

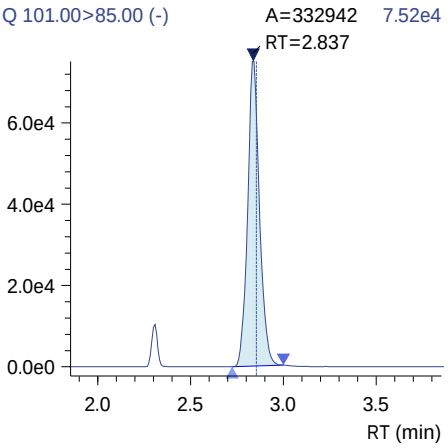
Perchlorate

Conc 587.6419



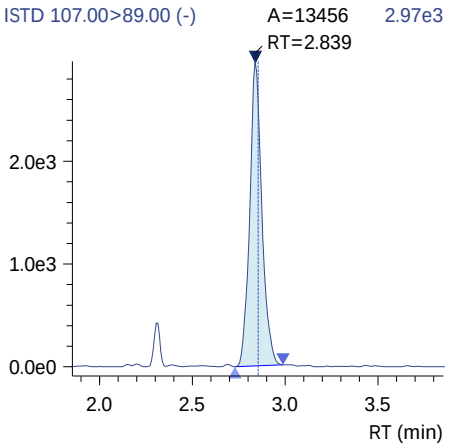
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2022 2:31:11 PM

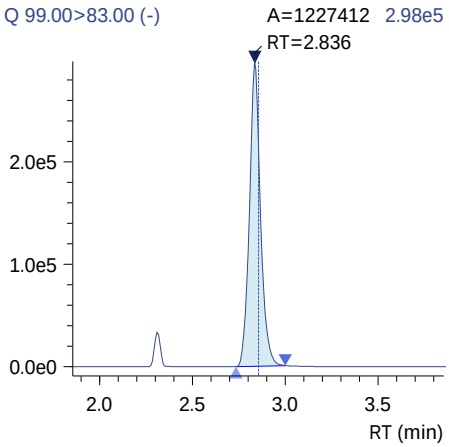
EQ2200278-05

Sample ID: EQ2200278-05
Date Acquired: 7/12/2022 5:47:02 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_039.lcd
Vial: 28 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.836	1227412	13571	598.4457	ng/mL	26.94	17.85-33.16
Perchlorate 2	Auto	2.833	330694	13571	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.834	13571	13571	1.0000	ng/mL	----	

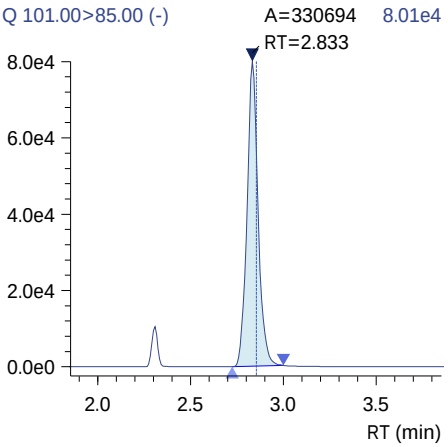
Perchlorate

Conc 598.4457



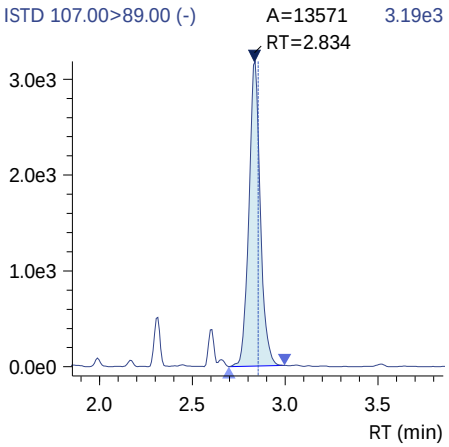
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

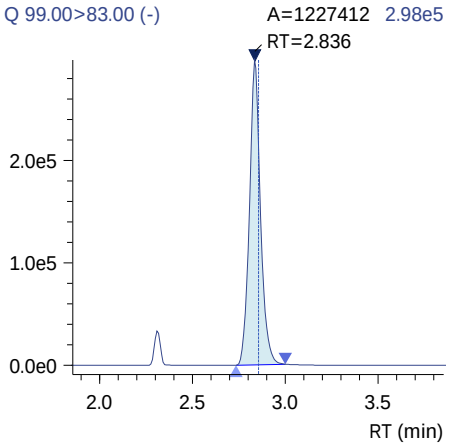
Printed at 7/25/2022 2:33:07 PM

EQ2200278-05

Sample ID: EQ2200278-05
Date Acquired: 7/12/2022 5:47:02 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_039.lcd
Vial: 28 | Inj. Volume: 25.0000uL | Tray: 6

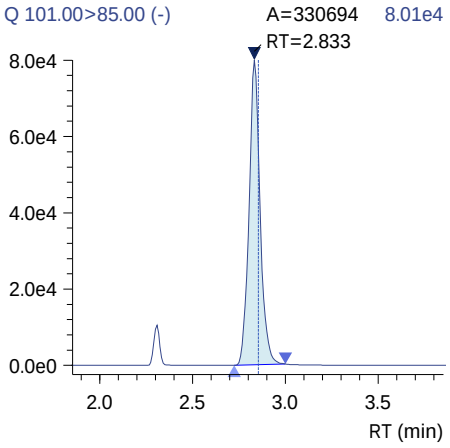
Perchlorate

Conc 598.4457



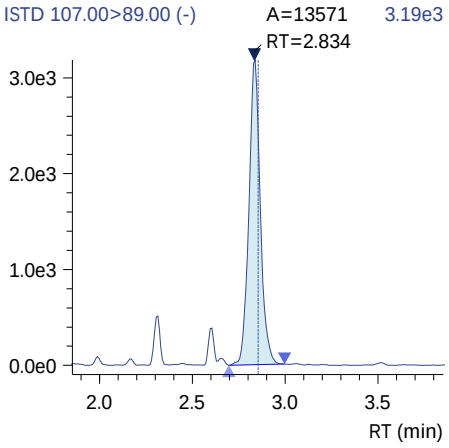
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:38:07 AM

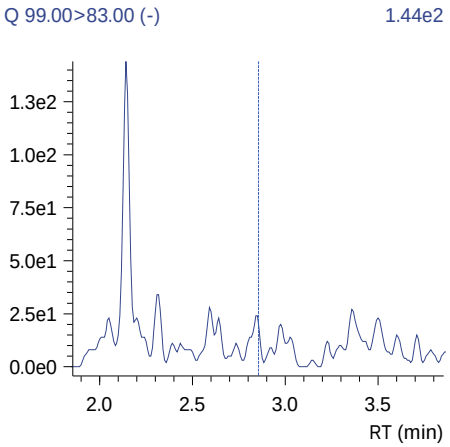
E2200646-006

Sample ID: E2200646-006
Date Acquired: 7/12/2022 6:50:09 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_047.lcd
Vial: 36 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	26413	----	ng/mL	0.00	17.85-33.16
Perchlorate 2	ND(W/B)	----	----	26413	----	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.829	26413	26413	1.0000	ng/mL	----	

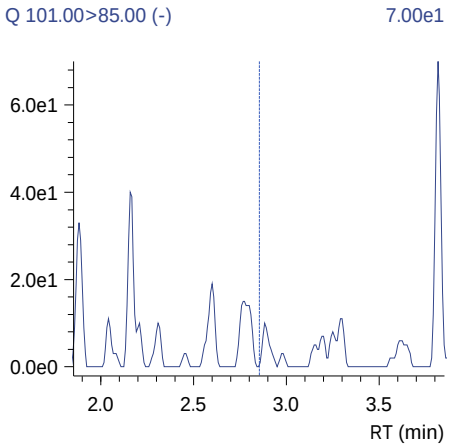
Perchlorate

Conc ----



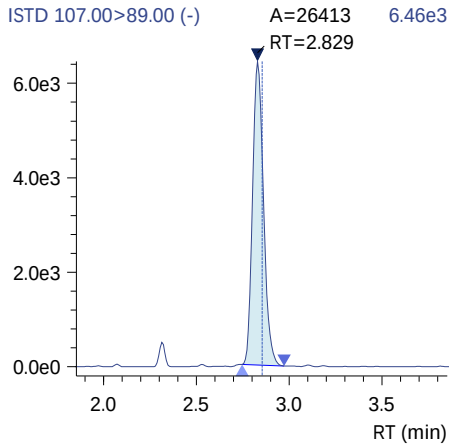
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

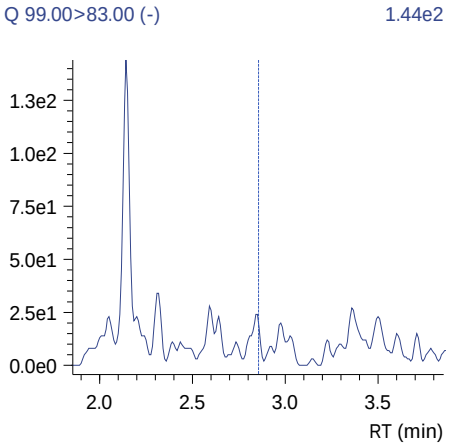
Printed at 7/18/2022 10:40:58 AM

E2200646-006

Sample ID: E2200646-006
Date Acquired: 7/12/2022 6:50:09 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_047.lcd
Vial: 36 | Inj. Volume: 25.0000uL | Tray: 6

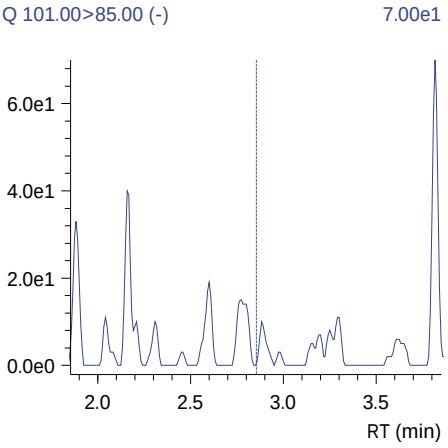
Perchlorate

Conc ----



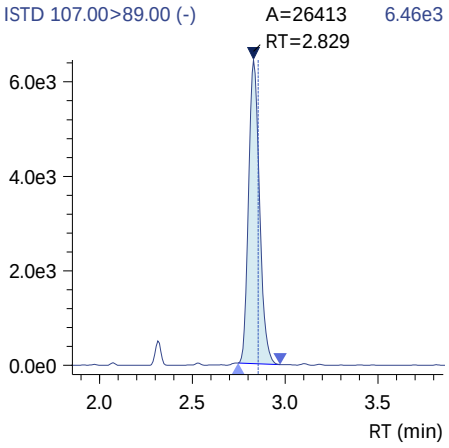
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:38:07 AM

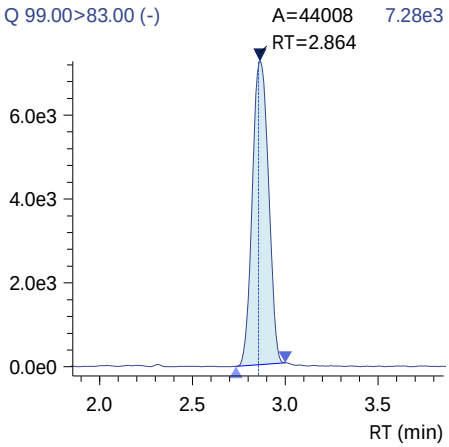
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 6:58:01 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_048.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.864	44008	28691	10.1492	ng/mL	26.41	17.85-33.16
Perchlorate 2	Auto	2.857	11623	28691	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.859	28691	28691	1.0000	ng/mL	----	

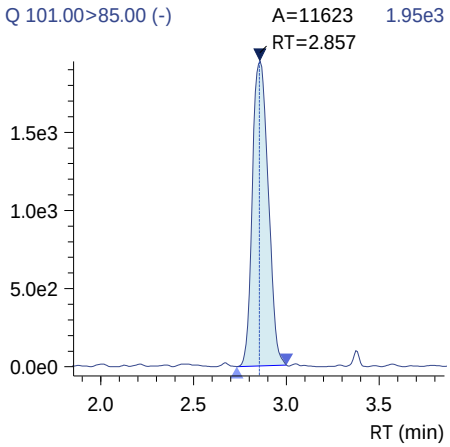
Perchlorate

Conc 10.1492



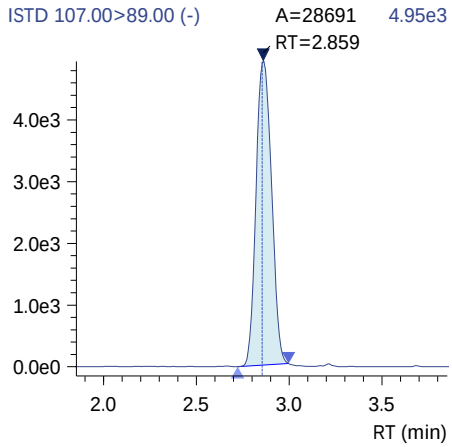
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:40:58 AM

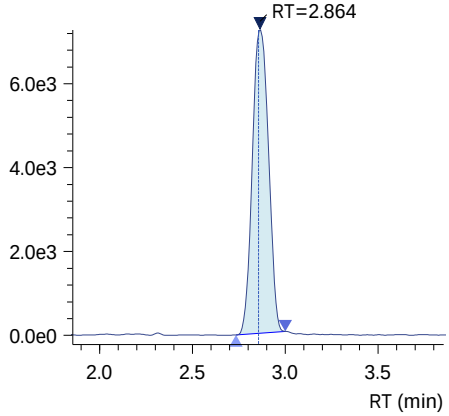
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 6:58:01 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_048.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.3950

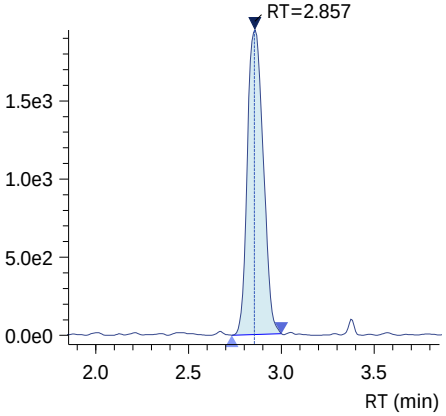
Q 99.00>83.00 (-) A=44008 7.28e3



Perchlorate 2

Conc 0.0000

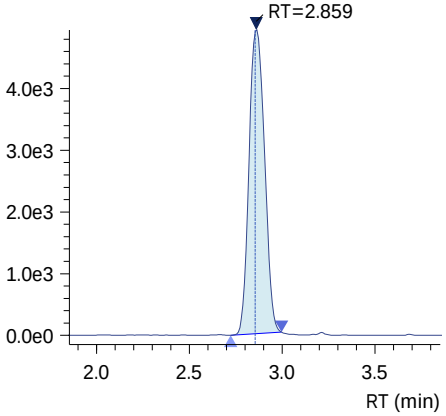
Q 101.00>85.00 (-) A=11623 1.95e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=28691 4.95e3



Insight Report

Printed at 7/18/2022 10:38:07 AM

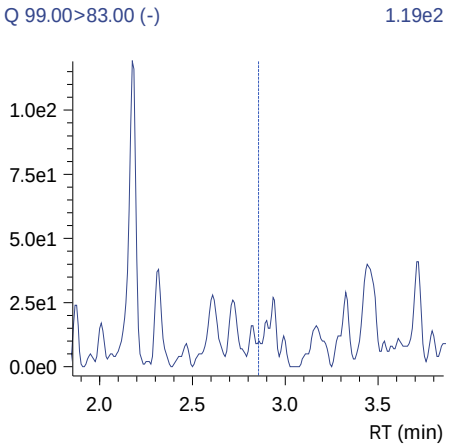
E2200646-007

Sample ID: E2200646-007
Date Acquired: 7/12/2022 7:05:52 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_049.lcd
Vial: 37 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	27543	----	ng/mL	0.00	17.85-33.16
Perchlorate 2	ND(W/B)	----	----	27543	----	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.827	27543	27543	1.0000	ng/mL	----	

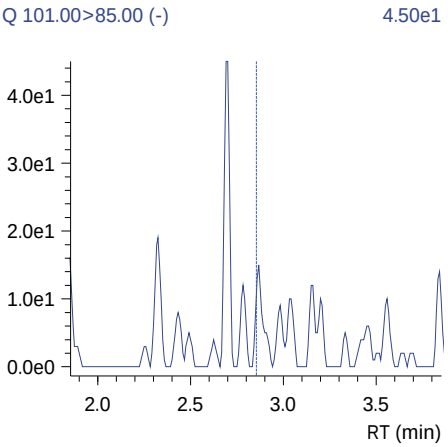
Perchlorate

Conc ----



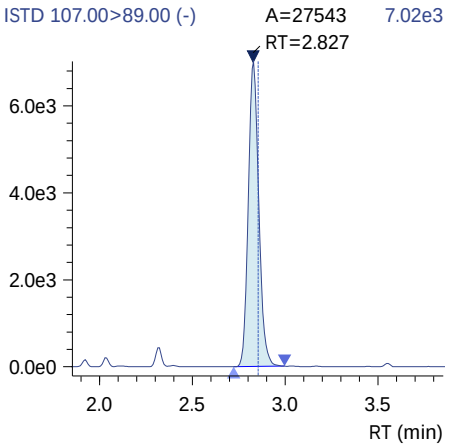
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:40:58 AM

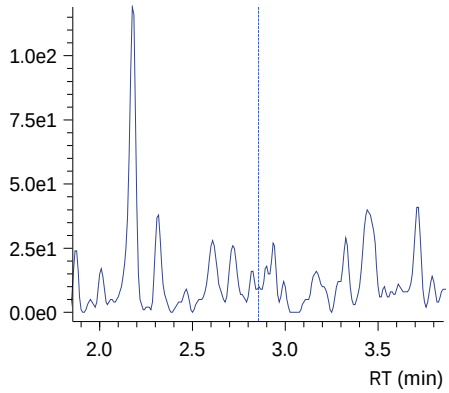
E2200646-007

Sample ID: E2200646-007
Date Acquired: 7/12/2022 7:05:52 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_049.lcd
Vial: 37 | Inj. Volume: 25.0000uL | Tray: 6

Perchlorate

Conc ----

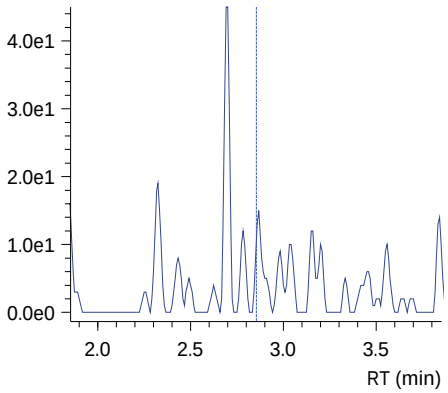
Q 99.00>83.00 (-) 1.19e2



Perchlorate 2

Conc ----

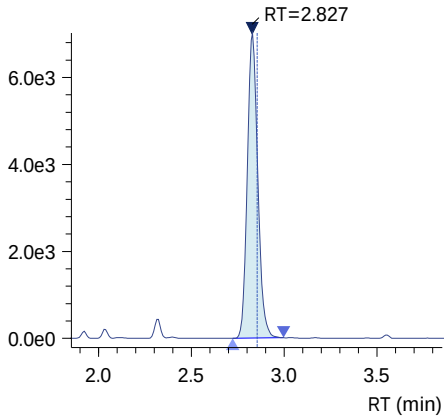
Q 101.00>85.00 (-) 4.50e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=27543 7.02e3



Insight Report

Printed at 7/18/2022 10:38:07 AM

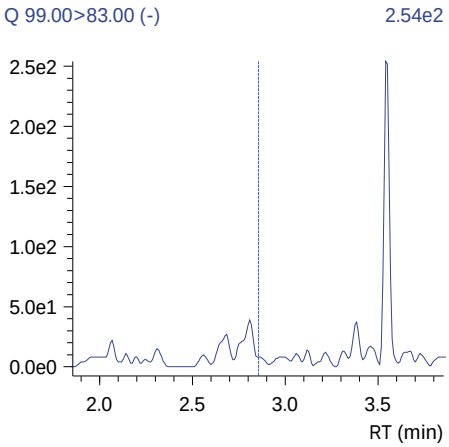
E2200646-008

Sample ID: E2200646-008
Date Acquired: 7/12/2022 7:13:45 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_050.lcd
Vial: 38 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	19549	----	ng/mL	0.00	17.85-33.16
Perchlorate 2	ND(W/B)	----	----	19549	----	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.827	19549	19549	1.0000	ng/mL	----	

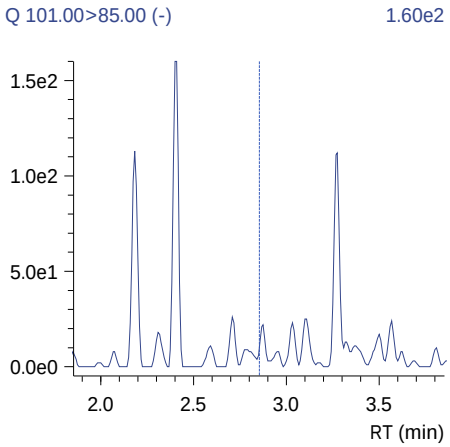
Perchlorate

Conc ----



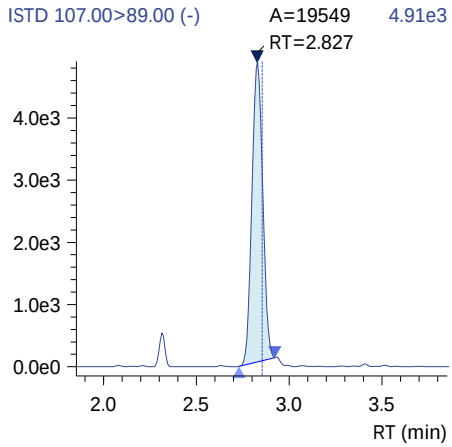
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

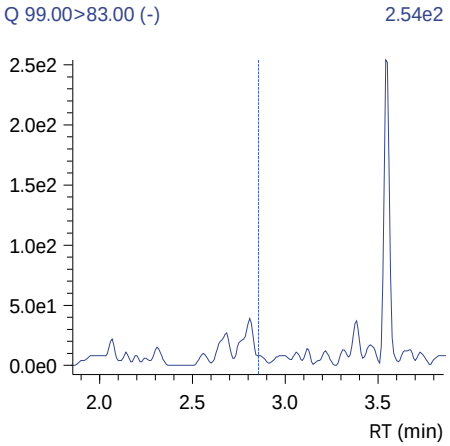
Printed at 7/18/2022 10:40:58 AM

E2200646-008

Sample ID: E2200646-008
Date Acquired: 7/12/2022 7:13:45 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_050.lcd
Vial: 38 | Inj. Volume: 25.0000uL | Tray: 6

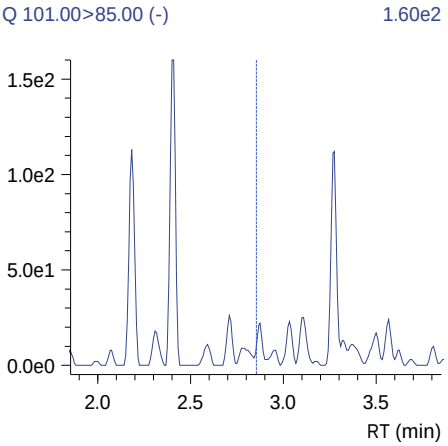
Perchlorate

Conc ----



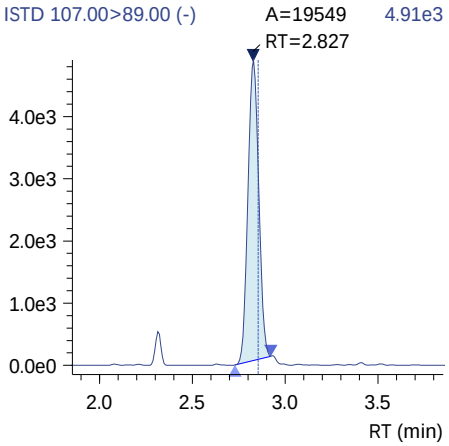
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:38:07 AM

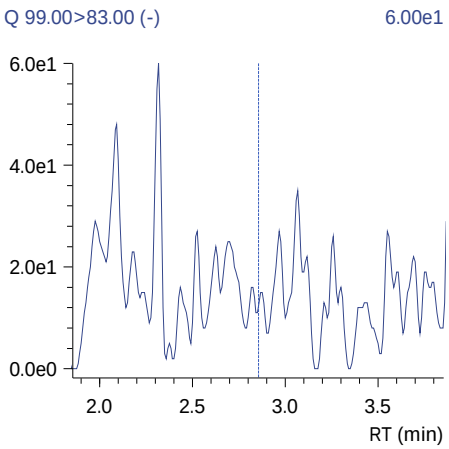
E2200646-009

Sample ID: E2200646-009
Date Acquired: 7/12/2022 7:21:36 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_051.lcd
Vial: 39 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	24618	----	ng/mL	0.00	17.85-33.16
Perchlorate 2	ND(W/B)	----	----	24618	----	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.838	24618	24618	1.0000	ng/mL	----	

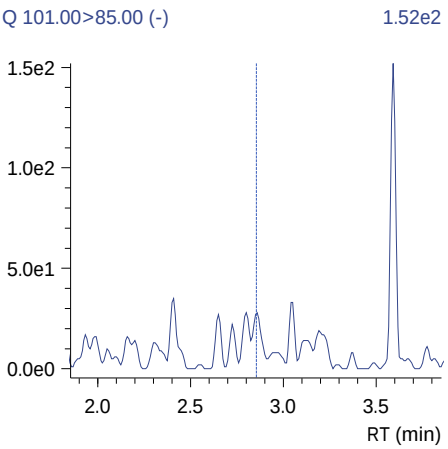
Perchlorate

Conc ----



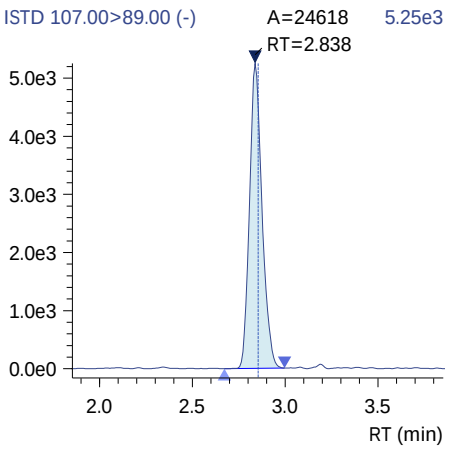
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

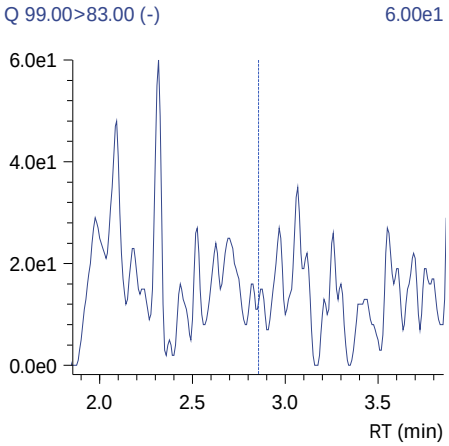
Printed at 7/18/2022 10:40:58 AM

E2200646-009

Sample ID: E2200646-009
Date Acquired: 7/12/2022 7:21:36 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_051.lcd
Vial: 39 | Inj. Volume: 25.0000uL | Tray: 6

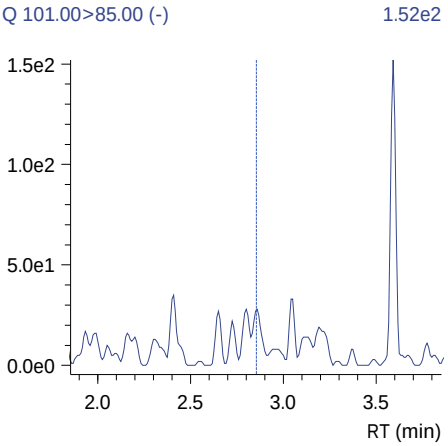
Perchlorate

Conc ----



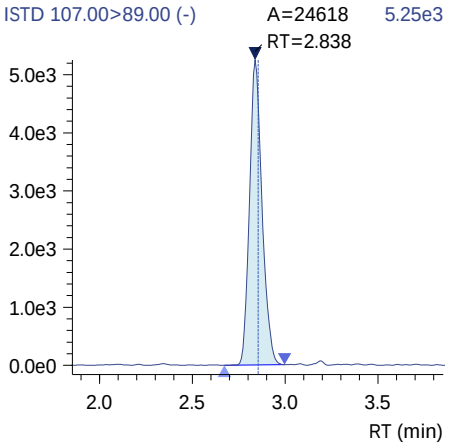
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:38:07 AM

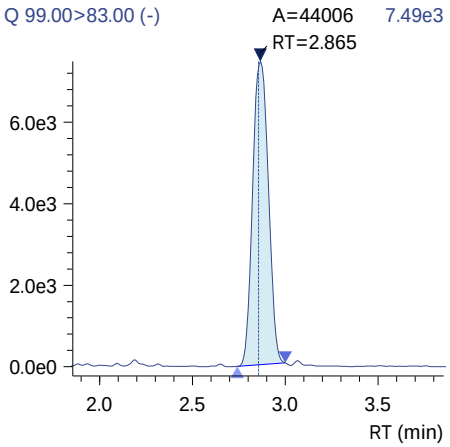
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 8:08:59 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_057.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.865	44006	29254	9.9534	ng/mL	25.78	17.85-33.16
Perchlorate 2	Auto	2.862	11345	29254	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.867	29254	29254	1.0000	ng/mL	----	

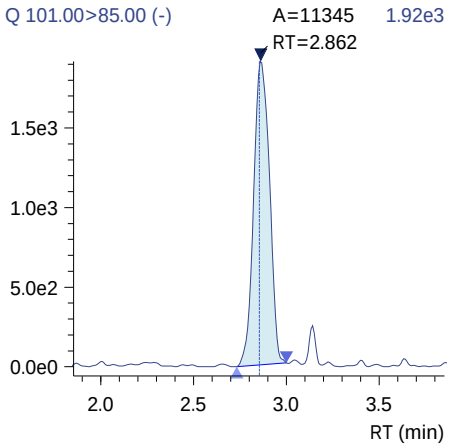
Perchlorate

Conc 9.9534



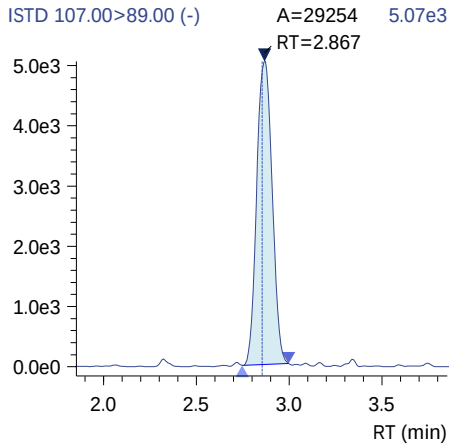
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:40:58 AM

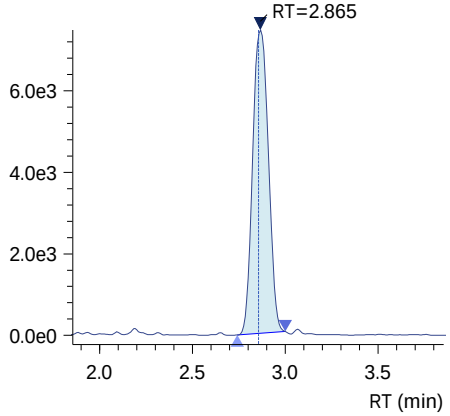
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 8:08:59 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_057.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.1945

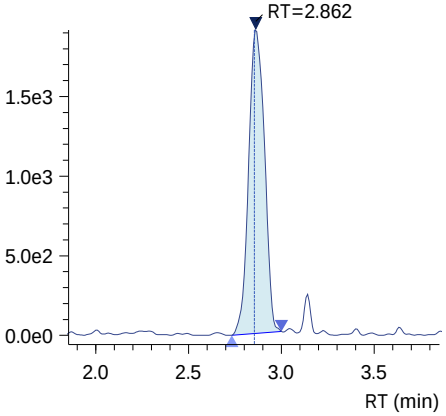
Q 99.00>83.00 (-) A=44006 7.49e3 RT=2.865



Perchlorate 2

Conc 0.0000

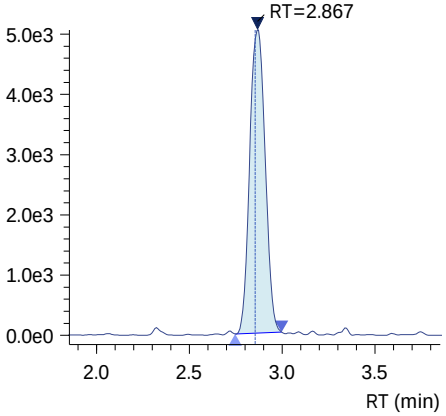
Q 101.00>85.00 (-) A=11345 1.92e3 RT=2.862



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=29254 5.07e3 RT=2.867



Insight Report

Printed at 7/19/2022 10:33:05 AM

Method File: I:\LCMS01\DATA\20220718\20220718.lcm
Project File: I:\LCMS01\DATA\20220718\20220718.damlp

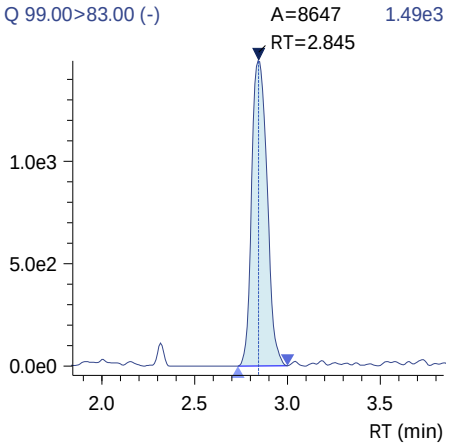
ICS

Sample ID: ICS
Date Acquired: 7/18/2022 11:18:33 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_017.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.845	8647	47140	0.9951	ng/mL	33.47	23.36-43.39
Perchlorate 2	Auto	2.836	2894	47140	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.838	47140	47140	1.0000	ng/mL	----	

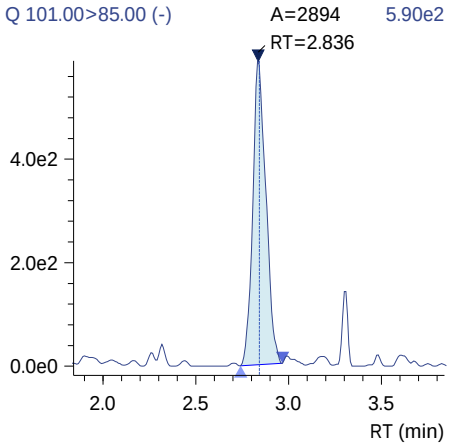
Perchlorate

Conc 0.9951



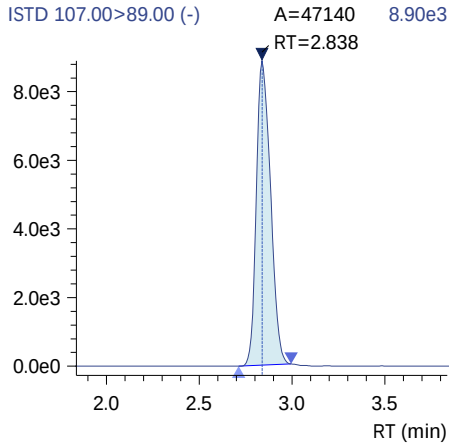
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/19/2022 10:35:47 AM

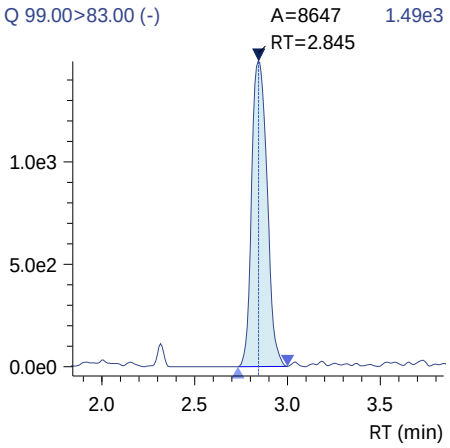
Method File: I:\LCMS01\DATA\20220718\20220718.lcm
Project File: I:\LCMS01\DATA\20220718\20220718.damlp

ICS

Sample ID: ICS
Date Acquired: 7/18/2022 11:18:33 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_017.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 1

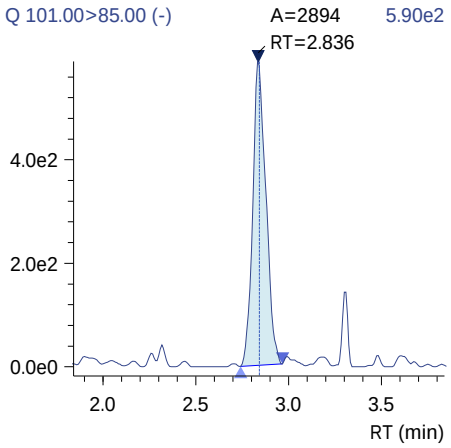
Perchlorate

Conc 0.9951



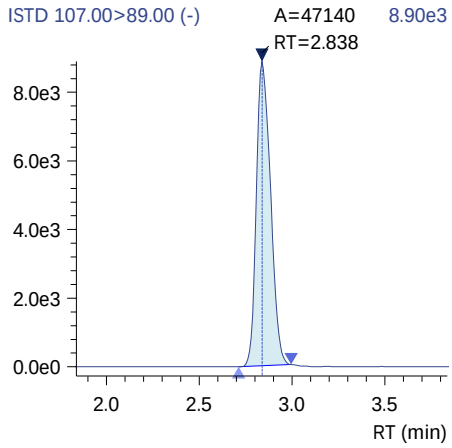
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/19/2022 10:33:05 AM

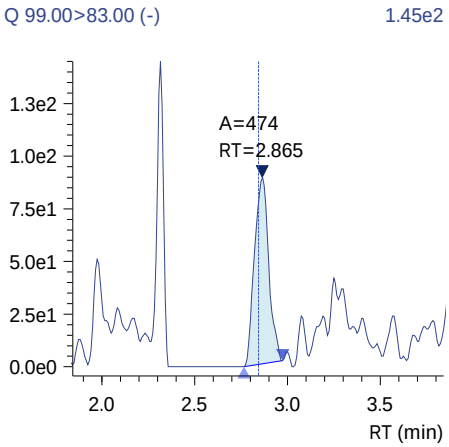
LODV

Sample ID: LODV
Date Acquired: 7/18/2022 11:26:27 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_018.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.865	474	50148	0.0513	ng/mL	28.27	23.36-43.39
Perchlorate 2	Auto	2.874	134	50148	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.848	50148	50148	1.0000	ng/mL	----	

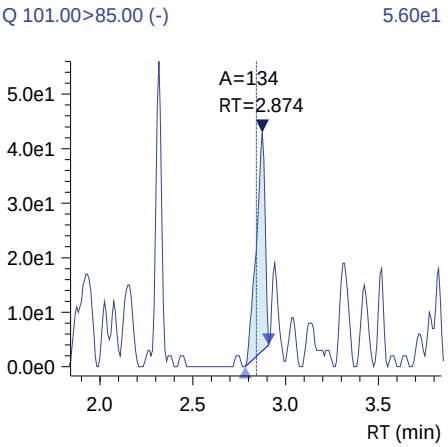
Perchlorate

Conc 0.0513



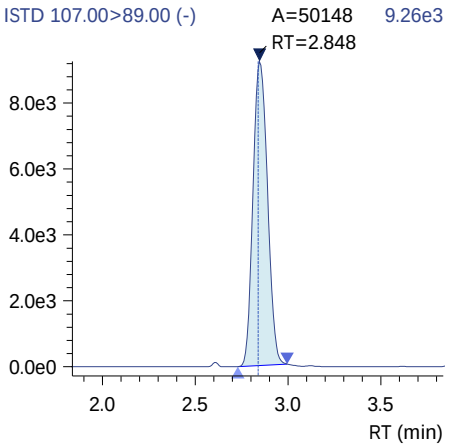
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/19/2022 10:35:47 AM

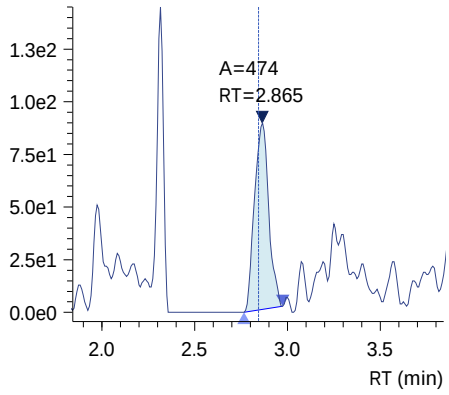
LODV

Sample ID: LODV
Date Acquired: 7/18/2022 11:26:27 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_018.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 0.0513

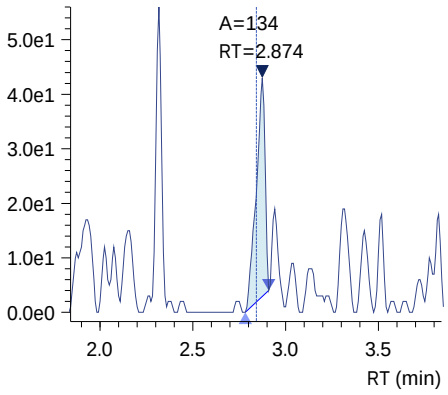
Q 99.00>83.00 (-) 1.45e2



Perchlorate 2

Conc 0.0000

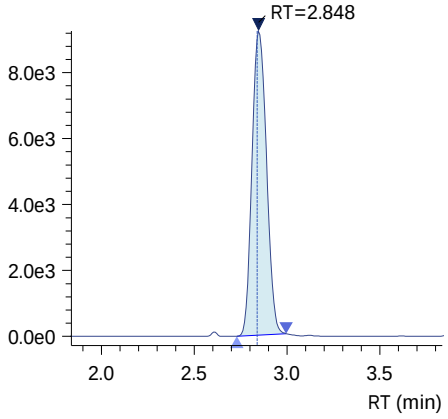
Q 101.00>85.00 (-) 5.60e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=50148 9.26e3



Insight Report

Printed at 7/19/2022 10:33:05 AM

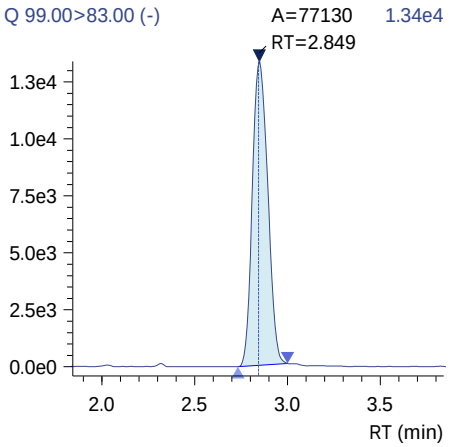
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/18/2022 11:39:36 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_019.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.849	77130	42801	9.7757	ng/mL	34.42	23.36-43.39
Perchlorate 2	Auto	2.840	26551	42801	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.843	42801	42801	1.0000	ng/mL	----	

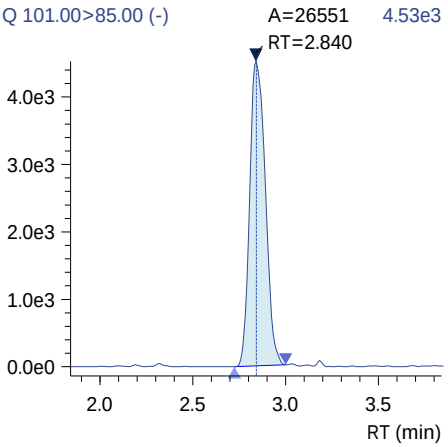
Perchlorate

Conc 9.7757



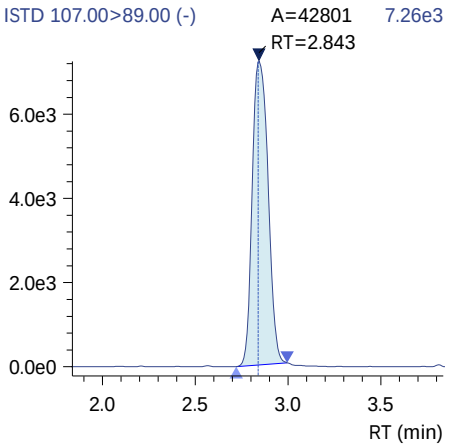
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

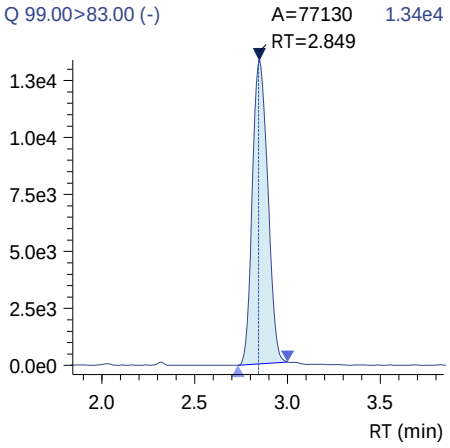
Printed at 7/19/2022 10:35:47 AM

PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/18/2022 11:39:36 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_019.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

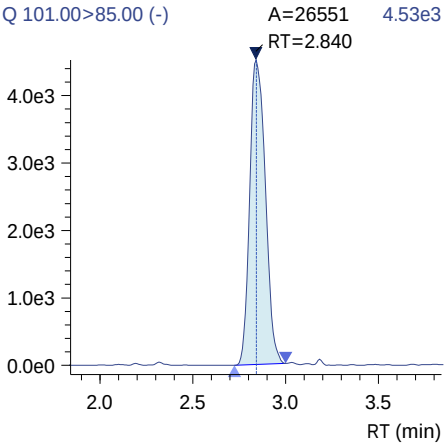
Perchlorate

Conc 9.7757



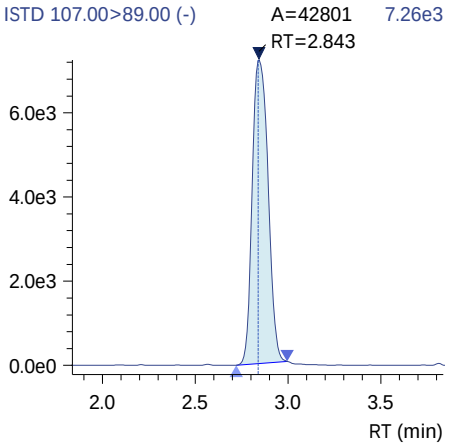
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/19/2022 10:33:05 AM

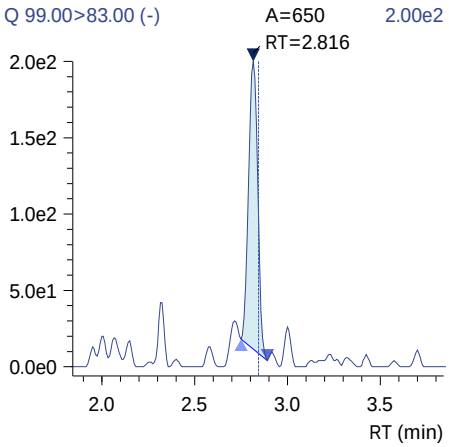
EQ2200278-06

Sample ID: EQ2200278-06
Date Acquired: 7/18/2022 11:47:28 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_020.lcd
Vial: 29 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.816	650	33652	0.1048	ng/mL	35.69	23.36-43.39
Perchlorate 2	Auto	2.813	232	33652	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.812	33652	33652	1.0000	ng/mL	----	

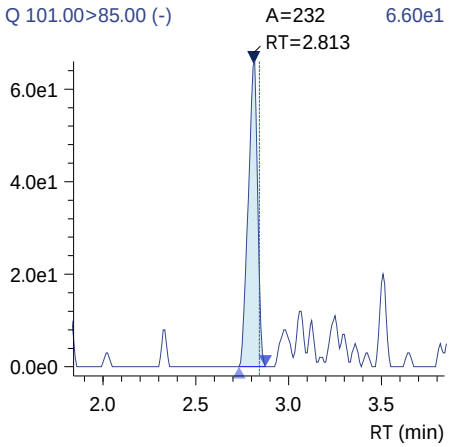
Perchlorate

Conc 0.1048



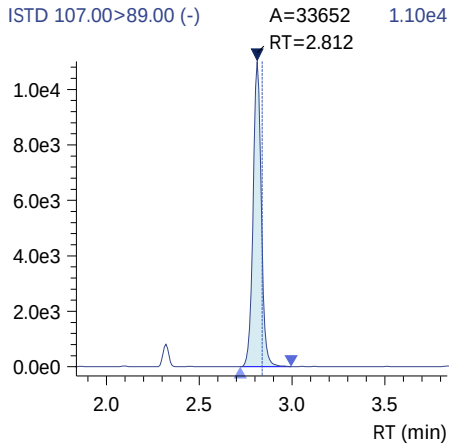
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

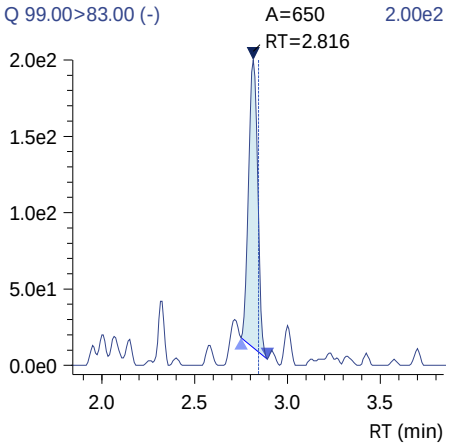
Printed at 7/19/2022 10:35:47 AM

EQ2200278-06

Sample ID: EQ2200278-06
Date Acquired: 7/18/2022 11:47:28 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_020.lcd
Vial: 29 | Inj. Volume: 25.0000uL | Tray: 6

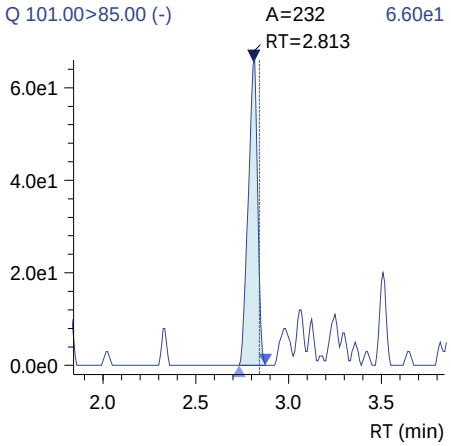
Perchlorate

Conc 0.1048



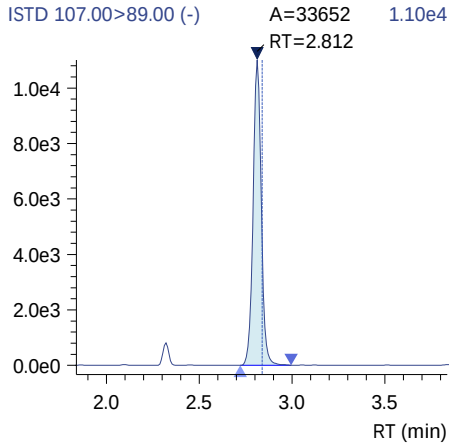
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/19/2022 10:33:05 AM

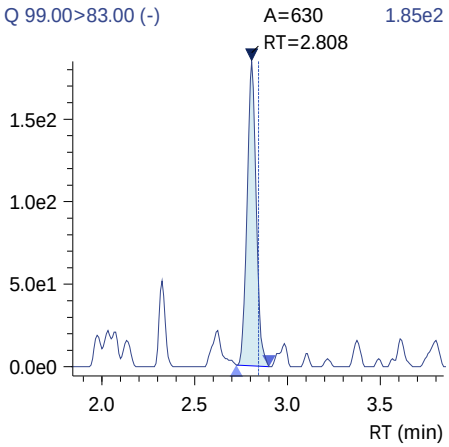
EQ2200278-07

Sample ID: EQ2200278-07
Date Acquired: 7/18/2022 11:55:21 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_021.lcd
Vial: 30 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.808	630	30582	0.1118	ng/mL	41.43	23.36-43.39
Perchlorate 2	Auto	2.813	261	30582	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.811	30582	30582	1.0000	ng/mL	----	

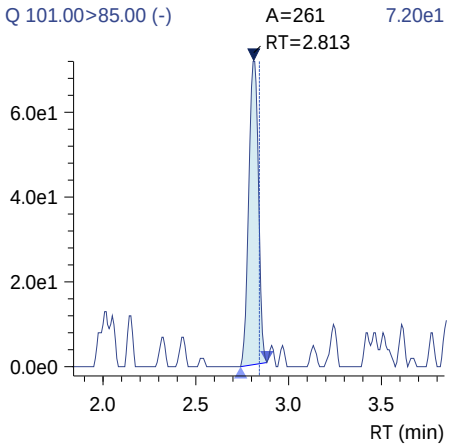
Perchlorate

Conc 0.1118



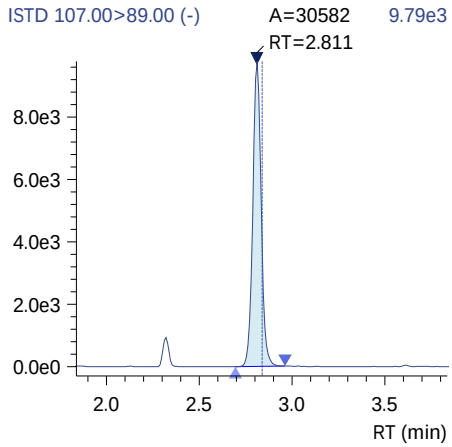
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

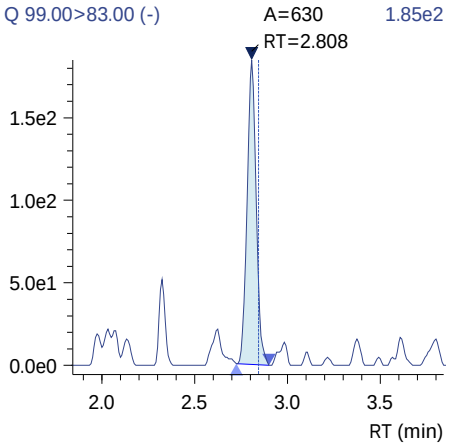
Printed at 7/19/2022 10:35:47 AM

EQ2200278-07

Sample ID: EQ2200278-07
Date Acquired: 7/18/2022 11:55:21 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_021.lcd
Vial: 30 | Inj. Volume: 25.0000uL | Tray: 6

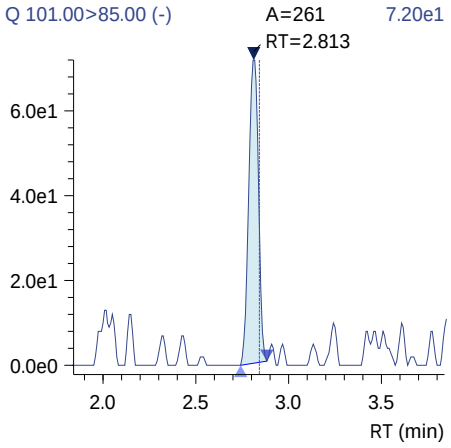
Perchlorate

Conc 0.1118



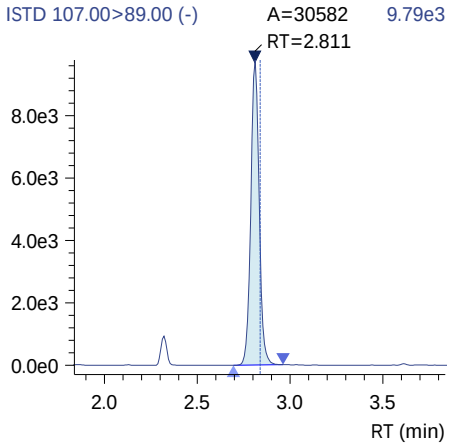
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/19/2022 10:33:05 AM

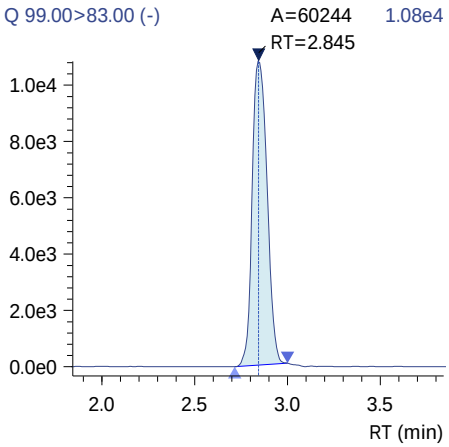
E2200646-001x50

Sample ID: E2200646-001x50
Date Acquired: 7/18/2022 12:26:49 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_025.lcd
Vial: 31 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.845	60244	28113	11.6247	ng/mL	32.73	23.36-43.39
Perchlorate 2	Auto	2.843	19715	28113	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.844	28113	28113	1.0000	ng/mL	----	

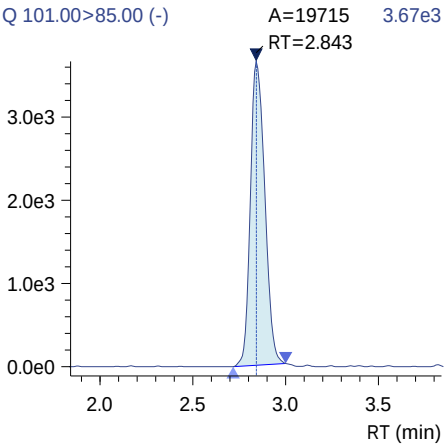
Perchlorate

Conc 11.6247



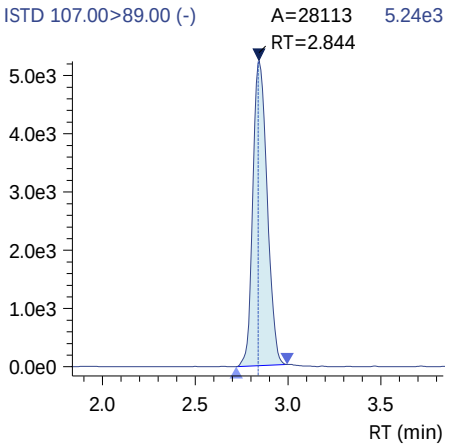
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

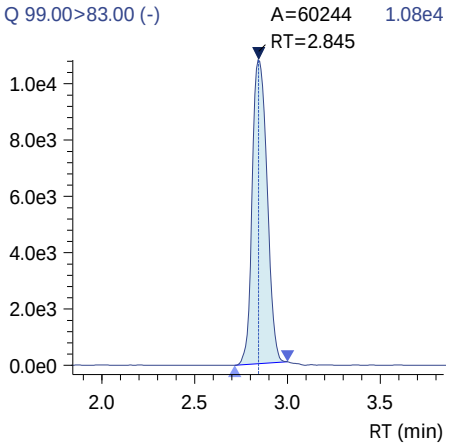
Printed at 7/19/2022 10:35:47 AM

E2200646-001x50

Sample ID: E2200646-001x50
Date Acquired: 7/18/2022 12:26:49 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_025.lcd
Vial: 31 | Inj. Volume: 25.0000uL | Tray: 6

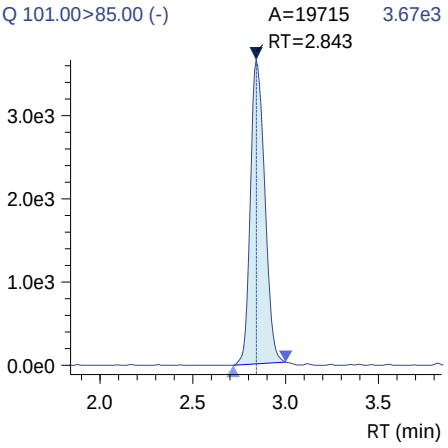
Perchlorate

Conc 11.6247



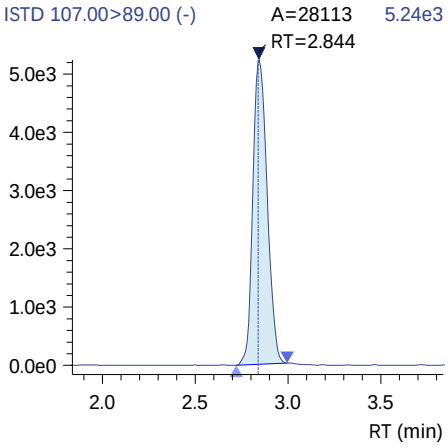
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/19/2022 10:33:05 AM

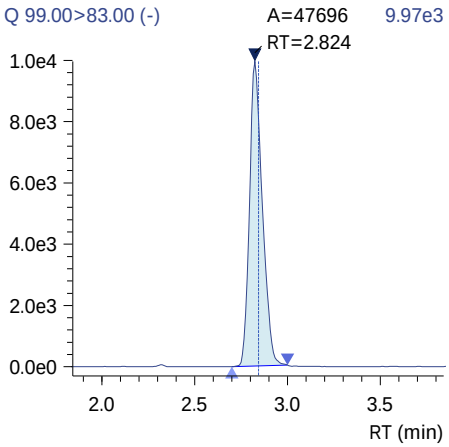
E2200646-002x50

Sample ID: E2200646-002x50
Date Acquired: 7/18/2022 12:34:45 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_026.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.824	47696	30846	8.3880	ng/mL	34.41	23.36-43.39
Perchlorate 2	Auto	2.824	16414	30846	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.822	30846	30846	1.0000	ng/mL	----	

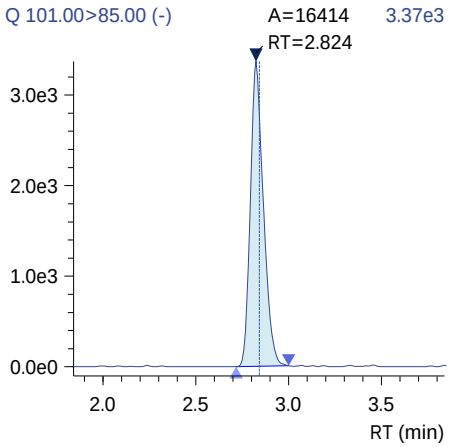
Perchlorate

Conc 8.3880



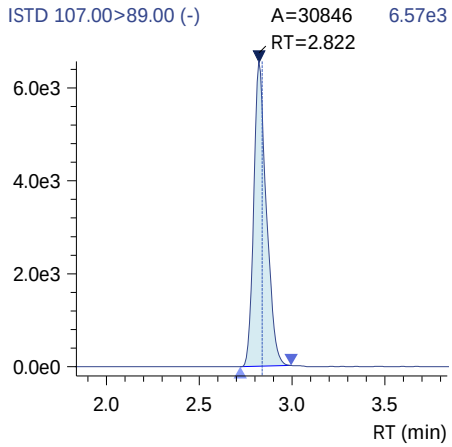
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

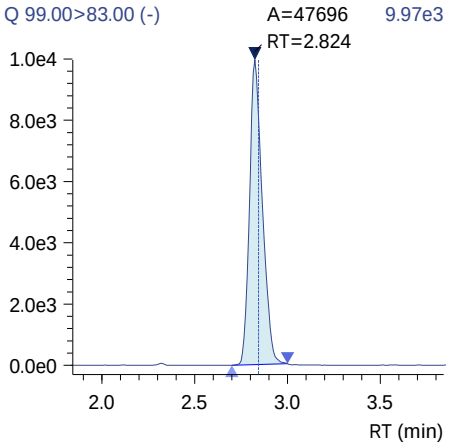
Printed at 7/19/2022 10:35:47 AM

E2200646-002x50

Sample ID: E2200646-002x50
Date Acquired: 7/18/2022 12:34:45 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_026.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 6

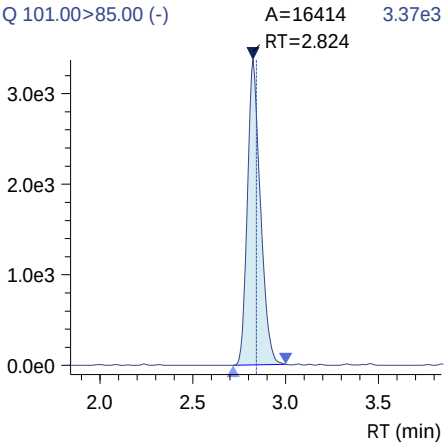
Perchlorate

Conc 8.3880



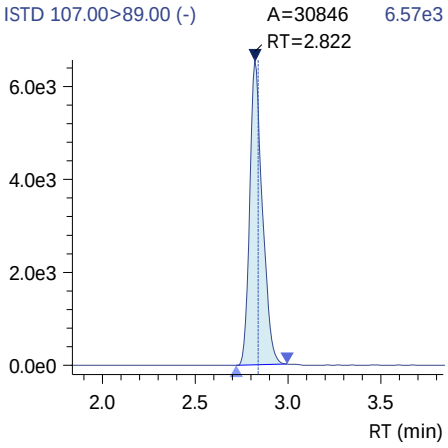
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/19/2022 10:33:05 AM

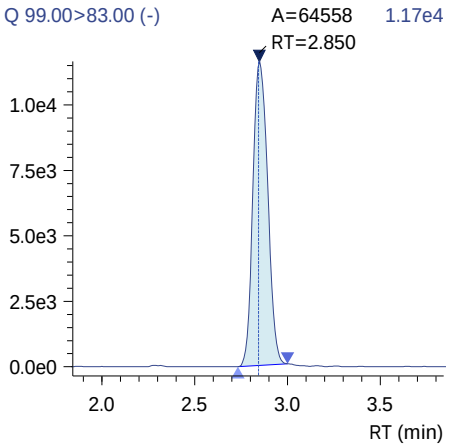
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/18/2022 12:42:38 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_027.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.850	64558	36058	9.7124	ng/mL	32.76	23.36-43.39
Perchlorate 2	Auto	2.850	21146	36058	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.850	36058	36058	1.0000	ng/mL	----	

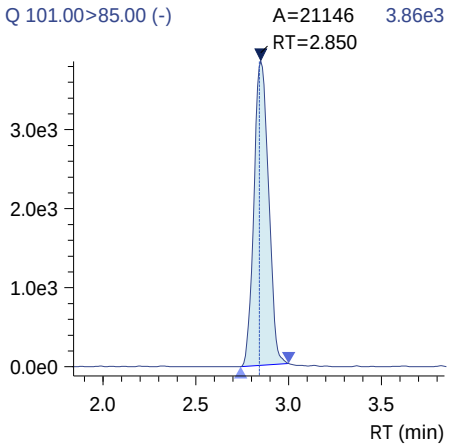
Perchlorate

Conc 9.7124



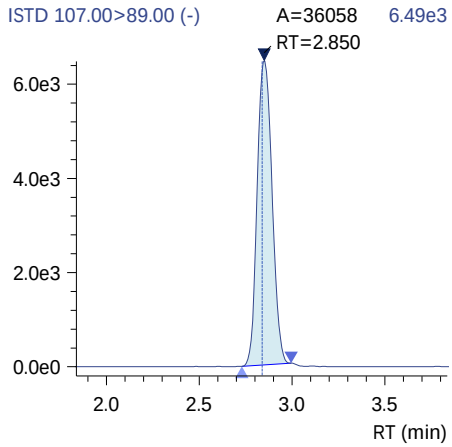
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

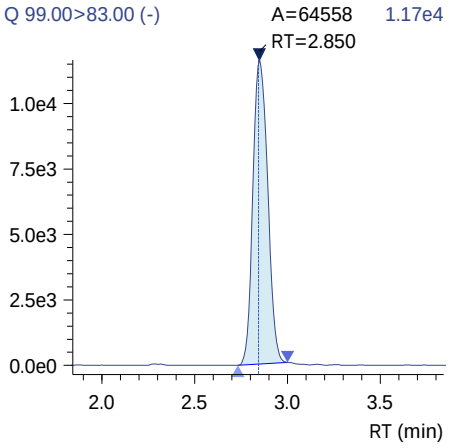
Printed at 7/19/2022 10:35:47 AM

PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/18/2022 12:42:38 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_027.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

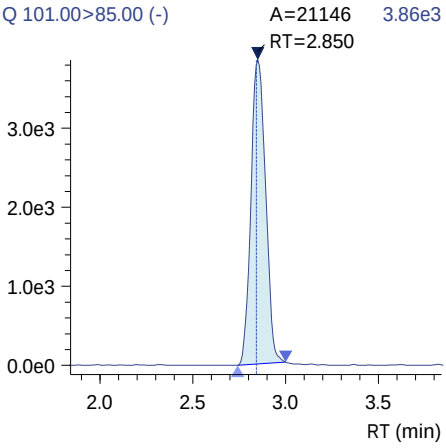
Perchlorate

Conc 9.7124



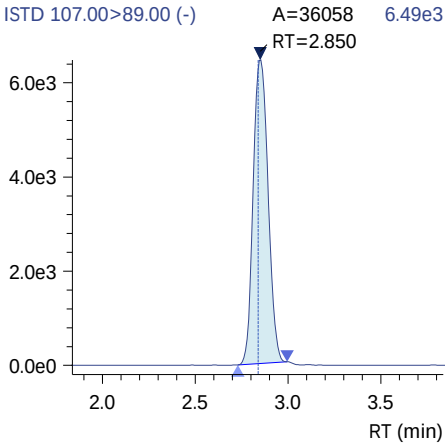
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/19/2022 10:33:05 AM

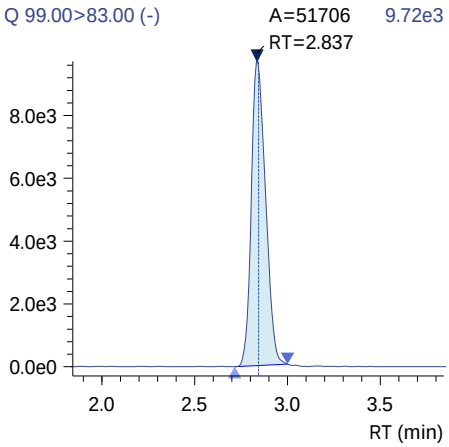
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/18/2022 2:49:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_037.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.837	51706	27890	10.0570	ng/mL	33.27	23.36-43.39
Perchlorate 2	Auto	2.832	17201	27890	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.832	27890	27890	1.0000	ng/mL	----	

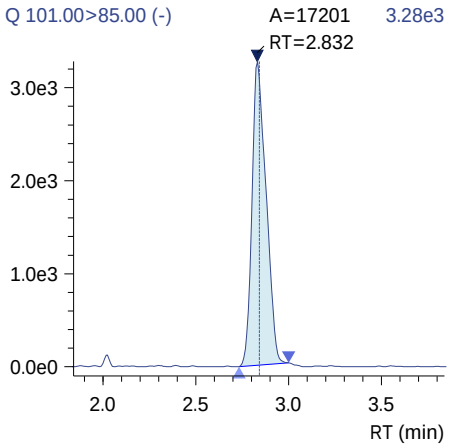
Perchlorate

Conc 10.0570



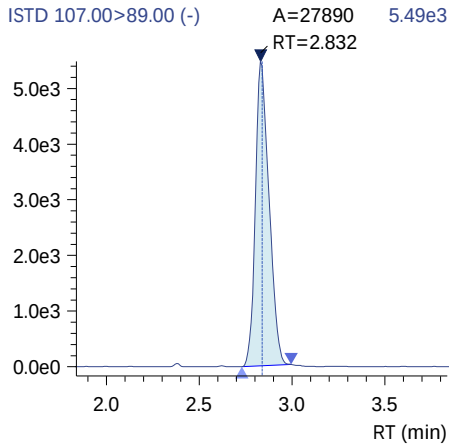
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/19/2022 10:35:47 AM

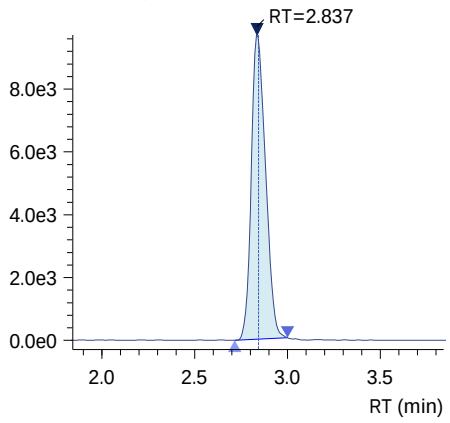
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/18/2022 2:49:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_037.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.0570

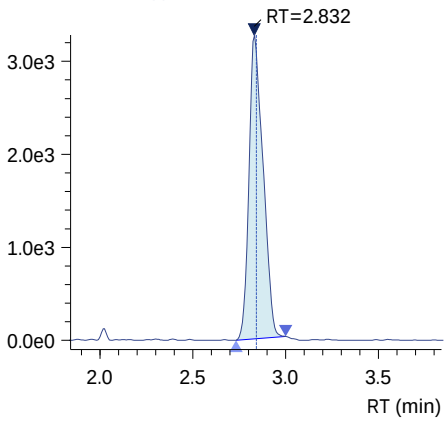
Q 99.00>83.00 (-) A=51706 9.72e3



Perchlorate 2

Conc 0.0000

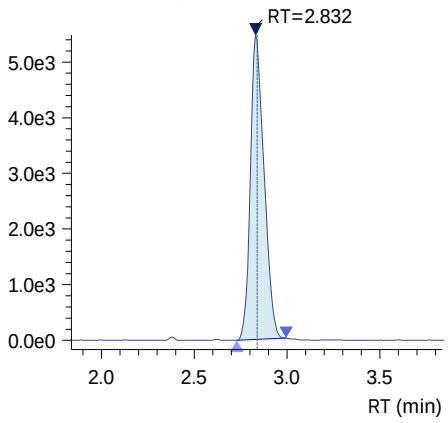
Q 101.00>85.00 (-) A=17201 3.28e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=27890 5.49e3



Insight Report

Printed at 7/19/2022 10:33:05 AM

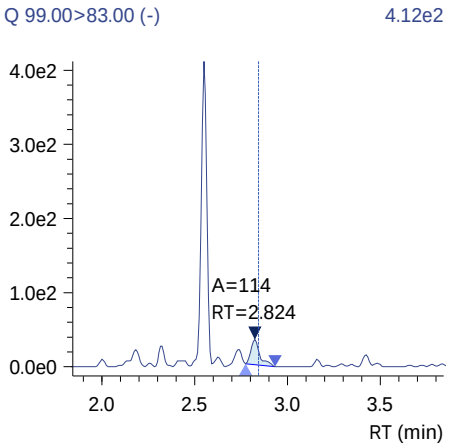
E2200646-003x5

Sample ID: E2200646-003x5
Date Acquired: 7/18/2022 4:00:10 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_039.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	2.824	114	31421	0.0197	ng/mL	24.56	23.36-43.39
Perchlorate 2	M	2.861	28	31421	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.820	31421	31421	1.0000	ng/mL	----	

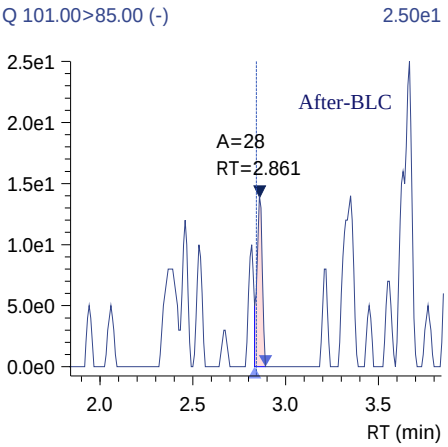
Perchlorate

Conc 0.0197



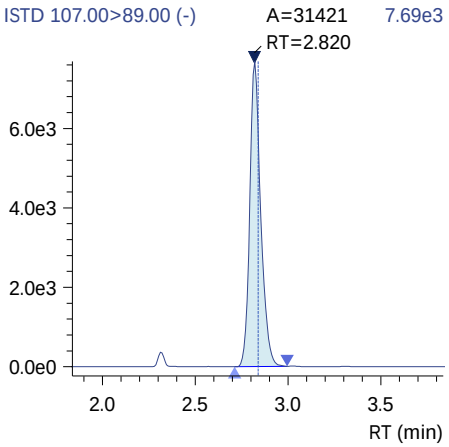
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/19/2022 10:35:47 AM

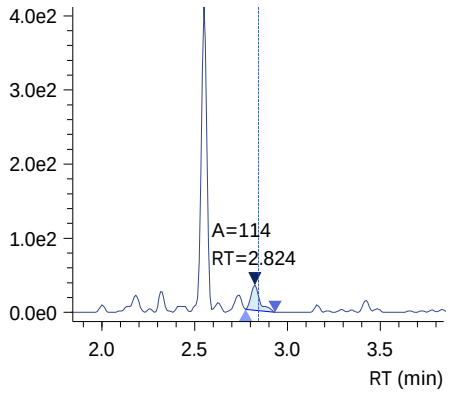
E2200646-003x5

Sample ID: E2200646-003x5
Date Acquired: 7/18/2022 4:00:10 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_039.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 6

Perchlorate

Conc 0.0197

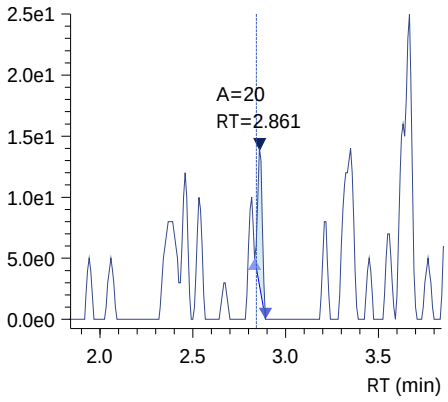
Q 99.00>83.00 (-) 4.12e2



Perchlorate 2

Conc 0.0000

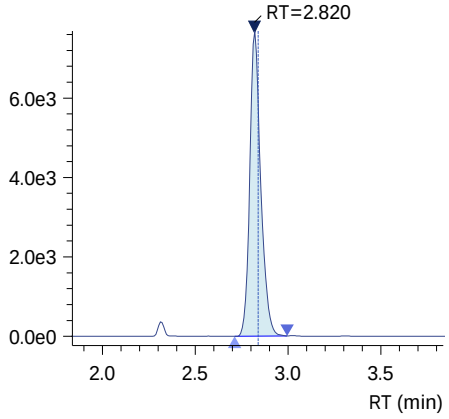
Q 101.00>85.00 (-) 2.50e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=31421 7.69e3



Insight Report

Printed at 7/19/2022 10:33:05 AM

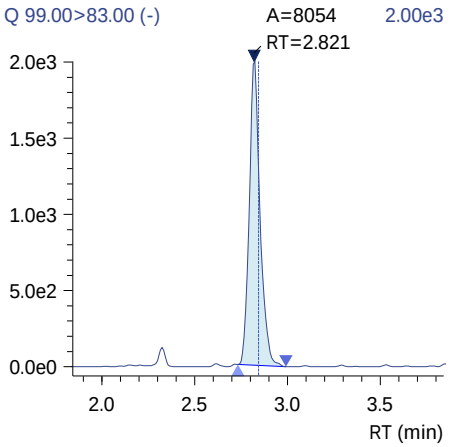
E2200646-004x5

Sample ID: E2200646-004x5
Date Acquired: 7/18/2022 4:08:01 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_040.lcd
Vial: 34 | Inj. Volume: 25.0000uL | Tray: 6

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.821	8054	27758	1.5740	ng/mL	35.10	23.36-43.39
Perchlorate 2	Auto	2.818	2827	27758	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.820	27758	27758	1.0000	ng/mL	----	

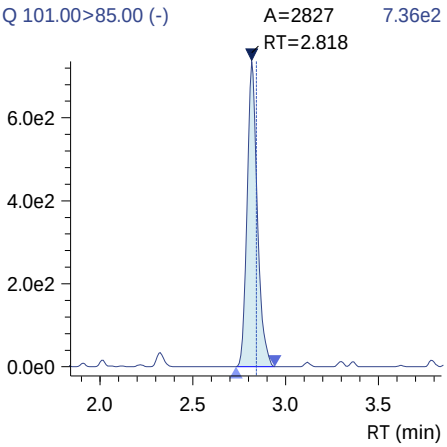
Perchlorate

Conc 1.5740



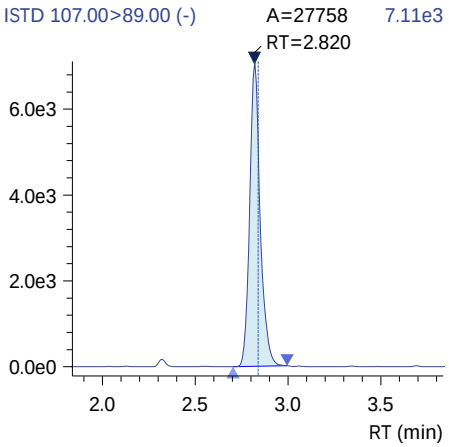
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

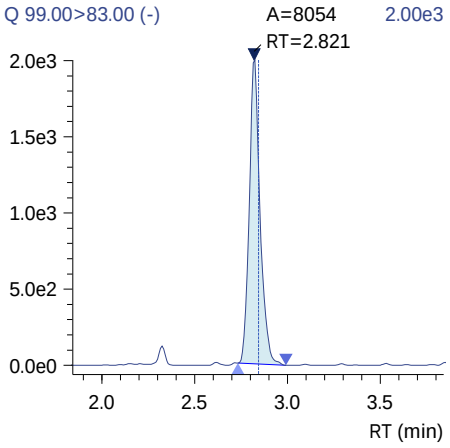
Printed at 7/19/2022 10:35:47 AM

E2200646-004x5

Sample ID: E2200646-004x5
Date Acquired: 7/18/2022 4:08:01 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_040.lcd
Vial: 34 | Inj. Volume: 25.0000uL | Tray: 6

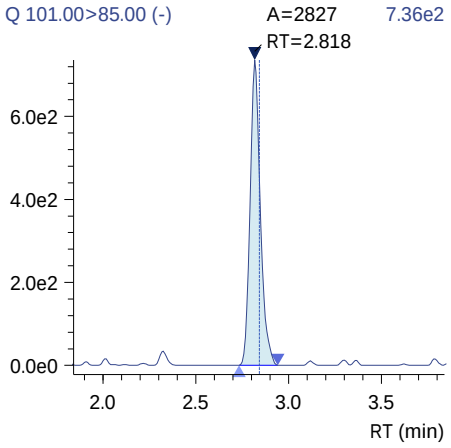
Perchlorate

Conc 1.5740



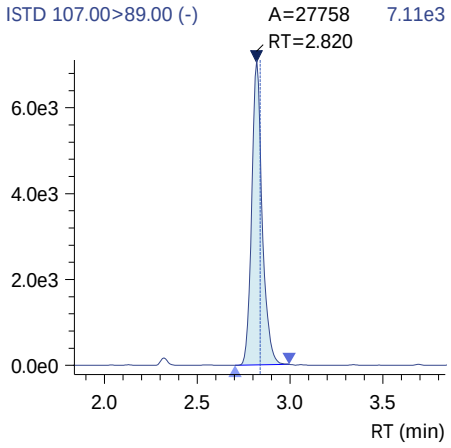
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/19/2022 10:33:05 AM

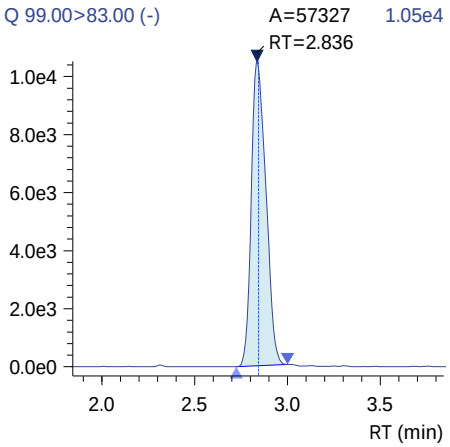
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/18/2022 4:31:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_043.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.836	57327	31936	9.7377	ng/mL	32.40	23.36-43.39
Perchlorate 2	Auto	2.832	18571	31936	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.835	31936	31936	1.0000	ng/mL	----	

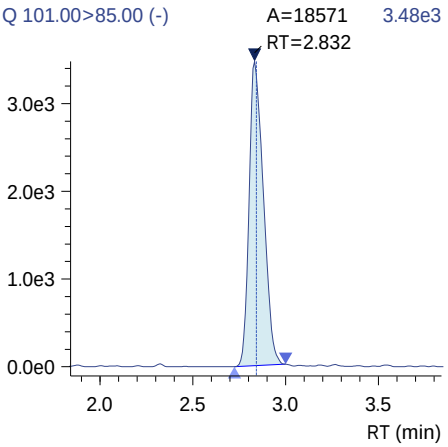
Perchlorate

Conc 9.7377



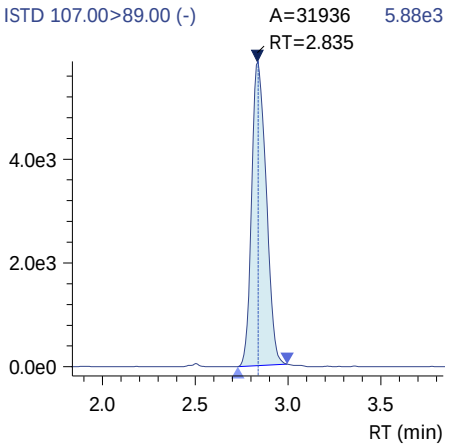
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/19/2022 10:35:47 AM

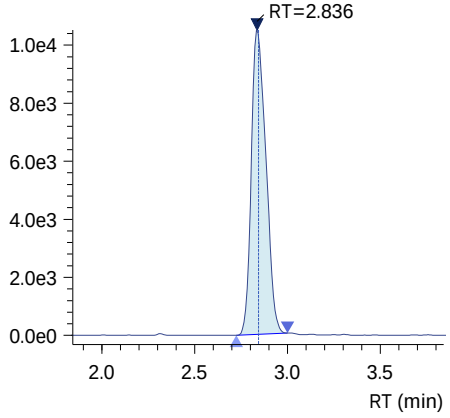
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/18/2022 4:31:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220718\20220718_043.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 9.7377

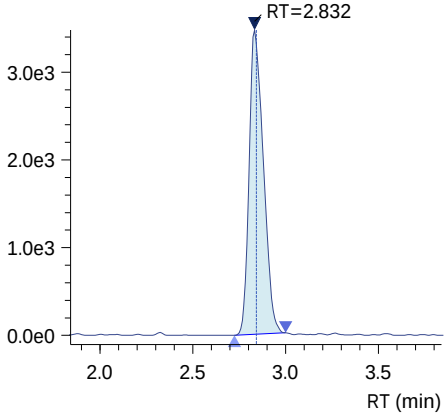
Q 99.00>83.00 (-) A=57327 1.05e4



Perchlorate 2

Conc 0.0000

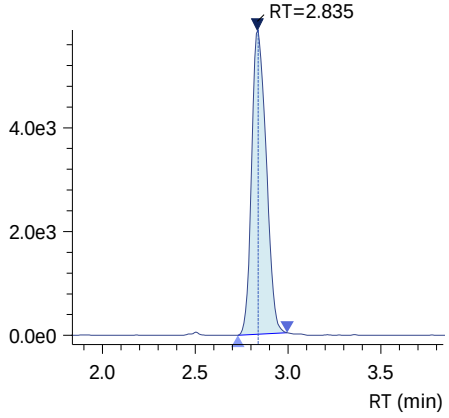
Q 101.00>85.00 (-) A=18571 3.48e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=31936 5.88e3



Insight Report

Printed at 7/19/2022 2:03:02 PM

Method File: I:\LCMS01\DATA\20220719\20220718.lcm
Project File: I:\LCMS01\DATA\20220719\20220719.damlp

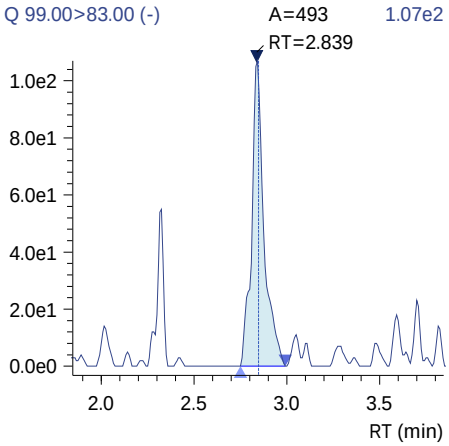
LODV

Sample ID: LODV
Date Acquired: 7/19/2022 9:12:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220719\20220719_007.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	2.839	493	43429	0.0616	ng/mL	39.55	22.95-42.62
Perchlorate 2	M	2.829	195	43429	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.837	43429	43429	1.0000	ng/mL	----	

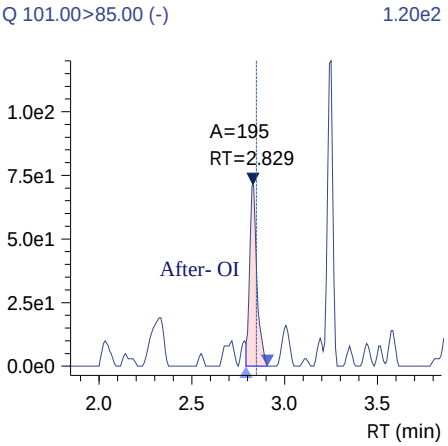
Perchlorate

Conc 0.0616



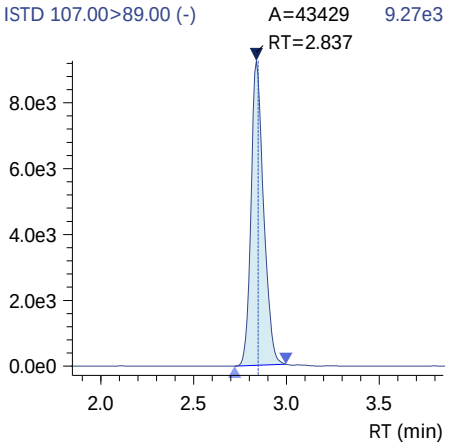
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/19/2022 2:06:22 PM

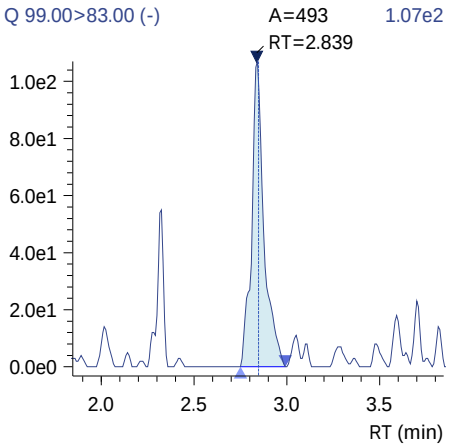
Method File: I:\LCMS01\DATA\20220719\20220718.lcm
Project File: I:\LCMS01\DATA\20220719\20220719.damlp

LODV

Sample ID: LODV
Date Acquired: 7/19/2022 9:12:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220719\20220719_007.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 1

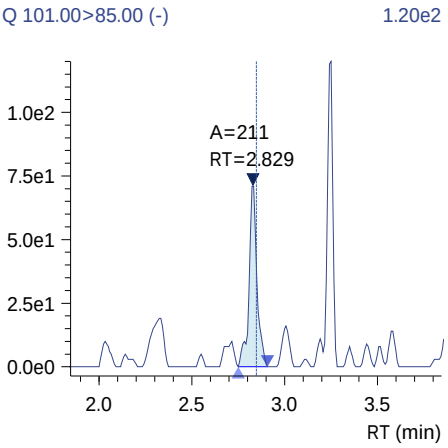
Perchlorate

Conc 0.0616



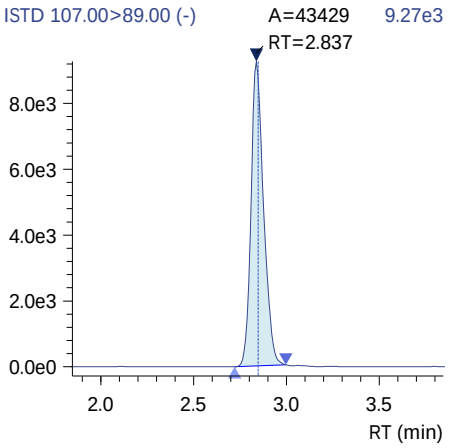
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/19/2022 2:03:02 PM

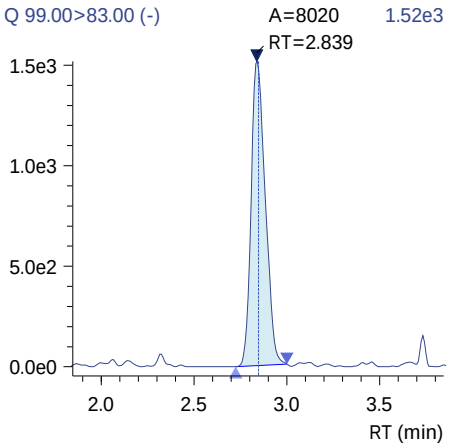
ICS

Sample ID: ICS
Date Acquired: 7/19/2022 9:20:31 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220719\20220719_008.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.839	8020	41267	1.0543	ng/mL	31.77	22.95-42.62
Perchlorate 2	Auto	2.836	2548	41267	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.836	41267	41267	1.0000	ng/mL	----	

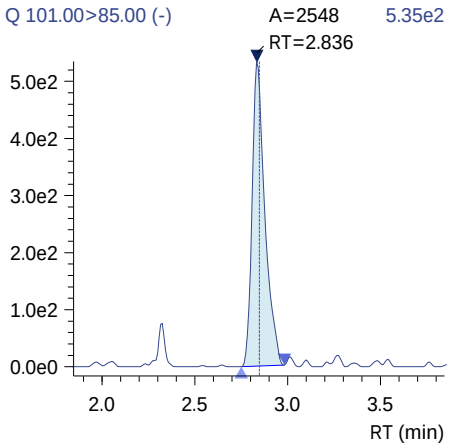
Perchlorate

Conc 1.0543



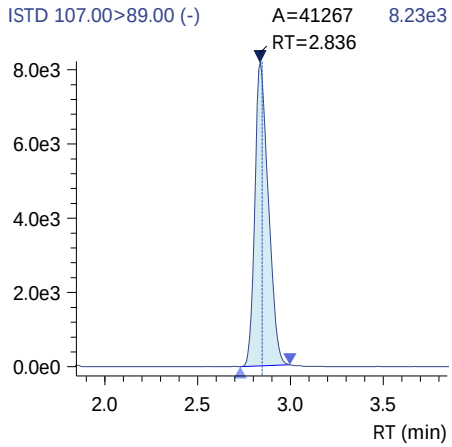
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

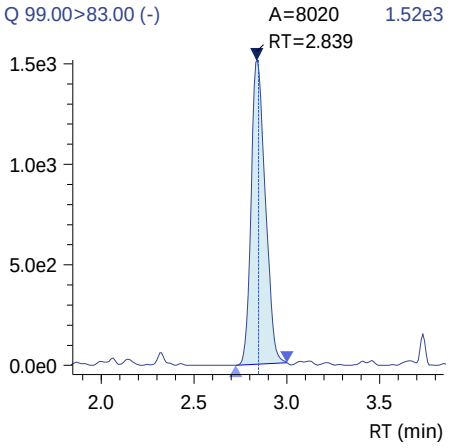
Printed at 7/19/2022 2:06:22 PM

ICS

Sample ID: ICS
Date Acquired: 7/19/2022 9:20:31 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220719\20220719_008.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 1

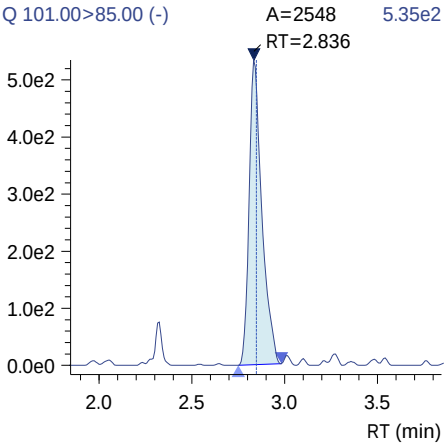
Perchlorate

Conc 1.0543



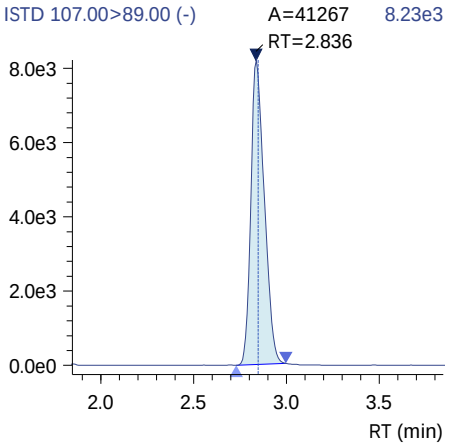
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/19/2022 2:03:02 PM

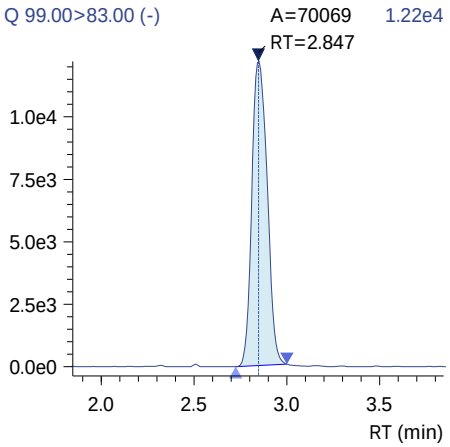
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/19/2022 10:15:41 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220719\20220719_009.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.847	70069	38512	9.8698	ng/mL	34.34	22.95-42.62
Perchlorate 2	Auto	2.847	24061	38512	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.846	38512	38512	1.0000	ng/mL	----	

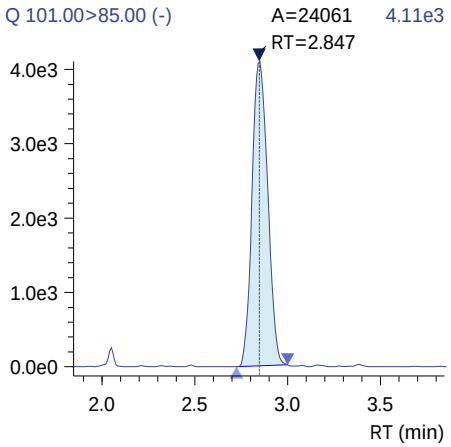
Perchlorate

Conc 9.8698



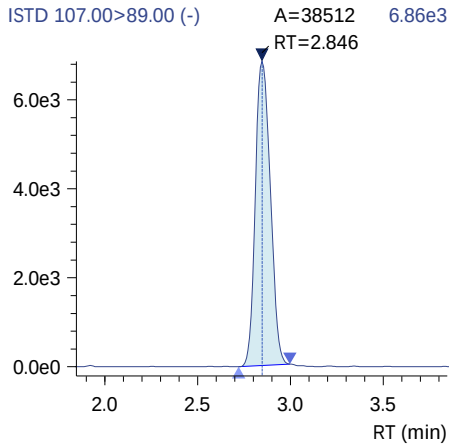
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

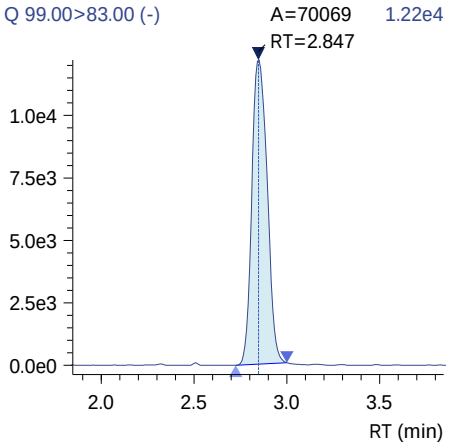
Printed at 7/19/2022 2:06:22 PM

PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/19/2022 10:15:41 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220719\20220719_009.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

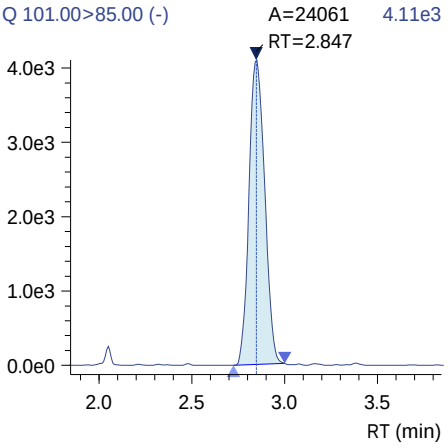
Perchlorate

Conc 9.8698



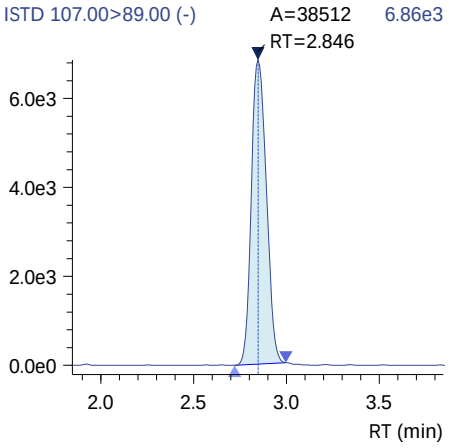
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/19/2022 2:03:02 PM

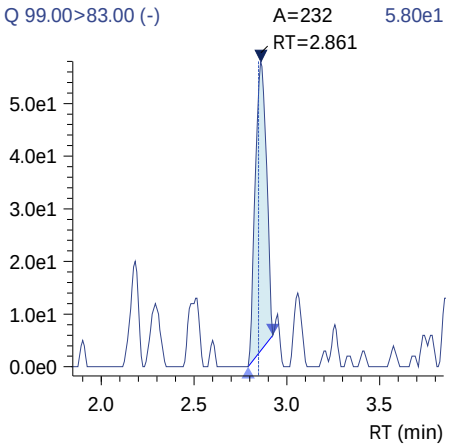
E2200646-005x5

Sample ID: E2200646-005x5
Date Acquired: 7/19/2022 10:23:39 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220719\20220719_010.lcd
Vial: 40 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.861	232	35779	0.0352	ng/mL	33.19	22.95-42.62
Perchlorate 2	Auto	2.858	77	35779	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.858	35779	35779	1.0000	ng/mL	----	

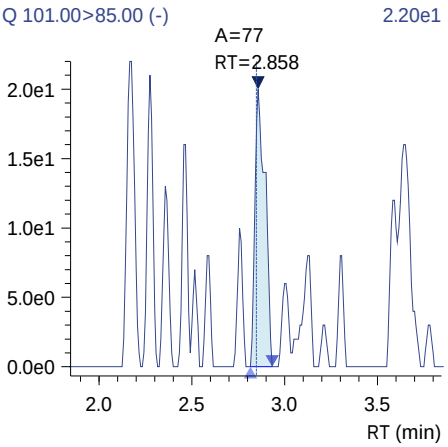
Perchlorate

Conc 0.0352



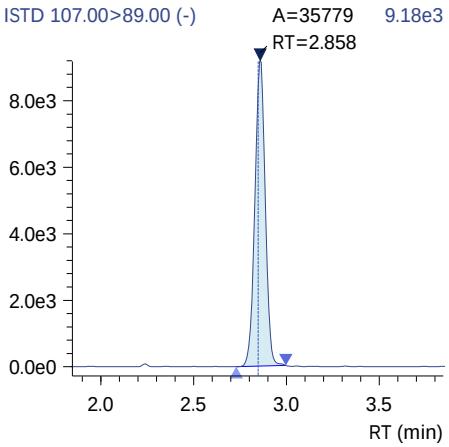
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

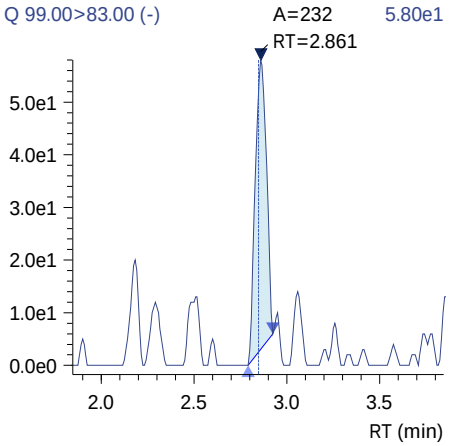
Printed at 7/19/2022 2:06:22 PM

E2200646-005x5

Sample ID: E2200646-005x5
Date Acquired: 7/19/2022 10:23:39 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220719\20220719_010.lcd
Vial: 40 | Inj. Volume: 25.0000uL | Tray: 2

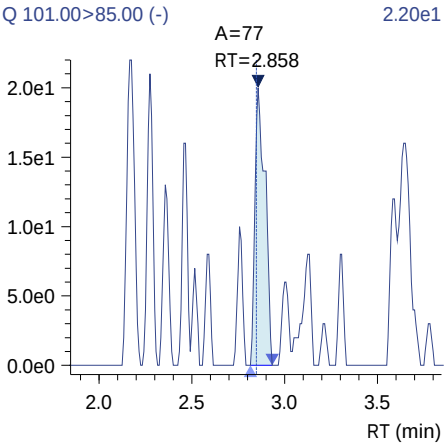
Perchlorate

Conc 0.0352



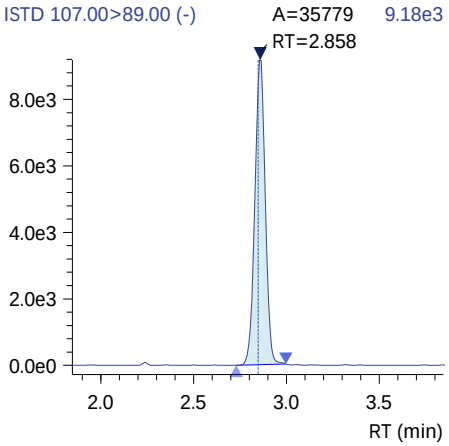
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/19/2022 2:03:02 PM

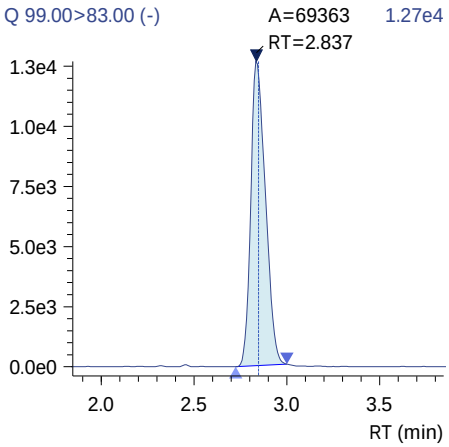
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/19/2022 10:56:54 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220719\20220719_012.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.837	69363	38732	9.7148	ng/mL	32.77	22.95-42.62
Perchlorate 2	Auto	2.836	22727	38732	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.833	38732	38732	1.0000	ng/mL	----	

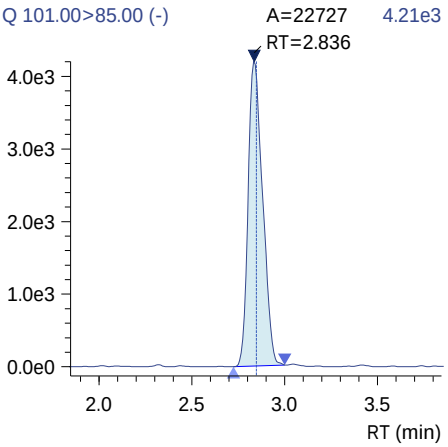
Perchlorate

Conc 9.7148



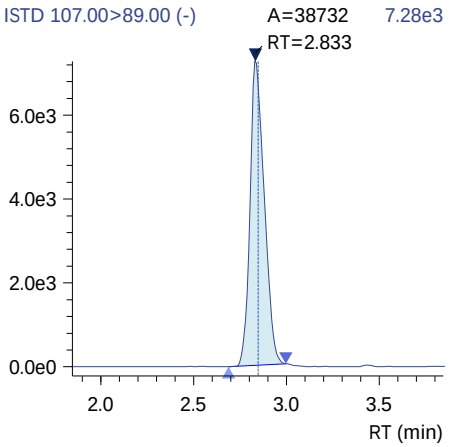
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

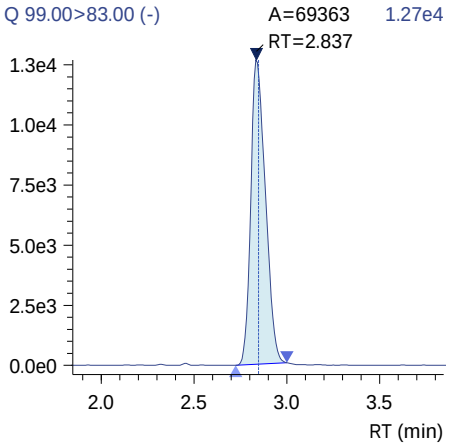
Printed at 7/19/2022 2:06:22 PM

PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/19/2022 10:56:54 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220719\20220719_012.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

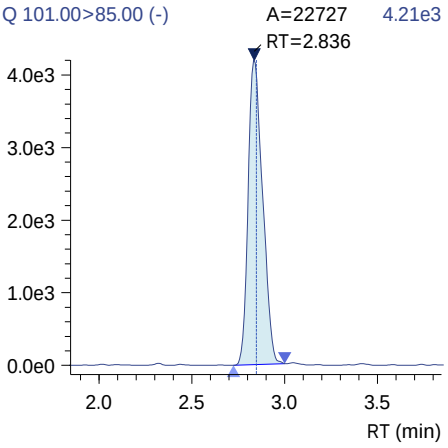
Perchlorate

Conc 9.7148



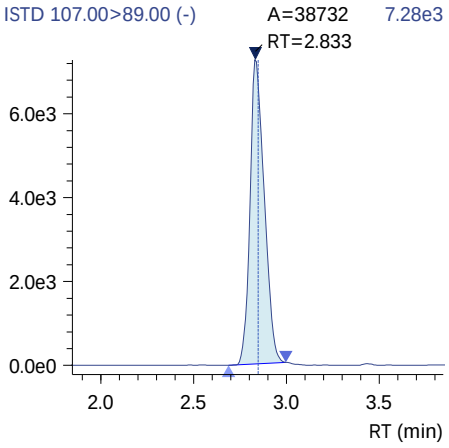
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



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alsglobal.com

WorkOrder: HS22070086

LHAAP 16 June 2022

Aptim Environmental & Infrastucture, Inc.

Vicki Graves
10333 Richmond Ave Ste 1030
Houston TX 77042

21-Jul-2022

ALS Environmental
ALS Group USA, Corp
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HS22070086 LHAAP 16 June 2022 Final

ALS WO# HS22070086

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July 20, 2022

Vicki Graves
Aptim Environmental & Infrastucture, Inc.
10333 Richmond Ave
Ste 1030
Houston, TX 77042

Work Order: **HS22070086**

Laboratory Results for: **LHAAP 16 June 2022**

Dear Vicki Graves ,

ALS Environmental received 8 sample(s) on Jul 01, 2022 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: JUMOKE.LAWAL
Dane J. Wacasey

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Work Order: HS22070086

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS22070086-01	16WW41-220629-M	Groundwater		29-Jun-2022 09:30	01-Jul-2022 09:25	☐
HS22070086-02	16WW22-220629-M	Groundwater		29-Jun-2022 10:25	01-Jul-2022 09:25	☐
HS22070086-03	16WW39-220629-M	Groundwater		29-Jun-2022 11:10	01-Jul-2022 09:25	☐
HS22070086-04	16WW16-220630-M	Groundwater		30-Jun-2022 07:10	01-Jul-2022 09:25	☐
HS22070086-05	16WW35-220630-M	Groundwater		30-Jun-2022 08:10	01-Jul-2022 09:25	☐
HS22070086-06	16WW36-220630-M	Groundwater		30-Jun-2022 08:55	01-Jul-2022 09:25	☐
HS22070086-07	16WW30-220630-M	Groundwater		30-Jun-2022 10:25	01-Jul-2022 09:25	☑
HS22070086-08	16WW29-220630-M	Groundwater		30-Jun-2022 11:10	01-Jul-2022 09:25	☐

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc. **CASE NARRATIVE**
Project: LHAAP 16 June 2022
Work Order: HS22070086

Metals by Method SW6020A

Batch ID: 181294

Sample ID: 16WW41-220629-M (HS22070086-01MSD)

- The MS and/or MSD recovery was outside of the control limits; however, the result in the parent sample is greater than 4x the spike amount. (Chromium,Manganese,Nickel)

Sample ID: 16WW41-220629-M (HS22070086-01PDS)

- The PDS recovery was outside method control limits, however the result in the parent sample is greater than 4x the spike amount. (Manganese)

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW41-220629-M
Collection Date: 29-Jun-2022 09:30

ANALYTICAL REPORT
WorkOrder:HS22070086
Lab ID:HS22070086-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 16-Jul-2022		Analyst: JHD
Arsenic	0.00125	U	0.000400	0.00125	0.00500	mg/L	1	19-Jul-2022 12:13
Chromium	**0.280**		**0.00800**	**0.0250**	**0.100**	**mg/L**	20	20-Jul-2022 12:51
Manganese	**1.14**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	19-Jul-2022 12:13
Nickel	**2.10**		**0.0120**	**0.0250**	**0.100**	**mg/L**	20	20-Jul-2022 12:51
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	19-Jul-2022 12:13

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW22-220629-M
Collection Date: 29-Jun-2022 10:25

ANALYTICAL REPORT
WorkOrder:HS22070086
Lab ID:HS22070086-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 16-Jul-2022		Analyst: JHD
Nickel	**0.331**		**0.00600**	**0.0125**	**0.0500**	**mg/L**	10	19-Jul-2022 16:12
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	19-Jul-2022 12:23

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW39-220629-M
Collection Date: 29-Jun-2022 11:10

ANALYTICAL REPORT
WorkOrder:HS22070086
Lab ID:HS22070086-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 16-Jul-2022		Analyst: JHD
Arsenic	**0.000805**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	19-Jul-2022 15:30
Chromium	**0.000700**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	19-Jul-2022 15:30
Manganese	**0.125**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	19-Jul-2022 15:30
Nickel	**0.0106**		**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	19-Jul-2022 15:30
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	19-Jul-2022 15:30

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW16-220630-M
Collection Date: 30-Jun-2022 07:10

ANALYTICAL REPORT
WorkOrder:HS22070086
Lab ID:HS22070086-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 16-Jul-2022		Analyst: JHD
Manganese	**1.39**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	19-Jul-2022 12:39
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	19-Jul-2022 12:39

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW35-220630-M
Collection Date: 30-Jun-2022 08:10

ANALYTICAL REPORT
WorkOrder:HS22070086
Lab ID:HS22070086-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 16-Jul-2022		Analyst: JHD
Arsenic	0.0125	U	0.00400	0.0125	0.0500	mg/L	1	19-Jul-2022 15:37
Manganese	**7.88**		**0.00700**	**0.0250**	**0.0500**	**mg/L**	1	19-Jul-2022 15:37
Thallium	0.00500	U	0.00200	0.00500	0.0200	mg/L	1	19-Jul-2022 15:37

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW36-220630-M
Collection Date: 30-Jun-2022 08:55

ANALYTICAL REPORT
WorkOrder:HS22070086
Lab ID:HS22070086-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 16-Jul-2022		Analyst: JHD
Manganese	**13.6**		**0.0700**	**0.250**	**0.500**	**mg/L**	10	19-Jul-2022 16:14
Thallium	0.00500	U	0.00200	0.00500	0.0200	mg/L	1	19-Jul-2022 12:43

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW29-220630-M
Collection Date: 30-Jun-2022 11:10

ANALYTICAL REPORT
WorkOrder:HS22070086
Lab ID:HS22070086-08
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 16-Jul-2022		Analyst: JHD
Manganese	**7.36**		**0.0700**	**0.250**	**0.500**	**mg/L**	10	19-Jul-2022 16:15
Thallium	0.00500	U	0.00200	0.00500	0.0200	mg/L	1	19-Jul-2022 12:45

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Weight / Prep Log

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070086

Batch ID: 181294 **Start Date:** 16 Jul 2022 08:30 **End Date:** 16 Jul 2022 12:30
Method: WATER - SW3010A **Prep Code:** 3010A

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22070086-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070086-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070086-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070086-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070086-05		1 (mL)	10 (mL)	10	120 plastic HNO3
HS22070086-06		1 (mL)	10 (mL)	10	120 plastic HNO3
HS22070086-08		1 (mL)	10 (mL)	10	120 plastic HNO3

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070086

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 181294 (0)	**Test Name :** METALS BY ICPMS BY SW6020A				**Matrix:** Groundwater	
HS22070086-01	16WW41-220629-M	29 Jun 2022 09:30		16 Jul 2022 08:30	20 Jul 2022 12:51	20
HS22070086-01	16WW41-220629-M	29 Jun 2022 09:30		16 Jul 2022 08:30	19 Jul 2022 12:13	1
HS22070086-02	16WW22-220629-M	29 Jun 2022 10:25		16 Jul 2022 08:30	19 Jul 2022 16:12	10
HS22070086-02	16WW22-220629-M	29 Jun 2022 10:25		16 Jul 2022 08:30	19 Jul 2022 12:23	1
HS22070086-03	16WW39-220629-M	29 Jun 2022 11:10		16 Jul 2022 08:30	19 Jul 2022 15:30	1
HS22070086-04	16WW16-220630-M	30 Jun 2022 07:10		16 Jul 2022 08:30	19 Jul 2022 12:39	1
HS22070086-05	16WW35-220630-M	30 Jun 2022 08:10		16 Jul 2022 08:30	19 Jul 2022 15:37	1
HS22070086-06	16WW36-220630-M	30 Jun 2022 08:55		16 Jul 2022 08:30	19 Jul 2022 16:14	10
HS22070086-06	16WW36-220630-M	30 Jun 2022 08:55		16 Jul 2022 08:30	19 Jul 2022 12:43	1
HS22070086-08	16WW29-220630-M	30 Jun 2022 11:10		16 Jul 2022 08:30	19 Jul 2022 16:15	10
HS22070086-08	16WW29-220630-M	30 Jun 2022 11:10		16 Jul 2022 08:30	19 Jul 2022 12:45	1

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070086

QC BATCH REPORT

Batch ID: 181294 (0) **Instrument: ICPMS07** **Method: METALS BY ICPMS BY SW6020A**

MBLK Sample ID: **MBLK-181294** Units: **mg/L** Analysis Date: **19-Jul-2022 12:09**
Client ID: Run ID: **ICPMS07_413228** SeqNo: **6754521** PrepDate: **16-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.00125	0.00500								U
Chromium	0.00125	0.00500								U
Manganese	0.00250	0.00500								U
Nickel	0.00125	0.00500								U
Thallium	0.000500	0.00200								U

LCS Sample ID: **LCS-181294** Units: **mg/L** Analysis Date: **19-Jul-2022 12:11**
Client ID: Run ID: **ICPMS07_413228** SeqNo: **6754522** PrepDate: **16-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.05714	0.00500	0.05	0	114	84 - 116				
Chromium	0.05549	0.00500	0.05	0	111	85 - 116				
Manganese	0.05664	0.00500	0.05	0	113	87 - 115				
Nickel	0.05606	0.00500	0.05	0	112	85 - 117				
Thallium	0.0513	0.00200	0.05	0	103	82 - 116				

MS Sample ID: **HS22070086-01MS** Units: **mg/L** Analysis Date: **19-Jul-2022 12:18**
Client ID: **16WW41-220629-M** Run ID: **ICPMS07_413228** SeqNo: **6754525** PrepDate: **16-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.05329	0.00500	0.05	0.000267	106	84 - 116				
Chromium	0.3305	0.00500	0.05	0.2701	121	85 - 116				SO
Manganese	1.124	0.00500	0.05	1.137	-26.3	87 - 115				SO
Nickel	2.137	0.00500	0.05	2.196	-118	85 - 117				SEO
Thallium	0.04945	0.00200	0.05	0.000007	98.9	82 - 116				

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070086

QC BATCH REPORT

Batch ID: 181294 (0) **Instrument: ICPMS07** **Method: METALS BY ICPMS BY SW6020A**

MSD Sample ID: **HS22070086-01MSD** Units: **mg/L** Analysis Date: **19-Jul-2022 12:20**
Client ID: **16WW41-220629-M** Run ID: **ICPMS07_413228** SeqNo: **6754526** PrepDate: **16-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.05502	0.00500	0.05	0.000267	110	84 - 116	0.05329	3.2	20	
Chromium	0.3411	0.00500	0.05	0.2701	142	85 - 116	0.3305	3.16	20	SO
Manganese	1.149	0.00500	0.05	1.137	23.0	87 - 115	1.124	2.17	20	SO
Nickel	2.194	0.00500	0.05	2.196	-4.77	85 - 117	2.137	2.62	20	SEO
Thallium	0.05101	0.00200	0.05	0.000007	102	82 - 116	0.04945	3.11	20	

PDS Sample ID: **HS22070086-01PDS** Units: **mg/L** Analysis Date: **19-Jul-2022 15:26**
Client ID: **16WW41-220629-M** Run ID: **ICPMS07_413228** SeqNo: **6754554** PrepDate: **16-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1076	0.00500	0.1	0	108	80 - 120				
Manganese	1.195	0.00500	0.1	1.137	58.2	80 - 120				SO
Thallium	0.1077	0.00200	0.1	0	108	80 - 120				

PDS Sample ID: **HS22070086-01PDS** Units: **mg/L** Analysis Date: **20-Jul-2022 12:55**
Client ID: **16WW41-220629-M** Run ID: **ICPMS07_413348** SeqNo: **6756103** PrepDate: **16-Jul-2022** DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium	2.647	0.100	2	0.2796	118	80 - 120				

PDS Sample ID: **HS22070086-01PDS** Units: **mg/L** Analysis Date: **20-Jul-2022 13:38**
Client ID: **16WW41-220629-M** Run ID: **ICPMS07_413348** SeqNo: **6756119** PrepDate: **16-Jul-2022** DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nickel	3.828	0.100	2	2.1	86.4	80 - 120				

SD Sample ID: **HS22070086-01SD** Units: **mg/L** Analysis Date: **19-Jul-2022 12:16**
Client ID: **16WW41-220629-M** Run ID: **ICPMS07_413228** SeqNo: **6754524** PrepDate: **16-Jul-2022** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Arsenic	0.00625	0.0250					0.000267	0	10	U
Manganese	1.089	0.0250					1.137	4.28	10	
Thallium	0.00250	0.0100					0.000007	0	10	U

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070086

QC BATCH REPORT

Batch ID: 181294 (0) **Instrument:** ICPMS07 **Method:** METALS BY ICPMS BY SW6020A

SD Sample ID: **HS22070086-01SD** Units: **mg/L** Analysis Date: **20-Jul-2022 12:53**
Client ID: **16WW41-220629-M** Run ID: **ICPMS07_413348** SeqNo: **6756102** PrepDate: **16-Jul-2022** DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Chromium	0.2974	0.500					0.2796	0	10	J
Nickel	2.102	0.500					2.1	0.104	10	

The following samples were analyzed in this batch: HS22070086-01 HS22070086-02 HS22070086-03 HS22070086-04 HS22070086-05 HS22070086-06 HS22070086-08

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: **HS22070086**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
California	2919 2022-2023	30-Apr-2023
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-36	30-Jun-2023
Illinois	2000322022-9	09-May-2023
Kansas	E-10352 2021-2022	31-Jul-2022
Kentucky	123043, 2022-2023	30-Apr-2023
Louisiana	03087, 2022-2023	30-Jun-2023
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2022	31-Dec-2022
North Dakota	R-193 2022-2023	30-Apr-2023
Oklahoma	2021-080	31-Aug-2022
Texas	T104704231-22-29	30-Apr-2023
Utah	TX026932021-12	30-Jul-2022

ALS Houston, US Date: 20-Jul-22

Sample Receipt Checklist

Work Order ID: HS22070086 **Date/Time Received:** 01-Jul-2022 09:25

Client Name: CBI-Houston **Received by:** Pablo Marinez

Completed By:	/S/ Nilesh D. Ranchod	01-Jul-2022 18:23	**Reviewed by:**	/S/ Dane J. Wacasey	18-Jul-2022 13:57
	eSignature	Date/Time		eSignature	Date/Time

Matrices: W Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☐	No ☑	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	2.1uc/2.6c	IR31
Cooler(s)/Kit(s):	Md Blue	
Date/Time sample(s) sent to storage:	7/1/2022	

Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:			

Login Notes: Sample 16WW30-220630-M not received

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210 Houston, TX. 77099 (281) 575-2190 ATTN: Dane Wacasey

Project: APTIM
LONGHORN ARMY AMMN. PLANT (LHAAP)
GROUNDWATER TREATMENT PLANT (GWTP)
KARNACK, TEXAS

Project No. 501032

Job: **LHAAP 16 June 2022**

Prepared By: Scott Beesinger

P.O. Number

HS2207086

Aptim Environmental & Infrastucture, Inc.
LHAAP 16 June 2022

Field Sample I.D.	Time	Sample Matrix	Date /	MS / MSD	No. OF CONTAINERS	Analyses: As, Cr, Mn, Tl, Ni by 6020A	As, Mn, Tl by 6020A	Cr, Tl by SW 6020A	Cr, Mn, Tl by SW6020A	Cr, Ni, Tl by SW6020A	Mn, Tl by SW6020A	Ni, Tl by Sw6020A	Tl by Sw6020A			Rer (Pr etc.
16WW41-220629-m-MSD		WG	6/29/22	0930		1	X									
16WW22-220629-m		WG	6/29/22	1025		1						X				
16WW39-220629-m		WG	6/29/22	1110		1	X									
16WW16-220630-m		WG	6/30/22	0710		1					X					
16WW35-220630-m		WG	6/30/22	0810		1		X								
16WW36-220630-m		WG	6/30/22	0855		1					X					
16WW30-220630-m		WG	6/30/22	1025		1					X					
16WW29-220630-m		WG	6/30/22	1110		1					X					

Additional Remarks: **Standard TAT on all parameters. Please email results to Vicki.Graves@aptim.com and invoices to fedinvoices@aptim.com**

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
Scott Beesinger	6/30/22	1430		7/1/22	0935						

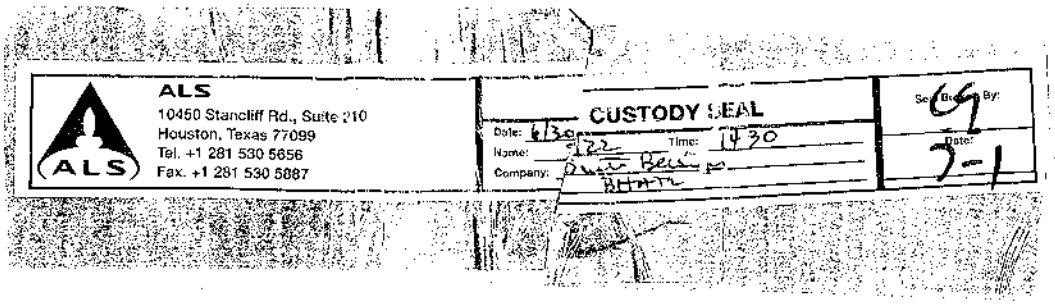
For Lab Use Only

Received At Lab By:	Date	Time	Airbill No.	Opened By:	Date	Time	Temp of Container	Seal No.	Condition

Remarks:

Blue Ice

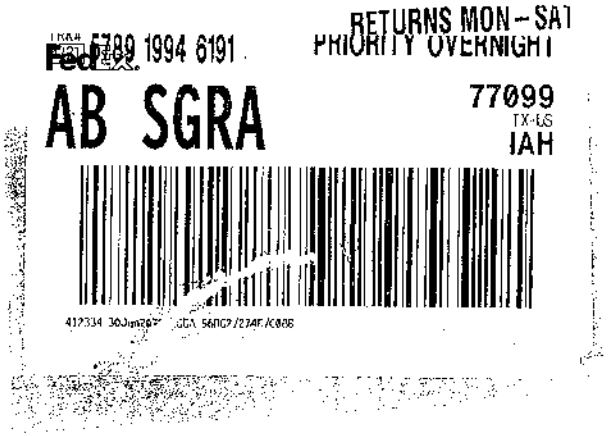
(Word) S:\Forms\Chain of Custody - BiWeekly



ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

CUSTODY SEAL
Date: 6/30 Time: 1430
Name:
Company:

Sc... Br... By:
Date: 7-1



FedEx 5789 1994 6191

RETURNS MON-SAT
PRIORITY OVERNIGHT

AB SGRA

77099
TX-US
IAH

HS22070086 - ME - ICP_W_DOD

ALS WO# HS22070086

ALS Houston, US Date: 22-Jul-22

FORM 13 - ANALYSIS RUN LOG

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070086
Start Date: 19-Jul-2022 End Date: 19-Jul-2022

Run ID:ICPMS07_413228
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS07_413228_Tune	1	19-Jul-2022 00:00	ICPMS07_413228_Tune_1	
CAL BLK	1	19-Jul-2022 11:24	007CALB.d_6753688	AS CR MN NI TL
2/10/200	1	19-Jul-2022 11:26	008CALS.d_6753689	AS CR MN NI TL
5/25/500	1	19-Jul-2022 11:29	009CALS.d_6753690	AS CR MN NI TL
10/50/100	1	19-Jul-2022 11:31	010CALS.d_6753691	AS CR MN NI TL
100/500/10K	1	19-Jul-2022 11:33	011CALS.d_6753692	AS CR MN NI TL
200/1000/20K	1	19-Jul-2022 11:35	012CALS.d_6753693	AS CR MN NI TL
ICV	1	19-Jul-2022 11:42	014_ICV.d_6753695	AS CR MN NI TL
LLICV2	1	19-Jul-2022 11:44	015LCV2.d_6753696	AS CR MN NI TL
LLICV5	1	19-Jul-2022 11:46	016LCV5.d_6753697	AS CR MN NI TL
ICB	1	19-Jul-2022 11:48	017_ICB.d_6753698	AS CR MN NI TL
ICSA	1	19-Jul-2022 11:53	019ICSA.d_6753700	AS CR MN NI TL
ICSAB	1	19-Jul-2022 11:55	020ICSB.d_6753701	AS CR MN NI TL
CCV 1	1	19-Jul-2022 12:04	023_CCV.d_6754519	AS CR MN NI TL
CCB 1	1	19-Jul-2022 12:06	024_CCB.d_6754520	AS CR MN NI TL
MBLK-181294	1	19-Jul-2022 12:09	025SMPL.d_6754521	AS CR MN NI TL
LCS-181294	1	19-Jul-2022 12:11	026SMPL.d_6754522	AS CR MN NI TL
16WW41-220629-M	1	19-Jul-2022 12:13	027SMPL.d_6754523	AS MN TL
16WW41-220629-MSD	5	19-Jul-2022 12:16	028SMPL.d_6754524	AS MN TL
16WW41-220629-MMS	1	19-Jul-2022 12:18	029SMPL.d_6754525	AS CR MN NI TL
16WW41-220629-MMSD	1	19-Jul-2022 12:20	030SMPL.d_6754526	AS CR MN NI TL
16WW22-220629-M	1	19-Jul-2022 12:23	032SMPL.d_6754528	TL
CCV 2	1	19-Jul-2022 12:35	035_CCV.d_6754531	AS CR MN NI TL
CCB 2	1	19-Jul-2022 12:37	036_CCB.d_6754532	AS CR MN NI TL
16WW16-220630-M	1	19-Jul-2022 12:39	037SMPL.d_6754533	MN TL
16WW36-220630-M	1	19-Jul-2022 12:43	039SMPL.d_6754535	TL
16WW29-220630-M	1	19-Jul-2022 12:45	040SMPL.d_6754536	TL
CCV 3	1	19-Jul-2022 13:01	047_CCV.d_6754539	AS CR MN NI TL
CCB 3	1	19-Jul-2022 13:03	048_CCB.d_6754540	AS CR MN NI TL
CCV 4	1	19-Jul-2022 14:46	085_CCV.d_6754541	AS CR MN NI TL
CCB 4	1	19-Jul-2022 14:48	086_CCB.d_6754542	AS CR MN NI TL
CCB 5	1	19-Jul-2022 15:13	097_CCB.d_6754550	AS CR MN NI TL
CCV 5	1	19-Jul-2022 15:20	099_CCV.d_6754552	AS CR MN NI TL
CCV 6	1	19-Jul-2022 15:24	100_CCV.d_6754553	AS CR MN NI TL
16WW41-220629-MPDS	1	19-Jul-2022 15:26	101SMPL.d_6754554	AS MN TL
16WW39-220629-M	1	19-Jul-2022 15:30	103SMPL.d_6754556	AS CR MN NI TL
16WW35-220630-M	1	19-Jul-2022 15:37	105SMPL.d_6754558	AS MN TL
CCV 7	1	19-Jul-2022 15:56	111_CCV.d_6754564	AS CR MN NI TL
CCB 6	1	19-Jul-2022 15:58	112_CCB.d_6754565	AS CR MN NI TL
16WW22-220629-M	10	19-Jul-2022 16:12	118SMPL.d_6754566	NI
16WW36-220630-M	10	19-Jul-2022 16:14	119SMPL.d_6754567	MN
16WW29-220630-M	10	19-Jul-2022 16:15	120SMPL.d_6754568	MN
CCV 8	1	19-Jul-2022 16:24	123_CCV.d_6754571	AS CR MN NI TL
CCV 9	1	19-Jul-2022 16:24	123_CCV.d_6755962	AS CR MN NI TL
CCB 7	1	19-Jul-2022 16:26	124_CCB.d_6754572	AS CR MN NI TL
CCB 8	1	19-Jul-2022 16:26	124_CCB.d_6755963	AS CR MN NI TL
CCB 9	1	19-Jul-2022 16:52	136_CCB.d_6755967	AS CR MN NI TL
CCV 10	1	19-Jul-2022 16:57	138_CCV.d_6755969	AS CR MN NI TL
CCV 11	1	19-Jul-2022 16:59	139_CCV.d_6755970	AS CR MN NI TL

ALS Houston, US Date: 22-Jul-22

FORM 13 - ANALYSIS RUN LOG

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070086
Start Date: 20-Jul-2022 End Date: 21-Jul-2022

Run ID:ICPMS07_413348
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS07_413348_Tune	1	20-Jul-2022 00:00	ICPMS07_413348_Tune_1	
CAL BLK	1	20-Jul-2022 11:26	009CALB.d_6756047	CR NI
2/10/200	1	20-Jul-2022 11:28	010CALS.d_6756048	CR NI
5/25/500	1	20-Jul-2022 11:30	011CALS.d_6756049	CR NI
10/50/100	1	20-Jul-2022 11:33	012CALS.d_6756050	CR NI
100/500/10K	1	20-Jul-2022 11:35	013CALS.d_6756051	CR NI
200/1000/20K	1	20-Jul-2022 11:37	014CALS.d_6756052	CR NI
100/500/10K	1	20-Jul-2022 11:47	017CALS.d_6756055	CR NI
200/1000/20K	1	20-Jul-2022 11:49	018CALS.d_6756056	CR NI
ICV	1	20-Jul-2022 11:53	020_ICV.d_6756058	AS CR MN NI TL
LLICV2	1	20-Jul-2022 11:55	021LCV2.d_6756059	CR NI
LLICV5	1	20-Jul-2022 11:57	022LCV5.d_6756060	CR NI
ICB	1	20-Jul-2022 11:59	023_ICB.d_6756061	AS CR MN NI TL
LLICV5	1	20-Jul-2022 12:05	024LCV5.d_6756062	CR NI
ICSA	1	20-Jul-2022 12:07	025ICSA.d_6756063	CR NI
ICSAB	1	20-Jul-2022 12:09	026ICSB.d_6756064	CR NI
CCV 1	1	20-Jul-2022 12:27	029_CCV.d_6756093	CR NI
CCB 1	1	20-Jul-2022 12:29	030_CCB.d_6756094	CR NI
16WW41-220629-M	20	20-Jul-2022 12:51	037SMPL.d_6756101	CR NI
16WW41-220629-MSD	100	20-Jul-2022 12:53	038SMPL.d_6756102	CR NI
16WW41-220629-MPDS	20	20-Jul-2022 12:55	039SMPL.d_6756103	CR
CCV 2	1	20-Jul-2022 12:59	041_CCV.d_6756105	CR NI
CCV 3	1	20-Jul-2022 12:59	041_CCV.d_6756114	CR NI
CCB 2	1	20-Jul-2022 13:01	042_CCB.d_6756106	CR NI
CCB 3	1	20-Jul-2022 13:01	042_CCB.d_6756115	CR NI
CCV 4	1	20-Jul-2022 13:29	053_CCV.d_6756117	CR NI
CCB 4	1	20-Jul-2022 13:31	054_CCB.d_6756118	CR NI
16WW41-220629-MPDS	20	20-Jul-2022 13:38	056SMPL.d_6756119	NI
CCV 5	1	20-Jul-2022 13:56	065_CCV.d_6756806	CR NI
CCB 5	1	20-Jul-2022 13:58	066_CCB.d_6756807	CR NI
CAL BLK	1	20-Jul-2022 21:07	205CALB.d_6756878	CR NI
2/10/200	1	20-Jul-2022 21:09	206CALS.d_6756879	CR NI
5/25/500	1	20-Jul-2022 21:11	207CALS.d_6756880	CR NI
10/50/100	1	20-Jul-2022 21:13	208CALS.d_6756881	CR NI
100/500/10K	1	20-Jul-2022 21:15	209CALS.d_6756882	CR NI
200/1000/20K	1	20-Jul-2022 21:17	210CALS.d_6756883	CR NI
ICCV 6	1	20-Jul-2022 21:21	212_ICV.d_6756885	CR NI
LLCCV2	1	20-Jul-2022 21:23	213LCV2.d_6756886	CR NI
LLCCV5	1	20-Jul-2022 21:25	214LCV5.d_6756887	CR NI
ICCB 6	1	20-Jul-2022 21:27	215_ICB.d_6756888	CR NI
CCV 7	1	20-Jul-2022 21:31	217_CCV.d_6756890	CR NI
CCB 7	1	20-Jul-2022 21:33	218_CCB.d_6756891	CR NI
CCV 8	1	20-Jul-2022 21:49	226_CCV.d_6756900	CR NI
CCB 8	1	20-Jul-2022 21:51	227_CCB.d_6756901	CR NI
CCV 9	1	20-Jul-2022 22:09	236_CCV.d_6756911	CR NI
CCB 9	1	20-Jul-2022 22:11	237_CCB.d_6756912	CR NI
CCV 10	1	20-Jul-2022 22:25	241_CCV.d_6756946	CR NI
CCB 10	1	20-Jul-2022 22:27	242_CCB.d_6756947	CR NI
CCV 11	1	20-Jul-2022 22:43	250_CCV.d_6756955	CR NI
CCB 11	1	20-Jul-2022 22:45	251_CCB.d_6756956	CR NI

ALS Houston, US

Date: 22-Jul-22

FORM 13 - ANALYSIS RUN LOG

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070086
Start Date: 20-Jul-2022 End Date: 21-Jul-2022

Run ID:ICPMS07_413348
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
CCV 12	1	20-Jul-2022 23:00	259_CCV.d_6756964	CR NI
CCB 12	1	20-Jul-2022 23:02	260_CCB.d_6756965	CR NI
CCV 13	1	20-Jul-2022 23:24	271_CCV.d_6756976	CR NI
CCB 13	1	20-Jul-2022 23:26	272_CCB.d_6756977	CR NI
CCV 14	1	21-Jul-2022 00:09	294_CCV.d_6757652	CR NI
CCB 14	1	21-Jul-2022 00:11	295_CCB.d_6757653	CR NI
LLCCV2	1	21-Jul-2022 00:15	297LCV2.d_6757655	CR NI
LLCCV5	1	21-Jul-2022 00:17	298LCV5.d_6757656	CR NI
ICSA	1	21-Jul-2022 00:19	299ICSA.d_6757657	CR NI
ICSAB	1	21-Jul-2022 00:21	300ICSB.d_6757658	CR NI

ALS Houston, US Date: 22-Jul-22

Form 2 - Initial and Continuing Calibration Verification

Client: Aptim Environmental & Infrastucture, Inc. Run ID: ICPMS07_413228
Project: LHAAP 16 June 2022 Instrument: ICPMS07
WorkOrder: HS22070086 Method: SW6020A

ICV	Date: 19-Jul-2022 11:42		Seq: 6753695	ICV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	109.027	109	90-110	
Chromium	100	105.084	105	90-110	
Manganese	100	105.311	105	90-110	
Nickel	100	105.711	106	90-110	
Thallium	100	107.757	108	90-110	

CCV1	Date: 19-Jul-2022 12:04		Seq: 6754519	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	100.186	100	90-110	
Chromium	100	100.148	100	90-110	
Manganese	100	99.946	100	90-110	
Nickel	100	100.659	101	90-110	
Thallium	100	100.536	101	90-110	

CCV2	Date: 19-Jul-2022 12:35		Seq: 6754531	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	101.101	101	90-110	
Chromium	100	101.563	102	90-110	
Manganese	100	101.148	101	90-110	
Nickel	100	101.544	102	90-110	
Thallium	100	98.807	99	90-110	

CCV3	Date: 19-Jul-2022 13:01		Seq: 6754539	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	101.08	101	90-110	
Chromium	100	104.073	104	90-110	
Manganese	100	103.293	103	90-110	
Nickel	100	103.082	103	90-110	
Thallium	100	102.393	102	90-110	

CCV4	Date: 19-Jul-2022 14:46		Seq: 6754541	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	108.005	108	90-110	
Chromium	100	105.081	105	90-110	
Manganese	100	105.951	106	90-110	
Nickel	100	104.896	105	90-110	
Thallium	100	109.848	110	90-110	

CCV5	Date: 19-Jul-2022 15:20		Seq: 6754552	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	101.765	102	90-110	
Chromium	100	101.06	101	90-110	
Manganese	100	100.301	100	90-110	
Nickel	100	100.236	100	90-110	
Thallium	100	104.916	105	90-110	

CCV6	Date: 19-Jul-2022 15:24		Seq: 6754553	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	101.91	102	90-110	
Chromium	100	99.869	100	90-110	
Manganese	100	100.241	100	90-110	
Nickel	100	99.301	99	90-110	
Thallium	100	104.405	104	90-110	

Form 2 - Initial and Continuing Calibration Verification

Client: Aptim Environmental & Infrastucture, Inc. Run ID: ICPMS07_413228
Project: LHAAP 16 June 2022 Instrument: ICPMS07
WorkOrder: HS22070086 Method: SW6020A

CCV7	Date: 19-Jul-2022 15:56		Seq: 6754564	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	103.223	103	90-110	
Chromium	100	101.993	102	90-110	
Manganese	100	106.515	107	90-110	
Nickel	100	102.204	102	90-110	
Thallium	100	103.393	103	90-110	

CCV9	Date: 19-Jul-2022 16:24		Seq: 6755962	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	107.785	108	90-110	
Chromium	100	106.033	106	90-110	
Manganese	100	105.016	105	90-110	
Nickel	100	104.721	105	90-110	
Thallium	100	109.393	109	90-110	

CCV8	Date: 19-Jul-2022 16:24		Seq: 6754571	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	107.785	108	90-110	
Chromium	100	106.033	106	90-110	
Manganese	100	105.016	105	90-110	
Nickel	100	104.721	105	90-110	
Thallium	100	109.393	109	90-110	

CCV10	Date: 19-Jul-2022 16:57		Seq: 6755969	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	98.485	99	90-110	
Chromium	100	98.16	98	90-110	
Manganese	100	97.306	97	90-110	
Nickel	100	98.829	99	90-110	
Thallium	100	102.59	103	90-110	

CCV11	Date: 19-Jul-2022 16:59		Seq: 6755970	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	101.465	101	90-110	
Chromium	100	100.399	100	90-110	
Manganese	100	99.632	100	90-110	
Nickel	100	100.024	100	90-110	
Thallium	100	103.934	104	90-110	

Form 2 - Initial and Continuing Calibration Verification

Client: Aptim Environmental & Infrastucture, Inc. Run ID: ICPMS07_413348
Project: LHAAP 16 June 2022 Instrument: ICPMS07
WorkOrder: HS22070086 Method: SW6020A

ICV	Date: 20-Jul-2022 11:53		Seq: 6756058	ICV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Chromium	100	100.558	101	90-110	
Nickel	100	102.068	102	90-110	

CCV1	Date: 20-Jul-2022 12:27		Seq: 6756093	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Chromium	100	100.477	100	90-110	
Nickel	100	101.637	102	90-110	

CCV3	Date: 20-Jul-2022 12:59		Seq: 6756114	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Chromium	100	101.143	101	90-110	
Nickel	100	100.661	101	90-110	

CCV2	Date: 20-Jul-2022 12:59		Seq: 6756105	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Chromium	100	101.143	101	90-110	
Nickel	100	100.661	101	90-110	

CCV4	Date: 20-Jul-2022 13:29		Seq: 6756117	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Chromium	100	101.738	102	90-110	
Nickel	100	101.541	102	90-110	

CCV5	Date: 20-Jul-2022 13:56		Seq: 6756806	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Chromium	100	102.018	102	90-110	
Nickel	100	103.211	103	90-110	

ICCV6	Date: 20-Jul-2022 21:21		Seq: 6756885	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Chromium	100	96.638	97	90-110	
Nickel	100	96.976	97	90-110	

CCV7	Date: 20-Jul-2022 21:31		Seq: 6756890	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Chromium	100	100.602	101	90-110	
Nickel	100	100.848	101	90-110	

CCV8	Date: 20-Jul-2022 21:49		Seq: 6756900	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Chromium	100	101.358	101	90-110	
Nickel	100	101.555	102	90-110	

CCV9	Date: 20-Jul-2022 22:09		Seq: 6756911	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Chromium	100	98.765	99	90-110	
Nickel	100	99.265	99	90-110	

CCV10	Date: 20-Jul-2022 22:25		Seq: 6756946	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Chromium	100	100.76	101	90-110	
Nickel	100	102.114	102	90-110	

ALS Houston, US Date: 22-Jul-22

Form 2 - Initial and Continuing Calibration Verification

Client: Aptim Environmental & Infrastucture, Inc. Run ID: ICPMS07_413348
Project: LHAAP 16 June 2022 Instrument: ICPMS07
WorkOrder: HS22070086 Method: SW6020A

CCV11 Date: 20-Jul-2022 22:43 Seq: 6756955 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Chromium	100	101.133	101	90-110	
Nickel	100	101.97	102	90-110	

CCV12 Date: 20-Jul-2022 23:00 Seq: 6756964 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Chromium	100	99.942	100	90-110	
Nickel	100	100.501	101	90-110	

CCV13 Date: 20-Jul-2022 23:24 Seq: 6756976 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Chromium	100	98.621	99	90-110	
Nickel	100	99.875	100	90-110	

CCV14 Date: 21-Jul-2022 00:09 Seq: 6757652 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Chromium	100	101.149	101	90-110	
Nickel	100	101.135	101	90-110	

Form 3 - BLANKS

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070086

Run ID: ICPMS07_413228
Instrument: ICPMS07
Method: SW6020A

ICB	Date: 19-Jul-2022 11:48		Seq: 6753698	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	5	0.4	5	U	
Chromium	5	0.4	5	U	
Manganese	5	0.7	5	U	
Nickel	5	0.6	5	U	
Thallium	2	0.2	2	U	

CCB1	Date: 19-Jul-2022 12:06		Seq: 6754520	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

MBLK-181294	Date: 19-Jul-2022 12:09		Seq: 6754521	MBLK	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	5	0.4	5	U	
Chromium	5	0.4	5	U	
Manganese	5	0.7	5	U	
Nickel	5	0.6	5	U	
Thallium	2	0.2	2	U	

CCB2	Date: 19-Jul-2022 12:37		Seq: 6754532	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB3	Date: 19-Jul-2022 13:03		Seq: 6754540	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB4	Date: 19-Jul-2022 14:48		Seq: 6754542	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB5	Date: 19-Jul-2022 15:13		Seq: 6754550	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

Form 3 - BLANKS

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070086

Run ID: ICPMS07_413228
Instrument: ICPMS07
Method: SW6020A

CCB6	Date: 19-Jul-2022 15:58		Seq: 6754565	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	2.324	0.7	5	J	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB8	Date: 19-Jul-2022 16:26		Seq: 6755963	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB7	Date: 19-Jul-2022 16:26		Seq: 6754572	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB9	Date: 19-Jul-2022 16:52		Seq: 6755967	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

Form 3 - BLANKS

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070086

Run ID: ICPMS07_413348
Instrument: ICPMS07
Method: SW6020A

ICB	Date: 20-Jul-2022 11:59		Seq: 6756061	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Chromium	5	0.4	5	U	
Nickel	5	0.6	5	U	
CCB1	Date: 20-Jul-2022 12:29		Seq: 6756094	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Chromium	4	0.4	4	U	
Nickel	2	0.6	2	U	
CCB3	Date: 20-Jul-2022 13:01		Seq: 6756115	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Chromium	4	0.4	4	U	
Nickel	2	0.6	2	U	
CCB2	Date: 20-Jul-2022 13:01		Seq: 6756106	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Chromium	4	0.4	4	U	
Nickel	2	0.6	2	U	
CCB4	Date: 20-Jul-2022 13:31		Seq: 6756118	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Chromium	4	0.4	4	U	
Nickel	2	0.6	2	U	
CCB5	Date: 20-Jul-2022 13:58		Seq: 6756807	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Chromium	4	0.4	4	U	
Nickel	2	0.6	2	U	
ICCB6	Date: 20-Jul-2022 21:27		Seq: 6756888	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Chromium	4	0.4	4	U	
Nickel	2	0.6	2	U	
CCB7	Date: 20-Jul-2022 21:33		Seq: 6756891	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Chromium	4	0.4	4	U	
Nickel	2	0.6	2	U	
CCB8	Date: 20-Jul-2022 21:51		Seq: 6756901	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Chromium	4	0.4	4	U	
Nickel	2	0.6	2	U	
CCB9	Date: 20-Jul-2022 22:11		Seq: 6756912	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Chromium	4	0.4	4	U	
Nickel	2	0.6	2	U	
CCB10	Date: 20-Jul-2022 22:27		Seq: 6756947	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Chromium	4	0.4	4	U	
Nickel	2	0.6	2	U	
CCB11	Date: 20-Jul-2022 22:45		Seq: 6756956	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Chromium	4	0.4	4	U	

Form 3 - BLANKS

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070086

Run ID: ICPMS07_413348
Instrument: ICPMS07
Method: SW6020A

CCB11	Date: 20-Jul-2022 22:45		Seq: 6756956	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Nickel	2	0.6	2	U	

CCB12	Date: 20-Jul-2022 23:02		Seq: 6756965	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Chromium	4	0.4	4	U	
Nickel	2	0.6	2	U	

CCB13	Date: 20-Jul-2022 23:26		Seq: 6756977	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Chromium	4	0.4	4	U	
Nickel	2	0.6	2	U	

CCB14	Date: 21-Jul-2022 00:11		Seq: 6757653	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Chromium	4	0.4	4	U	
Nickel	2	0.6	2	U	

ALS Houston, US Date: 22-Jul-22

Form 4 - ICP Interference Check Sample

Client: Aptim Environmental & Infrastucture, Inc. Run ID:ICPMS07_413228
Project: LHAAP 16 June 2022 Instrument:ICPMS07
WorkOrder: HS22070086 Method:SW6020A

ICSA	Date: 19-Jul-2022 11:53	Seq: 6753700	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Arsenic		0.253	0	
Chromium		1.42	0	
Manganese		0.288	0	
Nickel		0.791	0	
Thallium		0.005	0	

ICSAB	Date: 19-Jul-2022 11:55	Seq: 6753701	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Arsenic	100	102.6	103	
Chromium	100	102.9	103	
Manganese	100	103	103	
Nickel	100	101	101	
Thallium	100	103.3	103	

ALS Houston, US Date: 22-Jul-22

Form 4 - ICP Interference Check Sample

Client: Aptim Environmental & Infrastucture, Inc. Run ID:ICPMS07_413348
Project: LHAAP 16 June 2022 Instrument:ICPMS07
WorkOrder: HS22070086 Method:SW6020A

ICSA	Date: 20-Jul-2022 12:07	Seq: 6756063	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Chromium		1.193	0	
Nickel		0.867	0	
ICSAB	Date: 20-Jul-2022 12:09	Seq: 6756064	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Chromium	100	98.21	98.2	
Nickel	100	95.42	95.4	
ICSA	Date: 21-Jul-2022 00:19	Seq: 6757657	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Chromium		1.409	0	
Nickel		0.877	0	
ICSAB	Date: 21-Jul-2022 00:21	Seq: 6757658	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Chromium	100	98.5	98.5	
Nickel	100	97.1	97.1	

ALS Houston, US Date: 22-Jul-22

Form 5A - Matrix Spike/Matrix Spike Duplicate Recovery

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070086

Date Analyzed: 19-Jul-2022 12:20
Date Extracted: 16-Jul-2022 08:30
Units: ug/L

Matrix Spike: HS22070086-01MS
Client Sample ID: 16WW41-220629-M

Analysis Method: SW6020A

Analyte	Sample Result	MS Result	Spike Amount	% Rec	MSD Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Arsenic	5.000	53.29	50.00	106	55.02	50.00	110	84-116	3.20	20
Chromium	270.1	330.5	50.00	121	341.1	50.00	142	85-116	3.16	20
Manganese	1137	1124	50.00	-26.3	1149	50.00	23.0	87-115	2.17	20
Nickel	2196	2137	50.00	-118	2194	50.00	-4.77	85-117	2.62	20
Thallium	2.000	49.45	50.00	98.9	51.01	50.00	102	82-116	3.11	20

ALS Houston, US Date: 22-Jul-22

Form 5B - Post Digest Sample Recovery

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070086

Date Analyzed: 19-Jul-2022 15:26
Date Extracted: 16-Jul-2022 08:30
Units: ug/L

Lab Sample ID: HS22070086-01PDS
Client Sample ID: 16WW41-220629-M

Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0	107.6	100	108	80-120
Manganese	1137	1195	100	58	80-120
Thallium	0	107.7	100	108	80-120

ALS Houston, US

Date: 22-Jul-22

Form 5B - Post Digest Sample Recovery

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070086

Date Analyzed: 20-Jul-2022 12:55
Date Extracted: 16-Jul-2022 08:30
Units: ug/L

Lab Sample ID: HS22070086-01PDS
Client Sample ID: 16WW41-220629-M

Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Chromium	279.6	2647	2000	118	80-120
Nickel	2100	3828	2000	86	80-120

ALS Houston, US

Date: 22-Jul-22

Form 7 - Laboratory Control Sample

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070086

Date Analyzed: 19-Jul-2022 12:11
Date Extracted: 16-Jul-2022 08:30
Units: ug/L

Lab Sample ID: LCS-181294
Analysis Method: SW6020A

Analyte	Spike Amount	LCS Result	% Rec	% Rec Limits
Arsenic	50	57.14	114	84-116
Chromium	50	55.49	111	85-116
Manganese	50	56.64	113	87-115
Nickel	50	56.06	112	85-117
Thallium	50	51.3	103	82-116

ALS Houston, US Date: 22-Jul-22

Form 8 - ICP Serial Dilutions

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070086

Date Analyzed: 19-Jul-2022 12:16
Date Extracted: 16-Jul-2022 08:30
Units: ug/L

Lab Sample ID: HS22070086-01SD
Client Sample ID:16WW41-220629-M

Analysis Method: SW6020A

Analyte	Sample Result	C	SD Result	C	RPD	Q
Arsenic	0	U	0	U	0	
Manganese	1137		1089		4	
Thallium	0	U	0	U	0	

ALS Houston, US Date: 22-Jul-22

Form 8 - ICP Serial Dilutions

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070086

Date Analyzed: 20-Jul-2022 12:53
Date Extracted: 16-Jul-2022 08:30
Units: ug/L

Lab Sample ID: HS22070086-01SD
Client Sample ID:16WW41-220629-M

Analysis Method: SW6020A

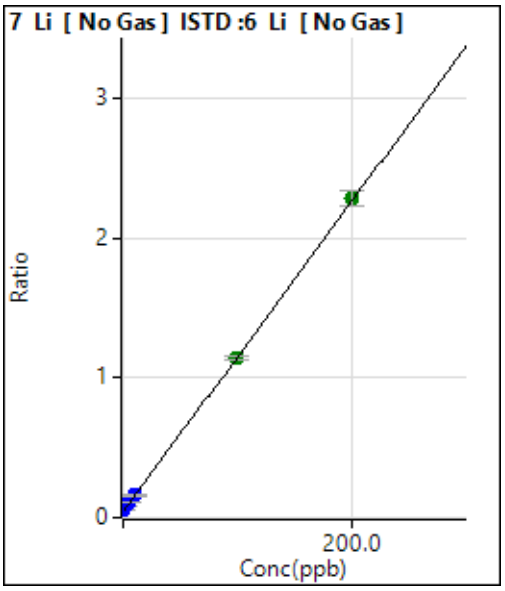
Analyte	Sample Result	C	SD Result	C	RPD	Q
Chromium	279.6		297.4	J	6	
Nickel	2100		2102		0	

Calibration for 250_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\071922A.b\
Analysis File: 071922A.batch.bin
DA Date-Time: 07/19/2022 22:23:26
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	243CALB.d	CAL BLK	07/19/2022 22:06:24
2	244CALS.d	2/10/200	07/19/2022 22:08:29
3	245CALS.d	5/25/500	07/19/2022 22:10:35
4	246CALS.d	10/50/100	07/19/2022 22:12:40
5	247CALS.d	100/500/10K	07/19/2022 22:14:44
6	248CALS.d	200/1000/20K	07/19/2022 22:16:46

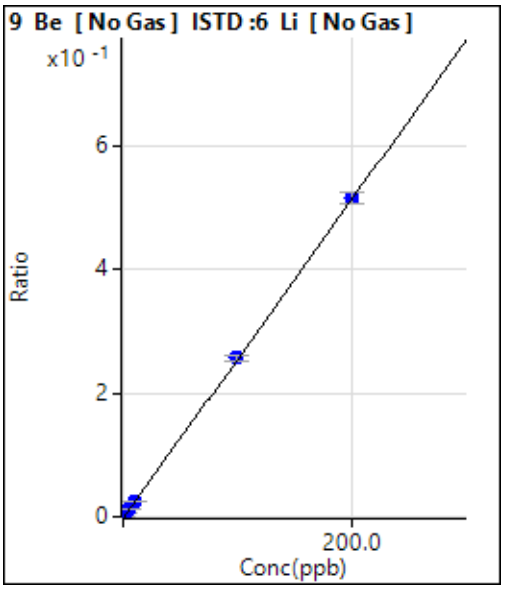
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	44822.95	0.0550	P	3.2	
2	☐	2.000	1.995	62431.13	0.0772	P	1.5	-0.2
3	☐	5.000	4.545	85947.71	0.1054	P	2.4	-9.1
4	☐	10.000	9.381	127793.69	0.1591	P	2.3	-6.2
5	☐	100.000	98.063	936020.56	1.1429	A	2.3	-1.9
6	☐	200.000	201.011	1821521.64	2.2850	A	4.4	0.5

y = 0.0111 * x + 0.0550
R = 0.9999
DL = 0.4811 ppb
BEC = 4.959 ppb

Weight: <None>
Min Conc: <None>

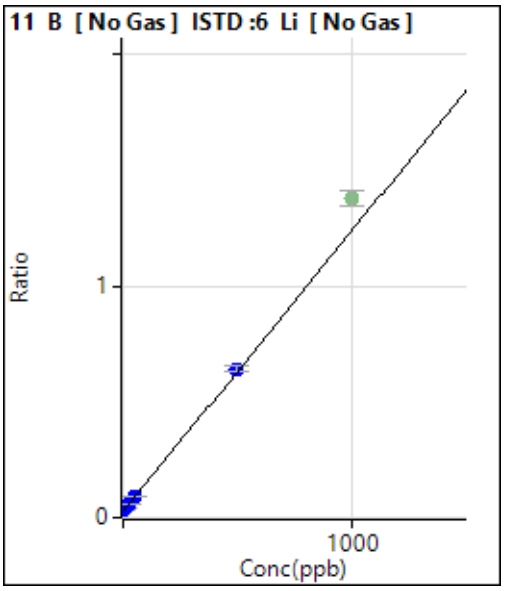


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1.67	0.0000	P	173.2	
2	☐	2.000	1.882	3920.57	0.0048	P	2.7	-5.9
3	☐	5.000	4.844	10165.41	0.0125	P	2.6	-3.1
4	☐	10.000	9.959	20590.14	0.0256	P	1.7	-0.4
5	☐	100.000	99.875	210415.85	0.2570	P	3.4	-0.1
6	☐	200.000	200.069	410520.46	0.5149	P	3.4	0.0

y = 0.0026 * x + 2.0560E-006
R = 1.0000
DL = 0.004152 ppb
BEC = 0.000799 ppb

Weight: <None>
Min Conc: <None>

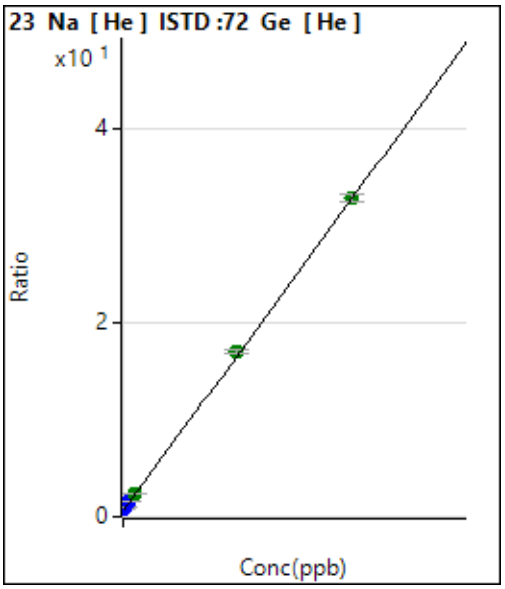
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	27971.22	0.0343	P	1.7	
2	☐	10.000	8.743	36332.27	0.0449	P	2.2	-12.6
3	☐	25.000	20.674	48384.80	0.0594	P	1.9	-17.3
4	☐	50.000	46.164	72487.96	0.0902	P	0.8	-7.7
5	☐	500.000	500.625	524402.34	0.6406	P	4.0	0.1
6	☑	1000.000		1100013.19	1.3800	A	5.0	

y = 0.0012 * x + 0.0343
R = 1.0000
DL = 1.47 ppb
BEC = 28.34 ppb

Weight: <None>
Min Conc: <None>

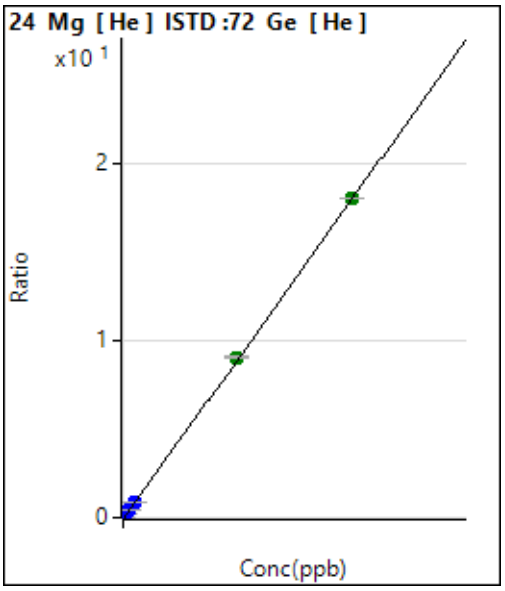


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	344079.90	0.7542	P	1.7	
2	☐	200.000	178.993	483177.30	1.0422	P	0.5	-10.5
3	☐	500.000	461.630	688616.97	1.4970	P	0.7	-7.7
4	☐	1000.000	1022.751	1111439.36	2.3998	A	1.6	2.3
5	☐	10000.00	10077.79	7915658.22	16.9693	A	2.0	0.8
6	☐	20000.00	19961.13	15086284.7	32.8715	A	2.0	-0.2

y = 0.0016 * x + 0.7542
R = 1.0000
DL = 23.48 ppb
BEC = 468.7 ppb

Weight: <None>
Min Conc: <None>

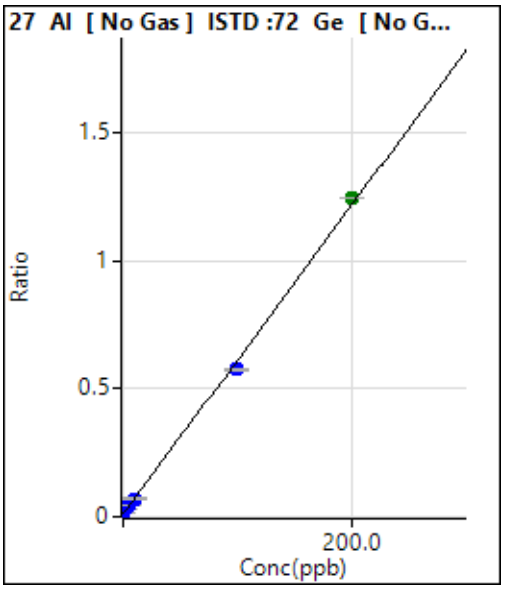
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	306.68	0.0007	P	13.4	
2	☐	200.000	195.983	82288.79	0.1775	P	0.2	-2.0
3	☐	500.000	484.870	201547.31	0.4381	P	0.7	-3.0
4	☐	1000.000	966.841	404314.34	0.8730	P	1.1	-3.3
5	☐	10000.00	10043.64	4227639.42	9.0625	A	1.1	0.4
6	☐	20000.00	19980.25	8274144.46	18.0277	A	0.3	-0.1

y = 9.0224E-004 * x + 6.7274E-004
R = 1.0000
DL = 0.2991 ppb
BEC = 0.7456 ppb

Weight: <None>
Min Conc: <None>

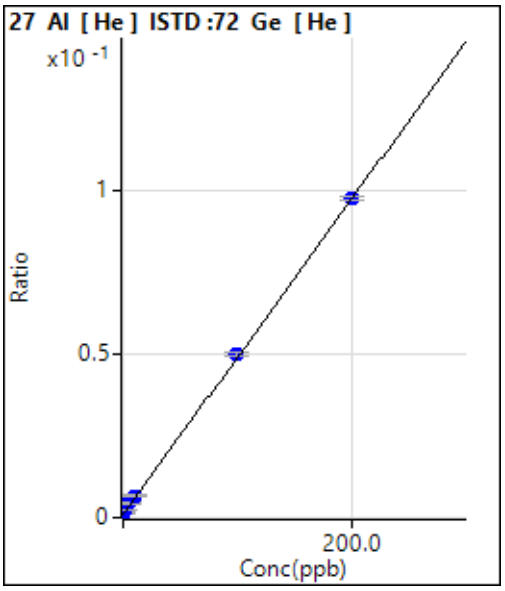


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	22849.11	0.0162	P	1.8	
2	☐	2.000	1.739	37851.98	0.0267	P	1.4	-13.1
3	☐	5.000	5.255	68484.94	0.0479	P	1.0	5.1
4	☐	10.000	9.056	100397.64	0.0708	P	3.4	-9.4
5	☐	100.000	92.815	818236.32	0.5756	P	1.2	-7.2
6	☐	200.000	203.636	1708167.74	1.2436	A	0.5	1.8

y = 0.0060 * x + 0.0162
R = 0.9991
DL = 0.1437 ppb
BEC = 2.691 ppb

Weight: <None>
Min Conc: <None>

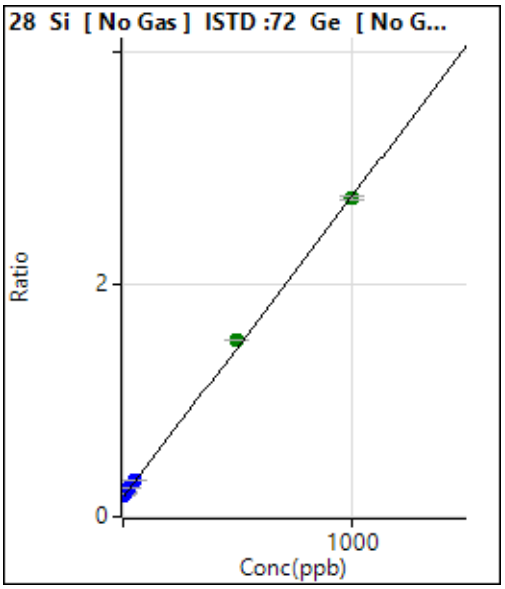
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	663.36	0.0015	P	7.9	
2	☐	2.000	2.015	1123.40	0.0024	P	5.3	0.7
3	☐	5.000	6.269	2056.85	0.0045	P	6.3	25.4
4	☐	10.000	10.571	3030.40	0.0065	P	9.5	5.7
5	☐	100.000	100.876	23336.50	0.0500	P	2.3	0.9
6	☐	200.000	199.501	44752.26	0.0975	P	0.9	-0.2

y = 4.8147E-004 * x + 0.0015
R = 1.0000
DL = 0.7111 ppb
BEC = 3.018 ppb

Weight: <None>
Min Conc: <None>

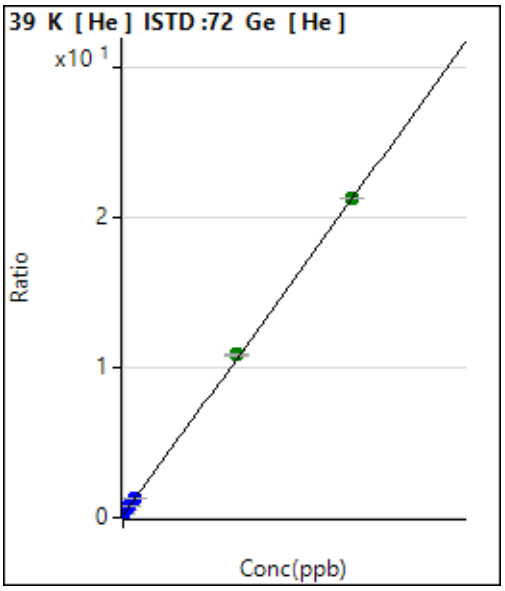


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	257048.87	0.1825	P	0.2	
2	☐	10.000	9.227	292484.42	0.2063	P	0.6	-7.7
3	☐	25.000	26.928	360453.52	0.2521	P	0.7	7.7
4	☐	50.000	50.917	445428.48	0.3141	P	1.5	1.8
5	☐	500.000	517.345	2160706.37	1.5201	A	0.9	3.5
6	☐	1000.000	991.241	3770939.53	2.7454	A	1.0	-0.9

y = 0.0026 * x + 0.1825
R = 0.9998
DL = 0.4787 ppb
BEC = 70.56 ppb

Weight: <None>
Min Conc: <None>

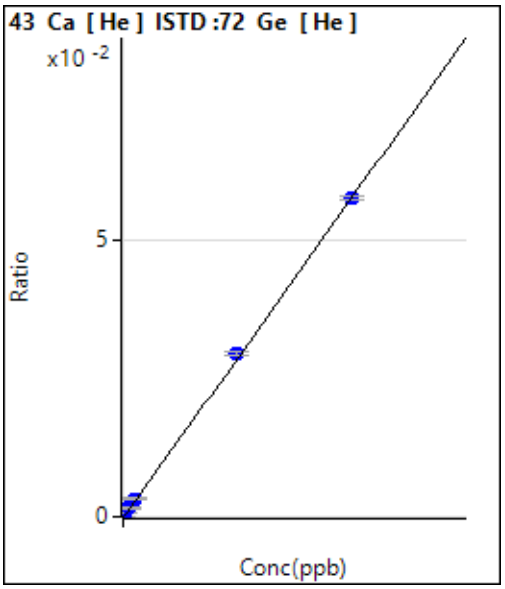
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	115731.71	0.2536	P	0.4	
2	☐	200.000	191.246	211023.06	0.4552	P	0.6	-4.4
3	☐	500.000	479.979	349355.14	0.7594	P	1.8	-4.0
4	☐	1000.000	968.791	590267.85	1.2745	P	1.5	-3.1
5	☐	10000.00	10069.79	5068398.47	10.8651	A	1.5	0.7
6	☐	20000.00	19967.25	9773781.31	21.2950	A	0.6	-0.2

y = 0.0011 * x + 0.2536
R = 1.0000
DL = 2.961 ppb
BEC = 240.7 ppb

Weight: <None>
Min Conc: <None>

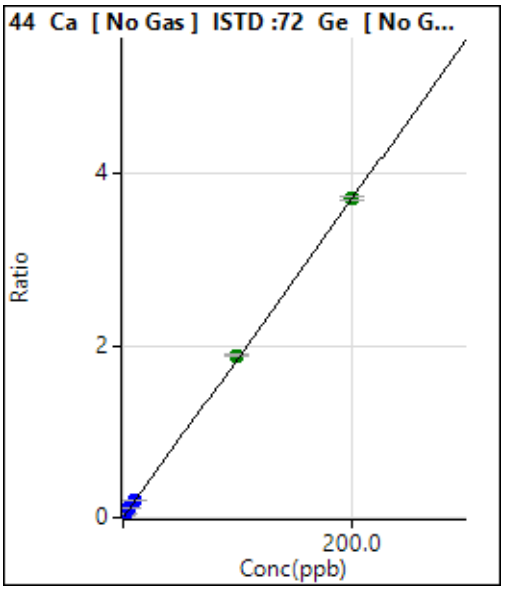


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	34.0	
2	☐	200.000	218.094	310.01	0.0007	P	23.2	9.0
3	☐	500.000	537.576	733.37	0.0016	P	11.1	7.5
4	☐	1000.000	1095.662	1486.77	0.0032	P	10.6	9.6
5	☐	10000.00	10199.68	13807.14	0.0296	P	2.8	2.0
6	☐	20000.00	19894.25	26479.10	0.0577	P	1.7	-0.5

y = 2.8982E-006 * x + 3.6456E-005
R = 0.9999
DL = 12.83 ppb
BEC = 12.58 ppb

Weight: <None>
Min Conc: <None>

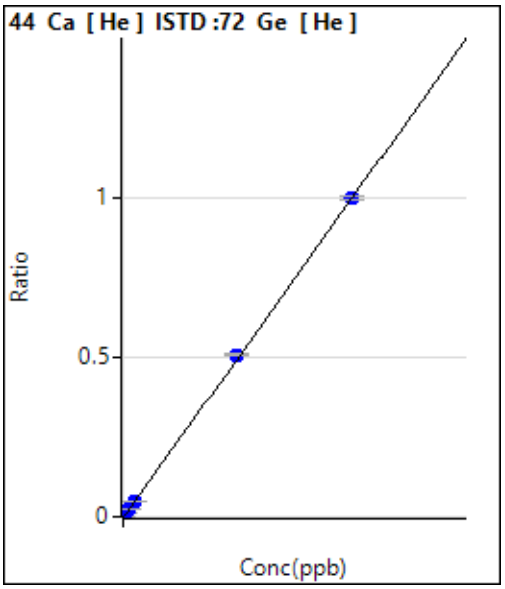
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	25640.88	0.0182	P	1.6	
2	☐	2.000	1.958	77283.02	0.0545	P	1.1	-2.1
3	☐	5.000	4.918	156447.88	0.1094	P	0.6	-1.6
4	☐	10.000	9.600	278296.38	0.1962	P	0.8	-4.0
5	☐	100.000	100.872	2684970.17	1.8889	A	1.5	0.9
6	☐	200.000	199.586	5109400.65	3.7196	A	1.2	-0.2

y = 0.0185 * x + 0.0182
R = 1.0000
DL = 0.04623 ppb
BEC = 0.9814 ppb

Weight: <None>
Min Conc: <None>

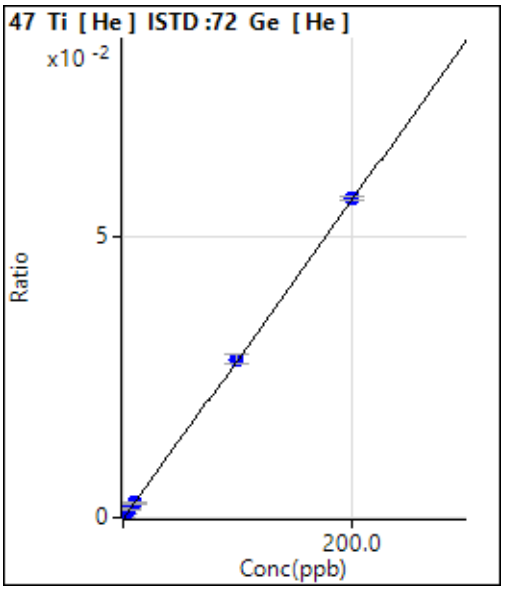


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	630.03	0.0014	P	6.7	
2	☐	200.000	195.338	5167.72	0.0111	P	3.1	-2.3
3	☐	500.000	504.872	12245.63	0.0266	P	2.8	1.0
4	☐	1000.000	974.811	23213.23	0.0501	P	2.0	-2.5
5	☐	10000.00	10126.45	236799.15	0.5076	P	1.2	1.3
6	☐	20000.00	19937.95	458106.31	0.9981	P	1.1	-0.3

y = 4.9991E-005 * x + 0.0014
R = 1.0000
DL = 5.586 ppb
BEC = 27.62 ppb

Weight: <None>
Min Conc: <None>

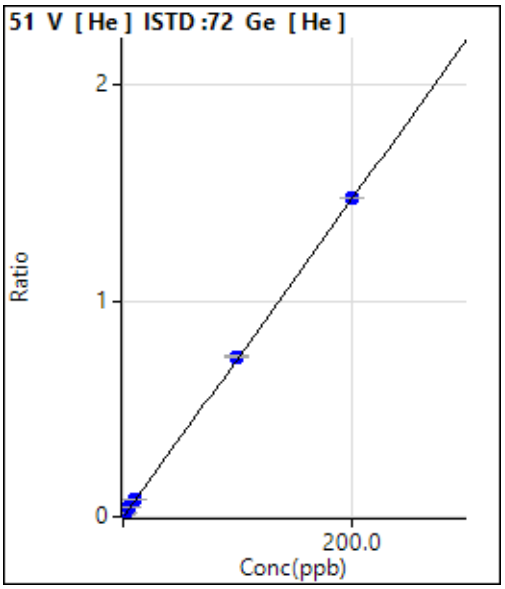
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	99.5	
2	☐	2.000	2.210	300.01	0.0006	P	40.8	10.5
3	☐	5.000	5.299	700.03	0.0015	P	13.8	6.0
4	☐	10.000	9.331	1233.41	0.0027	P	7.9	-6.7
5	☐	100.000	99.302	13126.44	0.0281	P	5.7	-0.7
6	☐	200.000	200.373	26048.30	0.0568	P	0.6	0.2

y = 2.8313E-004 * x + 2.1756E-005
R = 1.0000
DL = 0.2295 ppb
BEC = 0.07684 ppb

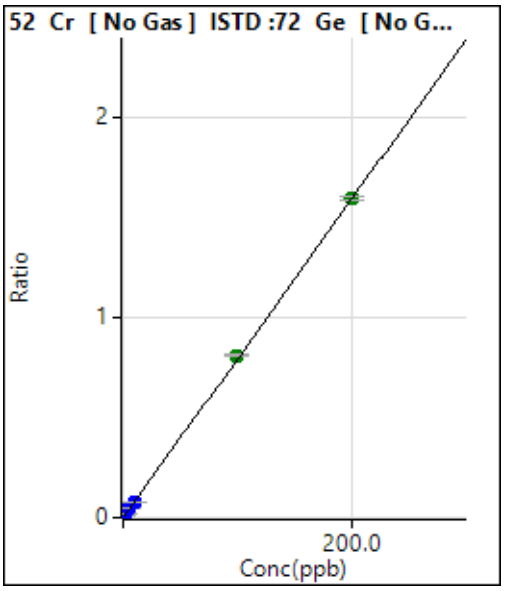
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2094.62	0.0046	P	3.1	
2	☐	2.000	1.939	8750.61	0.0189	P	0.8	-3.1
3	☐	5.000	4.914	18768.41	0.0408	P	1.8	-1.7
4	☐	10.000	9.745	35379.99	0.0764	P	0.7	-2.5
5	☐	100.000	100.104	346190.00	0.7421	P	1.3	0.1
6	☐	200.000	199.963	678282.18	1.4779	P	0.5	0.0

y = 0.0074 * x + 0.0046
R = 1.0000
DL = 0.05749 ppb
BEC = 0.6232 ppb

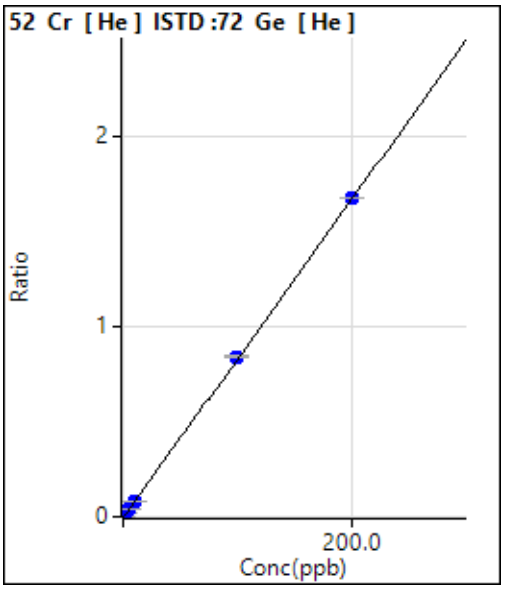
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10564.28	0.0075	P	3.1	
2	☐	2.000	1.892	31940.94	0.0225	P	2.0	-5.4
3	☐	5.000	4.581	62764.13	0.0439	P	1.5	-8.4
4	☐	10.000	9.199	114274.49	0.0806	P	1.4	-8.0
5	☐	100.000	101.063	1151864.93	0.8104	A	2.2	1.1
6	☐	200.000	199.520	2187482.21	1.5925	A	1.5	-0.2

y = 0.0079 * x + 0.0075
R = 1.0000
DL = 0.08831 ppb
BEC = 0.9439 ppb

Weight: <None>
Min Conc: <None>

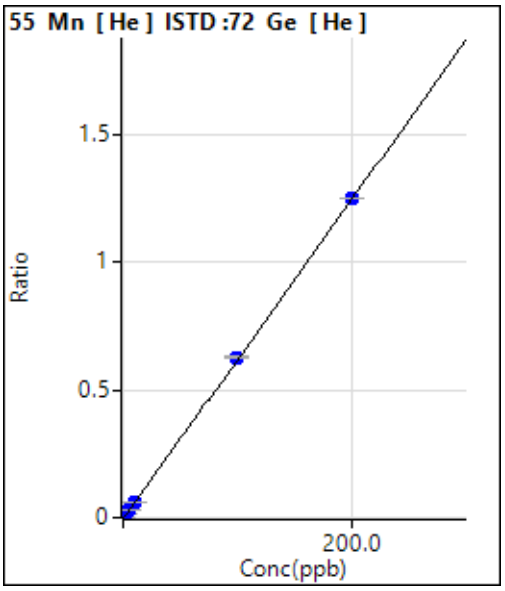


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1193.41	0.0026	P	3.7	
2	☐	2.000	1.969	8869.69	0.0191	P	4.7	-1.6
3	☐	5.000	4.820	19807.92	0.0431	P	3.1	-3.6
4	☐	10.000	9.785	39233.32	0.0847	P	2.2	-2.1
5	☐	100.000	100.167	393276.37	0.8431	P	1.5	0.2
6	☐	200.000	199.932	771132.20	1.6801	P	0.2	0.0

y = 0.0084 * x + 0.0026
R = 1.0000
DL = 0.0346 ppb
BEC = 0.3118 ppb

Weight: <None>
Min Conc: <None>

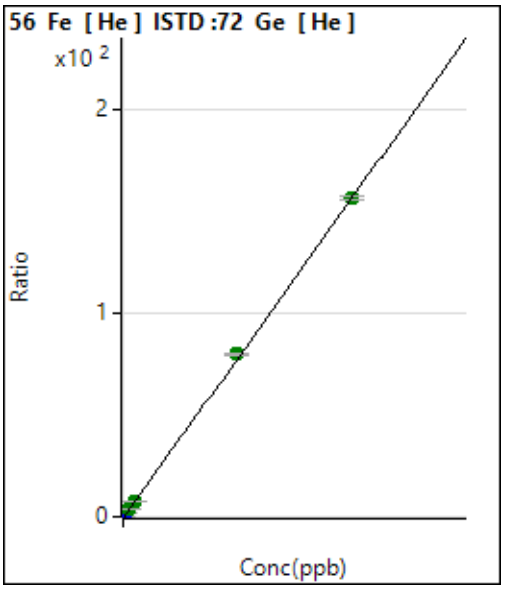
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	296.68	0.0007	P	14.7	
2	☐	2.000	1.866	5721.31	0.0123	P	5.4	-6.7
3	☐	5.000	4.836	14234.27	0.0309	P	3.3	-3.3
4	☐	10.000	9.743	28560.21	0.0617	P	2.4	-2.6
5	☐	100.000	100.390	293607.03	0.6294	P	1.7	0.4
6	☐	200.000	199.824	574719.89	1.2522	P	0.2	-0.1

y = 0.0063 * x + 6.5092E-004
R = 1.0000
DL = 0.04586 ppb
BEC = 0.1039 ppb

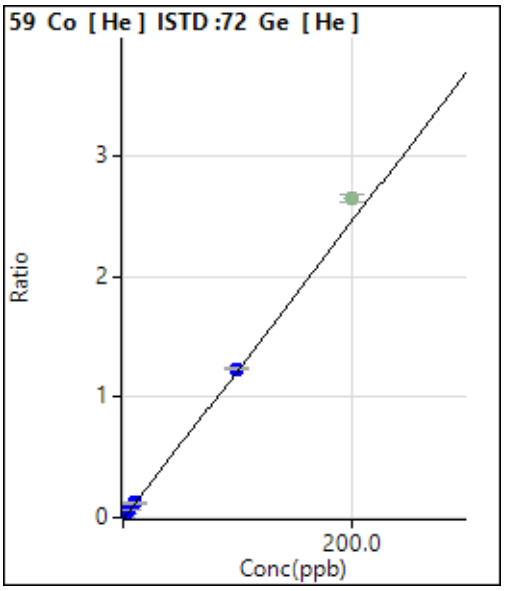
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12592.67	0.0276	P	2.4	
2	☐	200.000	195.490	726461.42	1.5670	P	1.6	-2.3
3	☐	500.000	519.372	1894119.35	4.1175	A	1.9	3.9
4	☐	1000.000	1008.121	3689506.82	7.9663	A	1.0	0.8
5	☐	10000.00	10150.57	37301026.9	79.9605	A	1.0	1.5
6	☐	20000.00	19923.87	72021503.9	156.922	A	0.8	-0.4

y = 0.0079 * x + 0.0276
R = 1.0000
DL = 0.2499 ppb
BEC = 3.505 ppb

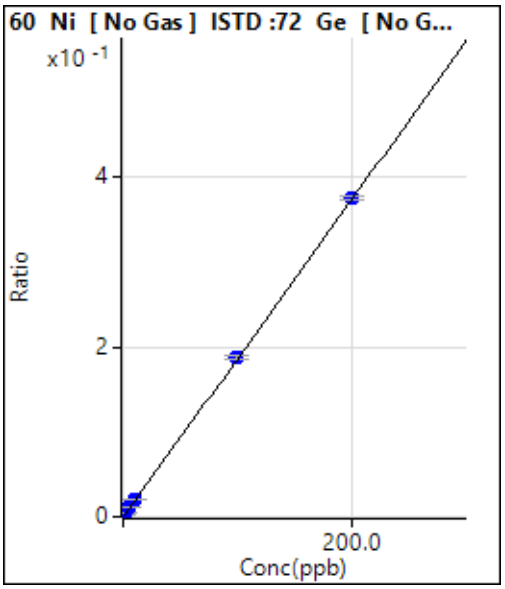
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	26.0	
2	☐	2.000	1.966	11274.84	0.0243	P	2.0	-1.7
3	☐	5.000	4.802	27267.62	0.0593	P	1.8	-4.0
4	☐	10.000	9.703	55429.72	0.1197	P	2.4	-3.0
5	☐	100.000	100.040	575310.47	1.2333	P	1.2	0.0
6	☑	200.000		1214610.50	2.6465	A	2.2	

y = 0.0123 * x + 8.7838E-005
R = 1.0000
DL = 0.005568 ppb
BEC = 0.007126 ppb

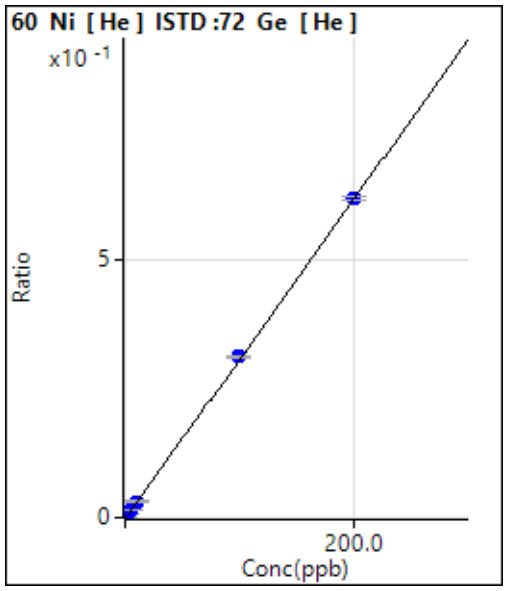
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2023.52	0.0014	P	4.8	
2	☐	2.000	2.064	7505.51	0.0053	P	4.1	3.2
3	☐	5.000	5.080	15632.51	0.0109	P	1.6	1.6
4	☐	10.000	10.094	28794.18	0.0203	P	1.9	0.9
5	☐	100.000	99.751	267074.93	0.1879	P	1.7	-0.2
6	☐	200.000	200.117	515783.16	0.3755	P	1.3	0.1

y = 0.0019 * x + 0.0014
R = 1.0000
DL = 0.1116 ppb
BEC = 0.7683 ppb

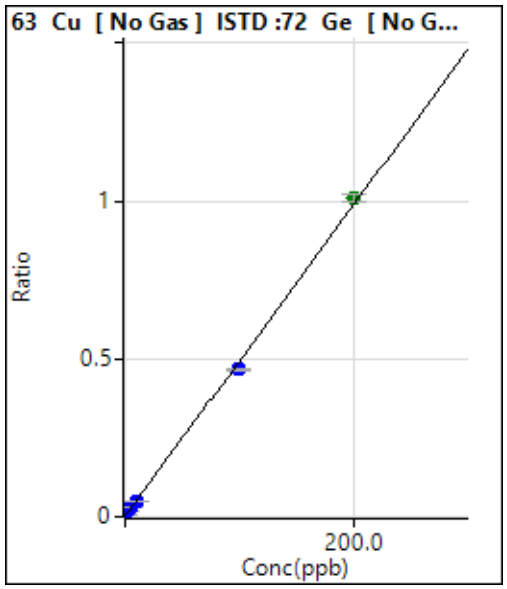
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	223.34	0.0005	P	18.8	
2	☐	2.000	2.003	3100.41	0.0067	P	5.1	0.2
3	☐	5.000	4.919	7225.38	0.0157	P	3.1	-1.6
4	☐	10.000	9.989	14541.33	0.0314	P	2.2	-0.1
5	☐	100.000	100.440	145173.98	0.3112	P	1.1	0.4
6	☐	200.000	199.782	283876.15	0.6185	P	0.8	-0.1

y = 0.0031 * x + 4.9001E-004
R = 1.0000
DL = 0.08928 ppb
BEC = 0.1584 ppb

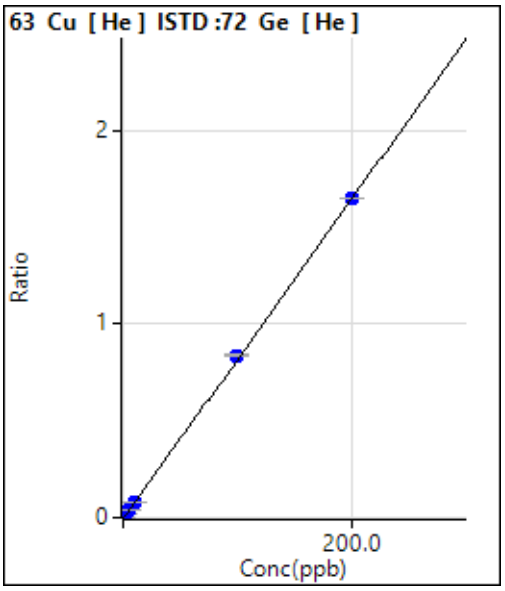
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9783.68	0.0069	P	1.7	
2	☐	2.000	1.764	22178.35	0.0156	P	1.8	-11.8
3	☐	5.000	4.313	40346.63	0.0282	P	2.2	-13.7
4	☐	10.000	8.935	72335.68	0.0510	P	1.5	-10.7
5	☐	100.000	93.388	664510.33	0.4675	P	1.5	-6.6
6	☐	200.000	203.379	1387150.55	1.0099	A	1.8	1.7

y = 0.0049 * x + 0.0069
R = 0.9993
DL = 0.07331 ppb
BEC = 1.408 ppb

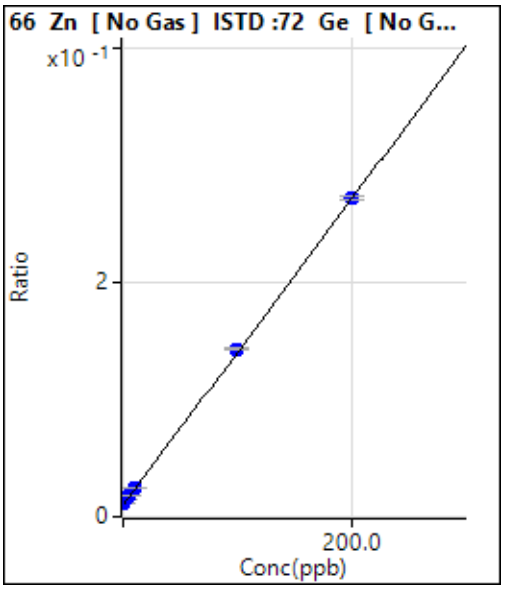
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	553.36	0.0012	P	19.2	
2	☐	2.000	2.004	8245.99	0.0178	P	1.1	0.2
3	☐	5.000	5.010	19621.10	0.0427	P	2.0	0.2
4	☐	10.000	9.690	37682.53	0.0814	P	2.1	-3.1
5	☐	100.000	101.056	390512.44	0.8371	P	1.4	1.1
6	☐	200.000	199.487	757934.41	1.6514	P	0.6	-0.3

y = 0.0083 * x + 0.0012
R = 1.0000
DL = 0.08451 ppb
BEC = 0.1466 ppb

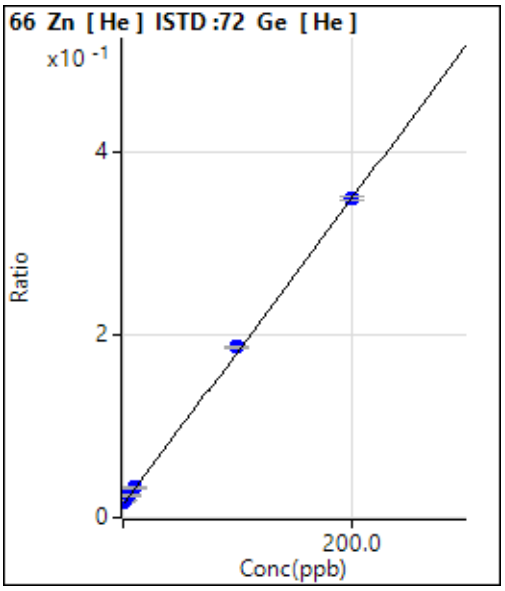
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16123.15	0.0114	P	4.4	
2	☐	2.000	2.360	20589.33	0.0145	P	3.0	18.0
3	☐	5.000	4.678	25086.86	0.0175	P	0.8	-6.4
4	☐	10.000	10.066	34838.30	0.0246	P	3.3	0.7
5	☐	100.000	100.809	203098.84	0.1429	P	1.5	0.8
6	☐	200.000	199.597	373198.70	0.2717	P	1.0	-0.2

y = 0.0013 * x + 0.0114
R = 1.0000
DL = 1.153 ppb
BEC = 8.776 ppb

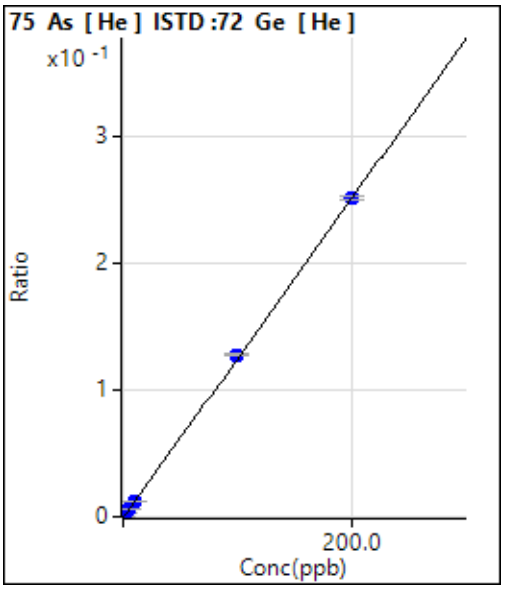
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7302.09	0.0160	P	0.6	
2	☐	2.000	1.494	8579.54	0.0185	P	3.1	-25.3
3	☐	5.000	5.041	11244.87	0.0244	P	2.3	0.8
4	☐	10.000	9.967	15142.02	0.0327	P	2.9	-0.3
5	☐	100.000	101.746	86947.41	0.1864	P	1.0	1.7
6	☐	200.000	199.133	160399.41	0.3495	P	1.3	-0.4

y = 0.0017 * x + 0.0160
R = 0.9999
DL = 0.1708 ppb
BEC = 9.557 ppb

Weight: <None>
Min Conc: <None>

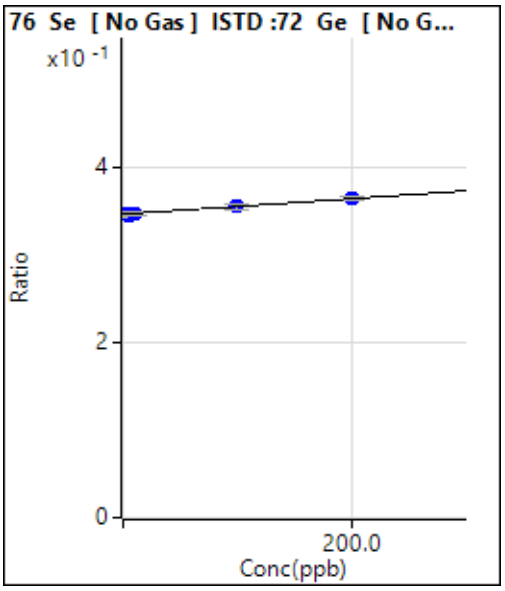


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	113.33	0.0002	P	13.8	
2	☐	2.000	2.080	1330.07	0.0029	P	2.3	4.0
3	☐	5.000	5.051	3041.47	0.0066	P	0.7	1.0
4	☐	10.000	9.866	5871.30	0.0127	P	0.7	-1.3
5	☐	100.000	101.329	59661.05	0.1279	P	1.1	1.3
6	☐	200.000	199.340	115363.99	0.2514	P	1.2	-0.3

y = 0.0013 * x + 2.4862E-004
R = 1.0000
DL = 0.08194 ppb
BEC = 0.1974 ppb

Weight: <None>
Min Conc: <None>

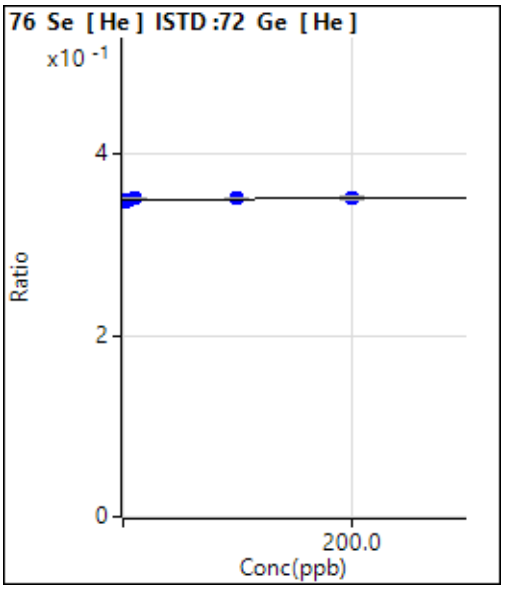
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	488547.58	0.3468	P	0.6	
2	☐	2.000	0.676	491690.06	0.3468	P	0.8	-66.2
3	☐	5.000	-23.031	492906.35	0.3447	P	0.9	-560.6
4	☐	10.000	8.392	492803.20	0.3475	P	1.6	-16.1
5	☐	100.000	94.950	504915.88	0.3552	P	1.5	-5.1
6	☐	200.000	203.320	501198.48	0.3649	P	1.4	1.7

y = 8.9213E-005 * x + 0.3468
R = 0.9925
DL = 67.5 ppb
BEC = 3887 ppb

Weight: <None>
Min Conc: <None>

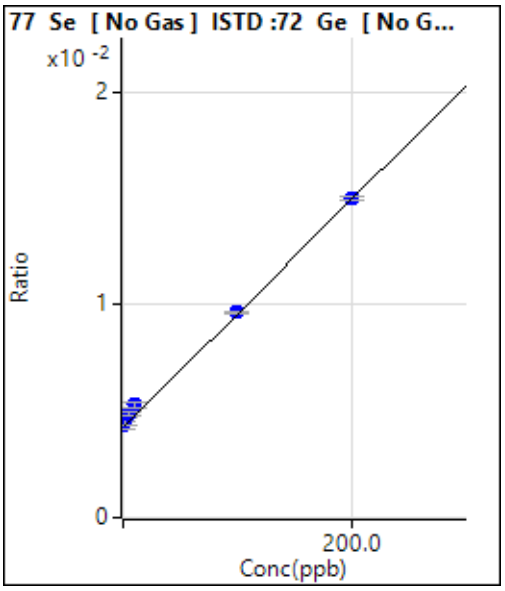


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	159660.32	0.3499	P	0.6	
2	☐	2.000	-164.239	161484.84	0.3483	P	0.4	-8311.
3	☐	5.000	41.296	161160.94	0.3503	P	0.5	725.9
4	☐	10.000	116.218	162604.06	0.3511	P	0.6	1062.2
5	☐	100.000	221.537	164270.81	0.3521	P	0.1	121.5
6	☐	200.000	134.675	161218.47	0.3513	P	1.2	-32.7

y = 9.8443E-006 * x + 0.3499
R = 0.5808
DL = 622.6 ppb
BEC = 3.555E+04 ppb

Weight: <None>
Min Conc: <None>

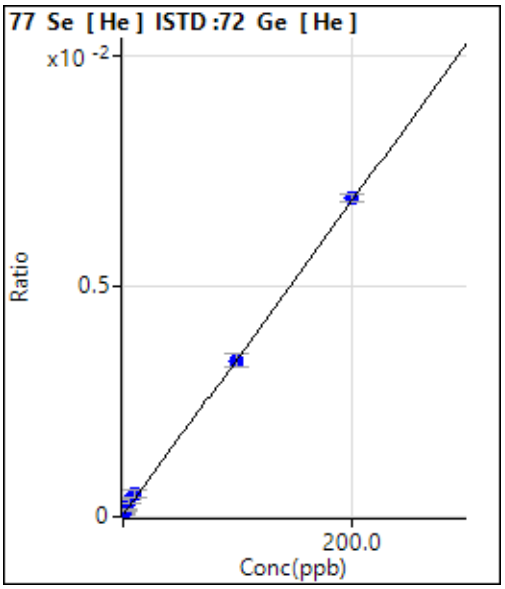
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6064.80	0.0043	P	8.4	
2	☐	2.000	4.380	6435.00	0.0045	P	7.9	119.0
3	☐	5.000	10.062	6925.22	0.0048	P	4.1	101.2
4	☐	10.000	18.571	7515.56	0.0053	P	5.1	85.7
5	☐	100.000	99.458	13690.54	0.0096	P	0.4	-0.5
6	☐	200.000	199.692	20602.66	0.0150	P	1.5	-0.2

y = 5.3552E-005 * x + 0.0043
R = 0.9993
DL = 20.32 ppb
BEC = 80.38 ppb

Weight: <None>
Min Conc: <None>

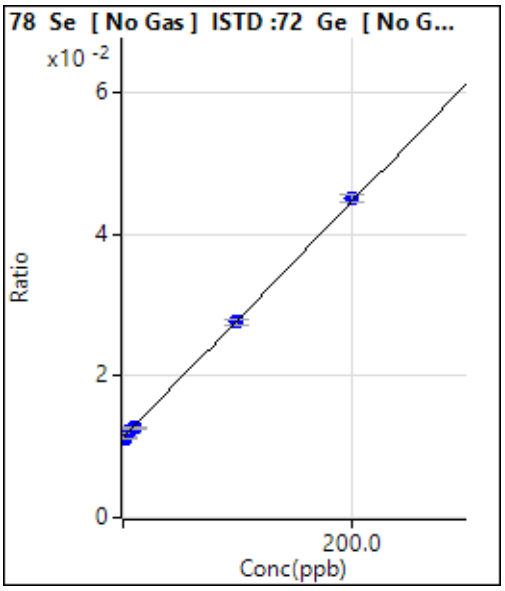


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	33.33	0.0001	P	61.9	
2	☐	2.000	2.090	66.67	0.0001	P	31.4	4.5
3	☐	5.000	7.656	153.33	0.0003	P	26.2	53.1
4	☐	10.000	12.905	236.67	0.0005	P	31.5	29.1
5	☐	100.000	97.434	1580.12	0.0034	P	8.8	-2.6
6	☐	200.000	201.071	3173.77	0.0069	P	2.7	0.5

y = 3.4027E-005 * x + 7.2749E-005
R = 0.9997
DL = 3.968 ppb
BEC = 2.138 ppb

Weight: <None>
Min Conc: <None>

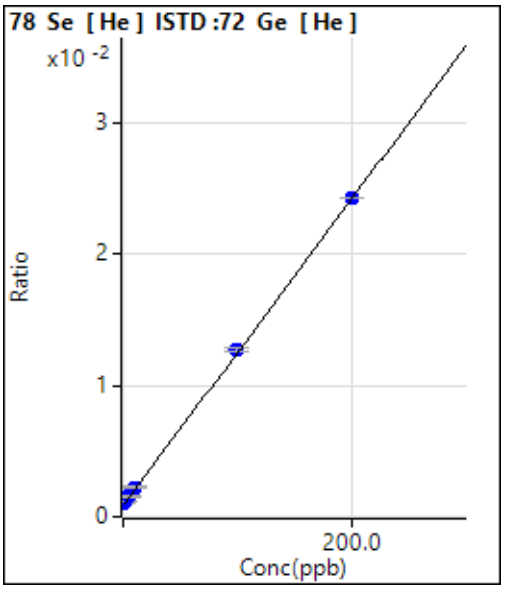
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16253.35	0.0115	P	1.4	
2	☐	2.000	-2.212	15832.86	0.0112	P	2.9	-210.6
3	☐	5.000	3.519	17331.41	0.0121	P	4.7	-29.6
4	☐	10.000	7.052	18028.96	0.0127	P	2.9	-29.5
5	☐	100.000	96.695	39250.78	0.0276	P	3.1	-3.3
6	☐	200.000	201.879	61962.37	0.0451	P	2.2	0.9

y = 1.6631E-004 * x + 0.0115
R = 0.9997
DL = 2.99 ppb
BEC = 69.37 ppb

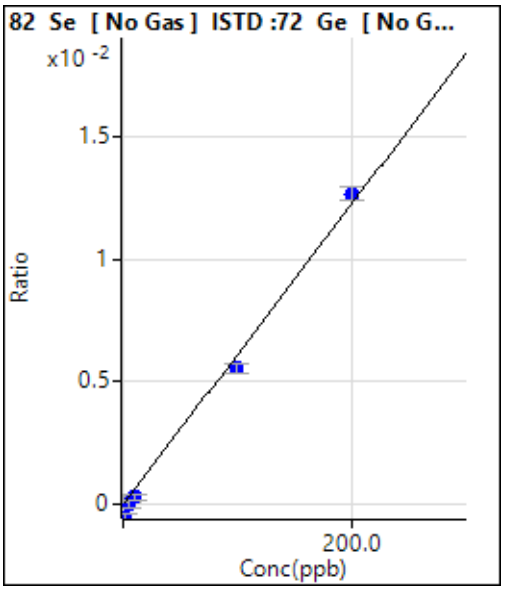
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	446.01	0.0010	P	4.3	
2	☐	2.000	1.719	546.01	0.0012	P	3.6	-14.0
3	☐	5.000	5.206	728.69	0.0016	P	6.6	4.1
4	☐	10.000	10.995	1046.04	0.0023	P	2.0	9.9
5	☐	100.000	100.629	5927.98	0.0127	P	1.5	0.6
6	☐	200.000	199.633	11127.94	0.0242	P	0.4	-0.2

y = 1.1655E-004 * x + 9.7729E-004
R = 1.0000
DL = 1.074 ppb
BEC = 8.385 ppb

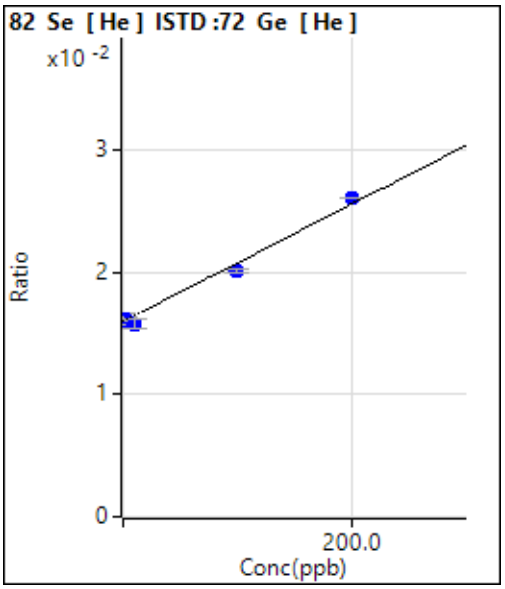
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	32.40	0.0000	P	1910.	
2	☐	2.000	-9.950	-835.26	-0.0006	P	-63.4	-597.5
3	☐	5.000	-1.430	-95.37	-0.0001	P	-430.	-128.6
4	☐	10.000	3.764	363.13	0.0003	P	77.6	-62.4
5	☐	100.000	89.442	7862.82	0.0055	P	6.4	-10.6
6	☐	200.000	205.871	17445.67	0.0127	P	5.0	2.9

y = 6.1585E-005 * x + 2.2822E-005
R = 0.9979
DL = 21.24 ppb
BEC = 0.3706 ppb

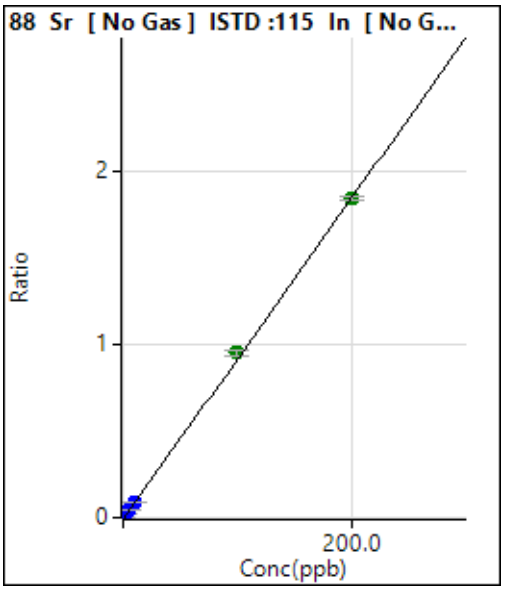
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7322.13	0.0161	P	7.3	
2	☐	2.000	3.221	7515.58	0.0162	P	1.2	61.1
3	☐	5.000	-3.199	7315.44	0.0159	P	2.6	-164.0
4	☐	10.000	-5.813	7305.46	0.0158	P	4.6	-158.1
5	☐	100.000	83.765	9366.73	0.0201	P	1.3	-16.2
6	☐	200.000	209.101	11978.86	0.0261	P	0.3	4.6

y = 4.8031E-005 * x + 0.0161
R = 0.9940
DL = 73.39 ppb
BEC = 334.3 ppb

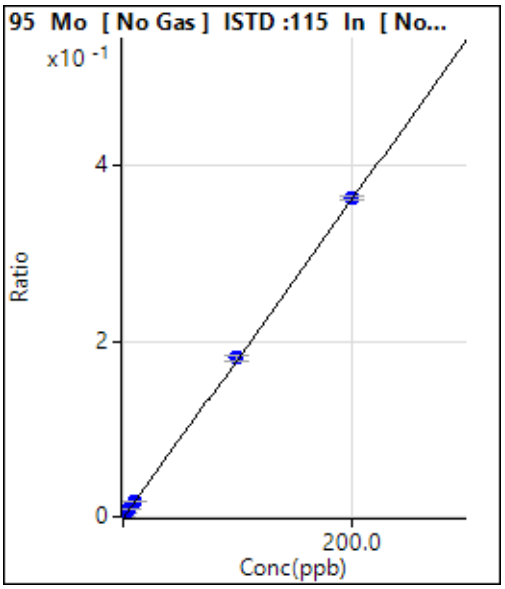
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	730.04	0.0004	P	13.1	
2	☐	2.000	1.891	29903.67	0.0179	P	1.7	-5.4
3	☐	5.000	4.990	79261.21	0.0466	P	2.1	-0.2
4	☐	10.000	9.272	145077.38	0.0863	P	1.3	-7.3
5	☐	100.000	102.440	1609026.54	0.9487	A	2.8	2.4
6	☐	200.000	198.818	3048031.72	1.8409	A	0.8	-0.6

y = 0.0093 * x + 4.3648E-004
R = 0.9999
DL = 0.01848 ppb
BEC = 0.04715 ppb

Weight: <None>
Min Conc: <None>

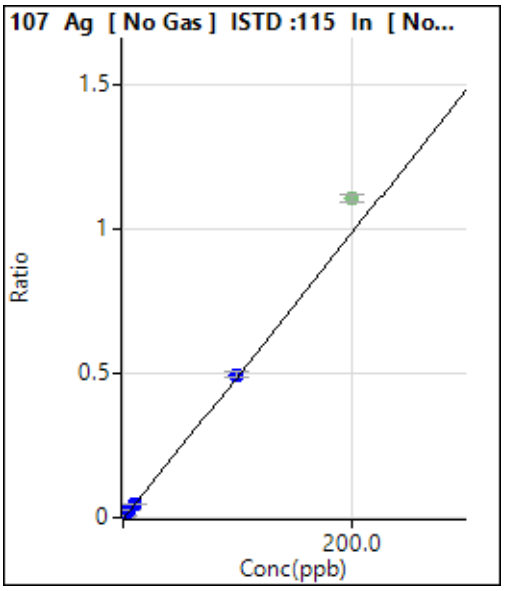


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	49.8	
2	☐	2.000	1.873	5684.65	0.0034	P	1.6	-6.3
3	☐	5.000	4.764	14715.06	0.0087	P	3.3	-4.7
4	☐	10.000	9.545	29158.90	0.0173	P	1.5	-4.5
5	☐	100.000	99.592	306523.71	0.1808	P	3.6	-0.4
6	☐	200.000	200.234	601711.31	0.3634	P	1.4	0.1

y = 0.0018 * x + 1.1959E-005
R = 1.0000
DL = 0.00984 ppb
BEC = 0.006589 ppb

Weight: <None>
Min Conc: <None>

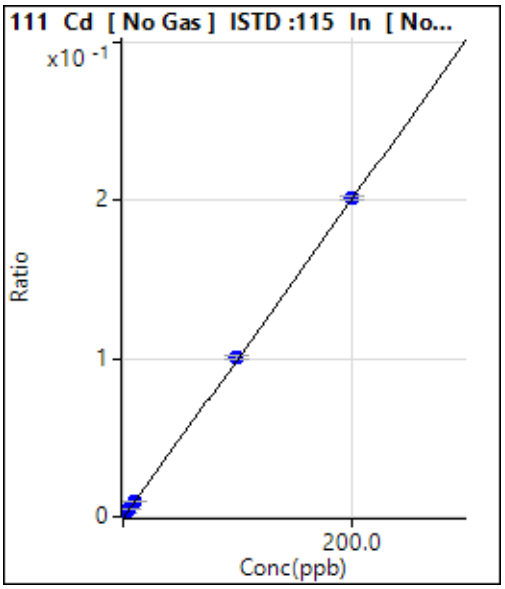
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0001	P	28.7	
2	☐	2.000	1.967	16353.74	0.0098	P	2.6	-1.7
3	☐	5.000	4.820	40652.89	0.0239	P	2.5	-3.6
4	☐	10.000	9.836	81926.53	0.0487	P	1.4	-1.6
5	☐	100.000	100.026	838721.89	0.4946	P	3.6	0.0
6	☑	200.000		1829217.26	1.1047	A	2.1	

y = 0.0049 * x + 8.9654E-005
R = 1.0000
DL = 0.01559 ppb
BEC = 0.01813 ppb

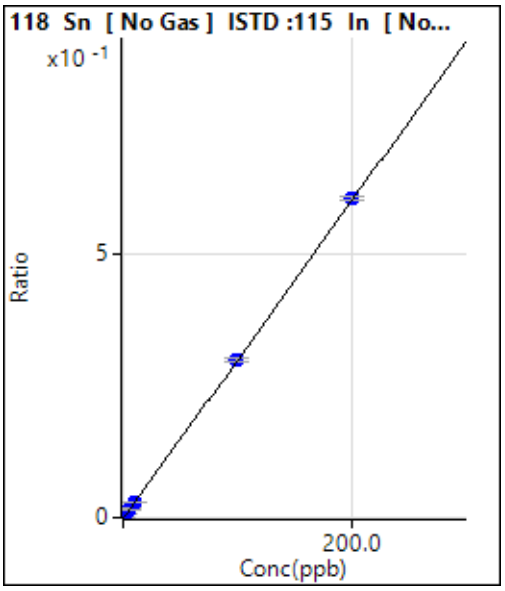
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	2.018	3383.84	0.0020	P	3.4	0.9
3	☐	5.000	4.700	8039.25	0.0047	P	2.3	-6.0
4	☐	10.000	9.642	16313.67	0.0097	P	2.3	-3.6
5	☐	100.000	99.923	170524.87	0.1005	P	2.2	-0.1
6	☐	200.000	200.064	333276.88	0.2013	P	1.1	0.0

y = 0.0010 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

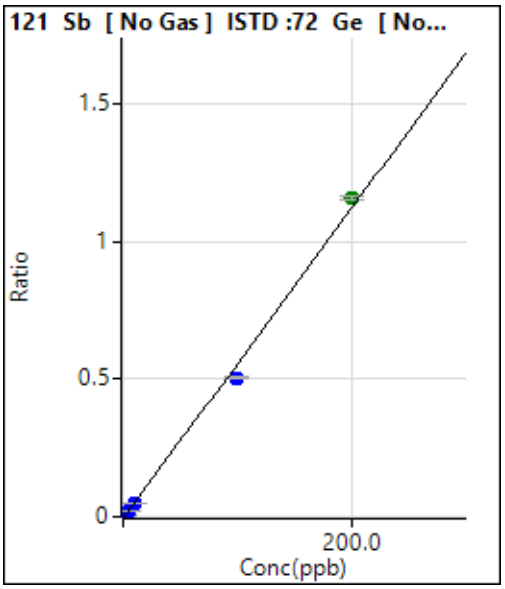
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1463.44	0.0009	P	8.7	
2	☐	2.000	1.927	11164.92	0.0067	P	5.2	-3.7
3	☐	5.000	5.050	27457.28	0.0161	P	13.0	1.0
4	☐	10.000	9.332	48928.03	0.0291	P	0.6	-6.7
5	☐	100.000	98.896	508658.85	0.2999	P	2.6	-1.1
6	☐	200.000	200.585	1005629.46	0.6074	P	1.4	0.3

y = 0.0030 * x + 8.7555E-004
R = 1.0000
DL = 0.07537 ppb
BEC = 0.2896 ppb

Weight: <None>
Min Conc: <None>

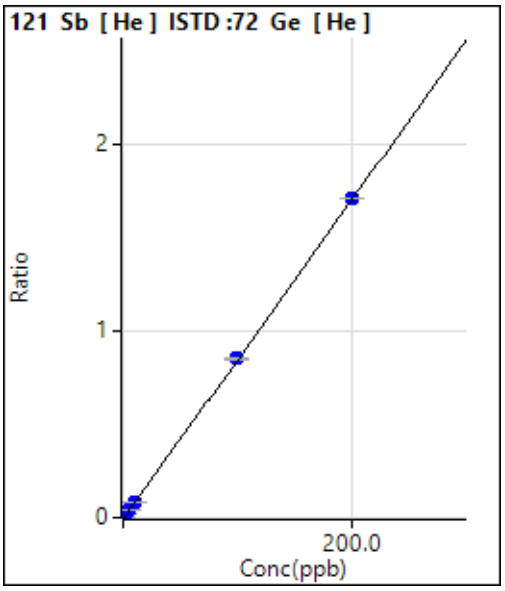


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0002	P	7.9	
2	☐	2.000	1.695	13804.22	0.0097	P	3.4	-15.2
3	☐	5.000	4.243	34452.20	0.0241	P	1.4	-15.1
4	☐	10.000	8.675	69581.10	0.0491	P	2.5	-13.2
5	☐	100.000	89.173	714440.98	0.5026	P	1.4	-10.8
6	☐	200.000	205.502	1590742.89	1.1581	A	1.4	2.8

y = 0.0056 * x + 1.8457E-004
R = 0.9980
DL = 0.00775 ppb
BEC = 0.03276 ppb

Weight: <None>
Min Conc: <None>

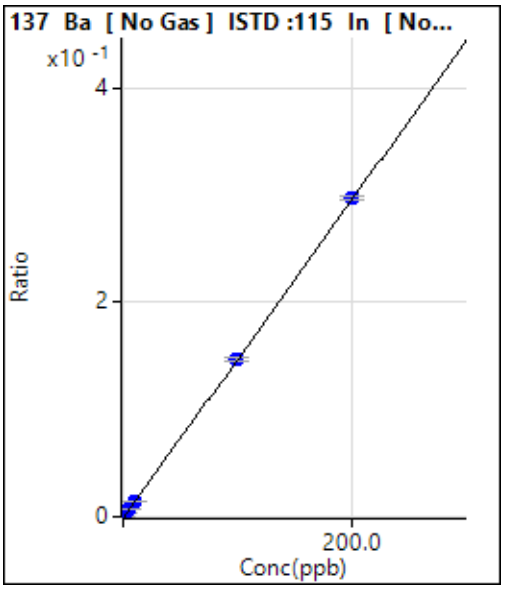
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0003	P	27.9	
2	☐	2.000	1.985	8015.91	0.0173	P	2.6	-0.7
3	☐	5.000	4.898	19401.31	0.0422	P	3.9	-2.0
4	☐	10.000	9.575	38035.45	0.0821	P	4.2	-4.2
5	☐	100.000	99.803	397920.03	0.8530	P	1.2	-0.2
6	☐	200.000	200.122	784879.23	1.7101	P	0.5	0.1

y = 0.0085 * x + 3.2809E-004
R = 1.0000
DL = 0.03212 ppb
BEC = 0.0384 ppb

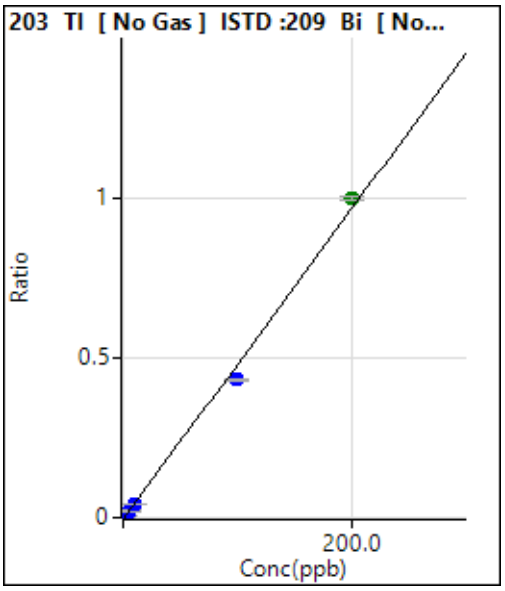
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	126.67	0.0001	P	9.7	
2	☐	2.000	2.003	5081.09	0.0030	P	1.7	0.2
3	☐	5.000	4.716	12029.09	0.0071	P	1.0	-5.7
4	☐	10.000	9.578	24035.79	0.0143	P	2.5	-4.2
5	☐	100.000	99.336	250207.93	0.1475	P	2.9	-0.7
6	☐	200.000	200.360	492578.05	0.2975	P	0.9	0.2

y = 0.0015 * x + 7.5785E-005
R = 1.0000
DL = 0.01479 ppb
BEC = 0.05105 ppb

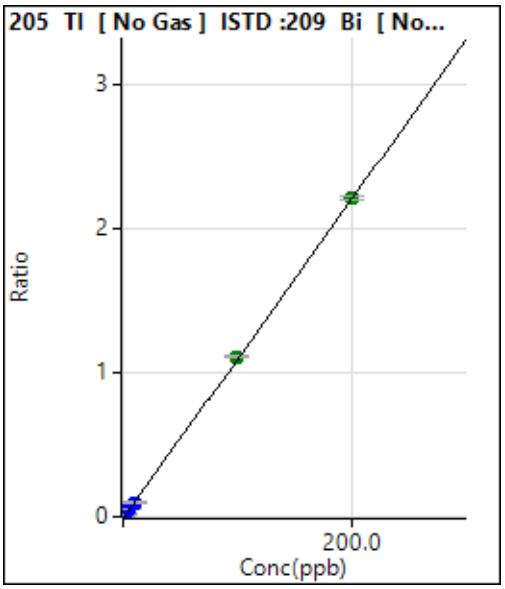
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	34.4	
2	☐	2.000	1.714	13604.35	0.0083	P	2.3	-14.3
3	☐	5.000	4.258	33592.33	0.0207	P	4.8	-14.8
4	☐	10.000	8.522	67502.47	0.0413	P	3.5	-14.8
5	☐	100.000	88.781	700088.76	0.4306	P	0.6	-11.2
6	☐	200.000	205.705	1590313.99	0.9977	A	0.7	2.9

y = 0.0048 * x + 1.0237E-005
R = 0.9979
DL = 0.002181 ppb
BEC = 0.002111 ppb

Weight: <None>
Min Conc: <None>

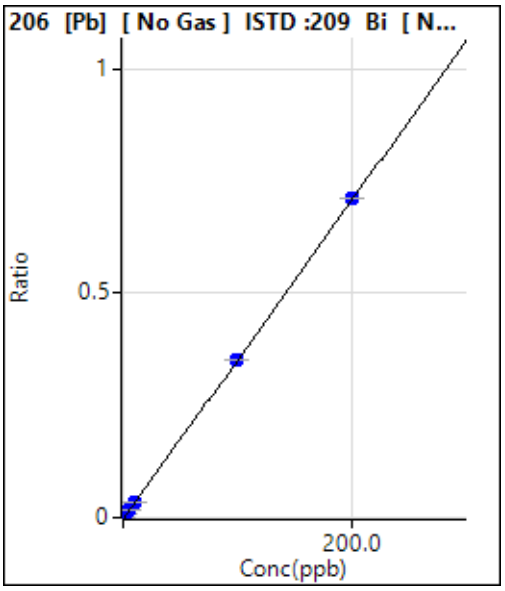


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43.33	0.0000	P	35.6	
2	☐	2.000	1.799	32626.34	0.0200	P	2.8	-10.1
3	☐	5.000	4.404	79415.67	0.0488	P	2.8	-11.9
4	☐	10.000	8.956	162175.43	0.0993	P	2.5	-10.4
5	☐	100.000	100.447	1810404.35	1.1136	A	1.4	0.4
6	☐	200.000	199.845	3531256.82	2.2155	A	1.6	-0.1

y = 0.0111 * x + 2.6648E-005
R = 1.0000
DL = 0.00257 ppb
BEC = 0.002404 ppb

Weight: <None>
Min Conc: <None>

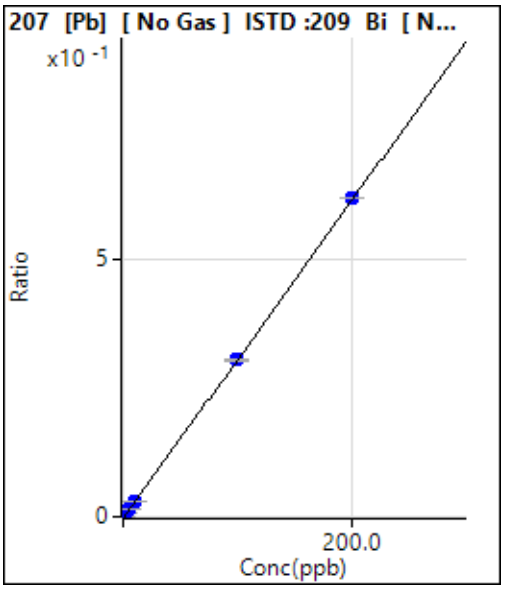
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	123.34	0.0001	P	44.0	
2	☐	2.000	1.929	11315.35	0.0069	P	4.2	-3.6
3	☐	5.000	4.767	27651.13	0.0170	P	2.4	-4.7
4	☐	10.000	9.639	56029.10	0.0343	P	1.2	-3.6
5	☐	100.000	99.274	573304.55	0.3526	P	0.6	-0.7
6	☐	200.000	200.388	1134431.18	0.7117	P	0.3	0.2

y = 0.0036 * x + 7.5662E-005
R = 1.0000
DL = 0.02812 ppb
BEC = 0.02131 ppb

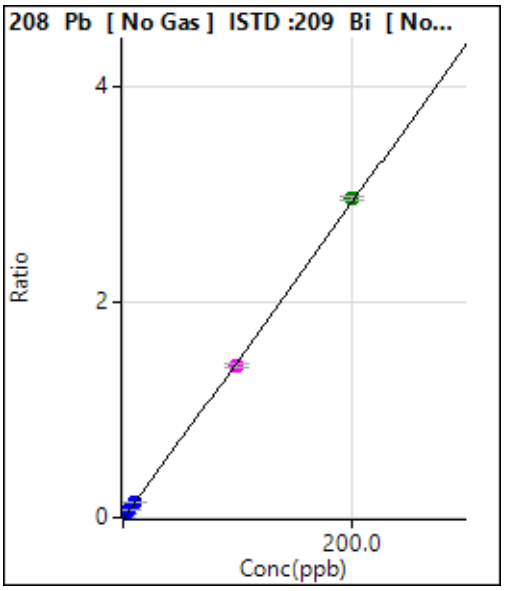
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	146.67	0.0001	P	4.7	
2	☐	2.000	1.934	9867.42	0.0060	P	1.1	-3.3
3	☐	5.000	4.665	23472.45	0.0144	P	0.8	-6.7
4	☐	10.000	9.556	48139.79	0.0295	P	1.2	-4.4
5	☐	100.000	98.632	493258.59	0.3034	P	0.2	-1.4
6	☐	200.000	200.715	983940.29	0.6173	P	0.4	0.4

y = 0.0031 * x + 9.0159E-005
R = 1.0000
DL = 0.004108 ppb
BEC = 0.02932 ppb

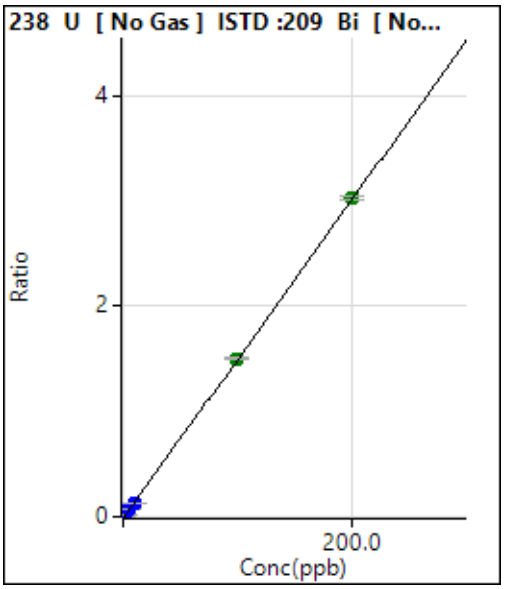
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	526.68	0.0003	P	6.8	
2	☐	2.000	1.847	44929.09	0.0275	P	3.4	-7.6
3	☐	5.000	4.547	109299.24	0.0672	P	1.2	-9.1
4	☐	10.000	9.203	221619.65	0.1357	P	1.5	-8.0
5	☐	100.000	96.377	2305350.51	1.4180	M	2.1	-3.6
6	☐	200.000	201.864	4733726.33	2.9698	A	0.6	0.9

y = 0.0147 * x + 3.2379E-004
R = 0.9998
DL = 0.004493 ppb
BEC = 0.02201 ppb

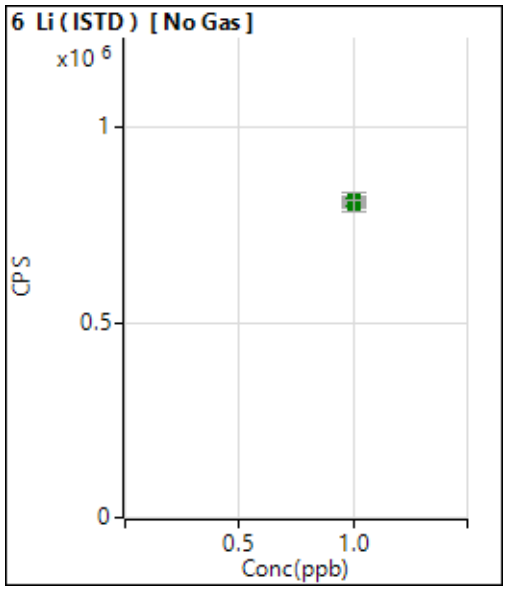
Weight: <None>
Min Conc: <None>



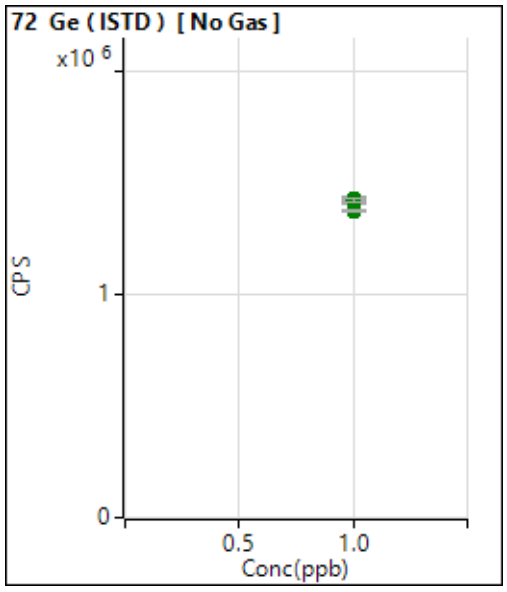
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	100.4	
2	☐	2.000	1.775	43882.52	0.0269	P	2.7	-11.2
3	☐	5.000	4.437	109137.98	0.0671	P	1.2	-11.3
4	☐	10.000	8.968	221537.58	0.1356	P	1.4	-10.3
5	☐	100.000	99.415	2444703.14	1.5037	A	0.9	-0.6
6	☐	200.000	200.360	4830317.53	3.0305	A	1.4	0.2

y = 0.0151 * x + 6.1417E-006
R = 1.0000
DL = 0.001223 ppb
BEC = 0.0004061 ppb

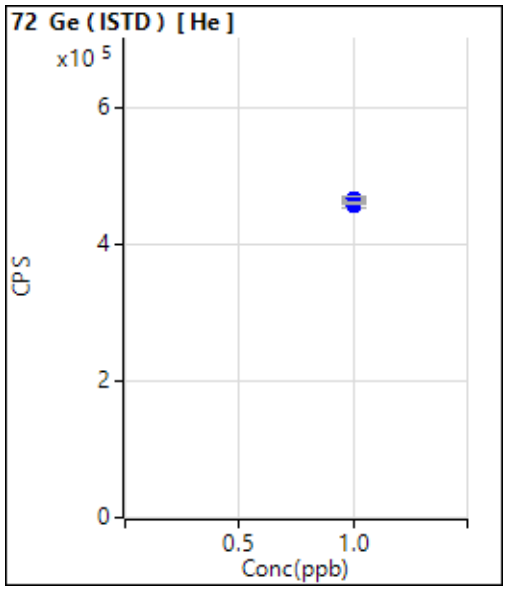
Weight: <None>
Min Conc: <None>



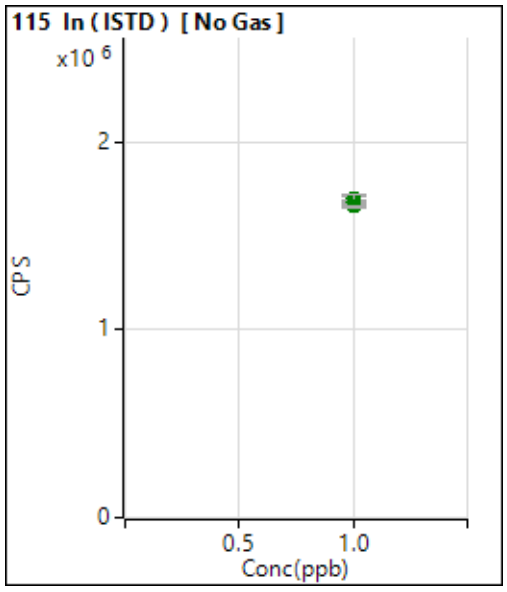
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		815144.87		A	2.4	
2	☐	1.000		809344.41		A	2.1	
3	☐	1.000		815260.28		A	0.9	
4	☐	1.000		803487.31		A	1.7	
5	☐	1.000		819312.87		A	3.4	
6	☐	1.000		797992.96		A	3.6	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1408872.38		A	0.2	
2	☐	1.000		1417753.73		A	0.7	
3	☐	1.000		1429994.46		A	0.8	
4	☐	1.000		1418258.52		A	1.1	
5	☐	1.000		1421543.00		A	1.3	
6	☐	1.000		1373592.43		A	0.7	

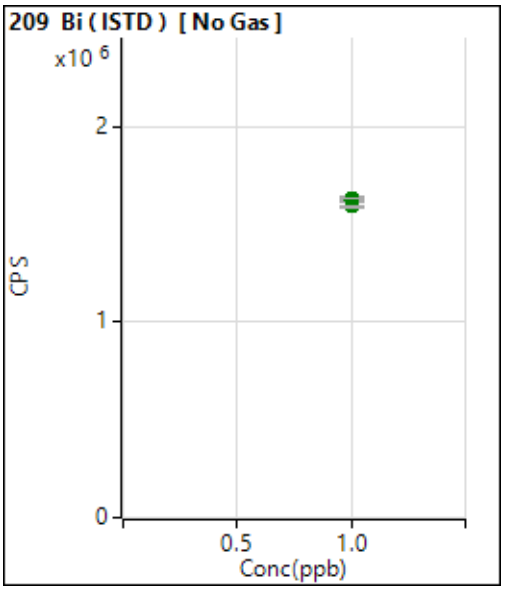


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		456267.27		P	1.1	
2	☐	1.000		463609.48		P	0.4	
3	☐	1.000		460006.44		P	0.2	
4	☐	1.000		463164.94		P	1.0	
5	☐	1.000		466519.77		P	0.8	
6	☐	1.000		458970.39		P	0.4	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1671941.00		A	0.5	
2	☐	1.000		1666469.60		A	0.6	
3	☐	1.000		1699936.61		A	0.8	
4	☐	1.000		1681940.19		A	1.5	
5	☐	1.000		1696924.17		A	3.0	
6	☐	1.000		1655831.27		A	0.9	

Calibration for 250_ICV.d



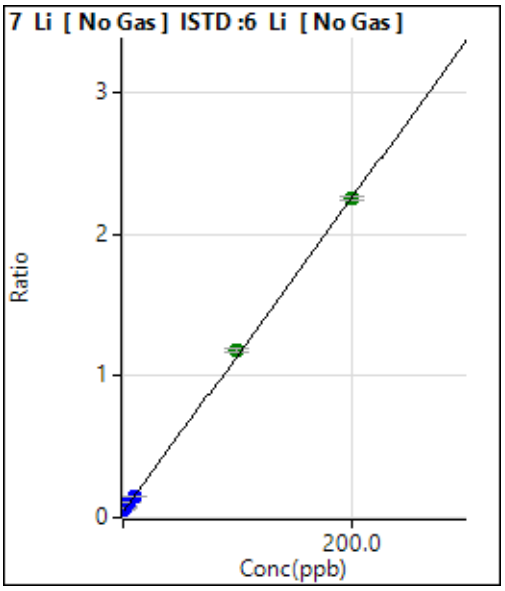
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1627139.04		A	0.8	
2	☐	1.000		1634344.40		A	0.9	
3	☐	1.000		1626259.35		A	1.2	
4	☐	1.000		1633500.97		A	1.8	
5	☐	1.000		1625904.67		A	0.9	
6	☐	1.000		1593996.69		A	0.6	

Calibration for 180_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\071922A.b\
Analysis File: 071922A.batch.bin
DA Date-Time: 07/19/2022 22:23:26
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	173CALB.d	CAL BLK	07/19/2022 19:42:23
2	174CALS.d	2/10/200	07/19/2022 19:44:29
3	175CALS.d	5/25/500	07/19/2022 19:46:35
4	176CALS.d	10/50/100	07/19/2022 19:48:41
5	177CALS.d	100/500/10K	07/19/2022 19:50:47
6	178CALS.d	200/1000/20K	07/19/2022 19:52:49

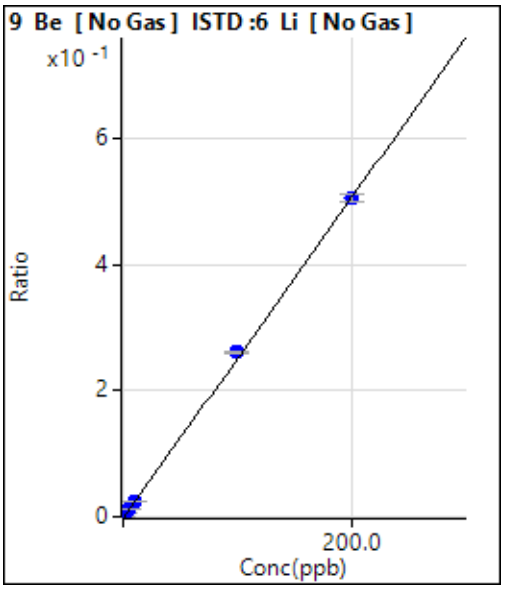
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	42473.94	0.0516	P	0.8	
2	☐	2.000	2.007	60119.31	0.0738	P	2.9	0.3
3	☐	5.000	4.826	84682.83	0.1051	P	1.9	-3.5
4	☐	10.000	9.316	125475.61	0.1549	P	0.6	-6.8
5	☐	100.000	102.400	935293.74	1.1872	A	1.9	2.4
6	☐	200.000	198.839	1737046.02	2.2568	A	1.5	-0.6

y = 0.0111 * x + 0.0516
R = 0.9999
DL = 0.1096 ppb
BEC = 4.651 ppb

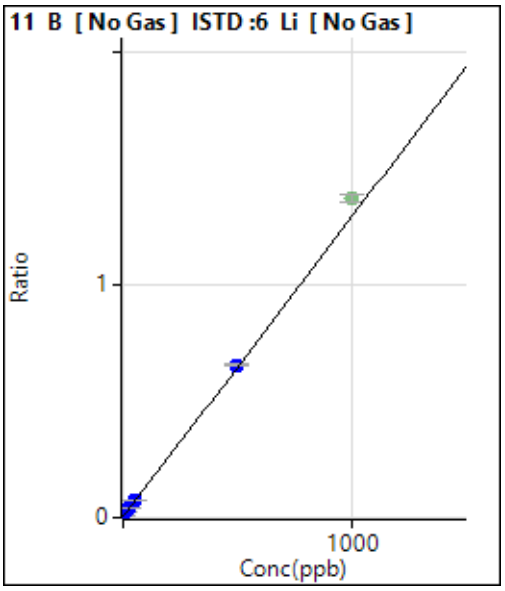
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18.33	0.0000	P	15.7	
2	☐	2.000	1.929	4020.61	0.0049	P	2.7	-3.6
3	☐	5.000	4.822	9916.88	0.0123	P	2.6	-3.6
4	☐	10.000	9.668	19975.93	0.0247	P	0.6	-3.3
5	☐	100.000	102.460	205670.52	0.2611	P	1.6	2.5
6	☐	200.000	198.792	389818.64	0.5066	P	2.3	-0.6

y = 0.0025 * x + 2.2261E-005
R = 0.9999
DL = 0.004106 ppb
BEC = 0.008736 ppb

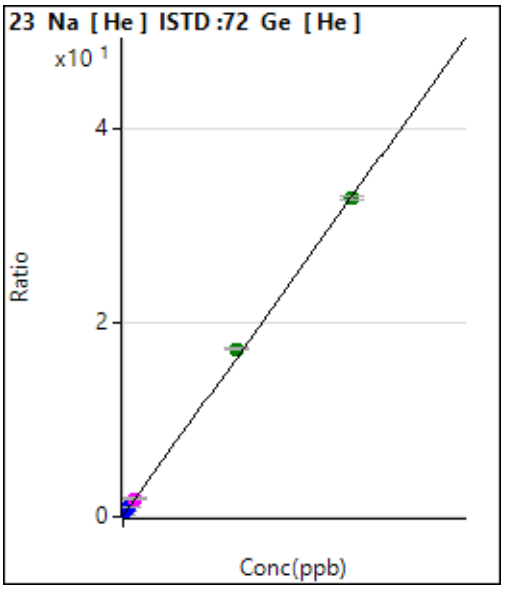
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8554.34	0.0104	P	1.3	
2	☐	10.000	9.134	18063.31	0.0222	P	0.9	-8.7
3	☐	25.000	23.923	33255.97	0.0413	P	1.2	-4.3
4	☐	50.000	47.709	58315.47	0.0720	P	0.5	-4.6
5	☐	500.000	500.300	516987.22	0.6563	P	0.7	0.1
6	☑	1000.000		1057851.83	1.3747	A	2.5	

y = 0.0013 * x + 0.0104
R = 1.0000
DL = 0.3052 ppb
BEC = 8.045 ppb

Weight: <None>
Min Conc: <None>

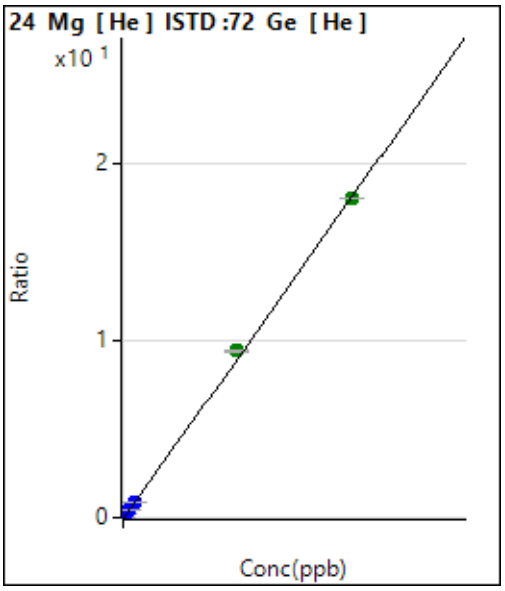


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	109366.02	0.2557	P	1.5	
2	☐	200.000	192.418	245596.27	0.5722	P	0.5	-3.8
3	☐	500.000	477.420	443648.69	1.0409	P	0.4	-4.5
4	☐	1000.000	986.580	801852.04	1.8784	M	5.3	-1.3
5	☐	10000.00	10356.22	7351344.68	17.2898	A	1.1	3.6
6	☐	20000.00	19823.19	13859601.0	32.8613	A	1.7	-0.9

y = 0.0016 * x + 0.2557
R = 0.9998
DL = 7.139 ppb
BEC = 155.4 ppb

Weight: <None>
Min Conc: <None>

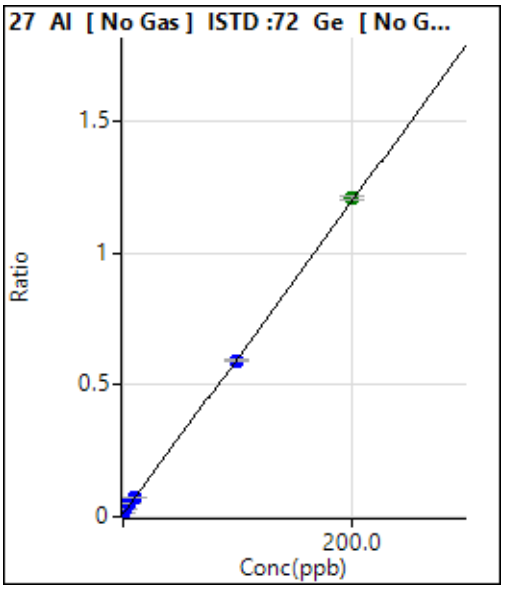
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	256.68	0.0006	P	12.9	
2	☐	200.000	199.530	78225.71	0.1822	P	1.7	-0.2
3	☐	500.000	488.542	189791.67	0.4453	P	0.2	-2.3
4	☐	1000.000	980.218	381094.81	0.8929	P	0.9	-2.0
5	☐	10000.00	10336.49	4000796.81	9.4097	A	1.6	3.4
6	☐	20000.00	19833.03	7615284.89	18.0543	A	0.6	-0.8

y = 9.1028E-004 * x + 6.0020E-004
R = 0.9998
DL = 0.2542 ppb
BEC = 0.6594 ppb

Weight: <None>
Min Conc: <None>

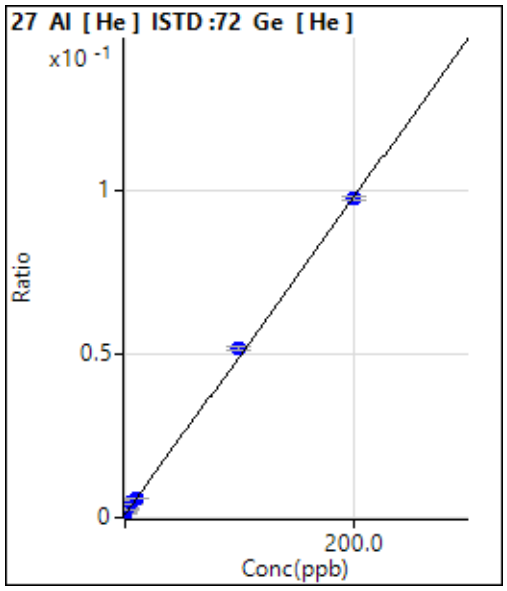


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	21848.46	0.0161	P	4.0	
2	☐	2.000	1.867	36628.59	0.0271	P	1.1	-6.7
3	☐	5.000	5.441	65383.58	0.0483	P	1.7	8.8
4	☐	10.000	9.232	94623.62	0.0708	P	0.1	-7.7
5	☐	100.000	97.336	787213.04	0.5933	P	0.5	-2.7
6	☐	200.000	201.360	1579516.80	1.2102	A	1.6	0.7

y = 0.0059 * x + 0.0161
R = 0.9999
DL = 0.3283 ppb
BEC = 2.708 ppb

Weight: <None>
Min Conc: <None>

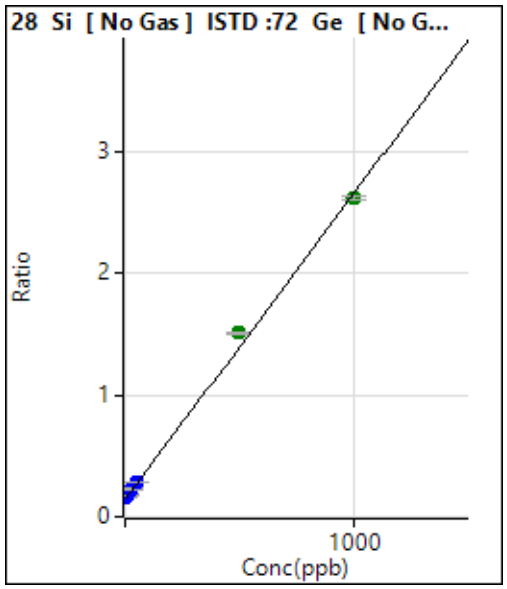
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	610.02	0.0014	P	14.7	
2	☐	2.000	2.571	1146.74	0.0027	P	4.7	28.5
3	☐	5.000	6.560	1960.36	0.0046	P	19.2	31.2
4	☐	10.000	9.233	2516.95	0.0059	P	5.8	-7.7
5	☐	100.000	103.207	21857.46	0.0514	P	2.3	3.2
6	☐	200.000	198.390	41127.65	0.0975	P	0.8	-0.8

y = 4.8429E-004 * x + 0.0014
R = 0.9998
DL = 1.295 ppb
BEC = 2.944 ppb

Weight: <None>
Min Conc: <None>

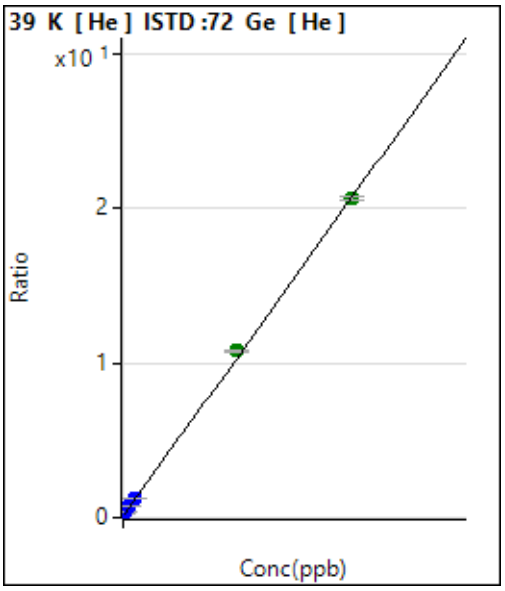


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	210874.53	0.1550	P	2.2	
2	☐	10.000	10.281	244093.50	0.1808	P	1.4	2.8
3	☐	25.000	28.106	305153.17	0.2256	P	2.9	12.4
4	☐	50.000	52.799	384312.83	0.2876	P	1.7	5.6
5	☐	500.000	538.279	1998792.89	1.5064	A	0.8	7.7
6	☐	1000.000	980.640	3415753.80	2.6169	A	1.3	-1.9

y = 0.0025 * x + 0.1550
R = 0.9990
DL = 4.143 ppb
BEC = 61.75 ppb

Weight: <None>
Min Conc: <None>

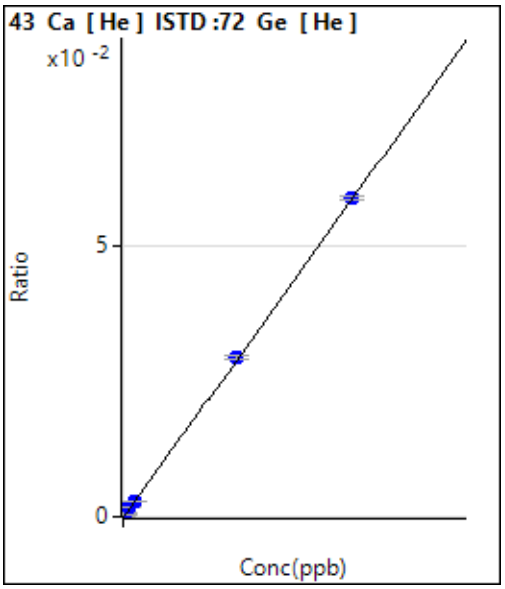
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	87331.88	0.2042	P	1.7	
2	☐	200.000	190.632	171858.75	0.4004	P	1.3	-4.7
3	☐	500.000	482.825	298834.26	0.7012	P	0.6	-3.4
4	☐	1000.000	962.307	509902.27	1.1947	P	1.8	-3.8
5	☐	10000.00	10298.11	4593966.08	10.8047	A	1.4	3.0
6	☐	20000.00	19853.35	8705619.87	20.6405	A	1.4	-0.7

y = 0.0010 * x + 0.2042
R = 0.9998
DL = 10.41 ppb
BEC = 198.3 ppb

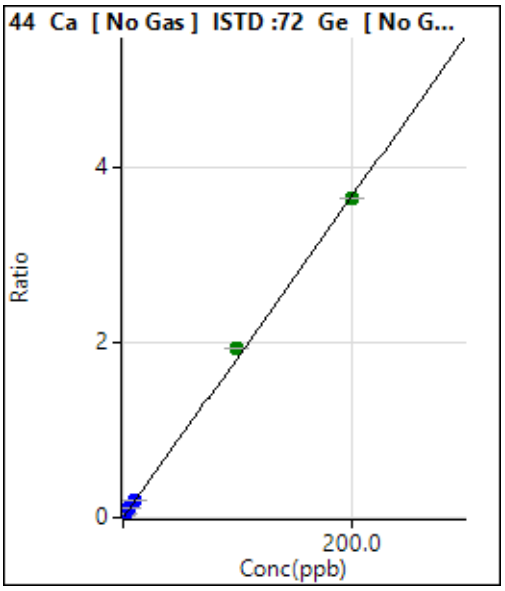
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	66.3	
2	☐	200.000	157.785	240.01	0.0006	P	24.5	-21.1
3	☐	500.000	575.762	763.37	0.0018	P	10.1	15.2
4	☐	1000.000	932.810	1213.41	0.0028	P	5.7	-6.7
5	☐	10000.00	9973.947	12535.93	0.0295	P	2.7	-0.3
6	☐	20000.00	20014.91	24919.48	0.0591	P	1.4	0.1

y = 2.9468E-006 * x + 9.3651E-005
R = 1.0000
DL = 63.25 ppb
BEC = 31.78 ppb

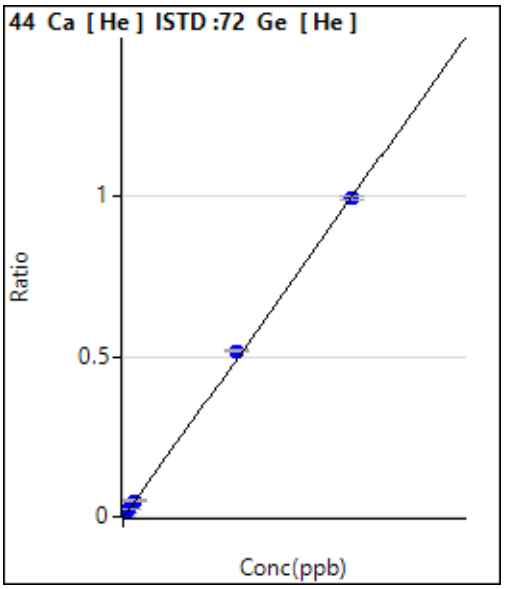
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	21941.04	0.0161	P	2.5	
2	☐	2.000	1.980	70801.44	0.0525	P	2.3	-1.0
3	☐	5.000	5.028	146614.56	0.1084	P	3.0	0.6
4	☐	10.000	9.919	264738.93	0.1981	P	0.7	-0.8
5	☐	100.000	104.149	2556946.11	1.9270	A	0.3	4.1
6	☐	200.000	197.929	4761101.08	3.6477	A	0.4	-1.0

y = 0.0183 * x + 0.0161
R = 0.9997
DL = 0.06482 ppb
BEC = 0.8791 ppb

Weight: <None>
Min Conc: <None>

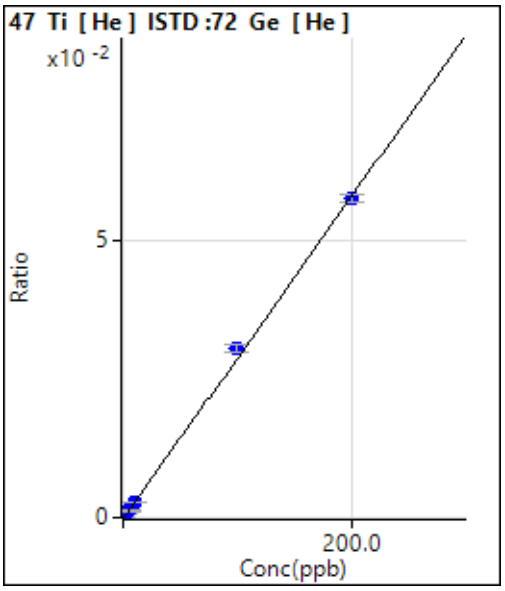


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	486.69	0.0011	P	10.9	
2	☐	200.000	203.128	4850.94	0.0113	P	7.3	1.6
3	☐	500.000	492.852	10997.91	0.0258	P	1.3	-1.4
4	☐	1000.000	993.640	21710.78	0.0509	P	2.1	-0.6
5	☐	10000.00	10302.94	219719.66	0.5168	P	1.5	3.0
6	☐	20000.00	19848.99	419492.78	0.9945	P	0.8	-0.8

y = 5.0048E-005 * x + 0.0011
R = 0.9998
DL = 7.45 ppb
BEC = 22.74 ppb

Weight: <None>
Min Conc: <None>

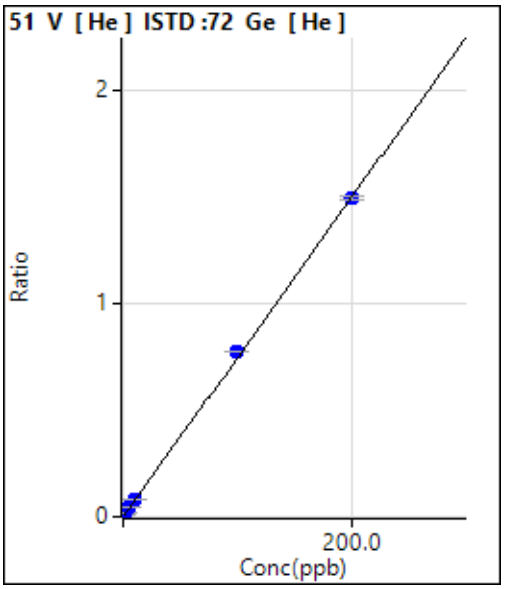
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	69.0	
2	☐	2.000	2.072	276.68	0.0006	P	26.9	3.6
3	☐	5.000	4.394	563.35	0.0013	P	22.2	-12.1
4	☐	10.000	9.499	1200.07	0.0028	P	0.9	-5.0
5	☐	100.000	104.562	12993.02	0.0306	P	4.9	4.6
6	☐	200.000	197.759	24368.64	0.0578	P	2.1	-1.1

y = 2.9192E-004 * x + 3.8911E-005
R = 0.9996
DL = 0.2758 ppb
BEC = 0.1333 ppb

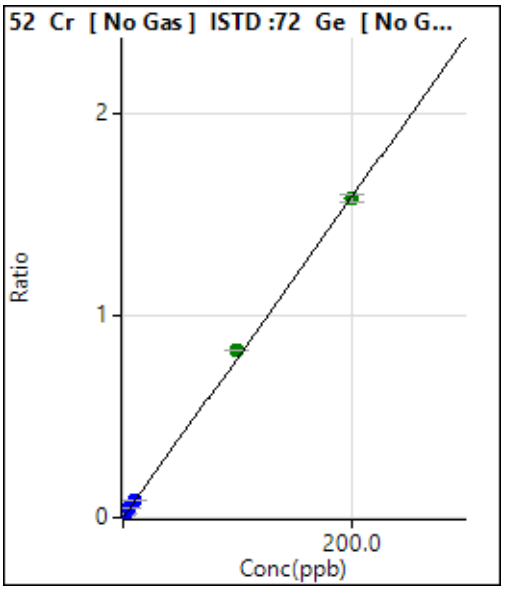
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2791.41	0.0065	P	3.5	
2	☐	2.000	1.904	8914.04	0.0208	P	1.6	-4.8
3	☐	5.000	4.878	18334.51	0.0430	P	1.1	-2.4
4	☐	10.000	9.727	33843.82	0.0793	P	1.4	-2.7
5	☐	100.000	102.879	330048.23	0.7762	P	0.3	2.9
6	☐	200.000	198.578	629379.69	1.4922	P	1.2	-0.7

y = 0.0075 * x + 0.0065
R = 0.9998
DL = 0.09221 ppb
BEC = 0.8721 ppb

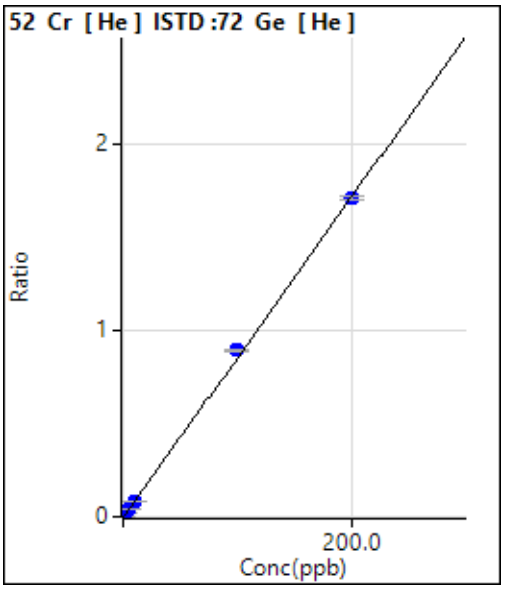
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10314.06	0.0076	P	2.6	
2	☐	2.000	1.890	30497.63	0.0226	P	2.4	-5.5
3	☐	5.000	4.647	60188.73	0.0445	P	3.4	-7.1
4	☐	10.000	9.398	109888.53	0.0822	P	1.0	-6.0
5	☐	100.000	103.536	1101350.56	0.8300	A	1.0	3.5
6	☐	200.000	198.272	2065652.47	1.5826	A	2.7	-0.9

y = 0.0079 * x + 0.0076
R = 0.9998
DL = 0.07463 ppb
BEC = 0.9546 ppb

Weight: <None>
Min Conc: <None>

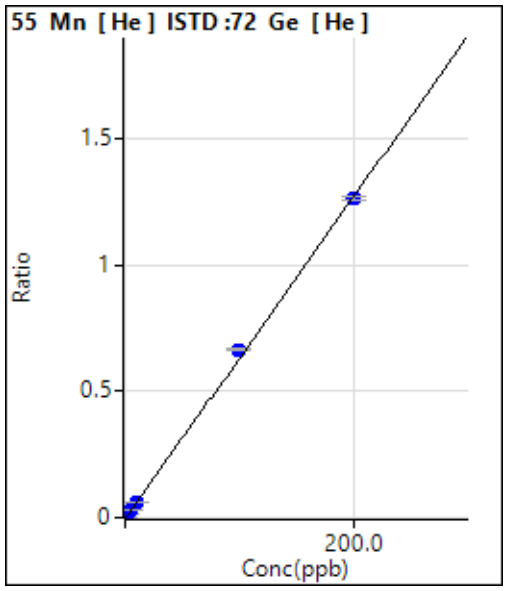


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1170.07	0.0027	P	3.3	
2	☐	2.000	1.956	8406.03	0.0196	P	0.3	-2.2
3	☐	5.000	4.964	19387.35	0.0455	P	1.8	-0.7
4	☐	10.000	9.788	37147.34	0.0870	P	1.1	-2.1
5	☐	100.000	103.481	380102.90	0.8939	P	0.6	3.5
6	☐	200.000	198.271	721344.73	1.7103	P	1.4	-0.9

y = 0.0086 * x + 0.0027
R = 0.9998
DL = 0.03116 ppb
BEC = 0.3176 ppb

Weight: <None>
Min Conc: <None>

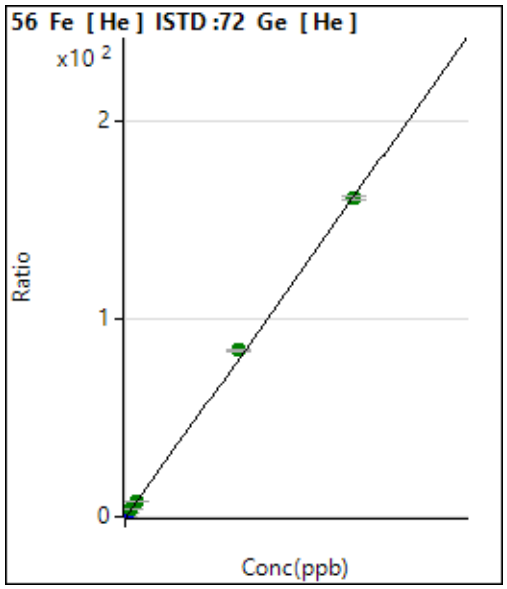
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	420.01	0.0010	P	15.3	
2	☐	2.000	2.044	6024.76	0.0140	P	3.4	2.2
3	☐	5.000	5.017	14074.09	0.0330	P	1.7	0.3
4	☐	10.000	9.882	27354.34	0.0641	P	1.5	-1.2
5	☐	100.000	104.043	282937.08	0.6654	P	0.8	4.0
6	☐	200.000	197.984	533699.03	1.2654	P	1.3	-1.0

y = 0.0064 * x + 9.8228E-004
R = 0.9997
DL = 0.07077 ppb
BEC = 0.1538 ppb

Weight: <None>
Min Conc: <None>

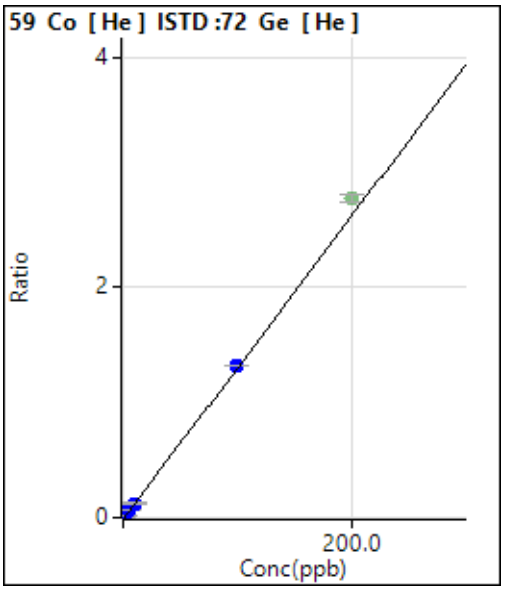


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11054.68	0.0258	P	1.9	
2	☐	200.000	193.848	686832.73	1.6001	P	0.8	-3.1
3	☐	500.000	520.191	1811651.01	4.2505	A	1.3	4.0
4	☐	1000.000	1004.511	3492905.68	8.1838	A	1.1	0.5
5	☐	10000.00	10347.18	35741262.8	84.0591	A	0.6	3.5
6	☐	20000.00	19825.73	67919897.3	161.037	A	1.6	-0.9

y = 0.0081 * x + 0.0258
R = 0.9998
DL = 0.1838 ppb
BEC = 3.182 ppb

Weight: <None>
Min Conc: <None>

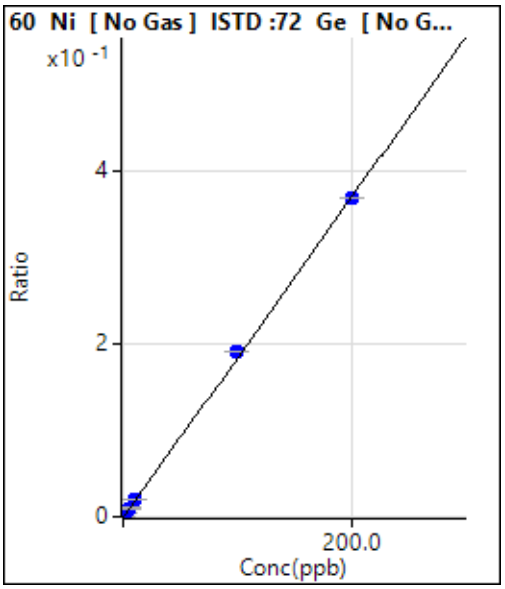
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	34.8	
2	☐	2.000	1.878	10627.62	0.0248	P	2.1	-6.1
3	☐	5.000	4.834	27137.30	0.0637	P	1.3	-3.3
4	☐	10.000	9.496	53367.86	0.1250	P	1.2	-5.0
5	☐	100.000	100.061	560062.95	1.3172	P	0.5	0.1
6	☑	200.000		1169340.37	2.7727	A	2.5	

y = 0.0132 * x + 3.8987E-005
R = 1.0000
DL = 0.003096 ppb
BEC = 0.002962 ppb

Weight: <None>
Min Conc: <None>

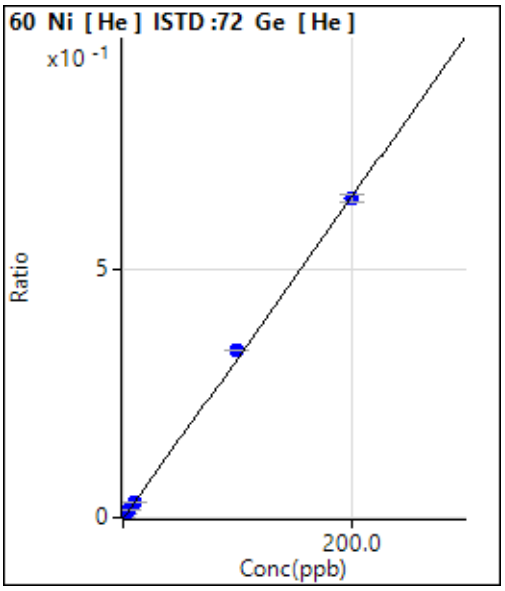


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	863.38	0.0006	P	5.0	
2	☐	2.000	1.901	5621.26	0.0042	P	7.2	-5.0
3	☐	5.000	4.963	13333.39	0.0099	P	4.2	-0.7
4	☐	10.000	10.118	25971.82	0.0194	P	3.6	1.2
5	☐	100.000	103.063	254971.40	0.1922	P	0.2	3.1
6	☐	200.000	198.465	482215.37	0.3694	P	0.3	-0.8

y = 0.0019 * x + 6.3465E-004
R = 0.9998
DL = 0.05081 ppb
BEC = 0.3415 ppb

Weight: <None>
Min Conc: <None>

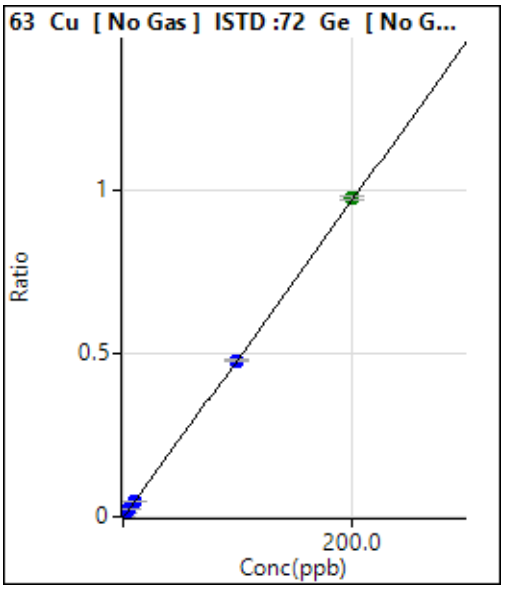
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	236.68	0.0006	P	6.8	
2	☐	2.000	1.938	2933.70	0.0068	P	9.1	-3.1
3	☐	5.000	4.875	6968.55	0.0164	P	2.6	-2.5
4	☐	10.000	9.642	13573.70	0.0318	P	3.2	-3.6
5	☐	100.000	103.648	143054.52	0.3364	P	0.7	3.6
6	☐	200.000	198.197	271130.07	0.6429	P	1.8	-0.9

y = 0.0032 * x + 5.5335E-004
R = 0.9998
DL = 0.03473 ppb
BEC = 0.1707 ppb

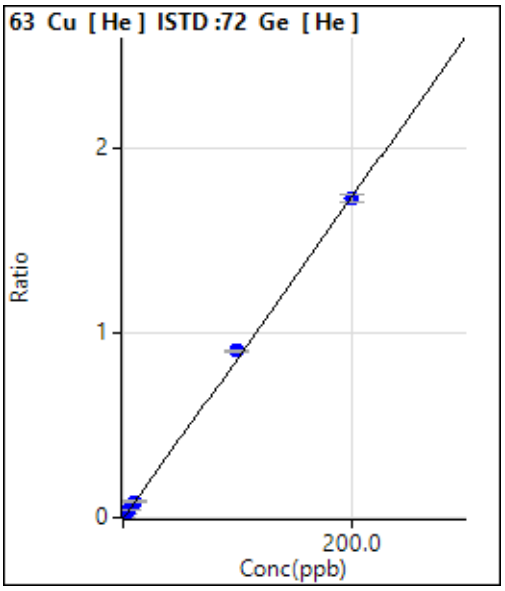
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1933.51	0.0014	P	9.9	
2	☐	2.000	1.847	13984.12	0.0104	P	2.3	-7.7
3	☐	5.000	4.577	31894.35	0.0236	P	2.0	-8.5
4	☐	10.000	9.415	62798.40	0.0470	P	0.3	-5.8
5	☐	100.000	98.311	633266.76	0.4773	P	0.5	-1.7
6	☐	200.000	200.886	1270962.43	0.9737	A	1.2	0.4

y = 0.0048 * x + 0.0014
R = 1.0000
DL = 0.08686 ppb
BEC = 0.2935 ppb

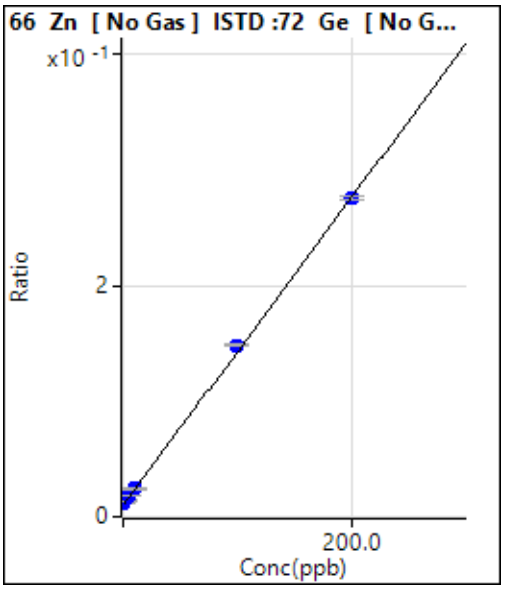
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	870.05	0.0020	P	12.2	
2	☐	2.000	1.953	8189.28	0.0191	P	2.7	-2.4
3	☐	5.000	4.819	18789.88	0.0441	P	1.2	-3.6
4	☐	10.000	9.877	37659.20	0.0882	P	2.8	-1.2
5	☐	100.000	103.339	384291.74	0.9038	P	1.1	3.3
6	☐	200.000	198.342	730835.04	1.7329	P	2.3	-0.8

y = 0.0087 * x + 0.0020
R = 0.9998
DL = 0.0855 ppb
BEC = 0.2331 ppb

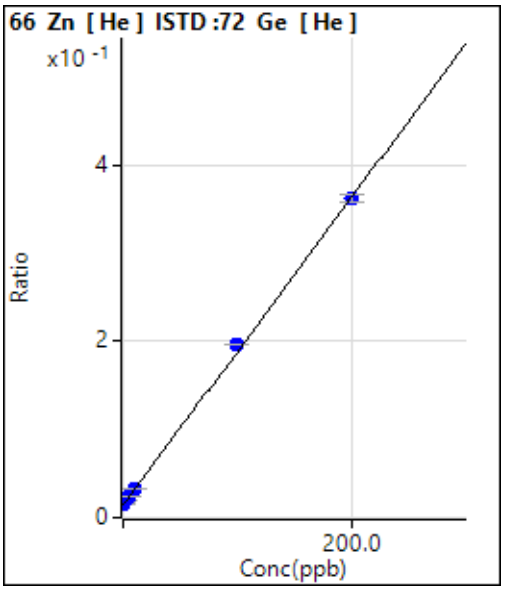
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	15555.81	0.0114	P	0.6	
2	☐	2.000	2.062	19130.45	0.0142	P	3.5	3.1
3	☐	5.000	4.915	24308.69	0.0180	P	4.2	-1.7
4	☐	10.000	9.623	32385.60	0.0242	P	1.7	-3.8
5	☐	100.000	102.983	196973.34	0.1484	P	0.2	3.0
6	☐	200.000	198.529	359681.86	0.2756	P	0.9	-0.7

y = 0.0013 * x + 0.0114
R = 0.9998
DL = 0.1501 ppb
BEC = 8.594 ppb

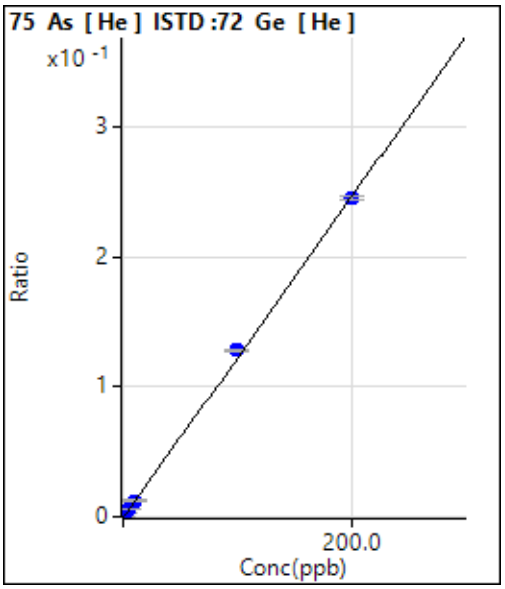
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6881.86	0.0161	P	3.8	
2	☐	2.000	1.761	8225.95	0.0192	P	0.9	-12.0
3	☐	5.000	4.604	10284.07	0.0241	P	2.7	-7.9
4	☐	10.000	9.781	14160.95	0.0332	P	1.3	-2.2
5	☐	100.000	103.403	83670.58	0.1968	P	0.8	3.4
6	☐	200.000	198.322	152941.42	0.3627	P	2.8	-0.8

y = 0.0017 * x + 0.0161
R = 0.9998
DL = 1.042 ppb
BEC = 9.206 ppb

Weight: <None>
Min Conc: <None>

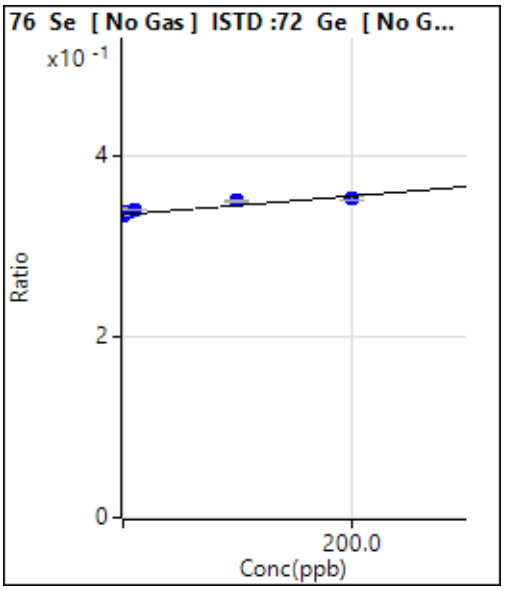


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	115.56	0.0003	P	14.4	
2	☐	2.000	2.092	1226.73	0.0029	P	4.3	4.6
3	☐	5.000	4.778	2633.60	0.0062	P	1.6	-4.4
4	☐	10.000	9.861	5319.96	0.0125	P	1.9	-1.4
5	☐	100.000	103.585	54579.70	0.1284	P	1.3	3.6
6	☐	200.000	198.219	103502.20	0.2454	P	1.3	-0.9

y = 0.0012 * x + 2.7011E-004
R = 0.9998
DL = 0.09423 ppb
BEC = 0.2184 ppb

Weight: <None>
Min Conc: <None>

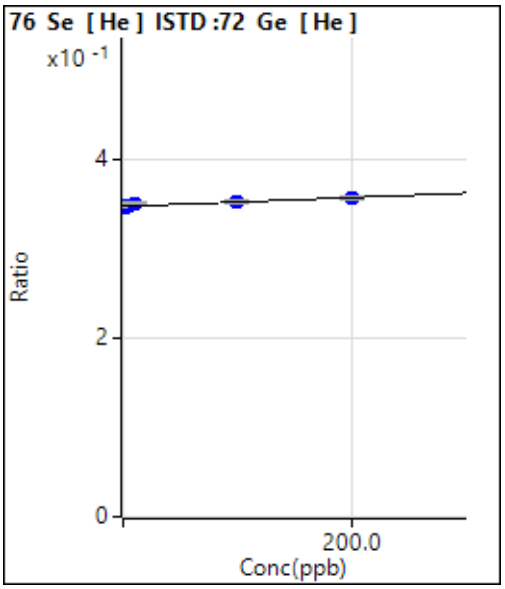
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	456499.10	0.3356	P	1.9	
2	☐	2.000	22.173	456071.89	0.3379	P	1.7	1008.7
3	☐	5.000	23.329	457260.05	0.3380	P	2.6	366.6
4	☐	10.000	50.966	455524.92	0.3409	P	0.5	409.7
5	☐	100.000	146.009	465412.68	0.3508	P	0.7	46.0
6	☐	200.000	174.287	461661.64	0.3537	P	0.9	-12.9

y = 1.0393E-004 * x + 0.3356
R = 0.9473
DL = 186.2 ppb
BEC = 3229 ppb

Weight: <None>
Min Conc: <None>

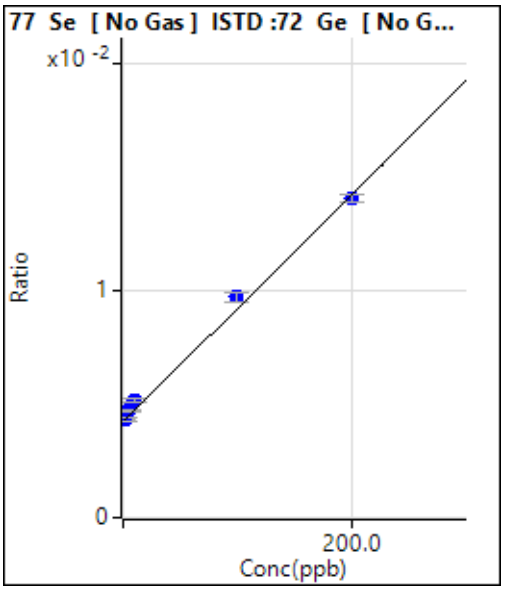


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	148565.04	0.3473	P	0.9	
2	☐	2.000	-16.642	148705.62	0.3465	P	1.9	-932.1
3	☐	5.000	35.723	148793.77	0.3491	P	1.2	614.5
4	☐	10.000	74.649	149835.17	0.3511	P	0.5	646.5
5	☐	100.000	112.739	150081.21	0.3530	P	1.1	12.7
6	☐	200.000	189.817	150523.03	0.3569	P	0.9	-5.1

y = 5.0382E-005 * x + 0.3473
R = 0.9272
DL = 192 ppb
BEC = 6893 ppb

Weight: <None>
Min Conc: <None>

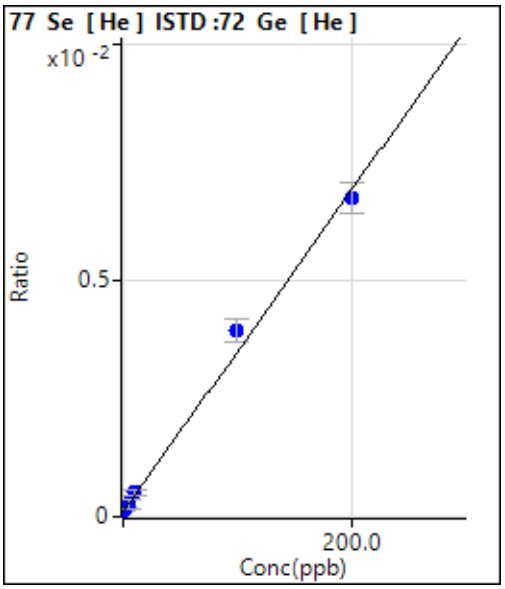
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5868.04	0.0043	P	1.3	
2	☐	2.000	0.383	5848.03	0.0043	P	2.6	-80.9
3	☐	5.000	7.892	6368.29	0.0047	P	3.1	57.8
4	☐	10.000	17.406	6925.21	0.0052	P	2.5	74.1
5	☐	100.000	108.537	12913.07	0.0097	P	4.2	8.5
6	☐	200.000	195.305	18356.08	0.0141	P	2.0	-2.3

y = 4.9921E-005 * x + 0.0043
R = 0.9981
DL = 3.441 ppb
BEC = 86.4 ppb

Weight: <None>
Min Conc: <None>

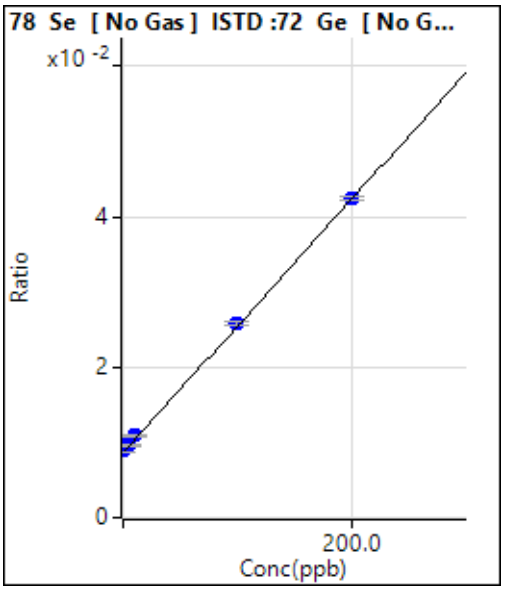


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	56.67	0.0001	P	27.3	
2	☐	2.000	1.350	76.67	0.0002	P	7.0	-32.5
3	☐	5.000	4.353	120.00	0.0003	P	73.7	-12.9
4	☐	10.000	11.018	216.67	0.0005	P	24.1	10.2
5	☐	100.000	111.885	1676.80	0.0039	P	11.9	11.9
6	☐	200.000	194.029	2843.68	0.0067	P	10.2	-3.0

y = 3.4079E-005 * x + 1.3254E-004
R = 0.9974
DL = 3.182 ppb
BEC = 3.889 ppb

Weight: <None>
Min Conc: <None>

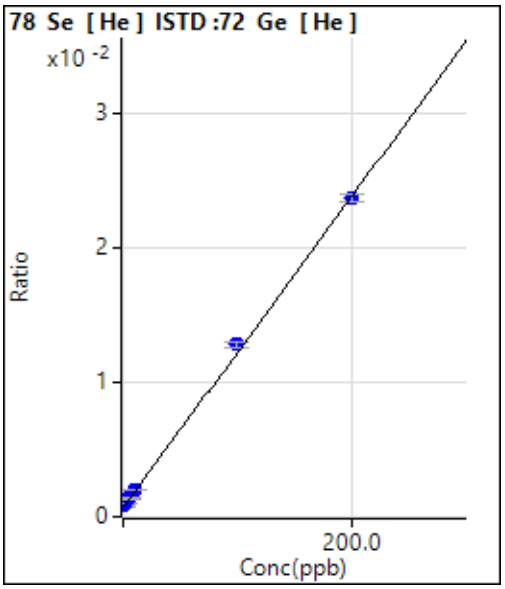
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12062.28	0.0089	P	5.0	
2	☐	2.000	5.664	13260.09	0.0098	P	0.3	183.2
3	☐	5.000	4.696	13069.88	0.0097	P	1.5	-6.1
4	☐	10.000	12.289	14614.76	0.0109	P	2.3	22.9
5	☐	100.000	100.772	34277.24	0.0258	P	1.2	0.8
6	☐	200.000	199.470	55404.12	0.0424	P	1.0	-0.3

y = 1.6834E-004 * x + 0.0089
R = 0.9998
DL = 7.943 ppb
BEC = 52.68 ppb

Weight: <None>
Min Conc: <None>

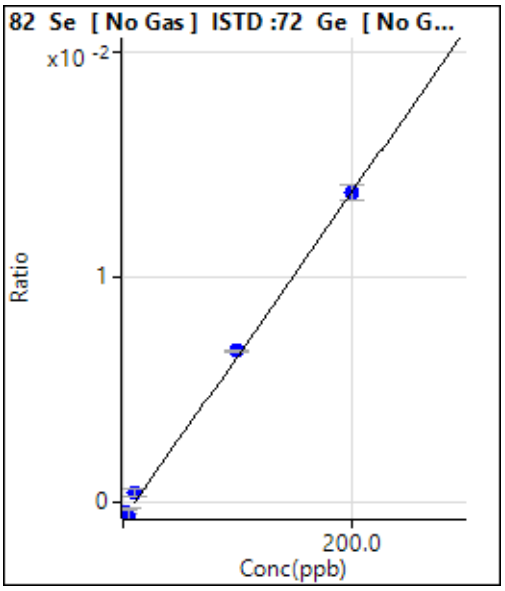


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	340.67	0.0008	P	13.6	
2	☐	2.000	2.016	442.01	0.0010	P	6.8	0.8
3	☐	5.000	5.070	589.35	0.0014	P	5.5	1.4
4	☐	10.000	10.245	846.03	0.0020	P	2.8	2.4
5	☐	100.000	103.806	5446.45	0.0128	P	3.6	3.8
6	☐	200.000	198.083	10005.73	0.0237	P	2.2	-1.0

y = 1.1575E-004 * x + 7.9630E-004
R = 0.9997
DL = 2.815 ppb
BEC = 6.88 ppb

Weight: <None>
Min Conc: <None>

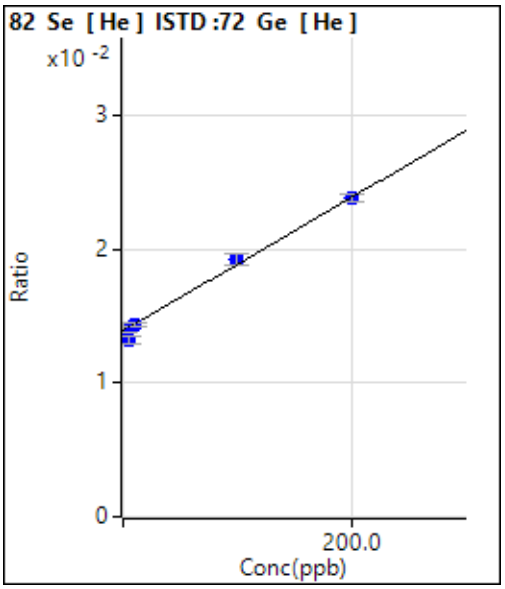
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-959.88	-0.0007	P	-101.	
2	☐	2.000	3.105	-641.01	-0.0005	P	-40.1	55.2
3	☐	5.000	0.564	-905.95	-0.0007	P	-110.	-88.7
4	☐	10.000	15.248	542.69	0.0004	P	92.4	52.5
5	☐	100.000	102.295	8914.76	0.0067	P	1.4	2.3
6	☐	200.000	198.690	17897.37	0.0137	P	5.0	-0.7

y = 7.2540E-005 * x - 7.0195E-004
R = 0.9992
DL = 29.48 ppb
BEC = -9.677 ppb

Weight: <None>
Min Conc: <None>

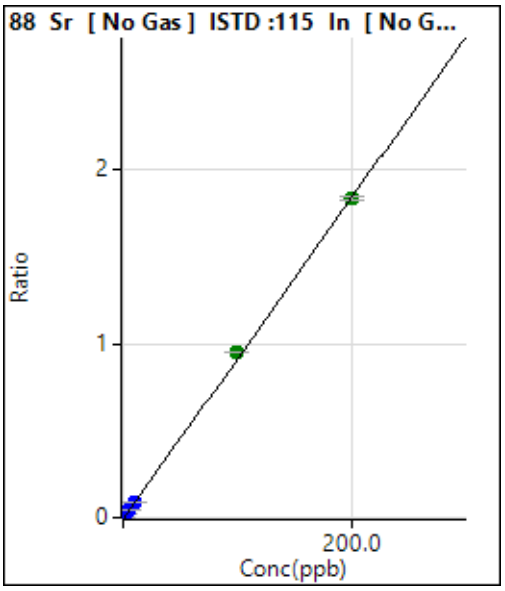


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5984.77	0.0140	P	7.3	
2	☐	2.000	-12.539	5737.98	0.0134	P	5.6	-726.9
3	☐	5.000	-15.133	5641.28	0.0132	P	5.1	-402.7
4	☐	10.000	7.348	6128.18	0.0144	P	1.6	-26.5
5	☐	100.000	105.961	8196.01	0.0193	P	4.3	6.0
6	☐	200.000	197.801	10063.90	0.0239	P	2.1	-1.1

y = 4.9906E-005 * x + 0.0140
R = 0.9949
DL = 61.28 ppb
BEC = 280.3 ppb

Weight: <None>
Min Conc: <None>

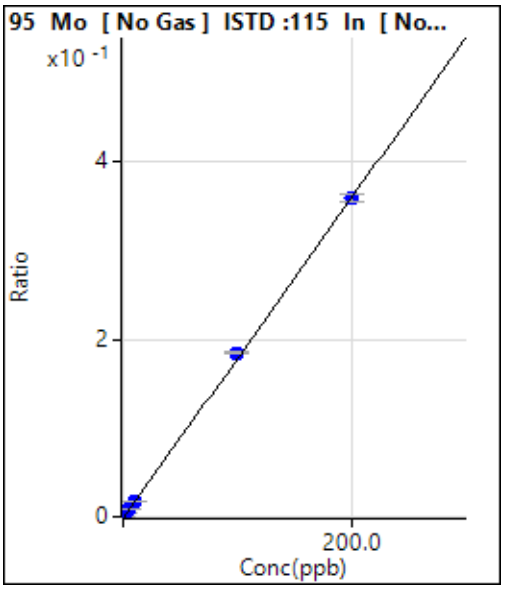
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	770.04	0.0005	P	14.5	
2	☐	2.000	1.855	29506.13	0.0176	P	1.8	-7.3
3	☐	5.000	5.004	78358.81	0.0467	P	1.1	0.1
4	☐	10.000	9.315	143873.55	0.0866	P	0.4	-6.9
5	☐	100.000	102.950	1582968.21	0.9523	A	0.8	3.0
6	☐	200.000	198.560	3011111.73	1.8363	A	1.4	-0.7

y = 0.0092 * x + 4.5957E-004
R = 0.9998
DL = 0.02162 ppb
BEC = 0.04971 ppb

Weight: <None>
Min Conc: <None>

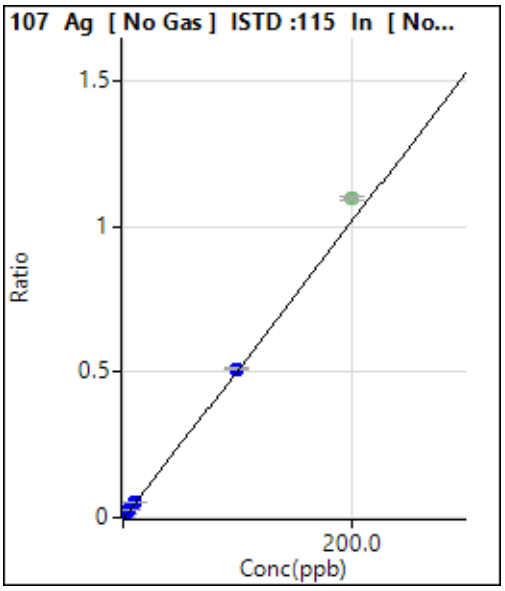


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	93.9	
2	☐	2.000	1.876	5714.68	0.0034	P	9.2	-6.2
3	☐	5.000	4.638	14101.07	0.0084	P	5.1	-7.2
4	☐	10.000	9.703	29202.28	0.0176	P	1.8	-3.0
5	☐	100.000	102.383	307985.10	0.1853	P	1.2	2.4
6	☐	200.000	198.834	590027.33	0.3598	P	1.8	-0.6

y = 0.0018 * x + 1.5875E-005
R = 0.9999
DL = 0.0247 ppb
BEC = 0.008772 ppb

Weight: <None>
Min Conc: <None>

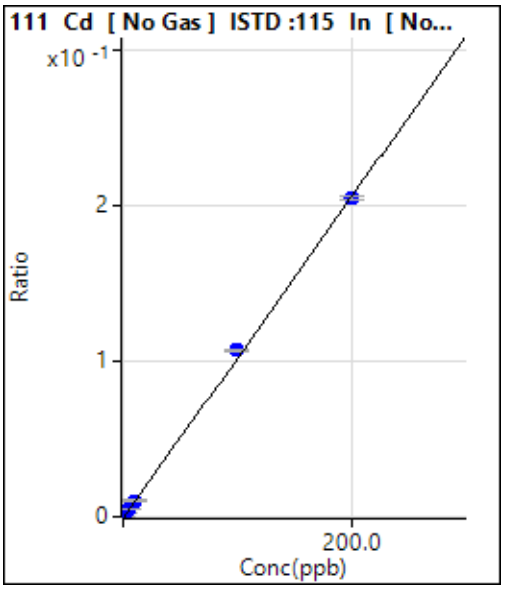
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	390.02	0.0002	P	25.5	
2	☐	2.000	1.943	17027.82	0.0102	P	1.5	-2.8
3	☐	5.000	4.725	40880.08	0.0244	P	1.4	-5.5
4	☐	10.000	9.731	82995.82	0.0499	P	1.4	-2.7
5	☐	100.000	100.042	849931.50	0.5114	P	1.2	0.0
6	☑	200.000		1798850.34	1.0970	A	1.7	

y = 0.0051 * x + 2.3325E-004
R = 1.0000
DL = 0.03492 ppb
BEC = 0.04566 ppb

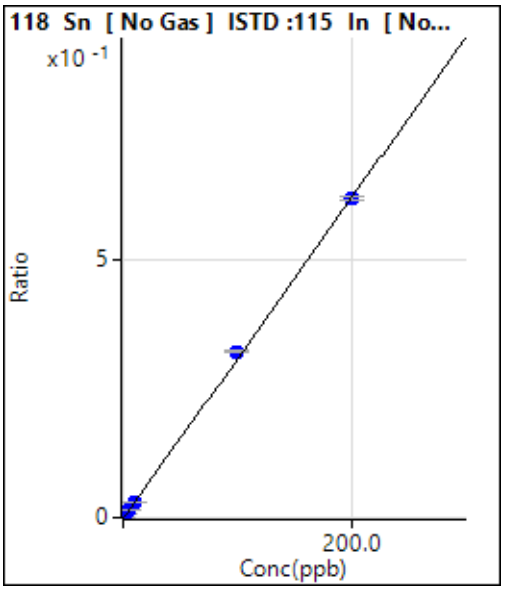
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	173.2	
2	☐	2.000	1.973	3427.16	0.0020	P	5.2	-1.3
3	☐	5.000	4.854	8429.53	0.0050	P	6.5	-2.9
4	☐	10.000	10.115	17401.70	0.0105	P	2.9	1.1
5	☐	100.000	103.451	177938.84	0.1071	P	1.3	3.5
6	☐	200.000	198.273	336472.20	0.2052	P	0.7	-0.9

y = 0.0010 * x + 3.9874E-006
R = 0.9998
DL = 0.02002 ppb
BEC = 0.003853 ppb

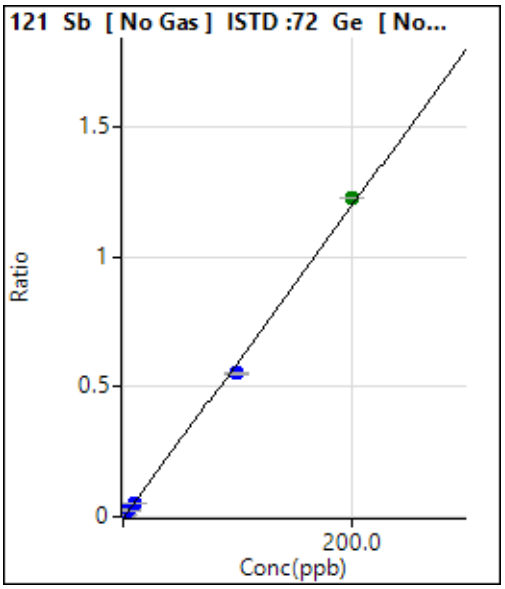
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1280.09	0.0008	P	6.3	
2	☐	2.000	1.947	11418.44	0.0068	P	3.5	-2.7
3	☐	5.000	4.729	25932.60	0.0155	P	0.6	-5.4
4	☐	10.000	9.705	51393.99	0.0309	P	1.3	-3.0
5	☐	100.000	102.832	532511.64	0.3204	P	1.1	2.8
6	☐	200.000	198.606	1013496.57	0.6181	P	1.3	-0.7

y = 0.0031 * x + 7.6438E-004
R = 0.9999
DL = 0.04672 ppb
BEC = 0.2459 ppb

Weight: <None>
Min Conc: <None>

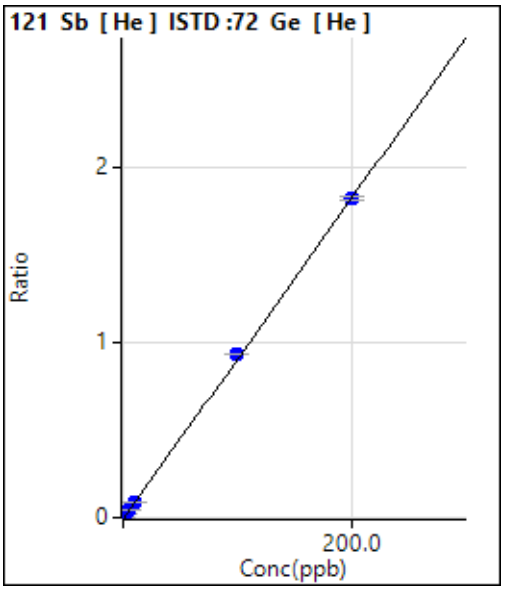


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	263.34	0.0002	P	18.4	
2	☐	2.000	1.736	14378.10	0.0106	P	4.1	-13.2
3	☐	5.000	4.327	35514.91	0.0263	P	3.0	-13.5
4	☐	10.000	8.720	70425.42	0.0527	P	1.4	-12.8
5	☐	100.000	91.906	734600.04	0.5536	P	0.8	-8.1
6	☐	200.000	204.131	1604672.84	1.2294	A	0.5	2.1

y = 0.0060 * x + 1.9351E-004
R = 0.9989
DL = 0.01776 ppb
BEC = 0.03214 ppb

Weight: <None>
Min Conc: <None>

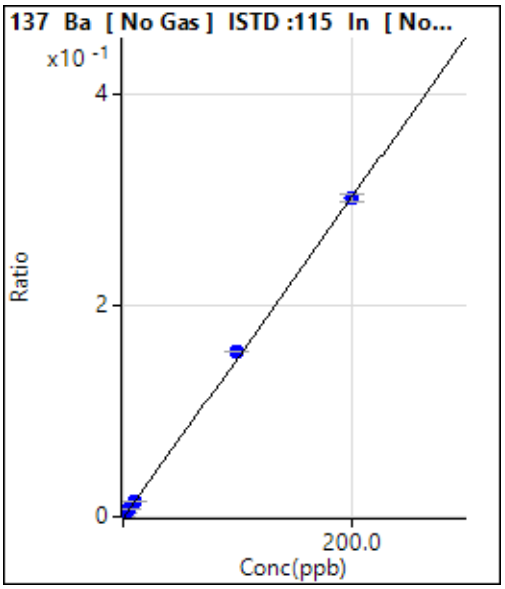
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	156.67	0.0004	P	3.2	
2	☐	2.000	1.927	7735.76	0.0180	P	1.0	-3.6
3	☐	5.000	4.893	19254.39	0.0452	P	5.5	-2.1
4	☐	10.000	9.751	38279.57	0.0897	P	0.3	-2.5
5	☐	100.000	102.191	398176.52	0.9364	P	0.2	2.2
6	☐	200.000	198.920	768649.05	1.8225	P	1.6	-0.5

y = 0.0092 * x + 3.6620E-004
R = 0.9999
DL = 0.003877 ppb
BEC = 0.03998 ppb

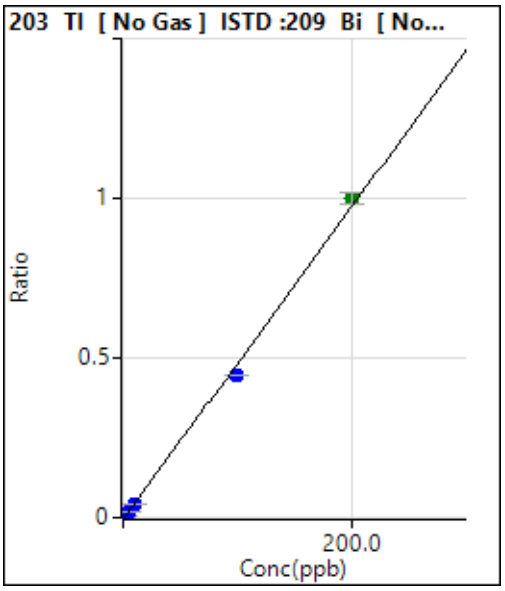
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	100.00	0.0001	P	65.7	
2	☐	2.000	1.991	5174.45	0.0031	P	1.6	-0.4
3	☐	5.000	4.905	12609.63	0.0075	P	0.5	-1.9
4	☐	10.000	9.951	25241.56	0.0152	P	2.0	-0.5
5	☐	100.000	102.700	259688.76	0.1562	P	0.5	2.7
6	☐	200.000	198.655	495410.98	0.3021	P	2.0	-0.7

y = 0.0015 * x + 5.9844E-005
R = 0.9999
DL = 0.07758 ppb
BEC = 0.03935 ppb

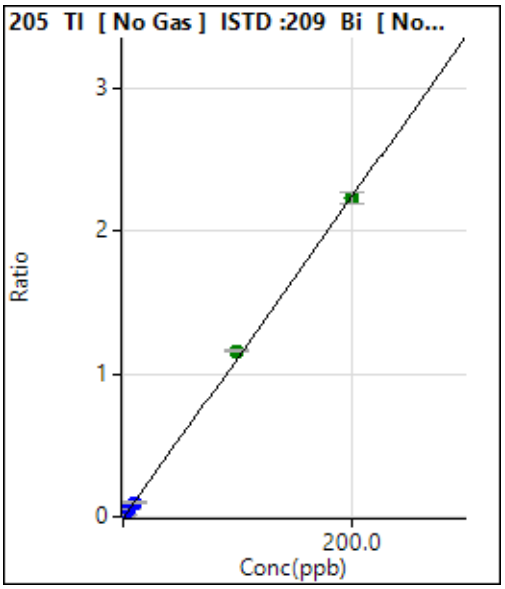
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	50.4	
2	☐	2.000	1.714	15139.42	0.0084	P	1.4	-14.3
3	☐	5.000	4.273	37175.74	0.0209	P	1.1	-14.5
4	☐	10.000	8.553	75054.87	0.0419	P	1.1	-14.5
5	☐	100.000	91.266	782605.87	0.4464	P	0.6	-8.7
6	☐	200.000	204.460	1724221.80	1.0001	A	3.7	2.2

y = 0.0049 * x + 1.3471E-005
R = 0.9987
DL = 0.004167 ppb
BEC = 0.002754 ppb

Weight: <None>
Min Conc: <None>

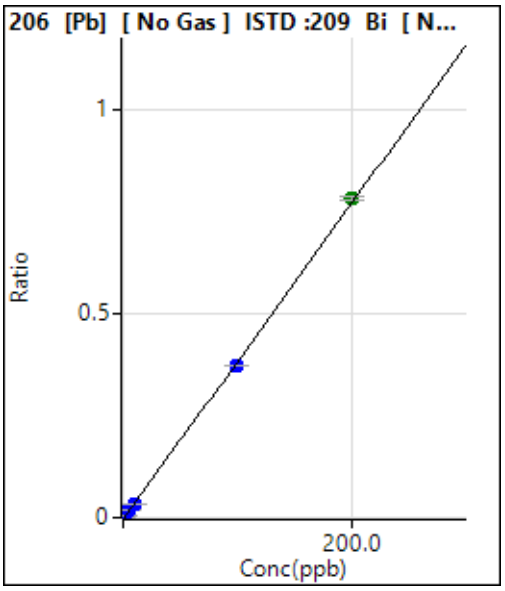


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0000	P	33.5	
2	☐	2.000	1.758	35708.19	0.0198	P	2.0	-12.1
3	☐	5.000	4.415	88388.67	0.0497	P	1.2	-11.7
4	☐	10.000	8.943	180586.02	0.1007	P	0.6	-10.6
5	☐	100.000	103.272	2038068.93	1.1626	A	1.8	3.3
6	☐	200.000	198.434	3851091.71	2.2339	A	3.3	-0.8

y = 0.0113 * x + 2.1130E-005
R = 0.9998
DL = 0.001887 ppb
BEC = 0.001877 ppb

Weight: <None>
Min Conc: <None>

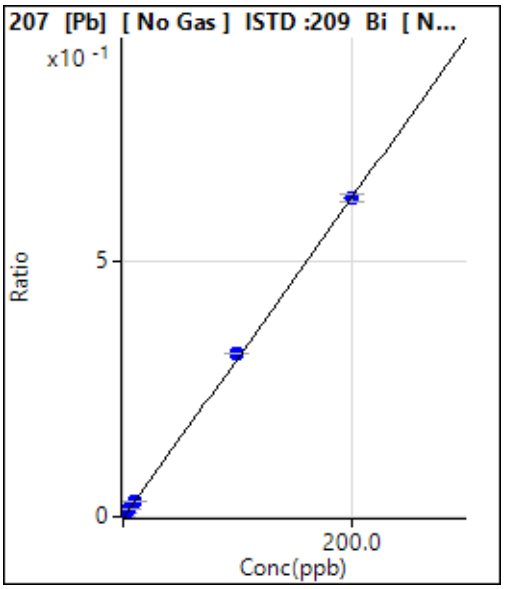
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	206.67	0.0001	P	22.3	
2	☐	2.000	1.725	12249.56	0.0068	P	1.7	-13.7
3	☐	5.000	4.381	30354.13	0.0171	P	0.4	-12.4
4	☐	10.000	8.854	61665.76	0.0344	P	0.6	-11.5
5	☐	100.000	95.839	650442.45	0.3710	P	0.5	-4.2
6	☐	200.000	202.156	1349302.69	0.7825	A	1.7	1.1

y = 0.0039 * x + 1.1863E-004
R = 0.9997
DL = 0.02051 ppb
BEC = 0.03065 ppb

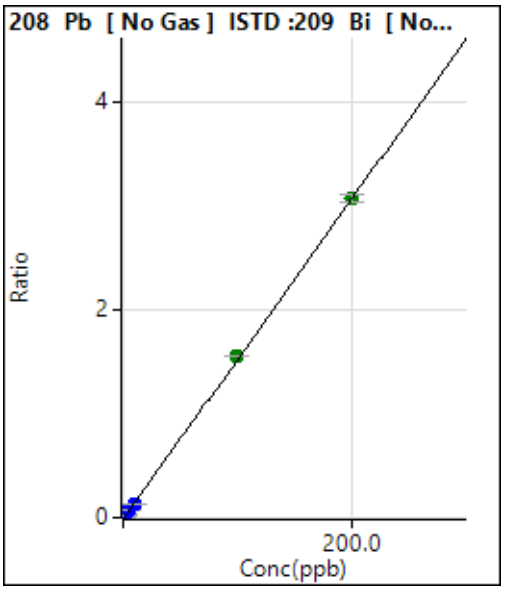
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	186.67	0.0001	P	12.4	
2	☐	2.000	1.919	11058.45	0.0061	P	1.2	-4.1
3	☐	5.000	4.695	26411.77	0.0149	P	1.7	-6.1
4	☐	10.000	9.376	53019.63	0.0296	P	1.8	-6.2
5	☐	100.000	101.963	561759.53	0.3204	P	0.8	2.0
6	☐	200.000	199.058	1078541.08	0.6255	P	1.9	-0.5

y = 0.0031 * x + 1.0704E-004
R = 0.9999
DL = 0.01273 ppb
BEC = 0.03407 ppb

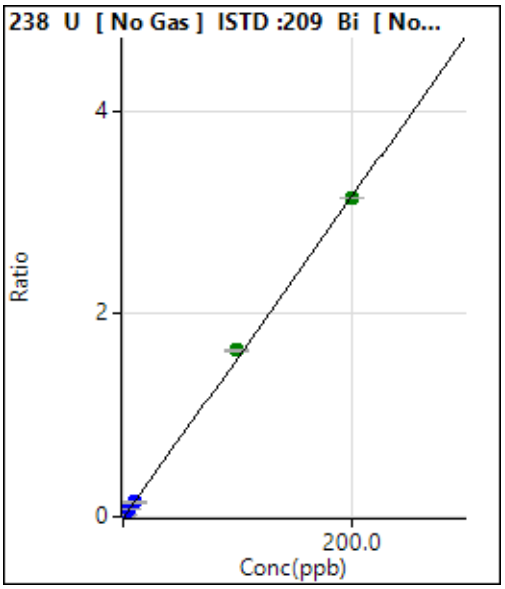
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	743.35	0.0004	P	11.6	
2	☐	2.000	1.786	50280.83	0.0279	P	2.1	-10.7
3	☐	5.000	4.427	121775.33	0.0685	P	0.5	-11.5
4	☐	10.000	8.914	246565.39	0.1375	P	1.0	-10.9
5	☐	100.000	101.073	2725259.98	1.5546	A	0.7	1.1
6	☐	200.000	199.534	5290886.22	3.0685	A	2.1	-0.2

y = 0.0154 * x + 4.2645E-004
R = 1.0000
DL = 0.009623 ppb
BEC = 0.02773 ppb

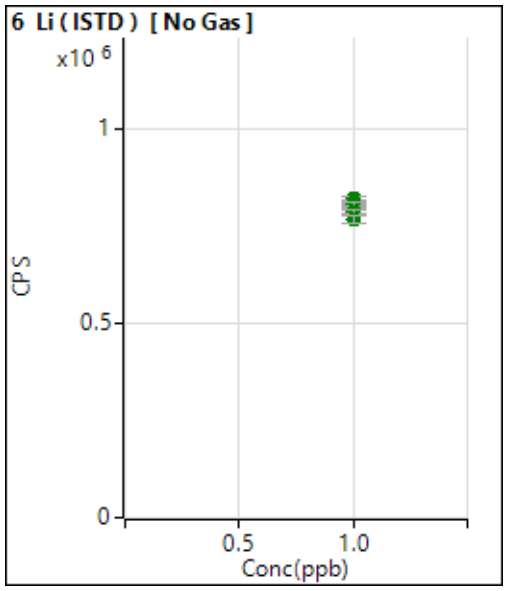
Weight: <None>
Min Conc: <None>



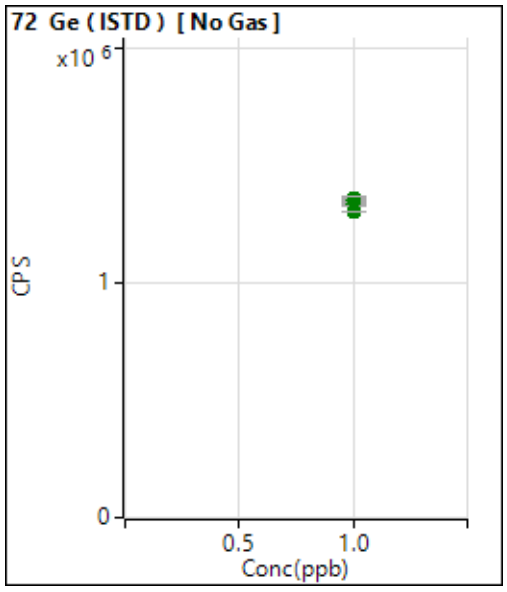
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	34.8	
2	☐	2.000	1.762	50330.29	0.0279	P	1.4	-11.9
3	☐	5.000	4.469	125835.57	0.0708	P	1.5	-10.6
4	☐	10.000	8.987	255277.89	0.1423	P	0.9	-10.1
5	☐	100.000	103.559	2875475.37	1.6402	A	1.4	3.6
6	☐	200.000	198.287	5416236.59	3.1405	A	0.6	-0.9

y = 0.0158 * x + 9.5705E-006
R = 0.9997
DL = 0.0006309 ppb
BEC = 0.0006043 ppb

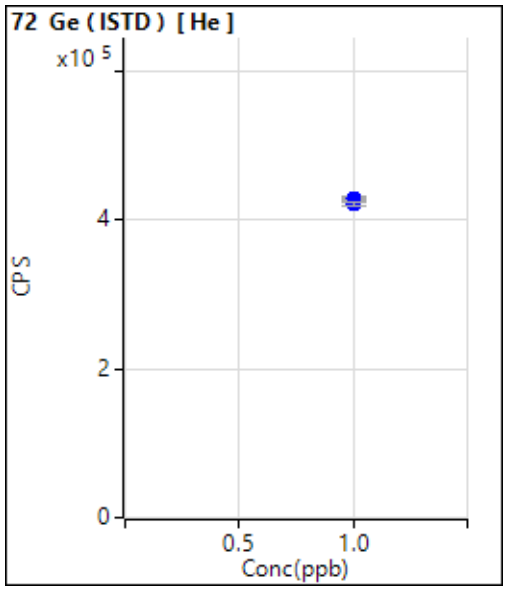
Weight: <None>
Min Conc: <None>



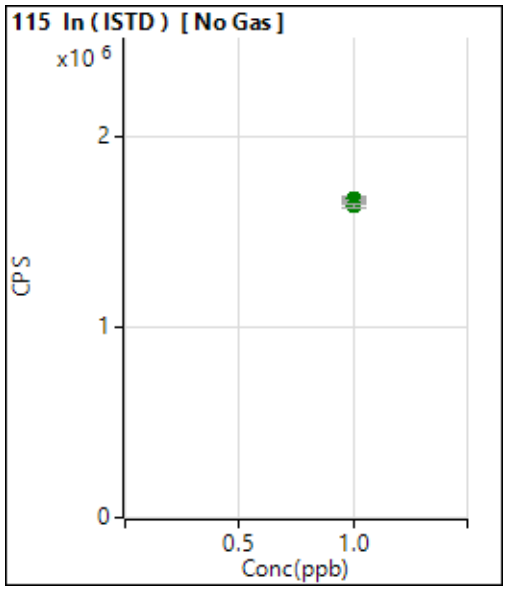
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		823507.32		A	0.9	
2	☐	1.000		814400.80		A	1.4	
3	☐	1.000		805882.28		A	1.9	
4	☐	1.000		810112.67		A	1.4	
5	☐	1.000		787773.03		A	1.3	
6	☐	1.000		769756.40		A	2.2	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1360587.69		A	1.5	
2	☐	1.000		1350055.71		A	1.9	
3	☐	1.000		1353328.37		A	2.3	
4	☐	1.000		1336358.21		A	0.9	
5	☐	1.000		1326885.50		A	0.1	
6	☐	1.000		1305240.45		A	0.2	

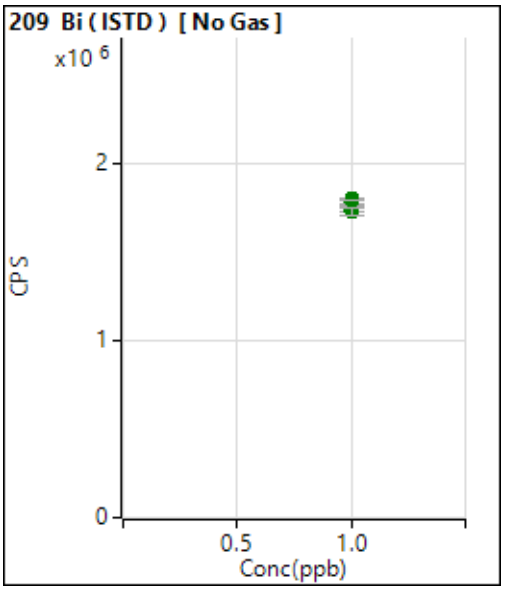


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		427779.66		P	0.5	
2	☐	1.000		429243.38		P	0.6	
3	☐	1.000		426201.89		P	0.7	
4	☐	1.000		426809.25		P	0.5	
5	☐	1.000		425204.34		P	0.8	
6	☐	1.000		421817.61		P	1.2	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1674672.94		A	0.9	
2	☐	1.000		1675687.62		A	0.7	
3	☐	1.000		1677188.96		A	0.7	
4	☐	1.000		1661695.51		A	0.7	
5	☐	1.000		1662239.18		A	1.0	
6	☐	1.000		1639966.44		A	1.4	

Calibration for 180_ICV.d



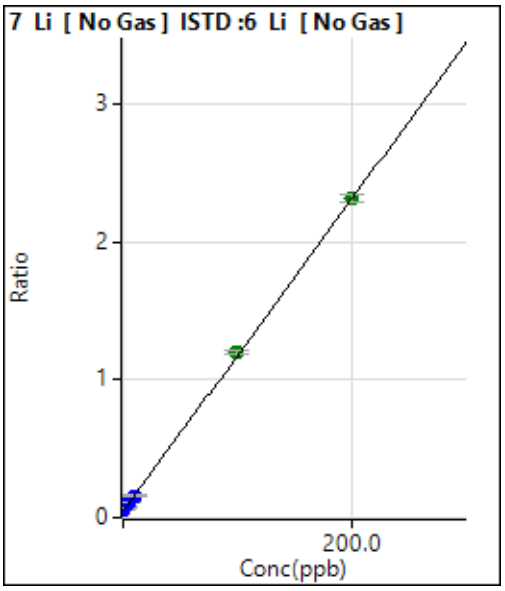
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1742359.04		A	2.0	
2	☐	1.000		1802525.91		A	0.2	
3	☐	1.000		1777837.73		A	1.2	
4	☐	1.000		1793436.17		A	0.2	
5	☐	1.000		1753083.31		A	0.5	
6	☐	1.000		1724796.80		A	2.3	

Calibration for 014_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\071922A.b\
Analysis File: 071922A.batch.bin
DA Date-Time: 07/19/2022 22:23:26
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	007CALB.d	CAL BLK	07/19/2022 11:24:40
2	008CALS.d	2/10/200	07/19/2022 11:26:55
3	009CALS.d	5/25/500	07/19/2022 11:29:09
4	010CALS.d	10/50/100	07/19/2022 11:31:23
5	011CALS.d	100/500/10K	07/19/2022 11:33:36
6	012CALS.d	200/1000/20K	07/19/2022 11:35:45

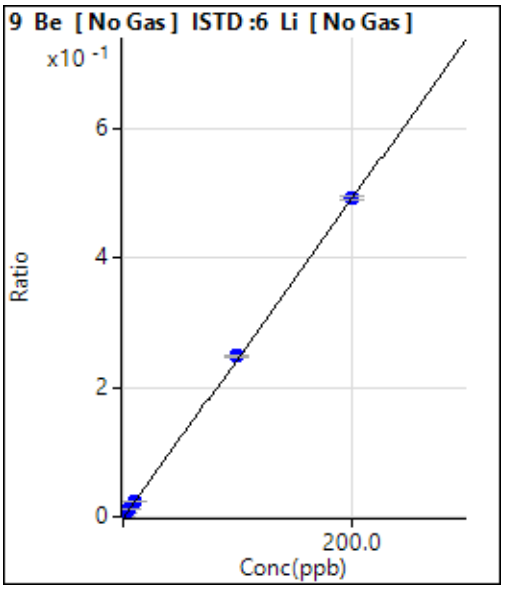
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	38948.74	0.0577	P	1.5	
2	☐	2.000	1.730	53618.19	0.0773	P	1.8	-13.5
3	☐	5.000	4.427	74264.40	0.1079	P	3.7	-11.5
4	☐	10.000	8.970	109740.26	0.1594	P	2.6	-10.3
5	☐	100.000	101.177	847629.96	1.2053	A	2.1	1.2
6	☐	200.000	199.480	1570775.08	2.3204	A	1.9	-0.3

y = 0.0113 * x + 0.0577
R = 1.0000
DL = 0.2249 ppb
BEC = 5.084 ppb

Weight: <None>
Min Conc: <None>

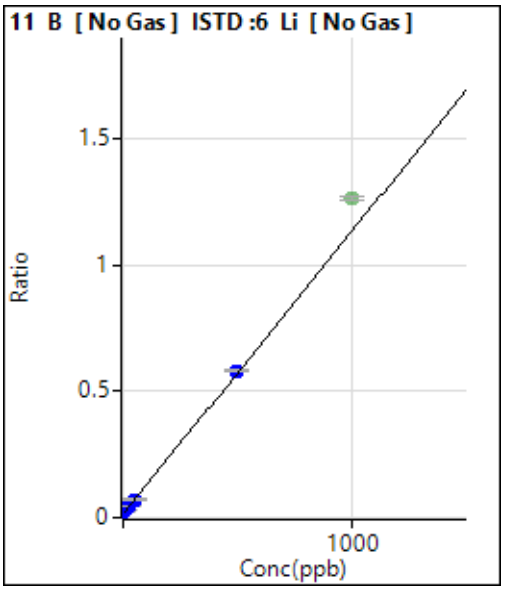


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0001	P	69.8	
2	☐	2.000	1.931	3355.43	0.0048	P	6.4	-3.4
3	☐	5.000	4.650	7950.65	0.0115	P	3.8	-7.0
4	☐	10.000	9.687	16509.74	0.0240	P	3.8	-3.1
5	☐	100.000	100.586	174680.97	0.2484	P	1.3	0.6
6	☐	200.000	199.732	333876.47	0.4932	P	1.6	-0.1

y = 0.0025 * x + 6.8572E-005
R = 1.0000
DL = 0.05817 ppb
BEC = 0.02777 ppb

Weight: <None>
Min Conc: <None>

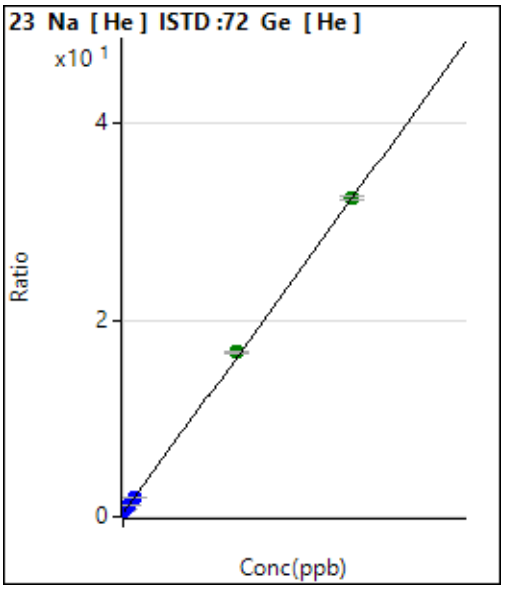
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14602.65	0.0216	P	2.3	
2	☐	10.000	6.418	19974.40	0.0288	P	1.8	-35.8
3	☐	25.000	20.478	30621.74	0.0445	P	3.6	-18.1
4	☐	50.000	45.296	49685.84	0.0722	P	3.7	-9.4
5	☐	500.000	500.768	408374.24	0.5807	P	1.7	0.2
6	☑	1000.000		855291.13	1.2633	A	1.1	

y = 0.0011 * x + 0.0216
R = 1.0000
DL = 1.351 ppb
BEC = 19.37 ppb

Weight: <None>
Min Conc: <None>

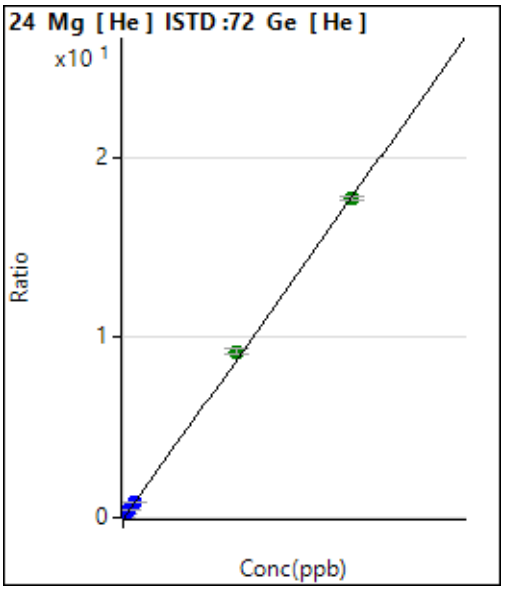


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	182657.37	0.5325	P	1.2	
2	☐	200.000	172.344	280188.69	0.8079	P	0.8	-13.8
3	☐	500.000	433.562	426412.31	1.2252	P	0.3	-13.3
4	☐	1000.000	907.615	685888.14	1.9825	P	0.6	-9.2
5	☐	10000.00	10115.85	5852425.54	16.6927	A	0.8	1.2
6	☐	20000.00	19948.62	11158848.5	32.4007	A	0.7	-0.3

y = 0.0016 * x + 0.5325
R = 1.0000
DL = 12.35 ppb
BEC = 333.4 ppb

Weight: <None>
Min Conc: <None>

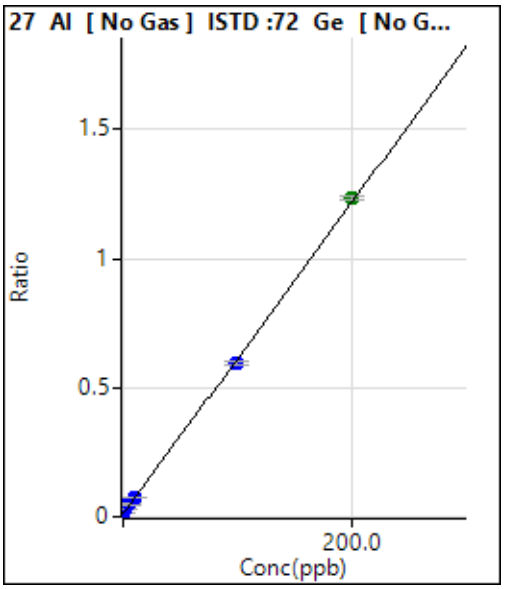
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	226.68	0.0007	P	24.2	
2	☐	200.000	189.977	59072.04	0.1703	P	0.5	-5.0
3	☐	500.000	474.699	147776.62	0.4246	P	0.3	-5.1
4	☐	1000.000	966.612	298878.84	0.8639	P	1.3	-3.3
5	☐	10000.00	10327.62	3233371.10	9.2236	A	2.7	3.3
6	☐	20000.00	19838.59	6101545.95	17.7172	A	0.8	-0.8

y = 8.9304E-004 * x + 6.5999E-004
R = 0.9998
DL = 0.5369 ppb
BEC = 0.739 ppb

Weight: <None>
Min Conc: <None>

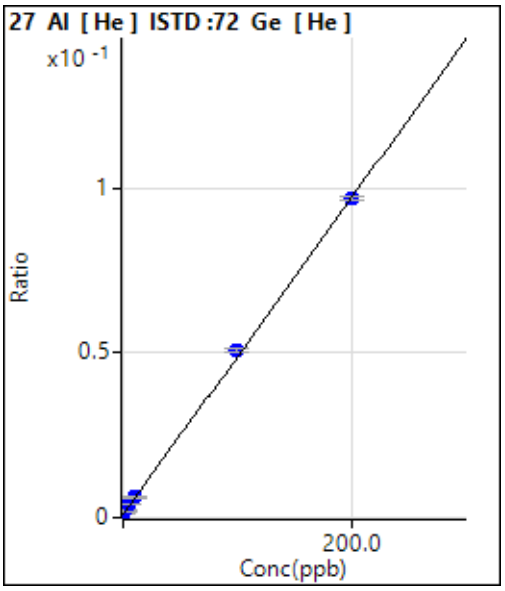


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18328.96	0.0169	P	4.7	
2	☐	2.000	1.578	29404.64	0.0265	P	1.5	-21.1
3	☐	5.000	5.310	53492.87	0.0490	P	4.3	6.2
4	☐	10.000	9.140	78256.04	0.0721	P	2.2	-8.6
5	☐	100.000	96.213	648535.02	0.5974	P	2.9	-3.8
6	☐	200.000	201.933	1344175.50	1.2353	A	1.3	1.0

y = 0.0060 * x + 0.0169
R = 0.9997
DL = 0.3973 ppb
BEC = 2.806 ppb

Weight: <None>
Min Conc: <None>

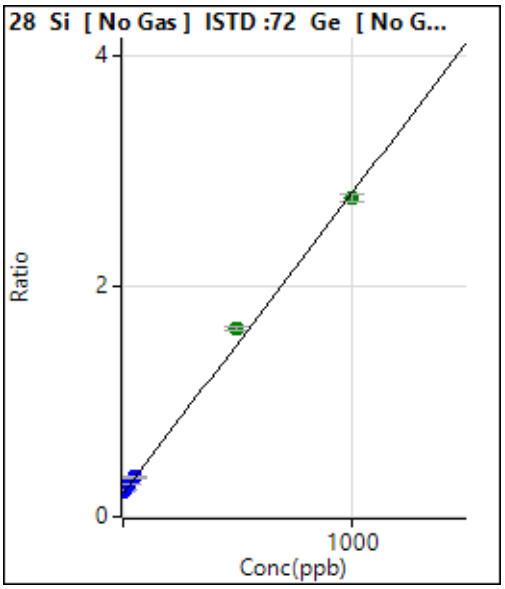
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	490.02	0.0014	P	1.5	
2	☐	2.000	1.653	770.03	0.0022	P	26.6	-17.3
3	☐	5.000	5.392	1400.10	0.0040	P	2.7	7.8
4	☐	10.000	9.871	2136.87	0.0062	P	7.4	-1.3
5	☐	100.000	102.850	17845.02	0.0509	P	2.5	2.9
6	☐	200.000	198.575	33390.50	0.0970	P	1.5	-0.7

y = 4.8106E-004 * x + 0.0014
R = 0.9998
DL = 0.1295 ppb
BEC = 2.969 ppb

Weight: <None>
Min Conc: <None>

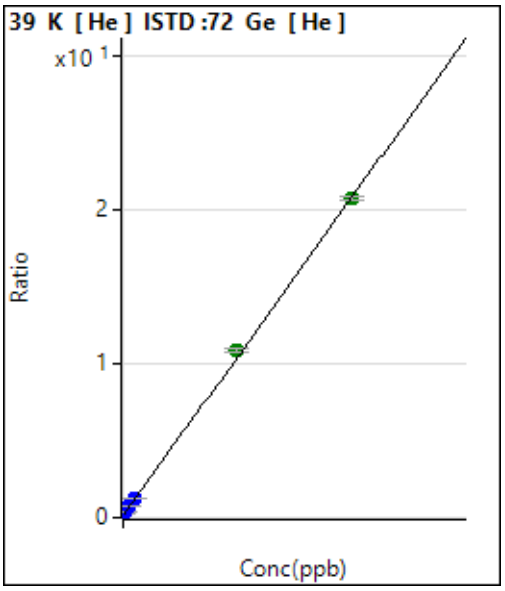


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	235702.45	0.2177	P	2.2	
2	☐	10.000	7.279	262999.99	0.2366	P	2.1	-27.2
3	☐	25.000	24.851	308479.02	0.2824	P	3.6	-0.6
4	☐	50.000	48.308	372801.53	0.3434	P	2.5	-3.4
5	☐	500.000	541.205	1765765.96	1.6264	A	1.9	8.2
6	☐	1000.000	979.513	3010511.00	2.7673	A	2.3	-2.0

y = 0.0026 * x + 0.2177
R = 0.9988
DL = 5.636 ppb
BEC = 83.63 ppb

Weight: <None>
Min Conc: <None>

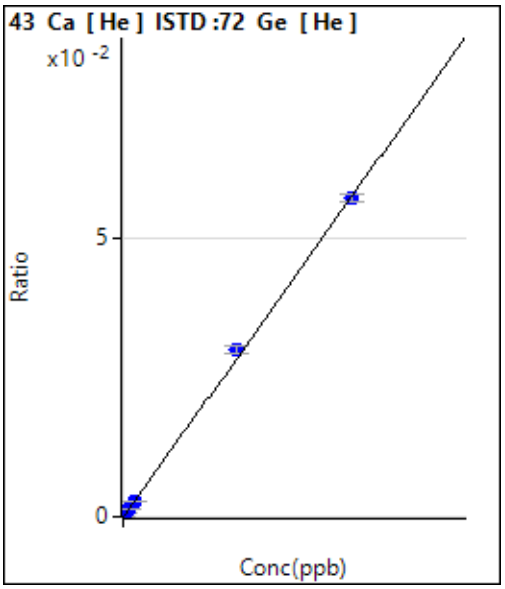
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	79897.00	0.2329	P	1.2	
2	☐	200.000	180.430	145462.91	0.4194	P	1.0	-9.8
3	☐	500.000	462.806	247549.48	0.7112	P	0.1	-7.4
4	☐	1000.000	949.531	420121.95	1.2143	P	0.4	-5.0
5	☐	10000.00	10315.33	3819073.49	10.8940	A	2.2	3.2
6	☐	20000.00	19845.98	7143831.98	20.7441	A	0.7	-0.8

y = 0.0010 * x + 0.2329
R = 0.9998
DL = 8 ppb
BEC = 225.4 ppb

Weight: <None>
Min Conc: <None>

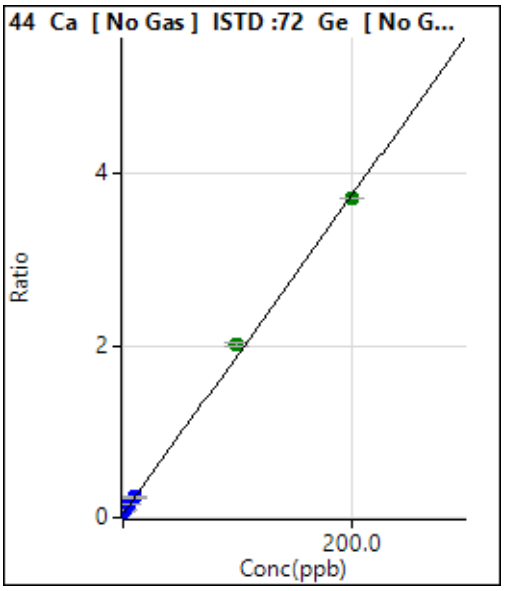


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0001	P	23.8	
2	☐	200.000	153.355	200.01	0.0006	P	10.7	-23.3
3	☐	500.000	425.678	473.35	0.0014	P	5.4	-14.9
4	☐	1000.000	960.937	1003.39	0.0029	P	1.7	-3.9
5	☐	10000.00	10376.20	10510.86	0.0300	P	4.4	3.8
6	☐	20000.00	19816.17	19674.36	0.0571	P	2.2	-0.9

y = 2.8764E-006 * x + 1.3586E-004
R = 0.9997
DL = 33.73 ppb
BEC = 47.23 ppb

Weight: <None>
Min Conc: <None>

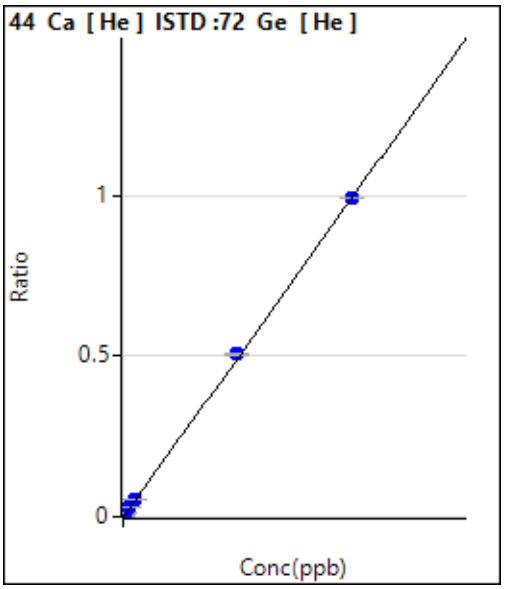
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	67441.89	0.0623	P	0.5	
2	☐	2.000	1.674	103728.82	0.0933	P	0.9	-16.3
3	☐	5.000	4.724	163671.47	0.1498	P	4.3	-5.5
4	☐	10.000	9.385	256489.66	0.2362	P	1.2	-6.2
5	☐	100.000	105.550	2191619.03	2.0189	A	2.9	5.6
6	☐	200.000	197.266	4046921.19	3.7191	A	0.5	-1.4

y = 0.0185 * x + 0.0623
R = 0.9994
DL = 0.05448 ppb
BEC = 3.359 ppb

Weight: <None>
Min Conc: <None>

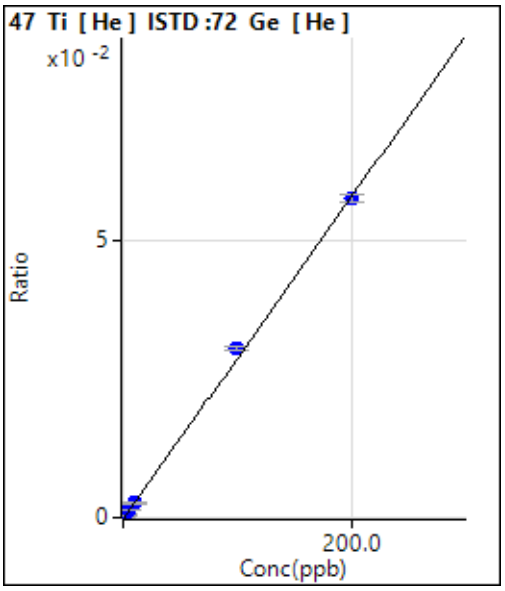


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1023.40	0.0030	P	8.6	
2	☐	200.000	193.928	4380.79	0.0126	P	0.5	-3.0
3	☐	500.000	505.752	9793.65	0.0281	P	2.8	1.2
4	☐	1000.000	988.648	18045.46	0.0522	P	2.7	-1.1
5	☐	10000.00	10161.77	178255.88	0.5085	P	1.3	1.6
6	☐	20000.00	19919.59	342262.23	0.9938	P	0.3	-0.4

y = 4.9742E-005 * x + 0.0030
R = 1.0000
DL = 15.5 ppb
BEC = 59.99 ppb

Weight: <None>
Min Conc: <None>

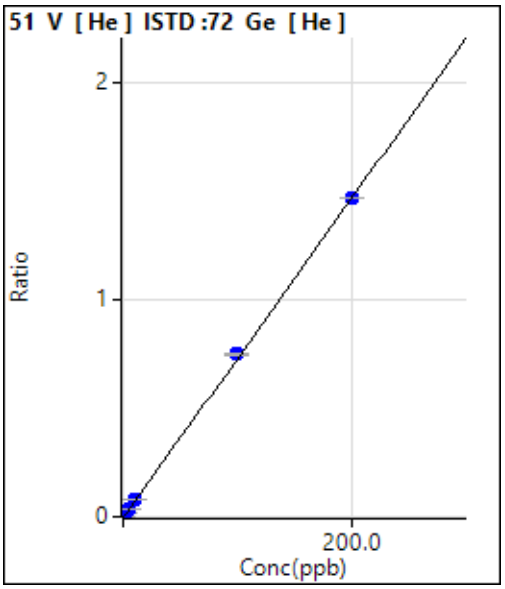
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	1.879	193.34	0.0006	P	31.9	-6.1
3	☐	5.000	4.797	490.02	0.0014	P	13.3	-4.1
4	☐	10.000	9.285	940.05	0.0027	P	11.2	-7.2
5	☐	100.000	104.324	10670.94	0.0304	P	2.3	4.3
6	☐	200.000	197.880	19877.99	0.0577	P	2.5	-1.1

y = 2.9161E-004 * x + 9.7550E-006
R = 0.9996
DL = 0.1738 ppb
BEC = 0.03345 ppb

Weight: <None>
Min Conc: <None>

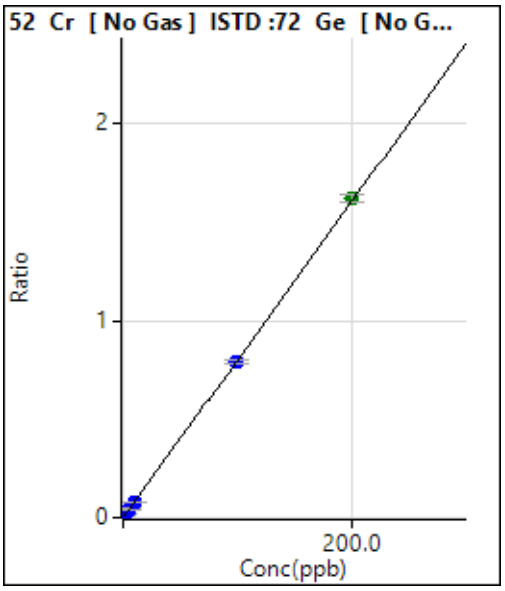


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	602.24	0.0018	P	5.0	
2	☐	2.000	1.979	5660.08	0.0163	P	4.4	-1.1
3	☐	5.000	4.851	13041.80	0.0375	P	0.9	-3.0
4	☐	10.000	9.995	26066.99	0.0753	P	0.3	0.0
5	☐	100.000	101.665	263019.47	0.7502	P	1.3	1.7
6	☐	200.000	199.171	505587.17	1.4681	P	0.1	-0.4

y = 0.0074 * x + 0.0018
R = 0.9999
DL = 0.03596 ppb
BEC = 0.2384 ppb

Weight: <None>
Min Conc: <None>

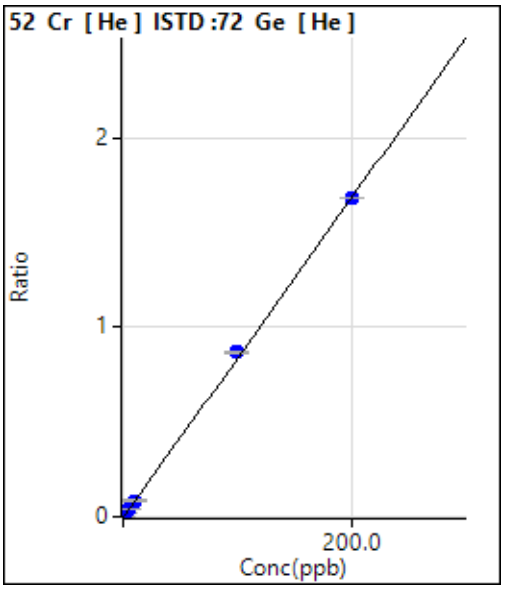
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7612.22	0.0070	P	5.6	
2	☐	2.000	1.765	23530.55	0.0212	P	2.8	-11.7
3	☐	5.000	4.561	47609.52	0.0436	P	4.1	-8.8
4	☐	10.000	9.211	87760.46	0.0808	P	3.1	-7.9
5	☐	100.000	97.613	857042.62	0.7894	P	2.0	-2.4
6	☐	200.000	201.246	1762477.58	1.6200	A	2.2	0.6

y = 0.0080 * x + 0.0070
R = 0.9999
DL = 0.1473 ppb
BEC = 0.8766 ppb

Weight: <None>
Min Conc: <None>

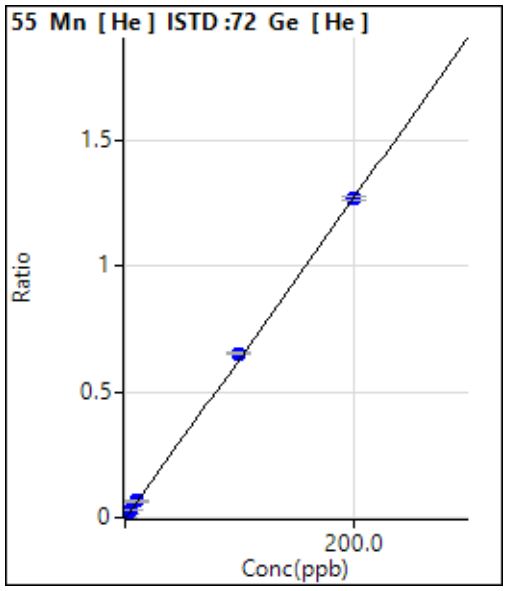


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	910.05	0.0027	P	11.9	
2	☐	2.000	1.917	6545.05	0.0189	P	8.2	-4.2
3	☐	5.000	4.846	15185.31	0.0436	P	0.5	-3.1
4	☐	10.000	9.738	29405.25	0.0850	P	3.1	-2.6
5	☐	100.000	102.356	304386.17	0.8682	P	1.7	2.4
6	☐	200.000	198.840	579983.27	1.6841	P	0.2	-0.6

y = 0.0085 * x + 0.0027
R = 0.9999
DL = 0.1117 ppb
BEC = 0.3139 ppb

Weight: <None>
Min Conc: <None>

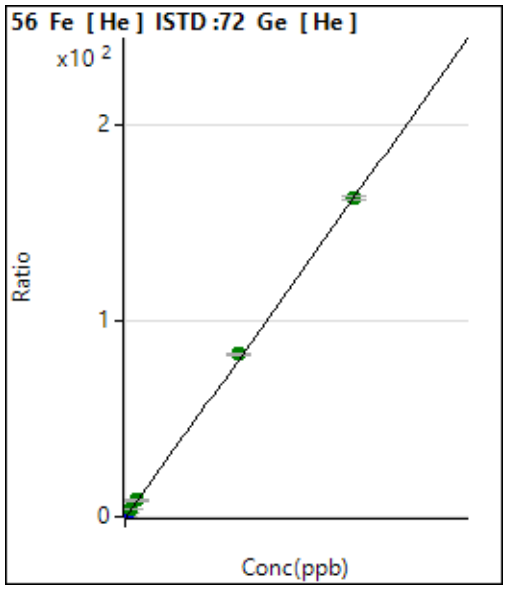
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	373.35	0.0011	P	21.5	
2	☐	2.000	1.962	4724.25	0.0136	P	0.4	-1.9
3	☐	5.000	4.931	11341.56	0.0326	P	3.9	-1.4
4	☐	10.000	10.037	22562.15	0.0652	P	1.6	0.4
5	☐	100.000	102.308	229519.59	0.6547	P	1.9	2.3
6	☐	200.000	198.846	437870.90	1.2715	P	0.8	-0.6

y = 0.0064 * x + 0.0011
R = 0.9999
DL = 0.1098 ppb
BEC = 0.1703 ppb

Weight: <None>
Min Conc: <None>

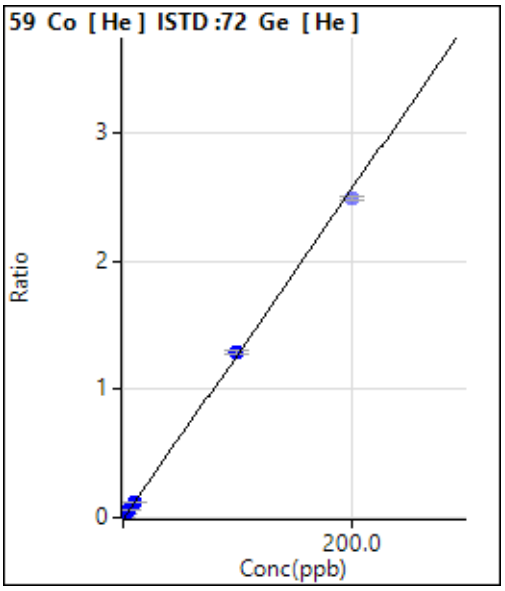


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8232.63	0.0240	P	2.2	
2	☐	200.000	189.606	545517.96	1.5728	P	0.9	-5.2
3	☐	500.000	500.902	1432373.00	4.1157	A	1.8	0.2
4	☐	1000.000	1017.047	2882654.54	8.3319	A	1.2	1.7
5	☐	10000.00	10179.61	29161372.0	83.1780	A	1.4	1.8
6	☐	20000.00	19909.42	56016162.5	162.657	A	0.7	-0.5

y = 0.0082 * x + 0.0240
R = 0.9999
DL = 0.1932 ppb
BEC = 2.938 ppb

Weight: <None>
Min Conc: <None>

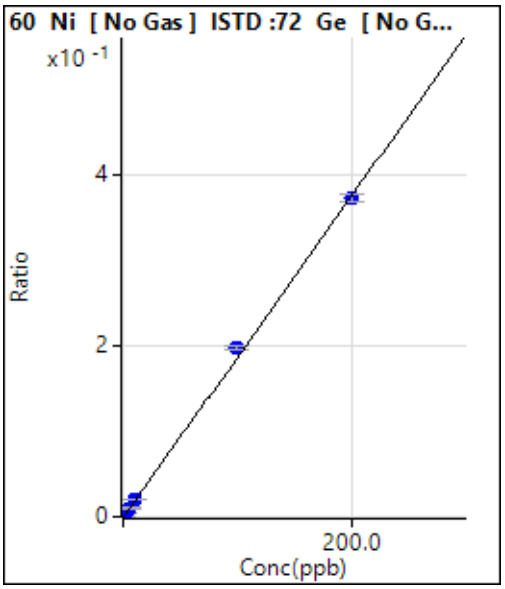
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	25.7	
2	☐	2.000	1.986	8913.05	0.0257	P	5.5	-0.7
3	☐	5.000	4.635	20822.84	0.0598	P	0.3	-7.3
4	☐	10.000	9.649	43048.20	0.1244	P	1.3	-3.5
5	☐	100.000	100.054	451906.71	1.2890	P	1.6	0.1
6	☑	200.000		858149.42	2.4919	P	0.7	

y = 0.0129 * x + 1.1677E-004
R = 1.0000
DL = 0.006992 ppb
BEC = 0.009065 ppb

Weight: <None>
Min Conc: <None>

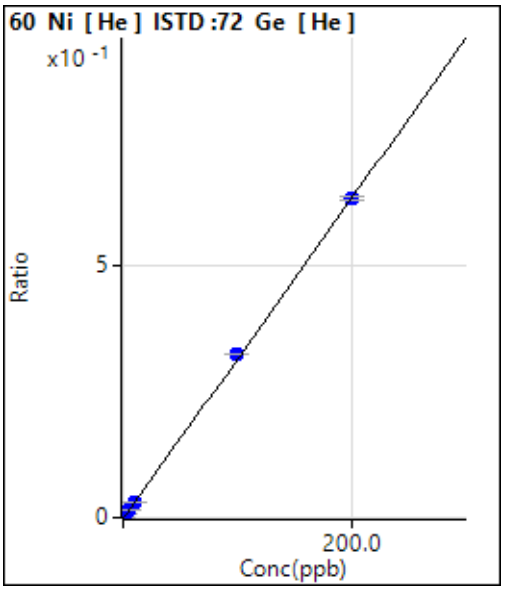


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	766.70	0.0007	P	14.3	
2	☐	2.000	2.011	4991.01	0.0045	P	1.1	0.5
3	☐	5.000	4.883	10804.48	0.0099	P	4.8	-2.3
4	☐	10.000	10.333	21864.53	0.0201	P	2.0	3.3
5	☐	100.000	104.611	214336.74	0.1974	P	2.5	4.6
6	☐	200.000	197.681	405216.95	0.3725	P	2.1	-1.2

y = 0.0019 * x + 7.0743E-004
R = 0.9996
DL = 0.161 ppb
BEC = 0.3762 ppb

Weight: <None>
Min Conc: <None>

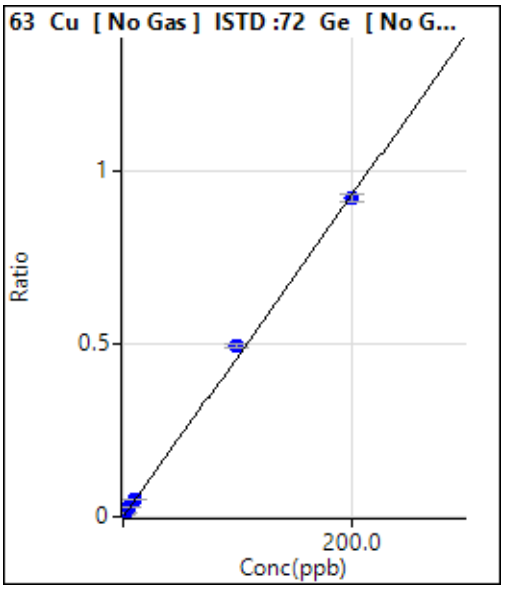
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	216.67	0.0006	P	19.2	
2	☐	2.000	1.939	2353.59	0.0068	P	4.4	-3.0
3	☐	5.000	5.014	5757.97	0.0165	P	5.7	0.3
4	☐	10.000	9.852	11034.65	0.0319	P	1.7	-1.5
5	☐	100.000	102.060	113778.93	0.3245	P	0.3	2.1
6	☐	200.000	198.978	217667.62	0.6321	P	0.8	-0.5

y = 0.0032 * x + 6.3159E-004
R = 0.9999
DL = 0.1146 ppb
BEC = 0.199 ppb

Weight: <None>
Min Conc: <None>

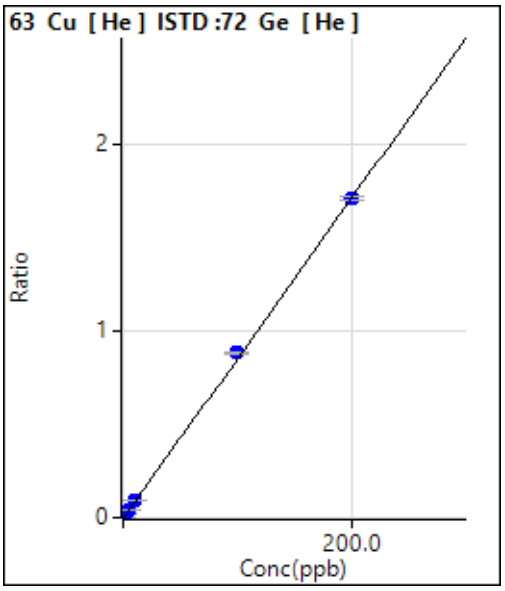


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3927.31	0.0036	P	4.0	
2	☐	2.000	1.888	13780.54	0.0124	P	4.3	-5.6
3	☐	5.000	4.797	28319.77	0.0259	P	4.2	-4.1
4	☐	10.000	10.042	54612.87	0.0503	P	2.4	0.4
5	☐	100.000	105.098	534355.41	0.4922	P	2.4	5.1
6	☐	200.000	197.455	1002571.73	0.9216	P	2.3	-1.3

y = 0.0046 * x + 0.0036
R = 0.9995
DL = 0.09288 ppb
BEC = 0.7803 ppb

Weight: <None>
Min Conc: <None>

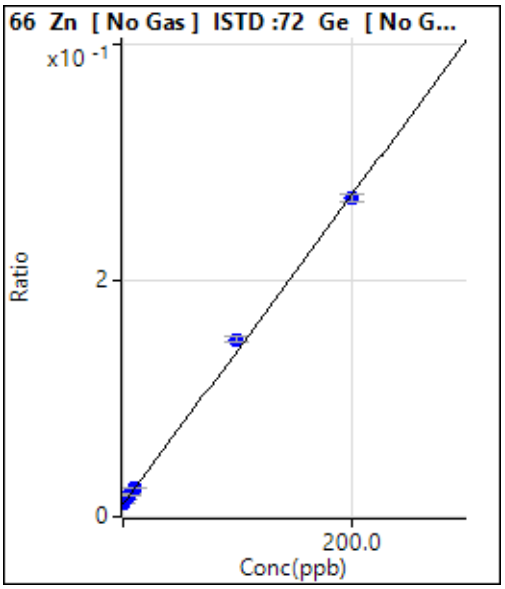
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1563.45	0.0046	P	2.8	
2	☐	2.000	2.006	7548.87	0.0218	P	3.1	0.3
3	☐	5.000	4.770	15829.44	0.0455	P	2.2	-4.6
4	☐	10.000	9.972	31179.36	0.0901	P	1.0	-0.3
5	☐	100.000	102.222	309058.71	0.8816	P	2.2	2.2
6	☐	200.000	198.896	589236.08	1.7110	P	0.7	-0.6

y = 0.0086 * x + 0.0046
R = 0.9999
DL = 0.04449 ppb
BEC = 0.5313 ppb

Weight: <None>
Min Conc: <None>

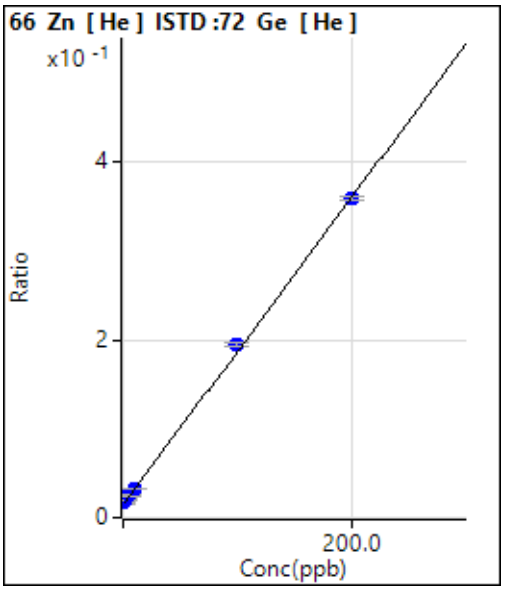


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12836.29	0.0119	P	3.6	
2	☐	2.000	2.135	16280.02	0.0146	P	2.2	6.8
3	☐	5.000	5.122	20275.39	0.0186	P	4.2	2.4
4	☐	10.000	9.846	26866.99	0.0247	P	1.5	-1.5
5	☐	100.000	105.563	162939.00	0.1501	P	3.0	5.6
6	☐	200.000	197.222	293912.36	0.2702	P	1.9	-1.4

y = 0.0013 * x + 0.0119
R = 0.9994
DL = 0.9655 ppb
BEC = 9.049 ppb

Weight: <None>
Min Conc: <None>

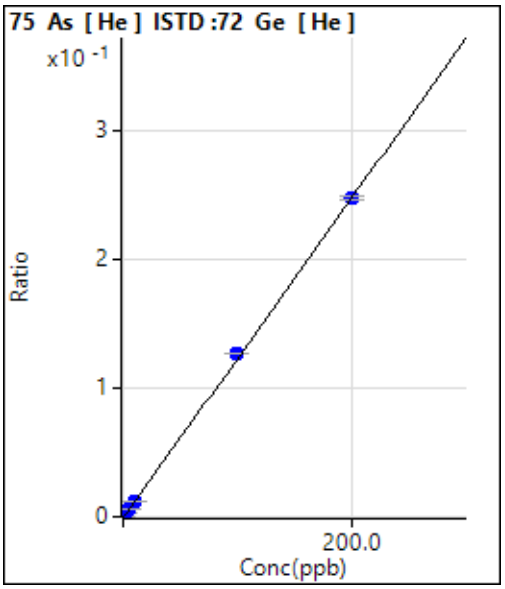
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5651.29	0.0165	P	3.0	
2	☐	2.000	2.255	7068.64	0.0204	P	2.5	12.7
3	☐	5.000	5.031	8766.31	0.0252	P	2.9	0.6
4	☐	10.000	9.481	11378.28	0.0329	P	2.5	-5.2
5	☐	100.000	103.328	68459.10	0.1953	P	2.2	3.3
6	☐	200.000	198.359	123891.52	0.3597	P	0.8	-0.8

y = 0.0017 * x + 0.0165
R = 0.9998
DL = 0.8671 ppb
BEC = 9.522 ppb

Weight: <None>
Min Conc: <None>

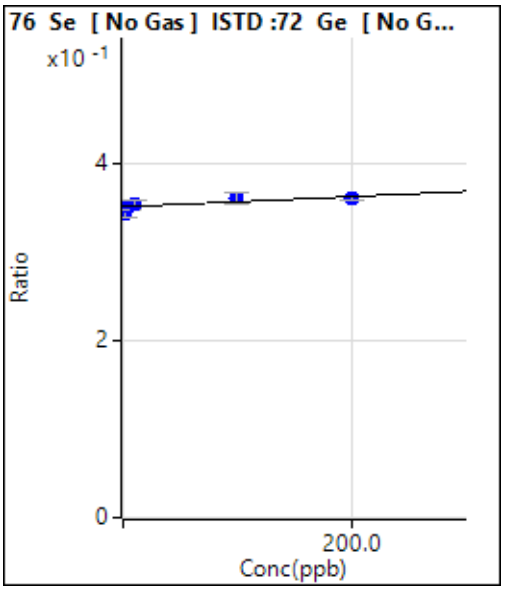


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	62.22	0.0002	P	38.0	
2	☐	2.000	1.953	903.37	0.0026	P	2.1	-2.3
3	☐	5.000	4.630	2062.39	0.0059	P	3.4	-7.4
4	☐	10.000	9.662	4209.57	0.0122	P	1.1	-3.4
5	☐	100.000	101.853	44359.24	0.1265	P	1.1	1.9
6	☐	200.000	199.100	85112.96	0.2472	P	1.0	-0.4

y = 0.0012 * x + 1.8149E-004
R = 0.9999
DL = 0.1667 ppb
BEC = 0.1463 ppb

Weight: <None>
Min Conc: <None>

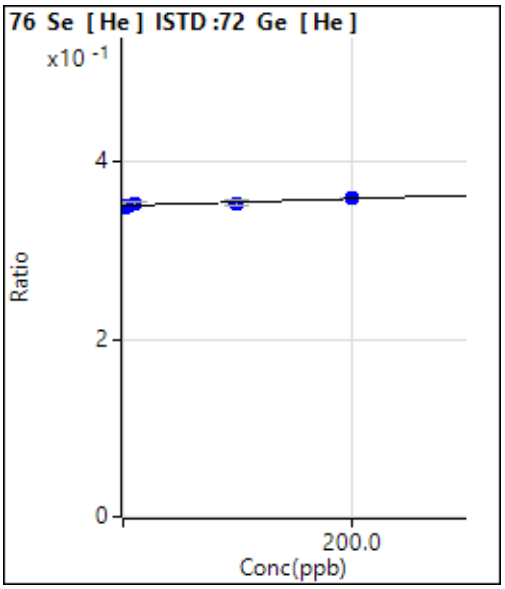
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	380438.43	0.3513	P	1.7	
2	☐	2.000	-117.667	382783.11	0.3444	P	2.6	-5983.
3	☐	5.000	20.941	385215.68	0.3526	P	3.0	318.8
4	☐	10.000	70.894	385931.01	0.3555	P	1.9	608.9
5	☐	100.000	164.373	391811.07	0.3610	P	3.5	64.4
6	☐	200.000	165.567	392855.58	0.3610	P	0.9	-17.2

y = 5.8649E-005 * x + 0.3513
R = 0.7719
DL = 302.2 ppb
BEC = 5991 ppb

Weight: <None>
Min Conc: <None>

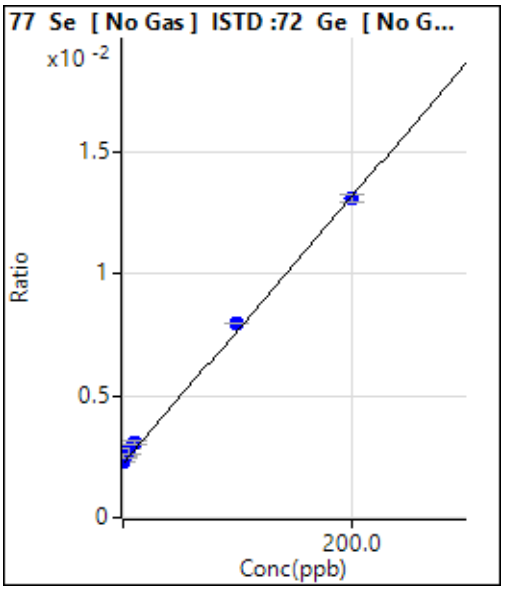


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	120215.19	0.3504	P	1.0	
2	☐	2.000	-58.011	120743.26	0.3481	P	1.2	-3000.
3	☐	5.000	11.913	122139.41	0.3509	P	0.7	138.3
4	☐	10.000	48.379	121916.90	0.3524	P	0.8	383.8
5	☐	100.000	60.483	123710.31	0.3529	P	1.9	-39.5
6	☐	200.000	218.267	123689.62	0.3592	P	0.5	9.1

y = 3.9954E-005 * x + 0.3504
R = 0.9208
DL = 270.1 ppb
BEC = 8771 ppb

Weight: <None>
Min Conc: <None>

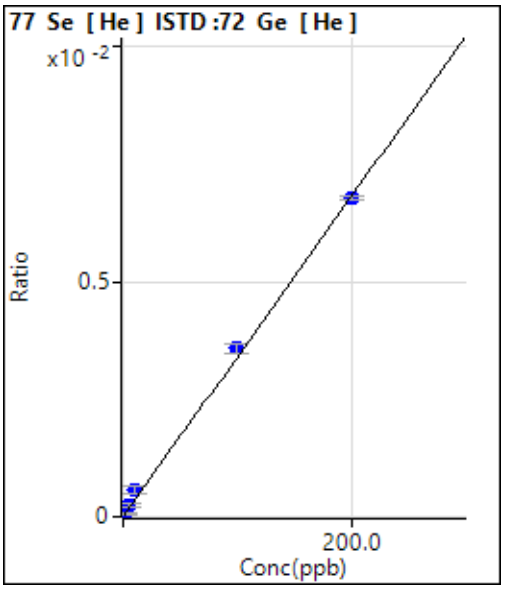
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2490.27	0.0023	P	2.0	
2	☐	2.000	3.600	2773.67	0.0025	P	5.1	80.0
3	☐	5.000	8.068	2990.38	0.0027	P	8.9	61.4
4	☐	10.000	14.400	3350.47	0.0031	P	4.7	44.0
5	☐	100.000	104.032	8676.29	0.0080	P	0.6	4.0
6	☐	200.000	197.671	14264.39	0.0131	P	2.2	-1.2

y = 5.4694E-005 * x + 0.0023
R = 0.9996
DL = 2.585 ppb
BEC = 42.04 ppb

Weight: <None>
Min Conc: <None>

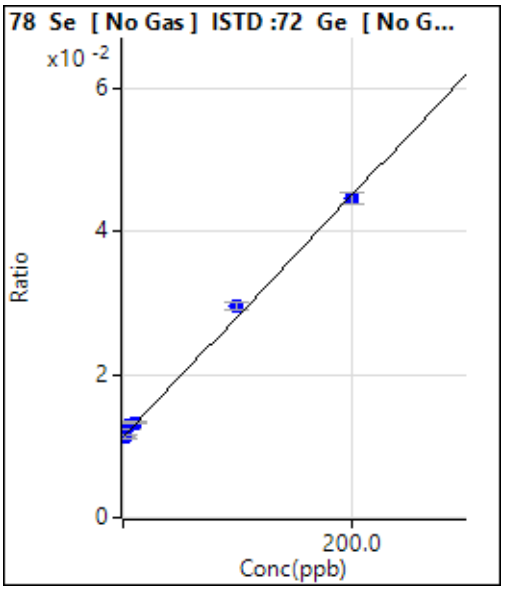


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	86.6	
2	☐	2.000	1.118	26.67	0.0001	P	57.5	-44.1
3	☐	5.000	5.610	80.00	0.0002	P	33.1	12.2
4	☐	10.000	15.532	196.67	0.0006	P	27.3	55.3
5	☐	100.000	103.841	1253.42	0.0036	P	6.2	3.8
6	☐	200.000	197.797	2333.58	0.0068	P	1.7	-1.1

y = 3.4063E-005 * x + 3.8756E-005
R = 0.9994
DL = 2.956 ppb
BEC = 1.138 ppb

Weight: <None>
Min Conc: <None>

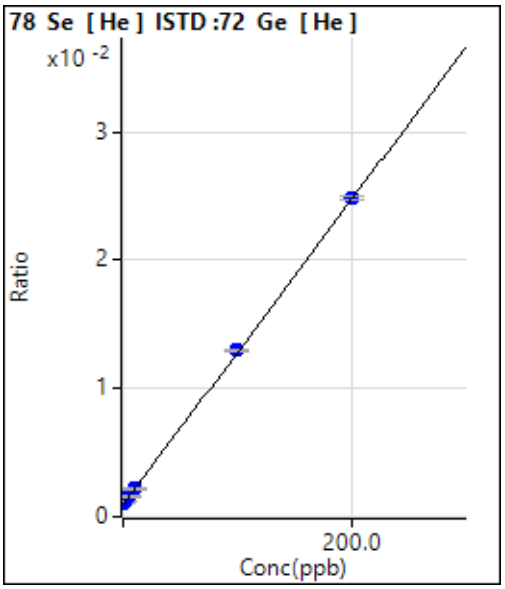
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12469.31	0.0115	P	2.8	
2	☐	2.000	-0.702	12666.18	0.0114	P	4.4	-135.1
3	☐	5.000	8.019	14040.85	0.0129	P	8.6	60.4
4	☐	10.000	10.496	14424.63	0.0133	P	3.7	5.0
5	☐	100.000	107.136	32091.84	0.0296	P	4.1	7.1
6	☐	200.000	196.359	48510.66	0.0446	P	3.9	-1.8

y = 1.6847E-004 * x + 0.0115
R = 0.9988
DL = 5.843 ppb
BEC = 68.36 ppb

Weight: <None>
Min Conc: <None>

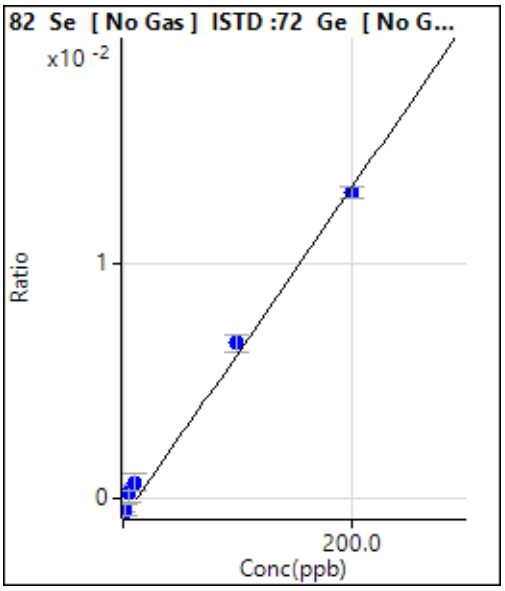


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	366.01	0.0011	P	8.4	
2	☐	2.000	0.979	410.68	0.0012	P	9.3	-51.1
3	☐	5.000	4.804	570.68	0.0016	P	9.3	-3.9
4	☐	10.000	9.554	762.69	0.0022	P	9.1	-4.5
5	☐	100.000	100.145	4551.45	0.0130	P	0.6	0.1
6	☐	200.000	199.965	8560.07	0.0249	P	1.1	0.0

y = 1.1896E-004 * x + 0.0011
R = 1.0000
DL = 2.256 ppb
BEC = 8.974 ppb

Weight: <None>
Min Conc: <None>

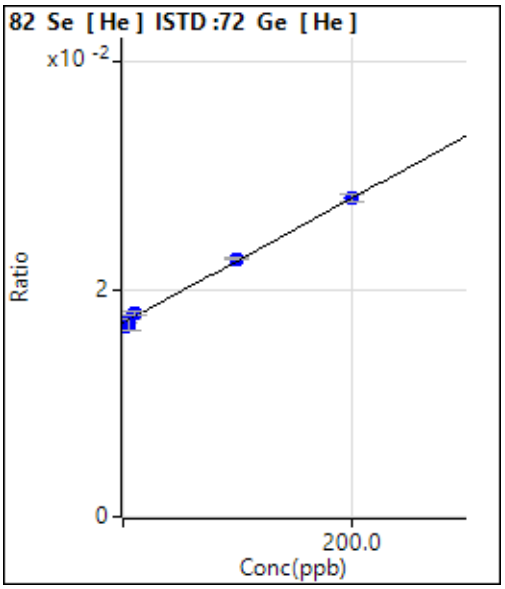
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-878.83	-0.0008	P	-51.0	
2	☐	2.000	4.622	-546.33	-0.0005	P	-96.0	131.1
3	☐	5.000	14.723	257.81	0.0002	P	319.7	194.5
4	☐	10.000	21.230	735.78	0.0007	P	114.6	112.3
5	☐	100.000	105.304	7176.40	0.0066	P	11.4	5.3
6	☐	200.000	196.517	14180.45	0.0130	P	3.8	-1.7

y = 7.0423E-005 * x - 8.1373E-004
R = 0.9983
DL = 17.68 ppb
BEC = -11.55 ppb

Weight: <None>
Min Conc: <None>

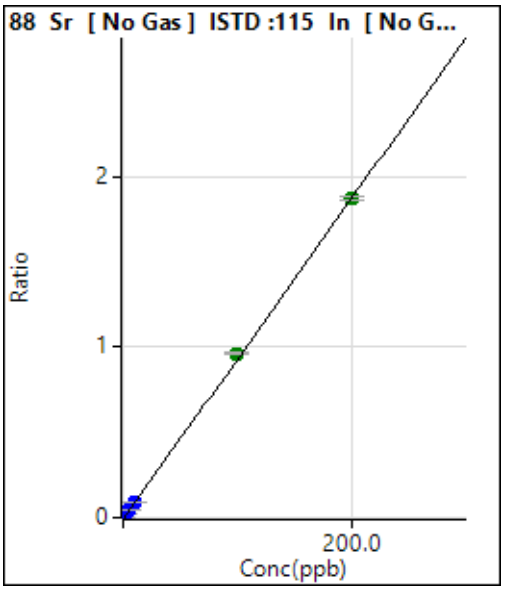


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5881.39	0.0171	P	2.4	
2	☐	2.000	-7.213	5808.02	0.0167	P	3.1	-460.6
3	☐	5.000	-3.854	5894.73	0.0169	P	6.6	-177.1
4	☐	10.000	15.448	6224.88	0.0180	P	1.7	54.5
5	☐	100.000	101.513	7962.49	0.0227	P	0.9	1.5
6	☐	200.000	199.285	9666.96	0.0281	P	2.8	-0.4

y = 5.4839E-005 * x + 0.0171
R = 0.9977
DL = 22.31 ppb
BEC = 312.6 ppb

Weight: <None>
Min Conc: <None>

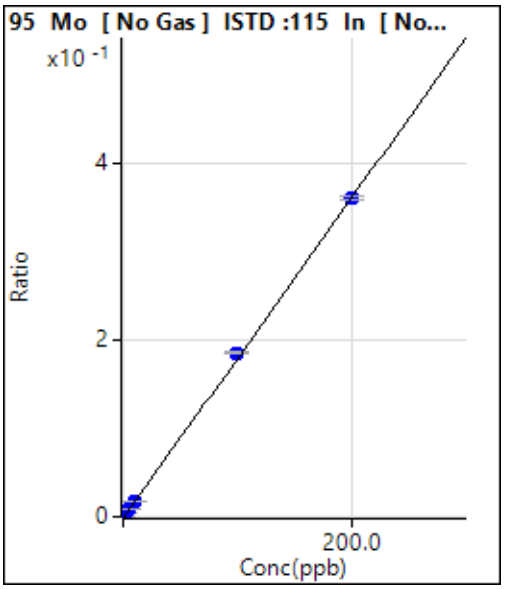
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	540.02	0.0004	P	20.5	
2	☐	2.000	1.797	23574.41	0.0173	P	2.1	-10.2
3	☐	5.000	4.742	61363.99	0.0450	P	2.6	-5.2
4	☐	10.000	9.067	116373.30	0.0858	P	1.0	-9.3
5	☐	100.000	102.089	1305412.22	0.9617	A	1.4	2.1
6	☐	200.000	199.011	2501477.41	1.8744	A	1.3	-0.5

y = 0.0094 * x + 3.9902E-004
R = 0.9999
DL = 0.0261 ppb
BEC = 0.04237 ppb

Weight: <None>
Min Conc: <None>

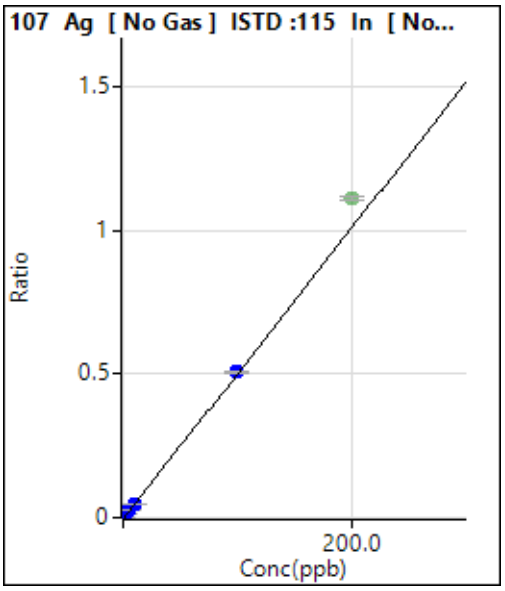


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	49.6	
2	☐	2.000	1.940	4817.62	0.0035	P	2.1	-3.0
3	☐	5.000	4.755	11788.73	0.0086	P	3.1	-4.9
4	☐	10.000	9.770	24078.79	0.0178	P	2.8	-2.3
5	☐	100.000	102.145	251688.35	0.1854	P	1.7	2.1
6	☐	200.000	198.946	481963.60	0.3611	P	0.7	-0.5

y = 0.0018 * x + 1.7243E-005
R = 0.9999
DL = 0.01414 ppb
BEC = 0.0095 ppb

Weight: <None>
Min Conc: <None>

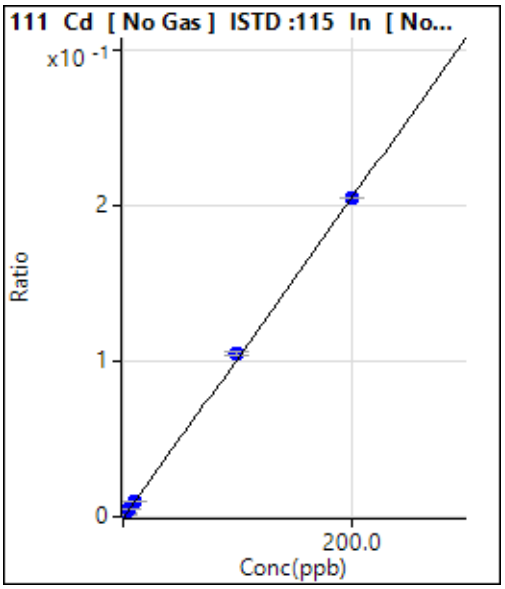
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1170.07	0.0009	P	3.5	
2	☐	2.000	1.896	14241.18	0.0105	P	0.6	-5.2
3	☐	5.000	4.651	33242.17	0.0244	P	2.2	-7.0
4	☐	10.000	9.638	67347.89	0.0496	P	0.8	-3.6
5	☐	100.000	100.056	688593.45	0.5073	P	1.4	0.1
6	☑	200.000		1482101.18	1.1105	A	0.9	

y = 0.0051 * x + 8.6408E-004
R = 1.0000
DL = 0.01769 ppb
BEC = 0.1707 ppb

Weight: <None>
Min Conc: <None>

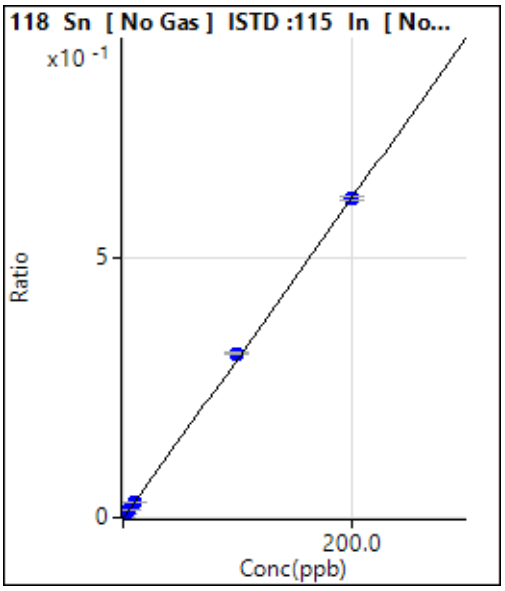


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.852	2590.29	0.0019	P	8.7	-7.4
3	☐	5.000	4.973	6958.65	0.0051	P	5.0	-0.5
4	☐	10.000	9.671	13483.79	0.0099	P	2.2	-3.3
5	☐	100.000	101.915	142160.00	0.1047	P	1.6	1.9
6	☐	200.000	199.061	273011.37	0.2046	P	0.6	-0.5

y = 0.0010 * x + 0.0000E+000
R = 0.9999
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

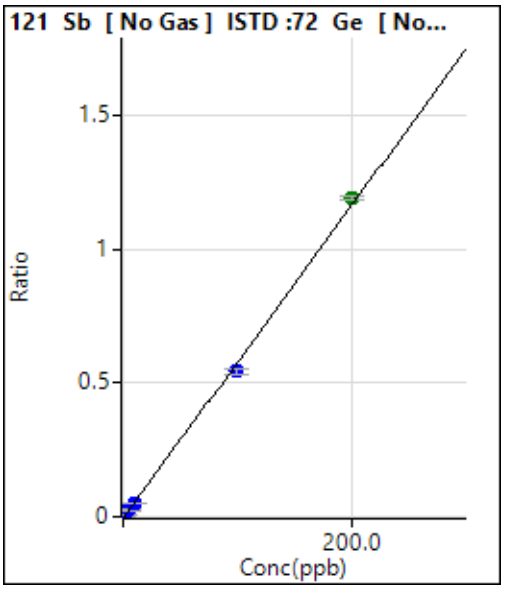
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1306.75	0.0010	P	7.6	
2	☐	2.000	1.816	8943.20	0.0066	P	2.7	-9.2
3	☐	5.000	4.733	21220.81	0.0156	P	1.7	-5.3
4	☐	10.000	9.531	41225.11	0.0304	P	1.9	-4.7
5	☐	100.000	102.023	428899.26	0.3160	P	0.7	2.0
6	☐	200.000	199.021	821380.64	0.6155	P	0.7	-0.5

y = 0.0031 * x + 9.6492E-004
R = 0.9999
DL = 0.07146 ppb
BEC = 0.3125 ppb

Weight: <None>
Min Conc: <None>

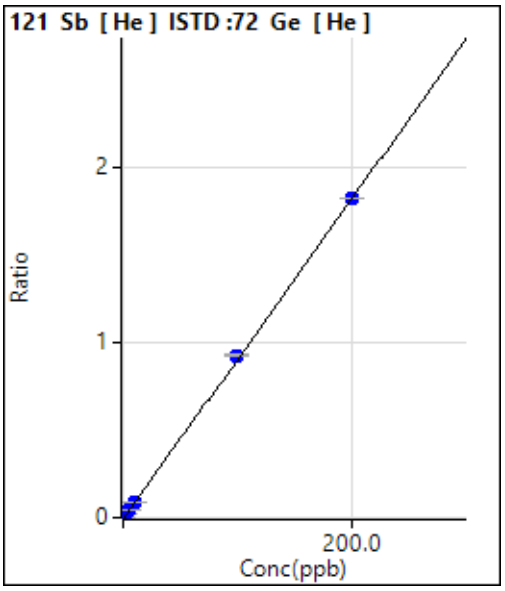


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	346.68	0.0003	P	17.9	
2	☐	2.000	1.715	11495.23	0.0103	P	1.7	-14.2
3	☐	5.000	4.285	27706.25	0.0254	P	3.0	-14.3
4	☐	10.000	8.851	56481.54	0.0520	P	4.1	-11.5
5	☐	100.000	92.703	588387.05	0.5420	P	3.0	-7.3
6	☐	200.000	203.727	1295667.40	1.1908	A	1.3	1.9

y = 0.0058 * x + 3.1991E-004
R = 0.9991
DL = 0.02933 ppb
BEC = 0.05475 ppb

Weight: <None>
Min Conc: <None>

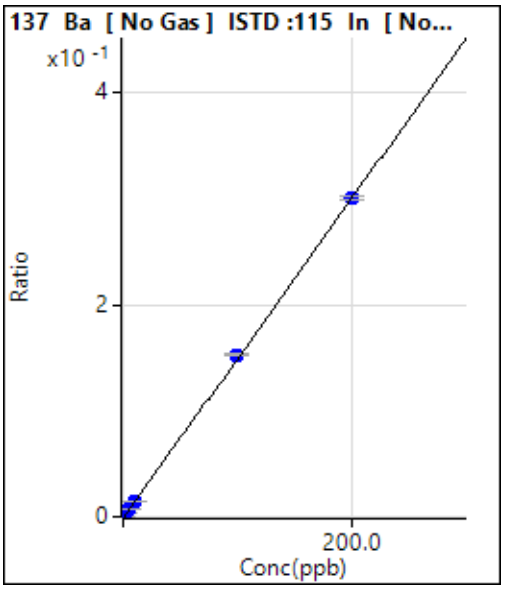
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	213.34	0.0006	P	15.7	
2	☐	2.000	1.839	6038.17	0.0174	P	0.7	-8.1
3	☐	5.000	4.794	15446.07	0.0444	P	3.7	-4.1
4	☐	10.000	9.617	30585.99	0.0884	P	0.9	-3.8
5	☐	100.000	101.109	323783.82	0.9236	P	1.4	1.1
6	☐	200.000	199.471	627288.82	1.8215	P	0.1	-0.3

y = 0.0091 * x + 6.2149E-004
R = 1.0000
DL = 0.03208 ppb
BEC = 0.06808 ppb

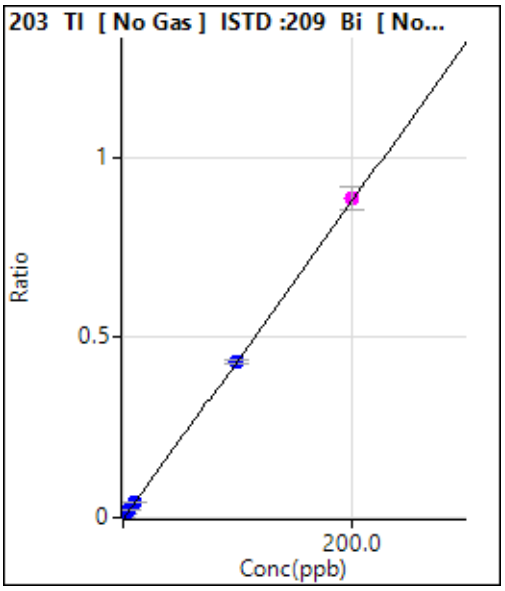
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0001	P	15.3	
2	☐	2.000	1.954	4147.41	0.0030	P	4.3	-2.3
3	☐	5.000	4.746	9897.29	0.0073	P	2.4	-5.1
4	☐	10.000	9.788	20179.32	0.0149	P	2.3	-2.1
5	☐	100.000	101.367	207894.24	0.1532	P	0.9	1.4
6	☐	200.000	199.334	401827.22	0.3011	P	0.7	-0.3

y = 0.0015 * x + 9.5995E-005
R = 1.0000
DL = 0.02926 ppb
BEC = 0.06358 ppb

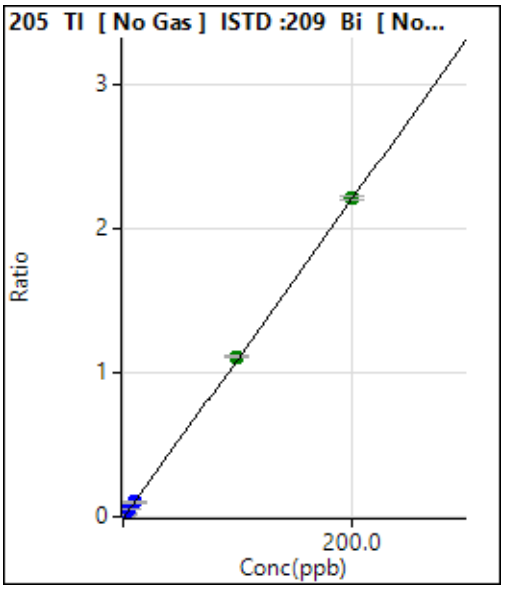
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0000	P	60.1	
2	☐	2.000	1.849	11725.68	0.0082	P	2.1	-7.5
3	☐	5.000	4.698	29615.46	0.0207	P	1.0	-6.0
4	☐	10.000	9.440	59016.19	0.0416	P	1.6	-5.6
5	☐	100.000	98.003	622041.54	0.4318	P	1.6	-2.0
6	☐	200.000	201.036	1235026.13	0.8857	M	6.6	0.5

y = 0.0044 * x + 3.2899E-005
R = 0.9999
DL = 0.01346 ppb
BEC = 0.007468 ppb

Weight: <None>
Min Conc: <None>

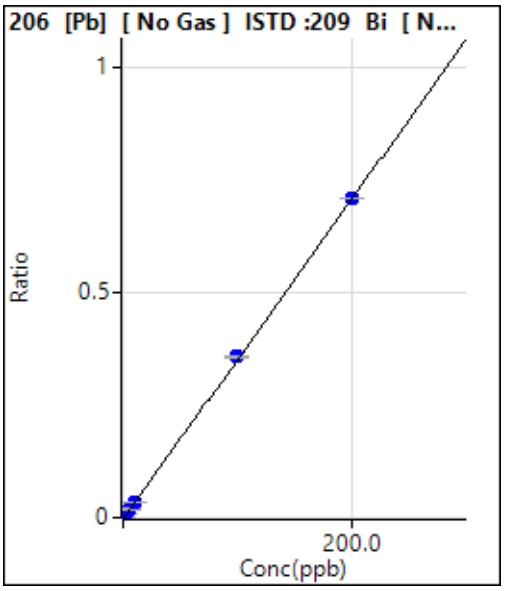


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0001	P	42.3	
2	☐	2.000	1.794	28552.99	0.0199	P	2.7	-10.3
3	☐	5.000	4.419	69895.69	0.0489	P	0.5	-11.6
4	☐	10.000	9.086	142456.70	0.1005	P	2.0	-9.1
5	☐	100.000	100.093	1592900.39	1.1058	A	1.4	0.1
6	☐	200.000	200.016	3082087.97	2.2095	A	0.6	0.0

y = 0.0110 * x + 1.0689E-004
R = 1.0000
DL = 0.01228 ppb
BEC = 0.009676 ppb

Weight: <None>
Min Conc: <None>

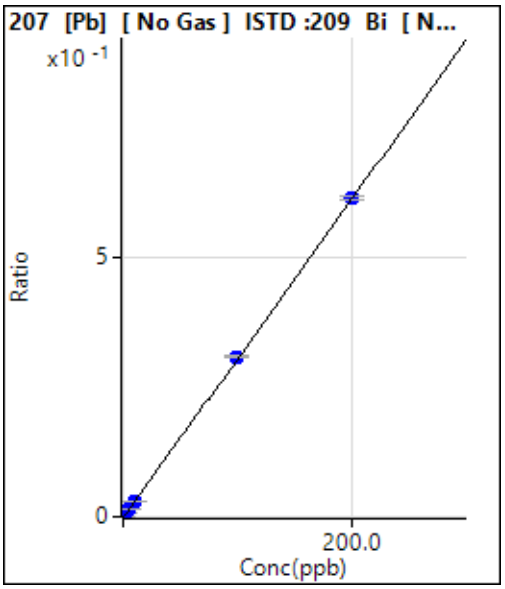
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	406.68	0.0003	P	14.0	
2	☐	2.000	1.898	10077.56	0.0070	P	2.9	-5.1
3	☐	5.000	5.163	26620.54	0.0186	P	14.3	3.3
4	☐	10.000	9.678	49163.87	0.0347	P	1.7	-3.2
5	☐	100.000	100.627	515422.74	0.3578	P	1.0	0.6
6	☐	200.000	199.700	990041.73	0.7098	P	0.3	-0.2

y = 0.0036 * x + 2.8808E-004
R = 1.0000
DL = 0.03408 ppb
BEC = 0.08109 ppb

Weight: <None>
Min Conc: <None>

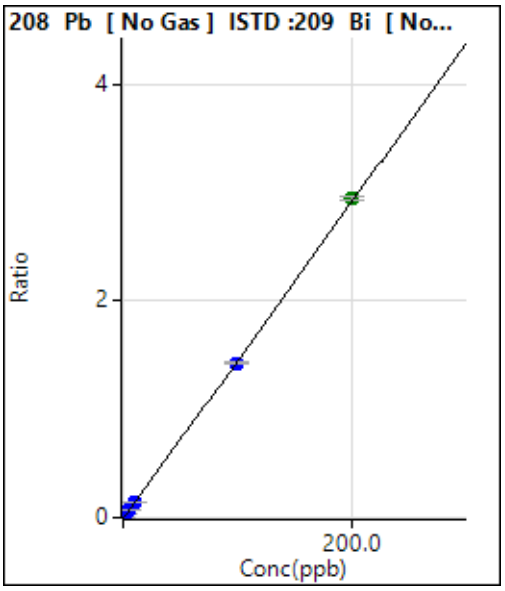


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1315.40	0.0009	P	133.0	
2	☐	2.000	1.702	8829.94	0.0062	P	6.5	-14.9
3	☐	5.000	4.585	21455.43	0.0150	P	2.7	-8.3
4	☐	10.000	9.487	42641.24	0.0301	P	4.6	-5.1
5	☐	100.000	100.287	445102.60	0.3090	P	1.0	0.3
6	☐	200.000	199.896	857710.85	0.6149	P	1.2	-0.1

y = 0.0031 * x + 9.3361E-004
R = 1.0000
DL = 1.213 ppb
BEC = 0.3039 ppb

Weight: <None>
Min Conc: <None>

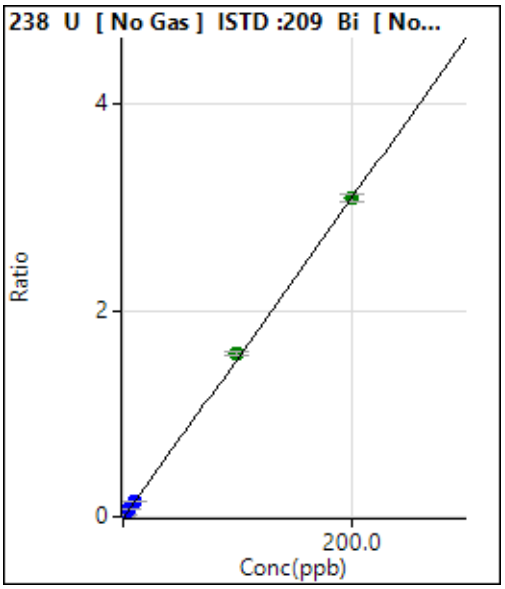
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2692.14	0.0019	P	65.4	
2	☐	2.000	1.777	40005.75	0.0279	P	1.8	-11.1
3	☐	5.000	4.695	100867.38	0.0706	P	4.0	-6.1
4	☐	10.000	9.303	195702.69	0.1380	P	1.5	-7.0
5	☐	100.000	97.385	2055255.19	1.4267	P	1.2	-2.6
6	☐	200.000	201.352	4111625.20	2.9478	A	1.3	0.7

y = 0.0146 * x + 0.0019
R = 0.9999
DL = 0.2564 ppb
BEC = 0.1306 ppb

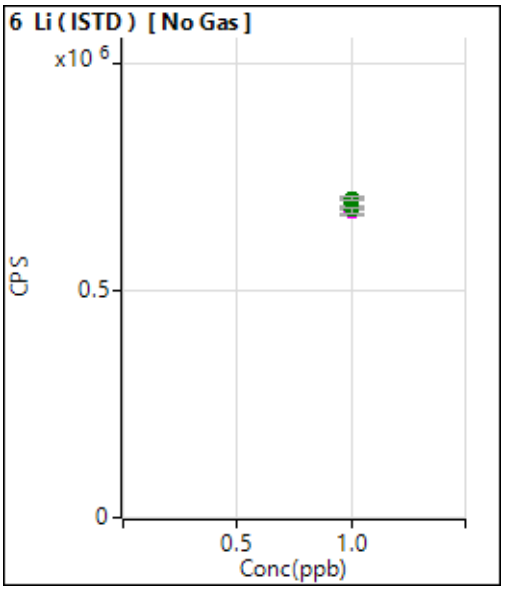
Weight: <None>
Min Conc: <None>



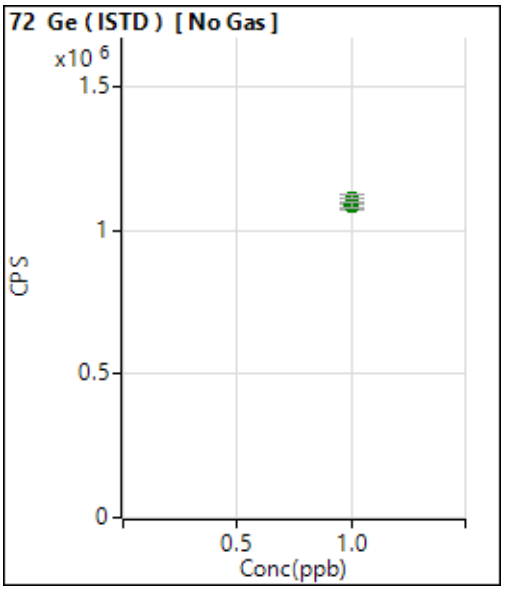
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	21.8	
2	☐	2.000	1.790	39888.68	0.0278	P	0.6	-10.5
3	☐	5.000	4.372	97086.58	0.0680	P	0.4	-12.6
4	☐	10.000	9.172	202118.54	0.1425	P	1.0	-8.3
5	☐	100.000	101.930	2281576.37	1.5838	A	1.9	1.9
6	☐	200.000	199.094	4314718.79	3.0936	A	1.9	-0.5

y = 0.0155 * x + 1.8924E-005
R = 0.9999
DL = 0.0007947 ppb
BEC = 0.001218 ppb

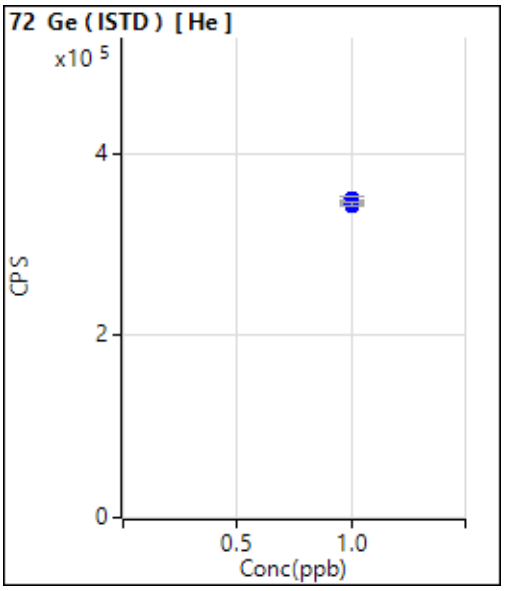
Weight: <None>
Min Conc: <None>



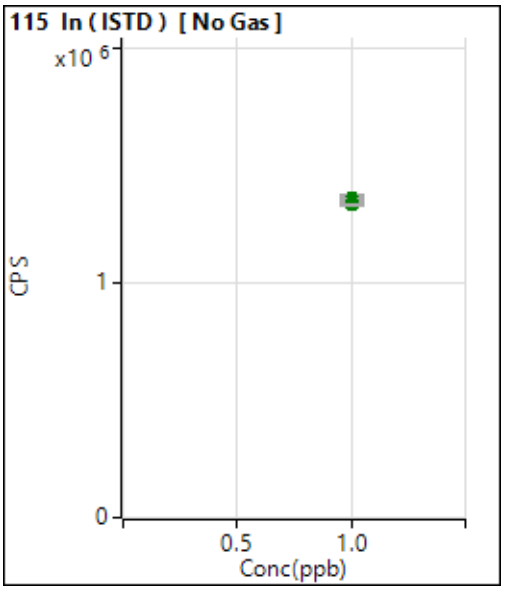
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		675584.15		M	3.0	
2	☐	1.000		693865.26		A	2.1	
3	☐	1.000		688986.54		A	3.8	
4	☐	1.000		688753.63		A	3.0	
5	☐	1.000		703252.47		A	0.8	
6	☐	1.000		677097.48		A	1.8	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1083013.81		A	1.6	
2	☐	1.000		1111763.63		A	2.3	
3	☐	1.000		1093395.24		A	3.7	
4	☐	1.000		1085869.80		A	1.9	
5	☐	1.000		1086061.18		A	2.6	
6	☐	1.000		1088193.97		A	1.7	

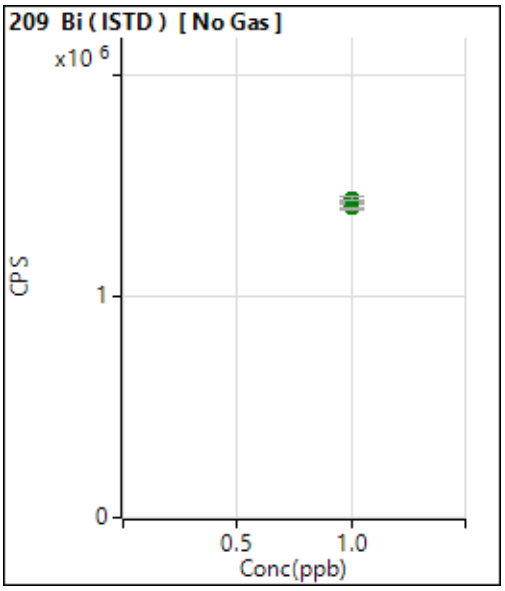


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		343019.46		P	0.9	
2	☐	1.000		346848.23		P	0.9	
3	☐	1.000		348051.02		P	0.6	
4	☐	1.000		345988.56		P	0.6	
5	☐	1.000		350617.54		P	1.2	
6	☐	1.000		344392.03		P	0.8	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1354248.87		A	0.5	
2	☐	1.000		1361364.67		A	1.1	
3	☐	1.000		1362632.26		A	2.2	
4	☐	1.000		1356637.78		A	0.9	
5	☐	1.000		1357464.77		A	0.7	
6	☐	1.000		1334627.37		A	0.5	

Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1409442.95		A	1.8	
2	☐	1.000		1433446.60		A	0.1	
3	☐	1.000		1428734.77		A	0.5	
4	☐	1.000		1418036.44		A	0.8	
5	☐	1.000		1440655.40		A	0.8	
6	☐	1.000		1394896.96		A	0.9	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	007CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:24:40-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	38949	0.00
Be	9	1	No Gas	47	152.87
V	51	2	He	602	0.97
Cr	52	2	He	910	1.23
Fe	56	2	He	8233	0.02
Se	78	2	He	366	2.07
As	75	2	He	62	60.47
Ca	44	2	He	1023	0.80
Na	23	2	He	182657	0.00
Mg	24	2	He	227	11.07
K	39	2	He	79897	0.00
Mn	55	2	He	373	5.84
Co	59	2	He	40	62.50
Ni	60	2	He	217	8.87
Cu	63	2	He	1563	0.13
Zn	66	2	He	5651	0.04
Al	27	2	He	490	0.42
B	11	1	No Gas	14603	0.01
Al	27	1	No Gas	18329	0.02
Si	28	1	No Gas	235702	0.00
Ag	107	1	No Gas	1170	0.26
Sr	88	1	No Gas	540	3.71
Mo	95	1	No Gas	23	212.09
Sn	118	1	No Gas	1307	0.59
Sb	121	1	No Gas	347	5.35
Ba	137	1	No Gas	130	11.83
Tl	205	1	No Gas	150	27.04
Tl	203	1	No Gas	47	132.55
Pb	208	1	No Gas	2692	2.43
U	238	1	No Gas	27	81.19
Ca	43	2	He	47	53.02
Sb	121	2	He	213	7.72
Ti	47	2	He	3	5196.15
Cu	63	1	No Gas	3927	0.08

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	1	No Gas	675584	3.03

Calibration Blank Report

Ge	72	2	He	343019	0.86
Ge	72	1	No Gas	1083014	1.59
In	115	1	No Gas	1354249	0.48
Bi	209	1	No Gas	1409443	1.85

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	008CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:26:55-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	3355	0.18
V	51	2	He	5660	0.07
Cr	52	2	He	6545	0.13
Fe	56	2	He	545518	0.00
Se	78	2	He	411	2.27
As	75	2	He	903	0.25
Ca	44	2	He	4381	0.01
Na	23	2	He	280189	0.00
Mg	24	2	He	59072	0.00
K	39	2	He	145463	0.00
Mn	55	2	He	4724	0.02
Co	59	2	He	8913	0.05
Ni	60	2	He	2354	0.18
Cu	63	2	He	7549	0.04
Zn	66	2	He	7069	0.04
Al	27	2	He	770	3.36
B	11	1	No Gas	19974	0.01
Al	27	1	No Gas	29405	0.00
Si	28	1	No Gas	263000	0.00
Ag	107	1	No Gas	14241	0.00
Cd	111	1	No Gas	2590	0.33
Sr	88	1	No Gas	23574	0.01
Mo	95	1	No Gas	4818	0.02
Sn	118	1	No Gas	8943	0.02
Sb	121	1	No Gas	11495	0.01
Ba	137	1	No Gas	4147	0.11
Tl	205	1	No Gas	28553	0.01
Tl	203	1	No Gas	11726	0.02
Pb	208	1	No Gas	40006	0.00
U	238	1	No Gas	39889	0.00
Ca	43	2	He	200	5.00
Sb	121	2	He	6038	0.03
Cu	63	1	No Gas	13781	0.02

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	693865	2.11	675584	102.71	70	120	
Ge	72	2	He	346848	0.92	343019	101.12	70	120	
Ge	72	1	No Gas	1111764	2.26	1083014	102.65	70	120	

Calibration Standard Report

In	115	1	No Gas	1361365	1.14	1354249	100.53	70	120	
Bi	209	1	No Gas	1433447	0.08	1409443	101.70	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	009CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:29:09-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	7951	0.02
V	51	2	He	13042	0.01
Cr	52	2	He	15185	0.00
Fe	56	2	He	1432373	0.00
Se	78	2	He	571	1.74
As	75	2	He	2062	0.20
Ca	44	2	He	9794	0.02
Na	23	2	He	426412	0.00
Mg	24	2	He	147777	0.00
K	39	2	He	247549	0.00
Mn	55	2	He	11342	0.03
Co	59	2	He	20823	0.00
Ni	60	2	He	5758	0.10
Cu	63	2	He	15829	0.01
Zn	66	2	He	8766	0.04
Al	27	2	He	1400	0.22
B	11	1	No Gas	30622	0.00
Al	27	1	No Gas	53493	0.00
Si	28	1	No Gas	308479	0.00
Ag	107	1	No Gas	33242	0.00
Cd	111	1	No Gas	6959	0.04
Sr	88	1	No Gas	61364	0.00
Mo	95	1	No Gas	11789	0.04
Sn	118	1	No Gas	21221	0.00
Sb	121	1	No Gas	27706	0.00
Ba	137	1	No Gas	9897	0.04
Tl	205	1	No Gas	69896	0.00
Tl	203	1	No Gas	29615	0.00
Pb	208	1	No Gas	100867	0.00
U	238	1	No Gas	97087	0.00
Ca	43	2	He	473	1.03
Sb	121	2	He	15446	0.02
Cu	63	1	No Gas	28320	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	688987	3.77	675584	101.98	70	120	
Ge	72	2	He	348051	0.65	343019	101.47	70	120	
Ge	72	1	No Gas	1093395	3.66	1083014	100.96	70	120	

Calibration Standard Report

In	115	1	No Gas	1362632	2.16	1354249	100.62	70	120	
Bi	209	1	No Gas	1428735	0.51	1409443	101.37	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	010CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:31:23-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	16510	0.01
V	51	2	He	26067	0.00
Cr	52	2	He	29405	0.01
Fe	56	2	He	2882655	0.00
Se	78	2	He	763	1.23
As	75	2	He	4210	0.02
Ca	44	2	He	18045	0.01
Na	23	2	He	685888	0.00
Mg	24	2	He	298879	0.00
K	39	2	He	420122	0.00
Mn	55	2	He	22562	0.01
Co	59	2	He	43048	0.00
Ni	60	2	He	11035	0.01
Cu	63	2	He	31179	0.01
Zn	66	2	He	11378	0.02
Al	27	2	He	2137	0.33
B	11	1	No Gas	49686	0.00
Al	27	1	No Gas	78256	0.00
Si	28	1	No Gas	372802	0.00
Ag	107	1	No Gas	67348	0.00
Cd	111	1	No Gas	13484	0.02
Sr	88	1	No Gas	116373	0.00
Mo	95	1	No Gas	24079	0.01
Sn	118	1	No Gas	41225	0.00
Sb	121	1	No Gas	56482	0.00
Ba	137	1	No Gas	20179	0.01
Tl	205	1	No Gas	142457	0.00
Tl	203	1	No Gas	59016	0.00
Pb	208	1	No Gas	195703	0.00
U	238	1	No Gas	202119	0.00
Ca	43	2	He	1003	0.23
Sb	121	2	He	30586	0.00
Cu	63	1	No Gas	54613	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	688754	2.96	675584	101.95	70	120	
Ge	72	2	He	345989	0.65	343019	100.87	70	120	
Ge	72	1	No Gas	1085870	1.89	1083014	100.26	70	120	

Calibration Standard Report

In	115	1	No Gas	1356638	0.87	1354249	100.18	70	120	
Bi	209	1	No Gas	1418036	0.77	1409443	100.61	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	011CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:33:36-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	174681	0.00
V	51	2	He	263019	0.00
Cr	52	2	He	304386	0.00
Fe	56	2	He	29161372	0.00
Se	78	2	He	4551	0.04
As	75	2	He	44359	0.00
Ca	44	2	He	178256	0.00
Na	23	2	He	5852426	0.00
Mg	24	2	He	3233371	0.00
K	39	2	He	3819073	0.00
Mn	55	2	He	229520	0.00
Co	59	2	He	451907	0.00
Ni	60	2	He	113779	0.00
Cu	63	2	He	309059	0.00
Zn	66	2	He	68459	0.00
Al	27	2	He	17845	0.01
B	11	1	No Gas	408374	0.00
Al	27	1	No Gas	648535	0.00
Si	28	1	No Gas	1765766	0.00
Ag	107	1	No Gas	688593	0.00
Cd	111	1	No Gas	142160	0.00
Sr	88	1	No Gas	1305412	0.00
Mo	95	1	No Gas	251688	0.00
Sn	118	1	No Gas	428899	0.00
Sb	121	1	No Gas	588387	0.00
Ba	137	1	No Gas	207894	0.00
Tl	205	1	No Gas	1592900	0.00
Tl	203	1	No Gas	622042	0.00
Pb	208	1	No Gas	2055255	0.00
U	238	1	No Gas	2281576	0.00
Ca	43	2	He	10511	0.04
Sb	121	2	He	323784	0.00
Cu	63	1	No Gas	534355	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	703252	0.78	675584	104.10	70	120	
Ge	72	2	He	350618	1.18	343019	102.22	70	120	
Ge	72	1	No Gas	1086061	2.61	1083014	100.28	70	120	

Calibration Standard Report

In	115	1	No Gas	1357465	0.68	1354249	100.24	70	120	
Bi	209	1	No Gas	1440655	0.85	1409443	102.21	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	012CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:35:45-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	333876	0.00
V	51	2	He	505587	0.00
Cr	52	2	He	579983	0.00
Fe	56	2	He	56016162	0.00
Se	78	2	He	8560	0.02
As	75	2	He	85113	0.00
Ca	44	2	He	342262	0.00
Na	23	2	He	11158849	0.00
Mg	24	2	He	6101546	0.00
K	39	2	He	7143832	0.00
Mn	55	2	He	437871	0.00
Co	59	2	He	858149	0.00
Ni	60	2	He	217668	0.00
Cu	63	2	He	589236	0.00
Zn	66	2	He	123892	0.00
Al	27	2	He	33390	0.00
B	11	1	No Gas	855291	0.00
Al	27	1	No Gas	1344176	0.00
Si	28	1	No Gas	3010511	0.00
Ag	107	1	No Gas	1482101	0.00
Cd	111	1	No Gas	273011	0.00
Sr	88	1	No Gas	2501477	0.00
Mo	95	1	No Gas	481964	0.00
Sn	118	1	No Gas	821381	0.00
Sb	121	1	No Gas	1295667	0.00
Ba	137	1	No Gas	401827	0.00
Tl	205	1	No Gas	3082088	0.00
Tl	203	1	No Gas	1235026	0.00
Pb	208	1	No Gas	4111625	0.00
U	238	1	No Gas	4314719	0.00
Ca	43	2	He	19674	0.01
Sb	121	2	He	627289	0.00
Cu	63	1	No Gas	1002572	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	677097	1.75	675584	100.22	70	120	
Ge	72	2	He	344392	0.78	343019	100.40	70	120	
Ge	72	1	No Gas	1088194	1.75	1083014	100.48	70	120	

Calibration Standard Report

In	115	1	No Gas	1334627	0.46	1354249	98.55	70	120	
Bi	209	1	No Gas	1394897	0.92	1409443	98.97	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	014_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:42:21-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	102.616	0.426	882315	0.91	100	102.6	90	110	
Be	9	1	No Gas	101.876	0.854	181700	0.27	100	101.9	90	110	
V	51	2	He	103.768	0.813	272783	0.53	100	103.8	90	110	
Cr	52	2	He	105.084	0.436	317528	0.67	100	105.1	90	110	
Fe	56	2	He	10306.582	0.215	30002672	0.32	10000	103.1	90	110	
Se	78	2	He	103.818	0.554	4780	0.65	100	103.8	90	110	
As	75	2	He	109.027	0.272	48246	0.55	100	109.0	90	110	
Ca	44	2	He	10279.425	0.309	183227	0.25	10000	102.8	90	110	
Na	23	2	He	10417.892	0.349	6118928	0.63	10000	104.2	90	110	
Mg	24	2	He	10597.080	0.736	3371725	0.61	10000	106.0	90	110	
K	39	2	He	10457.365	1.977	3933287	1.69	10000	104.6	90	110	
Mn	55	2	He	105.311	0.266	240088	0.56	100	105.3	90	110	
Co	59	2	He	104.897	0.374	468829	0.07	100	104.9	90	110	
Ni	60	2	He	105.711	0.391	119736	0.08	100	105.7	90	110	
Cu	63	2	He	104.829	0.436	322043	0.72	100	104.8	90	110	
Zn	66	2	He	106.886	1.256	71766	0.94	100	106.9	90	110	
Al	27	2	He	103.801	0.698	18299	0.91	100	103.8	90	110	
B	11	1	No Gas	447.444	3.059	408698	3.15	500	89.5	90	110	ICV Main CR1 Failed
Al	27	1	No Gas	98.331	0.496	677290	1.05	100	98.3	90	110	
Si	28	1	No Gas	540.048	1.118	1801809	1.50	500	108.0	90	110	
Ag	107	1	No Gas	95.456	1.493	721776	0.14	100	95.5	90	110	
Cd	111	1	No Gas	103.563	1.497	147416	0.22	100	103.6	90	110	
Sr	88	1	No Gas	103.249	1.310	1347288	0.50	100	103.2	90	110	
Mo	95	1	No Gas	101.341	1.406	254828	0.65	100	101.3	90	110	
Sn	118	1	No Gas	103.966	1.081	445993	0.49	100	104.0	90	110	
Sb	121	1	No Gas	96.612	0.674	626944	0.55	100	96.6	90	110	
Ba	137	1	No Gas	104.125	0.879	217929	0.89	100	104.1	90	110	
Tl	205	1	No Gas	107.757	3.694	1682263	1.62	100	107.8	90	110	
Tl	203	1	No Gas	106.418	2.164	662731	0.39	100	106.4	90	110	
Pb	208	1	No Gas	102.511	2.022	2122676	0.86	100	102.5	90	110	
U	238	1	No Gas	108.183	2.271	2376215	1.84	100	108.2	90	110	
Ca	43	2	He	10850.588	3.360	11168	3.59	10000	108.5	90	110	
Sb	121	2	He	106.862	0.717	347738	0.50	100	106.9	90	110	
Ti	47	2	He	101.811	1.419	10581	1.66	100	101.8	90	110	
Cu	63	1	No Gas	106.038	0.532	551137	0.70	100	106.0	90	110	
Se	82	1	No Gas	103.658	8.161	7204	10.36	100	103.7	90	110	

QC ISTD Table

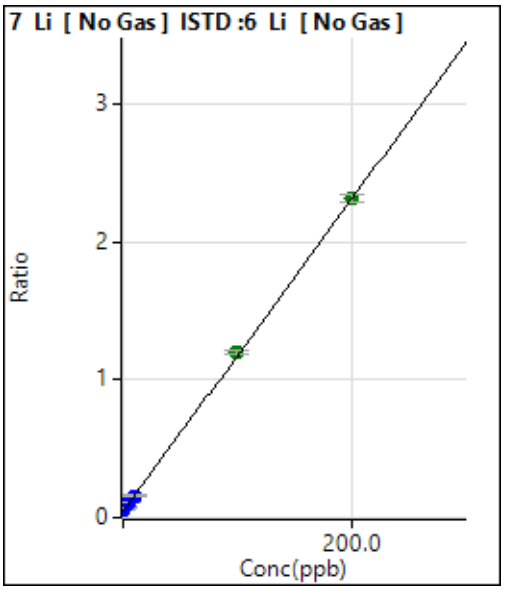
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	722234	0.82	675584	106.91	70	120	
Ge	72	2	He	356263	0.32	343019	103.86	70	120	
Ge	72	1	No Gas	1109918	1.20	1083014	102.48	70	120	
In	115	1	No Gas	1385353	1.37	1354249	102.30	70	120	
Bi	209	1	No Gas	1413882	2.11	1409443	100.31	70	120	

Calibration for 014_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\071922A.b\
Analysis File: 071922A.batch.bin
DA Date-Time: 07/19/2022 22:23:26
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	007CALB.d	CAL BLK	07/19/2022 11:24:40
2	008CALS.d	2/10/200	07/19/2022 11:26:55
3	009CALS.d	5/25/500	07/19/2022 11:29:09
4	010CALS.d	10/50/100	07/19/2022 11:31:23
5	011CALS.d	100/500/10K	07/19/2022 11:33:36
6	012CALS.d	200/1000/20K	07/19/2022 11:35:45

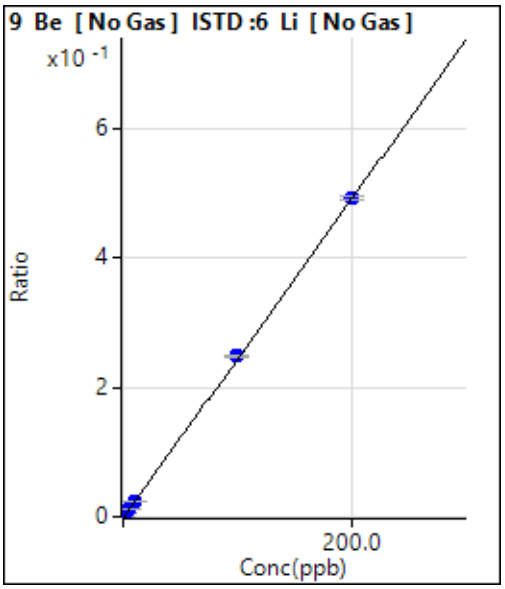
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	38948.74	0.0577	P	1.5	
2	☐	2.000	1.730	53618.19	0.0773	P	1.8	-13.5
3	☐	5.000	4.427	74264.40	0.1079	P	3.7	-11.5
4	☐	10.000	8.970	109740.26	0.1594	P	2.6	-10.3
5	☐	100.000	101.177	847629.96	1.2053	A	2.1	1.2
6	☐	200.000	199.480	1570775.08	2.3204	A	1.9	-0.3

y = 0.0113 * x + 0.0577
R = 1.0000
DL = 0.2249 ppb
BEC = 5.084 ppb

Weight: <None>
Min Conc: <None>

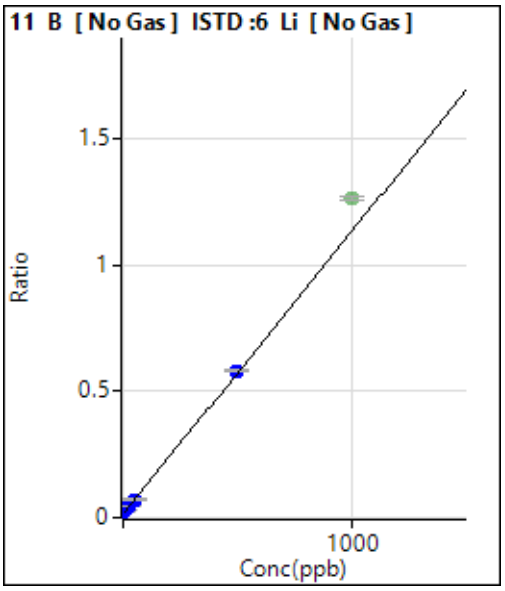


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0001	P	69.8	
2	☐	2.000	1.931	3355.43	0.0048	P	6.4	-3.4
3	☐	5.000	4.650	7950.65	0.0115	P	3.8	-7.0
4	☐	10.000	9.687	16509.74	0.0240	P	3.8	-3.1
5	☐	100.000	100.586	174680.97	0.2484	P	1.3	0.6
6	☐	200.000	199.732	333876.47	0.4932	P	1.6	-0.1

y = 0.0025 * x + 6.8572E-005
R = 1.0000
DL = 0.05817 ppb
BEC = 0.02777 ppb

Weight: <None>
Min Conc: <None>

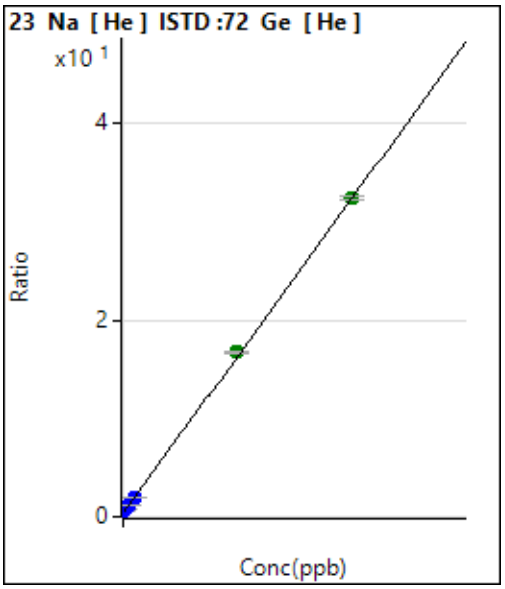
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14602.65	0.0216	P	2.3	
2	☐	10.000	6.418	19974.40	0.0288	P	1.8	-35.8
3	☐	25.000	20.478	30621.74	0.0445	P	3.6	-18.1
4	☐	50.000	45.296	49685.84	0.0722	P	3.7	-9.4
5	☐	500.000	500.768	408374.24	0.5807	P	1.7	0.2
6	☑	1000.000		855291.13	1.2633	A	1.1	

y = 0.0011 * x + 0.0216
R = 1.0000
DL = 1.351 ppb
BEC = 19.37 ppb

Weight: <None>
Min Conc: <None>

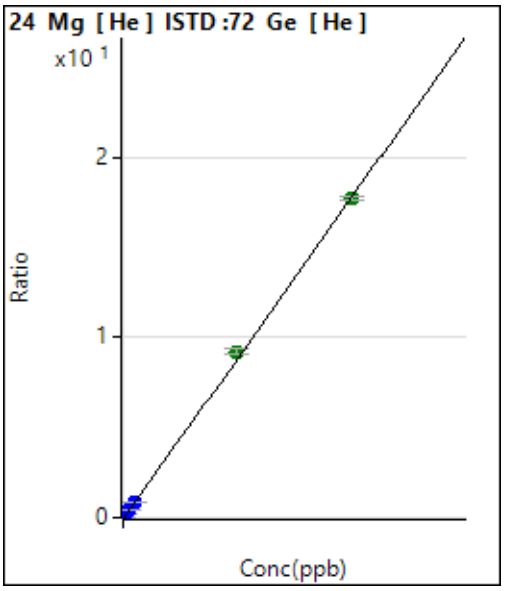


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	182657.37	0.5325	P	1.2	
2	☐	200.000	172.344	280188.69	0.8079	P	0.8	-13.8
3	☐	500.000	433.562	426412.31	1.2252	P	0.3	-13.3
4	☐	1000.000	907.615	685888.14	1.9825	P	0.6	-9.2
5	☐	10000.00	10115.85	5852425.54	16.6927	A	0.8	1.2
6	☐	20000.00	19948.62	11158848.5	32.4007	A	0.7	-0.3

y = 0.0016 * x + 0.5325
R = 1.0000
DL = 12.35 ppb
BEC = 333.4 ppb

Weight: <None>
Min Conc: <None>

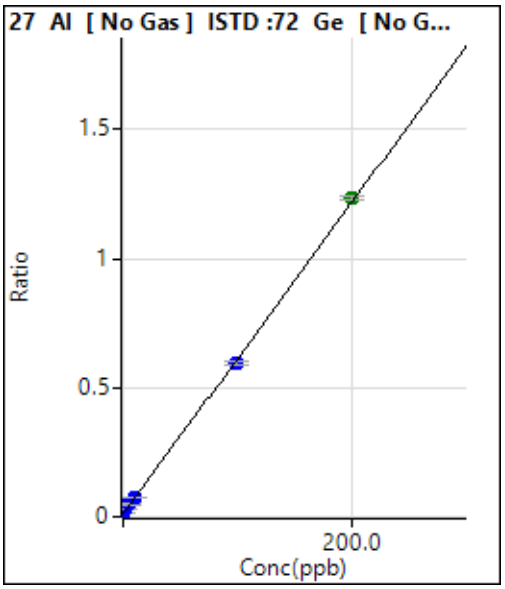
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	226.68	0.0007	P	24.2	
2	☐	200.000	189.977	59072.04	0.1703	P	0.5	-5.0
3	☐	500.000	474.699	147776.62	0.4246	P	0.3	-5.1
4	☐	1000.000	966.612	298878.84	0.8639	P	1.3	-3.3
5	☐	10000.00	10327.62	3233371.10	9.2236	A	2.7	3.3
6	☐	20000.00	19838.59	6101545.95	17.7172	A	0.8	-0.8

y = 8.9304E-004 * x + 6.5999E-004
R = 0.9998
DL = 0.5369 ppb
BEC = 0.739 ppb

Weight: <None>
Min Conc: <None>

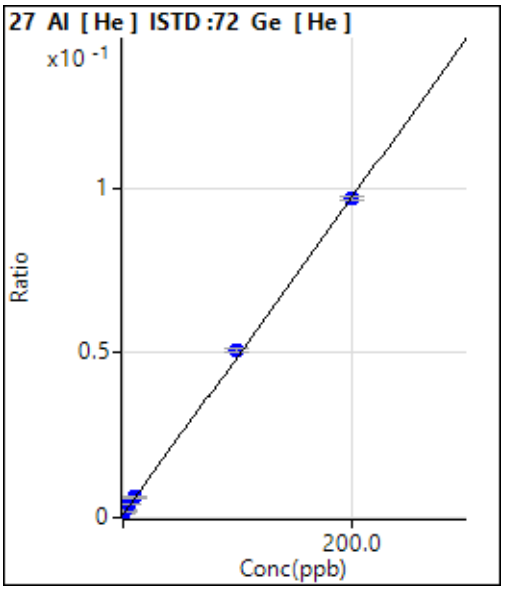


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18328.96	0.0169	P	4.7	
2	☐	2.000	1.578	29404.64	0.0265	P	1.5	-21.1
3	☐	5.000	5.310	53492.87	0.0490	P	4.3	6.2
4	☐	10.000	9.140	78256.04	0.0721	P	2.2	-8.6
5	☐	100.000	96.213	648535.02	0.5974	P	2.9	-3.8
6	☐	200.000	201.933	1344175.50	1.2353	A	1.3	1.0

y = 0.0060 * x + 0.0169
R = 0.9997
DL = 0.3973 ppb
BEC = 2.806 ppb

Weight: <None>
Min Conc: <None>

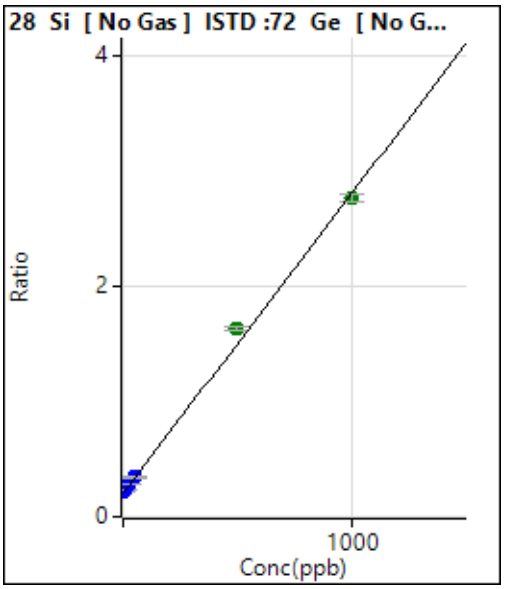
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	490.02	0.0014	P	1.5	
2	☐	2.000	1.653	770.03	0.0022	P	26.6	-17.3
3	☐	5.000	5.392	1400.10	0.0040	P	2.7	7.8
4	☐	10.000	9.871	2136.87	0.0062	P	7.4	-1.3
5	☐	100.000	102.850	17845.02	0.0509	P	2.5	2.9
6	☐	200.000	198.575	33390.50	0.0970	P	1.5	-0.7

y = 4.8106E-004 * x + 0.0014
R = 0.9998
DL = 0.1295 ppb
BEC = 2.969 ppb

Weight: <None>
Min Conc: <None>

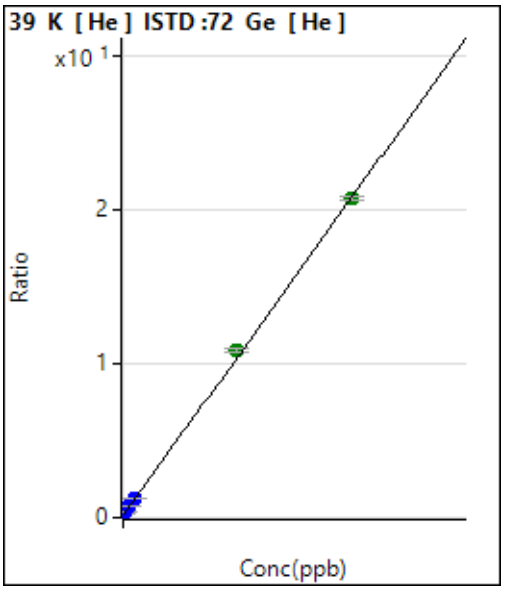


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	235702.45	0.2177	P	2.2	
2	☐	10.000	7.279	262999.99	0.2366	P	2.1	-27.2
3	☐	25.000	24.851	308479.02	0.2824	P	3.6	-0.6
4	☐	50.000	48.308	372801.53	0.3434	P	2.5	-3.4
5	☐	500.000	541.205	1765765.96	1.6264	A	1.9	8.2
6	☐	1000.000	979.513	3010511.00	2.7673	A	2.3	-2.0

y = 0.0026 * x + 0.2177
R = 0.9988
DL = 5.636 ppb
BEC = 83.63 ppb

Weight: <None>
Min Conc: <None>

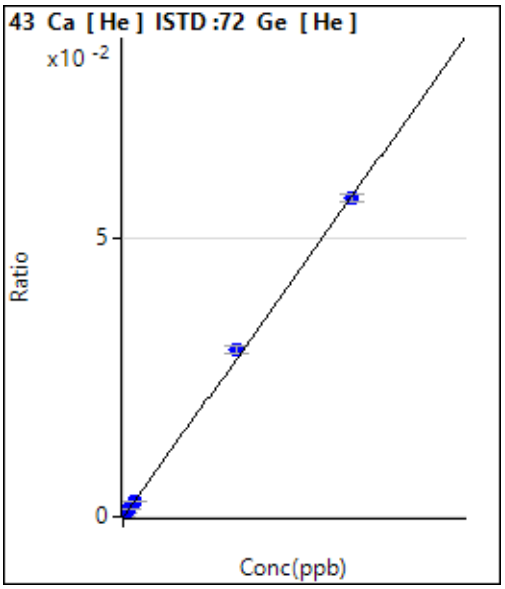
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	79897.00	0.2329	P	1.2	
2	☐	200.000	180.430	145462.91	0.4194	P	1.0	-9.8
3	☐	500.000	462.806	247549.48	0.7112	P	0.1	-7.4
4	☐	1000.000	949.531	420121.95	1.2143	P	0.4	-5.0
5	☐	10000.00	10315.33	3819073.49	10.8940	A	2.2	3.2
6	☐	20000.00	19845.98	7143831.98	20.7441	A	0.7	-0.8

y = 0.0010 * x + 0.2329
R = 0.9998
DL = 8 ppb
BEC = 225.4 ppb

Weight: <None>
Min Conc: <None>

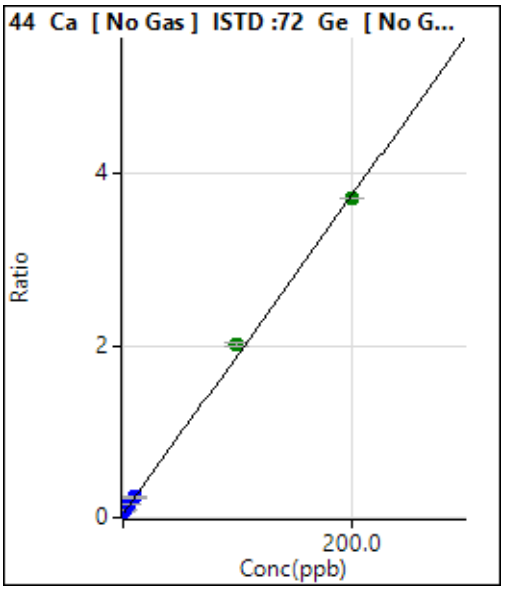


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0001	P	23.8	
2	☐	200.000	153.355	200.01	0.0006	P	10.7	-23.3
3	☐	500.000	425.678	473.35	0.0014	P	5.4	-14.9
4	☐	1000.000	960.937	1003.39	0.0029	P	1.7	-3.9
5	☐	10000.00	10376.20	10510.86	0.0300	P	4.4	3.8
6	☐	20000.00	19816.17	19674.36	0.0571	P	2.2	-0.9

y = 2.8764E-006 * x + 1.3586E-004
R = 0.9997
DL = 33.73 ppb
BEC = 47.23 ppb

Weight: <None>
Min Conc: <None>

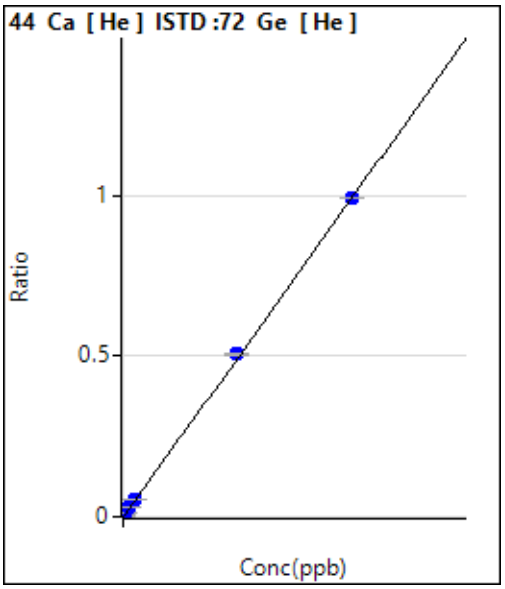
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	67441.89	0.0623	P	0.5	
2	☐	2.000	1.674	103728.82	0.0933	P	0.9	-16.3
3	☐	5.000	4.724	163671.47	0.1498	P	4.3	-5.5
4	☐	10.000	9.385	256489.66	0.2362	P	1.2	-6.2
5	☐	100.000	105.550	2191619.03	2.0189	A	2.9	5.6
6	☐	200.000	197.266	4046921.19	3.7191	A	0.5	-1.4

y = 0.0185 * x + 0.0623
R = 0.9994
DL = 0.05448 ppb
BEC = 3.359 ppb

Weight: <None>
Min Conc: <None>

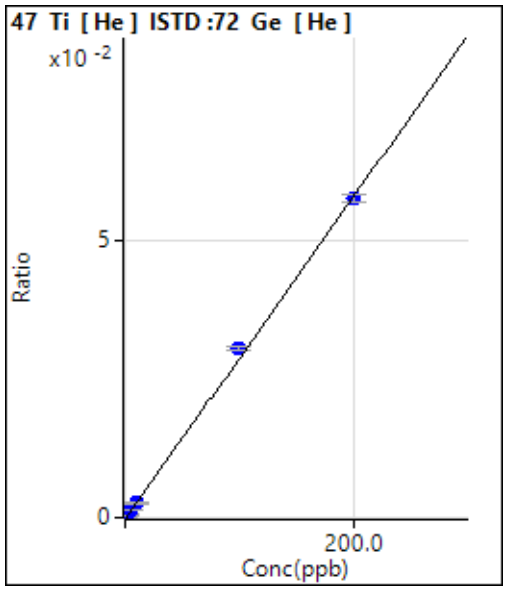


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1023.40	0.0030	P	8.6	
2	☐	200.000	193.928	4380.79	0.0126	P	0.5	-3.0
3	☐	500.000	505.752	9793.65	0.0281	P	2.8	1.2
4	☐	1000.000	988.648	18045.46	0.0522	P	2.7	-1.1
5	☐	10000.00	10161.77	178255.88	0.5085	P	1.3	1.6
6	☐	20000.00	19919.59	342262.23	0.9938	P	0.3	-0.4

y = 4.9742E-005 * x + 0.0030
R = 1.0000
DL = 15.5 ppb
BEC = 59.99 ppb

Weight: <None>
Min Conc: <None>

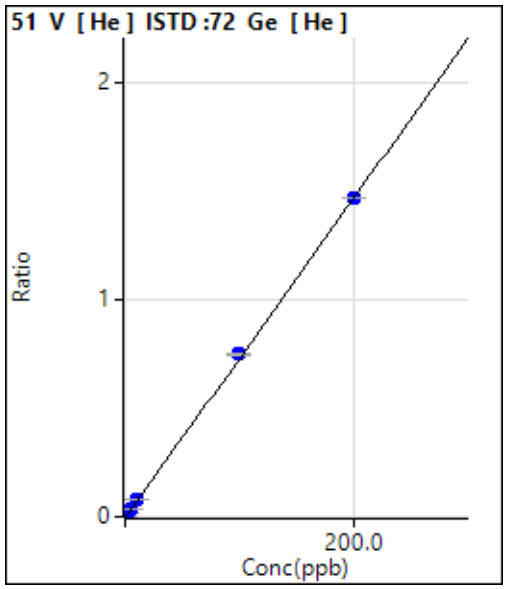
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	1.879	193.34	0.0006	P	31.9	-6.1
3	☐	5.000	4.797	490.02	0.0014	P	13.3	-4.1
4	☐	10.000	9.285	940.05	0.0027	P	11.2	-7.2
5	☐	100.000	104.324	10670.94	0.0304	P	2.3	4.3
6	☐	200.000	197.880	19877.99	0.0577	P	2.5	-1.1

y = 2.9161E-004 * x + 9.7550E-006
R = 0.9996
DL = 0.1738 ppb
BEC = 0.03345 ppb

Weight: <None>
Min Conc: <None>

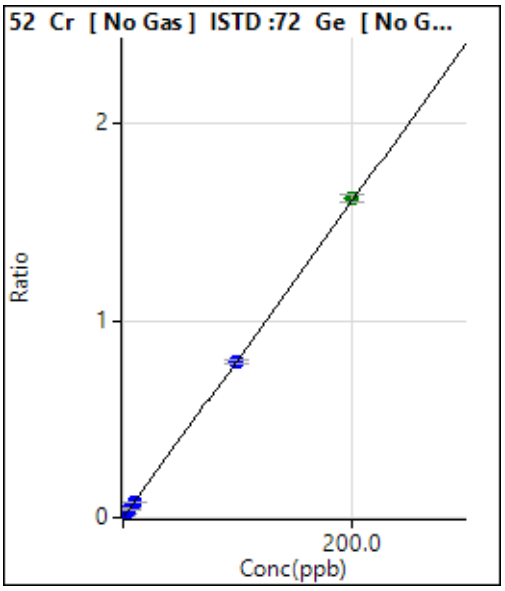


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	602.24	0.0018	P	5.0	
2	☐	2.000	1.979	5660.08	0.0163	P	4.4	-1.1
3	☐	5.000	4.851	13041.80	0.0375	P	0.9	-3.0
4	☐	10.000	9.995	26066.99	0.0753	P	0.3	0.0
5	☐	100.000	101.665	263019.47	0.7502	P	1.3	1.7
6	☐	200.000	199.171	505587.17	1.4681	P	0.1	-0.4

y = 0.0074 * x + 0.0018
R = 0.9999
DL = 0.03596 ppb
BEC = 0.2384 ppb

Weight: <None>
Min Conc: <None>

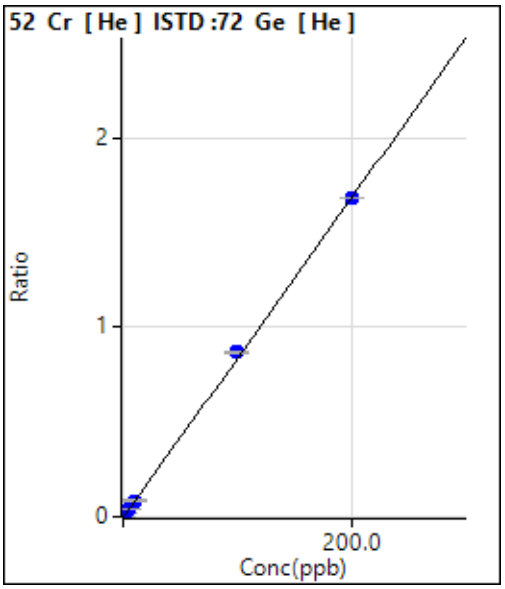
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7612.22	0.0070	P	5.6	
2	☐	2.000	1.765	23530.55	0.0212	P	2.8	-11.7
3	☐	5.000	4.561	47609.52	0.0436	P	4.1	-8.8
4	☐	10.000	9.211	87760.46	0.0808	P	3.1	-7.9
5	☐	100.000	97.613	857042.62	0.7894	P	2.0	-2.4
6	☐	200.000	201.246	1762477.58	1.6200	A	2.2	0.6

y = 0.0080 * x + 0.0070
R = 0.9999
DL = 0.1473 ppb
BEC = 0.8766 ppb

Weight: <None>
Min Conc: <None>

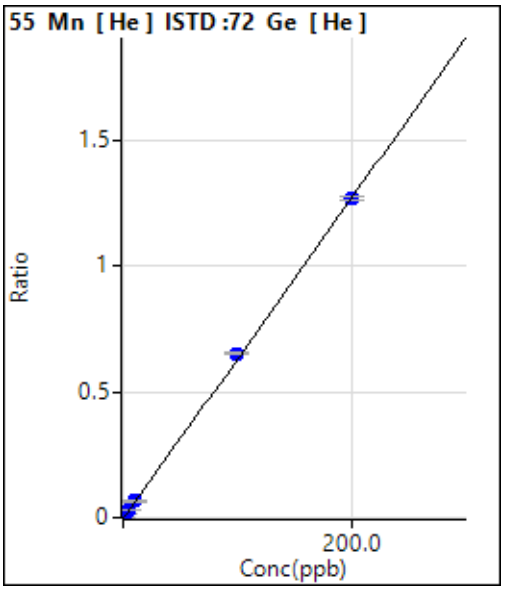


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	910.05	0.0027	P	11.9	
2	☐	2.000	1.917	6545.05	0.0189	P	8.2	-4.2
3	☐	5.000	4.846	15185.31	0.0436	P	0.5	-3.1
4	☐	10.000	9.738	29405.25	0.0850	P	3.1	-2.6
5	☐	100.000	102.356	304386.17	0.8682	P	1.7	2.4
6	☐	200.000	198.840	579983.27	1.6841	P	0.2	-0.6

y = 0.0085 * x + 0.0027
R = 0.9999
DL = 0.1117 ppb
BEC = 0.3139 ppb

Weight: <None>
Min Conc: <None>

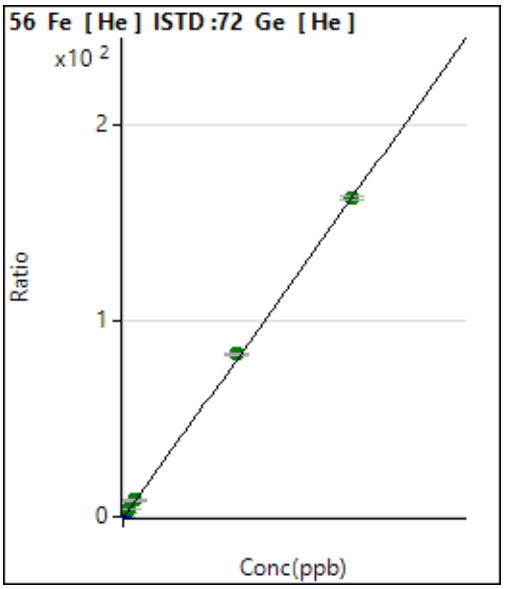
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	373.35	0.0011	P	21.5	
2	☐	2.000	1.962	4724.25	0.0136	P	0.4	-1.9
3	☐	5.000	4.931	11341.56	0.0326	P	3.9	-1.4
4	☐	10.000	10.037	22562.15	0.0652	P	1.6	0.4
5	☐	100.000	102.308	229519.59	0.6547	P	1.9	2.3
6	☐	200.000	198.846	437870.90	1.2715	P	0.8	-0.6

y = 0.0064 * x + 0.0011
R = 0.9999
DL = 0.1098 ppb
BEC = 0.1703 ppb

Weight: <None>
Min Conc: <None>

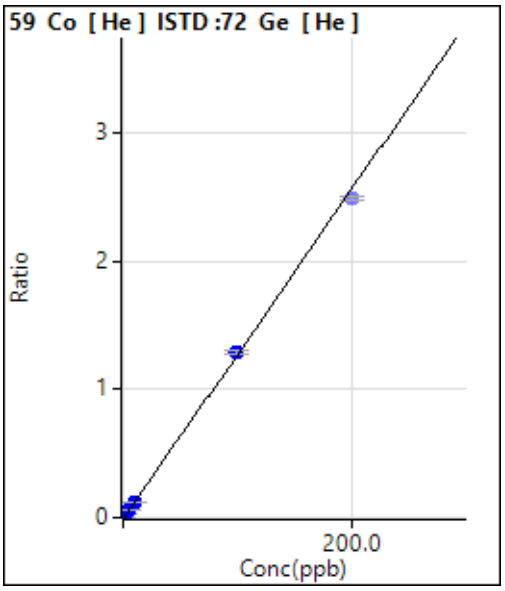


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8232.63	0.0240	P	2.2	
2	☐	200.000	189.606	545517.96	1.5728	P	0.9	-5.2
3	☐	500.000	500.902	1432373.00	4.1157	A	1.8	0.2
4	☐	1000.000	1017.047	2882654.54	8.3319	A	1.2	1.7
5	☐	10000.00	10179.61	29161372.0	83.1780	A	1.4	1.8
6	☐	20000.00	19909.42	56016162.5	162.657	A	0.7	-0.5

y = 0.0082 * x + 0.0240
R = 0.9999
DL = 0.1932 ppb
BEC = 2.938 ppb

Weight: <None>
Min Conc: <None>

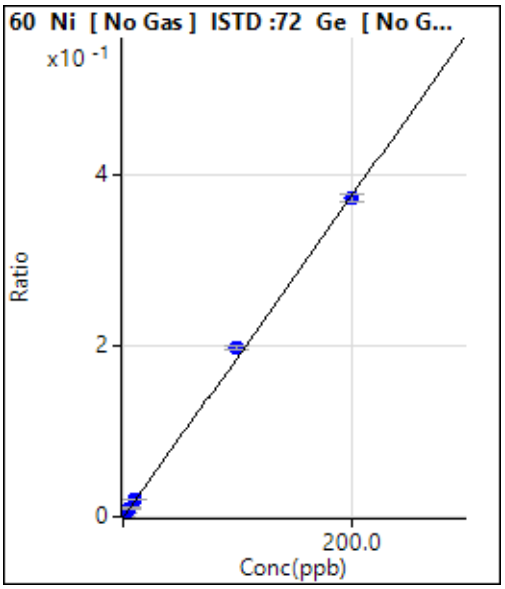
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	25.7	
2	☐	2.000	1.986	8913.05	0.0257	P	5.5	-0.7
3	☐	5.000	4.635	20822.84	0.0598	P	0.3	-7.3
4	☐	10.000	9.649	43048.20	0.1244	P	1.3	-3.5
5	☐	100.000	100.054	451906.71	1.2890	P	1.6	0.1
6	☑	200.000		858149.42	2.4919	P	0.7	

y = 0.0129 * x + 1.1677E-004
R = 1.0000
DL = 0.006992 ppb
BEC = 0.009065 ppb

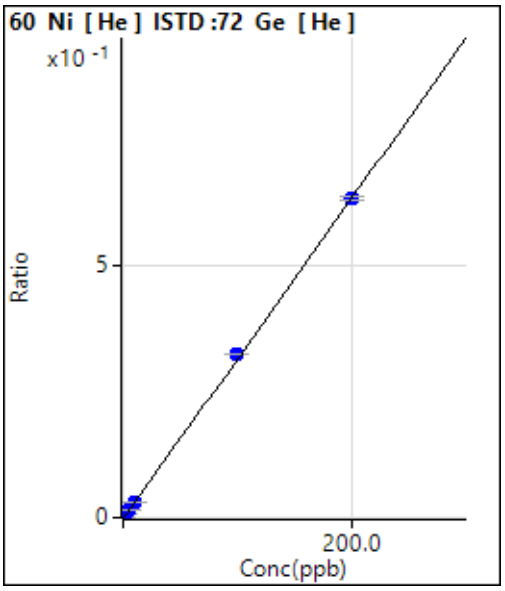
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	766.70	0.0007	P	14.3	
2	☐	2.000	2.011	4991.01	0.0045	P	1.1	0.5
3	☐	5.000	4.883	10804.48	0.0099	P	4.8	-2.3
4	☐	10.000	10.333	21864.53	0.0201	P	2.0	3.3
5	☐	100.000	104.611	214336.74	0.1974	P	2.5	4.6
6	☐	200.000	197.681	405216.95	0.3725	P	2.1	-1.2

y = 0.0019 * x + 7.0743E-004
R = 0.9996
DL = 0.161 ppb
BEC = 0.3762 ppb

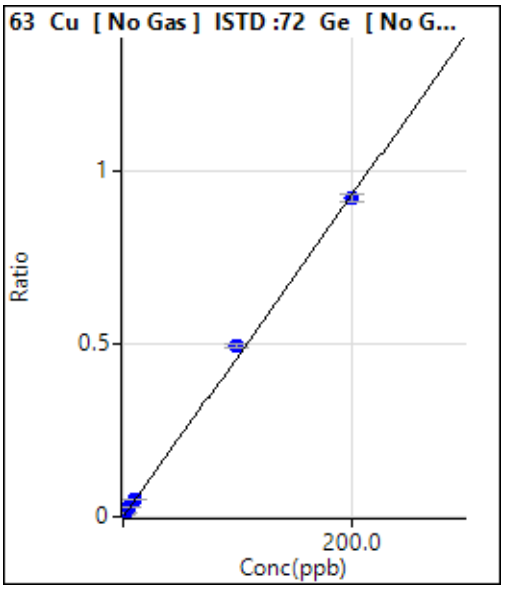
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	216.67	0.0006	P	19.2	
2	☐	2.000	1.939	2353.59	0.0068	P	4.4	-3.0
3	☐	5.000	5.014	5757.97	0.0165	P	5.7	0.3
4	☐	10.000	9.852	11034.65	0.0319	P	1.7	-1.5
5	☐	100.000	102.060	113778.93	0.3245	P	0.3	2.1
6	☐	200.000	198.978	217667.62	0.6321	P	0.8	-0.5

y = 0.0032 * x + 6.3159E-004
R = 0.9999
DL = 0.1146 ppb
BEC = 0.199 ppb

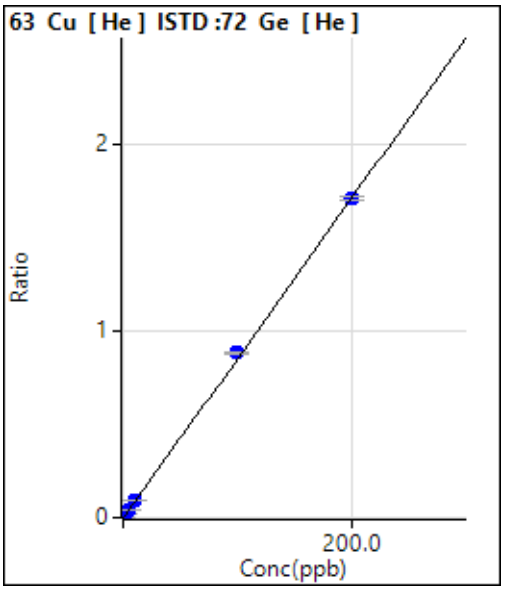
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3927.31	0.0036	P	4.0	
2	☐	2.000	1.888	13780.54	0.0124	P	4.3	-5.6
3	☐	5.000	4.797	28319.77	0.0259	P	4.2	-4.1
4	☐	10.000	10.042	54612.87	0.0503	P	2.4	0.4
5	☐	100.000	105.098	534355.41	0.4922	P	2.4	5.1
6	☐	200.000	197.455	1002571.73	0.9216	P	2.3	-1.3

y = 0.0046 * x + 0.0036
R = 0.9995
DL = 0.09288 ppb
BEC = 0.7803 ppb

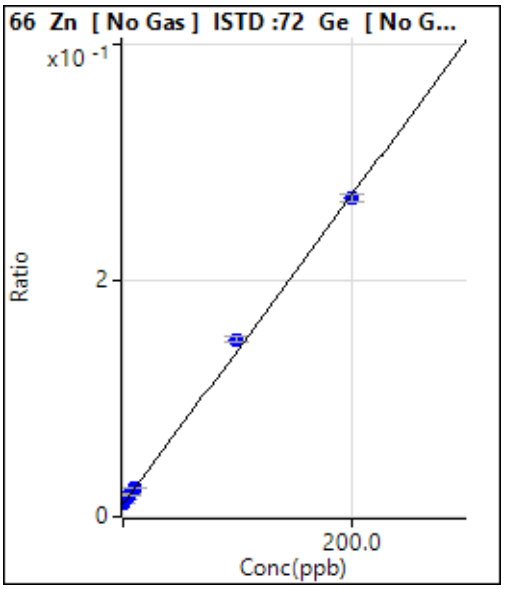
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1563.45	0.0046	P	2.8	
2	☐	2.000	2.006	7548.87	0.0218	P	3.1	0.3
3	☐	5.000	4.770	15829.44	0.0455	P	2.2	-4.6
4	☐	10.000	9.972	31179.36	0.0901	P	1.0	-0.3
5	☐	100.000	102.222	309058.71	0.8816	P	2.2	2.2
6	☐	200.000	198.896	589236.08	1.7110	P	0.7	-0.6

y = 0.0086 * x + 0.0046
R = 0.9999
DL = 0.04449 ppb
BEC = 0.5313 ppb

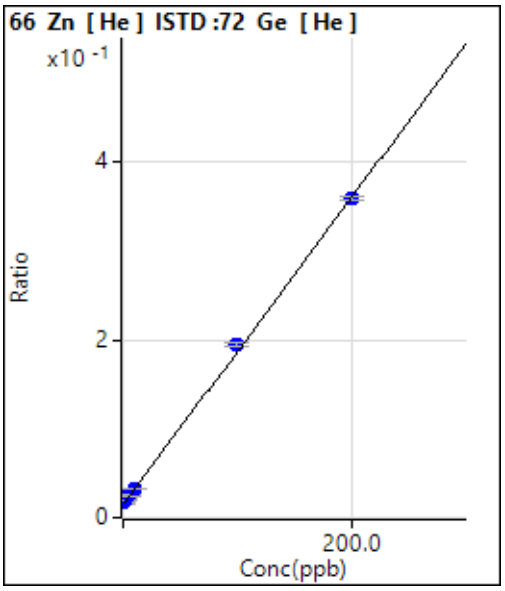
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12836.29	0.0119	P	3.6	
2	☐	2.000	2.135	16280.02	0.0146	P	2.2	6.8
3	☐	5.000	5.122	20275.39	0.0186	P	4.2	2.4
4	☐	10.000	9.846	26866.99	0.0247	P	1.5	-1.5
5	☐	100.000	105.563	162939.00	0.1501	P	3.0	5.6
6	☐	200.000	197.222	293912.36	0.2702	P	1.9	-1.4

y = 0.0013 * x + 0.0119
R = 0.9994
DL = 0.9655 ppb
BEC = 9.049 ppb

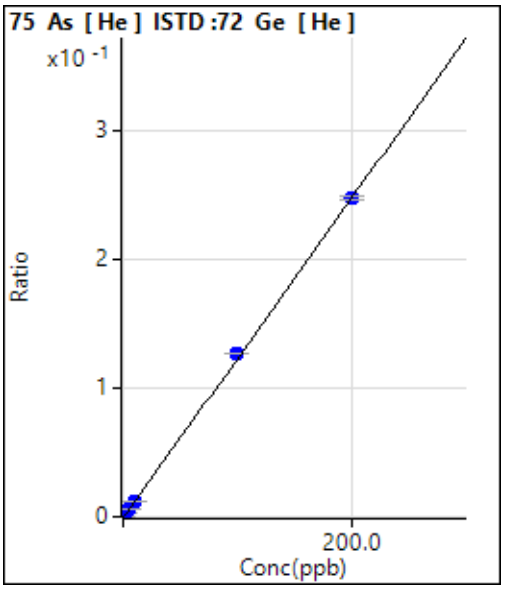
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5651.29	0.0165	P	3.0	
2	☐	2.000	2.255	7068.64	0.0204	P	2.5	12.7
3	☐	5.000	5.031	8766.31	0.0252	P	2.9	0.6
4	☐	10.000	9.481	11378.28	0.0329	P	2.5	-5.2
5	☐	100.000	103.328	68459.10	0.1953	P	2.2	3.3
6	☐	200.000	198.359	123891.52	0.3597	P	0.8	-0.8

y = 0.0017 * x + 0.0165
R = 0.9998
DL = 0.8671 ppb
BEC = 9.522 ppb

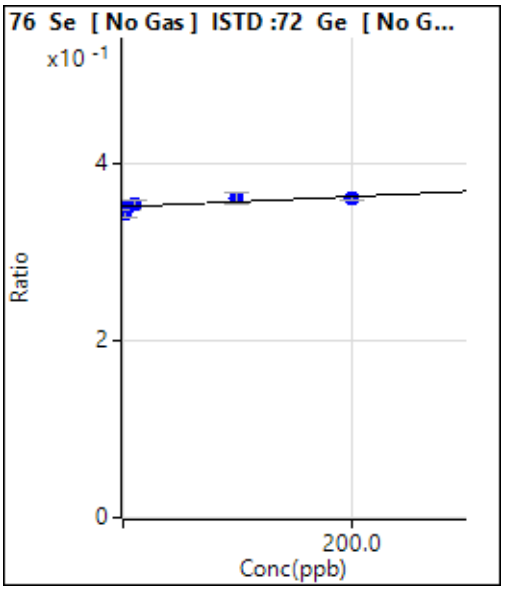
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	62.22	0.0002	P	38.0	
2	☐	2.000	1.953	903.37	0.0026	P	2.1	-2.3
3	☐	5.000	4.630	2062.39	0.0059	P	3.4	-7.4
4	☐	10.000	9.662	4209.57	0.0122	P	1.1	-3.4
5	☐	100.000	101.853	44359.24	0.1265	P	1.1	1.9
6	☐	200.000	199.100	85112.96	0.2472	P	1.0	-0.4

y = 0.0012 * x + 1.8149E-004
R = 0.9999
DL = 0.1667 ppb
BEC = 0.1463 ppb

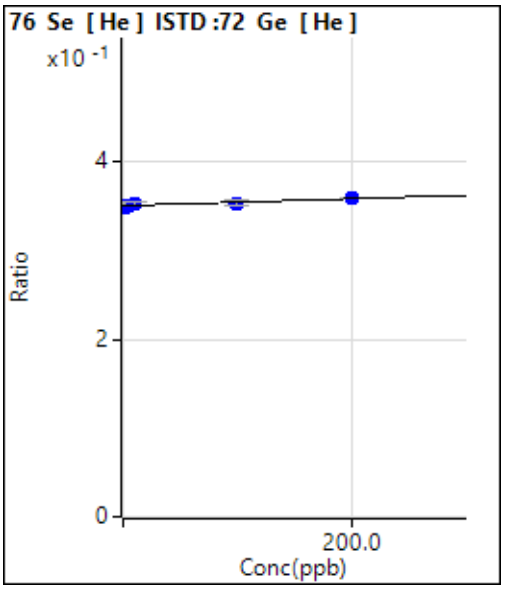
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	380438.43	0.3513	P	1.7	
2	☐	2.000	-117.667	382783.11	0.3444	P	2.6	-5983.
3	☐	5.000	20.941	385215.68	0.3526	P	3.0	318.8
4	☐	10.000	70.894	385931.01	0.3555	P	1.9	608.9
5	☐	100.000	164.373	391811.07	0.3610	P	3.5	64.4
6	☐	200.000	165.567	392855.58	0.3610	P	0.9	-17.2

y = 5.8649E-005 * x + 0.3513
R = 0.7719
DL = 302.2 ppb
BEC = 5991 ppb

Weight: <None>
Min Conc: <None>

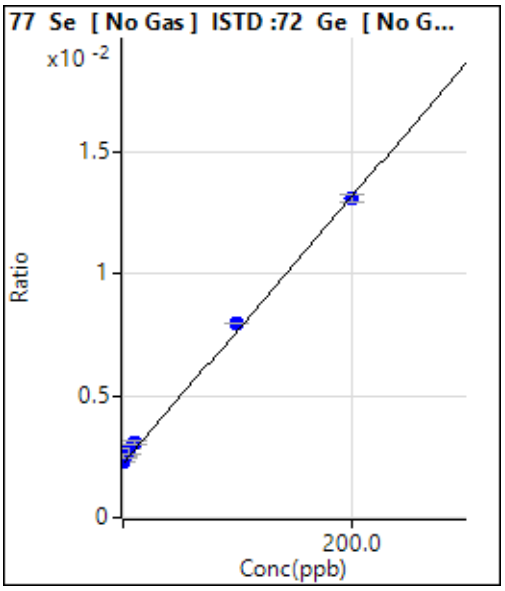


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	120215.19	0.3504	P	1.0	
2	☐	2.000	-58.011	120743.26	0.3481	P	1.2	-3000.
3	☐	5.000	11.913	122139.41	0.3509	P	0.7	138.3
4	☐	10.000	48.379	121916.90	0.3524	P	0.8	383.8
5	☐	100.000	60.483	123710.31	0.3529	P	1.9	-39.5
6	☐	200.000	218.267	123689.62	0.3592	P	0.5	9.1

y = 3.9954E-005 * x + 0.3504
R = 0.9208
DL = 270.1 ppb
BEC = 8771 ppb

Weight: <None>
Min Conc: <None>

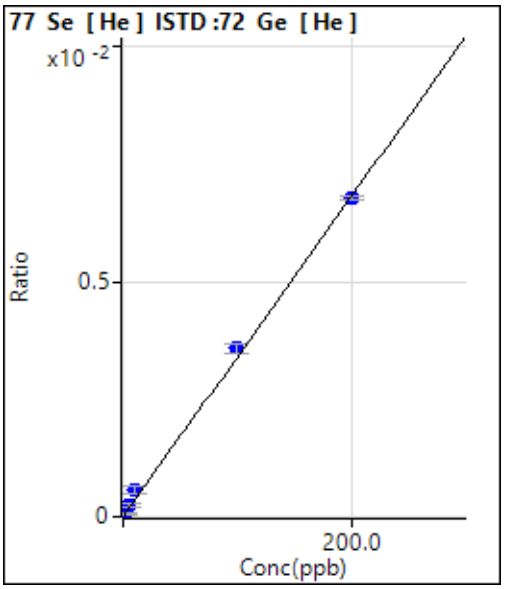
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2490.27	0.0023	P	2.0	
2	☐	2.000	3.600	2773.67	0.0025	P	5.1	80.0
3	☐	5.000	8.068	2990.38	0.0027	P	8.9	61.4
4	☐	10.000	14.400	3350.47	0.0031	P	4.7	44.0
5	☐	100.000	104.032	8676.29	0.0080	P	0.6	4.0
6	☐	200.000	197.671	14264.39	0.0131	P	2.2	-1.2

y = 5.4694E-005 * x + 0.0023
R = 0.9996
DL = 2.585 ppb
BEC = 42.04 ppb

Weight: <None>
Min Conc: <None>

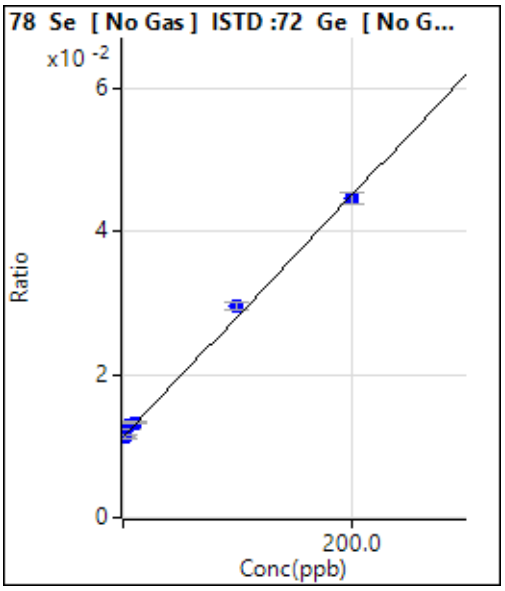


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	86.6	
2	☐	2.000	1.118	26.67	0.0001	P	57.5	-44.1
3	☐	5.000	5.610	80.00	0.0002	P	33.1	12.2
4	☐	10.000	15.532	196.67	0.0006	P	27.3	55.3
5	☐	100.000	103.841	1253.42	0.0036	P	6.2	3.8
6	☐	200.000	197.797	2333.58	0.0068	P	1.7	-1.1

y = 3.4063E-005 * x + 3.8756E-005
R = 0.9994
DL = 2.956 ppb
BEC = 1.138 ppb

Weight: <None>
Min Conc: <None>

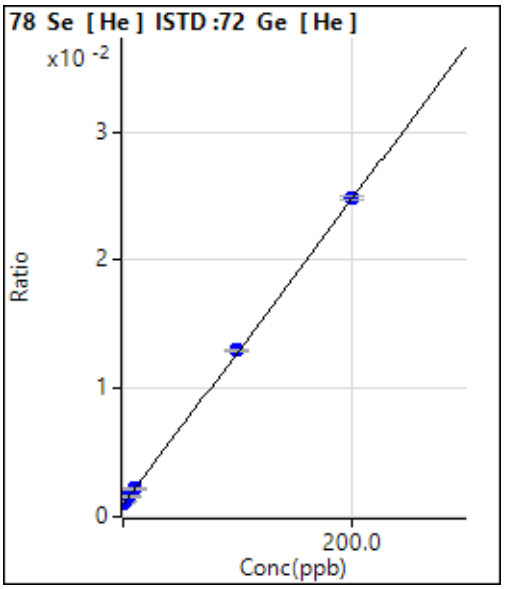
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12469.31	0.0115	P	2.8	
2	☐	2.000	-0.702	12666.18	0.0114	P	4.4	-135.1
3	☐	5.000	8.019	14040.85	0.0129	P	8.6	60.4
4	☐	10.000	10.496	14424.63	0.0133	P	3.7	5.0
5	☐	100.000	107.136	32091.84	0.0296	P	4.1	7.1
6	☐	200.000	196.359	48510.66	0.0446	P	3.9	-1.8

y = 1.6847E-004 * x + 0.0115
R = 0.9988
DL = 5.843 ppb
BEC = 68.36 ppb

Weight: <None>
Min Conc: <None>

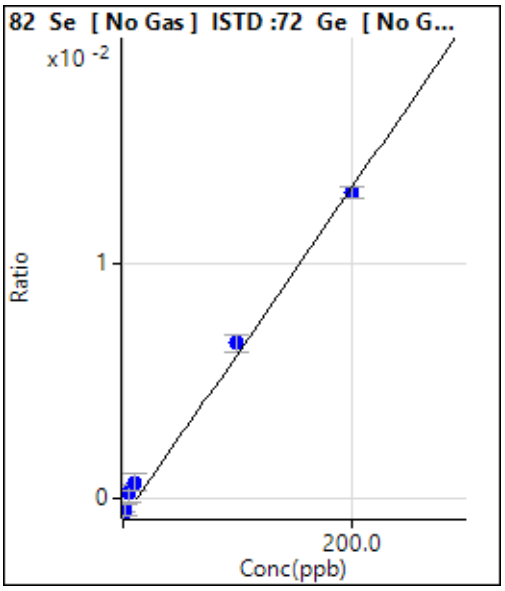


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	366.01	0.0011	P	8.4	
2	☐	2.000	0.979	410.68	0.0012	P	9.3	-51.1
3	☐	5.000	4.804	570.68	0.0016	P	9.3	-3.9
4	☐	10.000	9.554	762.69	0.0022	P	9.1	-4.5
5	☐	100.000	100.145	4551.45	0.0130	P	0.6	0.1
6	☐	200.000	199.965	8560.07	0.0249	P	1.1	0.0

y = 1.1896E-004 * x + 0.0011
R = 1.0000
DL = 2.256 ppb
BEC = 8.974 ppb

Weight: <None>
Min Conc: <None>

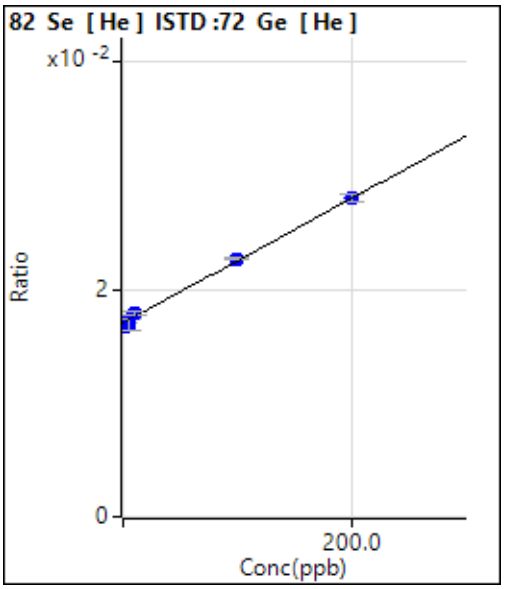
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-878.83	-0.0008	P	-51.0	
2	☐	2.000	4.622	-546.33	-0.0005	P	-96.0	131.1
3	☐	5.000	14.723	257.81	0.0002	P	319.7	194.5
4	☐	10.000	21.230	735.78	0.0007	P	114.6	112.3
5	☐	100.000	105.304	7176.40	0.0066	P	11.4	5.3
6	☐	200.000	196.517	14180.45	0.0130	P	3.8	-1.7

y = 7.0423E-005 * x - 8.1373E-004
R = 0.9983
DL = 17.68 ppb
BEC = -11.55 ppb

Weight: <None>
Min Conc: <None>

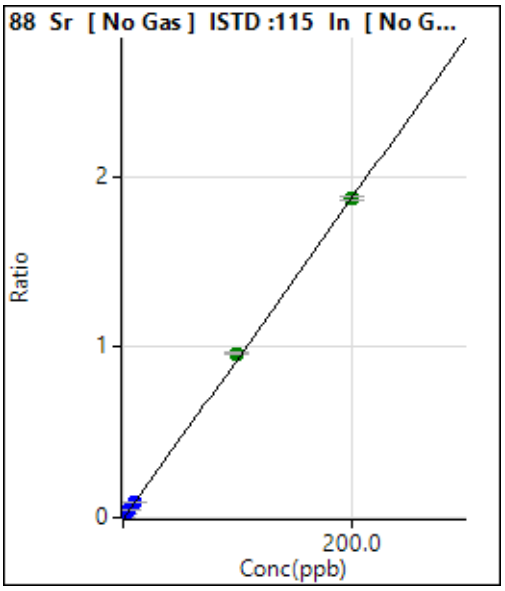


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5881.39	0.0171	P	2.4	
2	☐	2.000	-7.213	5808.02	0.0167	P	3.1	-460.6
3	☐	5.000	-3.854	5894.73	0.0169	P	6.6	-177.1
4	☐	10.000	15.448	6224.88	0.0180	P	1.7	54.5
5	☐	100.000	101.513	7962.49	0.0227	P	0.9	1.5
6	☐	200.000	199.285	9666.96	0.0281	P	2.8	-0.4

y = 5.4839E-005 * x + 0.0171
R = 0.9977
DL = 22.31 ppb
BEC = 312.6 ppb

Weight: <None>
Min Conc: <None>

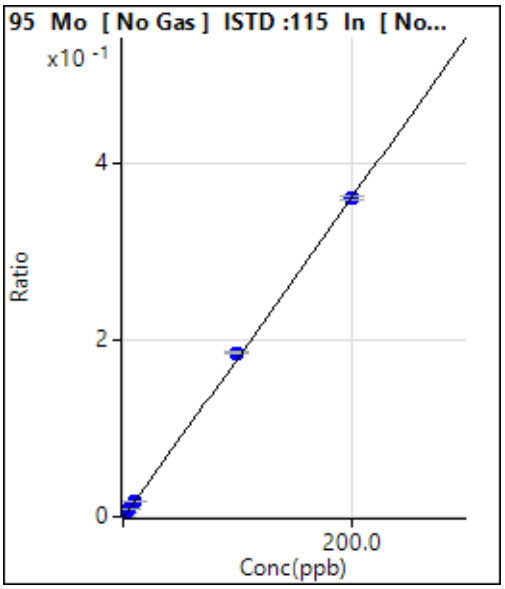
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	540.02	0.0004	P	20.5	
2	☐	2.000	1.797	23574.41	0.0173	P	2.1	-10.2
3	☐	5.000	4.742	61363.99	0.0450	P	2.6	-5.2
4	☐	10.000	9.067	116373.30	0.0858	P	1.0	-9.3
5	☐	100.000	102.089	1305412.22	0.9617	A	1.4	2.1
6	☐	200.000	199.011	2501477.41	1.8744	A	1.3	-0.5

y = 0.0094 * x + 3.9902E-004
R = 0.9999
DL = 0.0261 ppb
BEC = 0.04237 ppb

Weight: <None>
Min Conc: <None>

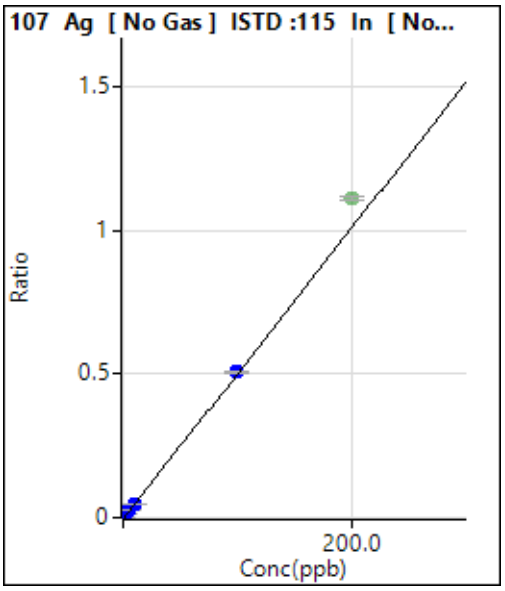


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	49.6	
2	☐	2.000	1.940	4817.62	0.0035	P	2.1	-3.0
3	☐	5.000	4.755	11788.73	0.0086	P	3.1	-4.9
4	☐	10.000	9.770	24078.79	0.0178	P	2.8	-2.3
5	☐	100.000	102.145	251688.35	0.1854	P	1.7	2.1
6	☐	200.000	198.946	481963.60	0.3611	P	0.7	-0.5

y = 0.0018 * x + 1.7243E-005
R = 0.9999
DL = 0.01414 ppb
BEC = 0.0095 ppb

Weight: <None>
Min Conc: <None>

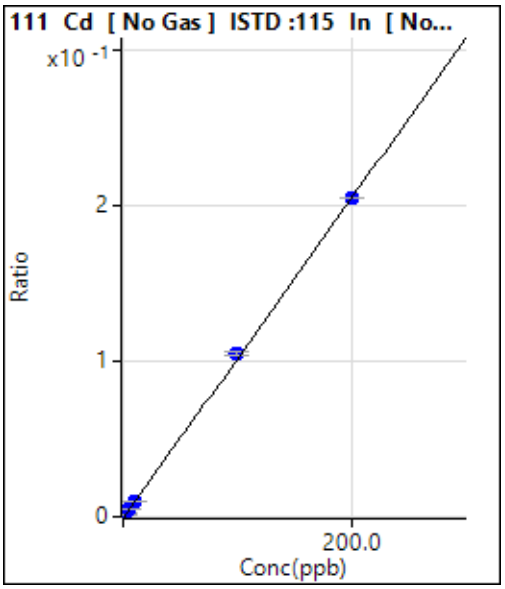
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1170.07	0.0009	P	3.5	
2	☐	2.000	1.896	14241.18	0.0105	P	0.6	-5.2
3	☐	5.000	4.651	33242.17	0.0244	P	2.2	-7.0
4	☐	10.000	9.638	67347.89	0.0496	P	0.8	-3.6
5	☐	100.000	100.056	688593.45	0.5073	P	1.4	0.1
6	☑	200.000		1482101.18	1.1105	A	0.9	

y = 0.0051 * x + 8.6408E-004
R = 1.0000
DL = 0.01769 ppb
BEC = 0.1707 ppb

Weight: <None>
Min Conc: <None>

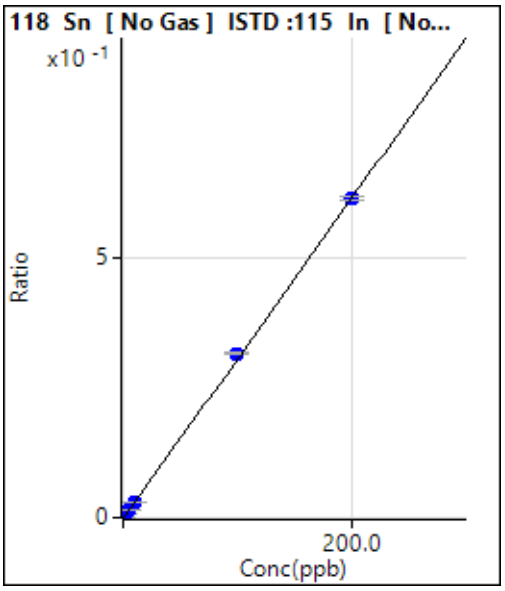


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.852	2590.29	0.0019	P	8.7	-7.4
3	☐	5.000	4.973	6958.65	0.0051	P	5.0	-0.5
4	☐	10.000	9.671	13483.79	0.0099	P	2.2	-3.3
5	☐	100.000	101.915	142160.00	0.1047	P	1.6	1.9
6	☐	200.000	199.061	273011.37	0.2046	P	0.6	-0.5

y = 0.0010 * x + 0.0000E+000
R = 0.9999
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

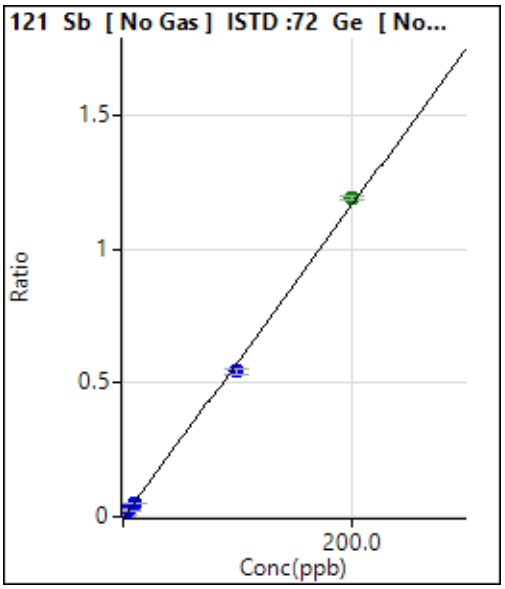
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1306.75	0.0010	P	7.6	
2	☐	2.000	1.816	8943.20	0.0066	P	2.7	-9.2
3	☐	5.000	4.733	21220.81	0.0156	P	1.7	-5.3
4	☐	10.000	9.531	41225.11	0.0304	P	1.9	-4.7
5	☐	100.000	102.023	428899.26	0.3160	P	0.7	2.0
6	☐	200.000	199.021	821380.64	0.6155	P	0.7	-0.5

y = 0.0031 * x + 9.6492E-004
R = 0.9999
DL = 0.07146 ppb
BEC = 0.3125 ppb

Weight: <None>
Min Conc: <None>

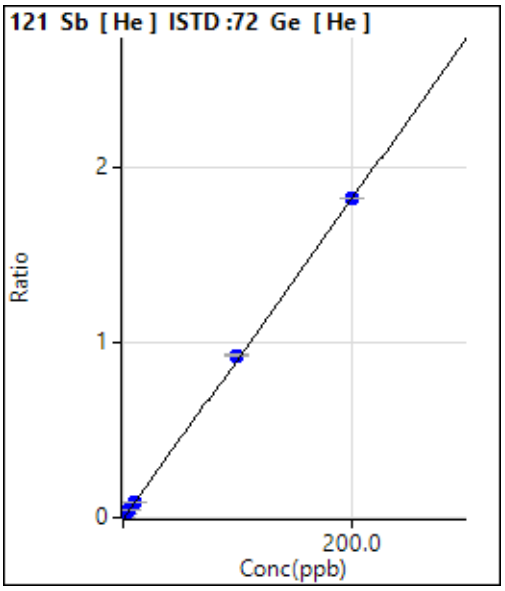


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	346.68	0.0003	P	17.9	
2	☐	2.000	1.715	11495.23	0.0103	P	1.7	-14.2
3	☐	5.000	4.285	27706.25	0.0254	P	3.0	-14.3
4	☐	10.000	8.851	56481.54	0.0520	P	4.1	-11.5
5	☐	100.000	92.703	588387.05	0.5420	P	3.0	-7.3
6	☐	200.000	203.727	1295667.40	1.1908	A	1.3	1.9

y = 0.0058 * x + 3.1991E-004
R = 0.9991
DL = 0.02933 ppb
BEC = 0.05475 ppb

Weight: <None>
Min Conc: <None>

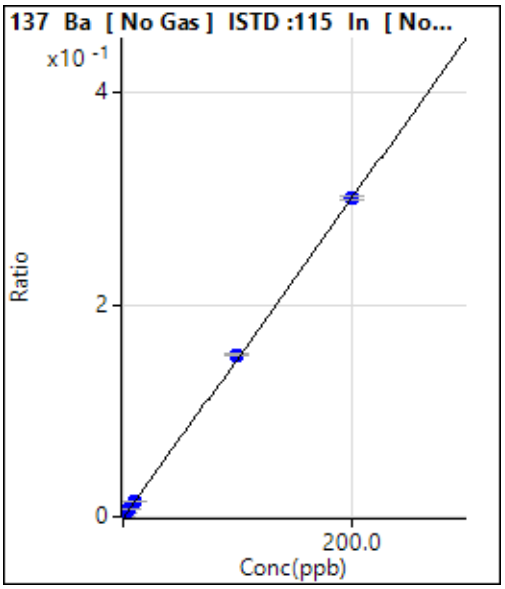
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	213.34	0.0006	P	15.7	
2	☐	2.000	1.839	6038.17	0.0174	P	0.7	-8.1
3	☐	5.000	4.794	15446.07	0.0444	P	3.7	-4.1
4	☐	10.000	9.617	30585.99	0.0884	P	0.9	-3.8
5	☐	100.000	101.109	323783.82	0.9236	P	1.4	1.1
6	☐	200.000	199.471	627288.82	1.8215	P	0.1	-0.3

y = 0.0091 * x + 6.2149E-004
R = 1.0000
DL = 0.03208 ppb
BEC = 0.06808 ppb

Weight: <None>
Min Conc: <None>

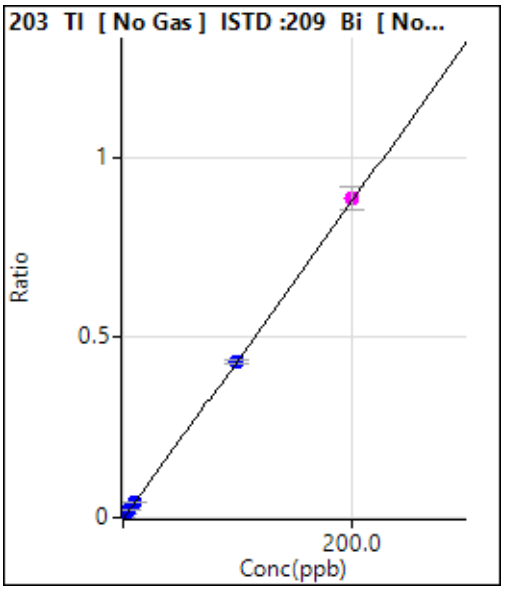


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0001	P	15.3	
2	☐	2.000	1.954	4147.41	0.0030	P	4.3	-2.3
3	☐	5.000	4.746	9897.29	0.0073	P	2.4	-5.1
4	☐	10.000	9.788	20179.32	0.0149	P	2.3	-2.1
5	☐	100.000	101.367	207894.24	0.1532	P	0.9	1.4
6	☐	200.000	199.334	401827.22	0.3011	P	0.7	-0.3

y = 0.0015 * x + 9.5995E-005
R = 1.0000
DL = 0.02926 ppb
BEC = 0.06358 ppb

Weight: <None>
Min Conc: <None>

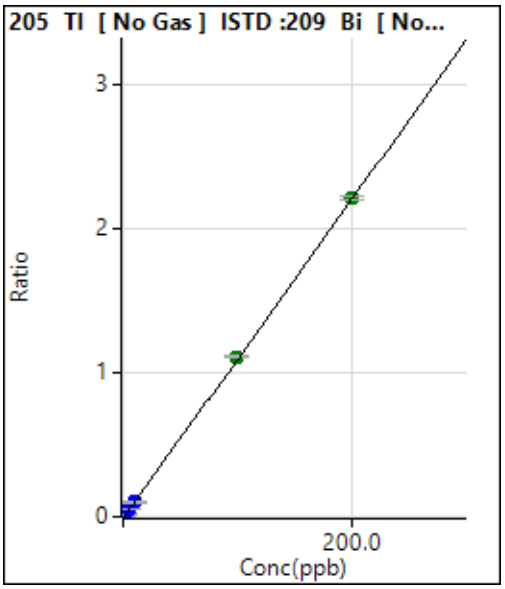
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0000	P	60.1	
2	☐	2.000	1.849	11725.68	0.0082	P	2.1	-7.5
3	☐	5.000	4.698	29615.46	0.0207	P	1.0	-6.0
4	☐	10.000	9.440	59016.19	0.0416	P	1.6	-5.6
5	☐	100.000	98.003	622041.54	0.4318	P	1.6	-2.0
6	☐	200.000	201.036	1235026.13	0.8857	M	6.6	0.5

y = 0.0044 * x + 3.2899E-005
R = 0.9999
DL = 0.01346 ppb
BEC = 0.007468 ppb

Weight: <None>
Min Conc: <None>

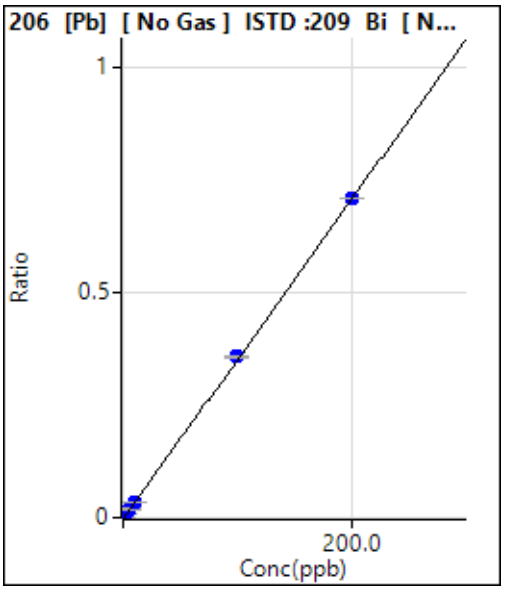


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0001	P	42.3	
2	☐	2.000	1.794	28552.99	0.0199	P	2.7	-10.3
3	☐	5.000	4.419	69895.69	0.0489	P	0.5	-11.6
4	☐	10.000	9.086	142456.70	0.1005	P	2.0	-9.1
5	☐	100.000	100.093	1592900.39	1.1058	A	1.4	0.1
6	☐	200.000	200.016	3082087.97	2.2095	A	0.6	0.0

y = 0.0110 * x + 1.0689E-004
R = 1.0000
DL = 0.01228 ppb
BEC = 0.009676 ppb

Weight: <None>
Min Conc: <None>

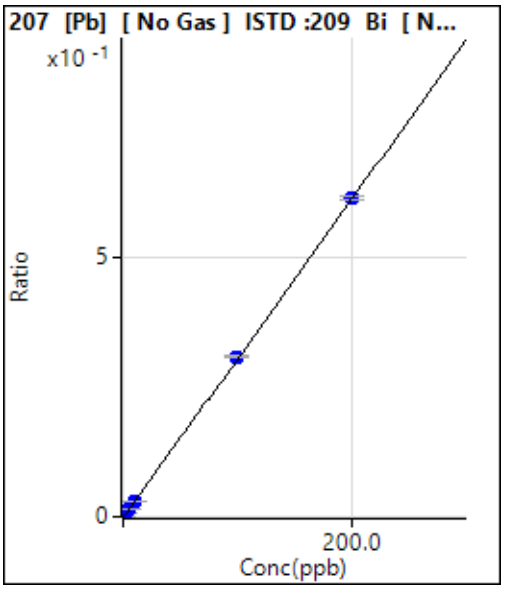
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	406.68	0.0003	P	14.0	
2	☐	2.000	1.898	10077.56	0.0070	P	2.9	-5.1
3	☐	5.000	5.163	26620.54	0.0186	P	14.3	3.3
4	☐	10.000	9.678	49163.87	0.0347	P	1.7	-3.2
5	☐	100.000	100.627	515422.74	0.3578	P	1.0	0.6
6	☐	200.000	199.700	990041.73	0.7098	P	0.3	-0.2

y = 0.0036 * x + 2.8808E-004
R = 1.0000
DL = 0.03408 ppb
BEC = 0.08109 ppb

Weight: <None>
Min Conc: <None>

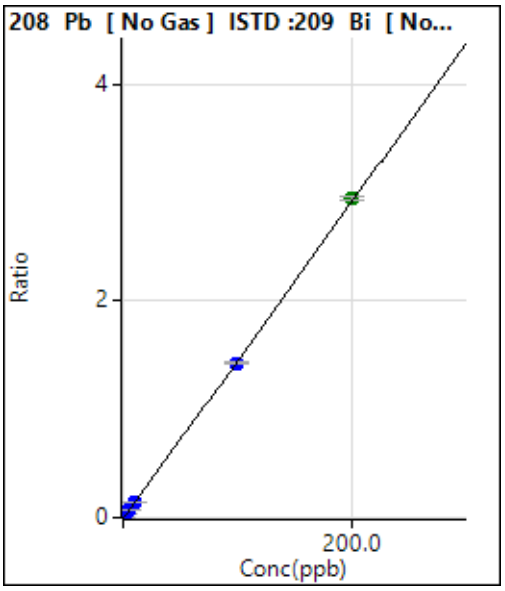


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1315.40	0.0009	P	133.0	
2	☐	2.000	1.702	8829.94	0.0062	P	6.5	-14.9
3	☐	5.000	4.585	21455.43	0.0150	P	2.7	-8.3
4	☐	10.000	9.487	42641.24	0.0301	P	4.6	-5.1
5	☐	100.000	100.287	445102.60	0.3090	P	1.0	0.3
6	☐	200.000	199.896	857710.85	0.6149	P	1.2	-0.1

y = 0.0031 * x + 9.3361E-004
R = 1.0000
DL = 1.213 ppb
BEC = 0.3039 ppb

Weight: <None>
Min Conc: <None>

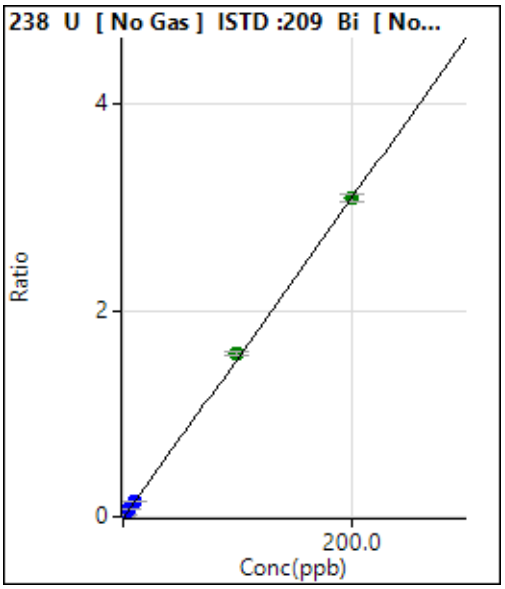
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2692.14	0.0019	P	65.4	
2	☐	2.000	1.777	40005.75	0.0279	P	1.8	-11.1
3	☐	5.000	4.695	100867.38	0.0706	P	4.0	-6.1
4	☐	10.000	9.303	195702.69	0.1380	P	1.5	-7.0
5	☐	100.000	97.385	2055255.19	1.4267	P	1.2	-2.6
6	☐	200.000	201.352	4111625.20	2.9478	A	1.3	0.7

y = 0.0146 * x + 0.0019
R = 0.9999
DL = 0.2564 ppb
BEC = 0.1306 ppb

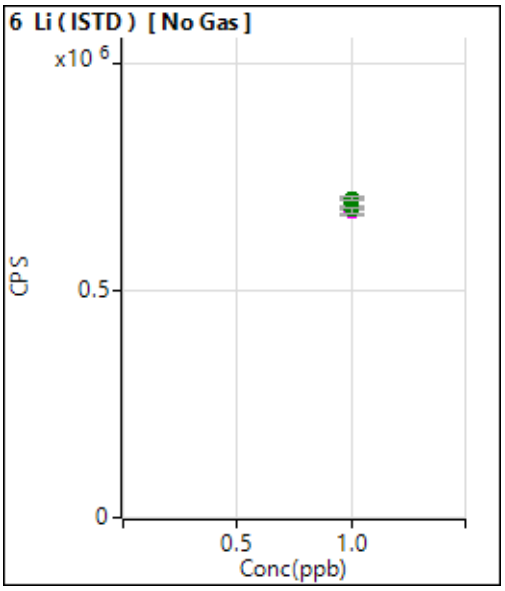
Weight: <None>
Min Conc: <None>



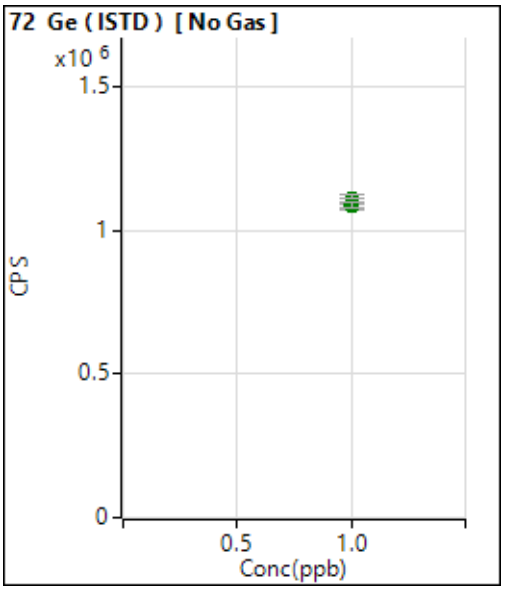
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	21.8	
2	☐	2.000	1.790	39888.68	0.0278	P	0.6	-10.5
3	☐	5.000	4.372	97086.58	0.0680	P	0.4	-12.6
4	☐	10.000	9.172	202118.54	0.1425	P	1.0	-8.3
5	☐	100.000	101.930	2281576.37	1.5838	A	1.9	1.9
6	☐	200.000	199.094	4314718.79	3.0936	A	1.9	-0.5

y = 0.0155 * x + 1.8924E-005
R = 0.9999
DL = 0.0007947 ppb
BEC = 0.001218 ppb

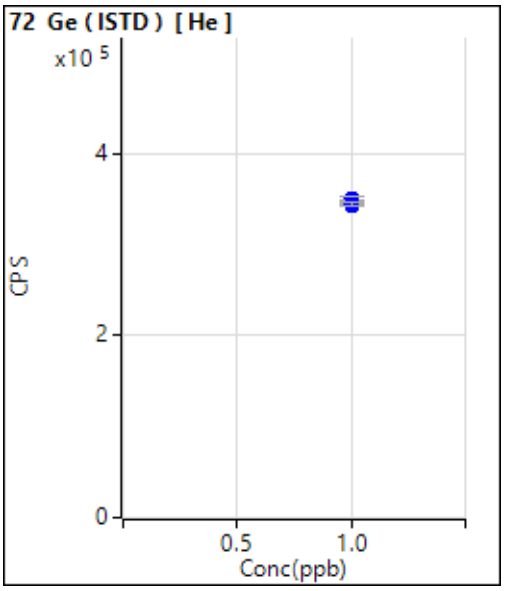
Weight: <None>
Min Conc: <None>



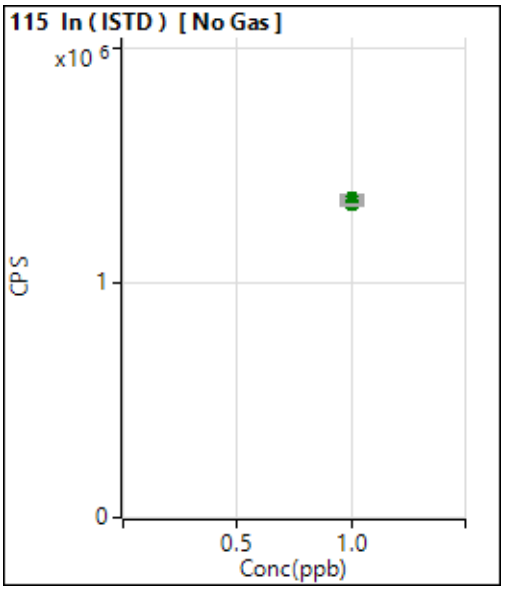
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		675584.15		M	3.0	
2	☐	1.000		693865.26		A	2.1	
3	☐	1.000		688986.54		A	3.8	
4	☐	1.000		688753.63		A	3.0	
5	☐	1.000		703252.47		A	0.8	
6	☐	1.000		677097.48		A	1.8	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1083013.81		A	1.6	
2	☐	1.000		1111763.63		A	2.3	
3	☐	1.000		1093395.24		A	3.7	
4	☐	1.000		1085869.80		A	1.9	
5	☐	1.000		1086061.18		A	2.6	
6	☐	1.000		1088193.97		A	1.7	

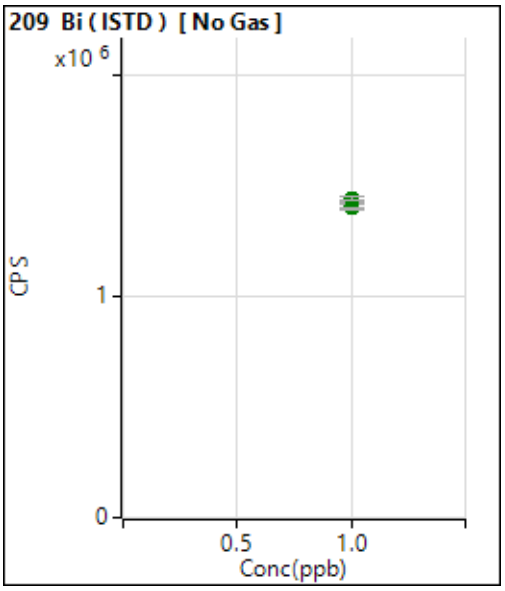


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		343019.46		P	0.9	
2	☐	1.000		346848.23		P	0.9	
3	☐	1.000		348051.02		P	0.6	
4	☐	1.000		345988.56		P	0.6	
5	☐	1.000		350617.54		P	1.2	
6	☐	1.000		344392.03		P	0.8	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1354248.87		A	0.5	
2	☐	1.000		1361364.67		A	1.1	
3	☐	1.000		1362632.26		A	2.2	
4	☐	1.000		1356637.78		A	0.9	
5	☐	1.000		1357464.77		A	0.7	
6	☐	1.000		1334627.37		A	0.5	

Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1409442.95		A	1.8	
2	☐	1.000		1433446.60		A	0.1	
3	☐	1.000		1428734.77		A	0.5	
4	☐	1.000		1418036.44		A	0.8	
5	☐	1.000		1440655.40		A	0.8	
6	☐	1.000		1394896.96		A	0.9	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	015LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:44:16-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.738	1.738	6.11	53971	0.00	2	
Be	9	1	No Gas	1.914	1.914	5.45	3345	0.06	2	
V	51	2	He	1.931	1.931	2.15	5479	0.04	2	
Cr	52	2	He	1.959	1.959	3.07	6595	0.03	2	
Fe	56	2	He	191.912	191.912	0.65	546119	0.04	200	
Se	78	2	He	1.203	1.203	24.60	415	0.29	2	NewName Main CR1 Failed
As	75	2	He	1.948	1.948	1.68	891	0.22	2	
Ca	44	2	He	182.415	182.415	1.76	4137	4.41	200	
Na	23	2	He	118.776	118.776	4.91	247807	0.05	200	NewName Main CR1 Failed
Mg	24	2	He	196.187	196.187	1.28	60337	0.33	200	
K	39	2	He	193.649	193.649	0.97	148592	0.13	200	
Mn	55	2	He	2.000	2.000	9.95	4758	0.04	2	
Co	59	2	He	2.004	2.004	2.47	8666	0.02	2	
Ni	60	2	He	1.816	1.816	5.39	2194	0.08	2	
Cu	63	2	He	1.932	1.932	5.52	7252	0.03	2	
Zn	66	2	He	1.609	1.609	18.19	6608	0.02	2	
Al	27	2	He	1.112	1.112	43.37	673	0.17	2	NewName Main CR1 Failed
B	11	1	No Gas	38.285	38.285	9.29	47577	0.08	10	NewName Main CR1 Failed
Al	27	1	No Gas	1.821	1.821	19.34	29291	0.01	2	
Si	28	1	No Gas	22.376	22.376	19.88	289713	0.01	10	NewName Main CR1 Failed
Ag	107	1	No Gas	1.717	1.717	3.55	13734	0.01	2	
Cd	111	1	No Gas	1.946	1.946	4.55	2687	0.07	2	
Sr	88	1	No Gas	1.865	1.865	1.85	24125	0.01	2	
Mo	95	1	No Gas	2.030	2.030	4.66	4974	0.04	2	
Sn	118	1	No Gas	1.933	1.933	5.42	9313	0.02	2	
Sb	121	1	No Gas	1.852	1.852	3.66	11709	0.02	2	
Ba	137	1	No Gas	1.955	1.955	2.21	4094	0.05	2	
Tl	205	1	No Gas	1.806	1.806	1.65	28352	0.01	2	
Tl	203	1	No Gas	1.856	1.856	1.93	11609	0.02	2	
Pb	208	1	No Gas	1.820	1.820	1.96	40343	0.00	2	
U	238	1	No Gas	1.824	1.824	0.22	40099	0.00	2	
Ca	43	2	He	195.982	195.982	10.52	240	81.66	200	
Sb	121	2	He	1.937	1.937	3.77	6282	0.03	2	
Ti	47	2	He	2.100	2.100	16.09	213	0.98	200	
Cu	63	1	No Gas	1.964	1.964	9.32	13390	0.01	2	
Se	82	1	No Gas	-2.546	-2.546	-246.07	-1035	0.25	2	NewName Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	697561	1.52	675584	103.25	70	120	
Ge	72	2	He	343113	0.72	343019	100.03	70	120	
Ge	72	1	No Gas	1050997	3.58	1083014	97.04	70	120	
In	115	1	No Gas	1343429	0.50	1354249	99.20	70	120	
Bi	209	1	No Gas	1413622	0.65	1409443	100.30	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	016LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:46:15-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.152	4.152	0.93	73867	0.01	5	
Be	9	1	No Gas	4.703	4.703	3.07	8236	0.06	5	
V	51	2	He	4.748	4.748	1.82	12722	0.04	5	
Cr	52	2	He	4.779	4.779	2.97	14925	0.03	5	
Fe	56	2	He	506.367	506.367	1.23	1441766	0.04	500	
Se	78	2	He	4.123	4.123	16.79	540	0.76	5	
As	75	2	He	4.980	4.980	1.80	2204	0.23	5	
Ca	44	2	He	501.993	501.993	1.79	9687	5.18	500	
Na	23	2	He	383.878	383.878	0.56	397057	0.10	500	
Mg	24	2	He	479.989	479.989	1.38	148777	0.32	500	
K	39	2	He	463.525	463.525	1.41	246729	0.19	500	
Mn	55	2	He	4.767	4.767	1.87	10931	0.04	5	
Co	59	2	He	4.805	4.805	0.24	20930	0.02	5	
Ni	60	2	He	4.801	4.801	7.34	5498	0.09	5	
Cu	63	2	He	4.741	4.741	2.61	15676	0.03	5	
Zn	66	2	He	4.651	4.651	10.40	8499	0.05	5	
Al	27	2	He	5.190	5.190	5.98	1360	0.38	5	
B	11	1	No Gas	28.772	28.772	1.61	39923	0.07	25	
Al	27	1	No Gas	5.510	5.510	4.04	53530	0.01	5	
Si	28	1	No Gas	30.784	30.784	6.92	317717	0.01	25	
Ag	107	1	No Gas	4.248	4.248	2.02	33199	0.01	5	
Cd	111	1	No Gas	4.846	4.846	5.88	6882	0.07	5	
Sr	88	1	No Gas	4.666	4.666	1.92	61280	0.01	5	
Mo	95	1	No Gas	4.878	4.878	1.44	12263	0.04	5	
Sn	118	1	No Gas	4.569	4.569	5.38	20830	0.02	5	
Sb	121	1	No Gas	4.375	4.375	3.95	27609	0.02	5	
Ba	137	1	No Gas	4.740	4.740	1.09	10027	0.05	5	
Tl	205	1	No Gas	4.390	4.390	1.73	69939	0.01	5	
Tl	203	1	No Gas	4.593	4.593	2.97	29168	0.02	5	
Pb	208	1	No Gas	4.500	4.500	2.50	97484	0.00	5	
U	238	1	No Gas	4.376	4.376	2.99	97876	0.00	5	
Ca	43	2	He	447.493	447.493	14.66	493	90.70	500	
Sb	121	2	He	4.973	4.973	0.89	15947	0.03	5	
Ti	47	2	He	5.476	5.476	3.88	557	0.98	5	
Cu	63	1	No Gas	4.807	4.807	4.50	27702	0.02	5	
Se	82	1	No Gas	9.134	9.134	85.22	-176	-5.19	5	NewName2 Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	705094	0.61	675584	104.37	70	120	
Ge	72	2	He	346538	0.56	343019	101.03	70	120	
Ge	72	1	No Gas	1067080	1.89	1083014	98.53	70	120	
In	115	1	No Gas	1382496	1.10	1354249	102.09	70	120	
Bi	209	1	No Gas	1439273	1.24	1409443	102.12	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	017_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:48:13-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.119	12.6	38367	1.1	0.5	
Be	9	1	No Gas	0.000	2802.6	45	29.4	0.5	
V	51	2	He	0.018	90.7	642	5.1	2.5	
Cr	52	2	He	0.022	127.5	967	7.3	2.5	
Fe	56	2	He	0.872	3.5	10594	1.7	100	
Se	78	2	He	-1.137	-9.5	317	1.9	1	
As	75	2	He	-0.001	-953.4	61	8.3	2.5	
Ca	44	2	He	-8.426	-48.4	873	8.6	100	
Na	23	2	He	-77.769	-5.7	138966	1.7	100	
Mg	24	2	He	0.632	40.8	417	18.6	100	
K	39	2	He	-6.671	-41.2	76937	1.6	100	
Mn	55	2	He	0.033	110.9	443	19.2	2.5	
Co	59	2	He	-0.005	-25.4	17	34.6	2.5	
Ni	60	2	He	-0.116	-15.2	90	22.2	2.5	
Cu	63	2	He	-0.104	-123.9	1250	31.0	1	
Zn	66	2	He	-0.201	-282.2	5488	4.8	2.5	
Al	27	2	He	-0.387	-97.6	423	15.7	5	
B	11	1	No Gas	4.608	16.9	17705	4.3	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-0.542	-9.3	13537	2.3	5	
Si	28	1	No Gas	9.433	5.9	239977	0.5	10	
Ag	107	1	No Gas	-0.051	-13.1	783	5.2	2.5	
Cd	111	1	No Gas	0.007	99.4	10	100.0	1	
Sr	88	1	No Gas	-0.004	-74.3	483	8.4	2.5	
Mo	95	1	No Gas	-0.007	-35.2	7	86.6	2.5	
Sn	118	1	No Gas	0.090	43.2	1657	9.4	5	
Sb	121	1	No Gas	0.040	33.3	547	13.9	2.5	
Ba	137	1	No Gas	0.004	298.1	137	18.4	2.5	
Tl	205	1	No Gas	-0.003	-60.1	103	24.4	1	
Tl	203	1	No Gas	0.001	241.4	50	20.0	1	
Pb	208	1	No Gas	-0.080	-4.7	1037	9.0	2.5	
U	238	1	No Gas	0.000	-274.2	20	86.6	2.5	
Ca	43	2	He	-43.850	-13.4	3	173.2	100	
Sb	121	2	He	0.022	79.8	280	19.9	2.5	
Ti	47	2	He	0.101	151.6	13	114.6	2.5	
Se	82	1	No Gas	6.257	285.8	-375	-335.1	1	ICB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	650100	0.78	675584	96.23	70	120	
Ge	72	2	He	340379	1.24	343019	99.23	70	120	
Ge	72	1	No Gas	990700	1.09	1083014	91.48	70	120	
In	115	1	No Gas	1333117	1.06	1354249	98.44	70	120	
Bi	209	1	No Gas	1387521	1.93	1409443	98.44	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	019ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:53:16-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.086	-199.6	39721	1.5	0	ICSA Main CR1 Failed
Be	9	1	No Gas	-0.014	-28.2	23	32.7	0	ICSA Main CR1 Failed
V	51	2	He	0.106	21.2	888	7.2	0	ICSA Main CR1 Failed
Cr	52	2	He	1.420	3.6	5134	2.3	0	ICSA Main CR1 Failed
Fe	56	2	He	103050.438	0.8	294773769	0.7	0	
Se	78	2	He	-0.173	-153.8	367	3.6	0	ICSA Main CR1 Failed
As	75	2	He	0.253	28.6	173	17.6	0	ICSA Main CR1 Failed
Ca	44	2	He	105462.082	1.3	1837998	1.2	0	
Na	23	2	He	104498.060	1.1	58640442	0.4	0	
Mg	24	2	He	104529.400	0.8	32687566	0.5	0	
K	39	2	He	102966.126	1.8	37343818	1.4	0	
Mn	55	2	He	0.288	20.1	1027	13.3	0	ICSA Main CR1 Failed
Co	59	2	He	0.260	7.9	1183	7.6	0	ICSA Main CR1 Failed
Ni	60	2	He	0.791	12.4	1100	9.6	0	ICSA Main CR1 Failed
Cu	63	2	He	0.113	7.0	1937	1.7	0	ICSA Main CR1 Failed
Zn	66	2	He	1.459	22.7	6655	3.6	0	ICSA Main CR1 Failed
Al	27	2	He	109267.562	1.4	18406437	1.1	0	
B	11	1	No Gas	-0.522	-196.8	14736	2.3	0	ICSA Main CR1 Failed
Al	27	1	No Gas	105269.173	4.8	679232817	0.2	0	
Si	28	1	No Gas	40.557	13.8	345704	0.1	0	
Ag	107	1	No Gas	0.100	29.9	1810	9.2	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	1.414	9.7	1917	7.6	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	4.425	2.5	55552	1.1	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	2305.493	2.1	5526088	0.0	0	
Sn	118	1	No Gas	0.282	18.8	2420	7.0	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.294	19.3	2180	16.3	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.613	3.6	1350	3.9	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.005	31.1	223	10.3	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.011	54.2	110	31.5	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.193	48.2	6552	28.5	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.006	37.0	163	30.8	0	ICSA Main CR1 Failed
Ca	43	2	He	102381.821	0.5	103167	0.4	0	
Sb	121	2	He	0.256	14.8	1037	12.1	0	ICSA Main CR1 Failed
Ti	47	2	He	2078.772	1.3	212264	0.6	0	
Se	82	1	No Gas	0.939	1666.3	-821	-147.4	0	ICSA Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	701123	3.12	675584	103.78	70	120	
Ge	72	2	He	350175	0.73	343019	102.09	70	120	
Ge	72	1	No Gas	1070892	4.48	1083014	98.88	70	120	
In	115	1	No Gas	1320930	2.20	1354249	97.54	70	120	
Bi	209	1	No Gas	1385348	0.34	1409443	98.29	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	020ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:55:37-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	99.193	2.030	836312	1.41	100	99.2	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	97.902	1.837	170948	1.09	100	97.9	80	120	
V	51	2	He	103.402	1.021	261672	0.68	100	103.4	80	120	
Cr	52	2	He	102.941	1.004	299449	0.68	100	102.9	80	120	
Fe	56	2	He	107155.437	1.571	300196329	1.24	100	107155.4	80	120	ICSB Main CR1 Failed
Se	78	2	He	102.950	1.680	4566	1.29	100	102.9	80	120	
As	75	2	He	102.580	1.261	43700	0.93	100	102.6	80	120	
Ca	44	2	He	112182.242	2.466	1914697	2.13	100	112182.2	80	120	ICSB Main CR1 Failed
Na	23	2	He	108804.237	1.765	59792082	1.43	100	108804.2	80	120	ICSB Main CR1 Failed
Mg	24	2	He	109214.456	1.366	33448890	1.03	100	109214.5	80	120	ICSB Main CR1 Failed
K	39	2	He	107840.835	1.420	38303324	1.10	100	107840.8	80	120	ICSB Main CR1 Failed
Mn	55	2	He	103.036	1.219	226130	0.88	100	103.0	80	120	
Co	59	2	He	102.878	1.097	442629	0.76	100	102.9	80	120	
Ni	60	2	He	100.954	0.251	110089	0.48	100	101.0	80	120	
Cu	63	2	He	100.665	2.212	297751	1.98	100	100.7	80	120	
Zn	66	2	He	100.604	1.451	65357	1.07	100	100.6	80	120	
Al	27	2	He	103319.841	1.414	17046116	1.08	100	103319.8	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	527.051	3.432	431262	2.60	100	527.1	80	120	
Al	27	1	No Gas	98591.878	4.264	620724337	1.07	100	98591.9	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	579.729	4.222	1801988	1.45	100	579.7	80	120	
Ag	107	1	No Gas	97.792	1.067	649073	1.66	100	97.8	80	120	
Cd	111	1	No Gas	101.961	1.092	137154	1.10	100	102.0	80	120	
Sr	88	1	No Gas	106.143	1.621	1308747	0.89	100	106.1	80	120	
Mo	95	1	No Gas	2220.502	1.928	5275250	0.49	100	2220.5	80	120	ICSB Main CR1 Failed
Sn	118	1	No Gas	103.169	1.443	418212	1.09	100	103.2	80	120	
Sb	121	1	No Gas	93.781	3.899	572200	0.70	100	93.8	80	120	
Ba	137	1	No Gas	103.945	3.133	205509	1.07	100	103.9	80	120	
Tl	205	1	No Gas	103.313	1.590	1547157	2.24	100	103.3	80	120	
Tl	203	1	No Gas	100.250	0.988	598731	1.59	100	100.2	80	120	
Pb	208	1	No Gas	99.905	0.348	1983847	0.72	100	99.9	80	120	
U	238	1	No Gas	107.708	0.970	2268524	1.14	100	107.7	80	120	
Ca	43	2	He	107970.810	0.264	106557	0.27	100	107970.8	80	120	ICSB Main CR1 Failed
Sb	121	2	He	101.432	1.285	317751	0.95	100	101.4	80	120	
Ti	47	2	He	2074.155	0.383	207441	0.43	100	2074.2	80	120	ICSB Main CR1 Failed
Cu	63	1	No Gas	101.952	4.472	498319	1.48	100	102.0	80	120	
Se	82	1	No Gas	100.757	27.341	6566	30.63	100	100.8	80	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	707105	0.82	675584	104.67	70	120	
Ge	72	2	He	342960	0.34	343019	99.98	70	120	
Ge	72	1	No Gas	1044736	4.54	1083014	96.47	70	120	
In	115	1	No Gas	1309173	2.13	1354249	96.67	70	120	
Bi	209	1	No Gas	1355485	0.71	1409443	96.17	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	023_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:04:21-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	101.078	6.192	839660	4.44	100	101.1	90	110	
Be	9	1	No Gas	100.017	1.656	172302	0.69	100	100.0	90	110	
V	51	2	He	100.161	0.839	260518	0.87	100	100.2	90	110	
Cr	52	2	He	100.148	0.813	299426	0.87	100	100.1	90	110	
Fe	56	2	He	10008.236	0.491	28823557	0.55	10000	100.1	90	110	
Se	78	2	He	100.949	2.360	4609	2.12	100	100.9	90	110	
As	75	2	He	100.186	0.865	43865	0.91	100	100.2	90	110	
Ca	44	2	He	10026.834	1.579	176845	1.62	10000	100.3	90	110	
Na	23	2	He	9837.958	0.665	5727044	0.65	10000	98.4	90	110	
Mg	24	2	He	10168.419	1.386	3200857	1.44	10000	101.7	90	110	
K	39	2	He	10108.695	0.633	3764432	0.68	10000	101.1	90	110	
Mn	55	2	He	99.946	0.201	225442	0.26	100	99.9	90	110	
Co	59	2	He	99.885	0.454	441669	0.51	100	99.9	90	110	
Ni	60	2	He	100.659	1.618	112808	1.56	100	100.7	90	110	
Cu	63	2	He	99.528	0.613	302573	0.66	100	99.5	90	110	
Zn	66	2	He	100.302	1.825	66985	1.62	100	100.3	90	110	
Al	27	2	He	102.636	8.951	17906	8.70	100	102.6	90	110	
B	11	1	No Gas	480.136	1.150	389083	2.53	500	96.0	90	110	
Al	27	1	No Gas	112.910	20.317	741090	21.81	100	112.9	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	543.982	3.228	1729295	0.88	5000	10.9	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	99.589	2.596	685218	0.41	100	99.6	90	110	
Cd	111	1	No Gas	100.440	1.125	140101	1.21	100	100.4	90	110	
Sr	88	1	No Gas	100.689	1.813	1287355	0.71	100	100.7	90	110	
Mo	95	1	No Gas	100.358	2.594	247229	0.50	100	100.4	90	110	
Sn	118	1	No Gas	99.685	2.076	419017	0.24	100	99.7	90	110	
Sb	121	1	No Gas	91.673	3.359	567346	0.59	100	91.7	90	110	
Ba	137	1	No Gas	99.847	2.666	204721	0.45	100	99.8	90	110	
Tl	205	1	No Gas	100.536	2.038	1580259	0.63	100	100.5	90	110	
Tl	203	1	No Gas	97.596	2.873	611725	0.27	100	97.6	90	110	
Pb	208	1	No Gas	96.457	2.164	2010576	0.53	100	96.5	90	110	
U	238	1	No Gas	101.582	2.162	2245764	0.79	100	101.6	90	110	
Ca	43	2	He	10109.998	4.849	10297	4.82	10000	101.1	90	110	
Sb	121	2	He	98.421	0.620	316875	0.68	100	98.4	90	110	
Ti	47	2	He	95.999	4.178	9870	4.20	100	96.0	90	110	
Cu	63	1	No Gas	105.321	3.283	522077	0.42	100	105.3	90	110	
Se	82	1	No Gas	102.057	5.477	6743	3.46	100	102.1	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	697746	2.22	675584	103.28	70	120	
Ge	72	2	He	352460	0.06	343019	102.75	70	120	
Ge	72	1	No Gas	1059099	2.81	1083014	97.79	70	120	
In	115	1	No Gas	1357574	2.26	1354249	100.25	70	120	
Bi	209	1	No Gas	1423316	2.61	1409443	100.98	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	024_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:06:17-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.124	146.9	39681	0.9	0.5	
Be	9	1	No Gas	-0.012	-58.9	27	47.2	0.5	
V	51	2	He	0.165	8.6	1011	4.5	2.5	
Cr	52	2	He	0.160	45.7	1363	14.7	2.5	
Fe	56	2	He	0.972	9.0	10868	2.0	100	
Se	78	2	He	-0.062	-1214.8	361	8.5	2	
As	75	2	He	0.035	63.6	77	11.5	2.5	
Ca	44	2	He	-17.068	-15.4	727	6.8	100	
Na	23	2	He	-95.614	-4.1	129208	1.0	100	
Mg	24	2	He	0.511	9.3	380	4.6	100	
K	39	2	He	-1.242	-229.3	78811	0.7	100	
Mn	55	2	He	0.023	32.4	420	4.8	2.5	
Co	59	2	He	-0.001	-358.6	37	31.5	2.5	
Ni	60	2	He	-0.134	-12.4	70	24.7	2.5	
Cu	63	2	He	-0.229	-12.6	883	9.6	2	
Zn	66	2	He	-0.331	-121.7	5411	4.1	2.5	
Al	27	2	He	-0.768	-50.8	360	16.9	5	
B	11	1	No Gas	23.623	21.9	32182	9.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.489	-12.6	14117	2.8	5	
Si	28	1	No Gas	2.581	38.3	226546	0.2	10	
Ag	107	1	No Gas	-0.090	-18.5	547	21.1	2.5	
Cd	111	1	No Gas	0.005	86.6	7	86.6	1	
Sr	88	1	No Gas	-0.011	-76.8	390	28.9	2.5	
Mo	95	1	No Gas	0.017	36.1	63	24.1	2.5	
Sn	118	1	No Gas	0.076	35.4	1607	8.3	5	
Sb	121	1	No Gas	0.173	24.1	1340	17.6	2.5	
Ba	137	1	No Gas	-0.027	-29.6	73	20.8	2.5	
Tl	205	1	No Gas	0.000	-559.0	143	10.7	1	
Tl	203	1	No Gas	0.007	22.5	90	11.1	1	
Pb	208	1	No Gas	-0.072	-8.6	1177	10.4	2.5	
U	238	1	No Gas	0.002	55.4	63	32.9	2.5	
Ca	43	2	He	-37.016	-0.3	10	0.0	100	
Sb	121	2	He	0.092	45.2	497	26.8	2.5	
Ti	47	2	He	0.135	44.0	17	34.6	2.5	
Cu	63	1	No Gas	-0.247	-22.8	2500	9.7	2.5	
Se	82	1	No Gas	4.223	163.0	-518	-93.9	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	672233	3.47	675584	99.50	70	120	
Ge	72	2	He	340241	0.92	343019	99.19	70	120	
Ge	72	1	No Gas	1009602	0.91	1083014	93.22	70	120	
In	115	1	No Gas	1338881	1.43	1354249	98.87	70	120	
Bi	209	1	No Gas	1366811	0.22	1409443	96.98	70	120	

Sample Report

Sample Table

Sample Name	MBLK-181294
Data File Name	025SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:09:56-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.083	0.083	47.03	39392	0.00	2000	
Be	9	1	No Gas	0.007	0.007	334.56	58	0.01	2000	
V	51	2	He	0.167	0.167	11.53	1020	0.02	2000	
Cr	52	2	He	0.067	0.067	61.20	1103	0.01	2000	
Fe	56	2	He	0.557	0.557	25.70	9767	0.01	200000	
Se	78	2	He	-0.416	-0.416	-359.06	348	-0.12	2000	
As	75	2	He	0.050	0.050	33.31	83	0.06	2000	
Ca	44	2	He	-3.187	-3.187	-205.02	967	-0.33	200000	
Na	23	2	He	-109.331	-109.331	-1.07	122407	-0.09	200000	
Mg	24	2	He	0.548	0.548	29.58	393	0.14	200000	
K	39	2	He	-4.979	-4.979	-67.61	77909	-0.01	200000	
Mn	55	2	He	-0.016	-0.016	-183.46	337	0.00	2000	
Co	59	2	He	-0.003	-0.003	-158.75	27	-0.01	2000	
Ni	60	2	He	-0.085	-0.085	-5.58	123	-0.07	2000	
Cu	63	2	He	-0.219	-0.219	-4.01	917	-0.02	2000	
Zn	66	2	He	-0.909	-0.909	-43.75	5098	-0.02	2000	
Al	27	2	He	2.741	2.741	35.42	940	0.29	2000	
B	11	1	No Gas	-0.415	-0.415	-201.37	14212	0.00	2000	
Al	27	1	No Gas	4.900	4.900	64.63	46875	0.01	2000	
Si	28	1	No Gas	-0.583	-0.583	-93.70	217207	0.00	2000	
Ag	107	1	No Gas	-0.063	-0.063	-42.34	717	-0.01	2000	
Cd	111	1	No Gas	0.025	0.025	120.43	33	0.07	2000	
Sr	88	1	No Gas	0.055	0.055	31.59	1210	0.00	2000	
Mo	95	1	No Gas	0.028	0.028	140.62	90	0.03	2000	
Sn	118	1	No Gas	0.010	0.010	315.54	1307	0.00	2000	
Sb	121	1	No Gas	0.076	0.076	28.35	767	0.01	2000	
Ba	137	1	No Gas	-0.002	-0.002	-2119.09	123	0.00	2000	
Tl	205	1	No Gas	0.009	0.009	218.54	290	0.00	2000	
Tl	203	1	No Gas	0.008	0.008	269.50	93	0.01	2000	
Pb	208	1	No Gas	-0.086	-0.086	-24.55	910	-0.01	2000	
U	238	1	No Gas	0.013	0.013	165.25	313	0.00	2000	
Ca	43	2	He	-20.041	-20.041	-128.20	27	-75.15	200000	
Sb	121	2	He	0.034	0.034	16.41	320	0.01	2000	
Ti	47	2	He	-0.033	-0.033	0.00	0	#DIV/0!	2000	
Cu	63	1	No Gas	-0.252	-0.252	-7.77	2467	-0.01	2000	
Zn	66	1	No Gas	0.340	0.340	86.57	12359	0.00	2000	
Se	82	1	No Gas	4.492	4.492	123.67	-502	-0.89	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	672143	2.45	675584	99.49	70	120	
Ge	72	2	He	342040	0.52	343019	99.71	70	120	
Ge	72	1	No Gas	1004845	1.28	1083014	92.78	70	120	
In	115	1	No Gas	1311520	1.16	1354249	96.84	70	120	

Sample Report

Bi	209	1	No Gas	1405683	0.52	1409443	99.73	70	120	

Sample Report

Sample Table

Sample Name	LCS-181294
Data File Name	026SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:11:55-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	-0.189	-0.189	-41.96	42611	0.00	2000	
Be	9	1	No Gas	54.209	54.209	2.01	102764	0.05	2000	
V	51	2	He	56.050	56.050	1.36	153935	0.04	2000	
Cr	52	2	He	55.494	55.494	1.12	175308	0.03	2000	
Fe	56	2	He	5590.404	5590.404	1.13	16972733	0.03	200000	
Se	78	2	He	56.399	56.399	1.49	2889	1.95	2000	
As	75	2	He	57.139	57.139	0.87	26399	0.22	2000	
Ca	44	2	He	5555.011	5555.011	2.24	103749	5.35	200000	
Na	23	2	He	5564.802	5564.802	0.81	3500358	0.16	200000	
Mg	24	2	He	5784.473	5784.473	2.41	1919090	0.30	200000	
K	39	2	He	5748.713	5748.713	0.68	2293659	0.25	200000	
Mn	55	2	He	56.641	56.641	1.43	134827	0.04	2000	
Co	59	2	He	56.474	56.474	1.08	263216	0.02	2000	
Ni	60	2	He	56.062	56.062	0.89	66324	0.08	2000	
Cu	63	2	He	57.139	57.139	1.33	183801	0.03	2000	
Zn	66	2	He	57.840	57.840	2.66	43306	0.13	2000	
Al	27	2	He	63.012	63.012	1.03	11792	0.53	2000	
B	11	1	No Gas	-6.462	-6.462	-6.58	11058	-0.06	2000	
Al	27	1	No Gas	56.759	56.759	1.82	424398	0.01	2000	
Si	28	1	No Gas	99.455	99.455	2.88	562756	0.02	2000	
Ag	107	1	No Gas	54.188	54.188	0.54	399409	0.01	2000	
Cd	111	1	No Gas	56.429	56.429	1.00	84181	0.07	2000	
Sr	88	1	No Gas	0.042	0.042	11.56	1160	0.00	2000	
Mo	95	1	No Gas	56.196	56.196	0.72	148103	0.04	2000	
Sn	118	1	No Gas	0.097	0.097	6.05	1833	0.01	2000	
Sb	121	1	No Gas	50.809	50.809	0.85	351017	0.01	2000	
Ba	137	1	No Gas	55.258	55.258	0.99	121262	0.05	2000	
Tl	205	1	No Gas	51.302	51.302	1.42	868783	0.01	2000	
Tl	203	1	No Gas	53.734	53.734	1.06	362937	0.01	2000	
Pb	208	1	No Gas	53.245	53.245	1.22	1196997	0.00	2000	
U	238	1	No Gas	-0.001	-0.001	-46.42	17	0.00	2000	
Ca	43	2	He	5659.322	5659.322	1.21	6098	92.80	200000	
Sb	121	2	He	56.814	56.814	1.90	192875	0.03	2000	
Ti	47	2	He	53.672	53.672	1.48	5818	0.92	2000	
Cu	63	1	No Gas	56.503	56.503	1.55	314471	0.02	2000	
Zn	66	1	No Gas	57.621	57.621	1.49	103113	0.06	2000	
Se	82	1	No Gas	53.689	53.689	5.77	3504	1.53	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	767589	1.57	675584	113.62	70	120	
Ge	72	2	He	371494	0.75	343019	108.30	70	120	
Ge	72	1	No Gas	1181044	1.45	1083014	109.05	70	120	
In	115	1	No Gas	1451706	0.34	1354249	107.20	70	120	

Sample Report

Bi	209	1	No Gas	1532947	1.13	1409443	108.76	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01
Data File Name	027SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:13:53-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	20.581	20.581	3.20	223183	0.01	2000	
Be	9	1	No Gas	-0.008	-0.008	-50.18	38	-0.02	2000	
V	51	2	He	0.552	0.552	7.71	2195	0.03	2000	
Cr	52	2	He	270.055	270.055	1.15	862481	0.03	2000	
Fe	56	2	He	6151.820	6151.820	1.13	18966169	0.03	200000	
Se	78	2	He	-0.833	-0.833	-15.53	365	-0.23	2000	
As	75	2	He	0.267	0.267	5.13	193	0.14	2000	
Ca	44	2	He	111561.276	111561.276	2.43	2094507	5.33	200000	
Na	23	2	He	431225.022	431225.022	1.56	260071236	0.17	200000	>LDR
Mg	24	2	He	78077.998	78077.998	0.45	26304524	0.30	200000	
K	39	2	He	1063.881	1063.881	1.13	502662	0.21	200000	
Mn	55	2	He	1137.199	1137.199	1.04	2741215	0.04	2000	
Co	59	2	He	29.137	29.137	1.00	137929	0.02	2000	
Ni	60	2	He	2196.222	2196.222	2.00	2629290	0.08	2000	>LDR
Cu	63	2	He	11.295	11.295	2.56	38281	0.03	2000	
Zn	66	2	He	7.846	7.846	1.69	11338	0.07	2000	
Al	27	2	He	12.184	12.184	9.53	2750	0.44	2000	
B	11	1	No Gas	8.527	8.527	6.90	23879	0.04	2000	
Al	27	1	No Gas	10.201	10.201	5.73	93728	0.01	2000	
Si	28	1	No Gas	16754.273	16754.273	3.16	52356396	0.03	2000	>LDR
Ag	107	1	No Gas	-0.073	-0.073	-15.94	697	-0.01	2000	
Cd	111	1	No Gas	0.257	0.257	17.02	373	0.07	2000	
Sr	88	1	No Gas	1651.738	1651.738	0.82	22007725	0.01	2000	
Mo	95	1	No Gas	1.743	1.743	4.46	4501	0.04	2000	
Sn	118	1	No Gas	0.161	0.161	16.42	2070	0.01	2000	
Sb	121	1	No Gas	0.095	0.095	14.03	1043	0.01	2000	
Ba	137	1	No Gas	65.215	65.215	0.87	139472	0.05	2000	
Tl	205	1	No Gas	0.007	0.007	37.12	260	0.00	2000	
Tl	203	1	No Gas	0.018	0.018	12.75	157	0.01	2000	
Pb	208	1	No Gas	-0.037	-0.037	-13.73	1947	0.00	2000	
U	238	1	No Gas	0.193	0.193	2.25	4284	0.00	2000	
Ca	43	2	He	108085.914	108085.914	2.66	117327	92.12	200000	
Sb	121	2	He	0.054	0.054	29.90	420	0.01	2000	
Ti	47	2	He	0.179	0.179	58.88	23	0.77	2000	
Cu	63	1	No Gas	12.138	12.138	4.14	71742	0.02	2000	
Zn	66	1	No Gas	7.946	7.946	8.11	26586	0.03	2000	
Se	82	1	No Gas	14.261	14.261	32.03	226	6.30	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	766920	2.24	675584	113.52	70	120	
Ge	72	2	He	377253	0.51	343019	109.98	70	120	
Ge	72	1	No Gas	1195322	2.89	1083014	110.37	70	120	
In	115	1	No Gas	1415016	0.96	1354249	104.49	70	120	
Bi	209	1	No Gas	1419525	1.06	1409443	100.72	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01SD
Data File Name	028SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:16:08-05:00
Sample Type	Sample
Dilution	5
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.230	21.151	2.45	81945	0.01	2000	
Be	9	1	No Gas	-0.002	-0.008	-2429.61	50	0.00	2000	
V	51	2	He	0.407	2.037	5.77	1752	0.02	2000	
Cr	52	2	He	55.809	279.045	1.29	174912	0.03	2000	
Fe	56	2	He	1307.591	6537.956	0.74	3945392	0.03	200000	
Se	78	2	He	-0.796	-3.978	-95.64	359	-0.22	2000	
As	75	2	He	0.101	0.507	74.94	113	0.09	2000	
Ca	44	2	He	21604.250	108021.252	0.94	397165	5.44	200000	
Na	23	2	He	88929.802	444649.011	0.63	52554938	0.17	200000	
Mg	24	2	He	16198.095	80990.477	0.96	5331192	0.30	200000	
K	39	2	He	212.272	1061.358	1.71	166703	0.13	200000	
Mn	55	2	He	217.715	1088.573	0.08	513022	0.04	2000	
Co	59	2	He	6.134	30.669	1.29	28400	0.02	2000	
Ni	60	2	He	423.713	2118.566	0.43	495780	0.09	2000	
Cu	63	2	He	2.308	11.540	4.46	8976	0.03	2000	
Zn	66	2	He	1.871	9.356	17.90	7265	0.03	2000	
Al	27	2	He	3.179	15.893	13.77	1090	0.29	2000	
B	11	1	No Gas	-4.416	-22.078	-15.74	12944	-0.03	2000	
Al	27	1	No Gas	2.474	12.370	25.15	37324	0.01	2000	
Si	28	1	No Gas	3425.866	17129.330	2.34	10695076	0.03	2000	>LDR
Ag	107	1	No Gas	-0.058	-0.288	-81.36	813	-0.01	2000	
Cd	111	1	No Gas	0.075	0.377	40.68	110	0.07	2000	
Sr	88	1	No Gas	334.574	1672.870	0.90	4464876	0.01	2000	
Mo	95	1	No Gas	0.408	2.042	23.83	1077	0.04	2000	
Sn	118	1	No Gas	0.048	0.240	18.90	1577	0.00	2000	
Sb	121	1	No Gas	0.041	0.203	73.87	653	0.01	2000	
Ba	137	1	No Gas	13.190	65.948	1.54	28358	0.05	2000	
Tl	205	1	No Gas	0.011	0.053	209.59	324	0.00	2000	
Tl	203	1	No Gas	0.011	0.057	215.61	120	0.01	2000	
Pb	208	1	No Gas	-0.077	-0.385	-21.74	1137	-0.01	2000	
U	238	1	No Gas	0.036	0.181	25.86	840	0.00	2000	
Ca	43	2	He	22260.166	111300.829	1.99	23647	94.13	200000	
Sb	121	2	He	0.016	0.081	181.60	283	0.01	2000	
Ti	47	2	He	0.028	0.141	378.31	7	0.42	2000	
Cu	63	1	No Gas	2.480	12.399	2.78	17745	0.01	2000	
Zn	66	1	No Gas	2.295	11.475	21.30	17388	0.01	2000	
Se	82	1	No Gas	-1.578	-7.888	-452.40	-1093	0.14	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	775699	1.42	675584	114.82	70	120	
Ge	72	2	He	368542	0.59	343019	107.44	70	120	
Ge	72	1	No Gas	1171238	2.66	1083014	108.15	70	120	
In	115	1	No Gas	1416934	1.11	1354249	104.63	70	120	

Sample Report

Bi	209	1	No Gas	1451118	1.51	1409443	102.96	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01MS
Data File Name	029SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:18:05-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	19.700	19.700	2.81	222007	0.01	2000	
Be	9	1	No Gas	51.024	51.024	2.31	99532	0.05	2000	
V	51	2	He	53.590	53.590	0.74	155638	0.03	2000	
Cr	52	2	He	330.521	330.521	0.96	1098748	0.03	2000	
Fe	56	2	He	10919.205	10919.205	1.02	35040285	0.03	200000	
Se	78	2	He	51.351	51.351	3.17	2818	1.82	2000	
As	75	2	He	53.291	53.291	2.50	26034	0.20	2000	
Ca	44	2	He	110903.044	110903.044	0.62	2167779	5.12	200000	
Na	23	2	He	416007.651	416007.651	0.65	261218663	0.16	200000	>LDR
Mg	24	2	He	79683.778	79683.778	1.43	27948320	0.29	200000	
K	39	2	He	6468.547	6468.547	1.08	2717174	0.24	200000	
Mn	55	2	He	1124.029	1124.029	0.74	2820870	0.04	2000	
Co	59	2	He	78.503	78.503	1.13	386808	0.02	2000	
Ni	60	2	He	2137.190	2137.190	0.64	2663888	0.08	2000	>LDR
Cu	63	2	He	60.707	60.707	0.97	206344	0.03	2000	
Zn	66	2	He	57.365	57.365	1.20	45460	0.13	2000	
Al	27	2	He	64.033	64.033	1.08	12659	0.51	2000	
B	11	1	No Gas	6.327	6.327	9.82	22660	0.03	2000	
Al	27	1	No Gas	58.349	58.349	1.33	447839	0.01	2000	
Si	28	1	No Gas	15931.286	15931.286	0.60	50593658	0.03	2000	>LDR
Ag	107	1	No Gas	49.124	49.124	2.11	361257	0.01	2000	
Cd	111	1	No Gas	51.263	51.263	2.00	76276	0.07	2000	
Sr	88	1	No Gas	1575.966	1575.966	2.35	21486919	0.01	2000	
Mo	95	1	No Gas	55.893	55.893	2.35	146913	0.04	2000	
Sn	118	1	No Gas	0.118	0.118	7.76	1924	0.01	2000	
Sb	121	1	No Gas	46.866	46.866	0.83	332781	0.01	2000	
Ba	137	1	No Gas	114.232	114.232	1.45	249897	0.05	2000	
Tl	205	1	No Gas	49.448	49.448	2.27	791463	0.01	2000	
Tl	203	1	No Gas	51.644	51.644	1.51	329708	0.02	2000	
Pb	208	1	No Gas	51.421	51.421	2.11	1092698	0.00	2000	
U	238	1	No Gas	0.193	0.193	9.30	4371	0.00	2000	
Ca	43	2	He	109148.140	109148.140	1.18	123355	88.48	200000	
Sb	121	2	He	52.748	52.748	1.14	189348	0.03	2000	
Ti	47	2	He	52.280	52.280	5.17	5991	0.87	2000	
Cu	63	1	No Gas	61.681	61.681	0.84	352428	0.02	2000	
Zn	66	1	No Gas	57.256	57.256	1.85	105393	0.05	2000	
Se	82	1	No Gas	53.089	53.089	24.18	3551	1.50	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	789970	2.39	675584	116.93	70	120	
Ge	72	2	He	392751	0.31	343019	114.50	70	120	
Ge	72	1	No Gas	1213736	0.56	1083014	112.07	70	120	
In	115	1	No Gas	1448285	1.99	1354249	106.94	70	120	
Bi	209	1	No Gas	1449270	2.58	1409443	102.83	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01MSD
Data File Name	030SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:20:01-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	19.557	19.557	1.92	240113	0.01	2000	
Be	9	1	No Gas	51.336	51.336	1.31	108943	0.05	2000	
V	51	2	He	54.450	54.450	0.81	164822	0.03	2000	
Cr	52	2	He	341.126	341.126	0.45	1182003	0.03	2000	
Fe	56	2	He	11194.689	11194.689	0.54	37445757	0.03	200000	
Se	78	2	He	50.908	50.908	2.64	2916	1.75	2000	
As	75	2	He	55.022	55.022	1.39	28015	0.20	2000	
Ca	44	2	He	112544.267	112544.267	0.73	2293046	4.91	200000	
Na	23	2	He	424778.380	424778.380	0.27	278019143	0.15	200000	>LDR
Mg	24	2	He	81617.243	81617.243	1.17	29838935	0.27	200000	
K	39	2	He	6710.098	6710.098	0.26	2934413	0.23	200000	
Mn	55	2	He	1148.675	1148.675	1.37	3004703	0.04	2000	
Co	59	2	He	80.588	80.588	0.44	413901	0.02	2000	
Ni	60	2	He	2193.839	2193.839	0.26	2850322	0.08	2000	>LDR
Cu	63	2	He	62.185	62.185	0.58	220281	0.03	2000	
Zn	66	2	He	58.967	58.967	2.32	48520	0.12	2000	
Al	27	2	He	68.156	68.156	1.35	14007	0.49	2000	
B	11	1	No Gas	5.481	5.481	8.13	23832	0.02	2000	
Al	27	1	No Gas	60.757	60.757	0.25	488232	0.01	2000	
Si	28	1	No Gas	16485.931	16485.931	0.81	54902946	0.03	2000	>LDR
Ag	107	1	No Gas	49.155	49.155	0.92	377755	0.01	2000	
Cd	111	1	No Gas	53.142	53.142	1.54	82625	0.06	2000	
Sr	88	1	No Gas	1623.738	1623.738	0.99	23134345	0.01	2000	
Mo	95	1	No Gas	57.821	57.821	0.64	158825	0.04	2000	
Sn	118	1	No Gas	0.085	0.085	61.36	1857	0.00	2000	
Sb	121	1	No Gas	47.641	47.641	0.98	354805	0.01	2000	
Ba	137	1	No Gas	118.899	118.899	1.11	271776	0.04	2000	
Tl	205	1	No Gas	51.009	51.009	0.84	858512	0.01	2000	
Tl	203	1	No Gas	53.255	53.255	1.13	357460	0.01	2000	
Pb	208	1	No Gas	52.951	52.951	1.13	1183033	0.00	2000	
U	238	1	No Gas	0.195	0.195	0.57	4651	0.00	2000	
Ca	43	2	He	111299.399	111299.399	1.49	131113	84.89	200000	
Sb	121	2	He	53.198	53.198	0.67	199052	0.03	2000	
Ti	47	2	He	51.889	51.889	5.16	6198	0.84	2000	
Cu	63	1	No Gas	63.827	63.827	1.36	382333	0.02	2000	
Zn	66	1	No Gas	58.842	58.842	1.50	113189	0.05	2000	
Se	82	1	No Gas	62.633	62.633	8.42	4581	1.37	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	859200	1.45	675584	127.18	70	120	ISTD Failed
Ge	72	2	He	409382	0.26	343019	119.35	70	120	
Ge	72	1	No Gas	1273030	0.54	1083014	117.55	70	120	
In	115	1	No Gas	1513122	1.03	1354249	111.73	70	120	
Bi	209	1	No Gas	1523459	1.21	1409443	108.09	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-02
Data File Name	032SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:23:53-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	22.094	22.094	3.48	263314	0.01	2000	
Be	9	1	No Gas	0.007	0.007	55.22	73	0.01	2000	
V	51	2	He	0.850	0.850	2.16	3345	0.03	2000	
Cr	52	2	He	463.750	463.750	1.61	1637404	0.03	2000	
Fe	56	2	He	78250.166	78250.166	0.34	266719169	0.03	200000	
Se	78	2	He	-1.748	-1.748	-40.50	359	-0.49	2000	
As	75	2	He	9.309	9.309	1.71	4894	0.19	2000	
Ca	44	2	He	100564.385	100564.385	0.38	2088474	4.82	200000	
Na	23	2	He	195887.632	195887.632	0.28	130793535	0.15	200000	>LDR
Mg	24	2	He	44450.742	44450.742	0.21	16563662	0.27	200000	
K	39	2	He	3809.966	3809.966	0.48	1740206	0.22	200000	
Mn	55	2	He	2253.171	2253.171	0.11	6006840	0.04	2000	>LDR
Co	59	2	He	10.716	10.716	1.95	56136	0.02	2000	
Ni	60	2	He	317.376	317.376	0.67	420492	0.08	2000	
Cu	63	2	He	5.306	5.306	3.39	20896	0.03	2000	
Zn	66	2	He	5.992	5.992	9.54	11201	0.05	2000	
Al	27	2	He	27.528	27.528	3.44	6121	0.45	2000	
B	11	1	No Gas	46.629	46.629	4.65	62927	0.07	2000	
Al	27	1	No Gas	24.864	24.864	3.25	217871	0.01	2000	
Si	28	1	No Gas	13899.556	13899.556	3.45	47491086	0.03	2000	>LDR
Ag	107	1	No Gas	-0.092	-0.092	-7.28	620	-0.01	2000	
Cd	111	1	No Gas	0.071	0.071	18.58	113	0.06	2000	
Sr	88	1	No Gas	2745.448	2745.448	0.63	40251584	0.01	2000	>LDR
Mo	95	1	No Gas	2.003	2.003	1.75	5688	0.04	2000	
Sn	118	1	No Gas	0.052	0.052	41.28	1750	0.00	2000	
Sb	121	1	No Gas	0.453	0.453	14.57	3867	0.01	2000	
Ba	137	1	No Gas	1490.548	1490.548	1.94	3504416	0.04	2000	
Tl	205	1	No Gas	0.004	0.004	53.64	247	0.00	2000	
Tl	203	1	No Gas	0.006	0.006	56.80	93	0.01	2000	
Pb	208	1	No Gas	0.112	0.112	133.71	5630	0.00	2000	
U	238	1	No Gas	0.036	0.036	8.62	910	0.00	2000	
Ca	43	2	He	98666.815	98666.815	1.55	118473	83.28	200000	
Sb	121	2	He	0.341	0.341	8.02	1557	0.02	2000	
Ti	47	2	He	0.433	0.433	61.32	57	0.76	2000	
Cu	63	1	No Gas	6.040	6.040	3.61	41370	0.01	2000	
Zn	66	1	No Gas	5.783	5.783	8.43	25347	0.02	2000	
Se	82	1	No Gas	13.591	13.591	62.83	199	6.82	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	854553	2.83	675584	126.49	70	120	ISTD Failed
Ge	72	2	He	417253	0.38	343019	121.64	70	120	ISTD Failed
Ge	72	1	No Gas	1305513	2.36	1083014	120.54	70	120	ISTD Failed
In	115	1	No Gas	1556997	0.48	1354249	114.97	70	120	
Bi	209	1	No Gas	1583973	0.57	1409443	112.38	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	035_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:35:54-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	96.243	5.088	857079	1.02	100	96.2	90	110	
Be	9	1	No Gas	96.100	3.201	177060	1.19	100	96.1	90	110	
V	51	2	He	101.193	2.340	267277	1.15	100	101.2	90	110	
Cr	52	2	He	101.563	1.202	308394	1.17	100	101.6	90	110	
Fe	56	2	He	10095.176	1.595	29526705	0.71	10000	101.0	90	110	
Se	78	2	He	100.705	4.150	4669	2.72	100	100.7	90	110	
As	75	2	He	101.101	2.325	44952	1.27	100	101.1	90	110	
Ca	44	2	He	10201.672	0.805	182738	1.74	10000	102.0	90	110	
Na	23	2	He	10388.639	1.768	6131424	1.49	10000	103.9	90	110	
Mg	24	2	He	10361.707	1.662	3312621	1.38	10000	103.6	90	110	
K	39	2	He	10347.785	1.106	3911789	1.12	10000	103.5	90	110	
Mn	55	2	He	101.148	1.366	231710	0.78	100	101.1	90	110	
Co	59	2	He	100.854	1.456	452928	1.37	100	100.9	90	110	
Ni	60	2	He	101.544	1.841	115574	1.51	100	101.5	90	110	
Cu	63	2	He	100.512	1.868	310298	0.64	100	100.5	90	110	
Zn	66	2	He	101.675	1.885	68877	0.51	100	101.7	90	110	
Al	27	2	He	105.256	4.286	18633	3.15	100	105.3	90	110	
B	11	1	No Gas	459.963	2.402	399321	2.15	500	92.0	90	110	
Al	27	1	No Gas	96.066	4.123	664452	1.24	100	96.1	90	110	
Si	28	1	No Gas	557.026	6.671	1862379	10.17	5000	11.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.989	1.783	683137	1.01	100	99.0	90	110	
Cd	111	1	No Gas	99.510	1.837	139184	0.47	100	99.5	90	110	
Sr	88	1	No Gas	103.646	3.052	1329688	4.90	100	103.6	90	110	
Mo	95	1	No Gas	100.249	2.049	247712	1.84	100	100.2	90	110	
Sn	118	1	No Gas	99.016	1.043	417462	1.17	100	99.0	90	110	
Sb	121	1	No Gas	87.246	4.624	568085	0.27	100	87.2	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	100.032	0.124	205755	1.88	100	100.0	90	110	
Tl	205	1	No Gas	98.807	5.946	1553431	2.40	100	98.8	90	110	
Tl	203	1	No Gas	96.112	4.929	602769	1.01	100	96.1	90	110	
Pb	208	1	No Gas	94.739	5.060	1975540	0.40	100	94.7	90	110	
U	238	1	No Gas	98.998	4.245	2190018	0.72	100	99.0	90	110	
Ca	43	2	He	10233.040	3.113	10591	5.10	10000	102.3	90	110	
Sb	121	2	He	98.342	2.138	321548	1.49	100	98.3	90	110	
Ti	47	2	He	99.852	4.612	10427	4.71	100	99.9	90	110	
Cu	63	1	No Gas	101.987	5.059	531928	0.25	100	102.0	90	110	
Se	82	1	No Gas	108.659	14.504	7587	11.57	100	108.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	746651	3.96	675584	110.52	70	120	
Ge	72	2	He	358022	1.99	343019	104.37	70	120	
Ge	72	1	No Gas	1115230	4.89	1083014	102.97	70	120	
In	115	1	No Gas	1361391	1.95	1354249	100.53	70	120	
Bi	209	1	No Gas	1425641	4.88	1409443	101.15	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	036_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:37:50-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.116	-47.0	40966	0.6	0.5	
Be	9	1	No Gas	0.015	250.8	77	88.1	0.5	
V	51	2	He	0.071	70.3	789	15.6	2.5	
Cr	52	2	He	0.104	36.7	1223	8.7	2.5	
Fe	56	2	He	1.202	10.2	11719	2.9	100	
Se	78	2	He	-0.208	-112.2	361	3.2	2	
As	75	2	He	0.017	191.4	70	19.0	2.5	
Ca	44	2	He	-14.744	-25.9	780	9.0	100	
Na	23	2	He	-42.126	-5.4	161180	0.2	100	
Mg	24	2	He	0.737	8.1	457	3.3	100	
K	39	2	He	3.932	46.5	82107	0.3	100	
Mn	55	2	He	0.027	41.4	437	4.8	2.5	
Co	59	2	He	-0.003	-154.5	27	78.1	2.5	
Ni	60	2	He	-0.117	-40.2	90	58.8	2.5	
Cu	63	2	He	-0.163	-30.9	1093	12.9	2	
Zn	66	2	He	-0.430	-25.5	5451	1.6	2.5	
Al	27	2	He	-0.771	-38.5	367	14.0	5	
B	11	1	No Gas	17.751	19.2	30126	9.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.765	-9.1	12996	4.6	5	
Si	28	1	No Gas	0.834	207.2	231853	0.9	10	
Ag	107	1	No Gas	-0.054	-14.6	783	7.5	2.5	
Cd	111	1	No Gas	0.032	73.4	43	74.2	1	
Sr	88	1	No Gas	0.185	27.9	2837	23.5	2.5	
Mo	95	1	No Gas	0.040	37.8	120	30.0	2.5	
Sn	118	1	No Gas	0.072	67.8	1573	12.1	5	
Sb	121	1	No Gas	0.206	9.2	1607	9.9	2.5	
Ba	137	1	No Gas	0.046	55.2	220	24.1	2.5	
Tl	205	1	No Gas	0.025	41.4	520	29.6	1	
Tl	203	1	No Gas	0.019	57.9	157	41.0	1	
Pb	208	1	No Gas	-0.059	-10.4	1420	8.1	2.5	
U	238	1	No Gas	0.019	36.0	427	33.9	2.5	
Ca	43	2	He	-27.100	-37.7	20	50.0	100	
Sb	121	2	He	0.101	31.7	537	19.9	2.5	
Ti	47	2	He	0.065	151.0	10	100.0	2.5	
Cu	63	1	No Gas	-0.089	-27.3	3387	0.9	2.5	
Se	82	1	No Gas	-10.672	-61.9	-1651	-29.6	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	726996	0.51	675584	107.61	70	120	
Ge	72	2	He	346466	0.95	343019	101.00	70	120	
Ge	72	1	No Gas	1054963	2.89	1083014	97.41	70	120	
In	115	1	No Gas	1325839	0.80	1354249	97.90	70	120	
Bi	209	1	No Gas	1359532	0.56	1409443	96.46	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-04
Data File Name	037SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:39:49-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	11.328	11.328	1.38	152557	0.01	2000	
Be	9	1	No Gas	-0.013	-0.013	-32.49	30	-0.04	2000	
V	51	2	He	0.967	0.967	3.59	3539	0.03	2000	
Cr	52	2	He	99.448	99.448	1.64	336471	0.03	2000	
Fe	56	2	He	1586.217	1586.217	1.09	5177574	0.03	200000	
Se	78	2	He	-0.824	-0.824	-17.98	387	-0.21	2000	
As	75	2	He	0.283	0.283	15.30	212	0.13	2000	
Ca	44	2	He	128523.999	128523.999	1.26	2551089	5.04	200000	
Na	23	2	He	562670.019	562670.019	0.73	358728221	0.16	200000	>LDR
Mg	24	2	He	86649.434	86649.434	0.22	30863926	0.28	200000	
K	39	2	He	1502.859	1502.859	0.72	712411	0.21	200000	
Mn	55	2	He	1390.882	1390.882	1.10	3544678	0.04	2000	
Co	59	2	He	10.430	10.430	1.24	52230	0.02	2000	
Ni	60	2	He	605.944	605.944	0.15	767197	0.08	2000	
Cu	63	2	He	4.965	4.965	2.98	18807	0.03	2000	
Zn	66	2	He	5.368	5.368	5.94	10277	0.05	2000	
Al	27	2	He	12.338	12.338	7.94	2937	0.42	2000	
B	11	1	No Gas	5.316	5.316	10.86	22582	0.02	2000	
Al	27	1	No Gas	12.135	12.135	2.68	110120	0.01	2000	
Si	28	1	No Gas	18180.556	18180.556	1.57	58072734	0.03	2000	>LDR
Ag	107	1	No Gas	-0.103	-0.103	-3.91	503	-0.02	2000	
Cd	111	1	No Gas	0.791	0.791	9.67	1187	0.07	2000	
Sr	88	1	No Gas	1831.133	1831.133	0.93	25166867	0.01	2000	>LDR
Mo	95	1	No Gas	7.419	7.419	2.43	19678	0.04	2000	
Sn	118	1	No Gas	0.112	0.112	53.20	1914	0.01	2000	
Sb	121	1	No Gas	0.071	0.071	15.51	900	0.01	2000	
Ba	137	1	No Gas	29.784	29.784	1.71	65776	0.05	2000	
Tl	205	1	No Gas	0.009	0.009	15.23	297	0.00	2000	
Tl	203	1	No Gas	0.014	0.014	62.73	137	0.01	2000	
Pb	208	1	No Gas	-0.043	-0.043	-6.45	1850	0.00	2000	
U	238	1	No Gas	3.278	3.278	0.66	73923	0.00	2000	
Ca	43	2	He	125524.223	125524.223	0.55	144061	87.13	200000	
Sb	121	2	He	0.084	0.084	41.19	553	0.02	2000	
Ti	47	2	He	0.225	0.225	66.42	30	0.75	2000	
Cu	63	1	No Gas	6.564	6.564	3.93	41704	0.02	2000	
Zn	66	1	No Gas	6.290	6.290	2.24	24546	0.03	2000	
Se	82	1	No Gas	6.363	6.363	32.62	-448	-1.42	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	819484	0.52	675584	121.30	70	120	ISTD Failed
Ge	72	2	He	398853	0.17	343019	116.28	70	120	
Ge	72	1	No Gas	1221776	1.70	1083014	112.81	70	120	
In	115	1	No Gas	1459581	0.49	1354249	107.78	70	120	
Bi	209	1	No Gas	1450937	0.80	1409443	102.94	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-06
Data File Name	039SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:43:46-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	5.529	5.529	3.83	107676	0.01	2000	
Be	9	1	No Gas	-0.015	-0.015	-19.07	28	-0.05	2000	
V	51	2	He	0.497	0.497	7.03	2332	0.02	2000	
Cr	52	2	He	0.684	0.684	1.18	3634	0.02	2000	
Fe	56	2	He	16.790	16.790	1.03	69406	0.02	200000	
Se	78	2	He	-1.842	-1.842	-15.42	365	-0.50	2000	
As	75	2	He	0.112	0.112	16.40	138	0.08	2000	
Ca	44	2	He	46252.388	46252.388	0.22	992171	4.66	200000	
Na	23	2	He	215469.125	215469.125	0.88	148473421	0.15	200000	>LDR
Mg	24	2	He	38026.315	38026.315	0.82	14625600	0.26	200000	
K	39	2	He	589.774	589.774	1.01	362840	0.16	200000	
Mn	55	2	He	1396.969	1396.969	0.32	3844363	0.04	2000	
Co	59	2	He	15.760	15.760	0.99	85195	0.02	2000	
Ni	60	2	He	7.303	7.303	3.87	10251	0.07	2000	
Cu	63	2	He	0.431	0.431	14.13	3554	0.01	2000	
Zn	66	2	He	2.634	2.634	12.00	9060	0.03	2000	
Al	27	2	He	6.486	6.486	12.51	1960	0.33	2000	
B	11	1	No Gas	-5.941	-5.941	-1.83	13411	-0.04	2000	
Al	27	1	No Gas	5.566	5.566	6.24	69752	0.01	2000	
Si	28	1	No Gas	2000.721	2000.721	1.20	7493339	0.03	2000	>LDR
Ag	107	1	No Gas	-0.107	-0.107	-4.49	513	-0.02	2000	
Cd	111	1	No Gas	0.360	0.360	12.52	593	0.06	2000	
Sr	88	1	No Gas	611.378	611.378	2.77	9226391	0.01	2000	
Mo	95	1	No Gas	0.052	0.052	35.11	180	0.03	2000	
Sn	118	1	No Gas	-0.008	-0.008	-336.36	1507	0.00	2000	
Sb	121	1	No Gas	0.004	0.004	306.45	473	0.00	2000	
Ba	137	1	No Gas	2.955	2.955	4.90	7306	0.04	2000	
Tl	205	1	No Gas	-0.005	-0.005	-10.65	80	-0.01	2000	
Tl	203	1	No Gas	-0.004	-0.004	-22.71	27	-0.01	2000	
Pb	208	1	No Gas	-0.084	-0.084	-4.51	1103	-0.01	2000	
U	238	1	No Gas	1.470	1.470	1.59	37080	0.00	2000	
Ca	43	2	He	45979.991	45979.991	0.78	57018	80.64	200000	
Sb	121	2	He	0.018	0.018	117.56	337	0.01	2000	
Ti	47	2	He	0.046	0.046	172.75	10	0.46	2000	
Cu	63	1	No Gas	0.964	0.964	6.09	11195	0.01	2000	
Zn	66	1	No Gas	3.177	3.177	10.84	22112	0.01	2000	
Se	82	1	No Gas	1.721	1.721	116.85	-955	-0.18	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	894612	1.68	675584	132.42	70	120	ISTD Failed
Ge	72	2	He	430696	0.96	343019	125.56	70	120	ISTD Failed
Ge	72	1	No Gas	1381305	1.42	1083014	127.54	70	120	ISTD Failed
In	115	1	No Gas	1603028	1.68	1354249	118.37	70	120	
Bi	209	1	No Gas	1621548	1.20	1409443	115.05	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-08
Data File Name	040SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:45:44-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	6.861	6.861	4.98	119398	0.01	2000	
Be	9	1	No Gas	-0.003	-0.003	-251.35	53	-0.01	2000	
V	51	2	He	0.028	0.028	104.89	831	0.00	2000	
Cr	52	2	He	0.760	0.760	9.89	3854	0.02	2000	
Fe	56	2	He	21010.189	21010.189	1.63	72834406	0.03	200000	
Se	78	2	He	-1.048	-1.048	-43.32	400	-0.26	2000	
As	75	2	He	0.052	0.052	46.20	104	0.05	2000	
Ca	44	2	He	35255.244	35255.244	1.18	745399	4.73	200000	
Na	23	2	He	33206.015	33206.015	2.31	22732555	0.15	200000	
Mg	24	2	He	18731.276	18731.276	1.57	7098186	0.26	200000	
K	39	2	He	565.079	565.079	2.17	346640	0.16	200000	
Mn	55	2	He	785.173	785.173	1.17	2129049	0.04	2000	
Co	59	2	He	0.017	0.017	57.69	140	0.01	2000	
Ni	60	2	He	0.281	0.281	1.65	647	0.04	2000	
Cu	63	2	He	0.019	0.019	84.85	2004	0.00	2000	
Zn	66	2	He	0.902	0.902	21.05	7656	0.01	2000	
Al	27	2	He	13.931	13.931	5.94	3450	0.40	2000	
B	11	1	No Gas	-0.051	-0.051	-563.05	19010	0.00	2000	
Al	27	1	No Gas	13.310	13.310	2.50	130931	0.01	2000	
Si	28	1	No Gas	1506.752	1506.752	0.98	5574538	0.03	2000	
Ag	107	1	No Gas	-0.114	-0.114	-9.74	467	-0.02	2000	
Cd	111	1	No Gas	0.046	0.046	6.36	77	0.06	2000	
Sr	88	1	No Gas	912.390	912.390	1.57	13906596	0.01	2000	
Mo	95	1	No Gas	0.081	0.081	10.46	267	0.03	2000	
Sn	118	1	No Gas	-0.044	-0.044	-27.66	1340	0.00	2000	
Sb	121	1	No Gas	0.010	0.010	45.14	507	0.00	2000	
Ba	137	1	No Gas	3.430	3.430	2.89	8536	0.04	2000	
Tl	205	1	No Gas	-0.007	-0.007	-7.60	50	-0.01	2000	
Tl	203	1	No Gas	-0.006	-0.006	-27.26	13	-0.04	2000	
Pb	208	1	No Gas	0.095	0.095	259.35	5612	0.00	2000	
U	238	1	No Gas	0.028	0.028	4.19	763	0.00	2000	
Ca	43	2	He	36842.508	36842.508	2.03	45021	81.83	200000	
Sb	121	2	He	0.013	0.013	153.22	313	0.00	2000	
Ti	47	2	He	0.369	0.369	36.79	50	0.74	2000	
Cu	63	1	No Gas	0.178	0.178	46.95	6008	0.00	2000	
Zn	66	1	No Gas	1.186	1.186	11.91	18049	0.01	2000	
Se	82	1	No Gas	-0.517	-0.517	-1803.78	-1152	0.04	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	881662	2.81	675584	130.50	70	120	ISTD Failed
Ge	72	2	He	424378	1.56	343019	123.72	70	120	ISTD Failed
Ge	72	1	No Gas	1346697	1.73	1083014	124.35	70	120	ISTD Failed
In	115	1	No Gas	1618793	1.24	1354249	119.53	70	120	

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Bi	209	1	No Gas	1683448	1.34	1409443	119.44	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	047_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T13:01:29-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	100.478	6.559	946225	0.71	100	100.5	90	110	
Be	9	1	No Gas	98.841	5.609	192954	1.46	100	98.8	90	110	
V	51	2	He	104.291	0.263	288799	0.33	100	104.3	90	110	
Cr	52	2	He	104.073	0.074	331276	0.58	100	104.1	90	110	
Fe	56	2	He	10254.300	0.439	31444269	0.17	10000	102.5	90	110	
Se	78	2	He	101.148	3.765	4917	4.03	100	101.1	90	110	
As	75	2	He	101.080	0.966	47123	1.13	100	101.1	90	110	
Ca	44	2	He	10465.265	0.354	196484	0.80	10000	104.7	90	110	
Na	23	2	He	10603.162	0.566	6556874	1.09	10000	106.0	90	110	
Mg	24	2	He	10552.745	0.293	3536930	0.27	10000	105.5	90	110	
K	39	2	He	10534.260	0.837	4173215	0.54	10000	105.3	90	110	
Mn	55	2	He	103.293	0.224	248071	0.79	100	103.3	90	110	
Co	59	2	He	103.785	0.383	488646	0.93	100	103.8	90	110	
Ni	60	2	He	103.082	0.743	123001	1.07	100	103.1	90	110	
Cu	63	2	He	103.837	0.888	336045	1.02	100	103.8	90	110	
Zn	66	2	He	102.428	0.316	72704	0.31	100	102.4	90	110	
Al	27	2	He	105.559	0.814	19594	1.35	100	105.6	90	110	
B	11	1	No Gas	510.589	3.912	468088	3.36	500	102.1	90	110	
Al	27	1	No Gas	95.670	2.806	722376	1.15	100	95.7	90	110	
Si	28	1	No Gas	519.966	4.694	1910016	2.96	5000	10.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.386	1.126	749320	1.50	100	100.4	90	110	
Cd	111	1	No Gas	100.679	1.549	152312	1.32	100	100.7	90	110	
Sr	88	1	No Gas	103.879	2.107	1440796	2.81	100	103.9	90	110	
Mo	95	1	No Gas	101.900	0.633	272367	2.22	100	101.9	90	110	
Sn	118	1	No Gas	100.827	1.927	459676	0.66	100	100.8	90	110	
Sb	121	1	No Gas	87.960	2.624	625288	0.54	100	88.0	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	101.033	0.867	224799	3.17	100	101.0	90	110	
Tl	205	1	No Gas	102.393	0.709	1710807	0.37	100	102.4	90	110	
Tl	203	1	No Gas	99.313	0.627	661837	1.56	100	99.3	90	110	
Pb	208	1	No Gas	99.194	2.015	2198015	2.54	100	99.2	90	110	
U	238	1	No Gas	102.896	1.284	2418015	0.45	100	102.9	90	110	
Ca	43	2	He	10421.580	2.526	11301	2.94	10000	104.2	90	110	
Sb	121	2	He	99.631	0.325	341547	0.86	100	99.6	90	110	
Ti	47	2	He	101.867	1.399	11151	1.01	100	101.9	90	110	
Cu	63	1	No Gas	101.861	3.113	580065	0.86	100	101.9	90	110	
Se	82	1	No Gas	101.700	4.934	7714	3.00	100	101.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	792193	5.96	675584	117.26	70	120	
Ge	72	2	He	375289	0.56	343019	109.41	70	120	
Ge	72	1	No Gas	1216317	2.74	1083014	112.31	70	120	
In	115	1	No Gas	1472488	2.46	1354249	108.73	70	120	
Bi	209	1	No Gas	1512479	0.93	1409443	107.31	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	048_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T13:03:24-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.204	-34.3	43144	1.1	0.5	
Be	9	1	No Gas	-0.010	-138.1	33	82.6	0.5	
V	51	2	He	0.445	2.0	1862	1.0	2.5	
Cr	52	2	He	0.076	53.2	1220	10.5	2.5	
Fe	56	2	He	1.712	46.9	14061	17.3	100	
Se	78	2	He	0.217	201.6	405	5.0	2	
As	75	2	He	0.154	26.3	138	13.3	2.5	
Ca	44	2	He	-18.895	-10.3	757	5.0	100	
Na	23	2	He	2.819	572.3	198756	4.8	100	
Mg	24	2	He	2.308	80.2	1007	60.7	100	
K	39	2	He	-10.258	-46.1	82285	2.2	100	
Mn	55	2	He	0.005	463.5	413	12.2	2.5	
Co	59	2	He	0.006	194.7	73	79.9	2.5	
Ni	60	2	He	-0.117	-15.4	97	21.5	2.5	
Cu	63	2	He	-0.153	-17.9	1200	7.6	2	
Zn	66	2	He	-0.307	-82.6	5901	2.5	2.5	
Al	27	2	He	-0.460	-104.7	447	19.0	5	
B	11	1	No Gas	40.543	12.5	52139	8.6	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.804	-6.7	14207	2.6	5	
Si	28	1	No Gas	-8.121	-10.5	231145	1.1	10	
Ag	107	1	No Gas	-0.087	-46.1	610	48.5	2.5	
Cd	111	1	No Gas	0.031	121.8	47	121.9	1	
Sr	88	1	No Gas	0.180	157.2	3024	127.5	2.5	
Mo	95	1	No Gas	0.034	115.2	113	90.1	2.5	
Sn	118	1	No Gas	0.058	26.9	1650	4.4	5	
Sb	121	1	No Gas	0.156	44.6	1450	33.0	2.5	
Ba	137	1	No Gas	0.030	316.8	203	100.8	2.5	
Tl	205	1	No Gas	0.017	152.0	443	97.1	1	
Tl	203	1	No Gas	0.021	141.4	187	103.9	1	
Pb	208	1	No Gas	-0.037	-179.9	2059	70.9	2.5	
U	238	1	No Gas	0.020	144.3	484	135.7	2.5	
Ca	43	2	He	-12.802	-41.6	37	15.7	100	
Sb	121	2	He	0.097	20.9	557	12.0	2.5	
Ti	47	2	He	0.059	156.8	10	100.0	2.5	
Cu	63	1	No Gas	-0.202	-19.0	3160	6.6	2.5	
Se	82	1	No Gas	5.121	141.3	-533	-112.4	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	779631	2.37	675584	115.40	70	120	
Ge	72	2	He	370103	0.37	343019	107.90	70	120	
Ge	72	1	No Gas	1176022	0.07	1083014	108.59	70	120	
In	115	1	No Gas	1442691	0.62	1354249	106.53	70	120	
Bi	209	1	No Gas	1494638	0.63	1409443	106.04	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	085_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T14:46:30-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	105.040	2.504	966972	0.93	100	105.0	90	110	
Be	9	1	No Gas	103.468	2.258	197802	0.72	100	103.5	90	110	
V	51	2	He	104.782	1.460	303979	0.73	100	104.8	90	110	
Cr	52	2	He	105.081	0.902	350422	0.80	100	105.1	90	110	
Fe	56	2	He	10322.508	0.469	33163115	0.26	10000	103.2	90	110	
Se	78	2	He	105.060	2.500	5334	2.41	100	105.1	90	110	
As	75	2	He	108.005	1.374	52745	0.70	100	108.0	90	110	
Ca	44	2	He	10339.071	0.191	203386	0.59	10000	103.4	90	110	
Na	23	2	He	10505.426	0.898	6807913	0.54	10000	105.1	90	110	
Mg	24	2	He	10662.899	1.746	3744082	1.12	10000	106.6	90	110	
K	39	2	He	10535.961	0.364	4373046	0.63	10000	105.4	90	110	
Mn	55	2	He	105.951	1.263	266571	1.02	100	106.0	90	110	
Co	59	2	He	105.264	1.603	519201	0.87	100	105.3	90	110	
Ni	60	2	He	104.896	1.420	131123	0.69	100	104.9	90	110	
Cu	63	2	He	104.845	1.259	355454	0.55	100	104.8	90	110	
Zn	66	2	He	104.559	1.652	77618	0.98	100	104.6	90	110	
Al	27	2	He	109.632	1.798	21297	1.02	100	109.6	90	110	
B	11	1	No Gas	490.021	5.768	439980	3.22	500	98.0	90	110	
Al	27	1	No Gas	98.827	0.979	752812	0.32	100	98.8	90	110	
Si	28	1	No Gas	559.359	2.097	2054530	1.18	5000	11.2	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	104.173	1.203	791300	0.50	100	104.2	90	110	
Cd	111	1	No Gas	104.235	1.377	160494	1.12	100	104.2	90	110	
Sr	88	1	No Gas	104.629	2.912	1476816	2.92	100	104.6	90	110	
Mo	95	1	No Gas	103.210	0.918	280725	0.77	100	103.2	90	110	
Sn	118	1	No Gas	106.049	0.552	492048	0.20	100	106.0	90	110	
Sb	121	1	No Gas	96.116	1.458	689900	0.91	100	96.1	90	110	
Ba	137	1	No Gas	106.082	1.694	240132	1.03	100	106.1	90	110	
Tl	205	1	No Gas	109.848	0.351	1875481	0.41	100	109.8	90	110	
Tl	203	1	No Gas	105.892	2.005	721012	1.53	100	105.9	90	110	
Pb	208	1	No Gas	106.036	2.529	2400373	2.01	100	106.0	90	110	
U	238	1	No Gas	106.763	0.683	2563797	0.31	100	106.8	90	110	
Ca	43	2	He	10586.706	3.313	12025	2.92	10000	105.9	90	110	
Sb	121	2	He	104.104	0.831	373876	0.23	100	104.1	90	110	
Ti	47	2	He	103.896	1.885	11915	1.18	100	103.9	90	110	
Cu	63	1	No Gas	103.825	0.982	596984	0.34	100	103.8	90	110	
Se	82	1	No Gas	105.690	3.960	8138	4.06	100	105.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	774409	2.62	675584	114.63	70	120	
Ge	72	2	He	393192	0.73	343019	114.63	70	120	
Ge	72	1	No Gas	1227679	0.66	1083014	113.36	70	120	
In	115	1	No Gas	1498380	0.71	1354249	110.64	70	120	
Bi	209	1	No Gas	1545501	0.58	1409443	109.65	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	086_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T14:48:24-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.230	-37.3	42163	0.8	0.5	
Be	9	1	No Gas	-0.012	-78.2	30	57.7	0.5	
V	51	2	He	0.215	1.7	1266	1.0	2.5	
Cr	52	2	He	0.099	20.0	1323	5.0	2.5	
Fe	56	2	He	1.509	13.7	13774	4.5	100	
Se	78	2	He	-0.948	-4.2	362	0.6	2	
As	75	2	He	0.017	212.9	77	21.7	2.5	
Ca	44	2	He	-18.979	-38.4	773	17.6	100	
Na	23	2	He	-92.019	-3.9	146173	1.2	100	
Mg	24	2	He	0.974	6.3	580	3.4	100	
K	39	2	He	15.961	8.6	94572	0.6	100	
Mn	55	2	He	0.059	91.4	557	23.9	2.5	
Co	59	2	He	-0.003	-70.3	30	33.3	2.5	
Ni	60	2	He	-0.127	-10.1	87	17.6	2.5	
Cu	63	2	He	-0.271	-9.7	847	10.3	2	
Zn	66	2	He	-0.264	-126.0	6075	3.8	2.5	
Al	27	2	He	-0.684	-77.0	417	22.8	5	
B	11	1	No Gas	48.398	13.9	57874	8.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.815	-10.1	14224	2.3	5	
Si	28	1	No Gas	15.562	28.0	305613	2.3	10	CCB Main CR1 Failed
Ag	107	1	No Gas	-0.113	-10.6	433	20.2	2.5	
Cd	111	1	No Gas	0.007	1.3	10	0.0	1	
Sr	88	1	No Gas	0.009	42.1	720	7.7	2.5	
Mo	95	1	No Gas	0.018	42.2	73	28.4	2.5	
Sn	118	1	No Gas	0.071	77.8	1743	13.2	5	
Sb	121	1	No Gas	0.259	15.2	2167	10.7	2.5	
Ba	137	1	No Gas	-0.013	-129.6	113	31.0	2.5	
Tl	205	1	No Gas	0.001	285.7	187	32.7	1	
Tl	203	1	No Gas	0.008	45.8	103	24.4	1	
Pb	208	1	No Gas	-0.096	-1.1	777	3.0	2.5	
U	238	1	No Gas	0.003	29.0	97	21.5	2.5	
Ca	43	2	He	-25.838	-20.5	23	24.7	100	
Sb	121	2	He	0.253	8.2	1110	6.3	2.5	
Ti	47	2	He	0.027	390.4	7	173.2	2.5	
Cu	63	1	No Gas	-0.367	-6.1	2277	7.0	2.5	
Se	82	1	No Gas	2.279	479.5	-760	-119.1	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	766039	2.17	675584	113.39	70	120	
Ge	72	2	He	379158	0.26	343019	110.54	70	120	
Ge	72	1	No Gas	1184422	2.26	1083014	109.36	70	120	
In	115	1	No Gas	1474969	1.32	1354249	108.91	70	120	
Bi	209	1	No Gas	1546406	1.44	1409443	109.72	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	097_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:13:28-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.157	134.8	38898	4.8	0.5	
Be	9	1	No Gas	0.111	194.6	227	156.0	0.5	
V	51	2	He	-0.094	-4.0	367	2.4	2.5	
Cr	52	2	He	0.078	29.4	1143	5.7	2.5	
Fe	56	2	He	2.851	2.6	16323	1.1	100	
Se	78	2	He	-0.464	-178.4	349	9.5	2	
As	75	2	He	0.017	371.1	70	39.0	2.5	
Ca	44	2	He	-24.278	-33.3	613	22.8	100	
Na	23	2	He	-106.043	-0.8	125329	0.4	100	
Mg	24	2	He	1.132	26.3	577	16.0	100	
K	39	2	He	5.106	35.4	82214	0.6	100	
Mn	55	2	He	0.199	18.2	813	9.9	2.5	
Co	59	2	He	0.001	825.2	43	58.1	2.5	
Ni	60	2	He	-0.120	-11.7	87	17.6	2.5	
Cu	63	2	He	-0.296	-10.1	697	12.9	2	
Zn	66	2	He	-0.679	-45.0	5281	3.2	2.5	
Al	27	2	He	-0.801	-26.6	360	9.6	5	
B	11	1	No Gas	37.530	14.7	41571	10.4	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.654	-32.6	13552	10.2	5	
Si	28	1	No Gas	16.631	66.4	272263	10.9	10	CCB Main CR1 Failed
Ag	107	1	No Gas	-0.016	-1138.4	1072	118.3	2.5	
Cd	111	1	No Gas	0.144	160.3	203	160.5	1	
Sr	88	1	No Gas	0.893	168.8	12086	161.2	2.5	
Mo	95	1	No Gas	0.102	144.5	277	132.5	2.5	
Sn	118	1	No Gas	0.167	168.8	2025	59.5	5	
Sb	121	1	No Gas	0.220	136.0	1674	109.3	2.5	
Ba	137	1	No Gas	0.160	197.7	464	141.7	2.5	
Tl	205	1	No Gas	0.150	168.8	2594	158.9	1	
Tl	203	1	No Gas	0.142	161.2	970	153.6	1	
Pb	208	1	No Gas	0.039	593.2	3638	136.1	2.5	
U	238	1	No Gas	0.132	169.8	3044	168.4	2.5	
Ca	43	2	He	-27.099	-37.0	20	50.0	100	
Sb	121	2	He	0.026	63.0	297	17.3	2.5	
Ti	47	2	He	0.000	-13771.0	3	173.2	2.5	
Cu	63	1	No Gas	-0.169	-72.0	2967	20.6	2.5	
Se	82	1	No Gas	6.590	148.9	-352	-200.6	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	654166	0.89	675584	96.83	70	120	
Ge	72	2	He	345138	0.22	343019	100.62	70	120	
Ge	72	1	No Gas	1043630	2.63	1083014	96.36	70	120	
In	115	1	No Gas	1363695	1.87	1354249	100.70	70	120	
Bi	209	1	No Gas	1451312	1.45	1409443	102.97	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	099_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:20:33-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	101.658	1.075	843729	0.77	100	101.7	90	110	
Be	9	1	No Gas	99.106	1.480	170545	0.34	100	99.1	90	110	
V	51	2	He	100.281	1.190	263131	0.73	100	100.3	90	110	
Cr	52	2	He	101.060	0.825	304815	0.34	100	101.1	90	110	
Fe	56	2	He	9883.293	1.079	28715029	0.58	10000	98.8	90	110	
Se	78	2	He	101.135	3.310	4657	3.00	100	101.1	90	110	
As	75	2	He	101.765	0.163	44951	0.70	100	101.8	90	110	
Ca	44	2	He	9965.367	1.509	177318	1.22	10000	99.7	90	110	
Na	23	2	He	10027.189	1.167	5885138	0.85	10000	100.3	90	110	
Mg	24	2	He	10091.182	1.632	3204704	1.75	10000	100.9	90	110	
K	39	2	He	9960.401	0.629	3743385	1.17	10000	99.6	90	110	
Mn	55	2	He	100.301	1.762	228235	1.29	100	100.3	90	110	
Co	59	2	He	101.297	1.548	451857	1.00	100	101.3	90	110	
Ni	60	2	He	100.236	2.694	113322	2.27	100	100.2	90	110	
Cu	63	2	He	100.878	0.950	309366	0.69	100	100.9	90	110	
Zn	66	2	He	100.892	3.176	67936	2.48	100	100.9	90	110	
Al	27	2	He	99.878	3.063	17591	2.59	100	99.9	90	110	
B	11	1	No Gas	468.799	1.980	379820	2.84	500	93.8	90	110	
Al	27	1	No Gas	94.912	0.783	651475	0.58	100	94.9	90	110	
Si	28	1	No Gas	515.830	1.565	1724183	1.82	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.748	0.775	701879	0.04	100	100.7	90	110	
Cd	111	1	No Gas	101.530	1.193	143365	0.65	100	101.5	90	110	
Sr	88	1	No Gas	101.209	1.940	1310033	1.46	100	101.2	90	110	
Mo	95	1	No Gas	98.503	0.880	245704	0.14	100	98.5	90	110	
Sn	118	1	No Gas	101.781	1.194	433129	0.65	100	101.8	90	110	
Sb	121	1	No Gas	93.638	0.347	604976	0.80	100	93.6	90	110	
Ba	137	1	No Gas	102.067	0.765	211901	0.66	100	102.1	90	110	
Tl	205	1	No Gas	104.916	2.369	1673035	0.73	100	104.9	90	110	
Tl	203	1	No Gas	102.670	1.733	653022	0.71	100	102.7	90	110	
Pb	208	1	No Gas	98.845	1.857	2090374	0.47	100	98.8	90	110	
U	238	1	No Gas	104.208	2.290	2337299	0.60	100	104.2	90	110	
Ca	43	2	He	9978.011	4.916	10254	4.99	10000	99.8	90	110	
Sb	121	2	He	101.017	1.014	328102	0.68	100	101.0	90	110	
Ti	47	2	He	97.602	4.047	10124	4.03	100	97.6	90	110	
Cu	63	1	No Gas	101.207	0.258	523883	0.53	100	101.2	90	110	
Se	82	1	No Gas	105.567	9.623	7313	10.44	100	105.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	696927	1.77	675584	103.16	70	120	
Ge	72	2	He	355585	0.56	343019	103.66	70	120	
Ge	72	1	No Gas	1104958	0.48	1083014	102.03	70	120	
In	115	1	No Gas	1374138	0.79	1354249	101.47	70	120	
Bi	209	1	No Gas	1443870	1.80	1409443	102.44	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	100_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:24:11-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	98.416	7.198	825638	0.23	100	98.4	90	110	
Be	9	1	No Gas	97.605	4.909	169675	2.03	100	97.6	90	110	
V	51	2	He	99.417	0.543	258916	0.94	100	99.4	90	110	
Cr	52	2	He	99.869	0.898	298974	1.20	100	99.9	90	110	
Fe	56	2	He	9828.677	0.589	28343555	1.45	10000	98.3	90	110	
Se	78	2	He	101.814	3.653	4650	2.49	100	101.8	90	110	
As	75	2	He	101.910	0.999	44674	0.56	100	101.9	90	110	
Ca	44	2	He	9861.010	0.786	174178	2.19	10000	98.6	90	110	
Na	23	2	He	10026.319	1.635	5840138	1.12	10000	100.3	90	110	
Mg	24	2	He	10167.194	0.939	3204387	0.52	10000	101.7	90	110	
K	39	2	He	10049.463	0.653	3747694	1.34	10000	100.5	90	110	
Mn	55	2	He	100.241	1.272	226417	2.30	100	100.2	90	110	
Co	59	2	He	100.663	1.166	445646	0.43	100	100.7	90	110	
Ni	60	2	He	99.301	0.491	111440	1.82	100	99.3	90	110	
Cu	63	2	He	98.882	1.106	300990	0.91	100	98.9	90	110	
Zn	66	2	He	102.545	1.964	68432	0.36	100	102.5	90	110	
Al	27	2	He	101.139	2.393	17675	2.54	100	101.1	90	110	
B	11	1	No Gas	481.674	5.747	393661	2.32	500	96.3	90	110	
Al	27	1	No Gas	95.218	5.285	649313	1.44	100	95.2	90	110	
Si	28	1	No Gas	519.590	5.445	1724058	1.82	5000	10.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	99.254	1.457	688799	0.72	100	99.3	90	110	
Cd	111	1	No Gas	100.090	1.001	140802	1.88	100	100.1	90	110	
Sr	88	1	No Gas	98.530	2.509	1270274	0.72	100	98.5	90	110	
Mo	95	1	No Gas	98.089	2.160	243706	1.20	100	98.1	90	110	
Sn	118	1	No Gas	100.138	1.488	424504	0.70	100	100.1	90	110	
Sb	121	1	No Gas	93.022	5.630	596989	0.94	100	93.0	90	110	
Ba	137	1	No Gas	101.162	1.373	209206	0.74	100	101.2	90	110	
Tl	205	1	No Gas	104.405	2.084	1660631	1.42	100	104.4	90	110	
Tl	203	1	No Gas	100.180	1.594	635515	0.98	100	100.2	90	110	
Pb	208	1	No Gas	96.461	2.385	2034472	0.58	100	96.5	90	110	
U	238	1	No Gas	100.843	2.224	2255839	0.24	100	100.8	90	110	
Ca	43	2	He	10374.833	2.223	10578	0.76	10000	103.7	90	110	
Sb	121	2	He	99.767	1.091	321616	1.43	100	99.8	90	110	
Ti	47	2	He	98.075	6.653	10097	6.85	100	98.1	90	110	
Cu	63	1	No Gas	100.090	5.955	514633	0.82	100	100.1	90	110	
Se	82	1	No Gas	96.441	9.796	6558	8.43	100	96.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	705526	7.03	675584	104.43	70	120	
Ge	72	2	He	352925	1.46	343019	102.89	70	120	
Ge	72	1	No Gas	1100311	6.61	1083014	101.60	70	120	
In	115	1	No Gas	1369008	2.10	1354249	101.09	70	120	
Bi	209	1	No Gas	1440098	2.10	1409443	102.17	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01PDS
Data File Name	101SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:26:09-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	19.845	19.845	1.78	220547	0.01	2000	
Be	9	1	No Gas	100.696	100.696	1.46	193953	0.05	2000	
V	51	2	He	107.828	107.828	0.48	305021	0.04	2000	
Cr	52	2	He	443.818	443.818	1.30	1439892	0.03	2000	
Fe	56	2	He	16304.667	16304.667	0.47	51072413	0.03	200000	
Se	78	2	He	102.091	102.091	2.08	5066	2.02	2000	
As	75	2	He	107.619	107.619	1.11	51250	0.21	2000	
Ca	44	2	He	117906.195	117906.195	0.33	2249715	5.24	200000	
Na	23	2	He	436901.014	436901.014	0.70	267793076	0.16	200000	>LDR
Mg	24	2	He	87194.203	87194.203	1.38	29853621	0.29	200000	
K	39	2	He	11679.110	11679.110	0.61	4717062	0.25	200000	
Mn	55	2	He	1195.430	1195.430	1.05	2928571	0.04	2000	
Co	59	2	He	132.079	132.079	0.70	635264	0.02	2000	
Ni	60	2	He	2252.169	2252.169	1.11	2740355	0.08	2000	>LDR
Cu	63	2	He	112.941	112.941	0.45	373247	0.03	2000	
Zn	66	2	He	110.624	110.624	1.28	79713	0.14	2000	
Al	27	2	He	132.691	132.691	2.92	25020	0.53	2000	
B	11	1	No Gas	47.787	47.787	7.78	58466	0.08	2000	
Al	27	1	No Gas	133.341	133.341	2.43	984671	0.01	2000	
Si	28	1	No Gas	15874.885	15874.885	2.75	49787116	0.03	2000	>LDR
Ag	107	1	No Gas	101.475	101.475	1.00	748524	0.01	2000	
Cd	111	1	No Gas	104.358	104.358	2.32	156010	0.07	2000	
Sr	88	1	No Gas	1594.529	1594.529	1.44	21845427	0.01	2000	
Mo	95	1	No Gas	110.292	110.292	1.37	291284	0.04	2000	
Sn	118	1	No Gas	0.070	0.070	23.82	1720	0.00	2000	
Sb	121	1	No Gas	93.845	93.845	2.70	657694	0.01	2000	
Ba	137	1	No Gas	170.566	170.566	1.04	374843	0.05	2000	
Tl	205	1	No Gas	107.688	107.688	1.94	1752630	0.01	2000	
Tl	203	1	No Gas	105.502	105.502	1.34	684805	0.02	2000	
Pb	208	1	No Gas	104.216	104.216	0.76	2249257	0.00	2000	
U	238	1	No Gas	0.201	0.201	1.33	4631	0.00	2000	
Ca	43	2	He	115755.645	115755.645	1.49	127702	90.65	200000	
Sb	121	2	He	103.628	103.628	0.74	362904	0.03	2000	
Ti	47	2	He	105.203	105.203	2.11	11765	0.89	2000	
Cu	63	1	No Gas	113.311	113.311	1.68	635825	0.02	2000	
Zn	66	1	No Gas	110.490	110.490	2.70	187656	0.06	2000	
Se	82	1	No Gas	107.711	107.711	6.52	8121	1.33	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	780051	1.57	675584	115.46	70	120	
Ge	72	2	He	383396	0.30	343019	111.77	70	120	
Ge	72	1	No Gas	1199105	2.40	1083014	110.72	70	120	
In	115	1	No Gas	1455040	1.45	1354249	107.44	70	120	
Bi	209	1	No Gas	1473455	1.86	1409443	104.54	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-03
Data File Name	103SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:30:31-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	26.775	26.775	0.37	295297	0.01	2000	
Be	9	1	No Gas	0.047	0.047	9.27	150	0.03	2000	
V	51	2	He	1.592	1.592	3.09	5204	0.03	2000	
Cr	52	2	He	0.700	0.700	12.23	3310	0.02	2000	
Fe	56	2	He	181.844	181.844	1.01	582795	0.03	200000	
Se	78	2	He	-1.226	-1.226	-64.96	356	-0.34	2000	
As	75	2	He	0.805	0.805	9.84	456	0.18	2000	
Ca	44	2	He	193691.871	193691.871	0.89	3721322	5.20	200000	>LDR
Na	23	2	He	670240.601	670240.601	0.71	413625794	0.16	200000	>LDR
Mg	24	2	He	147671.600	147671.600	0.64	50920014	0.29	200000	
K	39	2	He	946.470	946.470	0.67	467634	0.20	200000	
Mn	55	2	He	125.386	125.386	0.52	309720	0.04	2000	
Co	59	2	He	1.345	1.345	4.01	6558	0.02	2000	
Ni	60	2	He	10.598	10.598	3.19	13230	0.08	2000	
Cu	63	2	He	1.487	1.487	6.25	6685	0.02	2000	
Zn	66	2	He	11.023	11.023	3.82	13727	0.08	2000	
Al	27	2	He	25.140	25.140	4.09	5221	0.48	2000	
B	11	1	No Gas	9.865	9.865	0.92	26669	0.04	2000	
Al	27	1	No Gas	23.213	23.213	2.54	200018	0.01	2000	
Si	28	1	No Gas	18330.453	18330.453	2.40	61065852	0.03	2000	>LDR
Ag	107	1	No Gas	-0.108	-0.108	-11.80	480	-0.02	2000	
Cd	111	1	No Gas	0.414	0.414	10.19	647	0.06	2000	
Sr	88	1	No Gas	3047.871	3047.871	0.64	43610061	0.01	2000	>LDR
Mo	95	1	No Gas	0.147	0.147	24.13	430	0.03	2000	
Sn	118	1	No Gas	0.080	0.080	1.96	1843	0.00	2000	
Sb	121	1	No Gas	0.164	0.164	6.84	1630	0.01	2000	
Ba	137	1	No Gas	38.455	38.455	2.89	88363	0.04	2000	
Tl	205	1	No Gas	0.005	0.005	125.60	240	0.00	2000	
Tl	203	1	No Gas	0.009	0.009	18.34	110	0.01	2000	
Pb	208	1	No Gas	-0.004	-0.004	-199.69	2790	0.00	2000	
U	238	1	No Gas	1.392	1.392	3.06	32560	0.00	2000	
Ca	43	2	He	194853.077	194853.077	0.04	216454	90.02	200000	>LDR
Sb	121	2	He	0.133	0.133	8.55	710	0.02	2000	
Ti	47	2	He	0.678	0.678	35.19	80	0.85	2000	
Cu	63	1	No Gas	3.011	3.011	1.50	22459	0.01	2000	
Zn	66	1	No Gas	10.983	10.983	2.83	33432	0.03	2000	
Se	82	1	No Gas	5.911	5.911	15.96	-506	-1.17	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	817135	0.32	675584	120.95	70	120	ISTD Failed
Ge	72	2	He	386110	0.60	343019	112.56	70	120	
Ge	72	1	No Gas	1274418	1.80	1083014	117.67	70	120	
In	115	1	No Gas	1519563	1.01	1354249	112.21	70	120	
Bi	209	1	No Gas	1503856	1.07	1409443	106.70	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-05
Data File Name	105SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:37:02-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	6.377	6.377	0.57	106808	0.01	2000	
Be	9	1	No Gas	-0.015	-0.015	-15.67	25	-0.06	2000	
V	51	2	He	0.984	0.984	6.27	3577	0.03	2000	
Cr	52	2	He	8.061	8.061	1.56	28146	0.03	2000	
Fe	56	2	He	50.594	50.594	0.32	173812	0.03	200000	
Se	78	2	He	-1.280	-1.280	-79.35	364	-0.35	2000	
As	75	2	He	0.151	0.151	12.73	147	0.10	2000	
Ca	44	2	He	45770.042	45770.042	3.79	906025	5.05	200000	
Na	23	2	He	455430.654	455430.654	1.52	289378596	0.16	200000	>LDR
Mg	24	2	He	38913.005	38913.005	0.68	13812342	0.28	200000	
K	39	2	He	1251.727	1251.727	1.27	606763	0.21	200000	
Mn	55	2	He	787.581	787.581	0.59	2000400	0.04	2000	
Co	59	2	He	11.556	11.556	1.41	57662	0.02	2000	
Ni	60	2	He	11.150	11.150	2.54	14314	0.08	2000	
Cu	63	2	He	6.752	6.752	2.83	24833	0.03	2000	
Zn	66	2	He	2.058	2.058	20.04	7966	0.03	2000	
Al	27	2	He	7.476	7.476	6.03	1997	0.37	2000	
B	11	1	No Gas	-3.501	-3.501	-8.67	14554	-0.02	2000	
Al	27	1	No Gas	6.847	6.847	1.38	73336	0.01	2000	
Si	28	1	No Gas	1391.847	1391.847	3.04	4834621	0.03	2000	
Ag	107	1	No Gas	-0.129	-0.129	-2.85	317	-0.04	2000	
Cd	111	1	No Gas	0.078	0.078	8.08	120	0.06	2000	
Sr	88	1	No Gas	606.330	606.330	1.36	8547712	0.01	2000	
Mo	95	1	No Gas	0.140	0.140	22.62	407	0.03	2000	
Sn	118	1	No Gas	0.069	0.069	67.81	1763	0.00	2000	
Sb	121	1	No Gas	0.084	0.084	14.02	1023	0.01	2000	
Ba	137	1	No Gas	2.132	2.132	4.09	4961	0.04	2000	
Tl	205	1	No Gas	0.002	0.002	76.70	200	0.00	2000	
Tl	203	1	No Gas	0.003	0.003	94.07	73	0.00	2000	
Pb	208	1	No Gas	-0.073	-0.073	-6.07	1297	-0.01	2000	
U	238	1	No Gas	12.215	12.215	1.44	293187	0.00	2000	
Ca	43	2	He	45098.473	45098.473	0.48	51614	87.38	200000	
Sb	121	2	He	0.053	0.053	10.23	440	0.01	2000	
Ti	47	2	He	0.139	0.139	107.51	20	0.69	2000	
Cu	63	1	No Gas	7.709	7.709	0.85	49688	0.02	2000	
Zn	66	1	No Gas	2.847	2.847	10.87	19611	0.01	2000	
Se	82	1	No Gas	3.757	3.757	298.40	-684	-0.55	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	821598	0.35	675584	121.61	70	120	ISTD Failed
Ge	72	2	He	397474	0.73	343019	115.88	70	120	
Ge	72	1	No Gas	1259119	1.56	1083014	116.26	70	120	
In	115	1	No Gas	1497158	1.08	1354249	110.55	70	120	
Bi	209	1	No Gas	1544691	0.81	1409443	109.60	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	111_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:56:42-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	99.456	4.954	820077	2.00	100	99.5	90	110	
Be	9	1	No Gas	98.546	3.049	168362	0.84	100	98.5	90	110	
V	51	2	He	101.167	0.878	264822	0.38	100	101.2	90	110	
Cr	52	2	He	101.993	1.101	306887	0.73	100	102.0	90	110	
Fe	56	2	He	10126.735	0.996	29352278	0.52	10000	101.3	90	110	
Se	78	2	He	99.296	0.755	4569	0.29	100	99.3	90	110	
As	75	2	He	103.223	1.224	45484	0.91	100	103.2	90	110	
Ca	44	2	He	10027.689	1.240	177997	0.99	10000	100.3	90	110	
Na	23	2	He	10309.633	1.001	6031447	1.26	10000	103.1	90	110	
Mg	24	2	He	10378.704	0.321	3288118	0.20	10000	103.8	90	110	
K	39	2	He	10143.257	0.673	3801350	0.20	10000	101.4	90	110	
Mn	55	2	He	106.515	3.010	241789	3.07	100	106.5	90	110	
Co	59	2	He	103.530	1.409	460724	0.90	100	103.5	90	110	
Ni	60	2	He	102.204	1.538	115271	1.07	100	102.2	90	110	
Cu	63	2	He	101.995	1.049	312025	0.56	100	102.0	90	110	
Zn	66	2	He	102.735	1.072	68911	1.01	100	102.7	90	110	
Al	27	2	He	102.385	2.239	17979	2.14	100	102.4	90	110	
B	11	1	No Gas	467.440	2.947	375998	1.62	500	93.5	90	110	
Al	27	1	No Gas	92.951	2.053	647009	0.23	100	93.0	90	110	
Si	28	1	No Gas	545.290	7.494	1835432	8.72	5000	10.9	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.875	2.004	703037	0.85	100	98.9	90	110	
Cd	111	1	No Gas	99.911	1.807	143992	1.08	100	99.9	90	110	
Sr	88	1	No Gas	103.087	7.278	1362833	8.47	100	103.1	90	110	
Mo	95	1	No Gas	97.157	1.849	247340	0.69	100	97.2	90	110	
Sn	118	1	No Gas	99.836	1.396	433656	0.25	100	99.8	90	110	
Sb	121	1	No Gas	92.488	1.864	605608	0.36	100	92.5	90	110	
Ba	137	1	No Gas	100.195	1.516	212307	0.37	100	100.2	90	110	
Tl	205	1	No Gas	103.393	1.578	1680930	1.64	100	103.4	90	110	
Tl	203	1	No Gas	101.065	1.338	655261	0.12	100	101.1	90	110	
Pb	208	1	No Gas	96.972	2.081	2090444	0.80	100	97.0	90	110	
U	238	1	No Gas	101.301	0.725	2316439	0.85	100	101.3	90	110	
Ca	43	2	He	10012.052	1.047	10264	1.12	10000	100.1	90	110	
Sb	121	2	He	102.284	0.565	331424	0.06	100	102.3	90	110	
Ti	47	2	He	100.744	2.888	10424	2.45	100	100.7	90	110	
Cu	63	1	No Gas	98.911	2.467	518956	0.50	100	98.9	90	110	
Se	82	1	No Gas	100.980	0.638	7054	2.27	100	101.0	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	692209	3.03	675584	102.46	70	120	
Ge	72	2	He	354739	0.52	343019	103.42	70	120	
Ge	72	1	No Gas	1120173	2.24	1083014	103.43	70	120	
In	115	1	No Gas	1402599	1.17	1354249	103.57	70	120	
Bi	209	1	No Gas	1471717	1.31	1409443	104.42	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	112_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:58:52-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.195	69.0	39349	3.9	0.5	
Be	9	1	No Gas	0.143	74.3	278	63.4	0.5	
V	51	2	He	-0.043	-44.9	492	10.2	2.5	
Cr	52	2	He	0.149	24.0	1340	7.5	2.5	
Fe	56	2	He	40.607	31.7	121827	29.9	100	
Se	78	2	He	-0.265	-148.3	355	4.8	2	
As	75	2	He	0.032	79.0	76	14.2	2.5	
Ca	44	2	He	13.016	151.7	1244	27.3	100	
Na	23	2	He	-23.597	-98.7	169403	7.8	100	
Mg	24	2	He	26.710	50.5	8398	49.4	100	
K	39	2	He	13.963	45.7	84673	2.7	100	
Mn	55	2	He	2.324	42.5	5459	39.9	2.5	
Co	59	2	He	0.046	32.3	237	27.2	2.5	
Ni	60	2	He	-0.058	-96.3	153	39.9	2.5	
Cu	63	2	He	-0.301	-8.8	677	11.5	2	
Zn	66	2	He	-0.280	-65.9	5475	2.0	2.5	
Al	27	2	He	-0.359	-82.8	430	11.6	5	
B	11	1	No Gas	29.461	15.0	35836	10.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.486	-85.0	15420	19.2	5	
Si	28	1	No Gas	18.755	54.2	293342	11.0	10	CCB Main CR1 Failed
Ag	107	1	No Gas	0.024	424.1	1357	52.9	2.5	
Cd	111	1	No Gas	0.144	39.0	203	40.1	1	
Sr	88	1	No Gas	1.787	72.0	23792	70.7	2.5	
Mo	95	1	No Gas	0.138	74.8	370	70.4	2.5	
Sn	118	1	No Gas	0.128	46.6	1867	14.7	5	
Sb	121	1	No Gas	0.207	48.8	1687	39.8	2.5	
Ba	137	1	No Gas	0.196	63.2	540	48.6	2.5	
Tl	205	1	No Gas	0.179	69.9	3060	68.2	1	
Tl	203	1	No Gas	0.177	60.3	1191	60.0	1	
Pb	208	1	No Gas	0.074	164.9	4392	61.8	2.5	
U	238	1	No Gas	0.167	67.1	3836	68.6	2.5	
Ca	43	2	He	13.723	75.1	60	16.7	100	
Sb	121	2	He	0.102	38.4	530	22.9	2.5	
Ti	47	2	He	0.033	346.4	7	173.2	2.5	
Cu	63	1	No Gas	0.084	127.1	4424	13.3	2.5	
Se	82	1	No Gas	6.726	104.8	-374	-145.9	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	657001	1.83	675584	97.25	70	120	
Ge	72	2	He	342300	0.29	343019	99.79	70	120	
Ge	72	1	No Gas	1099869	1.34	1083014	101.56	70	120	
In	115	1	No Gas	1370956	1.57	1354249	101.23	70	120	
Bi	209	1	No Gas	1454154	2.53	1409443	103.17	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-02
Data File Name	118SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:12:03-05:00
Sample Type	Sample
Dilution	10
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	2.193	21.934	19.34	55957	0.00	2000	
Be	9	1	No Gas	-0.013	-0.127	-50.93	25	-0.05	2000	
V	51	2	He	0.051	0.506	29.82	751	0.01	2000	
Cr	52	2	He	42.907	429.074	1.22	128963	0.03	2000	
Fe	56	2	He	7868.884	78688.839	0.44	22690337	0.03	200000	
Se	78	2	He	-0.760	-7.598	-60.50	345	-0.22	2000	
As	75	2	He	0.907	9.074	3.87	461	0.20	2000	
Ca	44	2	He	9406.930	94069.301	1.43	166163	5.66	200000	
Na	23	2	He	19832.736	198327.356	0.74	11367683	0.17	200000	
Mg	24	2	He	4731.843	47318.427	1.85	1491198	0.32	200000	
K	39	2	He	345.353	3453.527	1.05	208140	0.17	200000	
Mn	55	2	He	214.915	2149.153	0.58	484886	0.04	2000	
Co	59	2	He	1.032	10.325	2.50	4611	0.02	2000	
Ni	60	2	He	33.064	330.641	1.25	37251	0.09	2000	
Cu	63	2	He	0.241	2.410	26.38	2337	0.01	2000	
Zn	66	2	He	0.327	3.275	20.01	6015	0.01	2000	
Al	27	2	He	2.074	20.742	39.74	857	0.24	2000	
B	11	1	No Gas	13.341	133.407	14.89	24757	0.05	2000	
Al	27	1	No Gas	1.736	17.355	6.07	30223	0.01	2000	
Si	28	1	No Gas	1358.581	13585.813	2.17	4139867	0.03	2000	
Ag	107	1	No Gas	-0.142	-1.416	-7.23	200	-0.07	2000	
Cd	111	1	No Gas	0.009	0.095	113.62	13	0.07	2000	
Sr	88	1	No Gas	278.571	2785.710	3.05	3547403	0.01	2000	
Mo	95	1	No Gas	0.203	2.025	11.99	520	0.04	2000	
Sn	118	1	No Gas	-0.023	-0.233	-81.99	1207	0.00	2000	
Sb	121	1	No Gas	0.095	0.953	12.89	967	0.01	2000	
Ba	137	1	No Gas	140.898	1408.982	1.37	287833	0.05	2000	
Tl	205	1	No Gas	-0.005	-0.054	-38.68	70	-0.01	2000	
Tl	203	1	No Gas	-0.002	-0.019	-247.77	37	-0.01	2000	
Pb	208	1	No Gas	0.147	1.474	293.80	6055	0.00	2000	
U	238	1	No Gas	0.003	0.031	15.27	100	0.00	2000	
Ca	43	2	He	9864.073	98640.733	4.37	10057	98.08	200000	
Sb	121	2	He	0.085	0.851	3.86	493	0.02	2000	
Ti	47	2	He	0.096	0.958	57.21	13	0.72	2000	
Cu	63	1	No Gas	0.420	4.202	5.22	6155	0.01	2000	
Zn	66	1	No Gas	0.503	5.030	135.10	13794	0.00	2000	
Se	82	1	No Gas	-0.787	-7.866	-1114.01	-963	0.08	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	678963	4.38	675584	100.50	70	120	
Ge	72	2	He	352878	1.07	343019	102.87	70	120	
Ge	72	1	No Gas	1102974	1.17	1083014	101.84	70	120	
In	115	1	No Gas	1352524	1.63	1354249	99.87	70	120	

Sample Report

Bi	209	1	No Gas	1482012	1.05	1409443	105.15	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-06
Data File Name	119SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:14:00-05:00
Sample Type	Sample
Dilution	10
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.448	4.482	33.25	42342	0.00	2000	
Be	9	1	No Gas	-0.011	-0.108	-58.80	28	-0.04	2000	
V	51	2	He	0.006	0.062	375.31	640	0.00	2000	
Cr	52	2	He	0.043	0.433	91.15	1073	0.00	2000	
Fe	56	2	He	2.244	22.436	3.98	15048	0.01	200000	
Se	78	2	He	-0.352	-3.518	-66.99	365	-0.10	2000	
As	75	2	He	0.038	0.376	62.56	81	0.05	2000	
Ca	44	2	He	4431.491	44314.908	1.79	79418	5.58	200000	
Na	23	2	He	22090.092	220900.922	0.26	12734345	0.17	200000	
Mg	24	2	He	3987.957	39879.572	0.62	1266319	0.31	200000	
K	39	2	He	58.284	582.836	2.19	104218	0.06	200000	
Mn	55	2	He	135.863	1358.633	0.52	308966	0.04	2000	
Co	59	2	He	1.668	16.685	1.32	7482	0.02	2000	
Ni	60	2	He	0.643	6.429	23.50	950	0.07	2000	
Cu	63	2	He	-0.306	-3.062	-1.00	687	-0.04	2000	
Zn	66	2	He	0.169	1.688	102.45	5961	0.00	2000	
Al	27	2	He	-0.221	-2.206	-192.37	470	-0.05	2000	
B	11	1	No Gas	2.061	20.611	36.32	16143	0.01	2000	
Al	27	1	No Gas	-0.268	-2.681	-51.03	16927	0.00	2000	
Si	28	1	No Gas	209.102	2091.021	3.11	843113	0.02	2000	
Ag	107	1	No Gas	-0.146	-1.459	-8.60	177	-0.08	2000	
Cd	111	1	No Gas	0.044	0.440	25.16	63	0.07	2000	
Sr	88	1	No Gas	59.335	593.355	1.96	784247	0.01	2000	
Mo	95	1	No Gas	0.006	0.062	166.82	40	0.02	2000	
Sn	118	1	No Gas	-0.038	-0.378	-40.17	1190	0.00	2000	
Sb	121	1	No Gas	0.060	0.600	38.70	740	0.01	2000	
Ba	137	1	No Gas	0.270	2.701	6.06	707	0.04	2000	
Tl	205	1	No Gas	-0.006	-0.058	-12.88	63	-0.01	2000	
Tl	203	1	No Gas	-0.002	-0.024	-140.72	33	-0.01	2000	
Pb	208	1	No Gas	-0.108	-1.084	-3.02	483	-0.02	2000	
U	238	1	No Gas	0.150	1.502	3.46	3507	0.00	2000	
Ca	43	2	He	4555.898	45558.979	3.76	4708	96.78	200000	
Sb	121	2	He	0.019	0.191	126.61	283	0.01	2000	
Ti	47	2	He	0.031	0.310	180.01	7	0.47	2000	
Cu	63	1	No Gas	-0.123	-1.232	-55.29	3374	0.00	2000	
Zn	66	1	No Gas	0.349	3.489	12.37	13617	0.00	2000	
Se	82	1	No Gas	8.412	84.119	53.21	-252	-3.34	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	675027	2.36	675584	99.92	70	120	
Ge	72	2	He	355494	0.77	343019	103.64	70	120	
Ge	72	1	No Gas	1106394	2.98	1083014	102.16	70	120	
In	115	1	No Gas	1402805	1.00	1354249	103.59	70	120	

Sample Report

Bi	209	1	No Gas	1491256	1.44	1409443	105.80	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-08
Data File Name	120SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:15:57-05:00
Sample Type	Sample
Dilution	10
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.435	4.352	52.84	43669	0.00	2000	
Be	9	1	No Gas	-0.011	-0.114	-27.22	28	-0.04	2000	
V	51	2	He	0.017	0.168	1.92	676	0.00	2000	
Cr	52	2	He	0.091	0.908	45.65	1230	0.01	2000	
Fe	56	2	He	2148.287	21482.866	0.83	6318169	0.03	200000	
Se	78	2	He	-0.758	-7.581	-57.21	351	-0.22	2000	
As	75	2	He	-0.014	-0.143	-179.82	59	-0.02	2000	
Ca	44	2	He	3524.283	35242.834	2.27	64099	5.50	200000	
Na	23	2	He	3365.147	33651.473	1.53	2124361	0.16	200000	
Mg	24	2	He	1883.003	18830.031	0.20	604843	0.31	200000	
K	39	2	He	54.692	546.915	9.16	104077	0.05	200000	
Mn	55	2	He	73.585	735.846	0.56	169416	0.04	2000	
Co	59	2	He	0.000	-0.004	-489.92	40	0.00	2000	
Ni	60	2	He	-0.091	-0.910	-29.04	123	-0.07	2000	
Cu	63	2	He	-0.349	-3.487	-3.13	563	-0.06	2000	
Zn	66	2	He	-0.165	-1.650	-176.18	5821	0.00	2000	
Al	27	2	He	1.040	10.402	57.10	693	0.15	2000	
B	11	1	No Gas	-1.244	-12.437	-52.43	14117	-0.01	2000	
Al	27	1	No Gas	0.933	9.335	20.08	25591	0.00	2000	
Si	28	1	No Gas	141.512	1415.125	3.93	664776	0.02	2000	
Ag	107	1	No Gas	-0.140	-1.404	-5.09	217	-0.06	2000	
Cd	111	1	No Gas	0.009	0.092	43.03	13	0.07	2000	
Sr	88	1	No Gas	94.442	944.423	2.12	1258011	0.01	2000	
Mo	95	1	No Gas	0.000	-0.004	-1124.94	23	0.00	2000	
Sn	118	1	No Gas	-0.023	-0.225	-92.87	1267	0.00	2000	
Sb	121	1	No Gas	0.046	0.464	25.00	670	0.01	2000	
Ba	137	1	No Gas	0.383	3.829	20.05	953	0.04	2000	
Tl	205	1	No Gas	-0.005	-0.048	-34.01	80	-0.01	2000	
Tl	203	1	No Gas	-0.001	-0.014	-227.41	40	0.00	2000	
Pb	208	1	No Gas	-0.103	-1.034	-1.67	593	-0.02	2000	
U	238	1	No Gas	0.002	0.024	71.14	83	0.00	2000	
Ca	43	2	He	3770.021	37700.214	3.88	3947	95.51	200000	
Sb	121	2	He	0.035	0.345	31.14	337	0.01	2000	
Ti	47	2	He	-0.002	-0.018	-3002.86	3	-0.05	2000	
Cu	63	1	No Gas	-0.202	-2.022	-28.95	3047	-0.01	2000	
Zn	66	1	No Gas	-0.062	-0.616	-701.84	13353	0.00	2000	
Se	82	1	No Gas	3.805	38.053	132.12	-614	-0.62	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	698143	3.17	675584	103.34	70	120	
Ge	72	2	He	359544	0.45	343019	104.82	70	120	
Ge	72	1	No Gas	1134810	2.34	1083014	104.78	70	120	
In	115	1	No Gas	1414123	0.86	1354249	104.42	70	120	

Sample Report

Bi	209	1	No Gas	1494289	1.44	1409443	106.02	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	123_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:24:40-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	105.057	0.579	903173	0.25	100	105.1	90	110	
Be	9	1	No Gas	104.567	0.630	186683	0.28	100	104.6	90	110	
V	51	2	He	105.123	1.781	290621	0.84	100	105.1	90	110	
Cr	52	2	He	106.033	2.281	336928	1.28	100	106.0	90	110	
Fe	56	2	He	10349.219	1.631	31683806	0.73	10000	103.5	90	110	
Se	78	2	He	103.978	2.401	5034	1.59	100	104.0	90	110	
As	75	2	He	107.785	0.288	50167	0.99	100	107.8	90	110	
Ca	44	2	He	10263.717	1.072	192411	0.26	10000	102.6	90	110	
Na	23	2	He	10591.629	1.380	6539288	0.68	10000	105.9	90	110	
Mg	24	2	He	10681.802	1.653	3574512	1.38	10000	106.8	90	110	
K	39	2	He	10539.663	1.863	4168522	0.92	10000	105.4	90	110	
Mn	55	2	He	105.016	0.798	251808	1.03	100	105.0	90	110	
Co	59	2	He	105.239	0.688	494702	0.61	100	105.2	90	110	
Ni	60	2	He	104.721	1.303	124750	0.28	100	104.7	90	110	
Cu	63	2	He	105.338	1.205	340329	0.32	100	105.3	90	110	
Zn	66	2	He	105.509	1.485	74588	1.25	100	105.5	90	110	
Al	27	2	He	110.242	0.770	20409	1.74	100	110.2	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	516.509	2.646	432457	2.28	500	103.3	90	110	
Al	27	1	No Gas	96.355	1.862	716241	0.04	100	96.4	90	110	
Si	28	1	No Gas	513.584	2.347	1860893	0.87	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	104.845	0.950	771632	0.25	100	104.8	90	110	
Cd	111	1	No Gas	106.190	1.268	158433	1.87	100	106.2	90	110	
Sr	88	1	No Gas	104.393	1.829	1427604	1.53	100	104.4	90	110	
Mo	95	1	No Gas	103.055	0.697	271584	0.47	100	103.1	90	110	
Sn	118	1	No Gas	106.015	0.561	476593	0.39	100	106.0	90	110	
Sb	121	1	No Gas	95.303	1.511	667100	0.47	100	95.3	90	110	
Ba	137	1	No Gas	106.912	1.437	234485	0.88	100	106.9	90	110	
Tl	205	1	No Gas	109.393	0.250	1860371	0.66	100	109.4	90	110	
Tl	203	1	No Gas	105.832	1.855	717745	1.09	100	105.8	90	110	
Pb	208	1	No Gas	102.158	2.622	2303503	1.90	100	102.2	90	110	
U	238	1	No Gas	105.328	0.433	2519500	1.14	100	105.3	90	110	
Ca	43	2	He	10614.079	2.187	11492	2.77	10000	106.1	90	110	
Sb	121	2	He	105.110	1.613	359728	0.94	100	105.1	90	110	
Ti	47	2	He	101.535	0.838	11098	0.70	100	101.5	90	110	
Cu	63	1	No Gas	102.069	2.151	572346	0.30	100	102.1	90	110	
Se	82	1	No Gas	103.590	5.101	7765	7.25	100	103.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	722932	0.45	675584	107.01	70	120	
Ge	72	2	He	374717	1.11	343019	109.24	70	120	
Ge	72	1	No Gas	1197369	1.81	1083014	110.56	70	120	
In	115	1	No Gas	1451769	0.70	1354249	107.20	70	120	
Bi	209	1	No Gas	1539422	0.78	1409443	109.22	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	123_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:24:40-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	105.057	0.579	903173	0.25	100	105.1	90	110	
Be	9	1	No Gas	104.567	0.630	186683	0.28	100	104.6	90	110	
V	51	2	He	105.123	1.781	290621	0.84	100	105.1	90	110	
Cr	52	2	He	106.033	2.281	336928	1.28	100	106.0	90	110	
Fe	56	2	He	10349.219	1.631	31683806	0.73	10000	103.5	90	110	
Se	78	2	He	103.978	2.401	5034	1.59	100	104.0	90	110	
As	75	2	He	107.785	0.288	50167	0.99	100	107.8	90	110	
Ca	44	2	He	10263.717	1.072	192411	0.26	10000	102.6	90	110	
Na	23	2	He	10591.629	1.380	6539288	0.68	10000	105.9	90	110	
Mg	24	2	He	10681.802	1.653	3574512	1.38	10000	106.8	90	110	
K	39	2	He	10539.663	1.863	4168522	0.92	10000	105.4	90	110	
Mn	55	2	He	105.016	0.798	251808	1.03	100	105.0	90	110	
Co	59	2	He	105.239	0.688	494702	0.61	100	105.2	90	110	
Ni	60	2	He	104.721	1.303	124750	0.28	100	104.7	90	110	
Cu	63	2	He	105.338	1.205	340329	0.32	100	105.3	90	110	
Zn	66	2	He	105.509	1.485	74588	1.25	100	105.5	90	110	
Al	27	2	He	110.242	0.770	20409	1.74	100	110.2	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	516.509	2.646	432457	2.28	500	103.3	90	110	
Al	27	1	No Gas	96.355	1.862	716241	0.04	100	96.4	90	110	
Si	28	1	No Gas	513.584	2.347	1860893	0.87	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	104.845	0.950	771632	0.25	100	104.8	90	110	
Cd	111	1	No Gas	106.190	1.268	158433	1.87	100	106.2	90	110	
Sr	88	1	No Gas	104.393	1.829	1427604	1.53	100	104.4	90	110	
Mo	95	1	No Gas	103.055	0.697	271584	0.47	100	103.1	90	110	
Sn	118	1	No Gas	106.015	0.561	476593	0.39	100	106.0	90	110	
Sb	121	1	No Gas	95.303	1.511	667100	0.47	100	95.3	90	110	
Ba	137	1	No Gas	106.912	1.437	234485	0.88	100	106.9	90	110	
Tl	205	1	No Gas	109.393	0.250	1860371	0.66	100	109.4	90	110	
Tl	203	1	No Gas	105.832	1.855	717745	1.09	100	105.8	90	110	
Pb	208	1	No Gas	102.158	2.622	2303503	1.90	100	102.2	90	110	
U	238	1	No Gas	105.328	0.433	2519500	1.14	100	105.3	90	110	
Ca	43	2	He	10614.079	2.187	11492	2.77	10000	106.1	90	110	
Sb	121	2	He	105.110	1.613	359728	0.94	100	105.1	90	110	
Ti	47	2	He	101.535	0.838	11098	0.70	100	101.5	90	110	
Cu	63	1	No Gas	102.069	2.151	572346	0.30	100	102.1	90	110	
Se	82	1	No Gas	103.590	5.101	7765	7.25	100	103.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	722932	0.45	675584	107.01	70	120	
Ge	72	2	He	374717	1.11	343019	109.24	70	120	
Ge	72	1	No Gas	1197369	1.81	1083014	110.56	70	120	
In	115	1	No Gas	1451769	0.70	1354249	107.20	70	120	
Bi	209	1	No Gas	1539422	0.78	1409443	109.22	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	124_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:26:35-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.202	-129.9	39350	1.6	0.5	
Be	9	1	No Gas	-0.012	-59.0	28	40.8	0.5	
V	51	2	He	-0.049	-21.4	501	5.1	2.5	
Cr	52	2	He	0.052	45.6	1113	6.1	2.5	
Fe	56	2	He	0.701	20.7	10711	4.3	100	
Se	78	2	He	-0.995	-34.1	342	4.8	2	
As	75	2	He	-0.005	-901.8	63	29.3	2.5	
Ca	44	2	He	-38.036	-7.1	393	11.7	100	
Na	23	2	He	-80.129	-4.0	145732	1.0	100	
Mg	24	2	He	0.473	31.5	390	12.8	100	
K	39	2	He	1.554	305.1	84491	1.7	100	
Mn	55	2	He	0.022	105.8	443	12.4	2.5	
Co	59	2	He	-0.003	-167.0	30	66.7	2.5	
Ni	60	2	He	-0.135	-3.9	73	7.9	2.5	
Cu	63	2	He	-0.365	-5.8	513	13.0	2	
Zn	66	2	He	-0.296	-90.6	5751	2.6	2.5	
Al	27	2	He	-1.661	-31.6	227	40.0	5	
B	11	1	No Gas	23.924	18.1	34361	9.8	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.661	-9.2	7886	13.6	5	
Si	28	1	No Gas	-2.757	-49.8	240085	1.6	10	
Ag	107	1	No Gas	-0.111	-23.3	427	43.9	2.5	
Cd	111	1	No Gas	0.014	132.0	20	132.3	1	
Sr	88	1	No Gas	0.019	399.7	811	122.0	2.5	
Mo	95	1	No Gas	0.028	172.5	97	129.3	2.5	
Sn	118	1	No Gas	0.102	191.9	1798	46.7	5	
Sb	121	1	No Gas	0.054	50.9	727	25.5	2.5	
Ba	137	1	No Gas	-0.031	-54.4	70	51.5	2.5	
Tl	205	1	No Gas	0.009	146.6	313	71.0	1	
Tl	203	1	No Gas	0.012	76.5	130	46.8	1	
Pb	208	1	No Gas	-0.090	-12.9	903	27.6	2.5	
U	238	1	No Gas	0.007	141.7	200	121.3	2.5	
Ca	43	2	He	-34.320	-43.2	13	114.6	100	
Sb	121	2	He	0.021	85.2	293	20.0	2.5	
Ti	47	2	He	0.030	183.6	7	86.6	2.5	
Cu	63	1	No Gas	-0.065	-125.7	3791	11.8	2.5	
Se	82	1	No Gas	7.082	53.1	-359	-84.3	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	711467	3.74	675584	105.31	70	120	
Ge	72	2	He	360266	0.53	343019	105.03	70	120	
Ge	72	1	No Gas	1140508	0.47	1083014	105.31	70	120	
In	115	1	No Gas	1406131	0.76	1354249	103.83	70	120	
Bi	209	1	No Gas	1504783	1.01	1409443	106.76	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	124_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:26:35-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.202	-129.9	39350	1.6	0.5	
Be	9	1	No Gas	-0.012	-59.0	28	40.8	0.5	
V	51	2	He	-0.049	-21.4	501	5.1	2.5	
Cr	52	2	He	0.052	45.6	1113	6.1	2.5	
Fe	56	2	He	0.701	20.7	10711	4.3	100	
Se	78	2	He	-0.995	-34.1	342	4.8	2	
As	75	2	He	-0.005	-901.8	63	29.3	2.5	
Ca	44	2	He	-38.036	-7.1	393	11.7	100	
Na	23	2	He	-80.129	-4.0	145732	1.0	100	
Mg	24	2	He	0.473	31.5	390	12.8	100	
K	39	2	He	1.554	305.1	84491	1.7	100	
Mn	55	2	He	0.022	105.8	443	12.4	2.5	
Co	59	2	He	-0.003	-167.0	30	66.7	2.5	
Ni	60	2	He	-0.135	-3.9	73	7.9	2.5	
Cu	63	2	He	-0.365	-5.8	513	13.0	2	
Zn	66	2	He	-0.296	-90.6	5751	2.6	2.5	
Al	27	2	He	-1.661	-31.6	227	40.0	5	
B	11	1	No Gas	23.924	18.1	34361	9.8	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.661	-9.2	7886	13.6	5	
Si	28	1	No Gas	-2.757	-49.8	240085	1.6	10	
Ag	107	1	No Gas	-0.111	-23.3	427	43.9	2.5	
Cd	111	1	No Gas	0.014	132.0	20	132.3	1	
Sr	88	1	No Gas	0.019	399.7	811	122.0	2.5	
Mo	95	1	No Gas	0.028	172.5	97	129.3	2.5	
Sn	118	1	No Gas	0.102	191.9	1798	46.7	5	
Sb	121	1	No Gas	0.054	50.9	727	25.5	2.5	
Ba	137	1	No Gas	-0.031	-54.4	70	51.5	2.5	
Tl	205	1	No Gas	0.009	146.6	313	71.0	1	
Tl	203	1	No Gas	0.012	76.5	130	46.8	1	
Pb	208	1	No Gas	-0.090	-12.9	903	27.6	2.5	
U	238	1	No Gas	0.007	141.7	200	121.3	2.5	
Ca	43	2	He	-34.320	-43.2	13	114.6	100	
Sb	121	2	He	0.021	85.2	293	20.0	2.5	
Ti	47	2	He	0.030	183.6	7	86.6	2.5	
Cu	63	1	No Gas	-0.065	-125.7	3791	11.8	2.5	
Se	82	1	No Gas	7.082	53.1	-359	-84.3	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	711467	3.74	675584	105.31	70	120	
Ge	72	2	He	360266	0.53	343019	105.03	70	120	
Ge	72	1	No Gas	1140508	0.47	1083014	105.31	70	120	
In	115	1	No Gas	1406131	0.76	1354249	103.83	70	120	
Bi	209	1	No Gas	1504783	1.01	1409443	106.76	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	136_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:52:38-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.326	-34.4	41006	0.8	0.5	
Be	9	1	No Gas	-0.010	-16.2	33	8.7	0.5	
V	51	2	He	-0.012	-93.1	684	4.8	2.5	
Cr	52	2	He	-0.023	-105.2	1010	7.7	2.5	
Fe	56	2	He	0.912	9.0	12910	2.6	100	
Se	78	2	He	-0.550	-109.4	411	7.4	2	
As	75	2	He	-0.031	-12.8	59	3.3	2.5	
Ca	44	2	He	-30.093	-22.4	610	22.1	100	
Na	23	2	He	92.572	1.6	279265	0.2	100	
Mg	24	2	He	1.025	21.5	647	12.6	100	
K	39	2	He	6.403	43.6	98319	1.2	100	
Mn	55	2	He	-0.014	-178.7	410	15.2	2.5	
Co	59	2	He	-0.001	-631.1	43	66.6	2.5	
Ni	60	2	He	-0.158	-12.4	53	47.2	2.5	
Cu	63	2	He	-0.364	-4.1	590	9.4	2	
Zn	66	2	He	-0.645	-23.7	6305	1.2	2.5	
Al	27	2	He	-1.821	-1.9	227	2.5	5	
B	11	1	No Gas	18.643	21.2	32222	9.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.690	-2.6	8633	4.5	5	
Si	28	1	No Gas	-6.571	-36.2	257043	1.8	10	
Ag	107	1	No Gas	-0.125	-6.0	367	15.0	2.5	
Cd	111	1	No Gas	0.006	100.9	10	100.0	1	
Sr	88	1	No Gas	-0.007	-64.2	527	12.1	2.5	
Mo	95	1	No Gas	0.005	91.5	43	35.3	2.5	
Sn	118	1	No Gas	-0.044	-69.6	1317	12.4	5	
Sb	121	1	No Gas	0.066	22.9	907	10.9	2.5	
Ba	137	1	No Gas	-0.039	-9.9	60	16.7	2.5	
Tl	205	1	No Gas	0.004	22.2	243	6.3	1	
Tl	203	1	No Gas	0.007	42.1	103	20.1	1	
Pb	208	1	No Gas	-0.093	-3.6	913	9.6	2.5	
U	238	1	No Gas	0.003	42.5	113	31.0	2.5	
Ca	43	2	He	-41.603	-11.7	7	86.6	100	
Sb	121	2	He	0.040	63.5	403	23.6	2.5	
Ti	47	2	He	-0.006	-856.6	3	173.2	2.5	
Cu	63	1	No Gas	1.537	7.3	13801	3.1	2.5	
Se	82	1	No Gas	0.524	483.7	-998	-24.0	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	759917	1.62	675584	112.48	70	120	
Ge	72	2	He	410437	0.53	343019	119.65	70	120	
Ge	72	1	No Gas	1281870	1.77	1083014	118.36	70	120	
In	115	1	No Gas	1586553	1.71	1354249	117.15	70	120	
Bi	209	1	No Gas	1653123	0.78	1409443	117.29	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	138_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:57:15-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	98.780	4.205	849568	2.93	100	98.8	90	110	
Be	9	1	No Gas	101.964	1.382	181625	1.24	100	102.0	90	110	
V	51	2	He	97.932	1.676	301509	0.58	100	97.9	90	110	
Cr	52	2	He	98.160	2.029	347389	0.93	100	98.2	90	110	
Fe	56	2	He	9550.083	1.478	32555639	0.50	10000	95.5	90	110	
Se	78	2	He	92.447	1.820	5034	1.55	100	92.4	90	110	
As	75	2	He	98.485	3.162	51035	2.06	100	98.5	90	110	
Ca	44	2	He	9555.238	1.252	199541	0.76	10000	95.6	90	110	
Na	23	2	He	10118.390	1.772	6965574	0.62	10000	101.2	90	110	
Mg	24	2	He	9911.985	1.591	3693198	1.04	10000	99.1	90	110	
K	39	2	He	9755.104	1.376	4303332	0.27	10000	97.6	90	110	
Mn	55	2	He	97.306	2.024	259798	0.92	100	97.3	90	110	
Co	59	2	He	98.640	1.503	516262	0.44	100	98.6	90	110	
Ni	60	2	He	98.829	2.135	131096	1.06	100	98.8	90	110	
Cu	63	2	He	98.013	1.488	352716	0.39	100	98.0	90	110	
Zn	66	2	He	97.629	2.876	77353	1.81	100	97.6	90	110	
Al	27	2	He	96.734	2.805	20008	1.63	100	96.7	90	110	
B	11	1	No Gas	514.161	3.400	429531	2.33	500	102.8	90	110	
Al	27	1	No Gas	89.337	1.680	720125	0.38	100	89.3	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	468.111	1.575	1860395	1.60	5000	9.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	97.242	1.773	780699	0.56	100	97.2	90	110	
Cd	111	1	No Gas	97.431	1.620	158536	0.13	100	97.4	90	110	
Sr	88	1	No Gas	96.588	1.630	1440753	0.21	100	96.6	90	110	
Mo	95	1	No Gas	95.722	1.544	275145	0.04	100	95.7	90	110	
Sn	118	1	No Gas	97.858	2.039	479919	0.55	100	97.9	90	110	
Sb	121	1	No Gas	88.817	2.350	672623	0.54	100	88.8	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	98.163	1.172	234856	0.55	100	98.2	90	110	
Tl	205	1	No Gas	102.590	1.017	1851975	1.14	100	102.6	90	110	
Tl	203	1	No Gas	99.074	0.929	713320	1.45	100	99.1	90	110	
Pb	208	1	No Gas	98.394	2.275	2355513	2.44	100	98.4	90	110	
U	238	1	No Gas	99.274	0.628	2520599	0.32	100	99.3	90	110	
Ca	43	2	He	9795.181	4.262	11809	3.20	10000	98.0	90	110	
Sb	121	2	He	95.663	1.465	364566	0.38	100	95.7	90	110	
Ti	47	2	He	97.145	2.975	11822	2.34	100	97.1	90	110	
Cu	63	1	No Gas	96.035	1.577	582979	0.35	100	96.0	90	110	
Se	82	1	No Gas	101.716	5.376	8223	5.48	100	101.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	721328	1.20	675584	106.77	70	120	
Ge	72	2	He	417233	1.09	343019	121.64	70	120	ISTD Failed
Ge	72	1	No Gas	1295528	1.80	1083014	119.62	70	120	
In	115	1	No Gas	1583674	1.55	1354249	116.94	70	120	
Bi	209	1	No Gas	1634088	0.66	1409443	115.94	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	139_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:59:10-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	98.399	0.812	859822	0.82	100	98.4	90	110	
Be	9	1	No Gas	101.962	0.865	184442	0.51	100	102.0	90	110	
V	51	2	He	99.492	0.799	303638	0.43	100	99.5	90	110	
Cr	52	2	He	100.399	1.068	352200	0.48	100	100.4	90	110	
Fe	56	2	He	9795.305	1.076	33099899	0.61	10000	98.0	90	110	
Se	78	2	He	98.367	2.256	5280	1.44	100	98.4	90	110	
As	75	2	He	101.465	0.691	52126	0.64	100	101.5	90	110	
Ca	44	2	He	9743.883	0.621	201677	0.36	10000	97.4	90	110	
Na	23	2	He	10233.426	0.966	6980933	0.37	10000	102.3	90	110	
Mg	24	2	He	10201.186	0.971	3767728	0.52	10000	102.0	90	110	
K	39	2	He	10070.784	0.491	4400757	0.19	10000	100.7	90	110	
Mn	55	2	He	99.632	0.269	263696	0.70	100	99.6	90	110	
Co	59	2	He	100.577	1.470	521800	0.90	100	100.6	90	110	
Ni	60	2	He	100.024	1.070	131527	0.50	100	100.0	90	110	
Cu	63	2	He	99.616	0.634	355333	0.15	100	99.6	90	110	
Zn	66	2	He	99.677	1.517	78148	0.98	100	99.7	90	110	
Al	27	2	He	102.303	2.502	20943	2.18	100	102.3	90	110	
B	11	1	No Gas	542.559	0.766	459560	2.04	500	108.5	90	110	
Al	27	1	No Gas	91.069	2.229	727190	0.39	100	91.1	90	110	
Si	28	1	No Gas	487.531	1.756	1908888	1.08	5000	9.8	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	99.842	1.051	793999	0.29	100	99.8	90	110	
Cd	111	1	No Gas	99.267	1.193	160004	0.71	100	99.3	90	110	
Sr	88	1	No Gas	98.893	1.349	1461236	0.84	100	98.9	90	110	
Mo	95	1	No Gas	97.126	1.557	276540	0.58	100	97.1	90	110	
Sn	118	1	No Gas	100.542	1.449	488407	0.42	100	100.5	90	110	
Sb	121	1	No Gas	91.447	2.268	686469	0.29	100	91.4	90	110	
Ba	137	1	No Gas	100.347	1.658	237801	0.84	100	100.3	90	110	
Tl	205	1	No Gas	103.934	1.718	1893565	0.36	100	103.9	90	110	
Tl	203	1	No Gas	100.173	1.758	727886	0.99	100	100.2	90	110	
Pb	208	1	No Gas	100.211	3.257	2420612	1.51	100	100.2	90	110	
U	238	1	No Gas	99.248	2.046	2543142	0.27	100	99.2	90	110	
Ca	43	2	He	9459.594	2.499	11308	2.09	10000	94.6	90	110	
Sb	121	2	He	98.599	1.186	372464	0.57	100	98.6	90	110	
Ti	47	2	He	93.517	2.615	11281	2.28	100	93.5	90	110	
Cu	63	1	No Gas	98.686	1.978	593677	0.74	100	98.7	90	110	
Se	82	1	No Gas	108.336	10.450	8736	9.06	100	108.3	90	110	

QC ISTD Table

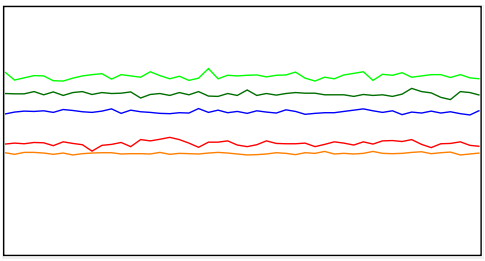
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	732542	1.31	675584	108.43	70	120	
Ge	72	2	He	413565	0.62	343019	120.57	70	120	ISTD Failed
Ge	72	1	No Gas	1284307	2.49	1083014	118.59	70	120	
In	115	1	No Gas	1568623	1.06	1354249	115.83	70	120	
Bi	209	1	No Gas	1649536	1.99	1409443	117.03	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq. Date-Time	07/19/2022 10:41:44
Report Comment	---
Instrument Name	G8422A SG22121190

[No Gas]

Sensitivity



Sampling Period [sec]	0.514
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/l)]	Resp (Required) [cps/(ug/l)]	Resp (Flag)
9	5000	2249	22485.22		
24	10000	7221	72206.42		
59	20000	11544	115443.75		
115	50000	20455	204549.19		
208	20000	13002	130021.40		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.282	5.000	
24	1.526	5.000	
59	1.054	5.000	
115	0.866	5.000	
208	1.260	5.000	

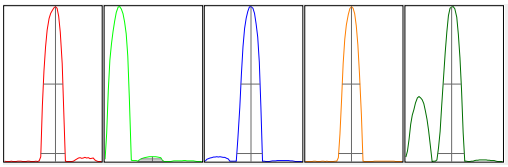
Mass	Background	Background (Required)	Background (Flag)
9	1.200		
24	0.100		
59	0.600		
115	0.400		
208	1.300		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.490 %
Doubly Charged	70 / 140 1.312 %

Tune Check Report

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	37.4
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	2272.64	9.10	8.90 - 9.10	
24	7193.72	24.00	23.90 - 24.10	
59	11630.21	58.95	58.90 - 59.10	
115	20541.10	114.95	114.90 - 115.10	
208	12764.72	207.95	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.59	0.739		
24	0.63	0.783		
59	0.59	0.776		
115	0.54	0.733		
208	0.55	0.811		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.70 L/min	Dilution Gas	0.35 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.7 V	Deflect	13.2 V
Extract 2	-185.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-75 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	126	Axis Offset	0.06		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.1 mm

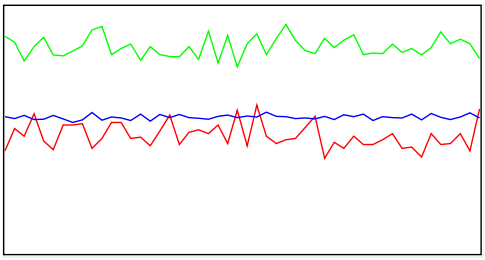
EM

Discriminator	4.5 mV	Analog HV	2102 V	Pulse HV	1001 V

[He]

Tune Check Report

Sensitivity



Sampling Period [sec]	0.306
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/l)]	Resp (Required) [cps/(ug/l)]	Resp (Flag)
9	200	95	953.63		
24	500	419	4187.43		
59	10000	5515	55149.97		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

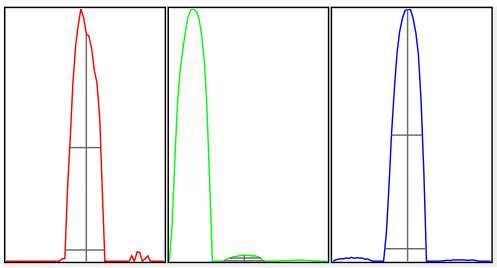
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	10.652	5.000	Fail
24	4.822	5.000	
59	1.741	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.300		
24	0.000		
59	0.000		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.310 %
Doubly Charged	70 / 140 1.001 %

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.24
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	85.76	9.05	8.90 - 9.10	
24	438.08	23.95	23.90 - 24.10	
59	5505.47	58.95	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.58	0.736		
24	0.58	0.768		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.58	0.771		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.70 L/min	Dilution Gas	0.35 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.4 V	Deflect	-0.4 V
Extract 2	-200.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-90 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	3.8 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-15.0 V
Mass Offset	126	Axis Offset	0.06		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.1 mm

EM

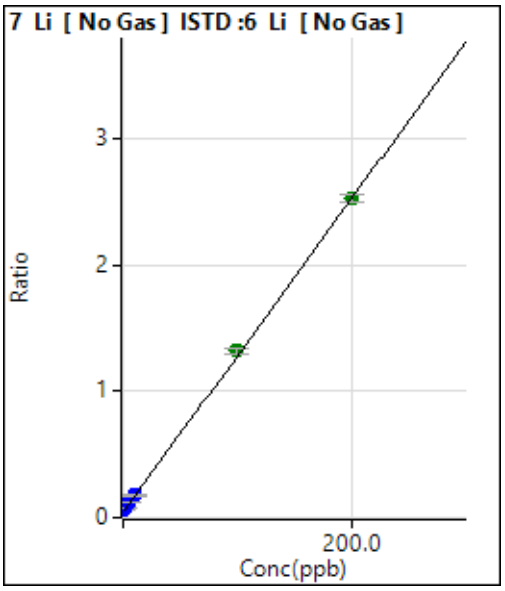
Discriminator	4.5 mV	Analog HV	2102 V	Pulse HV	1001 V

Calibration for 212_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072022A.b\
Analysis File: 072022A.batch.bin
DA Date-Time: 07/20/2022 21:22:39
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	205CALB.d	CAL BLK	07/20/2022 21:07:27
2	206CALS.d	2/10/200	07/20/2022 21:09:34
3	207CALS.d	5/25/500	07/20/2022 21:11:40
4	208CALS.d	10/50/100	07/20/2022 21:13:47
5	209CALS.d	100/500/10K	07/20/2022 21:15:53
6	210CALS.d	200/1000/20K	07/20/2022 21:17:56

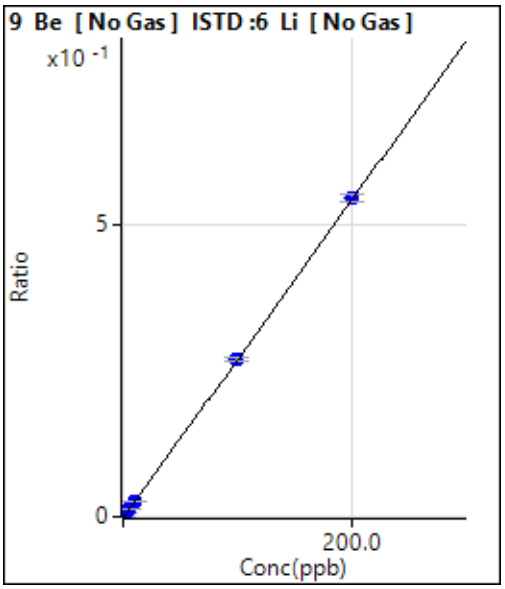
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	37730.40	0.0563	P	1.9	
2	☐	2.000	1.799	53819.05	0.0786	P	3.0	-10.1
3	☐	5.000	4.755	75939.85	0.1153	P	1.5	-4.9
4	☐	10.000	9.629	114860.54	0.1758	P	1.2	-3.7
5	☐	100.000	101.747	904309.91	1.3197	A	2.8	1.7
6	☐	200.000	199.153	1657050.03	2.5292	A	3.0	-0.4

y = 0.0124 * x + 0.0563
R = 0.9999
DL = 0.2614 ppb
BEC = 4.531 ppb

Weight: <None>
Min Conc: <None>

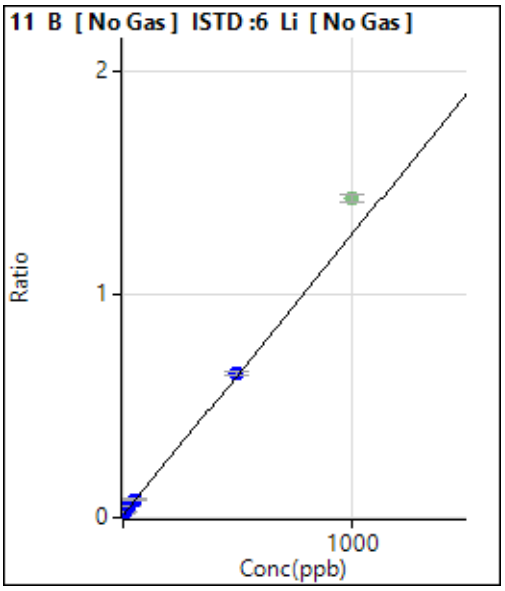


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0001	P	18.6	
2	☐	2.000	1.879	3535.47	0.0052	P	1.1	-6.1
3	☐	5.000	4.894	8796.16	0.0134	P	1.4	-2.1
4	☐	10.000	9.957	17716.22	0.0271	P	1.6	-0.4
5	☐	100.000	99.132	184695.47	0.2695	P	1.6	-0.9
6	☐	200.000	200.440	356998.94	0.5448	P	2.2	0.2

y = 0.0027 * x + 5.4519E-005
R = 1.0000
DL = 0.01118 ppb
BEC = 0.02006 ppb

Weight: <None>
Min Conc: <None>

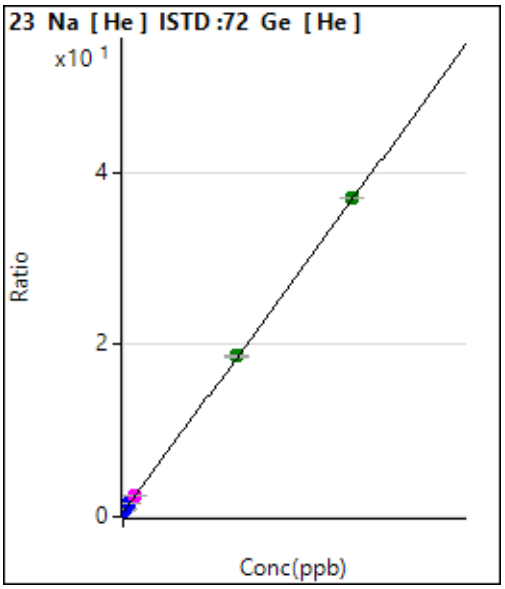
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12882.64	0.0192	P	2.5	
2	☐	10.000	8.415	20378.20	0.0298	P	1.9	-15.9
3	☐	25.000	23.533	32073.39	0.0487	P	1.5	-5.9
4	☐	50.000	49.599	53143.66	0.0814	P	2.7	-0.8
5	☐	500.000	500.145	442611.22	0.6459	P	2.9	0.0
6	☑	1000.000		936140.51	1.4288	A	2.8	

y = 0.0013 * x + 0.0192
R = 1.0000
DL = 1.172 ppb
BEC = 15.33 ppb

Weight: <None>
Min Conc: <None>

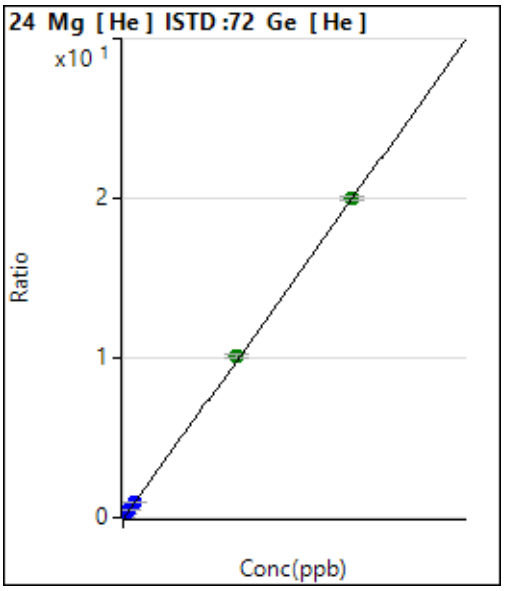


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230791.51	0.6813	P	0.4	
2	☐	200.000	171.583	340140.44	0.9923	P	1.2	-14.2
3	☐	500.000	450.459	501570.40	1.4978	P	1.1	-9.9
4	☐	1000.000	977.912	820148.48	2.4538	M	4.0	-2.2
5	☐	10000.00	9911.818	6354689.07	18.6465	A	1.1	-0.9
6	☐	20000.00	20046.71	12245754.4	37.0160	A	0.3	0.2

y = 0.0018 * x + 0.6813
R = 1.0000
DL = 4.646 ppb
BEC = 375.9 ppb

Weight: <None>
Min Conc: <None>

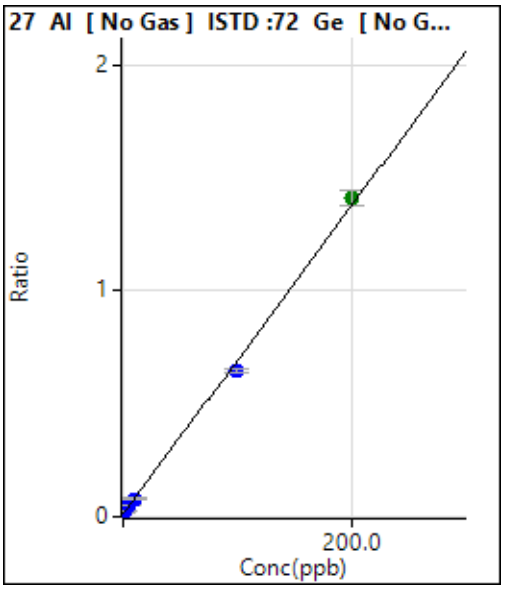
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	316.68	0.0009	P	28.7	
2	☐	200.000	185.497	64120.90	0.1871	P	2.8	-7.3
3	☐	500.000	476.543	160455.53	0.4791	P	0.5	-4.7
4	☐	1000.000	964.807	323922.24	0.9691	P	0.3	-3.5
5	☐	10000.00	10078.69	3446959.22	10.1144	A	2.1	0.8
6	☐	20000.00	19963.14	6627218.86	20.0330	A	0.8	-0.2

y = 0.0010 * x + 9.3527E-004
R = 1.0000
DL = 0.8024 ppb
BEC = 0.9321 ppb

Weight: <None>
Min Conc: <None>

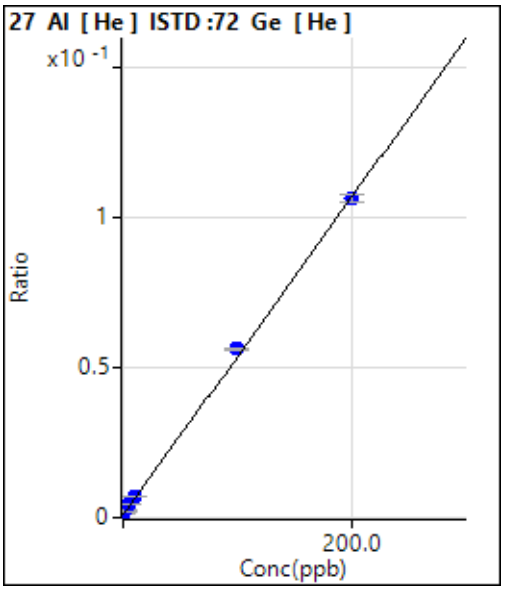


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20477.54	0.0192	P	4.4	
2	☐	2.000	1.454	32678.76	0.0291	P	3.1	-27.3
3	☐	5.000	4.925	57836.94	0.0528	P	2.3	-1.5
4	☐	10.000	8.945	84676.96	0.0802	P	2.8	-10.5
5	☐	100.000	92.157	711609.81	0.6477	P	3.3	-7.8
6	☐	200.000	203.981	1431879.93	1.4103	A	4.7	2.0

y = 0.0068 * x + 0.0192
R = 0.9990
DL = 0.3722 ppb
BEC = 2.819 ppb

Weight: <None>
Min Conc: <None>

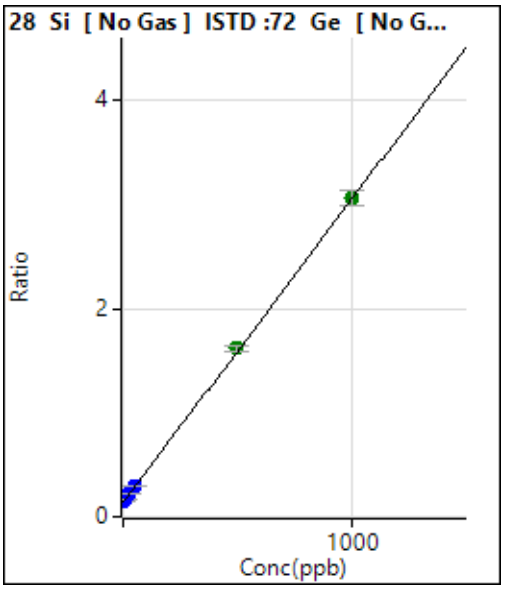
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	476.68	0.0014	P	10.6	
2	☐	2.000	1.716	793.37	0.0023	P	14.6	-14.2
3	☐	5.000	6.009	1536.78	0.0046	P	6.2	20.2
4	☐	10.000	10.921	2403.58	0.0072	P	4.3	9.2
5	☐	100.000	103.387	19133.39	0.0561	P	1.1	3.4
6	☐	200.000	198.238	35184.74	0.1064	P	2.3	-0.9

y = 5.2940E-004 * x + 0.0014
R = 0.9998
DL = 0.8476 ppb
BEC = 2.658 ppb

Weight: <None>
Min Conc: <None>

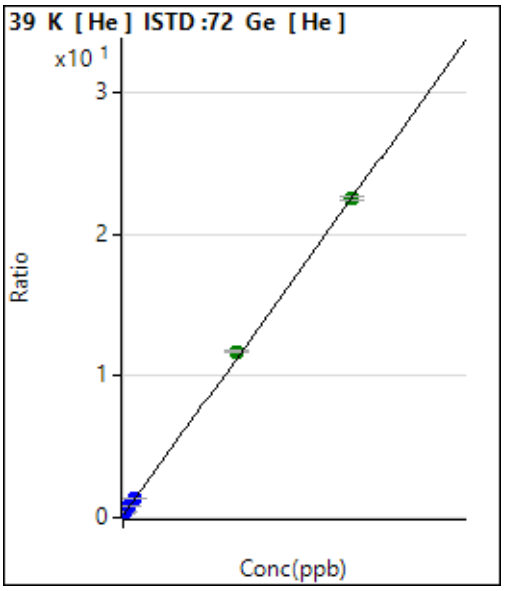


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	160765.18	0.1510	P	1.7	
2	☐	10.000	7.008	192241.55	0.1714	P	1.7	-29.9
3	☐	25.000	24.458	243444.90	0.2223	P	0.9	-2.2
4	☐	50.000	49.712	312162.91	0.2958	P	2.9	-0.6
5	☐	500.000	502.219	1773451.01	1.6142	A	3.3	0.4
6	☐	1000.000	998.948	3108594.33	3.0614	A	4.3	-0.1

y = 0.0029 * x + 0.1510
R = 1.0000
DL = 2.655 ppb
BEC = 51.83 ppb

Weight: <None>
Min Conc: <None>

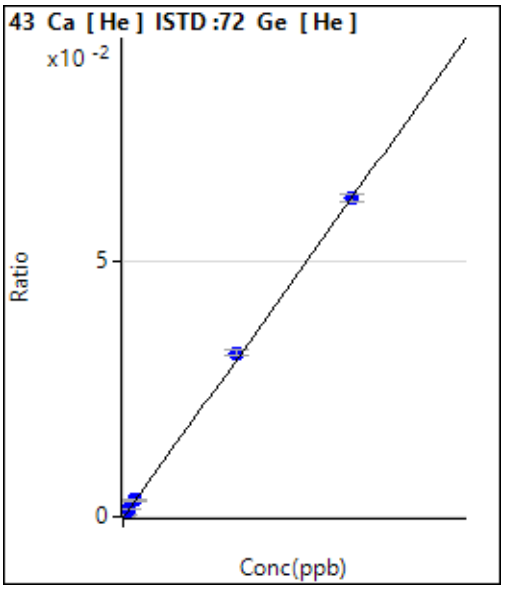
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	90065.66	0.2659	P	1.5	
2	☐	200.000	179.450	159937.67	0.4666	P	1.0	-10.3
3	☐	500.000	466.082	263610.33	0.7872	P	1.3	-6.8
4	☐	1000.000	950.000	444023.30	1.3284	P	1.1	-5.0
5	☐	10000.00	10209.39	3982095.46	11.6850	A	1.4	2.1
6	☐	20000.00	19898.85	7450688.22	22.5225	A	1.1	-0.5

y = 0.0011 * x + 0.2659
R = 0.9999
DL = 10.56 ppb
BEC = 237.7 ppb

Weight: <None>
Min Conc: <None>

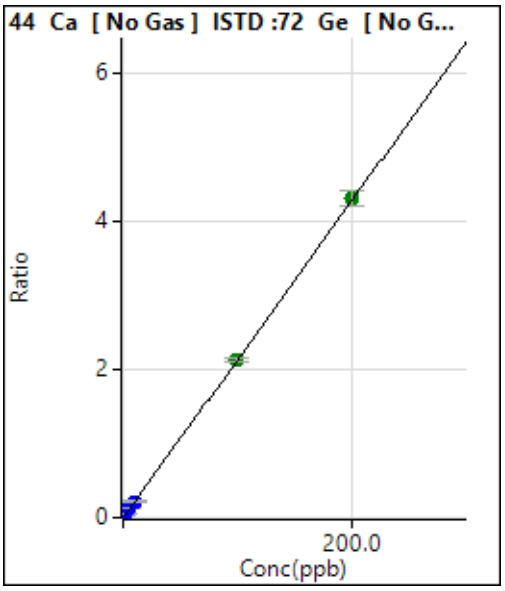


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0001	P	21.6	
2	☐	200.000	136.175	173.34	0.0005	P	14.4	-31.9
3	☐	500.000	479.578	530.02	0.0016	P	7.7	-4.1
4	☐	1000.000	1025.028	1100.05	0.0033	P	6.5	2.5
5	☐	10000.00	10191.35	10914.54	0.0320	P	3.7	1.9
6	☐	20000.00	19904.21	20669.11	0.0625	P	1.9	-0.5

y = 3.1351E-006 * x + 7.8713E-005
R = 0.9999
DL = 16.27 ppb
BEC = 25.11 ppb

Weight: <None>
Min Conc: <None>

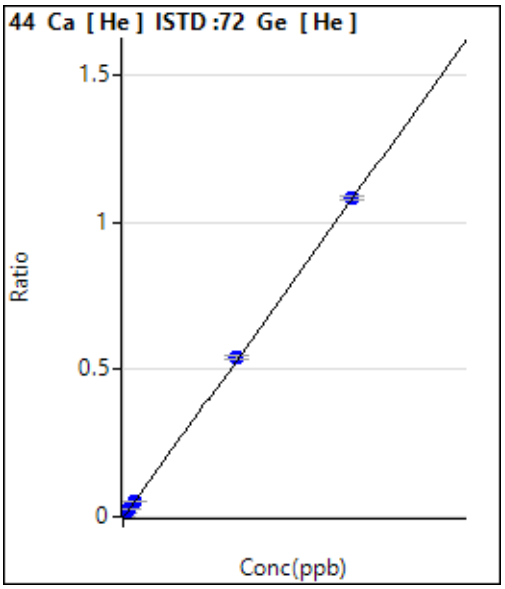
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18158.91	0.0171	P	1.7	
2	☐	2.000	1.796	62237.36	0.0555	P	1.7	-10.2
3	☐	5.000	4.718	129292.65	0.1180	P	0.7	-5.6
4	☐	10.000	9.490	232342.67	0.2202	P	3.3	-5.1
5	☐	100.000	98.755	2341846.01	2.1310	A	2.1	-1.2
6	☐	200.000	200.657	4378805.25	4.3124	A	4.2	0.3

y = 0.0214 * x + 0.0171
R = 1.0000
DL = 0.04012 ppb
BEC = 0.7967 ppb

Weight: <None>
Min Conc: <None>

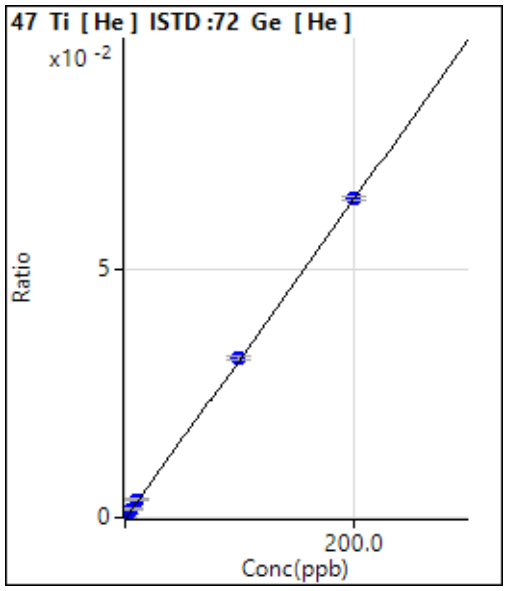


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	433.35	0.0013	P	5.6	
2	☐	200.000	194.347	4044.00	0.0118	P	5.8	-2.8
3	☐	500.000	493.274	9369.97	0.0280	P	0.7	-1.3
4	☐	1000.000	990.018	18339.14	0.0549	P	2.2	-1.0
5	☐	10000.00	9990.860	184733.80	0.5421	P	1.5	-0.1
6	☐	20000.00	20005.29	358652.37	1.0841	P	0.8	0.0

y = 5.4129E-005 * x + 0.0013
R = 1.0000
DL = 3.939 ppb
BEC = 23.63 ppb

Weight: <None>
Min Conc: <None>

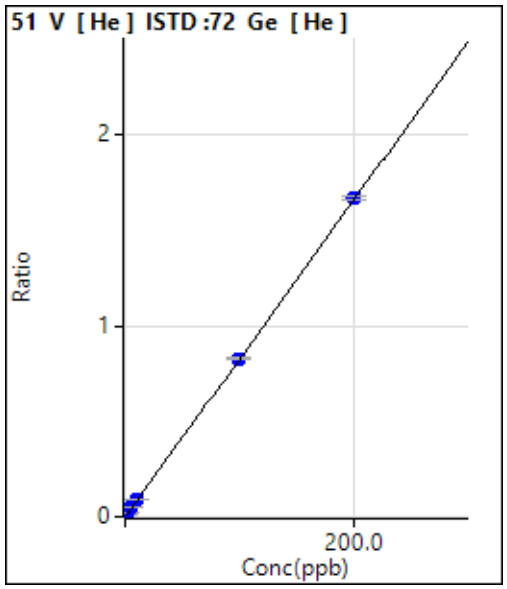
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	173.2	
2	☐	2.000	1.838	210.01	0.0006	P	4.7	-8.1
3	☐	5.000	5.246	573.35	0.0017	P	6.7	4.9
4	☐	10.000	11.030	1196.74	0.0036	P	7.3	10.3
5	☐	100.000	100.092	11014.61	0.0323	P	2.9	0.1
6	☐	200.000	199.898	21346.85	0.0645	P	0.9	-0.1

y = 3.2269E-004 * x + 1.9625E-005
R = 1.0000
DL = 0.316 ppb
BEC = 0.06082 ppb

Weight: <None>
Min Conc: <None>

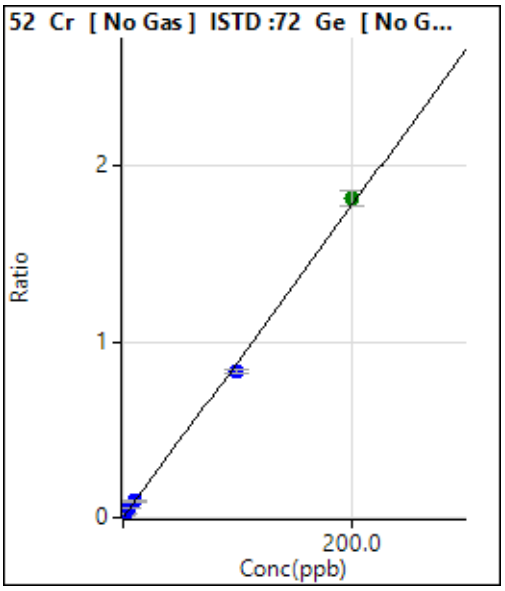


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2181.30	0.0064	P	4.8	
2	☐	2.000	1.908	7637.72	0.0223	P	1.6	-4.6
3	☐	5.000	4.857	15659.00	0.0468	P	1.7	-2.9
4	☐	10.000	9.831	29430.44	0.0880	P	1.0	-1.7
5	☐	100.000	99.158	282718.06	0.8296	P	1.3	-0.8
6	☐	200.000	200.434	552559.77	1.6703	P	1.2	0.2

y = 0.0083 * x + 0.0064
R = 1.0000
DL = 0.1123 ppb
BEC = 0.7756 ppb

Weight: <None>
Min Conc: <None>

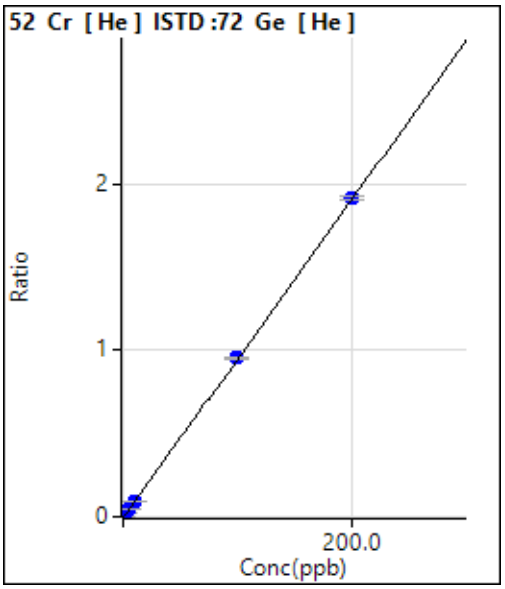
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9583.51	0.0090	P	6.6	
2	☐	2.000	1.761	27614.72	0.0246	P	2.5	-12.0
3	☐	5.000	4.553	54097.07	0.0494	P	0.5	-8.9
4	☐	10.000	9.565	98986.12	0.0939	P	4.9	-4.3
5	☐	100.000	92.775	914108.08	0.8320	P	3.1	-7.2
6	☐	200.000	203.648	1843297.47	1.8155	A	4.6	1.8

y = 0.0089 * x + 0.0090
R = 0.9991
DL = 0.2016 ppb
BEC = 1.015 ppb

Weight: <None>
Min Conc: <None>

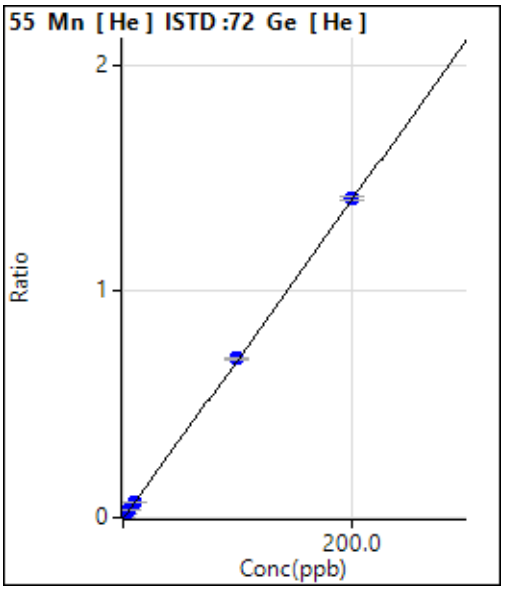


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1030.06	0.0030	P	2.4	
2	☐	2.000	1.875	7188.67	0.0210	P	1.5	-6.2
3	☐	5.000	4.847	16540.17	0.0494	P	1.7	-3.1
4	☐	10.000	9.852	32505.55	0.0972	P	1.0	-1.5
5	☐	100.000	99.641	325728.96	0.9558	P	1.1	-0.4
6	☐	200.000	200.192	634243.84	1.9173	P	1.2	0.1

y = 0.0096 * x + 0.0030
R = 1.0000
DL = 0.02331 ppb
BEC = 0.318 ppb

Weight: <None>
Min Conc: <None>

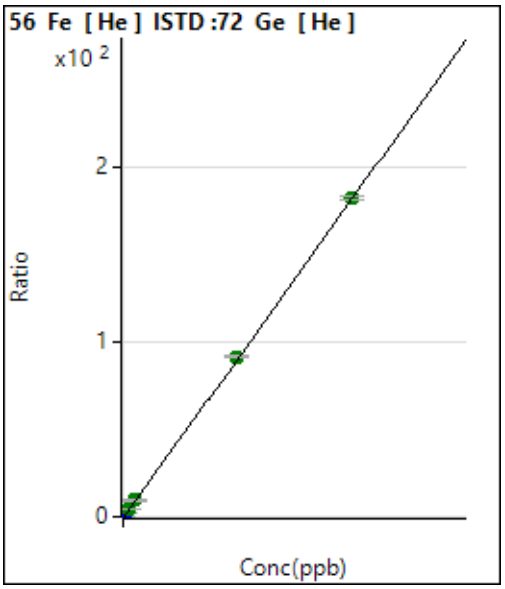
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	416.68	0.0012	P	20.0	
2	☐	2.000	1.970	5177.73	0.0151	P	3.5	-1.5
3	☐	5.000	4.968	12132.26	0.0362	P	3.1	-0.6
4	☐	10.000	9.881	23674.17	0.0708	P	2.0	-1.2
5	☐	100.000	99.510	239273.13	0.7021	P	1.3	-0.5
6	☐	200.000	200.252	467009.84	1.4117	P	0.8	0.1

y = 0.0070 * x + 0.0012
R = 1.0000
DL = 0.1049 ppb
BEC = 0.1746 ppb

Weight: <None>
Min Conc: <None>

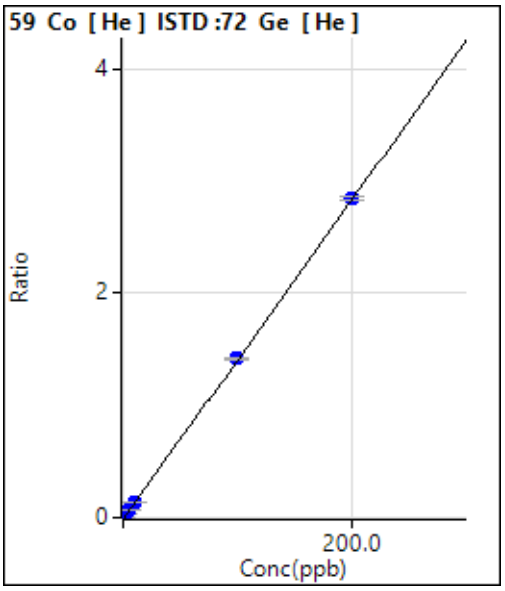


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10324.05	0.0305	P	2.3	
2	☐	200.000	186.331	594274.42	1.7337	P	1.9	-6.8
3	☐	500.000	515.097	1587020.24	4.7390	A	0.9	3.0
4	☐	1000.000	1023.570	3137494.12	9.3870	A	1.6	2.4
5	☐	10000.00	10021.25	31228539.5	91.6358	A	1.4	0.2
6	☐	20000.00	19987.95	60455059.1	182.742	A	0.8	-0.1

y = 0.0091 * x + 0.0305
R = 1.0000
DL = 0.2263 ppb
BEC = 3.334 ppb

Weight: <None>
Min Conc: <None>

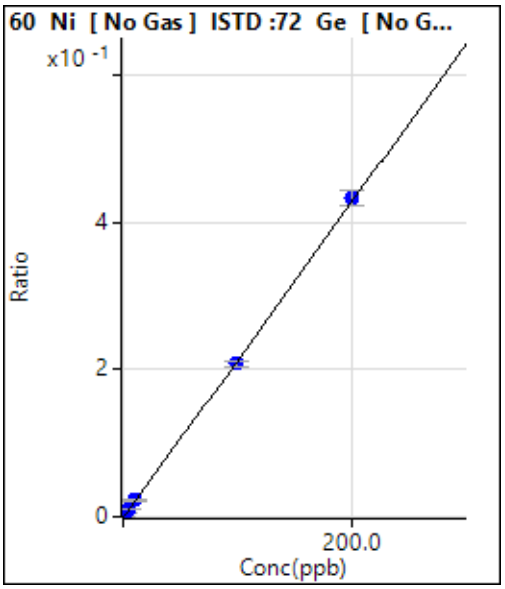
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0001	P	50.2	
2	☐	2.000	1.911	9340.01	0.0272	P	4.3	-4.5
3	☐	5.000	4.844	23099.87	0.0690	P	2.4	-3.1
4	☐	10.000	9.801	46626.79	0.1395	P	1.2	-2.0
5	☐	100.000	99.591	482836.23	1.4168	P	1.0	-0.4
6	☐	200.000	200.219	942255.48	2.8483	P	0.8	0.1

y = 0.0142 * x + 5.9088E-005
R = 1.0000
DL = 0.006253 ppb
BEC = 0.004154 ppb

Weight: <None>
Min Conc: <None>

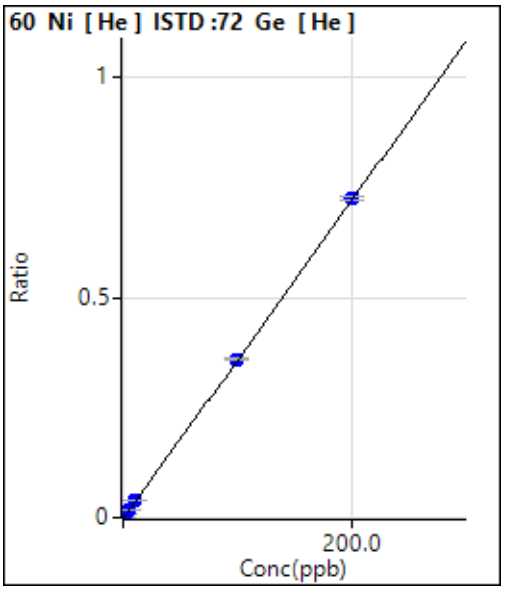


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	773.37	0.0007	P	8.7	
2	☐	2.000	1.742	5004.34	0.0045	P	2.0	-12.9
3	☐	5.000	4.680	11785.28	0.0108	P	3.3	-6.4
4	☐	10.000	10.021	23437.21	0.0222	P	3.0	0.2
5	☐	100.000	96.565	228288.69	0.2078	P	2.8	-3.4
6	☐	200.000	201.727	439871.02	0.4332	P	4.6	0.9

y = 0.0021 * x + 7.2578E-004
R = 0.9998
DL = 0.08832 ppb
BEC = 0.3385 ppb

Weight: <None>
Min Conc: <None>

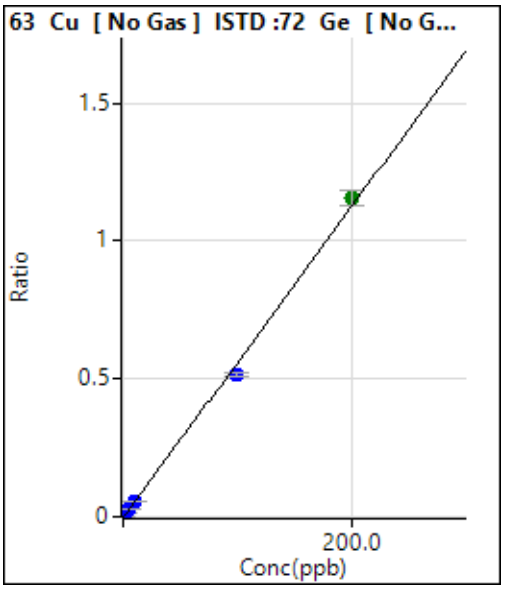
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	223.34	0.0007	P	18.7	
2	☐	2.000	1.925	2610.30	0.0076	P	2.6	-3.8
3	☐	5.000	4.958	6221.53	0.0186	P	4.5	-0.8
4	☐	10.000	10.179	12515.95	0.0374	P	1.0	1.8
5	☐	100.000	99.145	122328.82	0.3589	P	0.8	-0.9
6	☐	200.000	200.421	239817.44	0.7249	P	1.2	0.2

y = 0.0036 * x + 6.5930E-004
R = 1.0000
DL = 0.1022 ppb
BEC = 0.1824 ppb

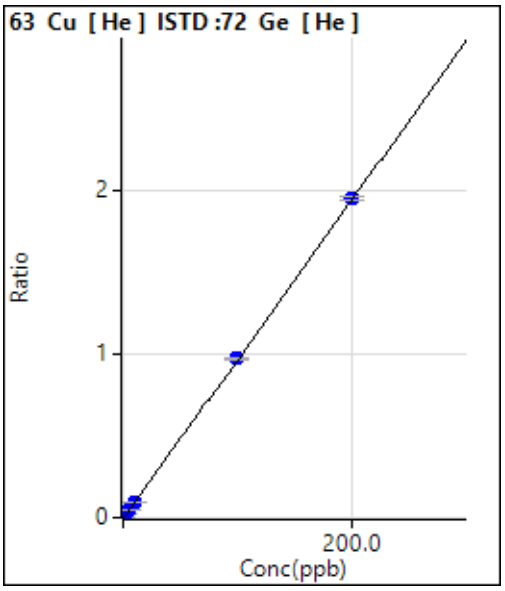
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2023.53	0.0019	P	5.2	
2	☐	2.000	1.909	14214.29	0.0127	P	4.1	-4.5
3	☐	5.000	4.456	29629.29	0.0270	P	1.6	-10.9
4	☐	10.000	9.287	57324.30	0.0543	P	2.5	-7.1
5	☐	100.000	91.199	567641.61	0.5166	P	3.0	-8.8
6	☐	200.000	204.450	1173628.76	1.1558	A	4.3	2.2

y = 0.0056 * x + 0.0019
R = 0.9987
DL = 0.05259 ppb
BEC = 0.3368 ppb

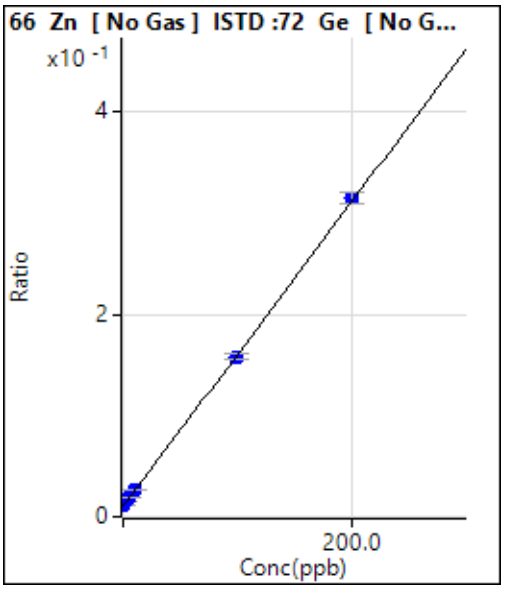
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	980.06	0.0029	P	15.3	
2	☐	2.000	1.961	7555.57	0.0220	P	3.1	-2.0
3	☐	5.000	4.816	16720.57	0.0499	P	0.5	-3.7
4	☐	10.000	9.869	33184.16	0.0993	P	0.5	-1.3
5	☐	100.000	99.522	332226.26	0.9748	P	0.9	-0.5
6	☐	200.000	200.251	647925.77	1.9586	P	0.9	0.1

y = 0.0098 * x + 0.0029
R = 1.0000
DL = 0.1364 ppb
BEC = 0.2963 ppb

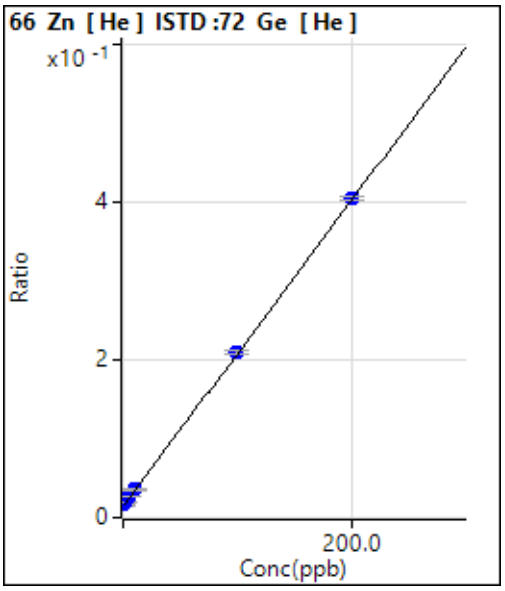
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12515.97	0.0118	P	3.3	
2	☐	2.000	1.971	16506.93	0.0147	P	0.6	-1.5
3	☐	5.000	4.571	20402.35	0.0186	P	2.4	-8.6
4	☐	10.000	9.903	28119.50	0.0266	P	3.3	-1.0
5	☐	100.000	97.093	173345.95	0.1578	P	3.2	-2.9
6	☐	200.000	201.469	319618.79	0.3148	P	4.1	0.7

y = 0.0015 * x + 0.0118
R = 0.9999
DL = 0.7632 ppb
BEC = 7.815 ppb

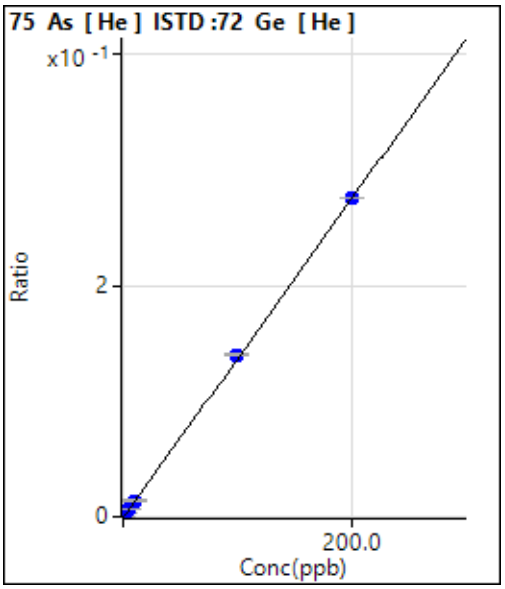
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5517.90	0.0163	P	6.4	
2	☐	2.000	1.584	6638.42	0.0194	P	6.3	-20.8
3	☐	5.000	4.932	8666.24	0.0259	P	1.3	-1.4
4	☐	10.000	9.972	11922.08	0.0357	P	4.2	-0.3
5	☐	100.000	99.664	71571.93	0.2100	P	1.3	-0.3
6	☐	200.000	200.175	134111.09	0.4054	P	1.3	0.1

y = 0.0019 * x + 0.0163
R = 1.0000
DL = 1.609 ppb
BEC = 8.381 ppb

Weight: <None>
Min Conc: <None>

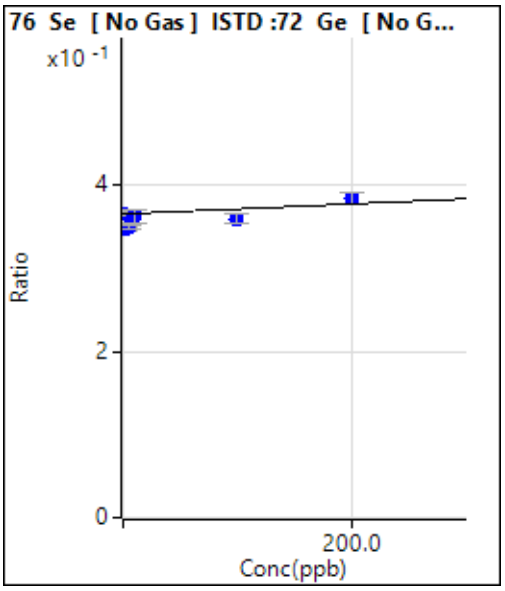


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	115.56	0.0003	P	17.9	
2	☐	2.000	1.982	1054.49	0.0031	P	3.9	-0.9
3	☐	5.000	4.974	2413.56	0.0072	P	0.8	-0.5
4	☐	10.000	9.849	4657.49	0.0139	P	2.7	-1.5
5	☐	100.000	100.976	47613.54	0.1397	P	1.1	1.0
6	☐	200.000	199.521	91219.13	0.2757	P	0.3	-0.2

y = 0.0014 * x + 3.4123E-004
R = 1.0000
DL = 0.1324 ppb
BEC = 0.2472 ppb

Weight: <None>
Min Conc: <None>

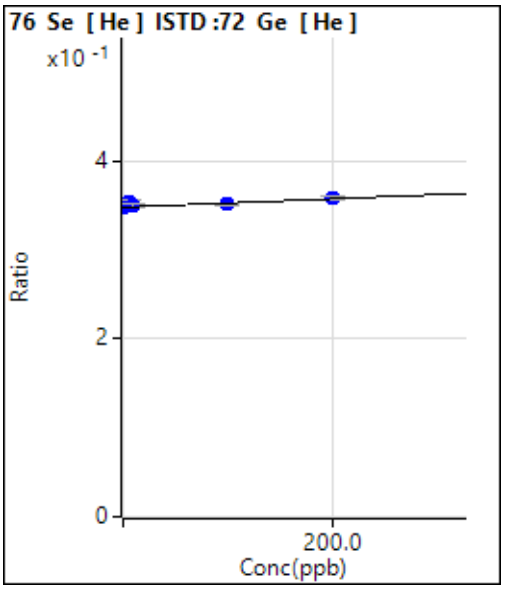
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	389615.57	0.3659	P	1.5	
2	☐	2.000	-307.857	389148.84	0.3470	P	1.2	-15492.
3	☐	5.000	-261.349	383167.95	0.3498	P	1.3	-5327.0
4	☐	10.000	-43.103	383238.18	0.3633	P	4.1	-531.0
5	☐	100.000	-90.749	395932.68	0.3604	P	3.0	-190.7
6	☐	200.000	307.787	390915.79	0.3849	P	3.3	53.9

y = 6.1562E-005 * x + 0.3659
R = 0.7903
DL = 265.8 ppb
BEC = 5944 ppb

Weight: <None>
Min Conc: <None>

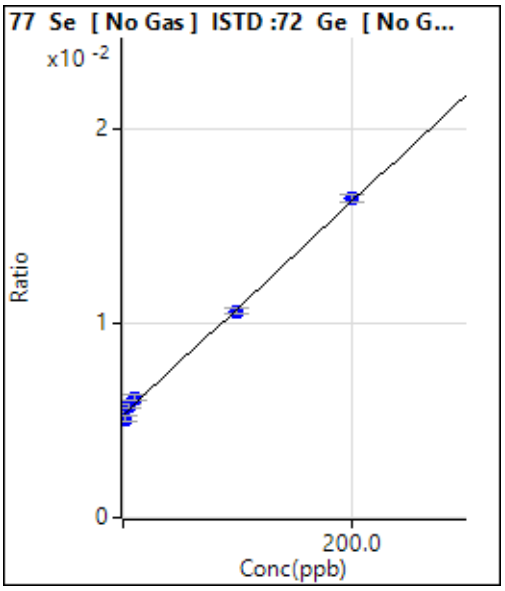


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	117895.22	0.3480	P	0.6	
2	☐	2.000	79.129	120602.08	0.3518	P	0.9	3856.5
3	☐	5.000	130.345	118651.35	0.3543	P	1.3	2506.9
4	☐	10.000	24.896	116728.09	0.3492	P	1.0	149.0
5	☐	100.000	81.283	119939.62	0.3519	P	0.6	-18.7
6	☐	200.000	204.709	118396.13	0.3579	P	1.2	2.4

y = 4.8025E-005 * x + 0.3480
R = 0.7505
DL = 123.2 ppb
BEC = 7247 ppb

Weight: <None>
Min Conc: <None>

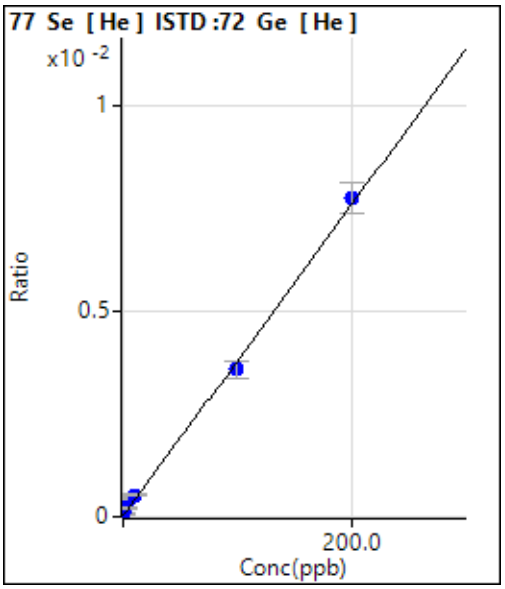
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5731.34	0.0054	P	6.6	
2	☐	2.000	-5.873	5678.00	0.0051	P	6.1	-393.7
3	☐	5.000	6.968	6314.92	0.0058	P	3.7	39.4
4	☐	10.000	14.585	6521.70	0.0062	P	5.1	45.8
5	☐	100.000	95.968	11695.24	0.0106	P	2.0	-4.0
6	☐	200.000	201.816	16697.29	0.0164	P	2.6	0.9

y = 5.4750E-005 * x + 0.0054
R = 0.9985
DL = 19.4 ppb
BEC = 98.36 ppb

Weight: <None>
Min Conc: <None>

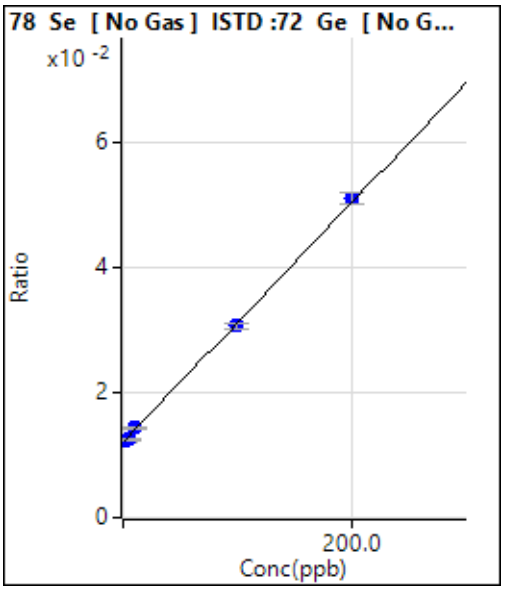


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0001	P	50.1	
2	☐	2.000	3.832	70.00	0.0002	P	14.3	91.6
3	☐	5.000	10.010	146.67	0.0004	P	16.2	100.2
4	☐	10.000	12.126	173.33	0.0005	P	8.2	21.3
5	☐	100.000	92.962	1220.08	0.0036	P	10.8	-7.0
6	☐	200.000	203.269	2566.96	0.0078	P	9.1	1.6

y = 3.7879E-005 * x + 5.9053E-005
R = 0.9987
DL = 2.344 ppb
BEC = 1.559 ppb

Weight: <None>
Min Conc: <None>

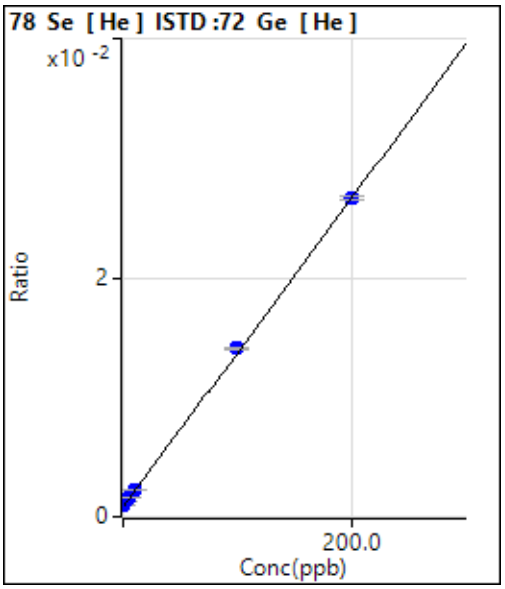
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13160.00	0.0124	P	6.2	
2	☐	2.000	-1.167	13610.42	0.0121	P	3.7	-158.3
3	☐	5.000	0.648	13673.81	0.0125	P	2.2	-87.0
4	☐	10.000	10.616	15182.08	0.0144	P	2.8	6.2
5	☐	100.000	95.448	33599.01	0.0306	P	3.4	-4.6
6	☐	200.000	202.386	51789.70	0.0510	P	4.1	1.2

y = 1.9091E-004 * x + 0.0124
R = 0.9995
DL = 12.11 ppb
BEC = 64.74 ppb

Weight: <None>
Min Conc: <None>

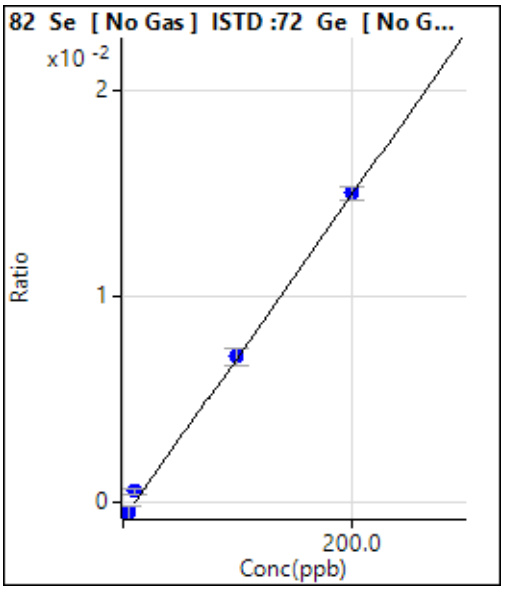


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	327.34	0.0010	P	7.1	
2	☐	2.000	2.067	422.68	0.0012	P	1.9	3.3
3	☐	5.000	5.223	549.34	0.0016	P	3.4	4.5
4	☐	10.000	10.128	760.02	0.0023	P	0.8	1.3
5	☐	100.000	101.812	4808.87	0.0141	P	1.3	1.8
6	☐	200.000	199.081	8822.23	0.0267	P	0.7	-0.5

y = 1.2910E-004 * x + 9.6621E-004
R = 0.9999
DL = 1.586 ppb
BEC = 7.484 ppb

Weight: <None>
Min Conc: <None>

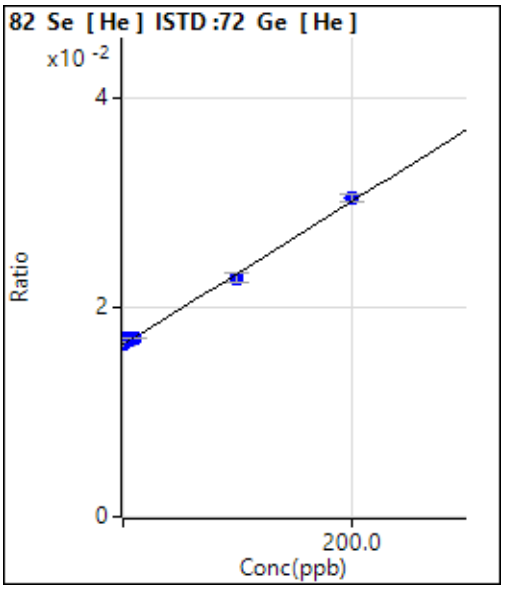
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-796.78	-0.0007	P	-54.8	
2	☐	2.000	2.169	-649.43	-0.0006	P	-141.	8.4
3	☐	5.000	3.266	-537.49	-0.0005	P	-106.	-34.7
4	☐	10.000	16.138	560.90	0.0005	P	51.3	61.4
5	☐	100.000	99.273	7795.94	0.0071	P	12.3	-0.7
6	☐	200.000	200.098	15287.09	0.0150	P	4.1	0.0

y = 7.8863E-005 * x - 7.4756E-004
R = 0.9994
DL = 15.58 ppb
BEC = -9.479 ppb

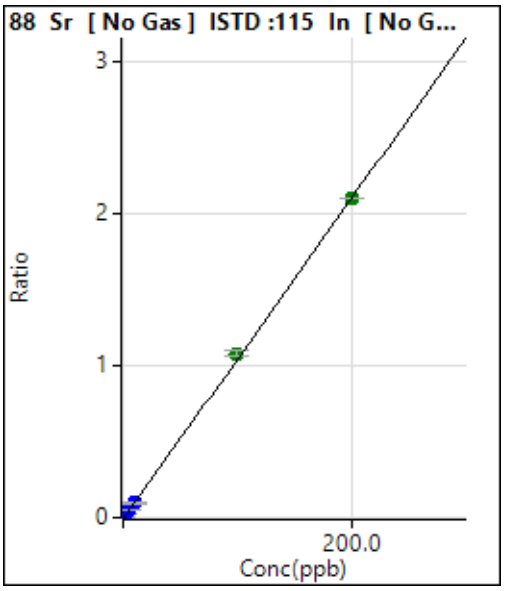
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5591.27	0.0165	P	2.3	
2	☐	2.000	8.706	5861.43	0.0171	P	2.1	335.3
3	☐	5.000	4.702	5634.62	0.0168	P	2.3	-6.0
4	☐	10.000	8.208	5704.63	0.0171	P	0.5	-17.9
5	☐	100.000	92.368	7775.73	0.0228	P	4.3	-7.6
6	☐	200.000	203.846	10070.59	0.0304	P	3.0	1.9

y = 6.8344E-005 * x + 0.0165
R = 0.9982
DL = 16.75 ppb
BEC = 241.5 ppb

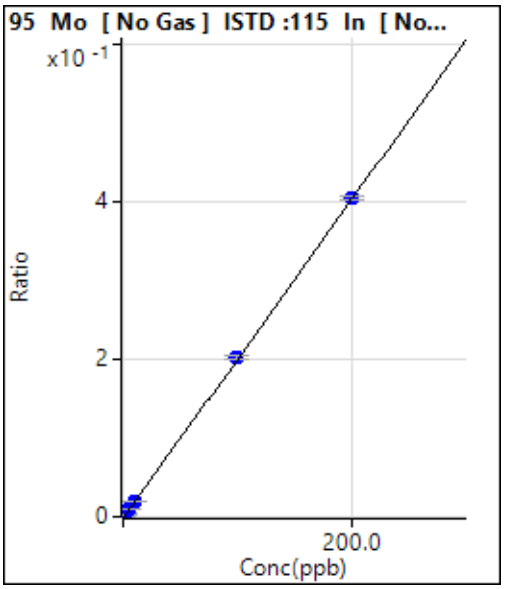
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	653.36	0.0005	P	5.1	
2	☐	2.000	1.822	27207.87	0.0197	P	2.5	-8.9
3	☐	5.000	4.819	69945.90	0.0514	P	2.4	-3.6
4	☐	10.000	8.984	130545.50	0.0954	P	1.1	-10.2
5	☐	100.000	102.284	1444761.23	1.0809	A	2.9	2.3
6	☐	200.000	198.915	2753242.46	2.1016	A	0.6	-0.5

y = 0.0106 * x + 4.8044E-004
R = 0.9999
DL = 0.007022 ppb
BEC = 0.04548 ppb

Weight: <None>
Min Conc: <None>

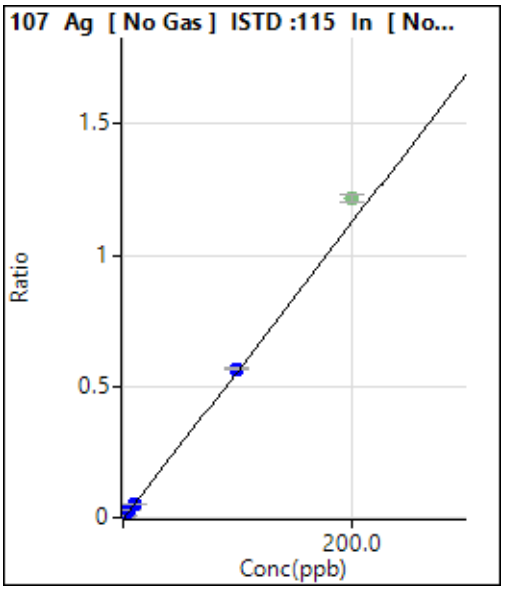


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	86.6	
2	☐	2.000	1.824	5111.09	0.0037	P	6.3	-8.8
3	☐	5.000	4.794	13236.83	0.0097	P	1.3	-4.1
4	☐	10.000	9.496	26353.07	0.0193	P	2.0	-5.0
5	☐	100.000	100.004	270914.09	0.2027	P	1.4	0.0
6	☐	200.000	200.030	531001.28	0.4053	P	1.3	0.0

y = 0.0020 * x + 9.7236E-006
R = 1.0000
DL = 0.01247 ppb
BEC = 0.004799 ppb

Weight: <None>
Min Conc: <None>

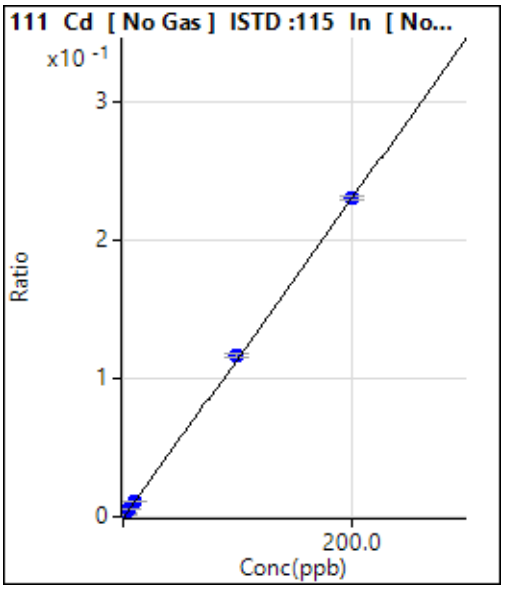
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0002	P	40.0	
2	☐	2.000	1.859	14704.99	0.0107	P	3.3	-7.1
3	☐	5.000	4.657	36009.26	0.0265	P	2.0	-6.9
4	☐	10.000	9.403	72890.65	0.0533	P	1.4	-6.0
5	☐	100.000	100.080	755480.59	0.5652	P	1.4	0.1
6	☑	200.000		1593637.32	1.2165	A	2.1	

y = 0.0056 * x + 1.6899E-004
R = 1.0000
DL = 0.03594 ppb
BEC = 0.02993 ppb

Weight: <None>
Min Conc: <None>

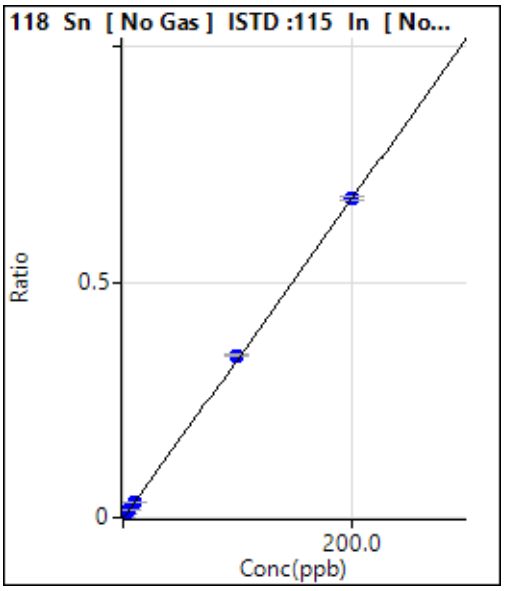


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.906	3040.41	0.0022	P	13.7	-4.7
3	☐	5.000	4.614	7268.79	0.0053	P	7.6	-7.7
4	☐	10.000	9.821	15559.44	0.0114	P	4.7	-1.8
5	☐	100.000	101.002	156297.13	0.1169	P	2.0	1.0
6	☐	200.000	199.518	302586.33	0.2310	P	1.0	-0.2

y = 0.0012 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

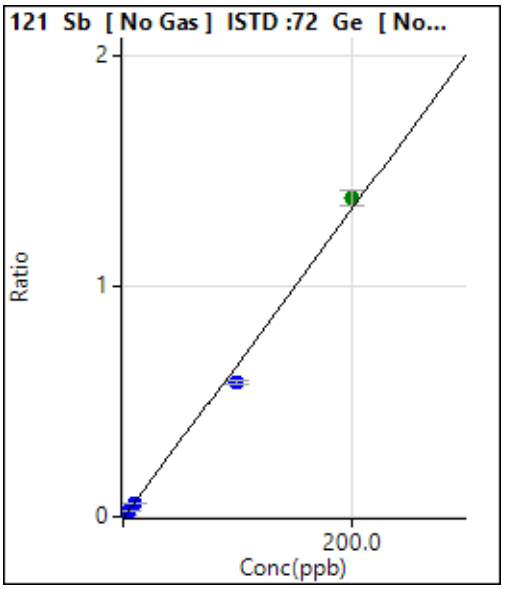
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1216.75	0.0009	P	5.3	
2	☐	2.000	1.889	10077.34	0.0073	P	3.3	-5.5
3	☐	5.000	4.597	22459.55	0.0165	P	0.2	-8.1
4	☐	10.000	9.190	43923.72	0.0321	P	0.9	-8.1
5	☐	100.000	101.196	460443.38	0.3444	P	1.3	1.2
6	☐	200.000	199.454	888216.26	0.6780	P	0.7	-0.3

y = 0.0034 * x + 8.9381E-004
R = 1.0000
DL = 0.0416 ppb
BEC = 0.2633 ppb

Weight: <None>
Min Conc: <None>

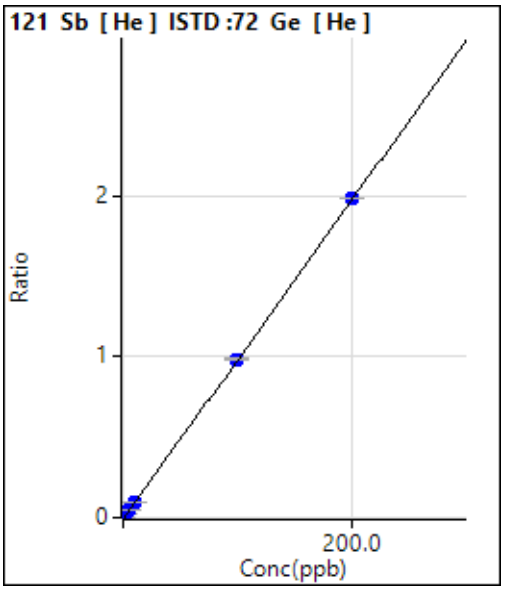


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	300.01	0.0003	P	28.5	
2	☐	2.000	1.647	12686.36	0.0113	P	7.0	-17.7
3	☐	5.000	4.146	30726.32	0.0281	P	2.0	-17.1
4	☐	10.000	8.698	61785.72	0.0586	P	3.6	-13.0
5	☐	100.000	87.172	642005.95	0.5843	P	2.7	-12.8
6	☐	200.000	206.504	1404987.27	1.3837	A	4.7	3.3

y = 0.0067 * x + 2.8121E-004
R = 0.9972
DL = 0.03585 ppb
BEC = 0.04198 ppb

Weight: <None>
Min Conc: <None>

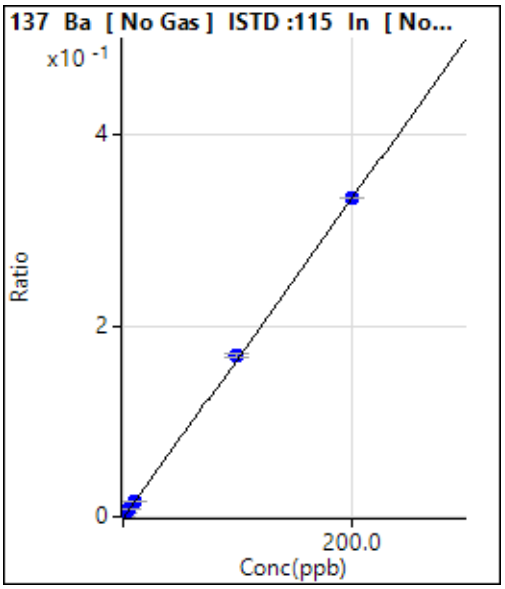
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	193.34	0.0006	P	14.8	
2	☐	2.000	1.825	6388.34	0.0186	P	3.3	-8.7
3	☐	5.000	4.739	15899.89	0.0475	P	2.2	-5.2
4	☐	10.000	9.532	31718.67	0.0949	P	3.8	-4.7
5	☐	100.000	99.483	335743.37	0.9852	P	1.5	-0.5
6	☐	200.000	200.290	655992.92	1.9829	P	0.5	0.1

y = 0.0099 * x + 5.7065E-004
R = 1.0000
DL = 0.02556 ppb
BEC = 0.05766 ppb

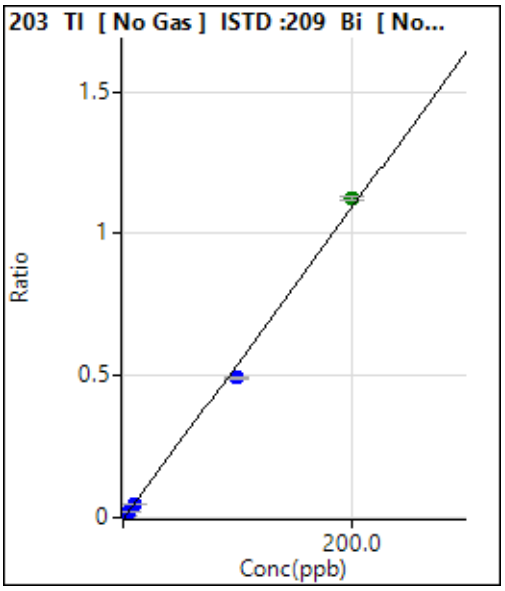
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.01	0.0001	P	26.4	
2	☐	2.000	1.942	4614.25	0.0033	P	5.1	-2.9
3	☐	5.000	4.948	11401.88	0.0084	P	4.2	-1.0
4	☐	10.000	9.331	21508.06	0.0157	P	2.6	-6.7
5	☐	100.000	100.886	225869.41	0.1690	P	2.0	0.9
6	☐	200.000	199.592	437828.10	0.3342	P	0.6	-0.2

y = 0.0017 * x + 9.5502E-005
R = 1.0000
DL = 0.0452 ppb
BEC = 0.05705 ppb

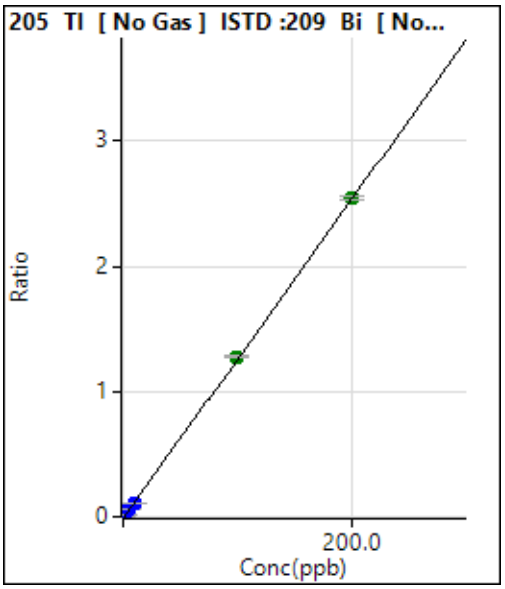
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	50.7	
2	☐	2.000	1.658	12923.58	0.0091	P	4.3	-17.1
3	☐	5.000	4.180	32135.16	0.0229	P	2.2	-16.4
4	☐	10.000	8.226	63789.30	0.0451	P	0.3	-17.7
5	☐	100.000	89.840	681766.19	0.4925	P	1.5	-10.2
6	☐	200.000	205.193	1501543.00	1.1249	A	1.1	2.6

y = 0.0055 * x + 1.4469E-005
R = 0.9983
DL = 0.004018 ppb
BEC = 0.002639 ppb

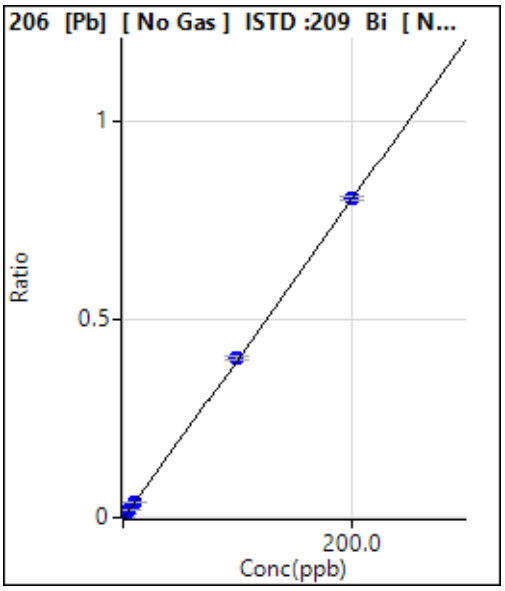
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0000	P	17.5	
2	☐	2.000	1.717	31082.39	0.0219	P	1.7	-14.1
3	☐	5.000	4.271	76266.31	0.0544	P	1.3	-14.6
4	☐	10.000	8.723	157097.24	0.1111	P	0.9	-12.8
5	☐	100.000	100.336	1768441.07	1.2776	A	1.6	0.3
6	☐	200.000	199.917	3397792.45	2.5456	A	1.1	0.0

y = 0.0127 * x + 2.6458E-005
R = 1.0000
DL = 0.001088 ppb
BEC = 0.002078 ppb

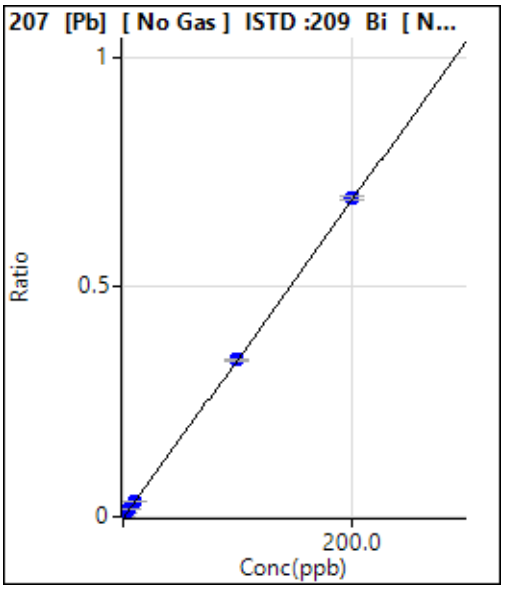
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	140.00	0.0001	P	24.5	
2	☐	2.000	1.937	11248.57	0.0079	P	3.4	-3.1
3	☐	5.000	4.636	26374.87	0.0188	P	2.3	-7.3
4	☐	10.000	9.490	54321.79	0.0384	P	0.5	-5.1
5	☐	100.000	100.315	560714.52	0.4051	P	2.0	0.3
6	☐	200.000	199.878	1077258.21	0.8071	P	1.3	-0.1

y = 0.0040 * x + 1.0074E-004
R = 1.0000
DL = 0.0183 ppb
BEC = 0.02495 ppb

Weight: <None>
Min Conc: <None>

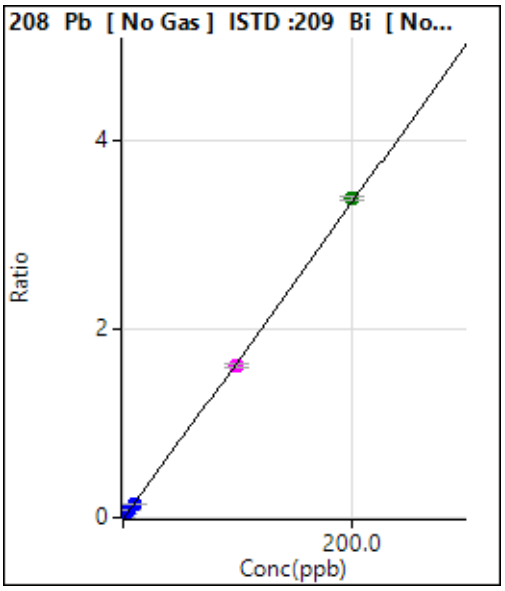


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	106.67	0.0001	P	21.4	
2	☐	2.000	1.915	9507.12	0.0067	P	4.8	-4.2
3	☐	5.000	4.602	22397.17	0.0160	P	2.9	-8.0
4	☐	10.000	9.393	46005.05	0.0325	P	1.9	-6.1
5	☐	100.000	98.683	472119.56	0.3411	P	1.4	-1.3
6	☐	200.000	200.700	925798.76	0.6936	P	1.1	0.3

y = 0.0035 * x + 7.6762E-005
R = 1.0000
DL = 0.01423 ppb
BEC = 0.02221 ppb

Weight: <None>
Min Conc: <None>

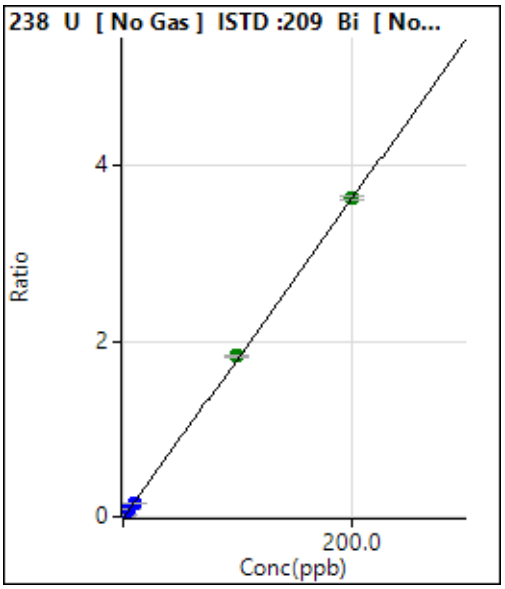
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	616.68	0.0004	P	7.6	
2	☐	2.000	1.819	43937.56	0.0309	P	2.1	-9.0
3	☐	5.000	4.478	105849.36	0.0755	P	1.4	-10.4
4	☐	10.000	9.050	215189.95	0.1522	P	0.6	-9.5
5	☐	100.000	96.161	2232387.98	1.6127	M	1.5	-3.8
6	☐	200.000	201.982	4520443.14	3.3868	A	1.6	1.0

y = 0.0168 * x + 4.4394E-004
R = 0.9998
DL = 0.006029 ppb
BEC = 0.02648 ppb

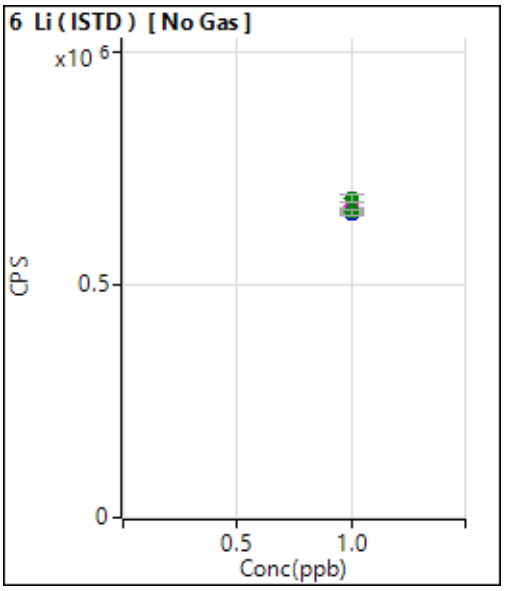
Weight: <None>
Min Conc: <None>



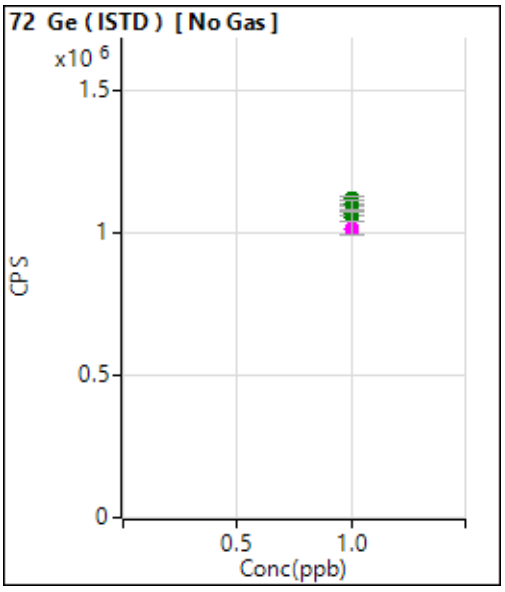
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	44.9	
2	☐	2.000	1.746	45053.23	0.0317	P	1.3	-12.7
3	☐	5.000	4.392	111879.02	0.0798	P	1.9	-12.2
4	☐	10.000	8.879	228172.47	0.1614	P	0.6	-11.2
5	☐	100.000	100.790	2535315.64	1.8316	A	1.1	0.8
6	☐	200.000	199.679	4843356.07	3.6286	A	1.4	-0.2

y = 0.0182 * x + 9.6416E-006
R = 1.0000
DL = 0.0007149 ppb
BEC = 0.0005306 ppb

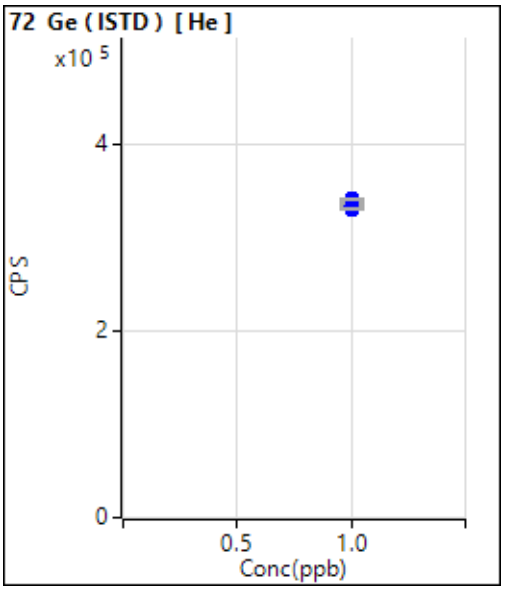
Weight: <None>
Min Conc: <None>



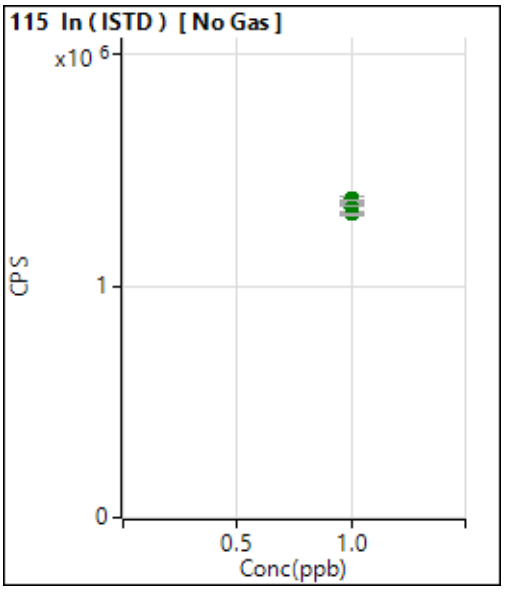
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		670806.57		M	2.3	
2	☐	1.000		685146.84		M	2.9	
3	☐	1.000		658640.95		P	0.1	
4	☐	1.000		653287.19		P	0.6	
5	☐	1.000		685499.72		A	2.0	
6	☐	1.000		655435.47		A	2.1	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1064832.80		A	1.3	
2	☐	1.000		1121595.69		A	0.9	
3	☐	1.000		1095296.75		A	0.7	
4	☐	1.000		1055891.36		A	3.4	
5	☐	1.000		1099376.75		A	3.0	
6	☐	1.000		1016593.71		M	4.1	

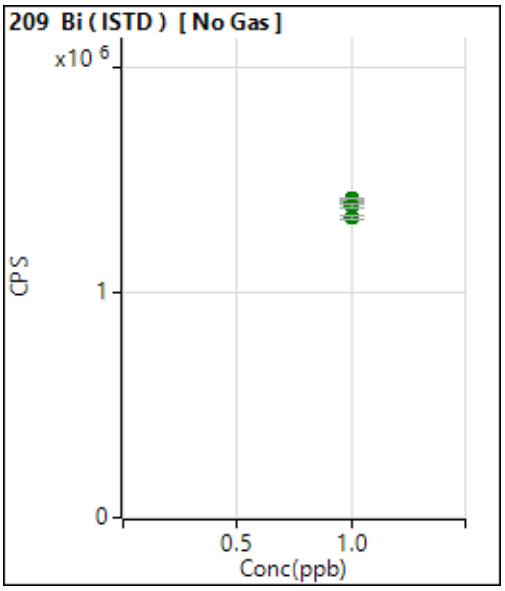


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		338750.20		P	0.3	
2	☐	1.000		342790.06		P	0.5	
3	☐	1.000		334894.32		P	0.6	
4	☐	1.000		334264.68		P	0.9	
5	☐	1.000		340806.65		P	0.6	
6	☐	1.000		330825.84		P	0.6	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1360629.72		A	1.9	
2	☐	1.000		1379610.82		A	1.6	
3	☐	1.000		1361230.28		A	1.2	
4	☐	1.000		1368776.61		A	0.7	
5	☐	1.000		1336992.47		A	1.7	
6	☐	1.000		1310100.00		A	0.9	

Calibration for 212_ICV.d



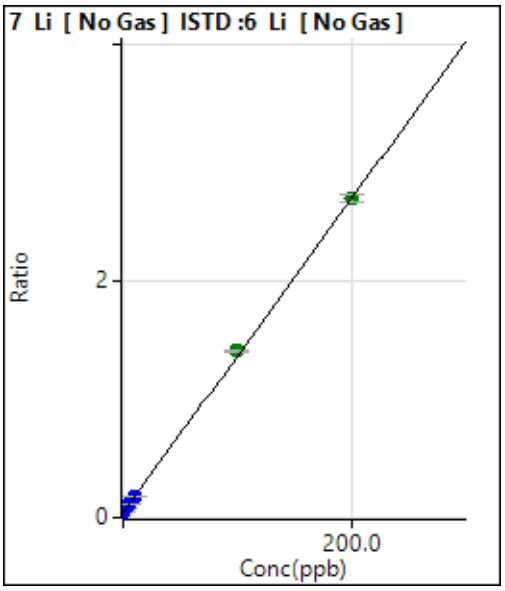
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1388985.61		A	2.0	
2	☐	1.000		1419790.14		A	0.4	
3	☐	1.000		1401715.45		A	1.3	
4	☐	1.000		1414056.38		A	0.8	
5	☐	1.000		1384389.30		A	1.6	
6	☐	1.000		1334929.82		A	1.6	

Calibration for 183_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072022A.b\
Analysis File: 072022A.batch.bin
DA Date-Time: 07/20/2022 21:20:44
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	175CALB.d	CAL BLK	07/20/2022 20:02:19
2	176CALS.d	2/10/200	07/20/2022 20:04:27
3	177CALS.d	5/25/500	07/20/2022 20:06:34
4	178CALS.d	10/50/100	07/20/2022 20:08:41
5	179CALS.d	100/500/10K	07/20/2022 20:10:48
6	180CALS.d	200/1000/20K	07/20/2022 20:12:52

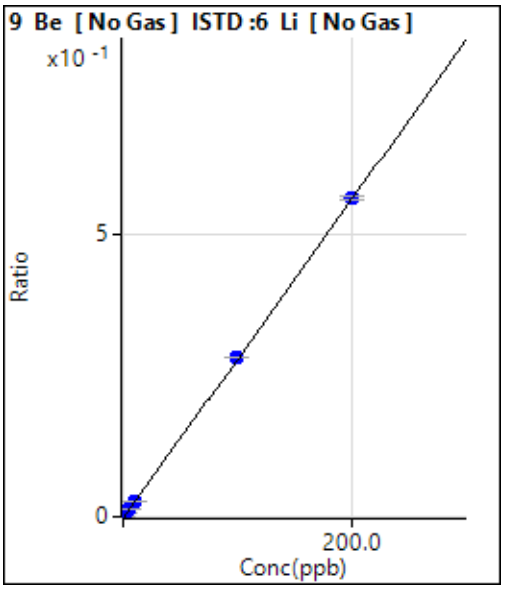
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	32400.55	0.0562	P	1.5	
2	☐	2.000	1.874	46659.10	0.0810	P	1.2	-6.3
3	☐	5.000	4.515	66482.54	0.1161	P	1.4	-9.7
4	☐	10.000	8.805	100094.32	0.1730	P	0.6	-12.0
5	☐	100.000	101.913	791055.69	1.4079	A	1.0	1.9
6	☐	200.000	199.117	1471629.87	2.6972	A	2.3	-0.4

y = 0.0133 * x + 0.0562
R = 0.9999
DL = 0.1948 ppb
BEC = 4.236 ppb

Weight: <None>
Min Conc: <None>

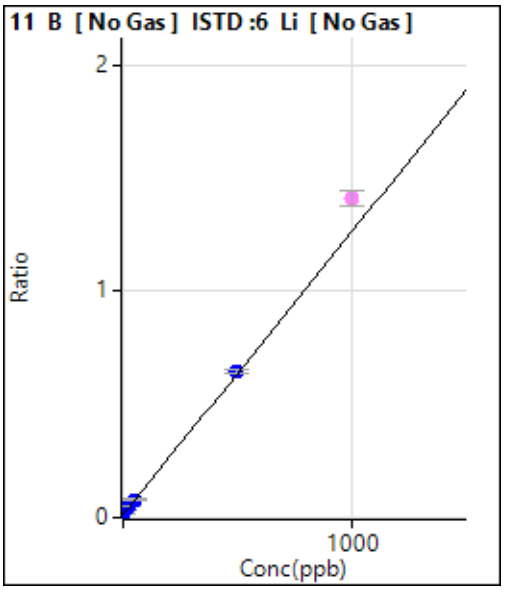


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	45.00	0.0001	P	29.8	
2	☐	2.000	1.936	3177.05	0.0055	P	7.1	-3.2
3	☐	5.000	4.928	7988.99	0.0139	P	2.3	-1.4
4	☐	10.000	9.507	15526.97	0.0268	P	1.7	-4.9
5	☐	100.000	100.070	158283.55	0.2817	P	1.0	0.1
6	☐	200.000	199.992	307173.38	0.5629	P	1.0	0.0

y = 0.0028 * x + 7.8120E-005
R = 1.0000
DL = 0.02484 ppb
BEC = 0.02776 ppb

Weight: <None>
Min Conc: <None>

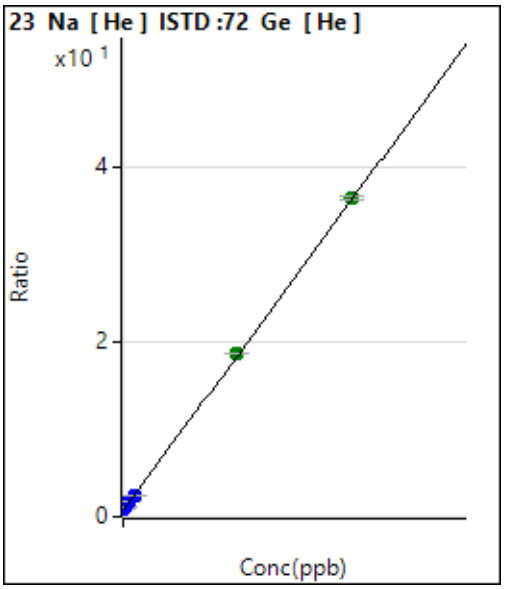
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12008.55	0.0208	P	1.5	
2	☐	10.000	9.121	18517.26	0.0322	P	5.8	-8.8
3	☐	25.000	23.286	28569.01	0.0499	P	2.8	-6.9
4	☐	50.000	47.784	46555.25	0.0805	P	1.6	-4.4
5	☐	500.000	500.325	362514.61	0.6452	P	2.4	0.1
6	☑	1000.000		769508.32	1.4099	M	4.8	

y = 0.0012 * x + 0.0208
R = 1.0000
DL = 0.7435 ppb
BEC = 16.69 ppb

Weight: <None>
Min Conc: <None>

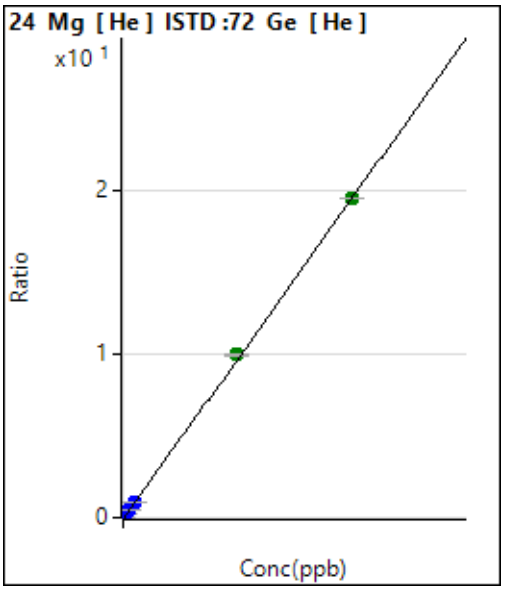


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	252696.92	0.8829	P	0.7	
2	☐	200.000	163.149	347772.14	1.1727	P	0.2	-18.4
3	☐	500.000	443.361	491404.16	1.6704	P	0.7	-11.3
4	☐	1000.000	903.850	729680.49	2.4884	P	1.2	-9.6
5	☐	10000.00	9985.203	5509348.25	18.6191	A	0.4	-0.1
6	☐	20000.00	20013.99	10472014.0	36.4327	A	1.2	0.1

y = 0.0018 * x + 0.8829
R = 1.0000
DL = 9.805 ppb
BEC = 497.1 ppb

Weight: <None>
Min Conc: <None>

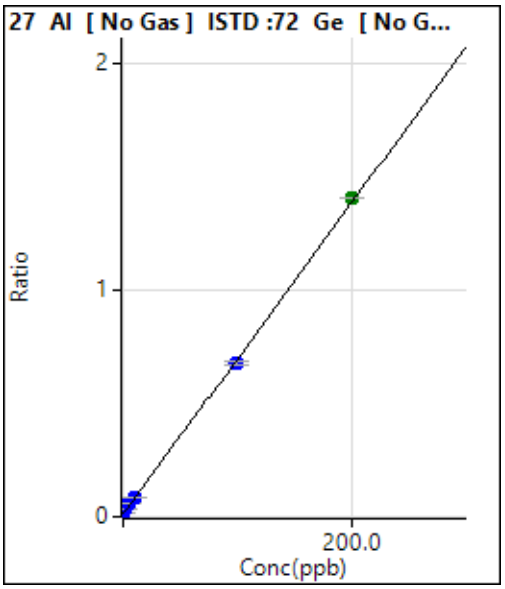
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0008	P	32.8	
2	☐	200.000	191.979	55942.34	0.1886	P	0.8	-4.0
3	☐	500.000	487.274	140492.19	0.4775	P	0.8	-2.5
4	☐	1000.000	964.952	277070.40	0.9449	P	1.6	-3.5
5	☐	10000.00	10150.59	2938814.85	9.9319	A	1.2	1.5
6	☐	20000.00	19926.85	5604571.58	19.4967	A	0.6	-0.4

y = 9.7837E-004 * x + 8.0352E-004
R = 1.0000
DL = 0.807 ppb
BEC = 0.8213 ppb

Weight: <None>
Min Conc: <None>

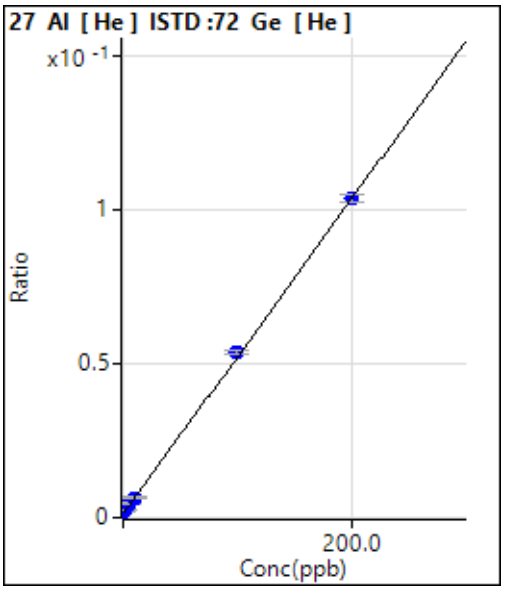


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16523.35	0.0186	P	0.7	
2	☐	2.000	2.018	28719.92	0.0325	P	4.3	0.9
3	☐	5.000	5.645	50786.00	0.0574	P	0.8	12.9
4	☐	10.000	9.256	73349.72	0.0822	P	1.4	-7.4
5	☐	100.000	95.956	611430.42	0.6775	P	1.7	-4.0
6	☐	200.000	202.043	1228066.10	1.4059	A	0.2	1.0

y = 0.0069 * x + 0.0186
R = 0.9997
DL = 0.05702 ppb
BEC = 2.708 ppb

Weight: <None>
Min Conc: <None>

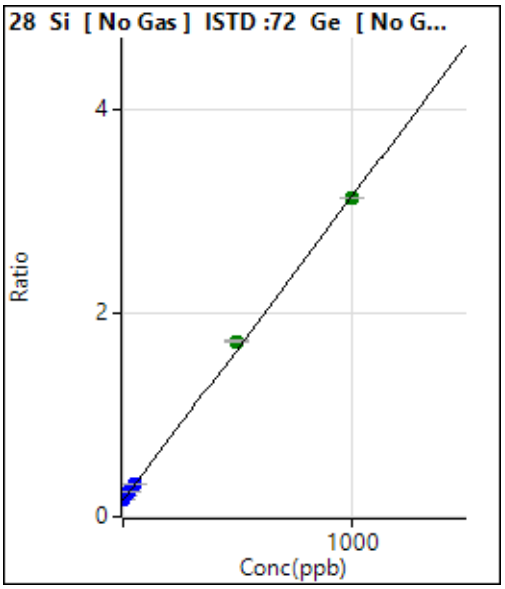
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	490.02	0.0017	P	3.6	
2	☐	2.000	1.523	740.03	0.0025	P	20.6	-23.8
3	☐	5.000	5.626	1353.42	0.0046	P	12.2	12.5
4	☐	10.000	9.191	1883.50	0.0064	P	10.6	-8.1
5	☐	100.000	101.467	15906.04	0.0537	P	2.1	1.5
6	☐	200.000	199.296	29872.31	0.1039	P	2.6	-0.4

y = 5.1284E-004 * x + 0.0017
R = 0.9999
DL = 0.3635 ppb
BEC = 3.338 ppb

Weight: <None>
Min Conc: <None>

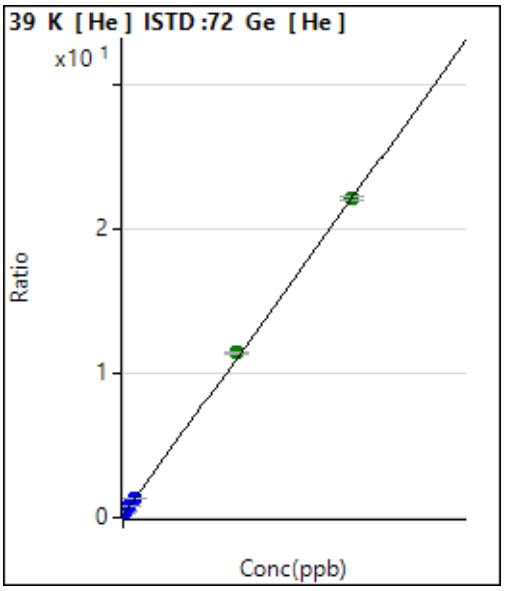


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	155957.23	0.1756	P	1.5	
2	☐	10.000	9.095	179401.96	0.2027	P	3.0	-9.0
3	☐	25.000	26.206	224623.56	0.2537	P	0.4	4.8
4	☐	50.000	46.795	281301.25	0.3151	P	0.4	-6.4
5	☐	500.000	518.365	1553215.92	1.7210	A	1.1	3.7
6	☐	1000.000	990.957	2733937.98	3.1299	A	0.2	-0.9

y = 0.0030 * x + 0.1756
R = 0.9997
DL = 2.598 ppb
BEC = 58.89 ppb

Weight: <None>
Min Conc: <None>

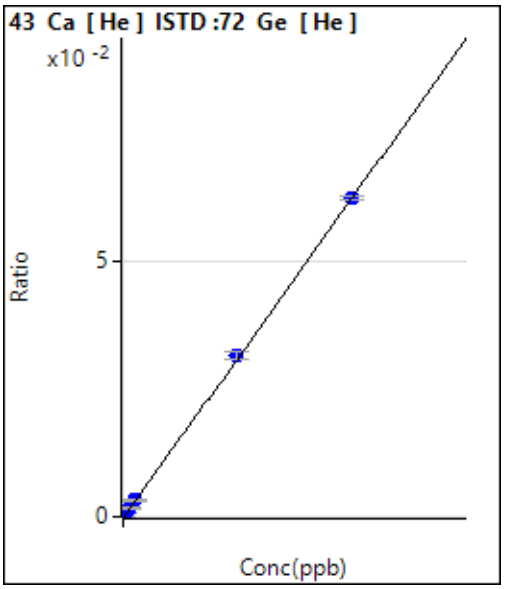
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	78358.37	0.2738	P	0.4	
2	☐	200.000	175.283	138233.21	0.4661	P	0.6	-12.4
3	☐	500.000	459.530	228902.97	0.7781	P	0.2	-8.1
4	☐	1000.000	933.607	380709.80	1.2983	P	1.4	-6.6
5	☐	10000.00	10163.56	3381123.91	11.4272	A	1.6	1.6
6	☐	20000.00	19922.79	6362828.45	22.1370	A	1.4	-0.4

y = 0.0011 * x + 0.2738
R = 0.9999
DL = 2.729 ppb
BEC = 249.5 ppb

Weight: <None>
Min Conc: <None>

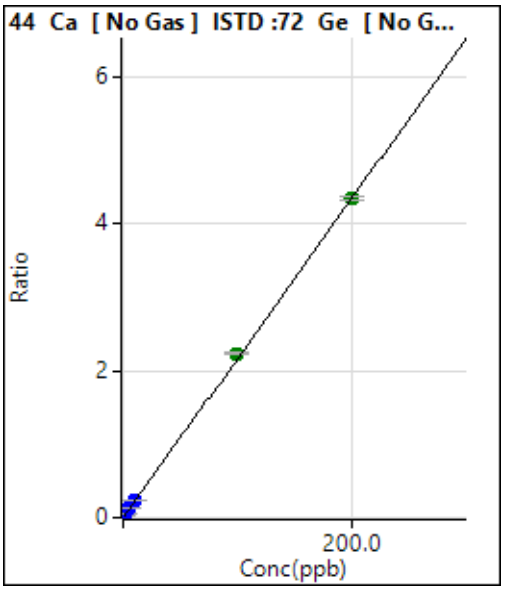


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	200.000	208.469	200.00	0.0007	P	12.7	4.2
3	☐	500.000	529.607	493.35	0.0017	P	8.9	5.9
4	☐	1000.000	1023.363	943.38	0.0032	P	8.3	2.3
5	☐	10000.00	10118.62	9353.35	0.0316	P	4.3	1.2
6	☐	20000.00	19938.69	17898.51	0.0623	P	1.2	-0.3

y = 3.1219E-006 * x + 2.3305E-005
R = 1.0000
DL = 19.39 ppb
BEC = 7.465 ppb

Weight: <None>
Min Conc: <None>

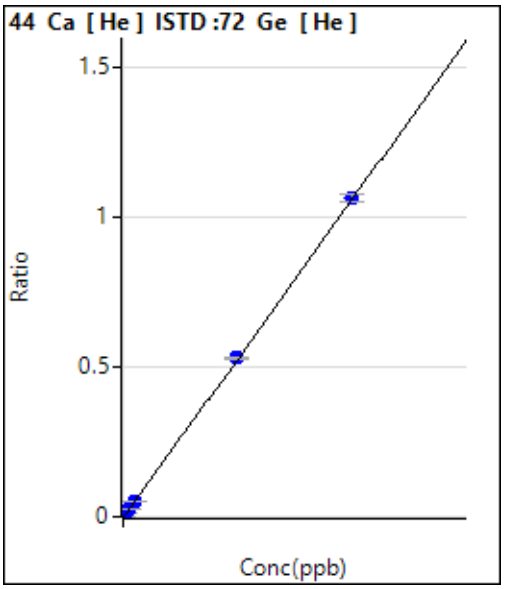
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	17978.69	0.0202	P	0.1	
2	☐	2.000	1.926	54963.13	0.0621	P	3.6	-3.7
3	☐	5.000	4.976	113669.61	0.1284	P	1.9	-0.5
4	☐	10.000	9.544	203270.60	0.2277	P	0.3	-4.6
5	☐	100.000	101.743	2014161.63	2.2316	A	0.8	1.7
6	☐	200.000	199.152	3798625.25	4.3488	A	0.9	-0.4

y = 0.0217 * x + 0.0202
R = 0.9999
DL = 0.004126 ppb
BEC = 0.9311 ppb

Weight: <None>
Min Conc: <None>

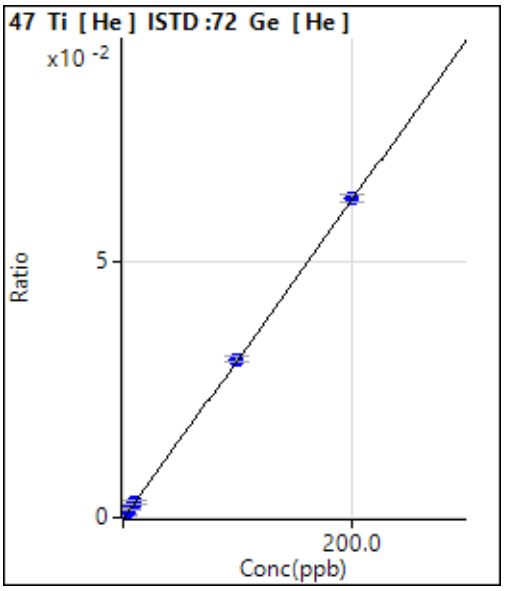


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	406.68	0.0014	P	2.8	
2	☐	200.000	195.603	3497.17	0.0118	P	2.3	-2.2
3	☐	500.000	504.055	8282.64	0.0281	P	4.7	0.8
4	☐	1000.000	953.775	15245.35	0.0520	P	1.7	-4.6
5	☐	10000.00	9943.887	156424.86	0.5287	P	0.5	-0.6
6	☐	20000.00	20030.31	305657.11	1.0635	P	1.9	0.2

y = 5.3021E-005 * x + 0.0014
R = 1.0000
DL = 2.267 ppb
BEC = 26.8 ppb

Weight: <None>
Min Conc: <None>

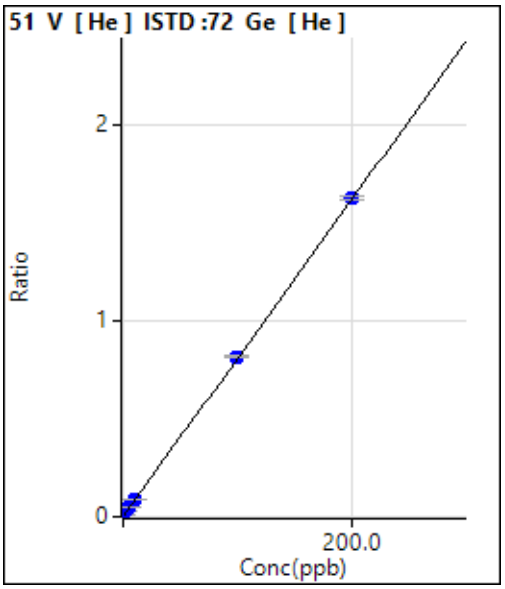
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.770	163.34	0.0006	P	31.1	-11.5
3	☐	5.000	5.306	486.69	0.0017	P	26.6	6.1
4	☐	10.000	9.868	900.05	0.0031	P	21.5	-1.3
5	☐	100.000	99.450	9159.88	0.0310	P	2.8	-0.6
6	☐	200.000	200.276	17921.91	0.0624	P	1.9	0.1

y = 3.1133E-004 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

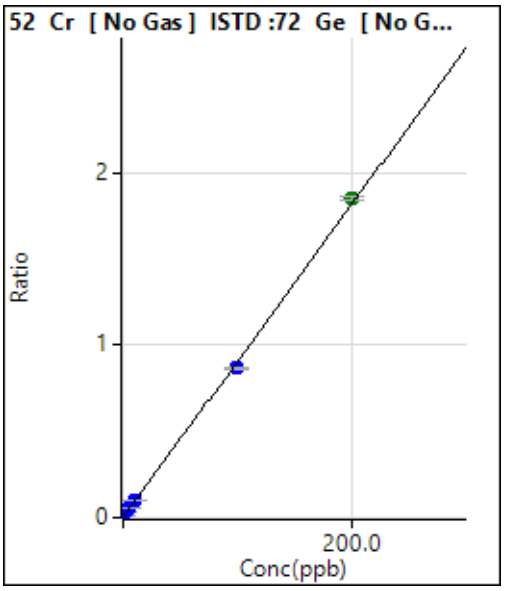


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2833.64	0.0099	P	1.6	
2	☐	2.000	1.895	7488.76	0.0252	P	4.0	-5.3
3	☐	5.000	4.994	14812.48	0.0504	P	0.6	-0.1
4	☐	10.000	9.697	25932.28	0.0884	P	2.3	-3.0
5	☐	100.000	99.852	242234.11	0.8187	P	1.0	-0.1
6	☐	200.000	200.090	468692.95	1.6305	P	0.6	0.0

y = 0.0081 * x + 0.0099
R = 1.0000
DL = 0.06046 ppb
BEC = 1.222 ppb

Weight: <None>
Min Conc: <None>

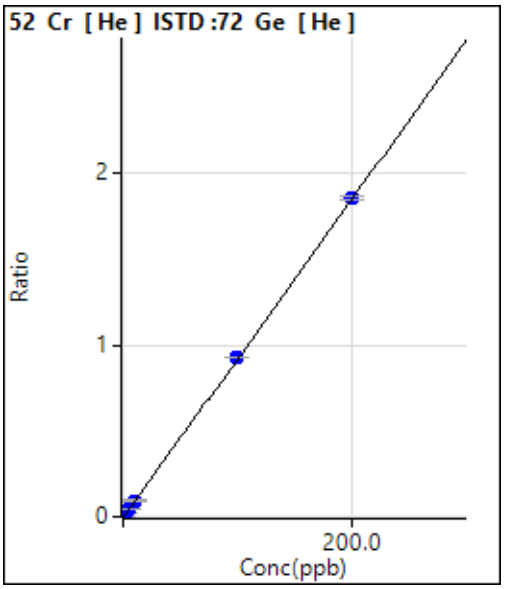
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9493.42	0.0107	P	1.5	
2	☐	2.000	2.022	25717.86	0.0291	P	4.1	1.1
3	☐	5.000	4.781	47920.69	0.0541	P	0.9	-4.4
4	☐	10.000	9.354	85421.98	0.0957	P	0.9	-6.5
5	☐	100.000	94.186	781966.73	0.8664	P	0.7	-5.8
6	☐	200.000	202.945	1619946.64	1.8546	A	1.1	1.5

y = 0.0091 * x + 0.0107
R = 0.9994
DL = 0.05237 ppb
BEC = 1.176 ppb

Weight: <None>
Min Conc: <None>

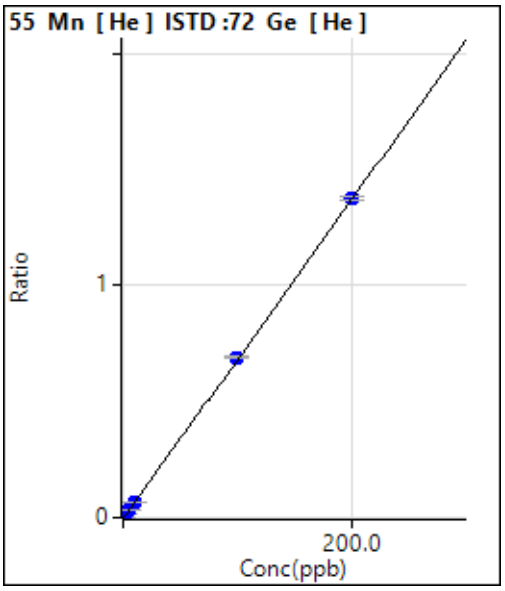


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	850.04	0.0030	P	4.6	
2	☐	2.000	1.922	6168.17	0.0208	P	2.4	-3.9
3	☐	5.000	5.060	14678.08	0.0499	P	1.6	1.2
4	☐	10.000	9.785	27481.18	0.0937	P	3.1	-2.2
5	☐	100.000	99.901	275042.22	0.9296	P	1.0	-0.1
6	☐	200.000	200.059	534208.00	1.8585	P	1.1	0.0

y = 0.0093 * x + 0.0030
R = 1.0000
DL = 0.04446 ppb
BEC = 0.3202 ppb

Weight: <None>
Min Conc: <None>

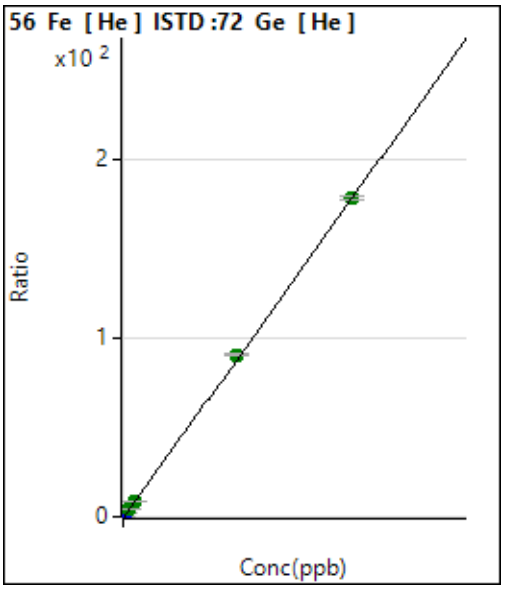
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	580.02	0.0020	P	9.7	
2	☐	2.000	1.945	4564.18	0.0154	P	4.1	-2.8
3	☐	5.000	5.107	10917.86	0.0371	P	0.5	2.1
4	☐	10.000	9.812	20362.13	0.0694	P	2.2	-1.9
5	☐	100.000	100.216	204312.75	0.6905	P	0.9	0.2
6	☐	200.000	199.899	395319.29	1.3753	P	1.0	-0.1

y = 0.0069 * x + 0.0020
R = 1.0000
DL = 0.08599 ppb
BEC = 0.295 ppb

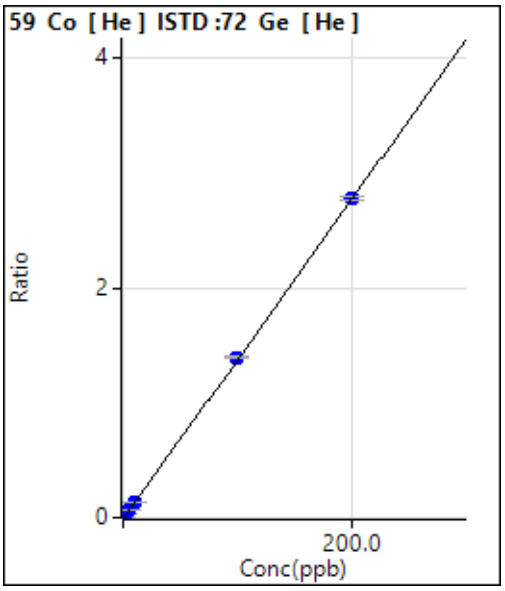
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8926.41	0.0312	P	4.3	
2	☐	200.000	189.317	511590.06	1.7250	P	1.3	-5.3
3	☐	500.000	525.244	1391702.79	4.7305	A	0.6	5.0
4	☐	1000.000	1012.785	2666298.40	9.0925	A	0.8	1.3
5	☐	10000.00	10105.49	26761250.4	90.4439	A	1.1	1.1
6	☐	20000.00	19946.08	51304722.5	178.486	A	0.9	-0.3

y = 0.0089 * x + 0.0312
R = 1.0000
DL = 0.4454 ppb
BEC = 3.486 ppb

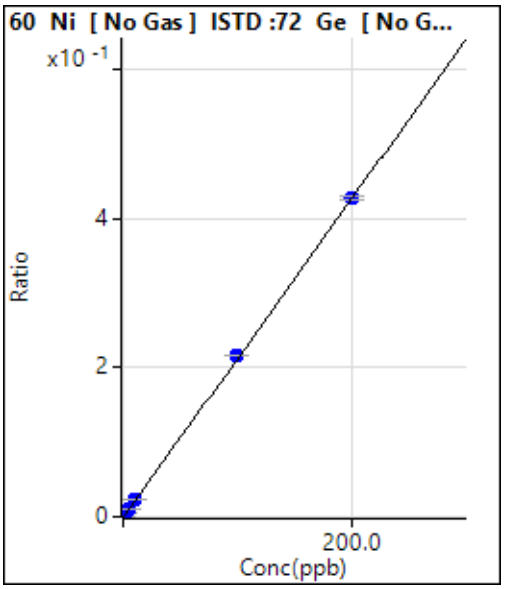
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0001	P	69.4	
2	☐	2.000	1.943	8039.20	0.0271	P	0.7	-2.8
3	☐	5.000	4.825	19774.59	0.0672	P	1.2	-3.5
4	☐	10.000	9.862	40276.54	0.1373	P	2.9	-1.4
5	☐	100.000	100.430	413673.34	1.3980	P	0.5	0.4
6	☐	200.000	199.797	799431.66	2.7812	P	0.9	-0.1

y = 0.0139 * x + 5.8263E-005
R = 1.0000
DL = 0.008716 ppb
BEC = 0.004186 ppb

Weight: <None>
Min Conc: <None>

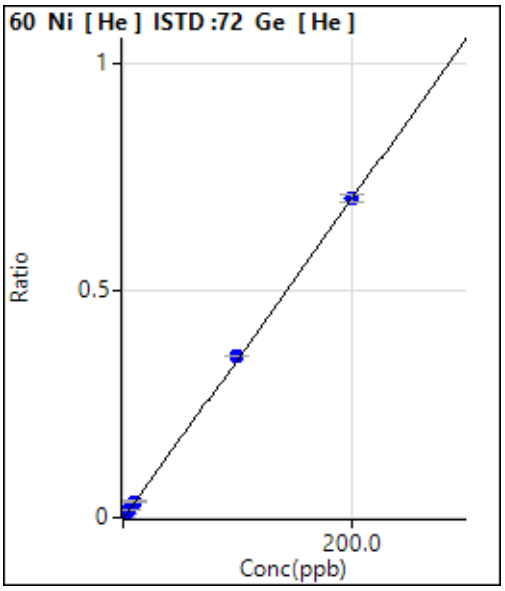


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	800.03	0.0009	P	2.9	
2	☐	2.000	1.864	4330.77	0.0049	P	3.4	-6.8
3	☐	5.000	4.954	10183.92	0.0115	P	0.6	-0.9
4	☐	10.000	10.124	20148.44	0.0226	P	2.9	1.2
5	☐	100.000	100.910	195716.29	0.2169	P	0.8	0.9
6	☐	200.000	199.541	373785.31	0.4279	P	0.9	-0.2

y = 0.0021 * x + 9.0069E-004
R = 1.0000
DL = 0.03652 ppb
BEC = 0.4209 ppb

Weight: <None>
Min Conc: <None>

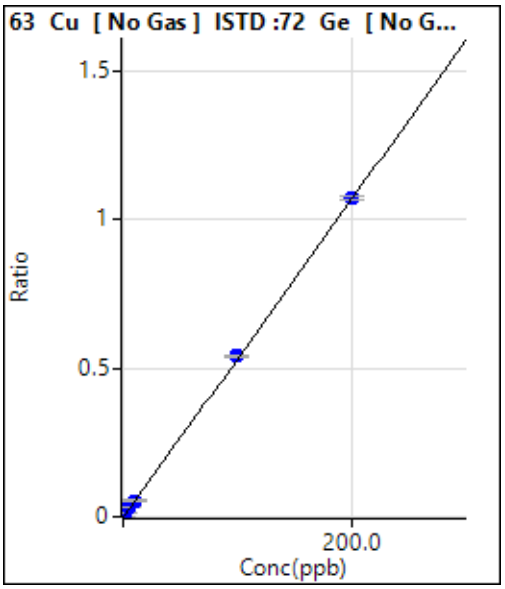
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0005	P	37.1	
2	☐	2.000	1.855	2090.19	0.0070	P	8.7	-7.3
3	☐	5.000	4.828	5147.71	0.0175	P	3.3	-3.4
4	☐	10.000	10.037	10500.89	0.0358	P	5.0	0.4
5	☐	100.000	100.974	105210.56	0.3556	P	0.2	1.0
6	☐	200.000	199.517	201780.90	0.7020	P	1.9	-0.2

y = 0.0035 * x + 5.2406E-004
R = 1.0000
DL = 0.1658 ppb
BEC = 0.149 ppb

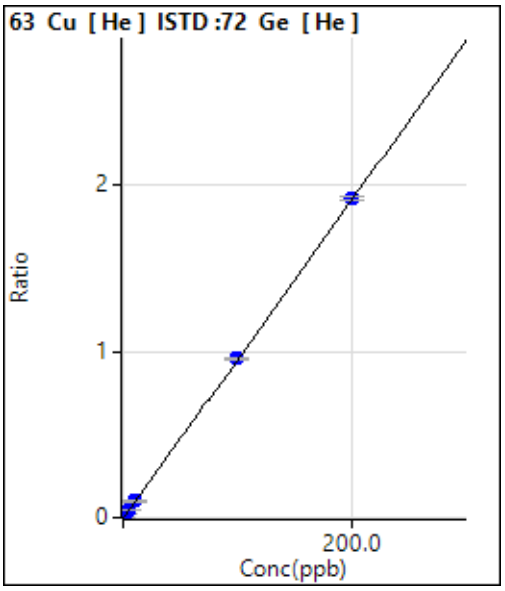
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2210.22	0.0025	P	1.3	
2	☐	2.000	2.130	12289.10	0.0139	P	5.2	6.5
3	☐	5.000	5.047	26115.39	0.0295	P	0.9	0.9
4	☐	10.000	9.728	48700.57	0.0545	P	1.6	-2.7
5	☐	100.000	100.344	486895.44	0.5395	P	0.4	0.3
6	☐	200.000	199.839	936316.57	1.0719	P	0.8	-0.1

y = 0.0054 * x + 0.0025
R = 1.0000
DL = 0.01816 ppb
BEC = 0.4648 ppb

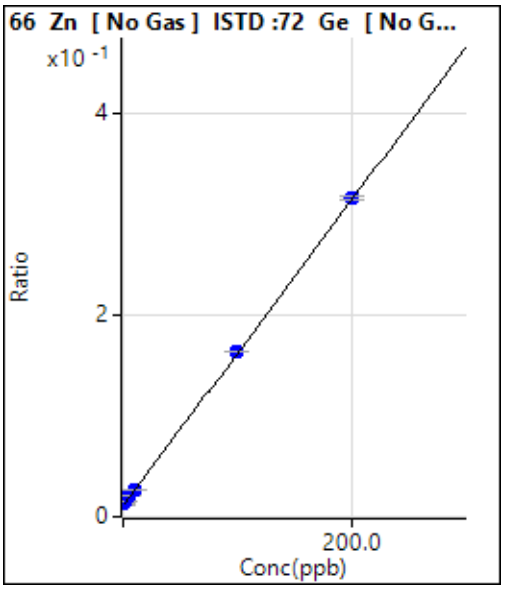
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	916.71	0.0032	P	4.5	
2	☐	2.000	2.059	6795.15	0.0229	P	1.2	2.9
3	☐	5.000	4.834	14558.01	0.0495	P	2.3	-3.3
4	☐	10.000	9.978	28951.21	0.0987	P	3.4	-0.2
5	☐	100.000	99.593	283075.45	0.9567	P	1.0	-0.4
6	☐	200.000	200.208	551899.64	1.9200	P	0.8	0.1

y = 0.0096 * x + 0.0032
R = 1.0000
DL = 0.04519 ppb
BEC = 0.3345 ppb

Weight: <None>
Min Conc: <None>

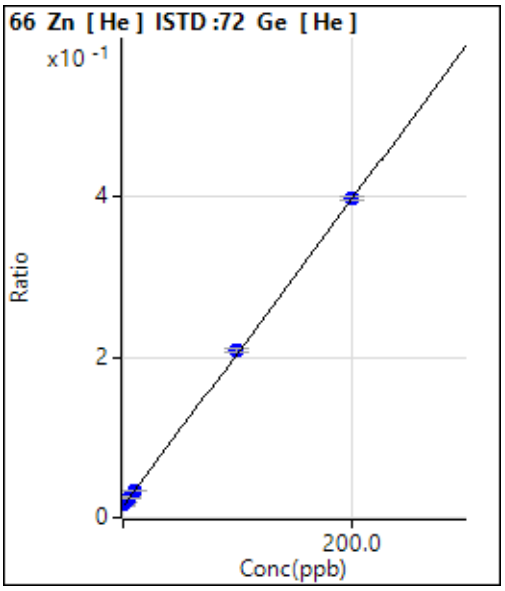


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11098.03	0.0125	P	3.2	
2	☐	2.000	1.896	13623.78	0.0154	P	3.4	-5.2
3	☐	5.000	5.342	18245.84	0.0206	P	1.7	6.8
4	☐	10.000	9.725	24338.79	0.0273	P	2.9	-2.8
5	☐	100.000	99.459	147620.21	0.1636	P	0.5	-0.5
6	☐	200.000	200.277	276624.55	0.3167	P	1.0	0.1

y = 0.0015 * x + 0.0125
R = 1.0000
DL = 0.7849 ppb
BEC = 8.224 ppb

Weight: <None>
Min Conc: <None>

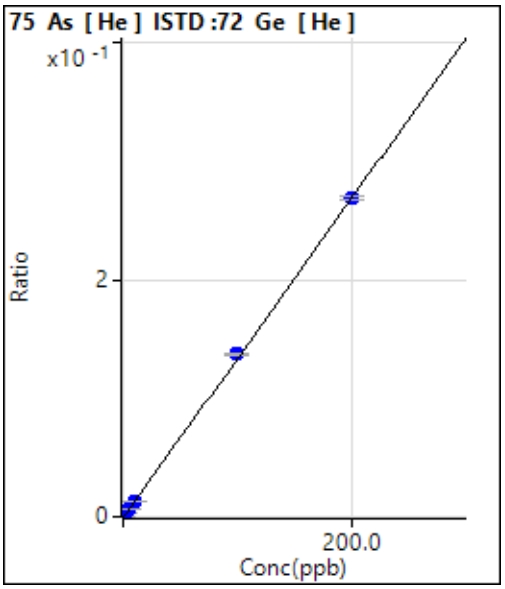
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4607.54	0.0161	P	6.4	
2	☐	2.000	1.916	5861.37	0.0198	P	2.5	-4.2
3	☐	5.000	4.688	7375.46	0.0251	P	3.4	-6.2
4	☐	10.000	9.487	10043.90	0.0342	P	1.3	-5.1
5	☐	100.000	100.730	61783.87	0.2088	P	1.6	0.7
6	☐	200.000	199.669	114436.50	0.3981	P	0.8	-0.2

y = 0.0019 * x + 0.0161
R = 1.0000
DL = 1.627 ppb
BEC = 8.415 ppb

Weight: <None>
Min Conc: <None>

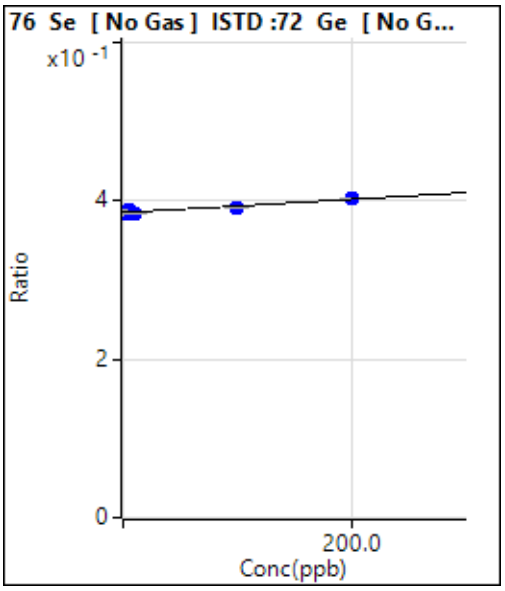


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	108.89	0.0004	P	12.4	
2	☐	2.000	1.783	825.59	0.0028	P	3.7	-10.9
3	☐	5.000	4.828	2026.83	0.0069	P	5.6	-3.4
4	☐	10.000	9.387	3821.68	0.0130	P	7.8	-6.1
5	☐	100.000	101.716	40686.59	0.1375	P	1.1	1.7
6	☐	200.000	199.179	77294.16	0.2689	P	1.1	-0.4

y = 0.0013 * x + 3.8045E-004
R = 0.9999
DL = 0.105 ppb
BEC = 0.2822 ppb

Weight: <None>
Min Conc: <None>

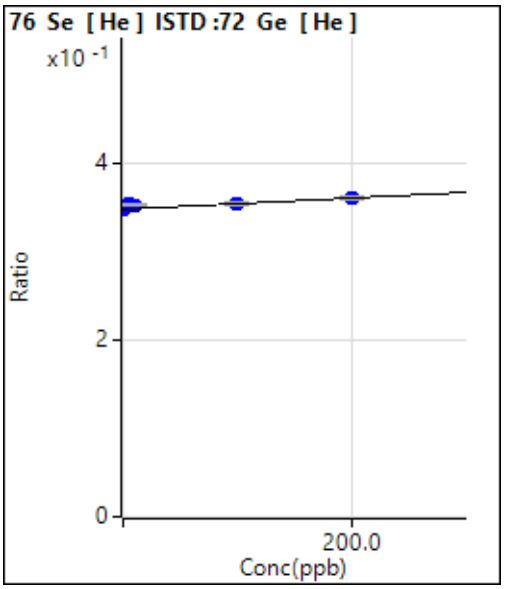
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	341723.99	0.3847	P	0.5	
2	☐	2.000	-7.579	340087.17	0.3840	P	1.4	-479.0
3	☐	5.000	29.037	342766.67	0.3871	P	0.3	480.7
4	☐	10.000	-3.747	343148.41	0.3844	P	0.6	-137.5
5	☐	100.000	73.836	352797.40	0.3909	P	0.6	-26.2
6	☐	200.000	213.264	351716.27	0.4027	P	0.5	6.6

y = 8.4380E-005 * x + 0.3847
R = 0.9766
DL = 74.01 ppb
BEC = 4559 ppb

Weight: <None>
Min Conc: <None>

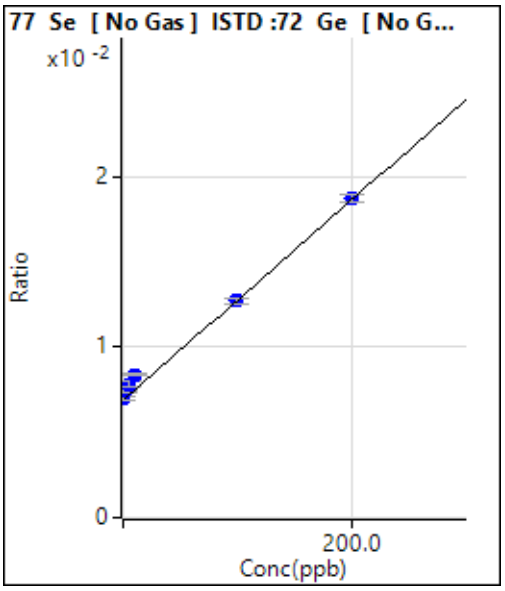


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	99341.21	0.3471	P	0.8	
2	☐	2.000	77.928	104425.35	0.3521	P	1.1	3796.4
3	☐	5.000	87.403	103767.09	0.3527	P	1.0	1648.1
4	☐	10.000	75.096	103202.80	0.3519	P	0.8	651.0
5	☐	100.000	99.838	104613.79	0.3535	P	0.9	-0.2
6	☐	200.000	194.007	103364.08	0.3596	P	1.3	-3.0

y = 6.4557E-005 * x + 0.3471
R = 0.8610
DL = 123.9 ppb
BEC = 5376 ppb

Weight: <None>
Min Conc: <None>

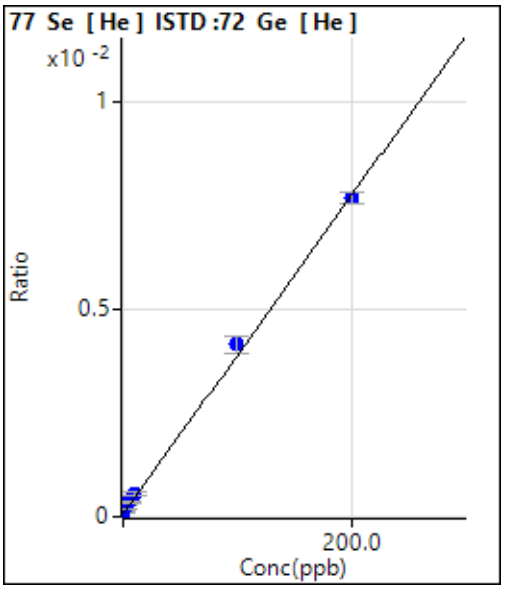
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6208.21	0.0070	P	3.3	
2	☐	2.000	7.199	6561.72	0.0074	P	1.4	259.9
3	☐	5.000	14.106	6918.57	0.0078	P	3.8	182.1
4	☐	10.000	23.786	7485.53	0.0084	P	0.8	137.9
5	☐	100.000	97.501	11471.73	0.0127	P	2.2	-2.5
6	☐	200.000	200.281	16373.56	0.0187	P	2.0	0.1

y = 5.8701E-005 * x + 0.0070
R = 0.9977
DL = 11.93 ppb
BEC = 119 ppb

Weight: <None>
Min Conc: <None>

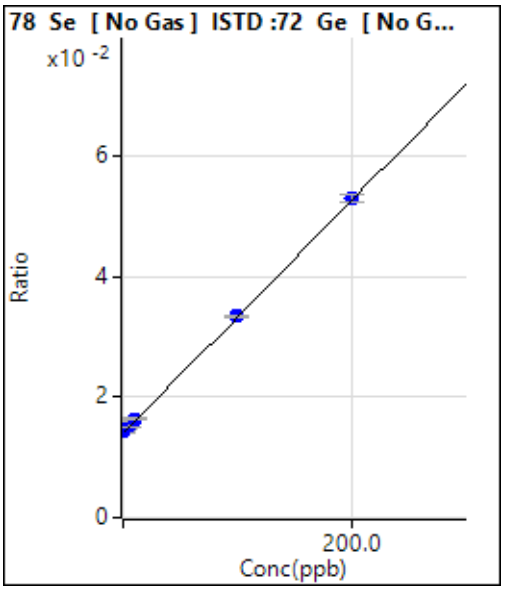


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0001	P	66.6	
2	☐	2.000	3.118	66.67	0.0002	P	48.0	55.9
3	☐	5.000	6.429	103.33	0.0004	P	20.9	28.6
4	☐	10.000	11.790	163.34	0.0006	P	19.4	17.9
5	☐	100.000	105.243	1226.75	0.0041	P	10.1	5.2
6	☐	200.000	197.242	2206.88	0.0077	P	3.5	-1.4

y = 3.8400E-005 * x + 1.0478E-004
R = 0.9995
DL = 5.455 ppb
BEC = 2.729 ppb

Weight: <None>
Min Conc: <None>

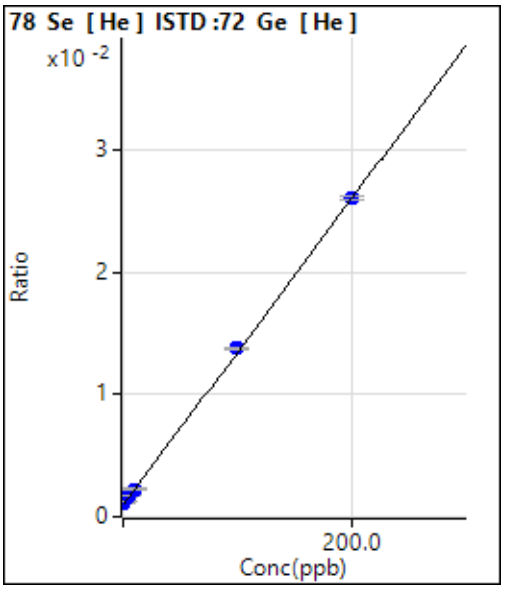
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12699.46	0.0143	P	2.7	
2	☐	2.000	3.169	13193.30	0.0149	P	4.1	58.5
3	☐	5.000	5.536	13597.11	0.0154	P	6.3	10.7
4	☐	10.000	10.707	14608.14	0.0164	P	1.5	7.1
5	☐	100.000	98.837	30110.64	0.0334	P	1.0	-1.2
6	☐	200.000	200.521	46272.98	0.0530	P	2.2	0.3

y = 1.9289E-004 * x + 0.0143
R = 1.0000
DL = 5.923 ppb
BEC = 74.11 ppb

Weight: <None>
Min Conc: <None>

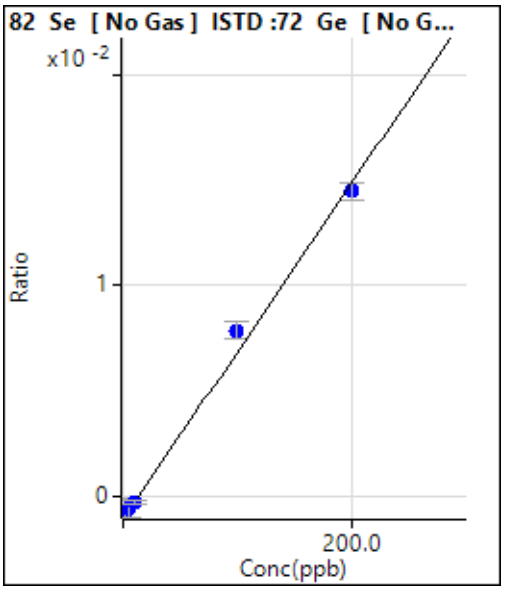


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	312.00	0.0011	P	5.0	
2	☐	2.000	2.641	421.34	0.0014	P	12.5	32.1
3	☐	5.000	5.396	519.34	0.0018	P	2.5	7.9
4	☐	10.000	9.142	655.35	0.0022	P	4.0	-8.6
5	☐	100.000	101.275	4073.29	0.0138	P	1.6	1.3
6	☐	200.000	199.389	7487.43	0.0260	P	0.8	-0.3

y = 1.2517E-004 * x + 0.0011
R = 1.0000
DL = 1.312 ppb
BEC = 8.709 ppb

Weight: <None>
Min Conc: <None>

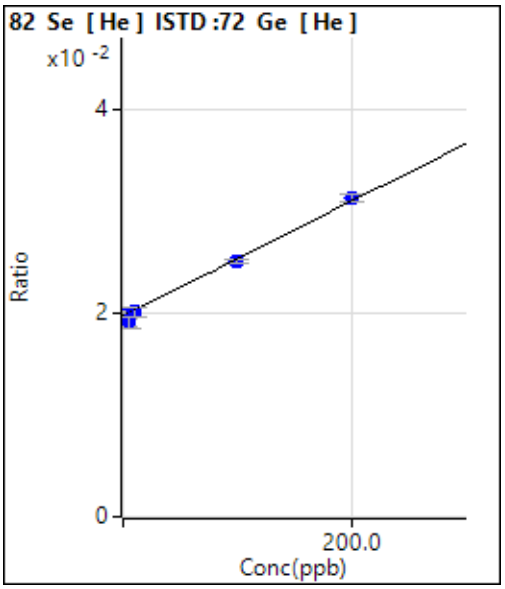
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-910.52	-0.0010	P	-63.2	
2	☐	2.000	1.459	-808.29	-0.0009	P	-96.8	-27.1
3	☐	5.000	6.008	-487.94	-0.0005	P	-162.	20.2
4	☐	10.000	8.949	-278.60	-0.0003	P	-55.0	-10.5
5	☐	100.000	111.559	7106.92	0.0079	P	9.9	11.6
6	☐	200.000	194.253	12641.63	0.0145	P	5.7	-2.9

y = 7.9788E-005 * x - 0.0010
R = 0.9975
DL = 24.37 ppb
BEC = -12.85 ppb

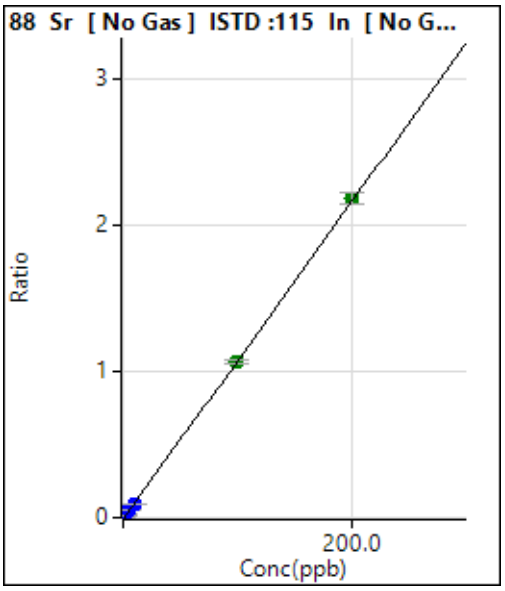
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5667.98	0.0198	P	3.2	
2	☐	2.000	-13.433	5647.95	0.0190	P	3.9	-771.6
3	☐	5.000	-10.277	5657.96	0.0192	P	7.3	-305.5
4	☐	10.000	4.765	5884.72	0.0201	P	5.5	-52.3
5	☐	100.000	93.343	7412.18	0.0251	P	2.1	-6.7
6	☐	200.000	204.126	8989.81	0.0313	P	2.9	2.1

y = 5.6216E-005 * x + 0.0198
R = 0.9975
DL = 34.08 ppb
BEC = 352.3 ppb

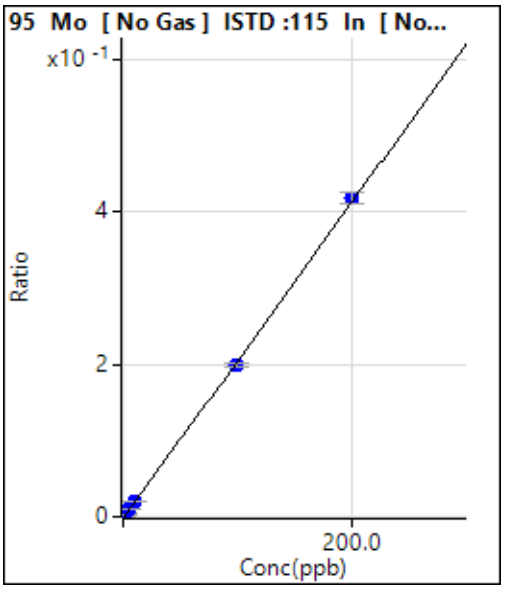
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	533.36	0.0005	P	16.8	
2	☐	2.000	1.773	22796.43	0.0197	P	7.4	-11.3
3	☐	5.000	4.764	60081.29	0.0521	P	4.3	-4.7
4	☐	10.000	8.591	109945.84	0.0936	P	0.8	-14.1
5	☐	100.000	97.754	1239005.79	1.0600	A	2.4	-2.2
6	☐	200.000	201.201	2390900.95	2.1812	A	3.3	0.6

y = 0.0108 * x + 4.7291E-004
R = 0.9999
DL = 0.02193 ppb
BEC = 0.04363 ppb

Weight: <None>
Min Conc: <None>

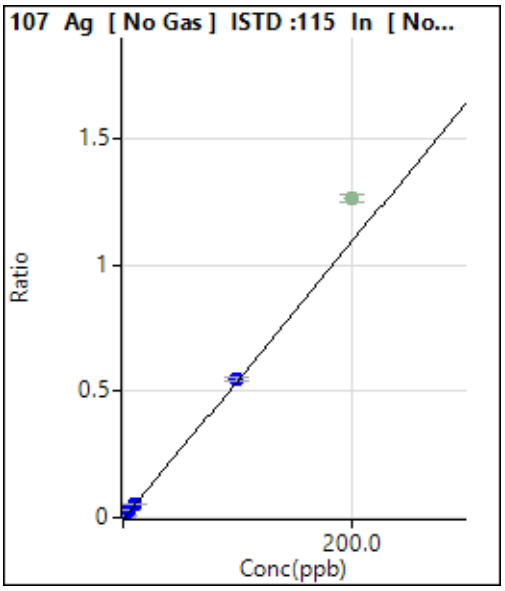


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	116.7	
2	☐	2.000	1.864	4474.18	0.0039	P	7.8	-6.8
3	☐	5.000	4.667	11134.83	0.0097	P	6.6	-6.7
4	☐	10.000	9.440	22936.82	0.0195	P	4.4	-5.6
5	☐	100.000	96.142	232427.38	0.1988	P	1.6	-3.9
6	☐	200.000	201.967	457832.82	0.4177	P	3.2	1.0

y = 0.0021 * x + 1.2122E-005
R = 0.9997
DL = 0.02053 ppb
BEC = 0.005862 ppb

Weight: <None>
Min Conc: <None>

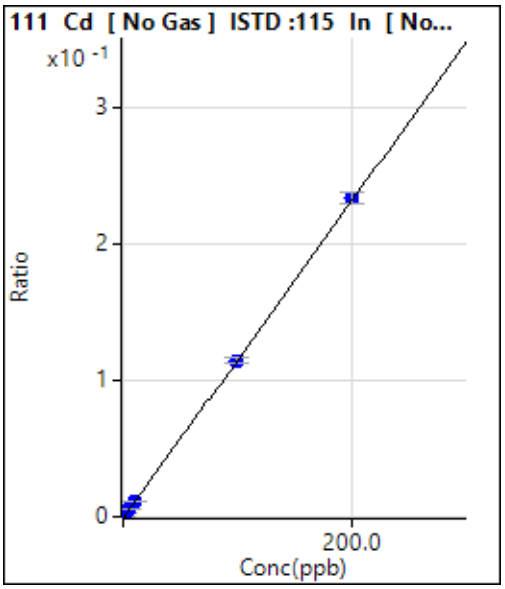
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	340.01	0.0003	P	32.4	
2	☐	2.000	1.948	12756.33	0.0110	P	2.3	-2.6
3	☐	5.000	4.904	31427.71	0.0273	P	3.7	-1.9
4	☐	10.000	9.559	62065.47	0.0528	P	0.9	-4.4
5	☐	100.000	100.050	642894.18	0.5501	P	2.9	0.0
6	☑	200.000		1388303.78	1.2662	A	2.3	

y = 0.0055 * x + 3.0087E-004
R = 1.0000
DL = 0.05319 ppb
BEC = 0.05475 ppb

Weight: <None>
Min Conc: <None>

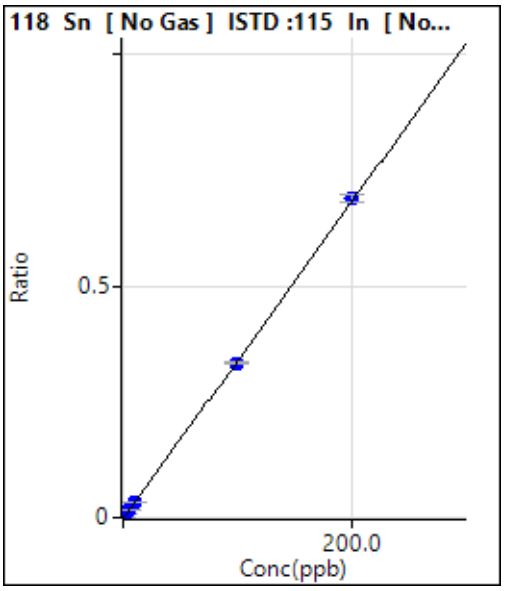


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.7	
2	☐	2.000	1.947	2633.65	0.0023	P	5.9	-2.6
3	☐	5.000	4.749	6381.66	0.0055	P	7.2	-5.0
4	☐	10.000	9.400	12863.13	0.0110	P	3.6	-6.0
5	☐	100.000	98.170	133638.66	0.1143	P	3.6	-1.8
6	☐	200.000	200.952	256559.04	0.2341	P	3.2	0.5

y = 0.0012 * x + 5.9730E-006
R = 0.9999
DL = 0.01334 ppb
BEC = 0.005128 ppb

Weight: <None>
Min Conc: <None>

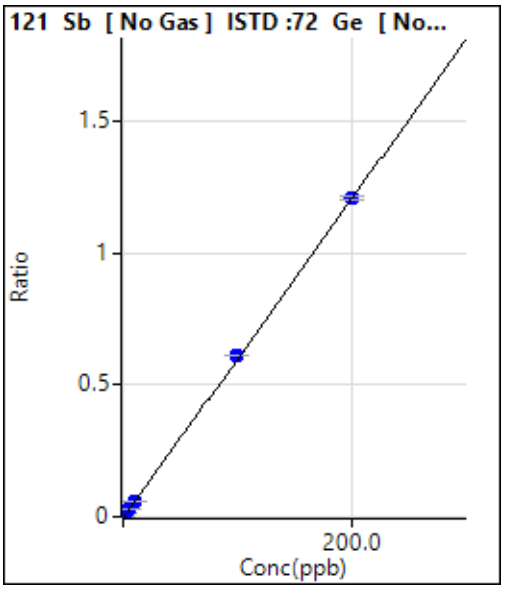
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1013.40	0.0009	P	6.3	
2	☐	2.000	1.872	8456.20	0.0073	P	5.2	-6.4
3	☐	5.000	4.528	18893.79	0.0164	P	4.0	-9.4
4	☐	10.000	9.238	38162.26	0.0325	P	2.8	-7.6
5	☐	100.000	97.418	390521.07	0.3341	P	2.0	-2.6
6	☐	200.000	201.342	755976.42	0.6896	P	2.5	0.7

y = 0.0034 * x + 8.9620E-004
R = 0.9999
DL = 0.04942 ppb
BEC = 0.262 ppb

Weight: <None>
Min Conc: <None>

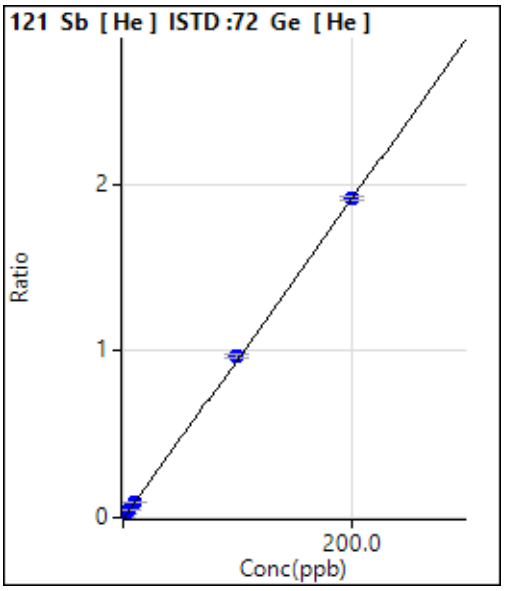


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	430.02	0.0005	P	25.0	
2	☐	2.000	1.984	11054.84	0.0125	P	6.0	-0.8
3	☐	5.000	4.766	25979.29	0.0293	P	2.2	-4.7
4	☐	10.000	9.712	52919.95	0.0593	P	1.4	-2.9
5	☐	100.000	100.655	550366.46	0.6098	P	0.4	0.7
6	☐	200.000	199.693	1056321.21	1.2093	P	0.7	-0.2

y = 0.0061 * x + 4.8336E-004
R = 1.0000
DL = 0.05999 ppb
BEC = 0.07985 ppb

Weight: <None>
Min Conc: <None>

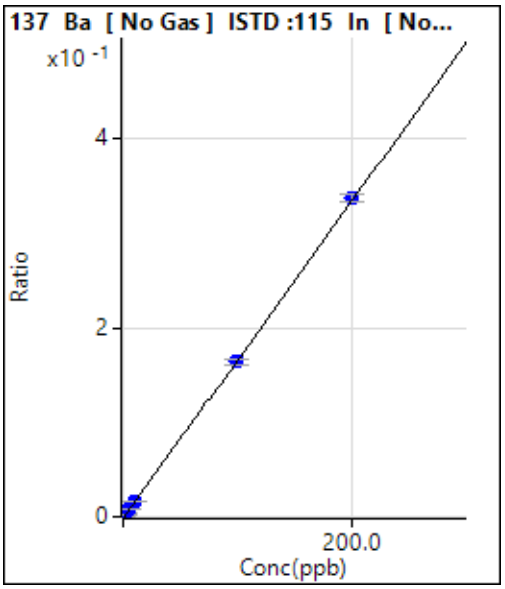
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0005	P	13.5	
2	☐	2.000	1.858	5444.58	0.0184	P	6.7	-7.1
3	☐	5.000	4.934	14077.79	0.0479	P	4.8	-1.3
4	☐	10.000	9.765	27626.03	0.0942	P	2.4	-2.3
5	☐	100.000	100.772	286224.44	0.9674	P	1.8	0.8
6	☐	200.000	199.629	550667.42	1.9158	P	1.4	-0.2

y = 0.0096 * x + 5.2414E-004
R = 1.0000
DL = 0.02206 ppb
BEC = 0.05463 ppb

Weight: <None>
Min Conc: <None>

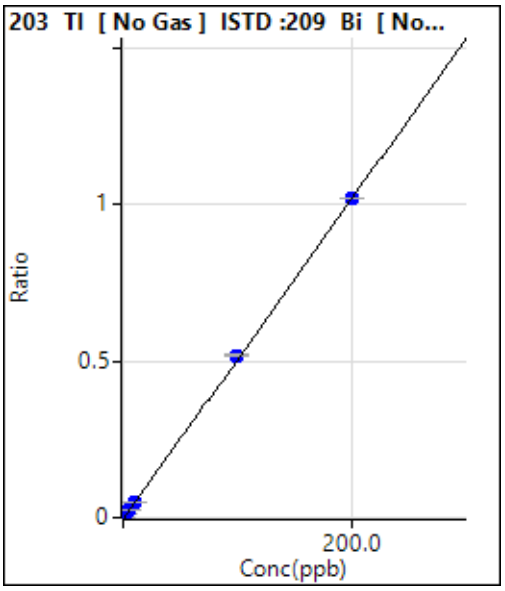


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	90.00	0.0001	P	35.9	
2	☐	2.000	1.818	3620.57	0.0031	P	10.4	-9.1
3	☐	5.000	4.816	9420.23	0.0082	P	3.1	-3.7
4	☐	10.000	9.487	18800.51	0.0160	P	3.0	-5.1
5	☐	100.000	97.787	191989.41	0.1643	P	3.1	-2.2
6	☐	200.000	201.138	370325.82	0.3378	P	2.8	0.6

y = 0.0017 * x + 7.9058E-005
R = 0.9999
DL = 0.05068 ppb
BEC = 0.04708 ppb

Weight: <None>
Min Conc: <None>

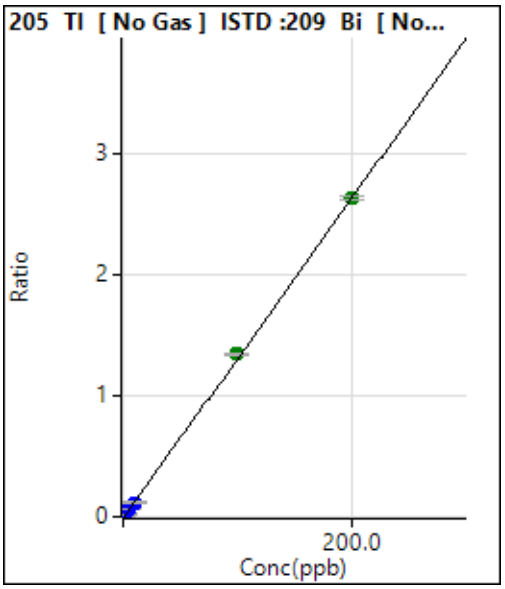
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	91.7	
2	☐	2.000	1.876	10998.33	0.0096	P	3.1	-6.2
3	☐	5.000	4.789	27293.47	0.0245	P	0.8	-4.2
4	☐	10.000	9.602	55285.62	0.0491	P	1.4	-4.0
5	☐	100.000	101.199	581924.12	0.5178	P	1.2	1.2
6	☐	200.000	199.427	1121561.73	1.0204	P	0.3	-0.3

y = 0.0051 * x + 1.4965E-005
R = 1.0000
DL = 0.008042 ppb
BEC = 0.002925 ppb

Weight: <None>
Min Conc: <None>

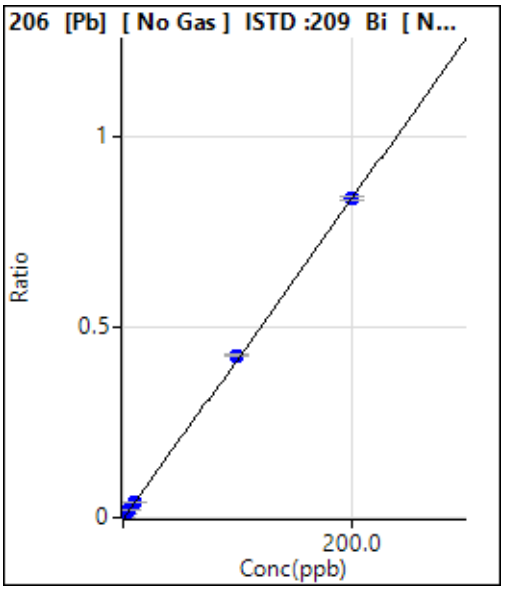


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	53.33	0.0000	P	39.1	
2	☐	2.000	1.787	27136.44	0.0237	P	1.7	-10.6
3	☐	5.000	4.550	67100.34	0.0603	P	3.0	-9.0
4	☐	10.000	8.995	134014.08	0.1191	P	1.7	-10.1
5	☐	100.000	101.591	1511712.11	1.3452	A	1.9	1.6
6	☐	200.000	199.268	2899905.89	2.6384	A	0.8	-0.4

y = 0.0132 * x + 4.8151E-005
R = 0.9999
DL = 0.004265 ppb
BEC = 0.003637 ppb

Weight: <None>
Min Conc: <None>

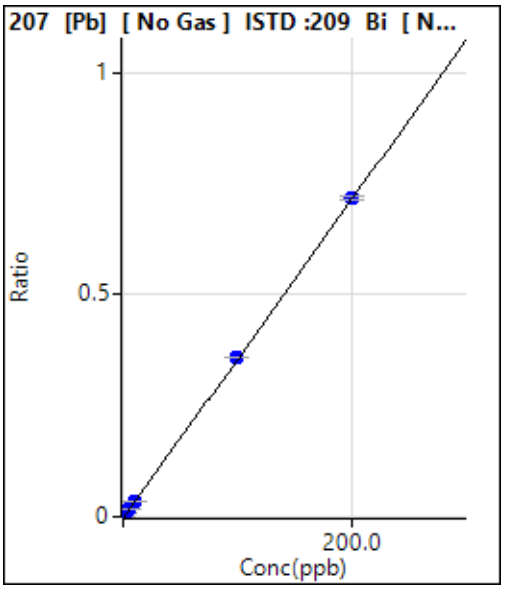
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	156.67	0.0001	P	25.2	
2	☐	2.000	1.907	9310.33	0.0081	P	4.5	-4.7
3	☐	5.000	4.908	23081.61	0.0207	P	0.5	-1.8
4	☐	10.000	9.794	46383.25	0.0412	P	3.1	-2.1
5	☐	100.000	101.353	478095.80	0.4254	P	0.8	1.4
6	☐	200.000	199.337	919448.29	0.8366	P	0.8	-0.3

y = 0.0042 * x + 1.4120E-004
R = 1.0000
DL = 0.02544 ppb
BEC = 0.03365 ppb

Weight: <None>
Min Conc: <None>

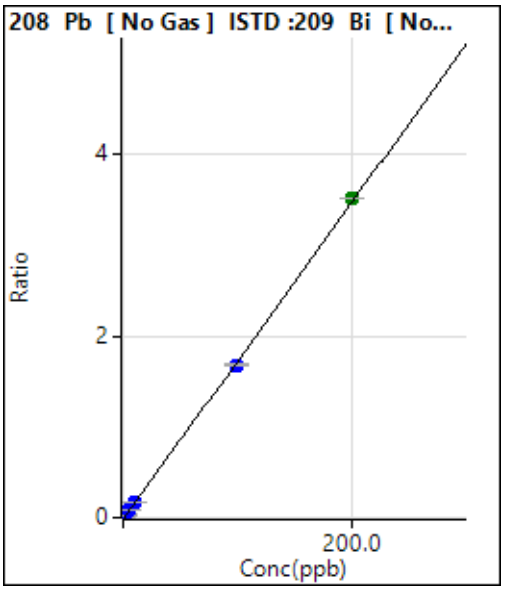


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	113.33	0.0001	P	25.8	
2	☐	2.000	1.925	8012.70	0.0070	P	6.1	-3.8
3	☐	5.000	4.728	18998.07	0.0171	P	1.9	-5.4
4	☐	10.000	9.875	39974.39	0.0355	P	0.6	-1.3
5	☐	100.000	99.975	403266.05	0.3588	P	1.1	0.0
6	☐	200.000	200.027	788987.28	0.7179	P	0.7	0.0

y = 0.0036 * x + 1.0233E-004
R = 1.0000
DL = 0.0221 ppb
BEC = 0.02852 ppb

Weight: <None>
Min Conc: <None>

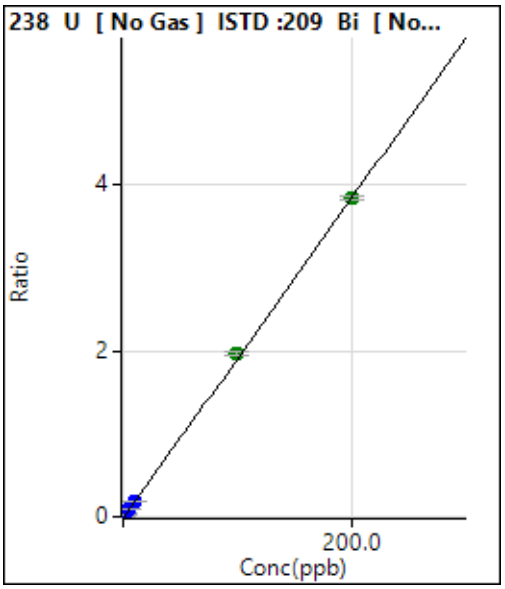
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	600.01	0.0005	P	2.6	
2	☐	2.000	1.836	37189.13	0.0325	P	5.2	-8.2
3	☐	5.000	4.612	90025.70	0.0809	P	0.9	-7.8
4	☐	10.000	9.380	184428.67	0.1640	P	0.5	-6.2
5	☐	100.000	96.575	1891499.72	1.6831	P	0.7	-3.4
6	☐	200.000	201.755	3863905.80	3.5155	A	0.6	0.9

y = 0.0174 * x + 5.4130E-004
R = 0.9998
DL = 0.002465 ppb
BEC = 0.03107 ppb

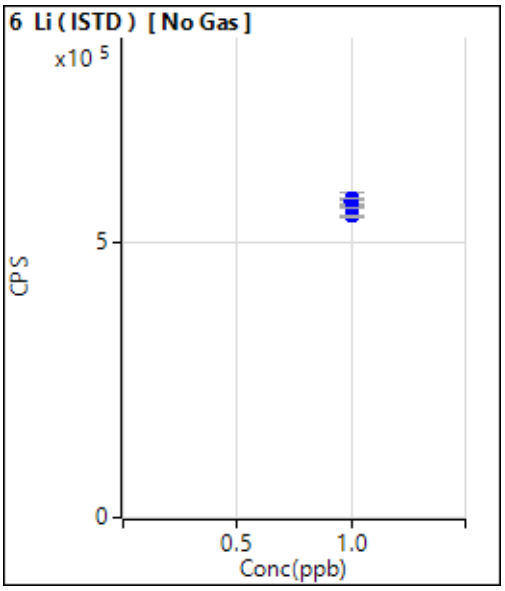
Weight: <None>
Min Conc: <None>



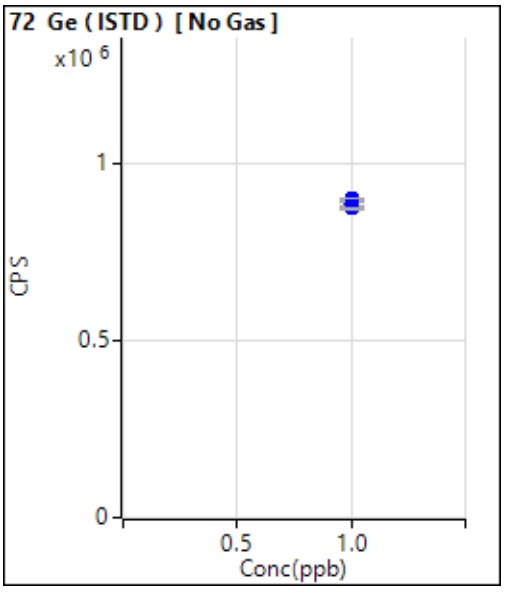
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	1.797	39764.88	0.0347	P	0.8	-10.1
3	☐	5.000	4.441	95577.94	0.0859	P	1.0	-11.2
4	☐	10.000	9.141	198814.87	0.1767	P	0.8	-8.6
5	☐	100.000	102.013	2216456.68	1.9723	A	1.4	2.0
6	☐	200.000	199.052	4230081.81	3.8485	A	1.3	-0.5

y = 0.0193 * x + 2.9930E-006
R = 0.9999
DL = 0.0008044 ppb
BEC = 0.0001548 ppb

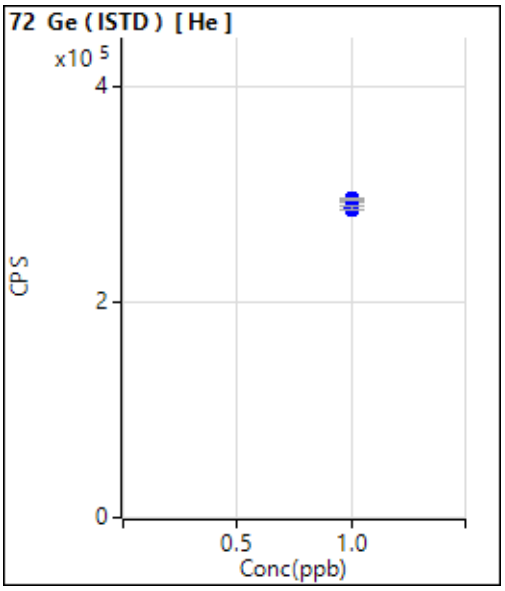
Weight: <None>
Min Conc: <None>



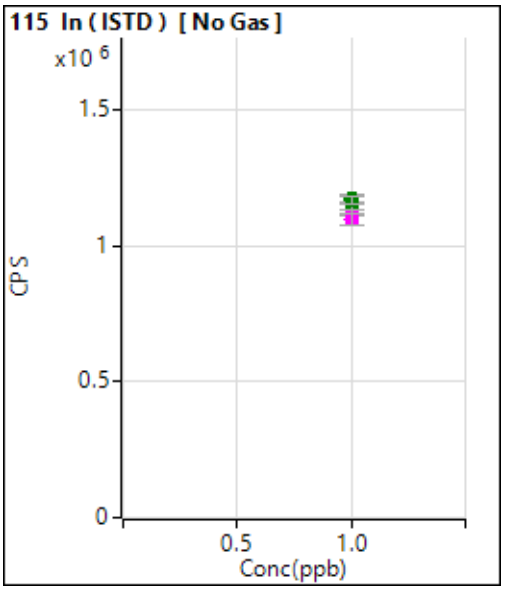
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		576643.55		P	0.5	
2	☐	1.000		575864.55		P	4.3	
3	☐	1.000		572855.46		P	1.5	
4	☐	1.000		578665.84		P	0.4	
5	☐	1.000		561866.75		P	0.1	
6	☐	1.000		545706.79		P	1.0	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		888395.66		P	1.1	
2	☐	1.000		885701.16		P	3.1	
3	☐	1.000		885457.90		P	1.3	
4	☐	1.000		892814.54		P	0.5	
5	☐	1.000		902536.57		P	0.4	
6	☐	1.000		873483.32		P	0.2	

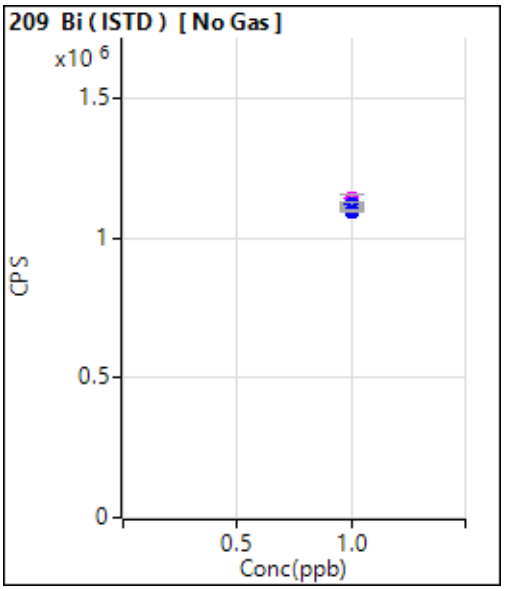


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		286216.33		P	0.1	
2	☐	1.000		296563.41		P	0.6	
3	☐	1.000		294194.42		P	0.8	
4	☐	1.000		293253.73		P	0.7	
5	☐	1.000		295899.88		P	0.9	
6	☐	1.000		287462.19		P	1.2	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1132545.80		M	3.7	
2	☐	1.000		1160229.98		A	5.3	
3	☐	1.000		1154459.69		A	4.2	
4	☐	1.000		1174927.58		A	2.4	
5	☐	1.000		1169173.58		A	2.1	
6	☐	1.000		1096948.53		M	3.6	

Calibration for 183_ICV.d



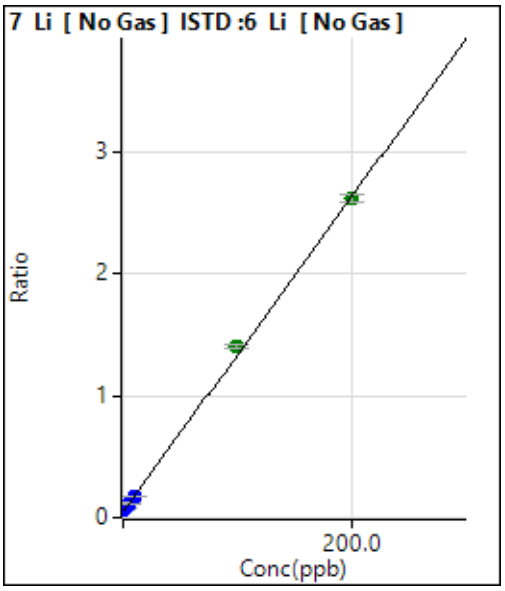
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1108342.67		P	0.8	
2	☐	1.000		1144508.68		M	2.9	
3	☐	1.000		1113087.30		P	1.1	
4	☐	1.000		1124894.31		P	0.7	
5	☐	1.000		1123868.45		P	1.0	
6	☐	1.000		1099099.36		P	0.5	

Calibration for 020_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072022A.b\
Analysis File: 072022A.batch.bin
DA Date-Time: 07/20/2022 21:20:44
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	009CALB.d	CAL BLK	07/20/2022 11:26:20
2	010CALS.d	2/10/200	07/20/2022 11:28:36
3	011CALS.d	5/25/500	07/20/2022 11:30:51
4	012CALS.d	10/50/100	07/20/2022 11:33:05
5	017CALS.d	100/500/10K	07/20/2022 11:47:02
6	018CALS.d	200/1000/20K	07/20/2022 11:49:06

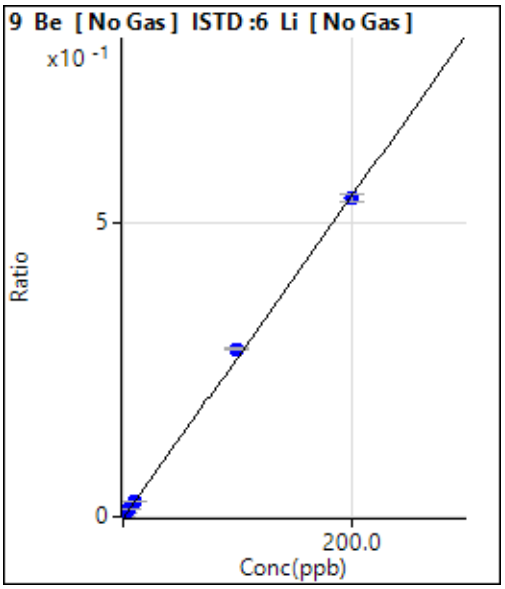
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35467.95	0.0612	P	0.1	
2	☐	2.000	1.703	49218.97	0.0832	P	0.9	-14.9
3	☐	5.000	4.388	70828.54	0.1179	P	0.9	-12.2
4	☐	10.000	9.097	107555.43	0.1788	P	0.9	-9.0
5	☐	100.000	104.181	814513.56	1.4081	A	2.5	4.2
6	☐	200.000	197.973	1565047.74	2.6206	A	2.6	-1.0

y = 0.0129 * x + 0.0612
R = 0.9997
DL = 0.01504 ppb
BEC = 4.732 ppb

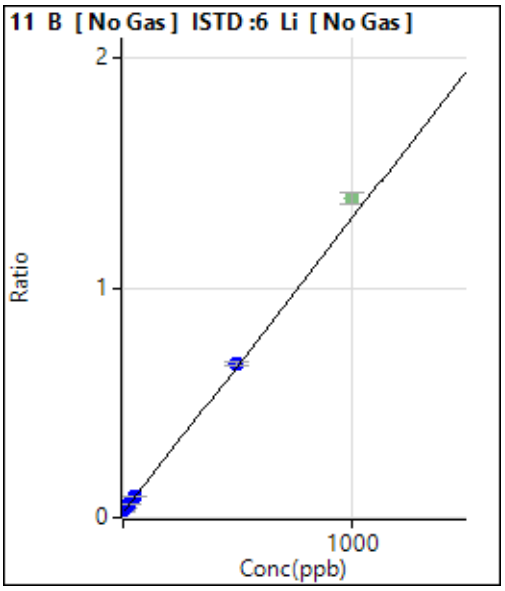
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	56.67	0.0001	P	31.3	
2	☐	2.000	1.954	3218.73	0.0054	P	5.3	-2.3
3	☐	5.000	4.761	7878.93	0.0131	P	2.1	-4.8
4	☐	10.000	9.860	16276.14	0.0271	P	1.7	-1.4
5	☐	100.000	104.279	165019.88	0.2852	P	0.2	4.3
6	☐	200.000	197.874	323198.11	0.5411	P	1.9	-1.1

y = 0.0027 * x + 9.7830E-005
R = 0.9997
DL = 0.03356 ppb
BEC = 0.03578 ppb

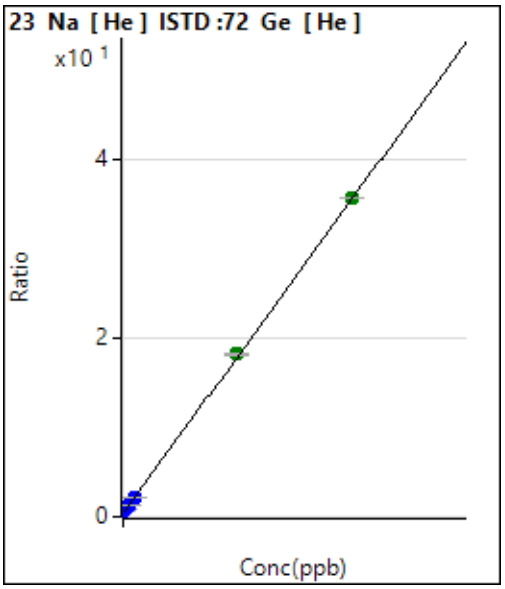
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16990.38	0.0293	P	0.5	
2	☐	10.000	9.158	24263.21	0.0410	P	8.6	-8.4
3	☐	25.000	21.051	33757.20	0.0562	P	1.8	-15.8
4	☐	50.000	46.725	53538.25	0.0890	P	1.3	-6.6
5	☐	500.000	500.542	386818.68	0.6687	P	3.1	0.1
6	☑	1000.000		829455.56	1.3893	A	4.0	

y = 0.0013 * x + 0.0293
R = 1.0000
DL = 0.3122 ppb
BEC = 22.94 ppb

Weight: <None>
Min Conc: <None>

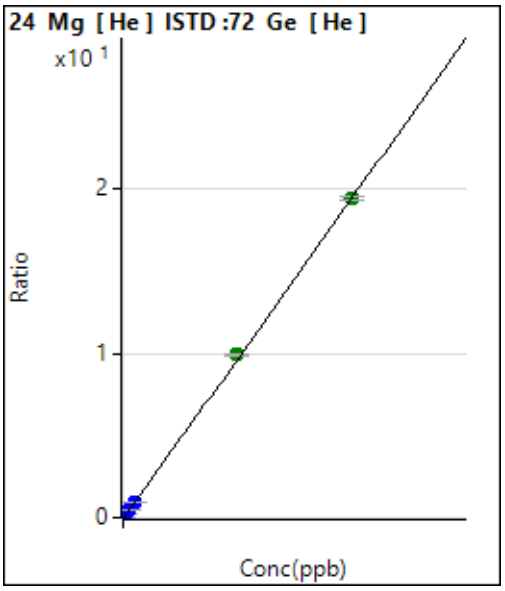


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	164287.96	0.5766	P	0.6	
2	☐	200.000	170.842	258803.67	0.8774	P	0.4	-14.6
3	☐	500.000	436.915	397312.47	1.3460	P	0.3	-12.6
4	☐	1000.000	897.715	641621.27	2.1575	P	1.1	-10.2
5	☐	10000.00	10027.13	5319771.80	18.2355	A	1.2	0.3
6	☐	20000.00	19993.41	10199744.8	35.7873	A	0.2	0.0

y = 0.0018 * x + 0.5766
R = 1.0000
DL = 6.195 ppb
BEC = 327.4 ppb

Weight: <None>
Min Conc: <None>

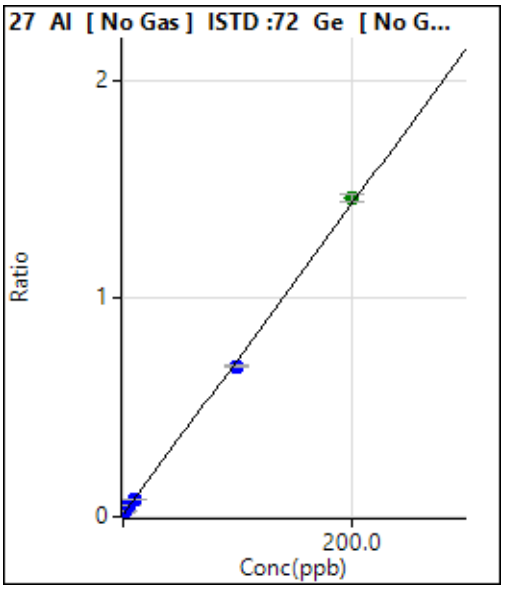
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	193.34	0.0007	P	29.1	
2	☐	200.000	186.480	53974.67	0.1830	P	1.6	-6.8
3	☐	500.000	466.818	134914.35	0.4571	P	0.4	-6.6
4	☐	1000.000	942.843	274324.60	0.9225	P	1.5	-5.7
5	☐	10000.00	10180.72	2903811.94	9.9539	A	1.1	1.8
6	☐	20000.00	19913.46	5548942.63	19.4692	A	1.4	-0.4

y = 9.7766E-004 * x + 6.7814E-004
R = 0.9999
DL = 0.6062 ppb
BEC = 0.6936 ppb

Weight: <None>
Min Conc: <None>

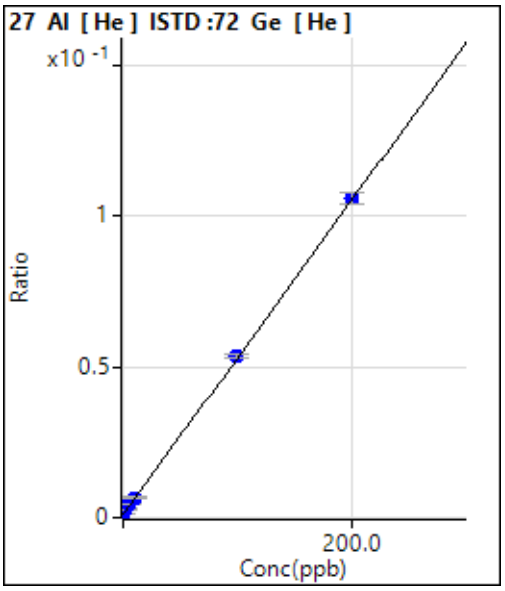


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	15916.03	0.0181	P	2.5	
2	☐	2.000	1.769	27494.07	0.0307	P	0.9	-11.6
3	☐	5.000	5.317	51134.28	0.0559	P	0.9	6.3
4	☐	10.000	8.983	74894.19	0.0820	P	1.2	-10.2
5	☐	100.000	94.129	614947.07	0.6876	P	1.4	-5.9
6	☐	200.000	202.981	1280085.01	1.4619	A	2.7	1.5

y = 0.0071 * x + 0.0181
R = 0.9994
DL = 0.193 ppb
BEC = 2.542 ppb

Weight: <None>
Min Conc: <None>

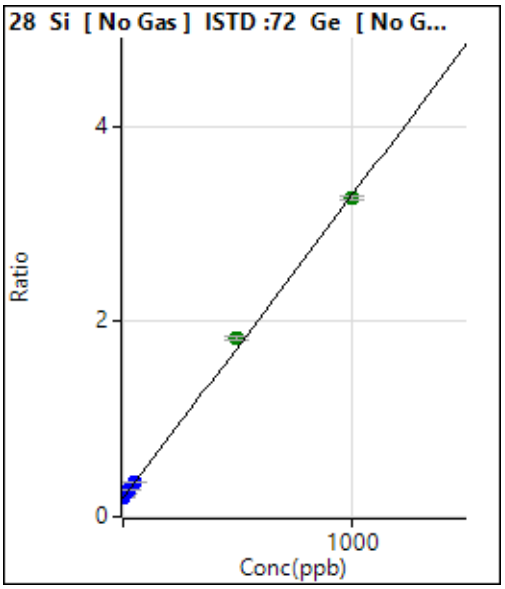
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	433.35	0.0015	P	9.1	
2	☐	2.000	2.218	790.04	0.0027	P	22.9	10.9
3	☐	5.000	5.746	1333.42	0.0045	P	7.0	14.9
4	☐	10.000	9.681	1953.51	0.0066	P	11.0	-3.2
5	☐	100.000	99.502	15582.26	0.0534	P	2.1	-0.5
6	☐	200.000	200.244	30193.05	0.1059	P	3.3	0.1

y = 5.2148E-004 * x + 0.0015
R = 1.0000
DL = 0.7965 ppb
BEC = 2.917 ppb

Weight: <None>
Min Conc: <None>

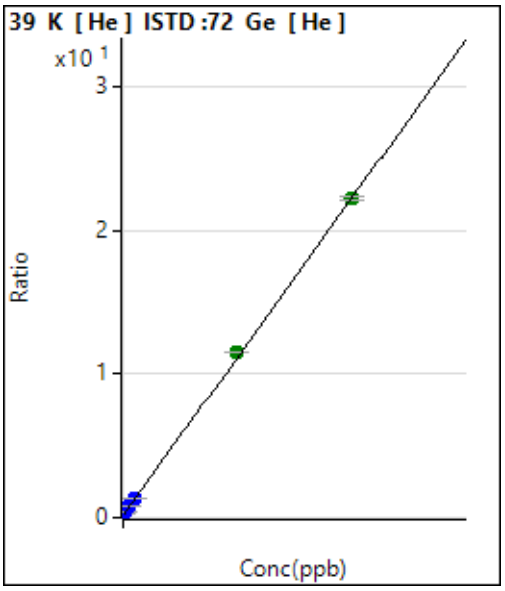


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	181850.04	0.2066	P	1.1	
2	☐	10.000	8.691	209425.99	0.2336	P	0.2	-13.1
3	☐	25.000	24.176	257545.31	0.2816	P	0.2	-3.3
4	☐	50.000	45.754	318398.39	0.3485	P	1.1	-8.5
5	☐	500.000	525.756	1642990.96	1.8372	A	1.9	5.2
6	☐	1000.000	987.368	2862369.75	3.2688	A	0.6	-1.3

y = 0.0031 * x + 0.2066
R = 0.9995
DL = 2.133 ppb
BEC = 66.61 ppb

Weight: <None>
Min Conc: <None>

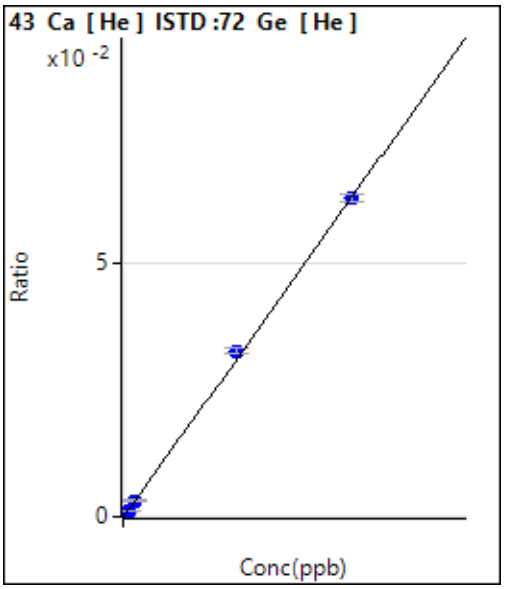
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	77058.22	0.2704	P	2.0	
2	☐	200.000	177.477	137586.80	0.4665	P	0.6	-11.3
3	☐	500.000	455.224	228252.37	0.7733	P	0.9	-9.0
4	☐	1000.000	924.398	384086.02	1.2915	P	1.0	-7.6
5	☐	10000.00	10210.47	3369392.76	11.5491	A	0.7	2.1
6	☐	20000.00	19899.88	6342019.70	22.2522	A	0.7	-0.5

y = 0.0011 * x + 0.2704
R = 0.9999
DL = 14.82 ppb
BEC = 244.8 ppb

Weight: <None>
Min Conc: <None>

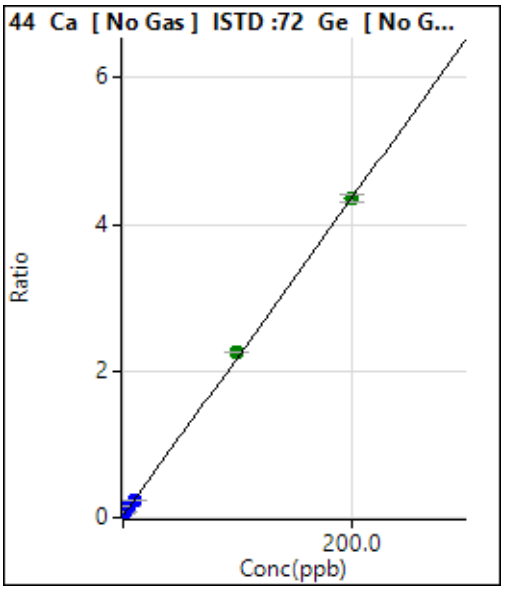


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0001	P	66.3	
2	☐	200.000	185.006	203.34	0.0007	P	15.7	-7.5
3	☐	500.000	385.158	390.01	0.0013	P	0.2	-23.0
4	☐	1000.000	953.240	926.72	0.0031	P	11.1	-4.7
5	☐	10000.00	10282.31	9503.44	0.0326	P	3.4	2.8
6	☐	20000.00	19864.20	17905.27	0.0628	P	2.5	-0.7

y = 3.1576E-006 * x + 1.0512E-004
R = 0.9998
DL = 66.27 ppb
BEC = 33.29 ppb

Weight: <None>
Min Conc: <None>

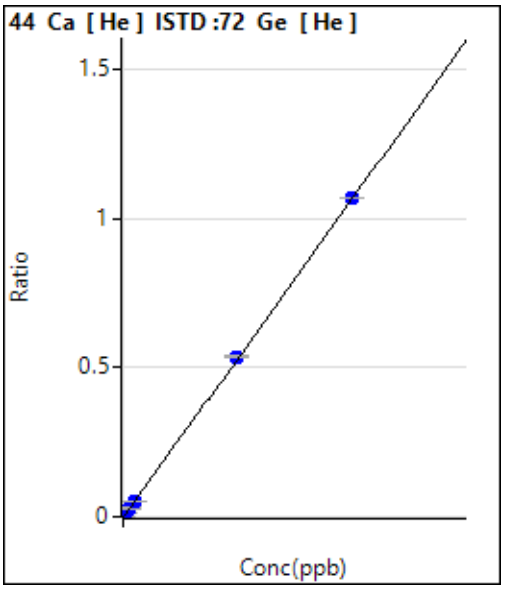
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	41308.90	0.0469	P	2.2	
2	☐	2.000	1.809	77229.47	0.0861	P	1.0	-9.5
3	☐	5.000	4.736	136766.87	0.1495	P	0.6	-5.3
4	☐	10.000	9.305	227066.14	0.2485	P	0.4	-7.0
5	☐	100.000	102.208	2022467.89	2.2613	A	0.7	2.2
6	☐	200.000	198.939	3815297.13	4.3570	A	2.2	-0.5

y = 0.0217 * x + 0.0469
R = 0.9999
DL = 0.1436 ppb
BEC = 2.166 ppb

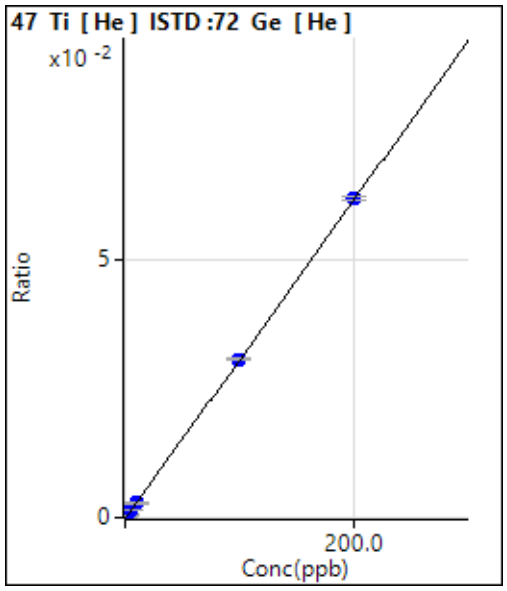
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	730.03	0.0026	P	11.7	
2	☐	200.000	180.459	3597.20	0.0122	P	3.1	-9.8
3	☐	500.000	490.097	8479.41	0.0287	P	5.2	-2.0
4	☐	1000.000	953.108	15892.78	0.0534	P	3.2	-4.7
5	☐	10000.00	10000.76	156495.16	0.5364	P	1.1	0.0
6	☐	20000.00	20002.40	305064.14	1.0704	P	0.3	0.0

y = 5.3384E-005 * x + 0.0026
R = 1.0000
DL = 16.78 ppb
BEC = 47.99 ppb

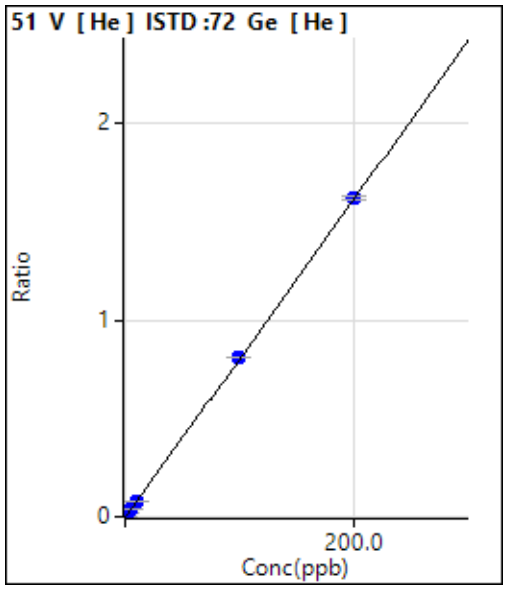
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	100.2	
2	☐	2.000	1.745	170.00	0.0006	P	36.6	-12.8
3	☐	5.000	4.329	406.68	0.0014	P	6.1	-13.4
4	☐	10.000	9.251	863.37	0.0029	P	13.5	-7.5
5	☐	100.000	99.487	9013.10	0.0309	P	1.9	-0.5
6	☐	200.000	200.313	17718.37	0.0622	P	1.7	0.2

y = 3.1016E-004 * x + 3.5087E-005
R = 1.0000
DL = 0.3401 ppb
BEC = 0.1131 ppb

Weight: <None>
Min Conc: <None>

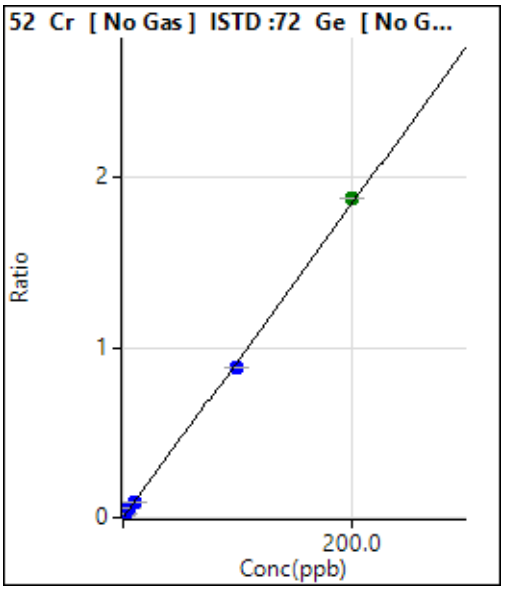


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	953.37	0.0033	P	2.1	
2	☐	2.000	1.952	5642.30	0.0191	P	0.9	-2.4
3	☐	5.000	4.758	12342.27	0.0418	P	2.1	-4.8
4	☐	10.000	9.449	23711.62	0.0797	P	1.7	-5.5
5	☐	100.000	99.946	236700.40	0.8114	P	0.6	-0.1
6	☐	200.000	200.061	461921.18	1.6207	P	0.9	0.0

y = 0.0081 * x + 0.0033
R = 1.0000
DL = 0.02611 ppb
BEC = 0.4139 ppb

Weight: <None>
Min Conc: <None>

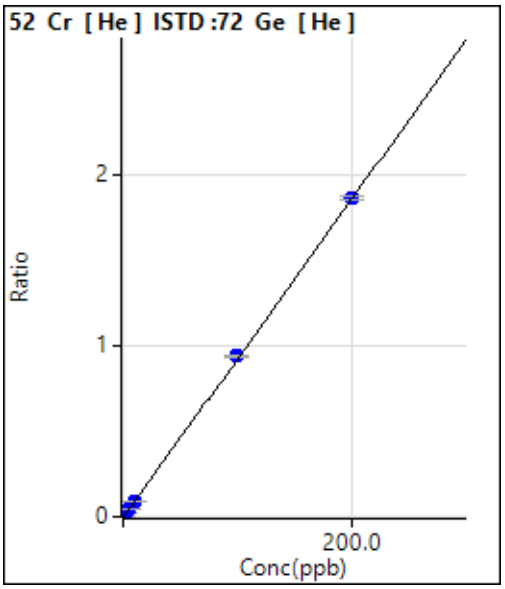
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8329.32	0.0095	P	1.6	
2	☐	2.000	1.851	23804.31	0.0265	P	1.4	-7.5
3	☐	5.000	4.539	46974.04	0.0514	P	0.7	-9.2
4	☐	10.000	9.282	86924.70	0.0951	P	1.1	-7.2
5	☐	100.000	94.709	790317.41	0.8837	P	1.0	-5.3
6	☐	200.000	202.694	1646629.61	1.8804	A	0.6	1.3

y = 0.0092 * x + 0.0095
R = 0.9995
DL = 0.04824 ppb
BEC = 1.025 ppb

Weight: <None>
Min Conc: <None>

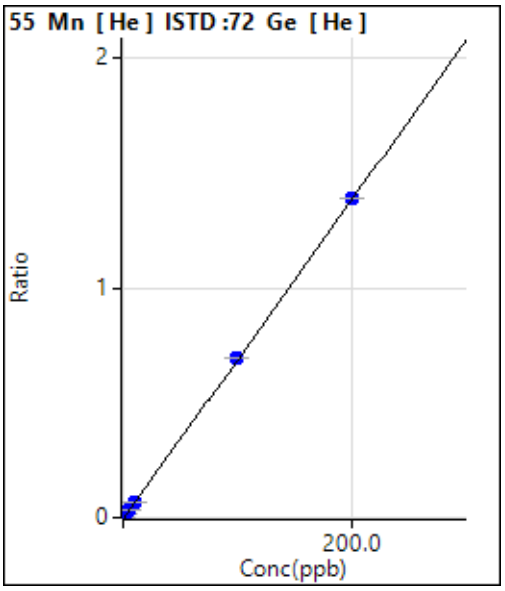


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	953.39	0.0033	P	8.5	
2	☐	2.000	1.949	6331.58	0.0215	P	3.6	-2.5
3	☐	5.000	4.854	14307.70	0.0485	P	4.1	-2.9
4	☐	10.000	9.562	27431.03	0.0922	P	3.7	-4.4
5	☐	100.000	100.390	273272.72	0.9367	P	0.7	0.4
6	☐	200.000	199.831	530453.74	1.8612	P	0.8	-0.1

y = 0.0093 * x + 0.0033
R = 1.0000
DL = 0.092 ppb
BEC = 0.3598 ppb

Weight: <None>
Min Conc: <None>

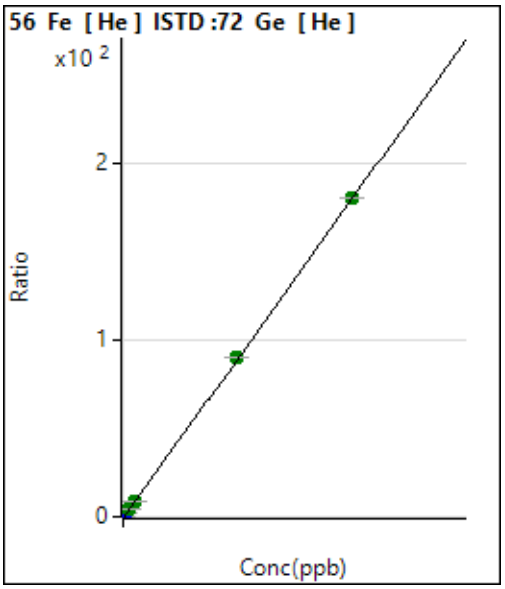
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	206.67	0.0007	P	17.0	
2	☐	2.000	1.935	4180.71	0.0142	P	6.3	-3.3
3	☐	5.000	4.711	9880.40	0.0335	P	4.4	-5.8
4	☐	10.000	9.483	19817.99	0.0666	P	2.8	-5.2
5	☐	100.000	99.872	202736.91	0.6949	P	0.6	-0.1
6	☐	200.000	200.098	396621.28	1.3916	P	0.3	0.0

y = 0.0070 * x + 7.2528E-004
R = 1.0000
DL = 0.05311 ppb
BEC = 0.1043 ppb

Weight: <None>
Min Conc: <None>

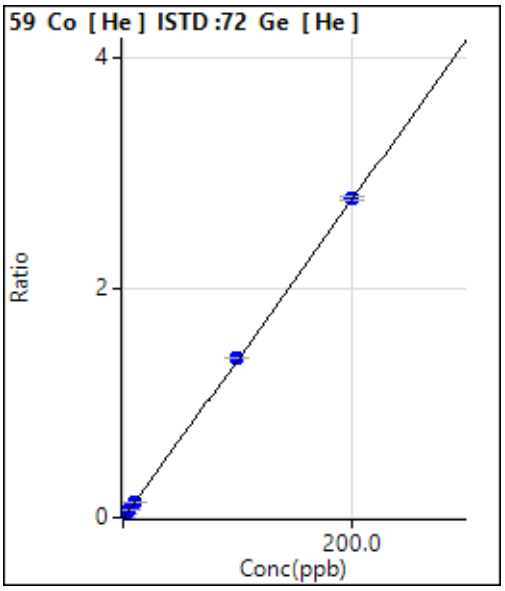


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7572.23	0.0266	P	3.2	
2	☐	200.000	185.551	502271.21	1.7029	P	1.2	-7.2
3	☐	500.000	497.258	1333887.04	4.5190	A	2.8	-0.5
4	☐	1000.000	1004.027	2705286.94	9.0973	A	2.6	0.4
5	☐	10000.00	10020.34	26418121.2	90.5541	A	0.2	0.2
6	☐	20000.00	19989.84	51478757.5	180.622	A	0.3	-0.1

y = 0.0090 * x + 0.0266
R = 1.0000
DL = 0.2834 ppb
BEC = 2.941 ppb

Weight: <None>
Min Conc: <None>

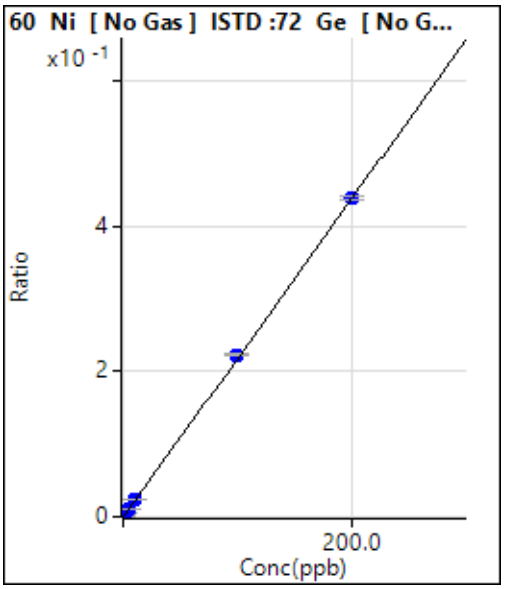
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0001	P	69.5	
2	☐	2.000	1.905	7822.37	0.0265	P	2.8	-4.8
3	☐	5.000	4.793	19674.44	0.0667	P	1.8	-4.1
4	☐	10.000	9.529	39387.22	0.1324	P	1.1	-4.7
5	☐	100.000	99.749	404311.58	1.3859	P	0.3	-0.3
6	☐	200.000	200.155	792549.88	2.7808	P	0.6	0.1

y = 0.0139 * x + 5.8556E-005
R = 1.0000
DL = 0.008792 ppb
BEC = 0.004215 ppb

Weight: <None>
Min Conc: <None>

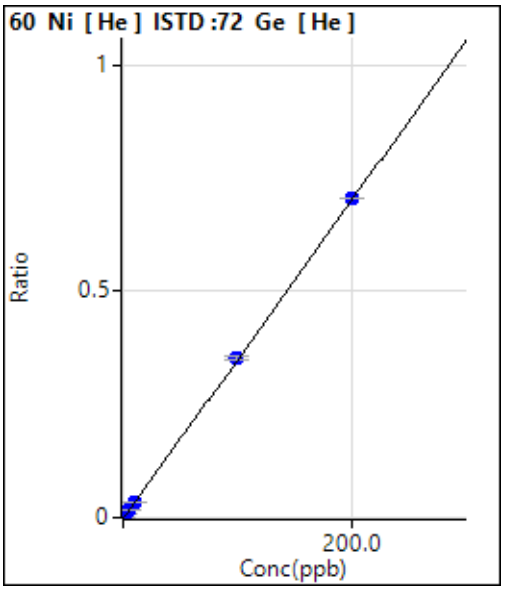


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1130.07	0.0013	P	10.5	
2	☐	2.000	1.832	4757.58	0.0053	P	1.4	-8.4
3	☐	5.000	4.747	10704.41	0.0117	P	1.7	-5.1
4	☐	10.000	10.125	21480.57	0.0235	P	1.4	1.2
5	☐	100.000	100.793	199037.86	0.2226	P	1.3	0.8
6	☐	200.000	199.605	384835.58	0.4395	P	1.4	-0.2

y = 0.0022 * x + 0.0013
R = 1.0000
DL = 0.1836 ppb
BEC = 0.5849 ppb

Weight: <None>
Min Conc: <None>

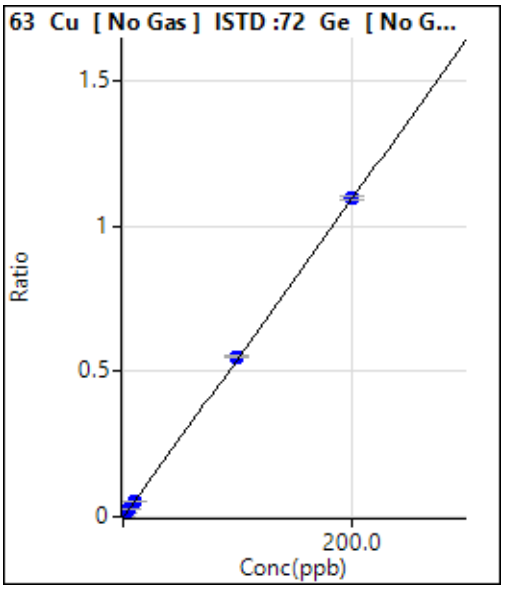
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	180.00	0.0006	P	25.7	
2	☐	2.000	1.915	2173.55	0.0074	P	8.2	-4.2
3	☐	5.000	4.890	5264.45	0.0178	P	4.2	-2.2
4	☐	10.000	9.867	10510.87	0.0353	P	1.9	-1.3
5	☐	100.000	99.522	102336.12	0.3507	P	2.3	-0.5
6	☐	200.000	200.249	200962.18	0.7051	P	0.2	0.1

y = 0.0035 * x + 6.3203E-004
R = 1.0000
DL = 0.1386 ppb
BEC = 0.1797 ppb

Weight: <None>
Min Conc: <None>

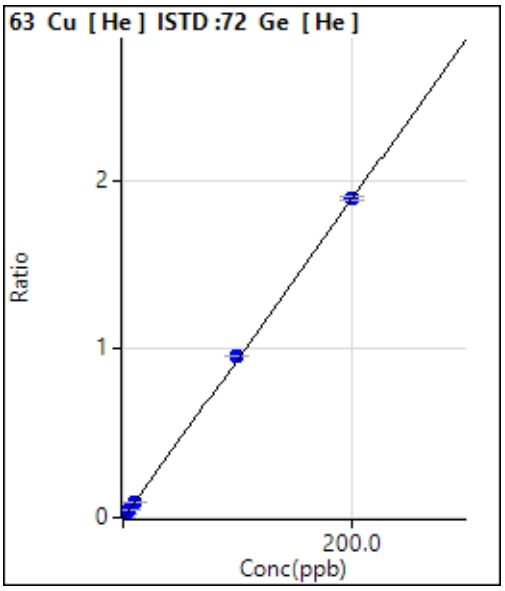


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2093.54	0.0024	P	6.6	
2	☐	2.000	1.971	11828.66	0.0132	P	1.8	-1.4
3	☐	5.000	4.869	26592.94	0.0291	P	3.2	-2.6
4	☐	10.000	9.764	51096.06	0.0559	P	0.7	-2.4
5	☐	100.000	100.224	493755.01	0.5520	P	0.3	0.2
6	☐	200.000	199.903	962106.18	1.0987	P	1.3	0.0

y = 0.0055 * x + 0.0024
R = 1.0000
DL = 0.0858 ppb
BEC = 0.4337 ppb

Weight: <None>
Min Conc: <None>

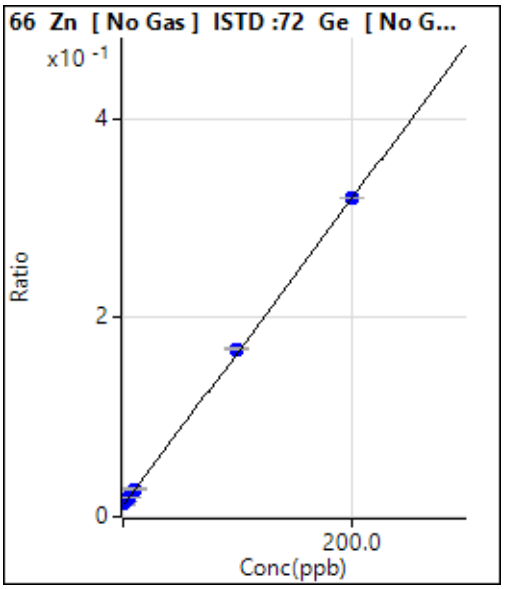
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	800.04	0.0028	P	4.5	
2	☐	2.000	2.028	6498.33	0.0220	P	3.8	1.4
3	☐	5.000	4.949	14674.83	0.0497	P	4.8	-1.0
4	☐	10.000	9.513	27645.12	0.0930	P	1.6	-4.9
5	☐	100.000	100.709	279268.86	0.9572	P	0.7	0.7
6	☐	200.000	199.671	540113.27	1.8951	P	0.8	-0.2

y = 0.0095 * x + 0.0028
R = 1.0000
DL = 0.0398 ppb
BEC = 0.2963 ppb

Weight: <None>
Min Conc: <None>

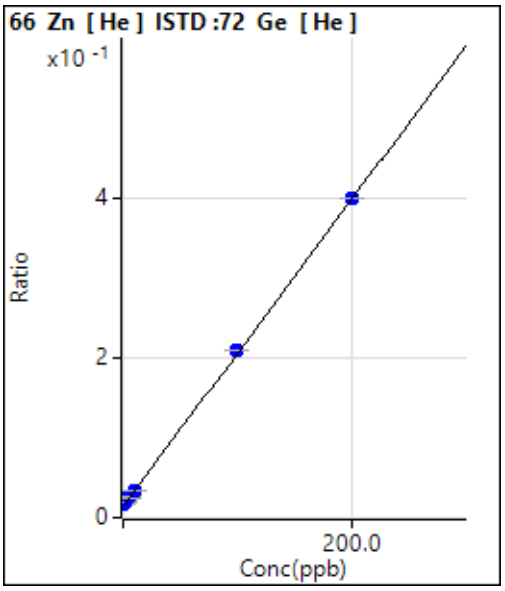


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11048.02	0.0126	P	2.7	
2	☐	2.000	2.150	14227.66	0.0159	P	2.3	7.5
3	☐	5.000	4.606	17975.47	0.0197	P	1.1	-7.9
4	☐	10.000	9.941	25474.27	0.0279	P	0.7	-0.6
5	☐	100.000	101.092	150652.98	0.1684	P	1.5	1.1
6	☐	200.000	199.465	280339.10	0.3202	P	0.5	-0.3

y = 0.0015 * x + 0.0126
R = 1.0000
DL = 0.6626 ppb
BEC = 8.139 ppb

Weight: <None>
Min Conc: <None>

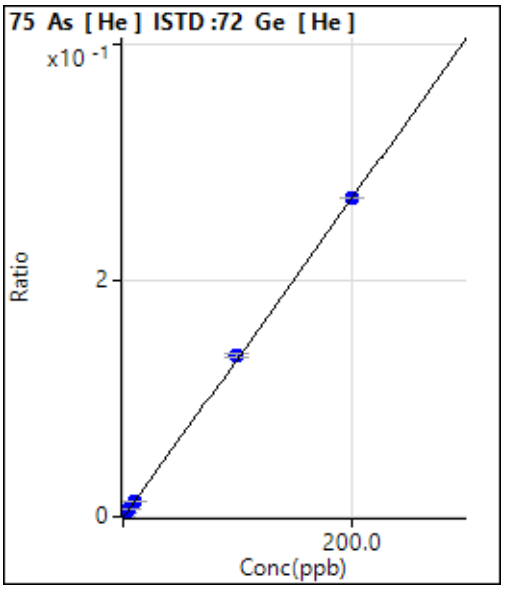
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4614.18	0.0162	P	3.3	
2	☐	2.000	2.179	6008.07	0.0204	P	3.6	9.0
3	☐	5.000	4.740	7462.18	0.0253	P	1.7	-5.2
4	☐	10.000	9.278	10103.97	0.0340	P	4.1	-7.2
5	☐	100.000	100.648	61007.10	0.2091	P	1.1	0.6
6	☐	200.000	199.717	113720.52	0.3990	P	0.5	-0.1

y = 0.0019 * x + 0.0162
R = 1.0000
DL = 0.8439 ppb
BEC = 8.448 ppb

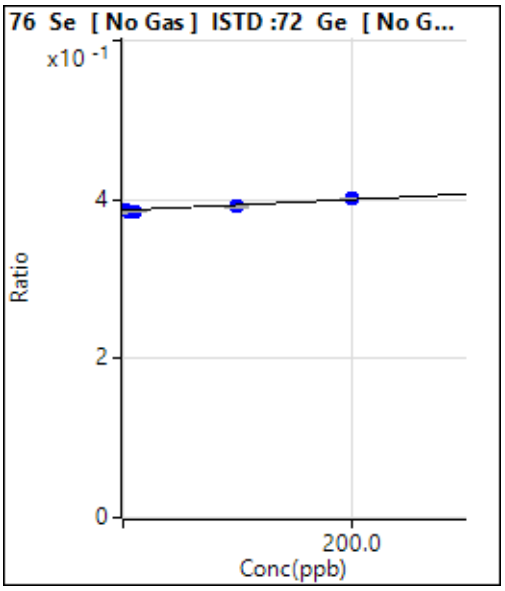
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	81.11	0.0003	P	13.5	
2	☐	2.000	1.809	806.70	0.0027	P	1.3	-9.6
3	☐	5.000	4.709	1966.82	0.0067	P	3.2	-5.8
4	☐	10.000	9.769	4019.52	0.0135	P	3.5	-2.3
5	☐	100.000	101.197	40073.77	0.1374	P	2.0	1.2
6	☐	200.000	199.422	77064.01	0.2704	P	0.5	-0.3

y = 0.0014 * x + 2.8473E-004
R = 1.0000
DL = 0.08512 ppb
BEC = 0.2102 ppb

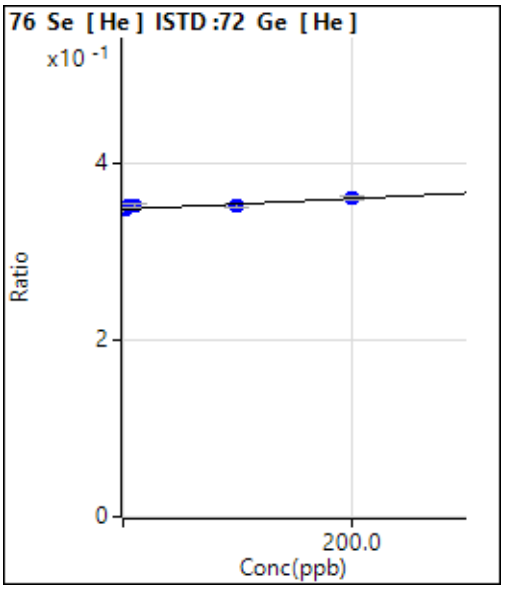
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	340135.53	0.3864	P	0.2	
2	☐	2.000	1.615	346593.28	0.3865	P	0.5	-19.3
3	☐	5.000	-39.591	350968.52	0.3837	P	0.3	-891.8
4	☐	10.000	-22.074	351671.41	0.3849	P	0.4	-320.7
5	☐	100.000	63.515	349470.53	0.3907	P	0.6	-36.5
6	☐	200.000	220.965	351535.49	0.4014	P	0.5	10.5

y = 6.8039E-005 * x + 0.3864
R = 0.9712
DL = 37.32 ppb
BEC = 5679 ppb

Weight: <None>
Min Conc: <None>

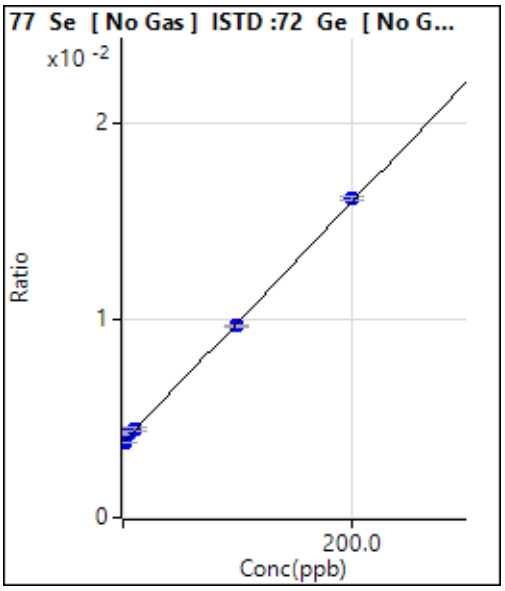


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	99327.45	0.3486	P	1.2	
2	☐	2.000	-5.827	102715.53	0.3482	P	1.0	-391.3
3	☐	5.000	74.808	104271.14	0.3533	P	0.8	1396.2
4	☐	10.000	72.449	105006.20	0.3531	P	1.6	624.5
5	☐	100.000	70.638	102978.72	0.3530	P	1.2	-29.4
6	☐	200.000	209.892	103068.85	0.3616	P	1.2	4.9

y = 6.2131E-005 * x + 0.3486
R = 0.8760
DL = 203.6 ppb
BEC = 5611 ppb

Weight: <None>
Min Conc: <None>

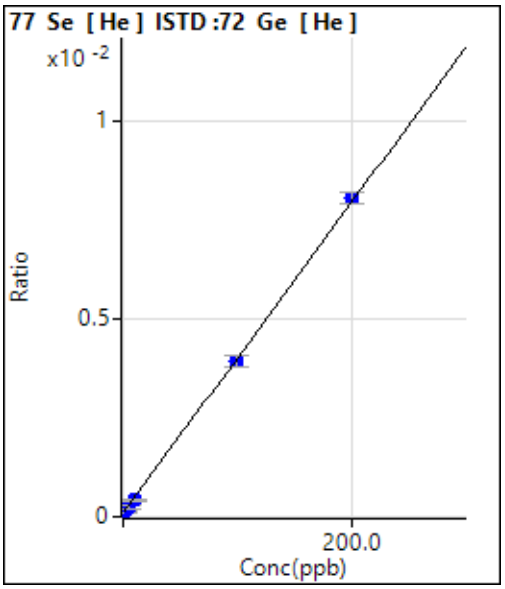
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3427.16	0.0039	P	2.8	
2	☐	2.000	-1.542	3407.17	0.0038	P	0.4	-177.1
3	☐	5.000	6.114	3900.64	0.0043	P	1.6	22.3
4	☐	10.000	9.802	4100.70	0.0045	P	3.5	-2.0
5	☐	100.000	95.699	8682.93	0.0097	P	1.6	-4.3
6	☐	200.000	202.168	14164.29	0.0162	P	1.2	1.1

y = 6.0750E-005 * x + 0.0039
R = 0.9995
DL = 5.321 ppb
BEC = 64.09 ppb

Weight: <None>
Min Conc: <None>

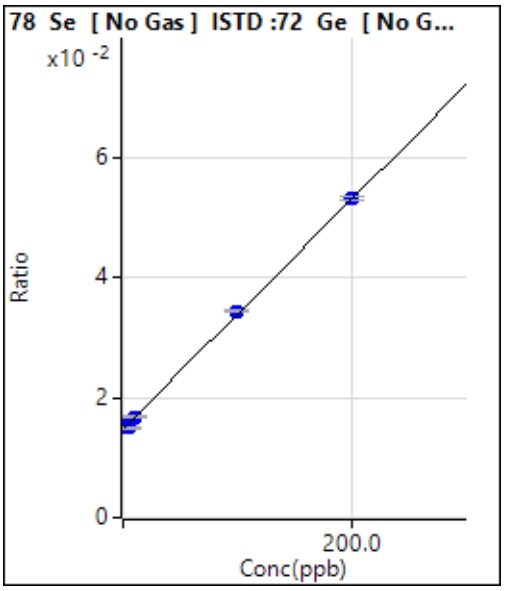


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	43.2	
2	☐	2.000	-0.121	40.00	0.0001	P	24.8	-106.0
3	☐	5.000	2.175	66.67	0.0002	P	37.7	-56.5
4	☐	10.000	7.270	126.67	0.0004	P	12.5	-27.3
5	☐	100.000	97.034	1153.40	0.0040	P	7.6	-3.0
6	☐	200.000	201.712	2300.24	0.0081	P	3.7	0.9

y = 3.9311E-005 * x + 1.4032E-004
R = 0.9998
DL = 4.626 ppb
BEC = 3.569 ppb

Weight: <None>
Min Conc: <None>

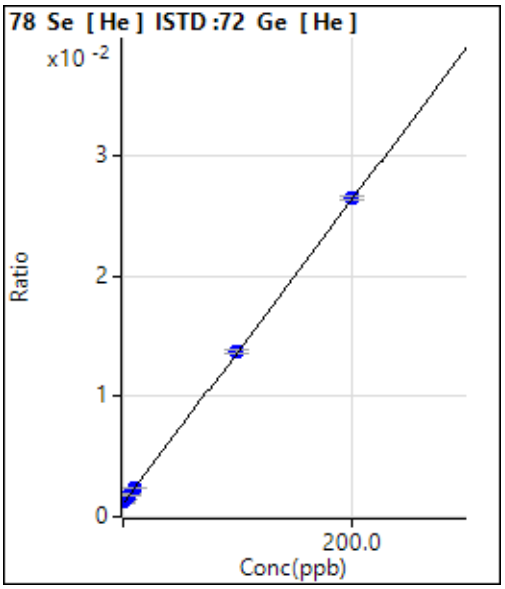
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13283.44	0.0151	P	2.3	
2	☐	2.000	2.487	13957.43	0.0156	P	2.0	24.4
3	☐	5.000	-0.649	13687.13	0.0150	P	3.1	-113.0
4	☐	10.000	8.805	15322.31	0.0168	P	3.0	-11.9
5	☐	100.000	101.061	30732.06	0.0344	P	0.7	1.1
6	☐	200.000	199.665	46550.52	0.0532	P	1.3	-0.2

y = 1.9066E-004 * x + 0.0151
R = 0.9996
DL = 5.56 ppb
BEC = 79.15 ppb

Weight: <None>
Min Conc: <None>

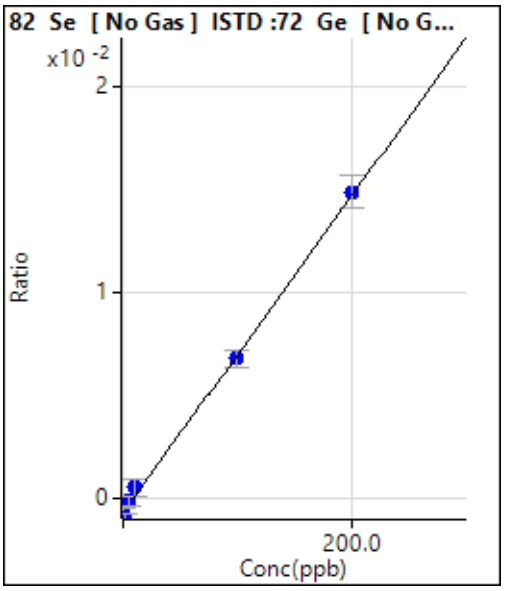


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	352.67	0.0012	P	9.8	
2	☐	2.000	1.441	418.68	0.0014	P	5.3	-27.9
3	☐	5.000	4.382	528.68	0.0018	P	8.7	-12.4
4	☐	10.000	9.045	708.02	0.0024	P	2.5	-9.5
5	☐	100.000	99.468	4028.61	0.0138	P	2.5	-0.5
6	☐	200.000	200.335	7568.81	0.0266	P	1.2	0.2

y = 1.2639E-004 * x + 0.0012
R = 1.0000
DL = 2.878 ppb
BEC = 9.791 ppb

Weight: <None>
Min Conc: <None>

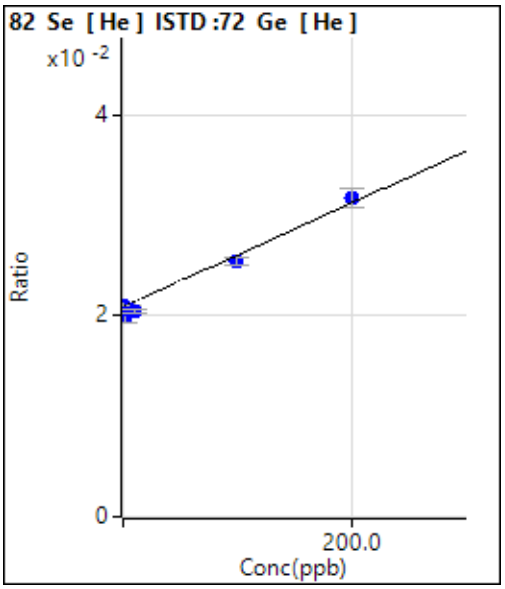
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-569.55	-0.0006	P	-53.0	
2	☐	2.000	-4.186	-869.28	-0.0010	P	-41.1	-309.3
3	☐	5.000	6.179	-158.52	-0.0002	P	-267.	23.6
4	☐	10.000	14.660	439.73	0.0005	P	172.7	46.6
5	☐	100.000	96.139	6030.53	0.0067	P	11.9	-3.9
6	☐	200.000	201.730	13022.02	0.0149	P	10.7	0.9

y = 7.6906E-005 * x - 6.4740E-004
R = 0.9988
DL = 13.39 ppb
BEC = -8.418 ppb

Weight: <None>
Min Conc: <None>

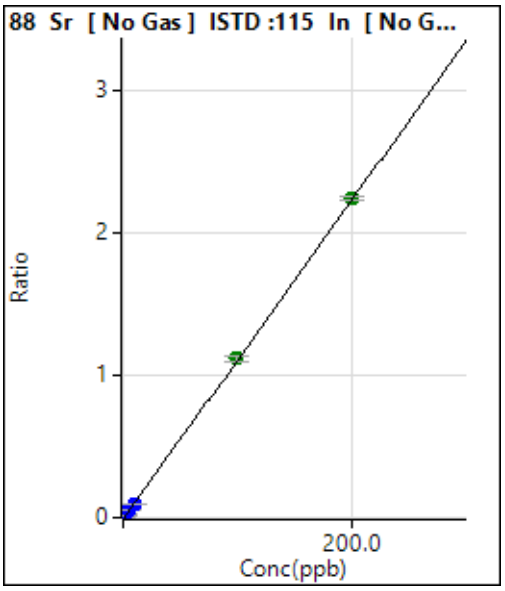


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5978.09	0.0210	P	2.4	
2	☐	2.000	-21.384	5861.38	0.0199	P	5.6	-1169.2
3	☐	5.000	-6.198	6098.18	0.0207	P	3.9	-224.0
4	☐	10.000	-10.045	6084.81	0.0205	P	2.2	-200.4
5	☐	100.000	86.340	7422.19	0.0254	P	2.6	-13.7
6	☐	200.000	208.346	9049.87	0.0318	P	5.5	4.2

y = 5.1708E-005 * x + 0.0210
R = 0.9947
DL = 29.27 ppb
BEC = 405.7 ppb

Weight: <None>
Min Conc: <None>

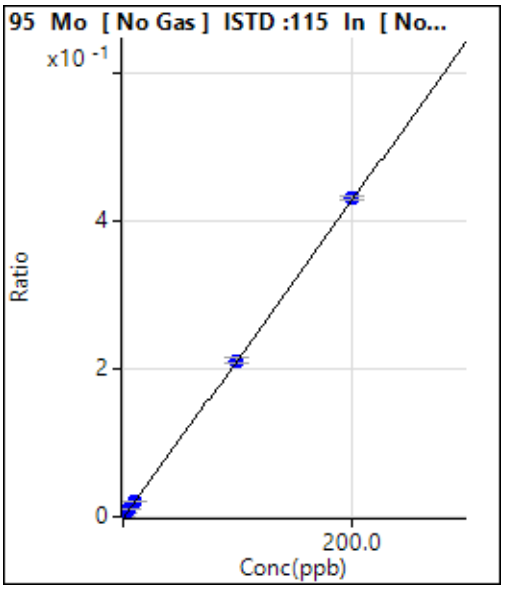
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	546.69	0.0005	P	9.2	
2	☐	2.000	1.766	22041.72	0.0203	P	2.2	-11.7
3	☐	5.000	4.509	60037.98	0.0509	P	3.0	-9.8
4	☐	10.000	8.456	112859.20	0.0951	P	1.3	-15.4
5	☐	100.000	99.649	1223557.59	1.1148	A	3.3	-0.4
6	☐	200.000	200.267	2379611.89	2.2400	A	1.7	0.1

y = 0.0112 * x + 5.1424E-004
R = 1.0000
DL = 0.01272 ppb
BEC = 0.04599 ppb

Weight: <None>
Min Conc: <None>

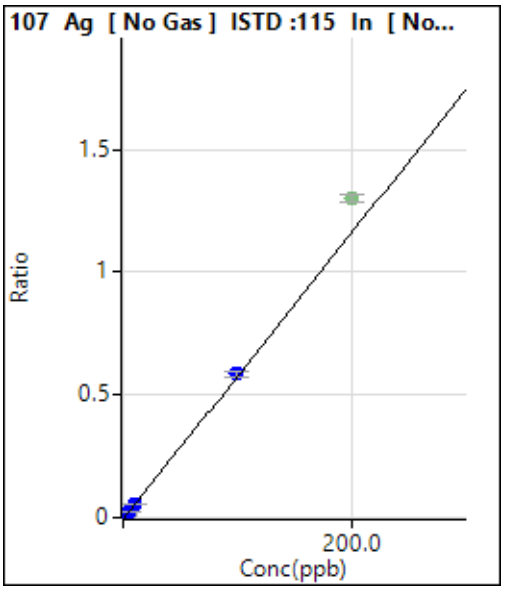


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	86.6	
2	☐	2.000	1.899	4464.16	0.0041	P	1.3	-5.0
3	☐	5.000	4.351	11054.78	0.0094	P	5.6	-13.0
4	☐	10.000	9.095	23247.31	0.0196	P	0.6	-9.0
5	☐	100.000	98.509	232519.11	0.2119	P	4.0	-1.5
6	☐	200.000	200.808	458857.01	0.4319	P	0.7	0.4

y = 0.0022 * x + 1.8921E-005
R = 1.0000
DL = 0.02285 ppb
BEC = 0.008796 ppb

Weight: <None>
Min Conc: <None>

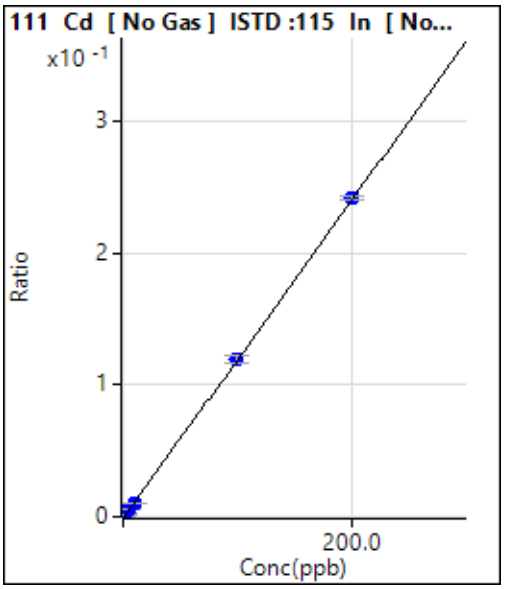
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	650.03	0.0006	P	7.8	
2	☐	2.000	1.941	12976.54	0.0119	P	3.1	-3.0
3	☐	5.000	4.524	31811.93	0.0270	P	2.5	-9.5
4	☐	10.000	9.123	63870.56	0.0538	P	0.7	-8.8
5	☐	100.000	100.113	641179.73	0.5843	P	3.8	0.1
6	☑	200.000		1381627.32	1.3006	A	2.1	

y = 0.0058 * x + 6.1152E-004
R = 1.0000
DL = 0.02442 ppb
BEC = 0.1049 ppb

Weight: <None>
Min Conc: <None>

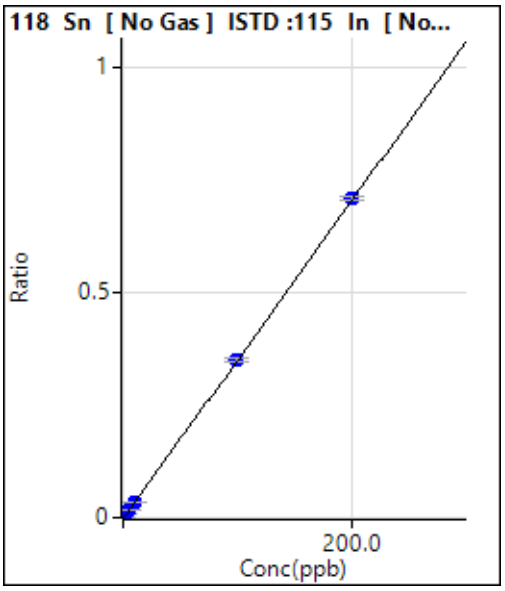


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	1.822	2396.93	0.0022	P	11.0	-8.9
3	☐	5.000	4.572	6511.73	0.0055	P	3.0	-8.6
4	☐	10.000	8.913	12773.06	0.0108	P	2.1	-10.9
5	☐	100.000	99.005	131086.48	0.1194	P	3.8	-1.0
6	☐	200.000	200.564	257048.49	0.2420	P	1.1	0.3

y = 0.0012 * x + 6.2649E-006
R = 1.0000
DL = 0.01349 ppb
BEC = 0.005193 ppb

Weight: <None>
Min Conc: <None>

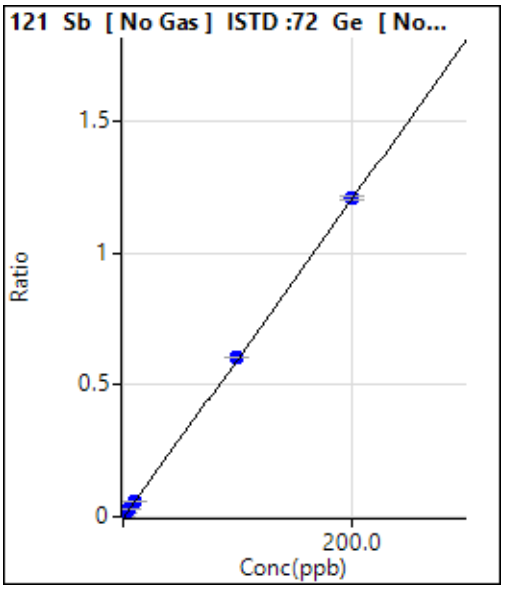
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1170.08	0.0011	P	8.4	
2	☐	2.000	1.972	8783.07	0.0081	P	1.1	-1.4
3	☐	5.000	4.359	19471.41	0.0165	P	0.6	-12.8
4	☐	10.000	8.959	38917.93	0.0328	P	1.7	-10.4
5	☐	100.000	98.962	385279.17	0.3510	P	3.4	-1.0
6	☐	200.000	200.588	754690.04	0.7104	P	0.7	0.3

y = 0.0035 * x + 0.0011
R = 1.0000
DL = 0.07837 ppb
BEC = 0.3116 ppb

Weight: <None>
Min Conc: <None>

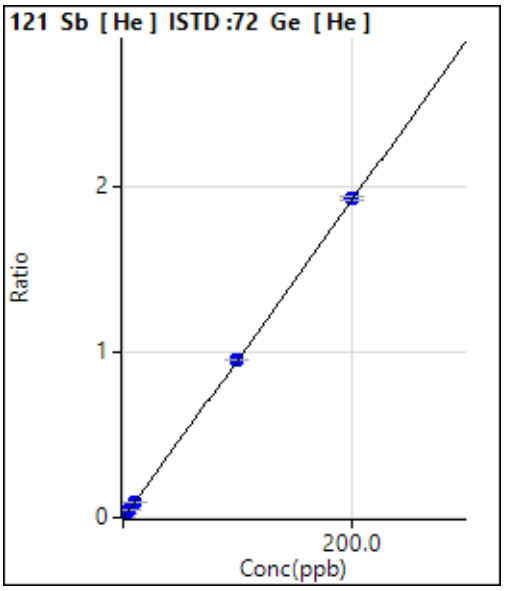


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	363.35	0.0004	P	22.2	
2	☐	2.000	1.926	10791.31	0.0120	P	4.2	-3.7
3	☐	5.000	4.795	26841.05	0.0293	P	2.2	-4.1
4	☐	10.000	9.720	53967.66	0.0591	P	0.6	-2.8
5	☐	100.000	99.844	539271.95	0.6029	P	0.6	-0.2
6	☐	200.000	200.098	1057720.85	1.2079	P	0.7	0.0

y = 0.0060 * x + 4.1282E-004
R = 1.0000
DL = 0.04548 ppb
BEC = 0.06841 ppb

Weight: <None>
Min Conc: <None>

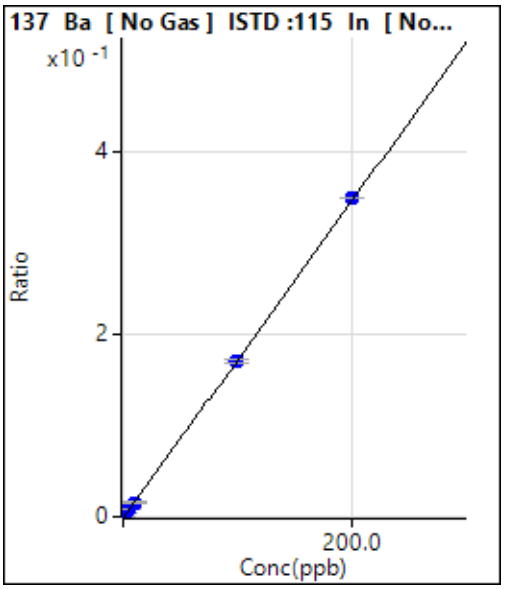
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0009	P	36.9	
2	☐	2.000	1.901	5651.32	0.0192	P	2.5	-4.9
3	☐	5.000	4.747	13717.39	0.0465	P	1.7	-5.1
4	☐	10.000	9.436	27205.20	0.0915	P	0.7	-5.6
5	☐	100.000	99.125	277821.51	0.9523	P	0.6	-0.9
6	☐	200.000	200.473	548641.67	1.9250	P	0.8	0.2

y = 0.0096 * x + 9.1294E-004
R = 1.0000
DL = 0.1052 ppb
BEC = 0.09512 ppb

Weight: <None>
Min Conc: <None>

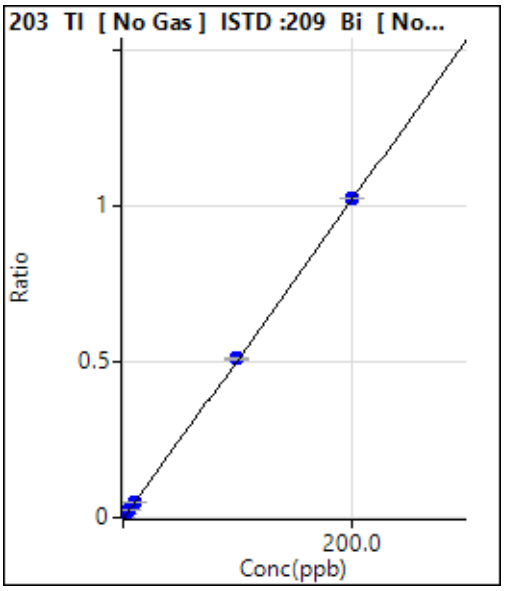


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0001	P	54.3	
2	☐	2.000	1.946	3817.31	0.0035	P	3.1	-2.7
3	☐	5.000	4.437	9243.50	0.0078	P	4.3	-11.3
4	☐	10.000	8.950	18636.96	0.0157	P	3.0	-10.5
5	☐	100.000	98.095	187481.52	0.1708	P	3.3	-1.9
6	☐	200.000	201.020	371723.32	0.3499	P	0.4	0.5

y = 0.0017 * x + 1.2276E-004
R = 0.9999
DL = 0.115 ppb
BEC = 0.07055 ppb

Weight: <None>
Min Conc: <None>

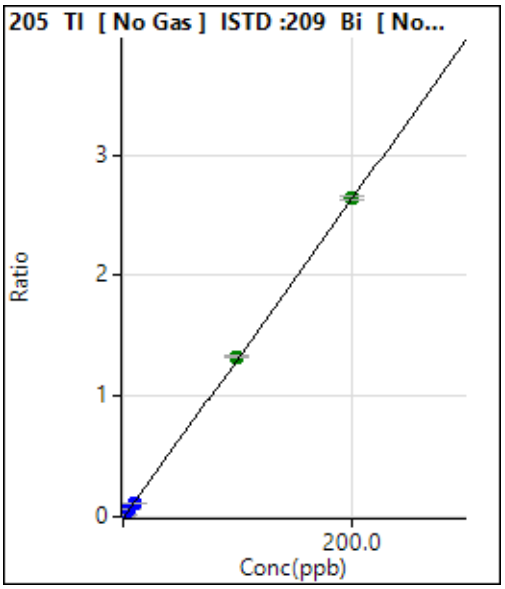
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	83.33	0.0001	P	45.4	
2	☐	2.000	1.939	10898.26	0.0100	P	3.0	-3.0
3	☐	5.000	4.692	26605.35	0.0241	P	1.7	-6.2
4	☐	10.000	9.670	55027.94	0.0495	P	1.7	-3.3
5	☐	100.000	99.603	553811.97	0.5093	P	0.4	-0.4
6	☐	200.000	200.223	1098394.77	1.0237	P	0.4	0.1

y = 0.0051 * x + 7.8411E-005
R = 1.0000
DL = 0.02088 ppb
BEC = 0.01534 ppb

Weight: <None>
Min Conc: <None>

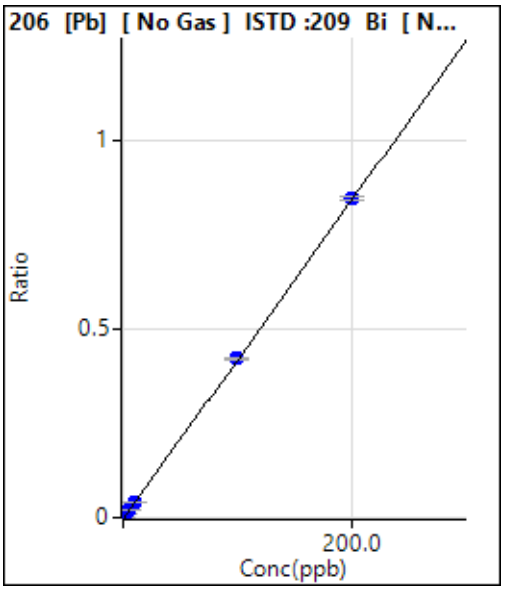


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0002	P	13.8	
2	☐	2.000	1.771	25793.72	0.0236	P	1.9	-11.5
3	☐	5.000	4.405	64643.90	0.0585	P	1.8	-11.9
4	☐	10.000	8.896	130928.72	0.1178	P	1.3	-11.0
5	☐	100.000	100.333	1442239.09	1.3262	A	0.7	0.3
6	☐	200.000	199.906	2835298.50	2.6422	A	1.4	0.0

y = 0.0132 * x + 2.4470E-004
R = 1.0000
DL = 0.007651 ppb
BEC = 0.01852 ppb

Weight: <None>
Min Conc: <None>

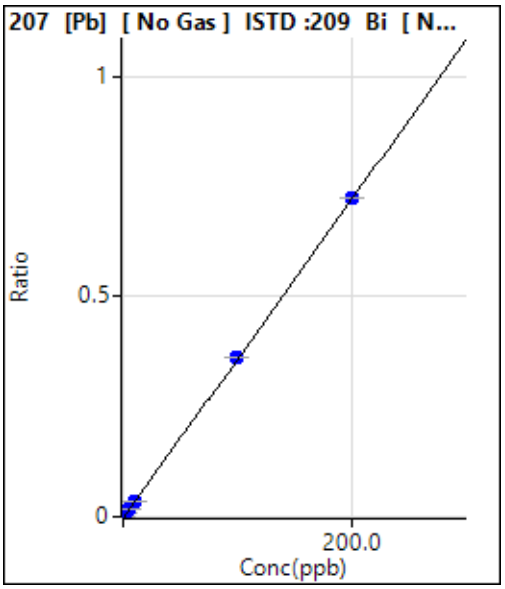
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	390.02	0.0004	P	11.9	
2	☐	2.000	1.968	9493.79	0.0087	P	0.9	-1.6
3	☐	5.000	4.820	22981.48	0.0208	P	2.1	-3.6
4	☐	10.000	9.618	45687.35	0.0411	P	2.6	-3.8
5	☐	100.000	99.592	459195.54	0.4223	P	0.4	-0.4
6	☐	200.000	200.228	910503.61	0.8486	P	0.8	0.1

y = 0.0042 * x + 3.6711E-004
R = 1.0000
DL = 0.03081 ppb
BEC = 0.08666 ppb

Weight: <None>
Min Conc: <None>

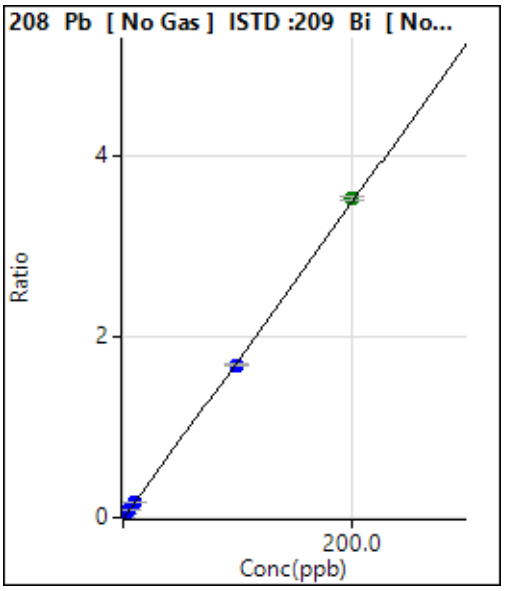


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	310.01	0.0003	P	11.1	
2	☐	2.000	1.955	8039.41	0.0074	P	2.8	-2.2
3	☐	5.000	4.776	19442.19	0.0176	P	3.7	-4.5
4	☐	10.000	9.521	38626.70	0.0348	P	2.9	-4.8
5	☐	100.000	100.149	394588.86	0.3628	P	0.3	0.1
6	☐	200.000	199.955	777014.99	0.7241	P	0.4	0.0

y = 0.0036 * x + 2.9176E-004
R = 1.0000
DL = 0.02677 ppb
BEC = 0.0806 ppb

Weight: <None>
Min Conc: <None>

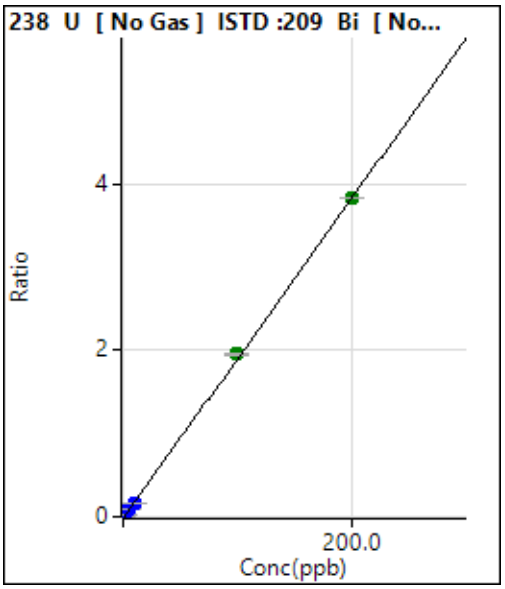
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1806.77	0.0017	P	9.4	
2	☐	2.000	1.840	36975.29	0.0339	P	2.6	-8.0
3	☐	5.000	4.624	91346.61	0.0826	P	1.7	-7.5
4	☐	10.000	9.247	181722.84	0.1635	P	1.4	-7.5
5	☐	100.000	96.337	1835045.95	1.6874	P	0.7	-3.7
6	☐	200.000	201.880	3792152.63	3.5343	A	0.9	0.9

y = 0.0175 * x + 0.0017
R = 0.9998
DL = 0.02748 ppb
BEC = 0.09719 ppb

Weight: <None>
Min Conc: <None>

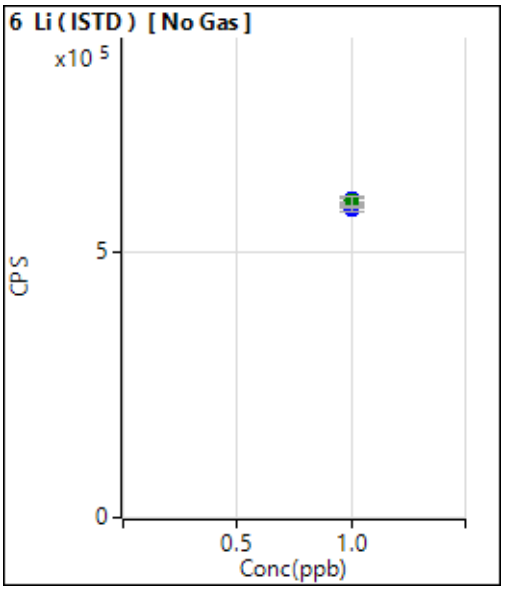


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	43.3	
2	☐	2.000	1.739	36464.68	0.0334	P	1.6	-13.1
3	☐	5.000	4.461	94795.56	0.0857	P	1.9	-10.8
4	☐	10.000	8.954	191259.99	0.1721	P	1.0	-10.5
5	☐	100.000	101.548	2122369.40	1.9517	A	1.0	1.5
6	☐	200.000	199.294	4109980.57	3.8303	A	0.6	-0.4

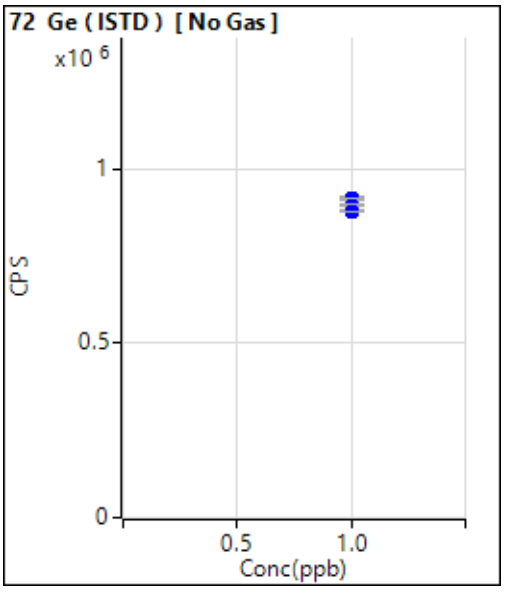
y = 0.0192 * x + 1.2550E-005
R = 0.9999
DL = 0.0008486 ppb
BEC = 0.000653 ppb

Weight: <None>
Min Conc: <None>

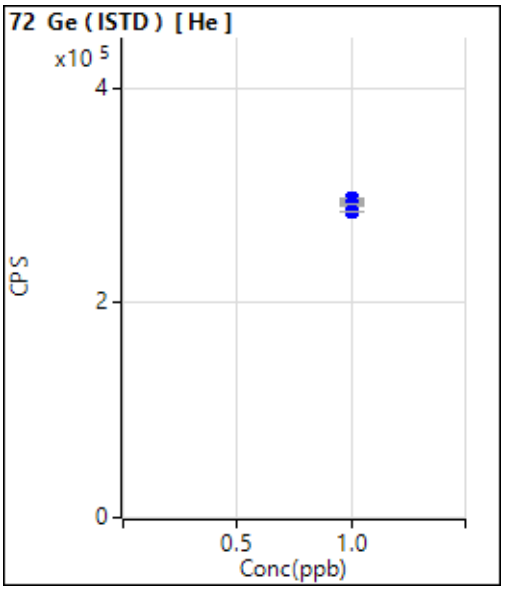
Calibration for 020_ICV.d



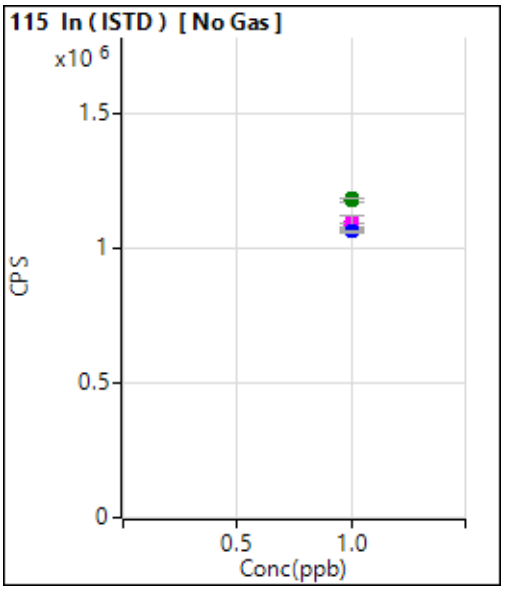
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		579730.97		P	0.8	
2	☐	1.000		591607.00		P	0.4	
3	☐	1.000		600682.49		P	0.2	
4	☐	1.000		601569.39		P	0.1	
5	☐	1.000		578595.56		P	1.4	
6	☐	1.000		597498.66		A	3.1	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		880231.97		P	0.3	
2	☐	1.000		896698.53		P	0.3	
3	☐	1.000		914660.95		P	1.0	
4	☐	1.000		913650.06		P	0.6	
5	☐	1.000		894402.64		P	1.0	
6	☐	1.000		875652.64		P	0.5	

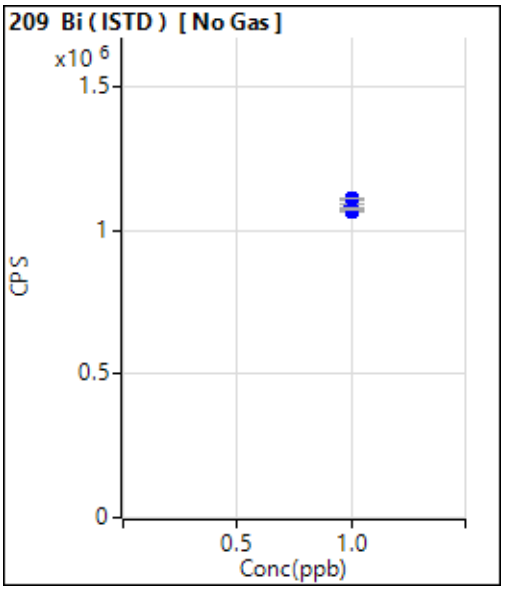


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		284935.68		P	0.4	
2	☐	1.000		294953.58		P	0.2	
3	☐	1.000		295174.68		P	0.2	
4	☐	1.000		297392.47		P	0.5	
5	☐	1.000		291738.45		P	0.6	
6	☐	1.000		285009.21		P	0.5	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1062541.78		P	0.9	
2	☐	1.000		1087771.37		M	1.2	
3	☐	1.000		1178962.77		A	1.2	
4	☐	1.000		1187157.58		A	0.5	
5	☐	1.000		1098599.80		M	4.4	
6	☐	1.000		1062301.36		P	0.6	

Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1062489.72		P	0.1	
2	☐	1.000		1090754.44		P	0.4	
3	☐	1.000		1105631.68		P	0.5	
4	☐	1.000		1111356.65		P	0.1	
5	☐	1.000		1087495.79		P	1.3	
6	☐	1.000		1073017.12		P	0.8	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	009CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:26:20-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	35468	0.00
Be	9	1	No Gas	57	54.68
V	51	2	He	953	0.19
Cr	52	2	He	953	0.94
Fe	56	2	He	7572	0.05
Se	78	2	He	353	2.90
As	75	2	He	81	16.29
Ca	44	2	He	730	1.60
Na	23	2	He	164288	0.00
Mg	24	2	He	193	15.21
K	39	2	He	77058	0.00
Mn	55	2	He	207	8.22
Co	59	2	He	17	415.69
Ni	60	2	He	180	14.14
Cu	63	2	He	800	0.56
Zn	66	2	He	4614	0.07
Al	27	2	He	433	2.02
B	11	1	No Gas	16990	0.01
Al	27	1	No Gas	15916	0.02
Si	28	1	No Gas	181850	0.00
Ag	107	1	No Gas	650	1.32
Cd	111	1	No Gas	7	1299.04
Sr	88	1	No Gas	547	1.84
Mo	95	1	No Gas	20	433.01
Sn	118	1	No Gas	1170	0.65
Sb	121	1	No Gas	363	6.08
Ba	137	1	No Gas	130	41.42
Tl	205	1	No Gas	260	5.33
Tl	203	1	No Gas	83	54.52
Pb	208	1	No Gas	1807	0.52
U	238	1	No Gas	13	324.76
Ca	43	2	He	30	222.22
Sb	121	2	He	260	14.11
Ti	47	2	He	10	1000.00
Cu	63	1	No Gas	2094	0.30

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD

Calibration Blank Report

Li	6	1	No Gas	579731	0.76
Ge	72	2	He	284936	0.40
Ge	72	1	No Gas	880232	0.27
In	115	1	No Gas	1062542	0.92

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	No Gas	1062490	0.11

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	010CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:28:36-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	3219	0.16
V	51	2	He	5642	0.02
Cr	52	2	He	6332	0.06
Fe	56	2	He	502271	0.00
Se	78	2	He	419	1.22
As	75	2	He	807	0.18
Ca	44	2	He	3597	0.09
Na	23	2	He	258804	0.00
Mg	24	2	He	53975	0.00
K	39	2	He	137587	0.00
Mn	55	2	He	4181	0.15
Co	59	2	He	7822	0.04
Ni	60	2	He	2174	0.37
Cu	63	2	He	6498	0.06
Zn	66	2	He	6008	0.06
Al	27	2	He	790	2.92
B	11	1	No Gas	24263	0.04
Al	27	1	No Gas	27494	0.00
Si	28	1	No Gas	209426	0.00
Ag	107	1	No Gas	12977	0.03
Cd	111	1	No Gas	2397	0.43
Sr	88	1	No Gas	22042	0.00
Mo	95	1	No Gas	4464	0.05
Sn	118	1	No Gas	8783	0.01
Sb	121	1	No Gas	10791	0.04
Ba	137	1	No Gas	3817	0.08
Tl	205	1	No Gas	25794	0.01
Tl	203	1	No Gas	10898	0.03
Pb	208	1	No Gas	36975	0.01
U	238	1	No Gas	36465	0.00
Ca	43	2	He	203	7.78
Sb	121	2	He	5651	0.04
Cu	63	1	No Gas	11829	0.02

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	591607	0.39	579731	102.05	70	120	
Ge	72	2	He	294954	0.22	284936	103.52	70	120	
Ge	72	1	No Gas	896699	0.35	880232	101.87	70	120	

Calibration Standard Report

In	115	1	No Gas	1087771	1.23	1062542	102.37	70	120	
Bi	209	1	No Gas	1090754	0.36	1062490	102.66	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	011CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:30:51-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	7879	0.03
V	51	2	He	12342	0.02
Cr	52	2	He	14308	0.03
Fe	56	2	He	1333887	0.00
Se	78	2	He	529	1.61
As	75	2	He	1967	0.17
Ca	44	2	He	8479	0.06
Na	23	2	He	397312	0.00
Mg	24	2	He	134914	0.00
K	39	2	He	228252	0.00
Mn	55	2	He	9880	0.04
Co	59	2	He	19674	0.01
Ni	60	2	He	5264	0.08
Cu	63	2	He	14675	0.03
Zn	66	2	He	7462	0.02
Al	27	2	He	1333	0.51
B	11	1	No Gas	33757	0.00
Al	27	1	No Gas	51134	0.00
Si	28	1	No Gas	257545	0.00
Ag	107	1	No Gas	31812	0.01
Cd	111	1	No Gas	6512	0.06
Sr	88	1	No Gas	60038	0.00
Mo	95	1	No Gas	11055	0.05
Sn	118	1	No Gas	19471	0.01
Sb	121	1	No Gas	26841	0.01
Ba	137	1	No Gas	9243	0.03
Tl	205	1	No Gas	64644	0.00
Tl	203	1	No Gas	26605	0.00
Pb	208	1	No Gas	91347	0.00
U	238	1	No Gas	94796	0.00
Ca	43	2	He	390	0.00
Sb	121	2	He	13717	0.01
Cu	63	1	No Gas	26593	0.01

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	600682	0.24	579731	103.61	70	120	
Ge	72	2	He	295175	0.15	284936	103.59	70	120	
Ge	72	1	No Gas	914661	0.99	880232	103.91	70	120	

Calibration Standard Report

In	115	1	No Gas	1178963	1.24	1062542	110.96	70	120	
Bi	209	1	No Gas	1105632	0.53	1062490	104.06	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	012CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:33:05-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	16276	0.01
V	51	2	He	23712	0.01
Cr	52	2	He	27431	0.01
Fe	56	2	He	2705287	0.00
Se	78	2	He	708	0.41
As	75	2	He	4020	0.08
Ca	44	2	He	15893	0.02
Na	23	2	He	641621	0.00
Mg	24	2	He	274325	0.00
K	39	2	He	384086	0.00
Mn	55	2	He	19818	0.01
Co	59	2	He	39387	0.00
Ni	60	2	He	10511	0.01
Cu	63	2	He	27645	0.00
Zn	66	2	He	10104	0.04
Al	27	2	He	1954	0.55
B	11	1	No Gas	53538	0.00
Al	27	1	No Gas	74894	0.00
Si	28	1	No Gas	318398	0.00
Ag	107	1	No Gas	63871	0.00
Cd	111	1	No Gas	12773	0.02
Sr	88	1	No Gas	112859	0.00
Mo	95	1	No Gas	23247	0.00
Sn	118	1	No Gas	38918	0.00
Sb	121	1	No Gas	53968	0.00
Ba	137	1	No Gas	18637	0.02
Tl	205	1	No Gas	130929	0.00
Tl	203	1	No Gas	55028	0.00
Pb	208	1	No Gas	181723	0.00
U	238	1	No Gas	191260	0.00
Ca	43	2	He	927	1.25
Sb	121	2	He	27205	0.00
Cu	63	1	No Gas	51096	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	601569	0.15	579731	103.77	70	120	
Ge	72	2	He	297392	0.48	284936	104.37	70	120	
Ge	72	1	No Gas	913650	0.55	880232	103.80	70	120	

Calibration Standard Report

In	115	1	No Gas	1187158	0.51	1062542	111.73	70	120	
Bi	209	1	No Gas	1111357	0.05	1062490	104.60	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	013CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:35:19-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	168416	0.00
V	51	2	He	233663	0.00
Cr	52	2	He	269443	0.00
Fe	56	2	He	25986130	0.00
Se	78	2	He	4051	0.07
As	75	2	He	39833	0.00
Ca	44	2	He	153165	0.00
Na	23	2	He	5291918	0.00
Mg	24	2	He	2886162	0.00
K	39	2	He	3367830	0.00
Mn	55	2	He	201618	0.00
Co	59	2	He	399751	0.00
Ni	60	2	He	101486	0.00
Cu	63	2	He	276211	0.00
Zn	66	2	He	60552	0.01
Al	27	2	He	15352	0.01
B	11	1	No Gas	404931	0.00
Al	27	1	No Gas	635368	0.00
Si	28	1	No Gas	1805218	0.00
Ag	107	1	No Gas	661091	0.00
Cd	111	1	No Gas	135423	0.00
Sr	88	1	No Gas	1259156	0.00
Mo	95	1	No Gas	238736	0.00
Sn	118	1	No Gas	399283	0.00
Sb	121	1	No Gas	556704	0.00
Ba	137	1	No Gas	194463	0.00
Tl	205	1	No Gas	1497702	0.00
Tl	203	1	No Gas	577771	0.00
Pb	208	1	No Gas	1888280	0.00
U	238	1	No Gas	2173658	0.00
Ca	43	2	He	9287	0.09
Sb	121	2	He	277954	0.00
Cu	63	1	No Gas	508345	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	623189	6.88	579731	107.50	70	120	
Ge	72	2	He	296926	1.35	284936	104.21	70	120	
Ge	72	1	No Gas	946428	0.81	880232	107.52	70	120	

Calibration Standard Report

In	115	1	No Gas	1208300	1.97	1062542	113.72	70	120	
Bi	209	1	No Gas	1137675	0.51	1062490	107.08	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	014CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:37:29-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	322422	0.00
V	51	2	He	471477	0.00
Cr	52	2	He	540667	0.00
Fe	56	2	He	52323608	0.00
Se	78	2	He	7600	0.03
As	75	2	He	78436	0.00
Ca	44	2	He	310253	0.00
Na	23	2	He	10424936	0.00
Mg	24	2	He	5682277	0.00
K	39	2	He	6472901	0.00
Mn	55	2	He	403681	0.00
Co	59	2	He	801190	0.00
Ni	60	2	He	203881	0.00
Cu	63	2	He	551854	0.00
Zn	66	2	He	115102	0.00
Al	27	2	He	30952	0.01
B	11	1	No Gas	847405	0.00
Al	27	1	No Gas	1300522	0.00
Si	28	1	No Gas	2858376	0.00
Ag	107	1	No Gas	1394118	0.00
Cd	111	1	No Gas	260698	0.00
Sr	88	1	No Gas	2409378	0.00
Mo	95	1	No Gas	463878	0.00
Sn	118	1	No Gas	761104	0.00
Sb	121	1	No Gas	1083556	0.00
Ba	137	1	No Gas	374438	0.00
Tl	205	1	No Gas	2856492	0.00
Tl	203	1	No Gas	1105447	0.00
Pb	208	1	No Gas	3813835	0.00
U	238	1	No Gas	4088712	0.00
Ca	43	2	He	18640	0.02
Sb	121	2	He	557975	0.00
Cu	63	1	No Gas	969815	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	583551	1.54	579731	100.66	70	120	
Ge	72	2	He	286007	0.89	284936	100.38	70	120	
Ge	72	1	No Gas	879973	0.37	880232	99.97	70	120	

Calibration Standard Report

In	115	1	No Gas	1061634	0.42	1062542	99.91	70	120	
Bi	209	1	No Gas	1063165	0.13	1062490	100.06	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	017CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:47:02-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	165020	0.00
V	51	2	He	236700	0.00
Cr	52	2	He	273273	0.00
Fe	56	2	He	26418121	0.00
Se	78	2	He	4029	0.06
As	75	2	He	40074	0.01
Ca	44	2	He	156495	0.00
Na	23	2	He	5319772	0.00
Mg	24	2	He	2903812	0.00
K	39	2	He	3369393	0.00
Mn	55	2	He	202737	0.00
Co	59	2	He	404312	0.00
Ni	60	2	He	102336	0.00
Cu	63	2	He	279269	0.00
Zn	66	2	He	61007	0.00
Al	27	2	He	15582	0.02
B	11	1	No Gas	386819	0.00
Al	27	1	No Gas	614947	0.00
Si	28	1	No Gas	1642991	0.00
Ag	107	1	No Gas	641180	0.00
Cd	111	1	No Gas	131086	0.00
Sr	88	1	No Gas	1223558	0.00
Mo	95	1	No Gas	232519	0.00
Sn	118	1	No Gas	385279	0.00
Sb	121	1	No Gas	539272	0.00
Ba	137	1	No Gas	187482	0.00
Tl	205	1	No Gas	1442239	0.00
Tl	203	1	No Gas	553812	0.00
Pb	208	1	No Gas	1835046	0.00
U	238	1	No Gas	2122369	0.00
Ca	43	2	He	9503	0.04
Sb	121	2	He	277822	0.00
Cu	63	1	No Gas	493755	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	578596	1.45	579731	99.80	70	120	
Ge	72	2	He	291738	0.63	284936	102.39	70	120	
Ge	72	1	No Gas	894403	1.01	880232	101.61	70	120	

Calibration Standard Report

In	115	1	No Gas	1098600	4.45	1062542	103.39	70	120	
Bi	209	1	No Gas	1087496	1.30	1062490	102.35	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	018CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:49:06-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	323198	0.00
V	51	2	He	461921	0.00
Cr	52	2	He	530454	0.00
Fe	56	2	He	51478758	0.00
Se	78	2	He	7569	0.01
As	75	2	He	77064	0.00
Ca	44	2	He	305064	0.00
Na	23	2	He	10199745	0.00
Mg	24	2	He	5548943	0.00
K	39	2	He	6342020	0.00
Mn	55	2	He	396621	0.00
Co	59	2	He	792550	0.00
Ni	60	2	He	200962	0.00
Cu	63	2	He	540113	0.00
Zn	66	2	He	113721	0.00
Al	27	2	He	30193	0.01
B	11	1	No Gas	829456	0.00
Al	27	1	No Gas	1280085	0.00
Si	28	1	No Gas	2862370	0.00
Ag	107	1	No Gas	1381627	0.00
Cd	111	1	No Gas	257048	0.00
Sr	88	1	No Gas	2379612	0.00
Mo	95	1	No Gas	458857	0.00
Sn	118	1	No Gas	754690	0.00
Sb	121	1	No Gas	1057721	0.00
Ba	137	1	No Gas	371723	0.00
Tl	205	1	No Gas	2835299	0.00
Tl	203	1	No Gas	1098395	0.00
Pb	208	1	No Gas	3792153	0.00
U	238	1	No Gas	4109981	0.00
Ca	43	2	He	17905	0.01
Sb	121	2	He	548642	0.00
Cu	63	1	No Gas	962106	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	597499	3.11	579731	103.06	70	120	
Ge	72	2	He	285009	0.50	284936	100.03	70	120	
Ge	72	1	No Gas	875653	0.50	880232	99.48	70	120	

Calibration Standard Report

In	115	1	No Gas	1062301	0.58	1062542	99.98	70	120	
Bi	209	1	No Gas	1073017	0.82	1062490	100.99	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	020_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:53:28-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	107.266	1.017	849002	0.68	100	107.3	90	110	
Be	9	1	No Gas	105.065	0.011	168499	0.79	100	105.1	90	110	
V	51	2	He	101.597	0.515	242358	1.50	100	101.6	90	110	
Cr	52	2	He	100.558	0.258	275725	1.25	100	100.6	90	110	
Fe	56	2	He	10118.971	0.674	26874532	1.97	10000	101.2	90	110	
Se	78	2	He	105.604	2.143	4286	2.56	100	105.6	90	110	
As	75	2	He	102.334	0.569	40818	1.82	100	102.3	90	110	
Ca	44	2	He	10094.502	0.770	159119	1.76	10000	100.9	90	110	
Na	23	2	He	10102.403	1.579	5397916	2.15	10000	101.0	90	110	
Mg	24	2	He	10222.150	1.089	2937249	2.20	10000	102.2	90	110	
K	39	2	He	10267.920	0.623	3412754	1.89	10000	102.7	90	110	
Mn	55	2	He	100.499	0.151	205505	1.31	100	100.5	90	110	
Co	59	2	He	100.969	1.106	412243	1.51	100	101.0	90	110	
Ni	60	2	He	102.068	1.655	105721	2.93	100	102.1	90	110	
Cu	63	2	He	101.980	1.143	284818	0.45	100	102.0	90	110	
Zn	66	2	He	101.968	2.382	62186	1.07	100	102.0	90	110	
Al	27	2	He	102.291	3.201	16126	4.19	100	102.3	90	110	
B	11	1	No Gas	479.476	3.224	394835	2.73	500	95.9	90	110	
Al	27	1	No Gas	95.376	0.432	628083	0.80	100	95.4	90	110	
Si	28	1	No Gas	565.233	0.520	1767177	0.73	500	113.0	90	110	ICV Main CR1 Failed
Ag	107	1	No Gas	89.649	3.450	644944	0.56	100	89.6	90	110	ICV Main CR1 Failed
Cd	111	1	No Gas	98.057	2.825	133604	1.20	100	98.1	90	110	
Sr	88	1	No Gas	97.850	4.961	1235720	2.05	100	97.8	90	110	
Mo	95	1	No Gas	95.947	3.843	233035	1.19	100	95.9	90	110	
Sn	118	1	No Gas	97.737	2.840	391564	1.33	100	97.7	90	110	
Sb	121	1	No Gas	100.819	0.543	549022	1.01	100	100.8	90	110	
Ba	137	1	No Gas	96.703	2.875	190173	1.02	100	96.7	90	110	
Tl	205	1	No Gas	99.988	1.726	1464743	1.78	100	100.0	90	110	
Tl	203	1	No Gas	100.739	0.831	570816	0.22	100	100.7	90	110	
Pb	208	1	No Gas	96.610	0.276	1875392	0.78	100	96.6	90	110	
U	238	1	No Gas	100.709	1.989	2144879	1.31	100	100.7	90	110	
Ca	43	2	He	9883.306	2.794	9200	1.76	10000	98.8	90	110	
Sb	121	2	He	102.172	1.076	288477	2.42	100	102.2	90	110	
Ti	47	2	He	100.894	0.819	9207	1.58	100	100.9	90	110	
Cu	63	1	No Gas	100.718	0.650	500269	0.84	100	100.7	90	110	
Se	82	1	No Gas	102.554	7.970	6530	9.00	100	102.6	90	110	

QC ISTD Table

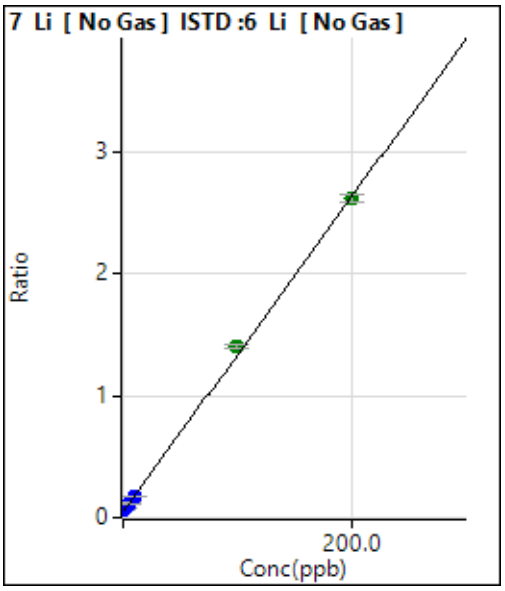
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	586369	0.79	579731	101.14	70	120	
Ge	72	2	He	293872	1.39	284936	103.14	70	120	
Ge	72	1	No Gas	901791	0.50	880232	102.45	70	120	
In	115	1	No Gas	1130124	3.84	1062542	106.36	70	120	
Bi	209	1	No Gas	1108264	1.00	1062490	104.31	70	120	

Calibration for 020_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072022A.b\
Analysis File: 072022A.batch.bin
DA Date-Time: 07/20/2022 21:20:44
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	009CALB.d	CAL BLK	07/20/2022 11:26:20
2	010CALS.d	2/10/200	07/20/2022 11:28:36
3	011CALS.d	5/25/500	07/20/2022 11:30:51
4	012CALS.d	10/50/100	07/20/2022 11:33:05
5	017CALS.d	100/500/10K	07/20/2022 11:47:02
6	018CALS.d	200/1000/20K	07/20/2022 11:49:06

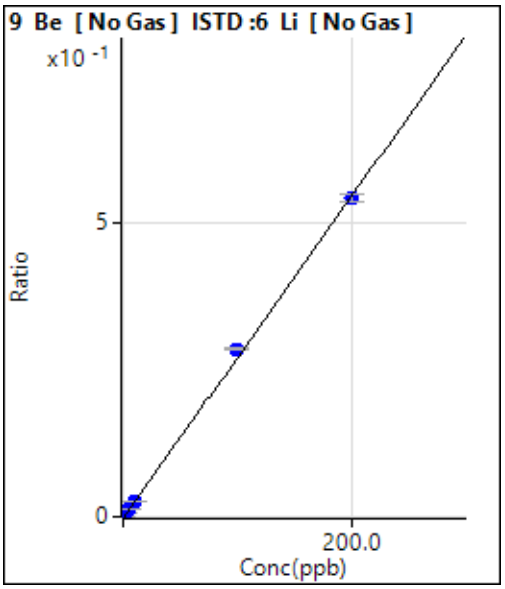
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35467.95	0.0612	P	0.1	
2	☐	2.000	1.703	49218.97	0.0832	P	0.9	-14.9
3	☐	5.000	4.388	70828.54	0.1179	P	0.9	-12.2
4	☐	10.000	9.097	107555.43	0.1788	P	0.9	-9.0
5	☐	100.000	104.181	814513.56	1.4081	A	2.5	4.2
6	☐	200.000	197.973	1565047.74	2.6206	A	2.6	-1.0

y = 0.0129 * x + 0.0612
R = 0.9997
DL = 0.01504 ppb
BEC = 4.732 ppb

Weight: <None>
Min Conc: <None>

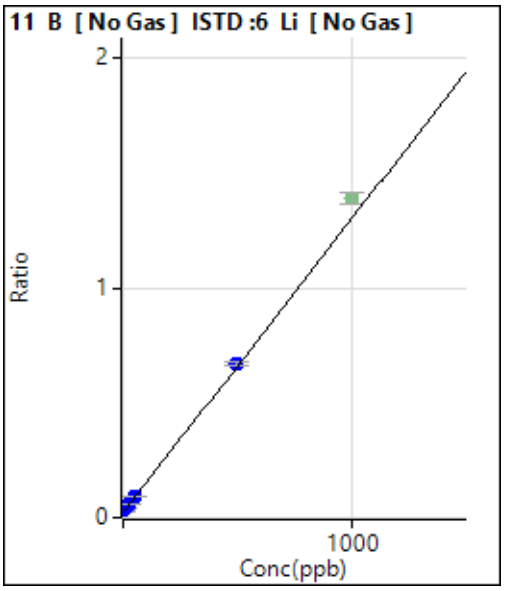


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	56.67	0.0001	P	31.3	
2	☐	2.000	1.954	3218.73	0.0054	P	5.3	-2.3
3	☐	5.000	4.761	7878.93	0.0131	P	2.1	-4.8
4	☐	10.000	9.860	16276.14	0.0271	P	1.7	-1.4
5	☐	100.000	104.279	165019.88	0.2852	P	0.2	4.3
6	☐	200.000	197.874	323198.11	0.5411	P	1.9	-1.1

y = 0.0027 * x + 9.7830E-005
R = 0.9997
DL = 0.03356 ppb
BEC = 0.03578 ppb

Weight: <None>
Min Conc: <None>

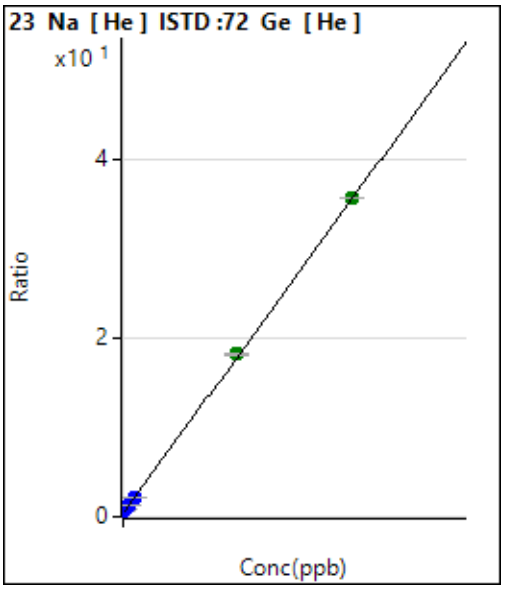
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16990.38	0.0293	P	0.5	
2	☐	10.000	9.158	24263.21	0.0410	P	8.6	-8.4
3	☐	25.000	21.051	33757.20	0.0562	P	1.8	-15.8
4	☐	50.000	46.725	53538.25	0.0890	P	1.3	-6.6
5	☐	500.000	500.542	386818.68	0.6687	P	3.1	0.1
6	☑	1000.000		829455.56	1.3893	A	4.0	

y = 0.0013 * x + 0.0293
R = 1.0000
DL = 0.3122 ppb
BEC = 22.94 ppb

Weight: <None>
Min Conc: <None>

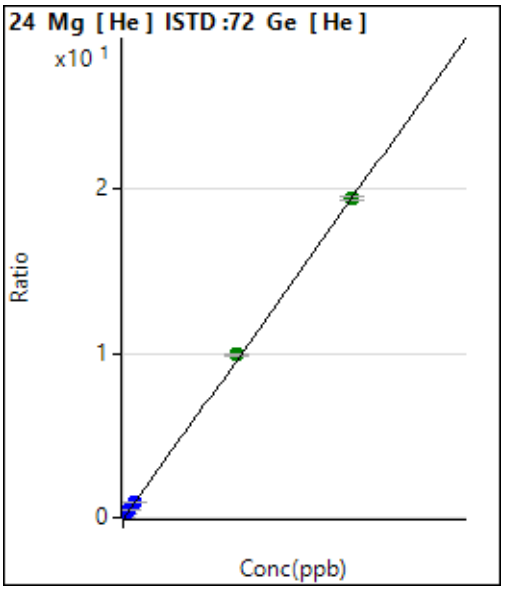


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	164287.96	0.5766	P	0.6	
2	☐	200.000	170.842	258803.67	0.8774	P	0.4	-14.6
3	☐	500.000	436.915	397312.47	1.3460	P	0.3	-12.6
4	☐	1000.000	897.715	641621.27	2.1575	P	1.1	-10.2
5	☐	10000.00	10027.13	5319771.80	18.2355	A	1.2	0.3
6	☐	20000.00	19993.41	10199744.8	35.7873	A	0.2	0.0

y = 0.0018 * x + 0.5766
R = 1.0000
DL = 6.195 ppb
BEC = 327.4 ppb

Weight: <None>
Min Conc: <None>

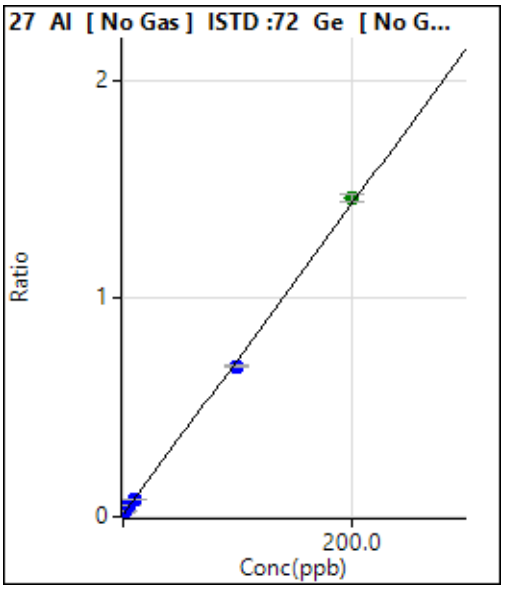
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	193.34	0.0007	P	29.1	
2	☐	200.000	186.480	53974.67	0.1830	P	1.6	-6.8
3	☐	500.000	466.818	134914.35	0.4571	P	0.4	-6.6
4	☐	1000.000	942.843	274324.60	0.9225	P	1.5	-5.7
5	☐	10000.00	10180.72	2903811.94	9.9539	A	1.1	1.8
6	☐	20000.00	19913.46	5548942.63	19.4692	A	1.4	-0.4

y = 9.7766E-004 * x + 6.7814E-004
R = 0.9999
DL = 0.6062 ppb
BEC = 0.6936 ppb

Weight: <None>
Min Conc: <None>

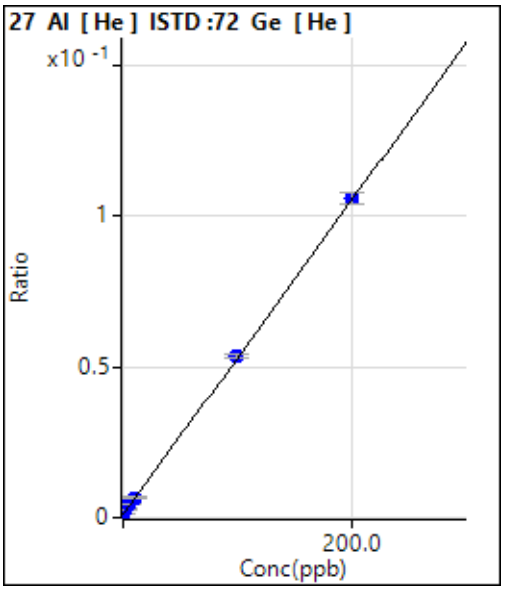


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	15916.03	0.0181	P	2.5	
2	☐	2.000	1.769	27494.07	0.0307	P	0.9	-11.6
3	☐	5.000	5.317	51134.28	0.0559	P	0.9	6.3
4	☐	10.000	8.983	74894.19	0.0820	P	1.2	-10.2
5	☐	100.000	94.129	614947.07	0.6876	P	1.4	-5.9
6	☐	200.000	202.981	1280085.01	1.4619	A	2.7	1.5

y = 0.0071 * x + 0.0181
R = 0.9994
DL = 0.193 ppb
BEC = 2.542 ppb

Weight: <None>
Min Conc: <None>

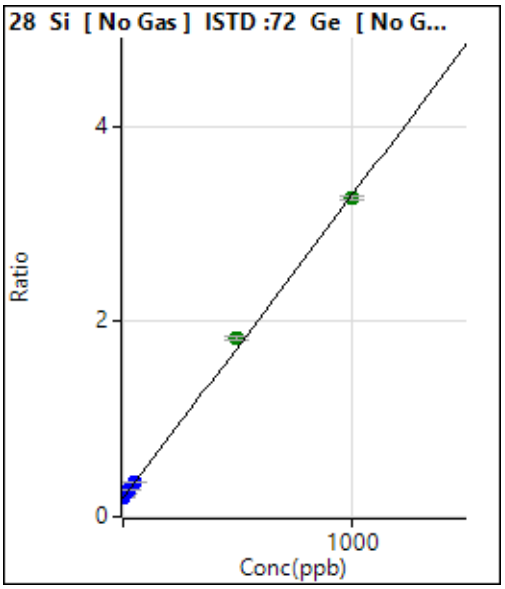
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	433.35	0.0015	P	9.1	
2	☐	2.000	2.218	790.04	0.0027	P	22.9	10.9
3	☐	5.000	5.746	1333.42	0.0045	P	7.0	14.9
4	☐	10.000	9.681	1953.51	0.0066	P	11.0	-3.2
5	☐	100.000	99.502	15582.26	0.0534	P	2.1	-0.5
6	☐	200.000	200.244	30193.05	0.1059	P	3.3	0.1

y = 5.2148E-004 * x + 0.0015
R = 1.0000
DL = 0.7965 ppb
BEC = 2.917 ppb

Weight: <None>
Min Conc: <None>

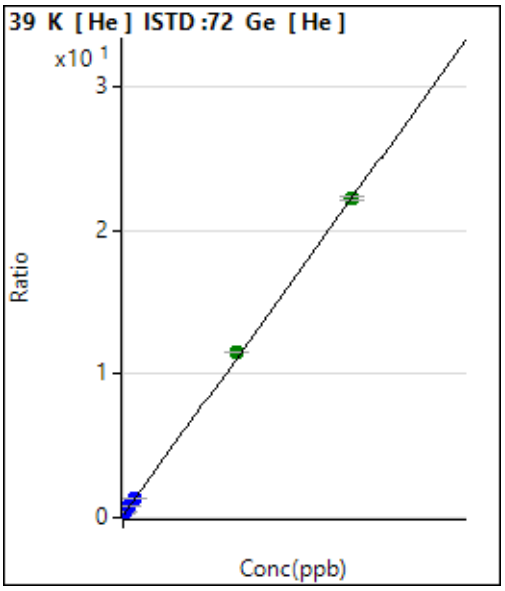


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	181850.04	0.2066	P	1.1	
2	☐	10.000	8.691	209425.99	0.2336	P	0.2	-13.1
3	☐	25.000	24.176	257545.31	0.2816	P	0.2	-3.3
4	☐	50.000	45.754	318398.39	0.3485	P	1.1	-8.5
5	☐	500.000	525.756	1642990.96	1.8372	A	1.9	5.2
6	☐	1000.000	987.368	2862369.75	3.2688	A	0.6	-1.3

y = 0.0031 * x + 0.2066
R = 0.9995
DL = 2.133 ppb
BEC = 66.61 ppb

Weight: <None>
Min Conc: <None>

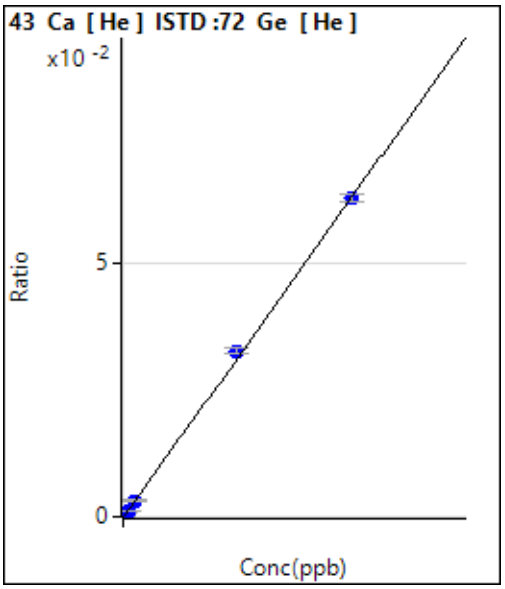
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	77058.22	0.2704	P	2.0	
2	☐	200.000	177.477	137586.80	0.4665	P	0.6	-11.3
3	☐	500.000	455.224	228252.37	0.7733	P	0.9	-9.0
4	☐	1000.000	924.398	384086.02	1.2915	P	1.0	-7.6
5	☐	10000.00	10210.47	3369392.76	11.5491	A	0.7	2.1
6	☐	20000.00	19899.88	6342019.70	22.2522	A	0.7	-0.5

y = 0.0011 * x + 0.2704
R = 0.9999
DL = 14.82 ppb
BEC = 244.8 ppb

Weight: <None>
Min Conc: <None>

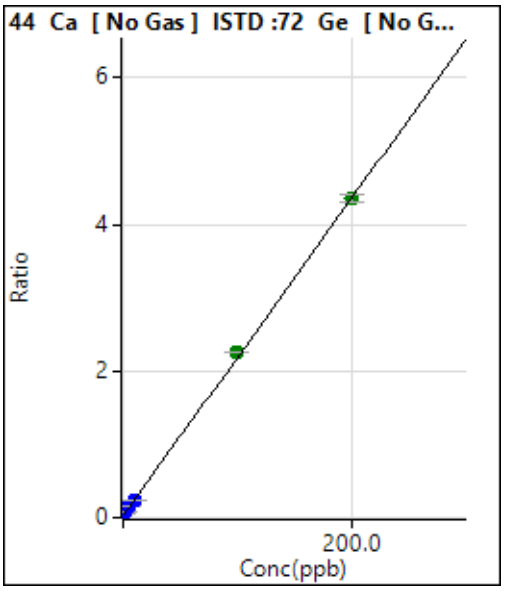


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0001	P	66.3	
2	☐	200.000	185.006	203.34	0.0007	P	15.7	-7.5
3	☐	500.000	385.158	390.01	0.0013	P	0.2	-23.0
4	☐	1000.000	953.240	926.72	0.0031	P	11.1	-4.7
5	☐	10000.00	10282.31	9503.44	0.0326	P	3.4	2.8
6	☐	20000.00	19864.20	17905.27	0.0628	P	2.5	-0.7

y = 3.1576E-006 * x + 1.0512E-004
R = 0.9998
DL = 66.27 ppb
BEC = 33.29 ppb

Weight: <None>
Min Conc: <None>

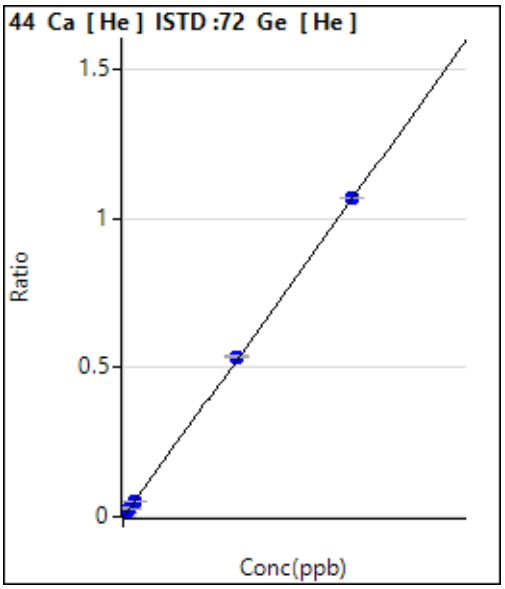
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	41308.90	0.0469	P	2.2	
2	☐	2.000	1.809	77229.47	0.0861	P	1.0	-9.5
3	☐	5.000	4.736	136766.87	0.1495	P	0.6	-5.3
4	☐	10.000	9.305	227066.14	0.2485	P	0.4	-7.0
5	☐	100.000	102.208	2022467.89	2.2613	A	0.7	2.2
6	☐	200.000	198.939	3815297.13	4.3570	A	2.2	-0.5

y = 0.0217 * x + 0.0469
R = 0.9999
DL = 0.1436 ppb
BEC = 2.166 ppb

Weight: <None>
Min Conc: <None>

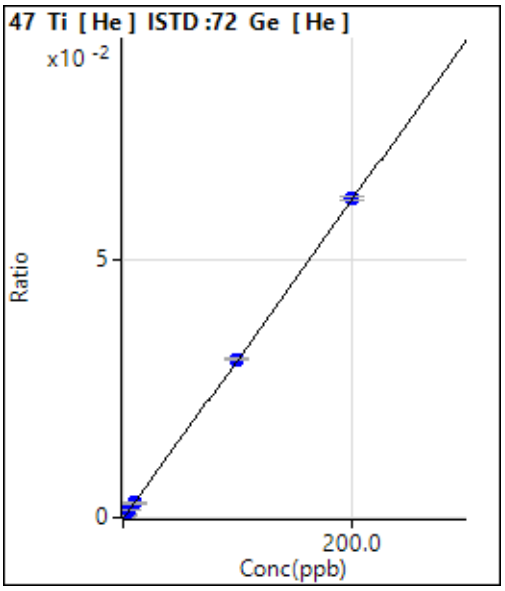


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	730.03	0.0026	P	11.7	
2	☐	200.000	180.459	3597.20	0.0122	P	3.1	-9.8
3	☐	500.000	490.097	8479.41	0.0287	P	5.2	-2.0
4	☐	1000.000	953.108	15892.78	0.0534	P	3.2	-4.7
5	☐	10000.00	10000.76	156495.16	0.5364	P	1.1	0.0
6	☐	20000.00	20002.40	305064.14	1.0704	P	0.3	0.0

y = 5.3384E-005 * x + 0.0026
R = 1.0000
DL = 16.78 ppb
BEC = 47.99 ppb

Weight: <None>
Min Conc: <None>

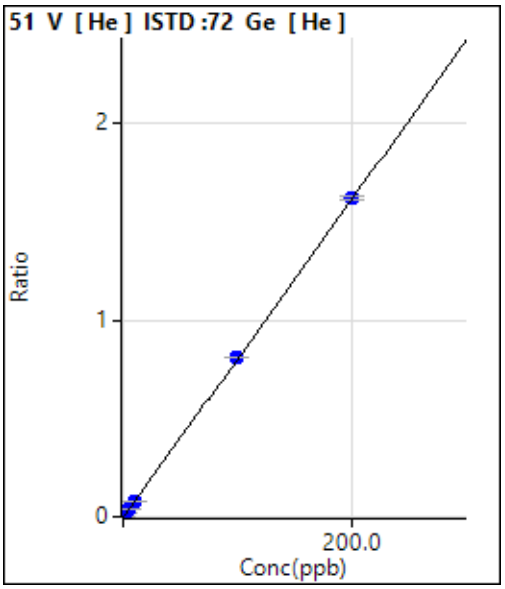
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	100.2	
2	☐	2.000	1.745	170.00	0.0006	P	36.6	-12.8
3	☐	5.000	4.329	406.68	0.0014	P	6.1	-13.4
4	☐	10.000	9.251	863.37	0.0029	P	13.5	-7.5
5	☐	100.000	99.487	9013.10	0.0309	P	1.9	-0.5
6	☐	200.000	200.313	17718.37	0.0622	P	1.7	0.2

y = 3.1016E-004 * x + 3.5087E-005
R = 1.0000
DL = 0.3401 ppb
BEC = 0.1131 ppb

Weight: <None>
Min Conc: <None>

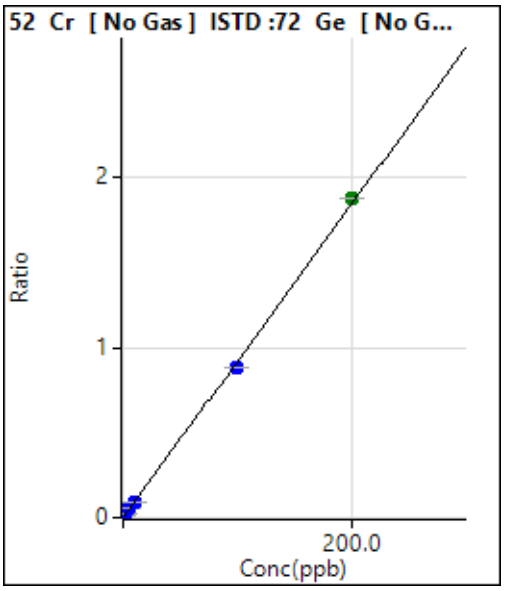


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	953.37	0.0033	P	2.1	
2	☐	2.000	1.952	5642.30	0.0191	P	0.9	-2.4
3	☐	5.000	4.758	12342.27	0.0418	P	2.1	-4.8
4	☐	10.000	9.449	23711.62	0.0797	P	1.7	-5.5
5	☐	100.000	99.946	236700.40	0.8114	P	0.6	-0.1
6	☐	200.000	200.061	461921.18	1.6207	P	0.9	0.0

y = 0.0081 * x + 0.0033
R = 1.0000
DL = 0.02611 ppb
BEC = 0.4139 ppb

Weight: <None>
Min Conc: <None>

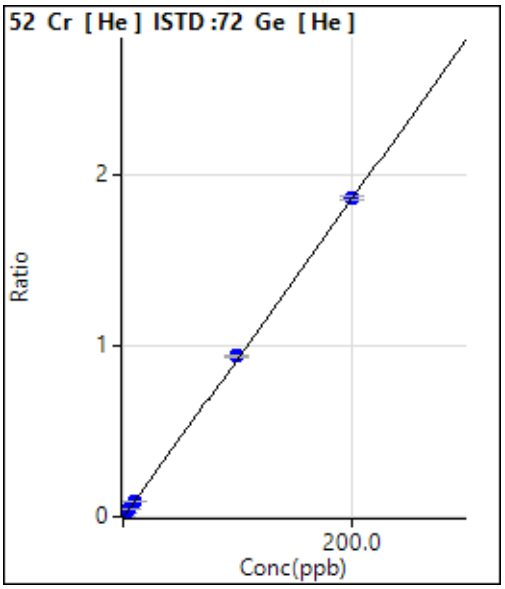
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8329.32	0.0095	P	1.6	
2	☐	2.000	1.851	23804.31	0.0265	P	1.4	-7.5
3	☐	5.000	4.539	46974.04	0.0514	P	0.7	-9.2
4	☐	10.000	9.282	86924.70	0.0951	P	1.1	-7.2
5	☐	100.000	94.709	790317.41	0.8837	P	1.0	-5.3
6	☐	200.000	202.694	1646629.61	1.8804	A	0.6	1.3

y = 0.0092 * x + 0.0095
R = 0.9995
DL = 0.04824 ppb
BEC = 1.025 ppb

Weight: <None>
Min Conc: <None>

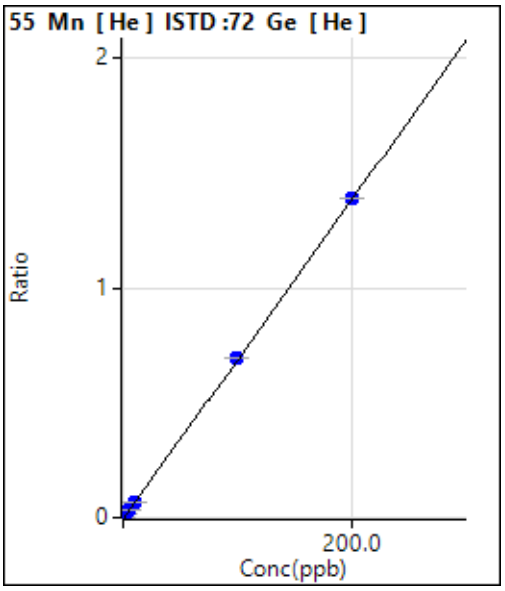


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	953.39	0.0033	P	8.5	
2	☐	2.000	1.949	6331.58	0.0215	P	3.6	-2.5
3	☐	5.000	4.854	14307.70	0.0485	P	4.1	-2.9
4	☐	10.000	9.562	27431.03	0.0922	P	3.7	-4.4
5	☐	100.000	100.390	273272.72	0.9367	P	0.7	0.4
6	☐	200.000	199.831	530453.74	1.8612	P	0.8	-0.1

y = 0.0093 * x + 0.0033
R = 1.0000
DL = 0.092 ppb
BEC = 0.3598 ppb

Weight: <None>
Min Conc: <None>

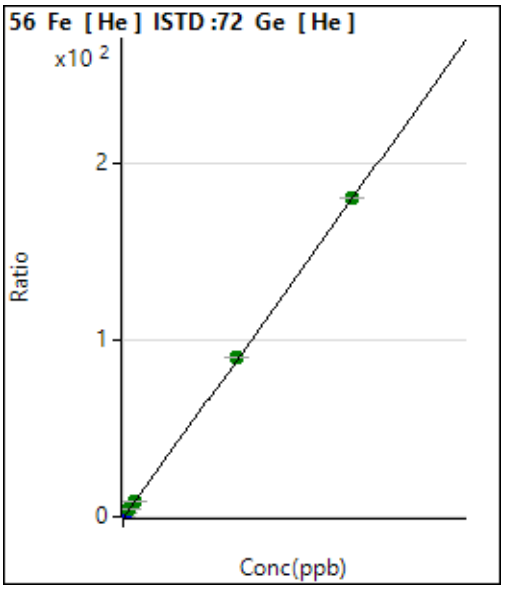
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	206.67	0.0007	P	17.0	
2	☐	2.000	1.935	4180.71	0.0142	P	6.3	-3.3
3	☐	5.000	4.711	9880.40	0.0335	P	4.4	-5.8
4	☐	10.000	9.483	19817.99	0.0666	P	2.8	-5.2
5	☐	100.000	99.872	202736.91	0.6949	P	0.6	-0.1
6	☐	200.000	200.098	396621.28	1.3916	P	0.3	0.0

y = 0.0070 * x + 7.2528E-004
R = 1.0000
DL = 0.05311 ppb
BEC = 0.1043 ppb

Weight: <None>
Min Conc: <None>

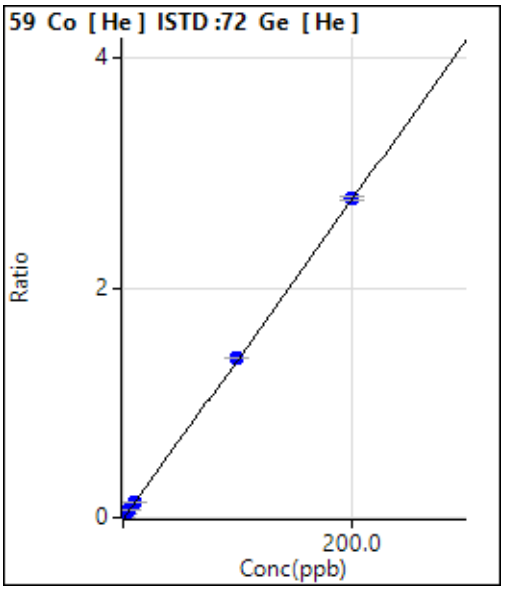


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7572.23	0.0266	P	3.2	
2	☐	200.000	185.551	502271.21	1.7029	P	1.2	-7.2
3	☐	500.000	497.258	1333887.04	4.5190	A	2.8	-0.5
4	☐	1000.000	1004.027	2705286.94	9.0973	A	2.6	0.4
5	☐	10000.00	10020.34	26418121.2	90.5541	A	0.2	0.2
6	☐	20000.00	19989.84	51478757.5	180.622	A	0.3	-0.1

y = 0.0090 * x + 0.0266
R = 1.0000
DL = 0.2834 ppb
BEC = 2.941 ppb

Weight: <None>
Min Conc: <None>

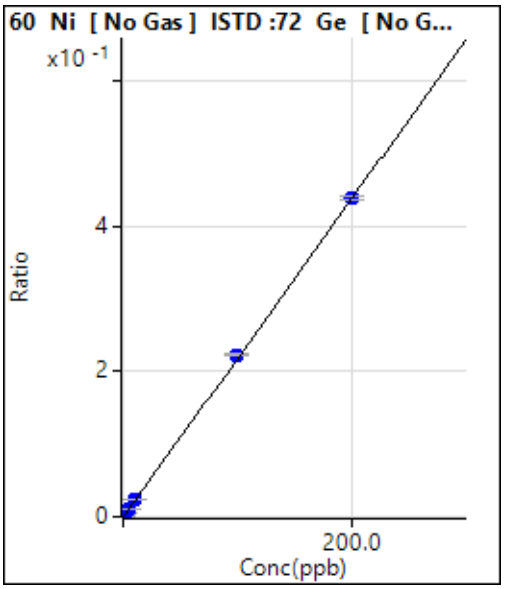
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0001	P	69.5	
2	☐	2.000	1.905	7822.37	0.0265	P	2.8	-4.8
3	☐	5.000	4.793	19674.44	0.0667	P	1.8	-4.1
4	☐	10.000	9.529	39387.22	0.1324	P	1.1	-4.7
5	☐	100.000	99.749	404311.58	1.3859	P	0.3	-0.3
6	☐	200.000	200.155	792549.88	2.7808	P	0.6	0.1

y = 0.0139 * x + 5.8556E-005
R = 1.0000
DL = 0.008792 ppb
BEC = 0.004215 ppb

Weight: <None>
Min Conc: <None>

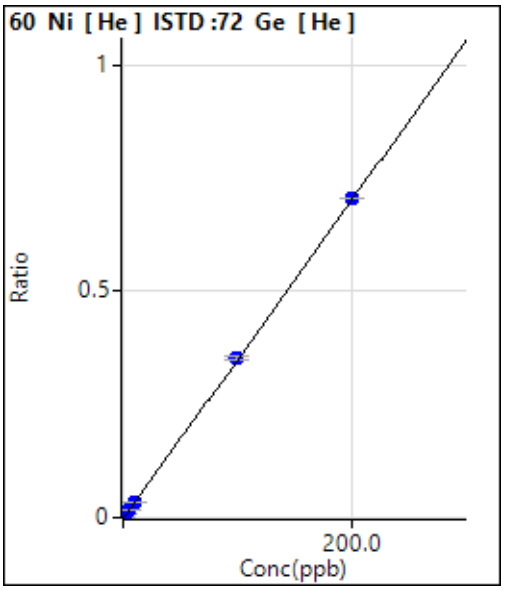


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1130.07	0.0013	P	10.5	
2	☐	2.000	1.832	4757.58	0.0053	P	1.4	-8.4
3	☐	5.000	4.747	10704.41	0.0117	P	1.7	-5.1
4	☐	10.000	10.125	21480.57	0.0235	P	1.4	1.2
5	☐	100.000	100.793	199037.86	0.2226	P	1.3	0.8
6	☐	200.000	199.605	384835.58	0.4395	P	1.4	-0.2

y = 0.0022 * x + 0.0013
R = 1.0000
DL = 0.1836 ppb
BEC = 0.5849 ppb

Weight: <None>
Min Conc: <None>

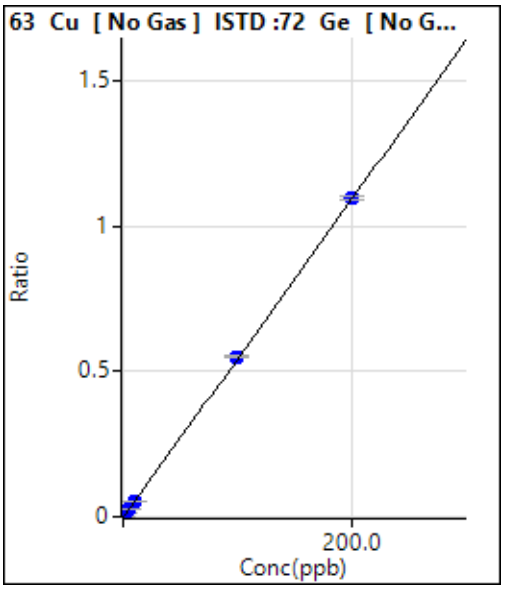
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	180.00	0.0006	P	25.7	
2	☐	2.000	1.915	2173.55	0.0074	P	8.2	-4.2
3	☐	5.000	4.890	5264.45	0.0178	P	4.2	-2.2
4	☐	10.000	9.867	10510.87	0.0353	P	1.9	-1.3
5	☐	100.000	99.522	102336.12	0.3507	P	2.3	-0.5
6	☐	200.000	200.249	200962.18	0.7051	P	0.2	0.1

y = 0.0035 * x + 6.3203E-004
R = 1.0000
DL = 0.1386 ppb
BEC = 0.1797 ppb

Weight: <None>
Min Conc: <None>

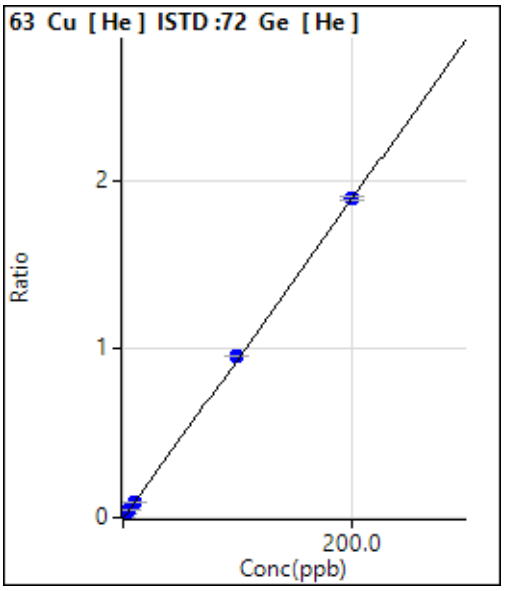


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2093.54	0.0024	P	6.6	
2	☐	2.000	1.971	11828.66	0.0132	P	1.8	-1.4
3	☐	5.000	4.869	26592.94	0.0291	P	3.2	-2.6
4	☐	10.000	9.764	51096.06	0.0559	P	0.7	-2.4
5	☐	100.000	100.224	493755.01	0.5520	P	0.3	0.2
6	☐	200.000	199.903	962106.18	1.0987	P	1.3	0.0

y = 0.0055 * x + 0.0024
R = 1.0000
DL = 0.0858 ppb
BEC = 0.4337 ppb

Weight: <None>
Min Conc: <None>

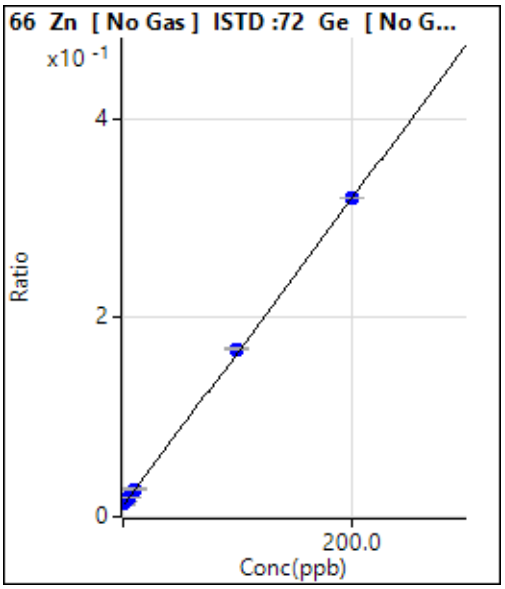
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	800.04	0.0028	P	4.5	
2	☐	2.000	2.028	6498.33	0.0220	P	3.8	1.4
3	☐	5.000	4.949	14674.83	0.0497	P	4.8	-1.0
4	☐	10.000	9.513	27645.12	0.0930	P	1.6	-4.9
5	☐	100.000	100.709	279268.86	0.9572	P	0.7	0.7
6	☐	200.000	199.671	540113.27	1.8951	P	0.8	-0.2

y = 0.0095 * x + 0.0028
R = 1.0000
DL = 0.0398 ppb
BEC = 0.2963 ppb

Weight: <None>
Min Conc: <None>

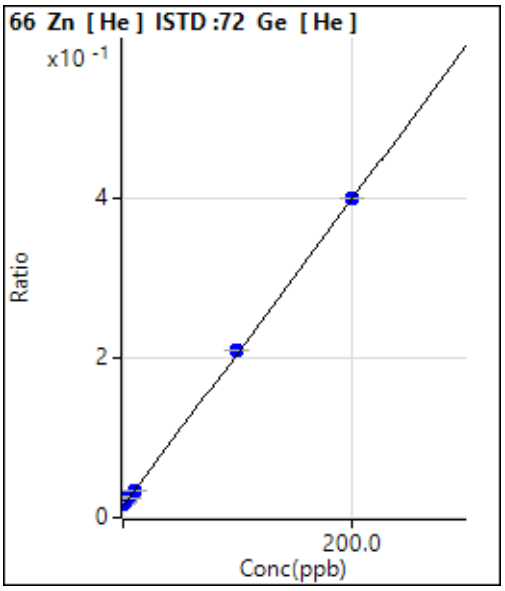


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11048.02	0.0126	P	2.7	
2	☐	2.000	2.150	14227.66	0.0159	P	2.3	7.5
3	☐	5.000	4.606	17975.47	0.0197	P	1.1	-7.9
4	☐	10.000	9.941	25474.27	0.0279	P	0.7	-0.6
5	☐	100.000	101.092	150652.98	0.1684	P	1.5	1.1
6	☐	200.000	199.465	280339.10	0.3202	P	0.5	-0.3

y = 0.0015 * x + 0.0126
R = 1.0000
DL = 0.6626 ppb
BEC = 8.139 ppb

Weight: <None>
Min Conc: <None>

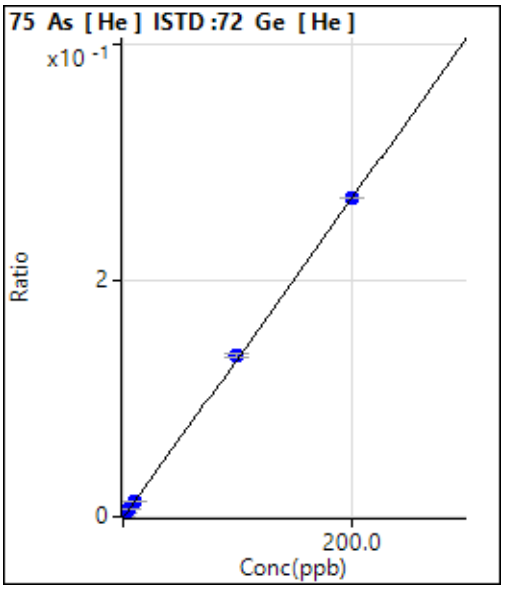
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4614.18	0.0162	P	3.3	
2	☐	2.000	2.179	6008.07	0.0204	P	3.6	9.0
3	☐	5.000	4.740	7462.18	0.0253	P	1.7	-5.2
4	☐	10.000	9.278	10103.97	0.0340	P	4.1	-7.2
5	☐	100.000	100.648	61007.10	0.2091	P	1.1	0.6
6	☐	200.000	199.717	113720.52	0.3990	P	0.5	-0.1

y = 0.0019 * x + 0.0162
R = 1.0000
DL = 0.8439 ppb
BEC = 8.448 ppb

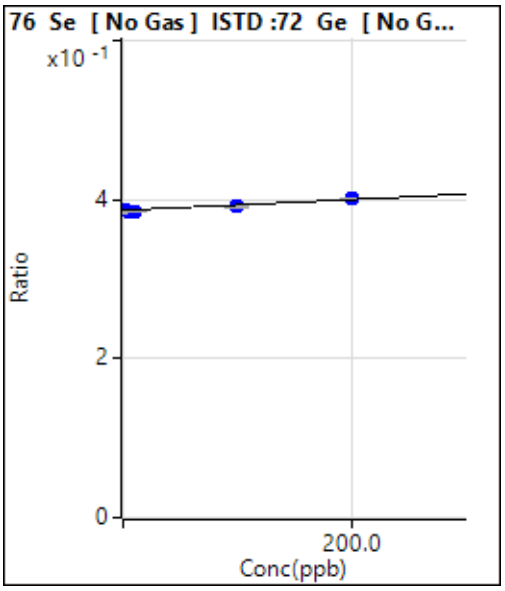
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	81.11	0.0003	P	13.5	
2	☐	2.000	1.809	806.70	0.0027	P	1.3	-9.6
3	☐	5.000	4.709	1966.82	0.0067	P	3.2	-5.8
4	☐	10.000	9.769	4019.52	0.0135	P	3.5	-2.3
5	☐	100.000	101.197	40073.77	0.1374	P	2.0	1.2
6	☐	200.000	199.422	77064.01	0.2704	P	0.5	-0.3

y = 0.0014 * x + 2.8473E-004
R = 1.0000
DL = 0.08512 ppb
BEC = 0.2102 ppb

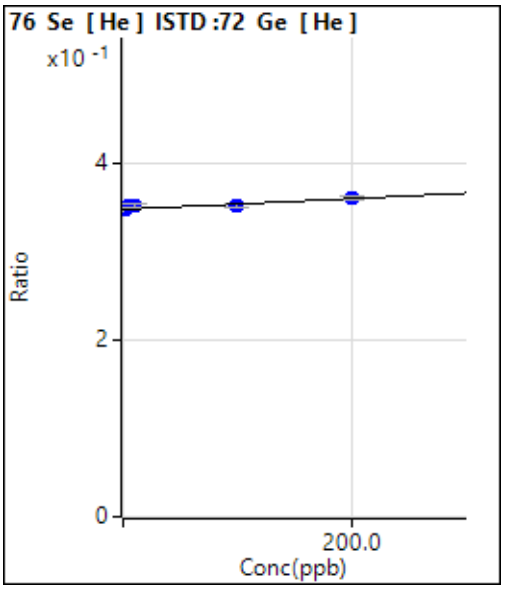
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	340135.53	0.3864	P	0.2	
2	☐	2.000	1.615	346593.28	0.3865	P	0.5	-19.3
3	☐	5.000	-39.591	350968.52	0.3837	P	0.3	-891.8
4	☐	10.000	-22.074	351671.41	0.3849	P	0.4	-320.7
5	☐	100.000	63.515	349470.53	0.3907	P	0.6	-36.5
6	☐	200.000	220.965	351535.49	0.4014	P	0.5	10.5

y = 6.8039E-005 * x + 0.3864
R = 0.9712
DL = 37.32 ppb
BEC = 5679 ppb

Weight: <None>
Min Conc: <None>

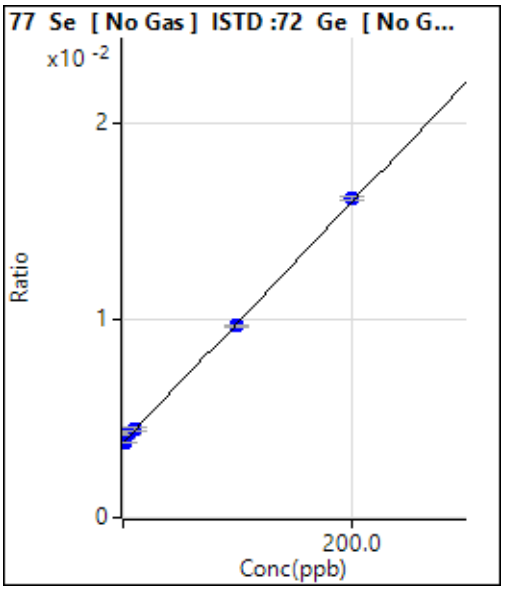


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	99327.45	0.3486	P	1.2	
2	☐	2.000	-5.827	102715.53	0.3482	P	1.0	-391.3
3	☐	5.000	74.808	104271.14	0.3533	P	0.8	1396.2
4	☐	10.000	72.449	105006.20	0.3531	P	1.6	624.5
5	☐	100.000	70.638	102978.72	0.3530	P	1.2	-29.4
6	☐	200.000	209.892	103068.85	0.3616	P	1.2	4.9

y = 6.2131E-005 * x + 0.3486
R = 0.8760
DL = 203.6 ppb
BEC = 5611 ppb

Weight: <None>
Min Conc: <None>

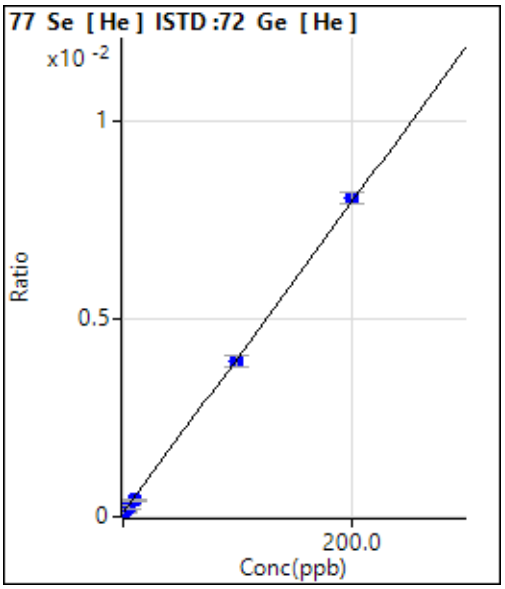
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3427.16	0.0039	P	2.8	
2	☐	2.000	-1.542	3407.17	0.0038	P	0.4	-177.1
3	☐	5.000	6.114	3900.64	0.0043	P	1.6	22.3
4	☐	10.000	9.802	4100.70	0.0045	P	3.5	-2.0
5	☐	100.000	95.699	8682.93	0.0097	P	1.6	-4.3
6	☐	200.000	202.168	14164.29	0.0162	P	1.2	1.1

y = 6.0750E-005 * x + 0.0039
R = 0.9995
DL = 5.321 ppb
BEC = 64.09 ppb

Weight: <None>
Min Conc: <None>

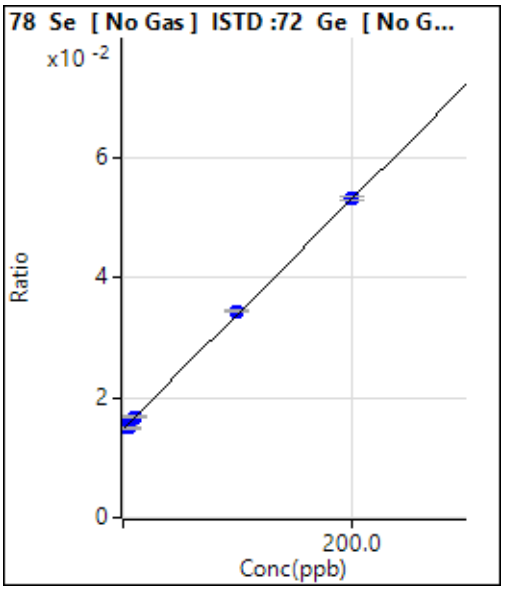


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	43.2	
2	☐	2.000	-0.121	40.00	0.0001	P	24.8	-106.0
3	☐	5.000	2.175	66.67	0.0002	P	37.7	-56.5
4	☐	10.000	7.270	126.67	0.0004	P	12.5	-27.3
5	☐	100.000	97.034	1153.40	0.0040	P	7.6	-3.0
6	☐	200.000	201.712	2300.24	0.0081	P	3.7	0.9

y = 3.9311E-005 * x + 1.4032E-004
R = 0.9998
DL = 4.626 ppb
BEC = 3.569 ppb

Weight: <None>
Min Conc: <None>

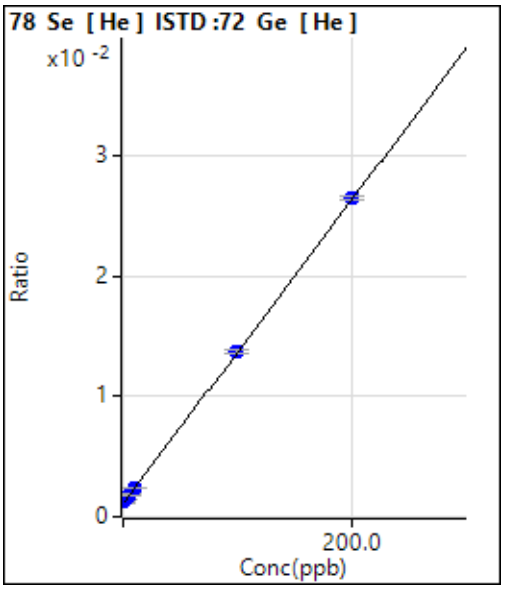
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13283.44	0.0151	P	2.3	
2	☐	2.000	2.487	13957.43	0.0156	P	2.0	24.4
3	☐	5.000	-0.649	13687.13	0.0150	P	3.1	-113.0
4	☐	10.000	8.805	15322.31	0.0168	P	3.0	-11.9
5	☐	100.000	101.061	30732.06	0.0344	P	0.7	1.1
6	☐	200.000	199.665	46550.52	0.0532	P	1.3	-0.2

y = 1.9066E-004 * x + 0.0151
R = 0.9996
DL = 5.56 ppb
BEC = 79.15 ppb

Weight: <None>
Min Conc: <None>

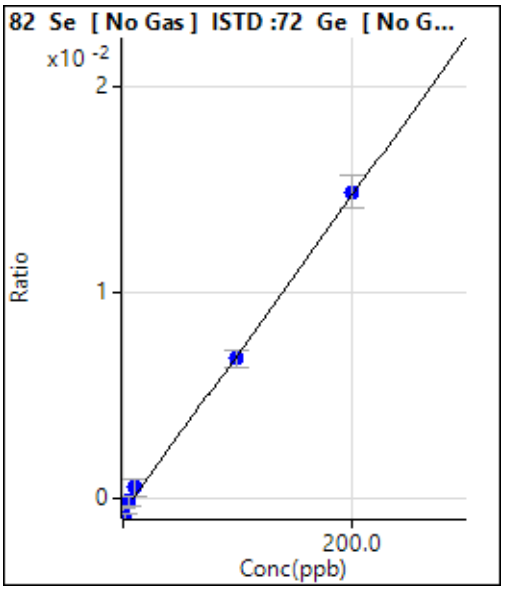


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	352.67	0.0012	P	9.8	
2	☐	2.000	1.441	418.68	0.0014	P	5.3	-27.9
3	☐	5.000	4.382	528.68	0.0018	P	8.7	-12.4
4	☐	10.000	9.045	708.02	0.0024	P	2.5	-9.5
5	☐	100.000	99.468	4028.61	0.0138	P	2.5	-0.5
6	☐	200.000	200.335	7568.81	0.0266	P	1.2	0.2

y = 1.2639E-004 * x + 0.0012
R = 1.0000
DL = 2.878 ppb
BEC = 9.791 ppb

Weight: <None>
Min Conc: <None>

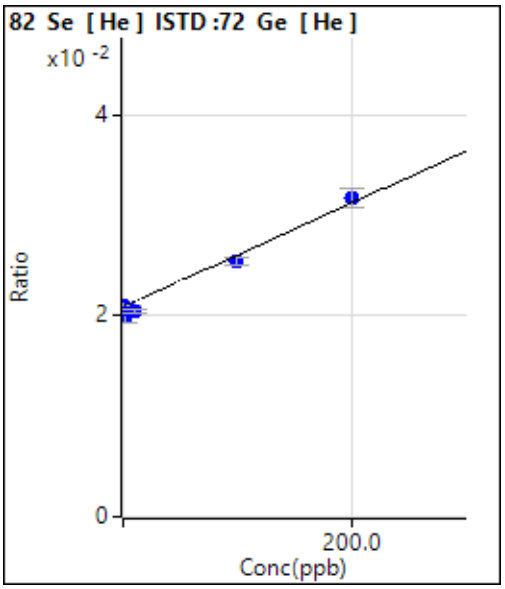
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-569.55	-0.0006	P	-53.0	
2	☐	2.000	-4.186	-869.28	-0.0010	P	-41.1	-309.3
3	☐	5.000	6.179	-158.52	-0.0002	P	-267.	23.6
4	☐	10.000	14.660	439.73	0.0005	P	172.7	46.6
5	☐	100.000	96.139	6030.53	0.0067	P	11.9	-3.9
6	☐	200.000	201.730	13022.02	0.0149	P	10.7	0.9

y = 7.6906E-005 * x - 6.4740E-004
R = 0.9988
DL = 13.39 ppb
BEC = -8.418 ppb

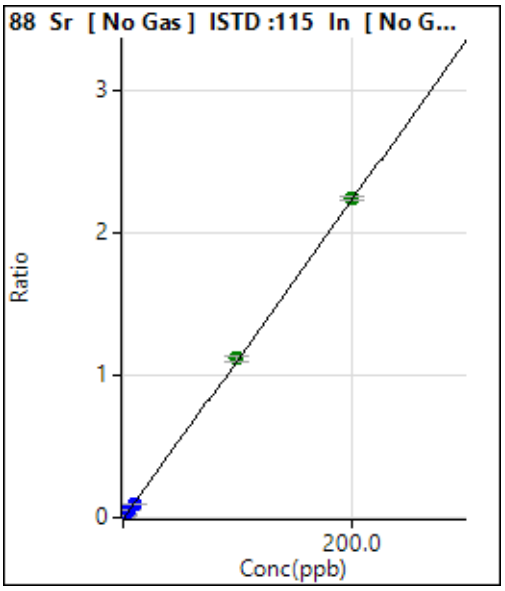
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5978.09	0.0210	P	2.4	
2	☐	2.000	-21.384	5861.38	0.0199	P	5.6	-1169.2
3	☐	5.000	-6.198	6098.18	0.0207	P	3.9	-224.0
4	☐	10.000	-10.045	6084.81	0.0205	P	2.2	-200.4
5	☐	100.000	86.340	7422.19	0.0254	P	2.6	-13.7
6	☐	200.000	208.346	9049.87	0.0318	P	5.5	4.2

y = 5.1708E-005 * x + 0.0210
R = 0.9947
DL = 29.27 ppb
BEC = 405.7 ppb

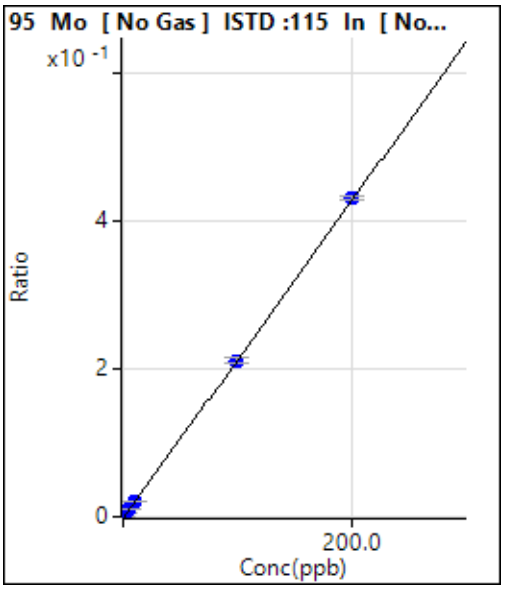
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	546.69	0.0005	P	9.2	
2	☐	2.000	1.766	22041.72	0.0203	P	2.2	-11.7
3	☐	5.000	4.509	60037.98	0.0509	P	3.0	-9.8
4	☐	10.000	8.456	112859.20	0.0951	P	1.3	-15.4
5	☐	100.000	99.649	1223557.59	1.1148	A	3.3	-0.4
6	☐	200.000	200.267	2379611.89	2.2400	A	1.7	0.1

y = 0.0112 * x + 5.1424E-004
R = 1.0000
DL = 0.01272 ppb
BEC = 0.04599 ppb

Weight: <None>
Min Conc: <None>

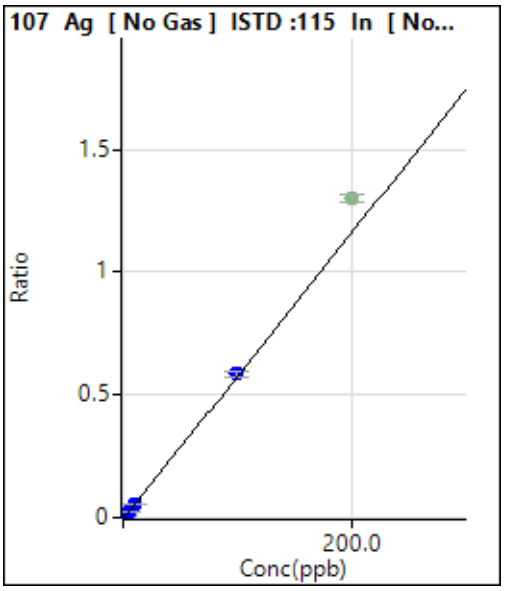


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	86.6	
2	☐	2.000	1.899	4464.16	0.0041	P	1.3	-5.0
3	☐	5.000	4.351	11054.78	0.0094	P	5.6	-13.0
4	☐	10.000	9.095	23247.31	0.0196	P	0.6	-9.0
5	☐	100.000	98.509	232519.11	0.2119	P	4.0	-1.5
6	☐	200.000	200.808	458857.01	0.4319	P	0.7	0.4

y = 0.0022 * x + 1.8921E-005
R = 1.0000
DL = 0.02285 ppb
BEC = 0.008796 ppb

Weight: <None>
Min Conc: <None>

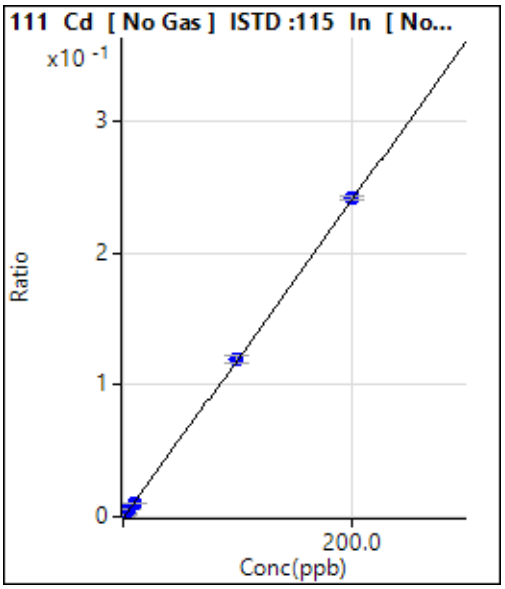
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	650.03	0.0006	P	7.8	
2	☐	2.000	1.941	12976.54	0.0119	P	3.1	-3.0
3	☐	5.000	4.524	31811.93	0.0270	P	2.5	-9.5
4	☐	10.000	9.123	63870.56	0.0538	P	0.7	-8.8
5	☐	100.000	100.113	641179.73	0.5843	P	3.8	0.1
6	☑	200.000		1381627.32	1.3006	A	2.1	

y = 0.0058 * x + 6.1152E-004
R = 1.0000
DL = 0.02442 ppb
BEC = 0.1049 ppb

Weight: <None>
Min Conc: <None>

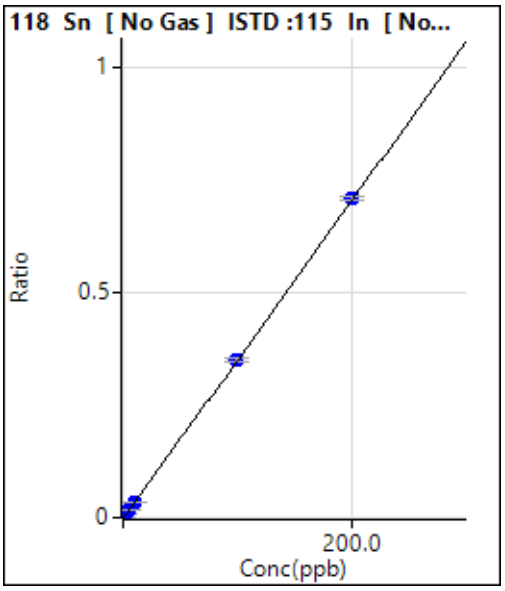


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	1.822	2396.93	0.0022	P	11.0	-8.9
3	☐	5.000	4.572	6511.73	0.0055	P	3.0	-8.6
4	☐	10.000	8.913	12773.06	0.0108	P	2.1	-10.9
5	☐	100.000	99.005	131086.48	0.1194	P	3.8	-1.0
6	☐	200.000	200.564	257048.49	0.2420	P	1.1	0.3

y = 0.0012 * x + 6.2649E-006
R = 1.0000
DL = 0.01349 ppb
BEC = 0.005193 ppb

Weight: <None>
Min Conc: <None>

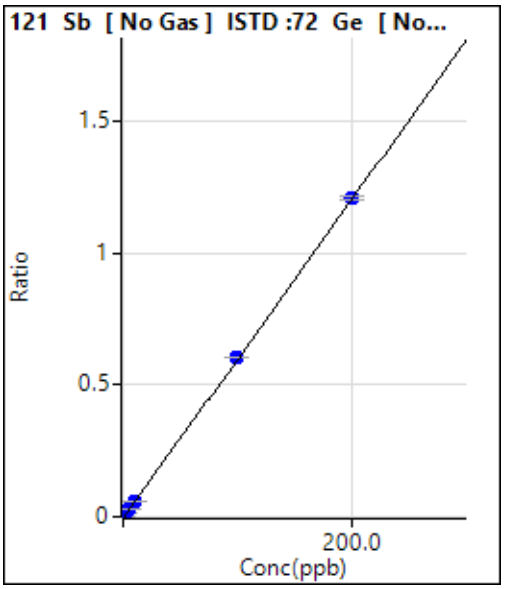
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1170.08	0.0011	P	8.4	
2	☐	2.000	1.972	8783.07	0.0081	P	1.1	-1.4
3	☐	5.000	4.359	19471.41	0.0165	P	0.6	-12.8
4	☐	10.000	8.959	38917.93	0.0328	P	1.7	-10.4
5	☐	100.000	98.962	385279.17	0.3510	P	3.4	-1.0
6	☐	200.000	200.588	754690.04	0.7104	P	0.7	0.3

y = 0.0035 * x + 0.0011
R = 1.0000
DL = 0.07837 ppb
BEC = 0.3116 ppb

Weight: <None>
Min Conc: <None>

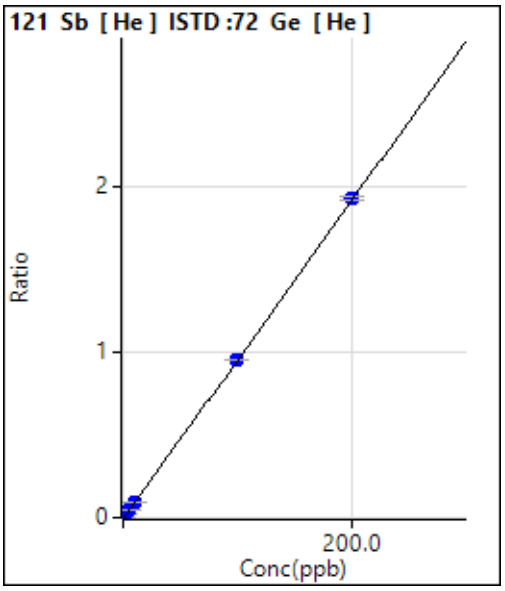


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	363.35	0.0004	P	22.2	
2	☐	2.000	1.926	10791.31	0.0120	P	4.2	-3.7
3	☐	5.000	4.795	26841.05	0.0293	P	2.2	-4.1
4	☐	10.000	9.720	53967.66	0.0591	P	0.6	-2.8
5	☐	100.000	99.844	539271.95	0.6029	P	0.6	-0.2
6	☐	200.000	200.098	1057720.85	1.2079	P	0.7	0.0

y = 0.0060 * x + 4.1282E-004
R = 1.0000
DL = 0.04548 ppb
BEC = 0.06841 ppb

Weight: <None>
Min Conc: <None>

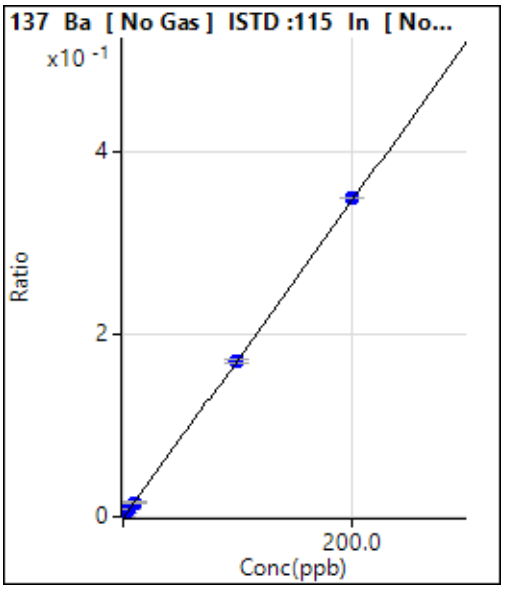
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0009	P	36.9	
2	☐	2.000	1.901	5651.32	0.0192	P	2.5	-4.9
3	☐	5.000	4.747	13717.39	0.0465	P	1.7	-5.1
4	☐	10.000	9.436	27205.20	0.0915	P	0.7	-5.6
5	☐	100.000	99.125	277821.51	0.9523	P	0.6	-0.9
6	☐	200.000	200.473	548641.67	1.9250	P	0.8	0.2

y = 0.0096 * x + 9.1294E-004
R = 1.0000
DL = 0.1052 ppb
BEC = 0.09512 ppb

Weight: <None>
Min Conc: <None>

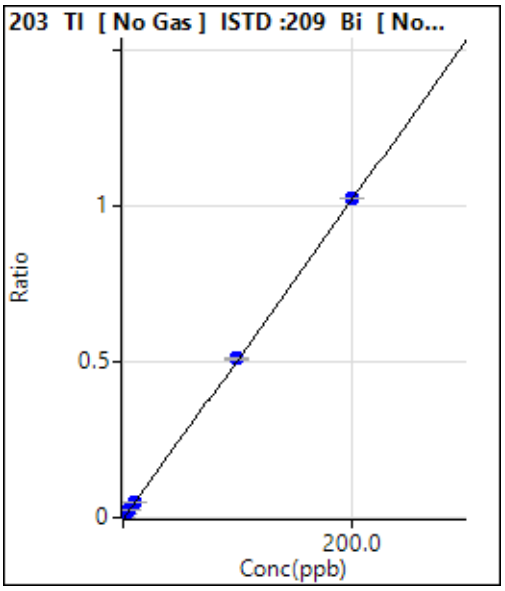


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0001	P	54.3	
2	☐	2.000	1.946	3817.31	0.0035	P	3.1	-2.7
3	☐	5.000	4.437	9243.50	0.0078	P	4.3	-11.3
4	☐	10.000	8.950	18636.96	0.0157	P	3.0	-10.5
5	☐	100.000	98.095	187481.52	0.1708	P	3.3	-1.9
6	☐	200.000	201.020	371723.32	0.3499	P	0.4	0.5

y = 0.0017 * x + 1.2276E-004
R = 0.9999
DL = 0.115 ppb
BEC = 0.07055 ppb

Weight: <None>
Min Conc: <None>

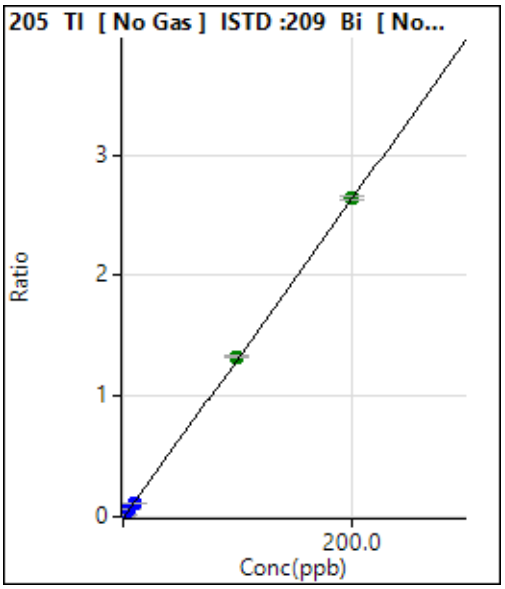
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	83.33	0.0001	P	45.4	
2	☐	2.000	1.939	10898.26	0.0100	P	3.0	-3.0
3	☐	5.000	4.692	26605.35	0.0241	P	1.7	-6.2
4	☐	10.000	9.670	55027.94	0.0495	P	1.7	-3.3
5	☐	100.000	99.603	553811.97	0.5093	P	0.4	-0.4
6	☐	200.000	200.223	1098394.77	1.0237	P	0.4	0.1

y = 0.0051 * x + 7.8411E-005
R = 1.0000
DL = 0.02088 ppb
BEC = 0.01534 ppb

Weight: <None>
Min Conc: <None>

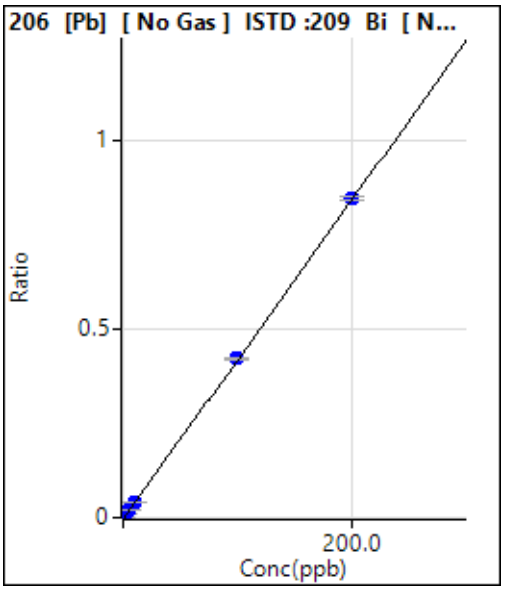


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0002	P	13.8	
2	☐	2.000	1.771	25793.72	0.0236	P	1.9	-11.5
3	☐	5.000	4.405	64643.90	0.0585	P	1.8	-11.9
4	☐	10.000	8.896	130928.72	0.1178	P	1.3	-11.0
5	☐	100.000	100.333	1442239.09	1.3262	A	0.7	0.3
6	☐	200.000	199.906	2835298.50	2.6422	A	1.4	0.0

y = 0.0132 * x + 2.4470E-004
R = 1.0000
DL = 0.007651 ppb
BEC = 0.01852 ppb

Weight: <None>
Min Conc: <None>

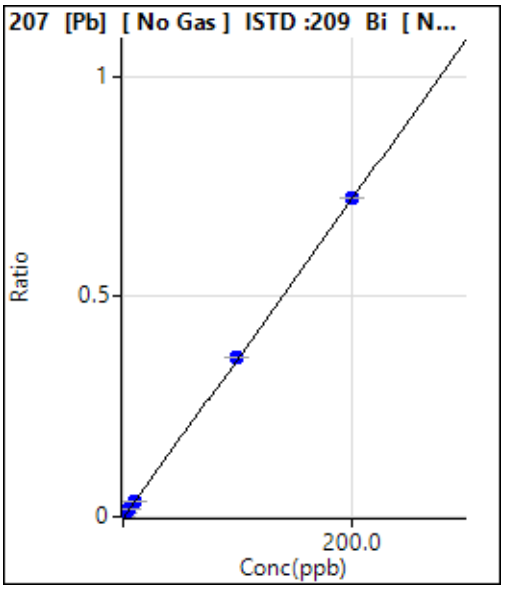
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	390.02	0.0004	P	11.9	
2	☐	2.000	1.968	9493.79	0.0087	P	0.9	-1.6
3	☐	5.000	4.820	22981.48	0.0208	P	2.1	-3.6
4	☐	10.000	9.618	45687.35	0.0411	P	2.6	-3.8
5	☐	100.000	99.592	459195.54	0.4223	P	0.4	-0.4
6	☐	200.000	200.228	910503.61	0.8486	P	0.8	0.1

y = 0.0042 * x + 3.6711E-004
R = 1.0000
DL = 0.03081 ppb
BEC = 0.08666 ppb

Weight: <None>
Min Conc: <None>

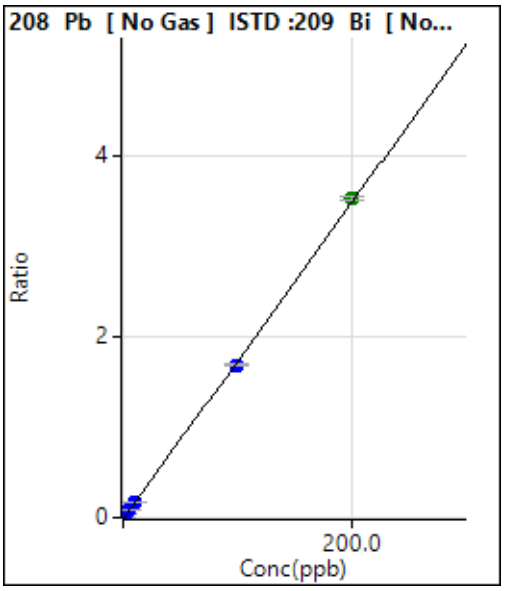


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	310.01	0.0003	P	11.1	
2	☐	2.000	1.955	8039.41	0.0074	P	2.8	-2.2
3	☐	5.000	4.776	19442.19	0.0176	P	3.7	-4.5
4	☐	10.000	9.521	38626.70	0.0348	P	2.9	-4.8
5	☐	100.000	100.149	394588.86	0.3628	P	0.3	0.1
6	☐	200.000	199.955	777014.99	0.7241	P	0.4	0.0

y = 0.0036 * x + 2.9176E-004
R = 1.0000
DL = 0.02677 ppb
BEC = 0.0806 ppb

Weight: <None>
Min Conc: <None>

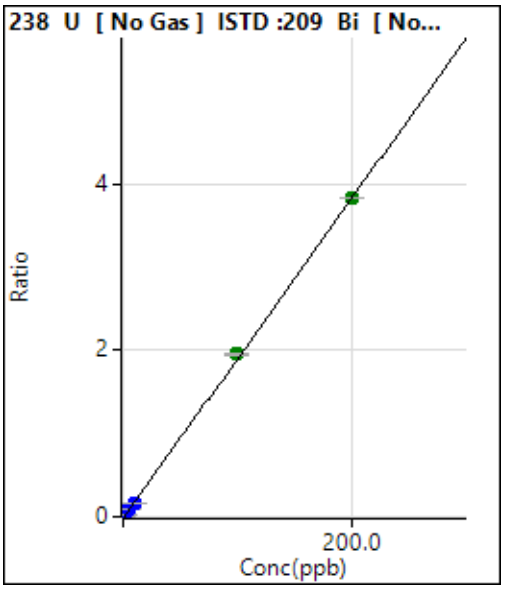
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1806.77	0.0017	P	9.4	
2	☐	2.000	1.840	36975.29	0.0339	P	2.6	-8.0
3	☐	5.000	4.624	91346.61	0.0826	P	1.7	-7.5
4	☐	10.000	9.247	181722.84	0.1635	P	1.4	-7.5
5	☐	100.000	96.337	1835045.95	1.6874	P	0.7	-3.7
6	☐	200.000	201.880	3792152.63	3.5343	A	0.9	0.9

y = 0.0175 * x + 0.0017
R = 0.9998
DL = 0.02748 ppb
BEC = 0.09719 ppb

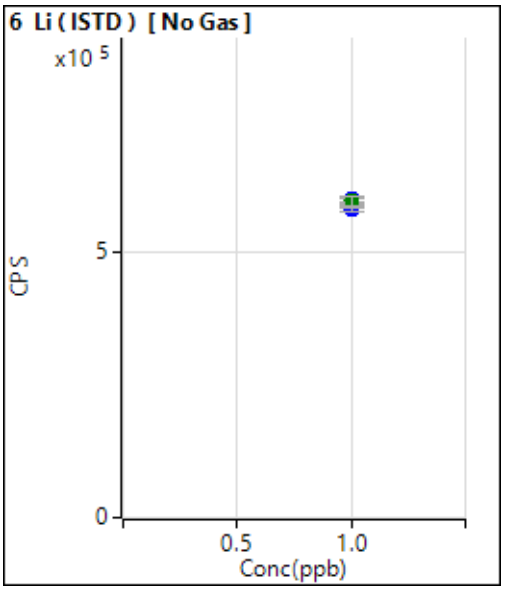
Weight: <None>
Min Conc: <None>



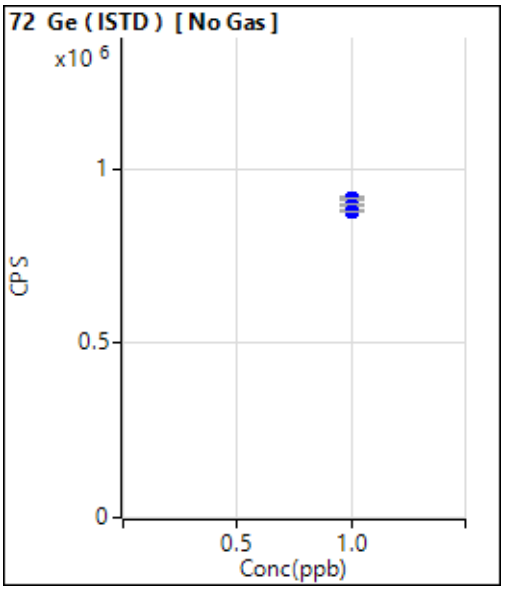
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	43.3	
2	☐	2.000	1.739	36464.68	0.0334	P	1.6	-13.1
3	☐	5.000	4.461	94795.56	0.0857	P	1.9	-10.8
4	☐	10.000	8.954	191259.99	0.1721	P	1.0	-10.5
5	☐	100.000	101.548	2122369.40	1.9517	A	1.0	1.5
6	☐	200.000	199.294	4109980.57	3.8303	A	0.6	-0.4

y = 0.0192 * x + 1.2550E-005
R = 0.9999
DL = 0.0008486 ppb
BEC = 0.000653 ppb

Weight: <None>
Min Conc: <None>

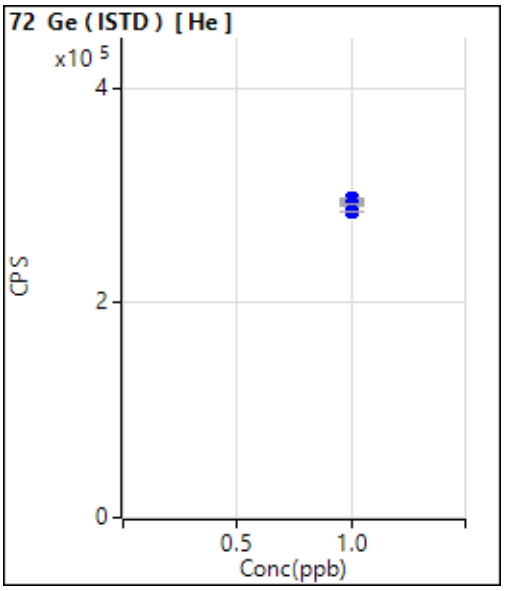


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		579730.97		P	0.8	
2	☐	1.000		591607.00		P	0.4	
3	☐	1.000		600682.49		P	0.2	
4	☐	1.000		601569.39		P	0.1	
5	☐	1.000		578595.56		P	1.4	
6	☐	1.000		597498.66		A	3.1	

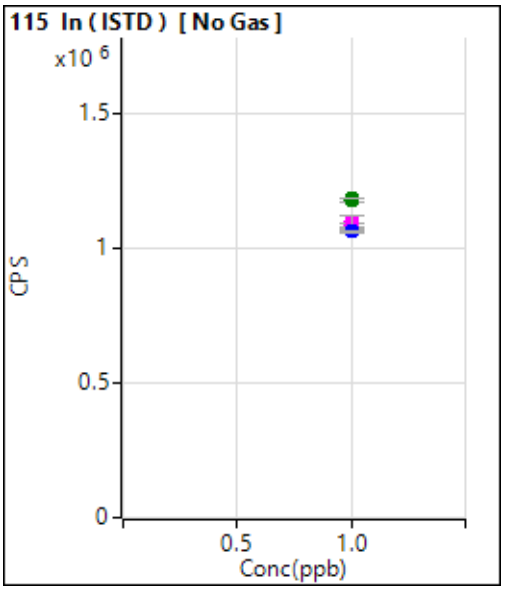


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		880231.97		P	0.3	
2	☐	1.000		896698.53		P	0.3	
3	☐	1.000		914660.95		P	1.0	
4	☐	1.000		913650.06		P	0.6	
5	☐	1.000		894402.64		P	1.0	
6	☐	1.000		875652.64		P	0.5	

Calibration for 020_ICV.d

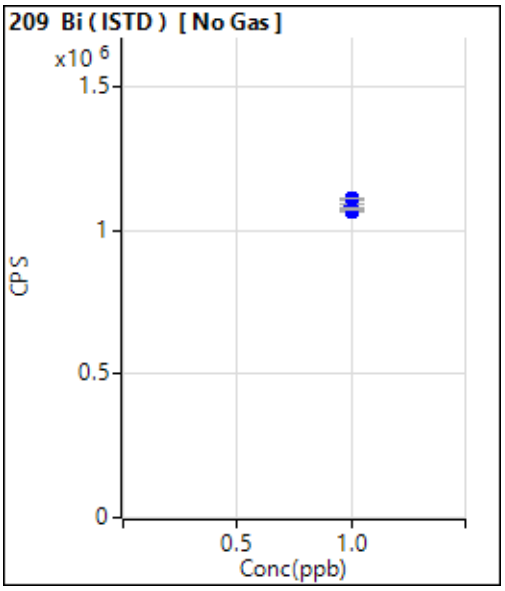


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		284935.68		P	0.4	
2	☐	1.000		294953.58		P	0.2	
3	☐	1.000		295174.68		P	0.2	
4	☐	1.000		297392.47		P	0.5	
5	☐	1.000		291738.45		P	0.6	
6	☐	1.000		285009.21		P	0.5	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1062541.78		P	0.9	
2	☐	1.000		1087771.37		M	1.2	
3	☐	1.000		1178962.77		A	1.2	
4	☐	1.000		1187157.58		A	0.5	
5	☐	1.000		1098599.80		M	4.4	
6	☐	1.000		1062301.36		P	0.6	

Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1062489.72		P	0.1	
2	☐	1.000		1090754.44		P	0.4	
3	☐	1.000		1105631.68		P	0.5	
4	☐	1.000		1111356.65		P	0.1	
5	☐	1.000		1087495.79		P	1.3	
6	☐	1.000		1073017.12		P	0.8	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	021LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:55:25-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.584	1.584	4.21	47819	0.00	2	
Be	9	1	No Gas	1.931	1.931	2.05	3149	0.06	2	
V	51	2	He	1.796	1.796	4.18	5021	0.04	2	
Cr	52	2	He	1.867	1.867	3.68	5821	0.03	2	
Fe	56	2	He	188.980	188.980	1.00	487544	0.04	200	
Se	78	2	He	1.390	1.390	30.06	397	0.35	2	NewName Main CR1 Failed
As	75	2	He	1.896	1.896	2.52	802	0.24	2	
Ca	44	2	He	173.569	173.569	7.69	3327	5.22	200	
Na	23	2	He	149.861	149.861	3.14	236268	0.06	200	
Mg	24	2	He	190.281	190.281	1.80	52499	0.36	200	
K	39	2	He	170.919	170.919	2.03	129113	0.13	200	
Mn	55	2	He	1.990	1.990	3.78	4091	0.05	2	
Co	59	2	He	1.934	1.934	3.88	7576	0.03	2	
Ni	60	2	He	1.861	1.861	6.42	2020	0.09	2	
Cu	63	2	He	2.020	2.020	1.63	6171	0.03	2	
Zn	66	2	He	2.130	2.130	13.40	5701	0.04	2	
Al	27	2	He	1.696	1.696	25.46	677	0.25	2	
B	11	1	No Gas	42.362	42.362	6.91	50504	0.08	10	NewName Main CR1 Failed
Al	27	1	No Gas	1.724	1.724	9.73	26469	0.01	2	
Si	28	1	No Gas	12.943	12.943	7.02	215220	0.01	10	
Ag	107	1	No Gas	1.901	1.901	4.85	12720	0.01	2	
Cd	111	1	No Gas	1.900	1.900	2.08	2504	0.08	2	
Sr	88	1	No Gas	1.758	1.758	3.09	21952	0.01	2	
Mo	95	1	No Gas	1.877	1.877	8.41	4404	0.04	2	
Sn	118	1	No Gas	1.995	1.995	9.83	8863	0.02	2	
Sb	121	1	No Gas	2.025	2.025	1.98	11018	0.02	2	
Ba	137	1	No Gas	1.821	1.821	9.65	3574	0.05	2	
Tl	205	1	No Gas	1.786	1.786	2.67	25690	0.01	2	
Tl	203	1	No Gas	1.990	1.990	2.92	11048	0.02	2	
Pb	208	1	No Gas	1.845	1.845	1.56	36628	0.01	2	
U	238	1	No Gas	1.813	1.813	1.00	37565	0.00	2	
Ca	43	2	He	199.445	199.445	4.76	207	96.50	200	
Sb	121	2	He	2.016	2.016	3.93	5698	0.04	2	
Ti	47	2	He	1.645	1.645	20.87	153	1.07	200	
Cu	63	1	No Gas	1.862	1.862	7.16	10978	0.02	2	
Se	82	1	No Gas	2.447	2.447	410.53	-399	-0.61	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	585645	2.09	579731	101.02	70	120	
Ge	72	2	He	281146	2.20	284936	98.67	70	120	
Ge	72	1	No Gas	872384	1.87	880232	99.11	70	120	
In	115	1	No Gas	1088834	4.75	1062542	102.47	70	120	
Bi	209	1	No Gas	1077526	1.99	1062490	101.42	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	022LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:57:25-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.425	4.425	1.35	70016	0.01	5	
Be	9	1	No Gas	5.027	5.027	2.43	8187	0.06	5	
V	51	2	He	4.685	4.685	3.91	11712	0.04	5	
Cr	52	2	He	4.836	4.836	2.25	13710	0.04	5	
Fe	56	2	He	506.914	506.914	1.82	1308327	0.04	500	
Se	78	2	He	3.487	3.487	21.58	476	0.73	5	NewName2 Main CR1 Failed
As	75	2	He	4.694	4.694	4.08	1887	0.25	5	
Ca	44	2	He	499.261	499.261	2.81	8293	6.02	500	
Na	23	2	He	422.091	422.091	2.46	374686	0.11	500	
Mg	24	2	He	469.183	469.183	0.46	130447	0.36	500	
K	39	2	He	458.184	458.184	0.30	220486	0.21	500	
Mn	55	2	He	4.696	4.696	3.55	9477	0.05	5	
Co	59	2	He	4.828	4.828	2.64	19070	0.03	5	
Ni	60	2	He	4.658	4.658	8.91	4834	0.10	5	
Cu	63	2	He	4.821	4.821	1.03	13774	0.04	5	
Zn	66	2	He	4.847	4.847	3.80	7235	0.07	5	
Al	27	2	He	5.601	5.601	16.77	1263	0.44	5	
B	11	1	No Gas	33.368	33.368	0.81	43841	0.08	25	NewName2 Main CR1 Failed
Al	27	1	No Gas	5.317	5.317	2.64	49485	0.01	5	
Si	28	1	No Gas	27.566	27.566	3.02	258524	0.01	25	
Ag	107	1	No Gas	4.653	4.653	3.79	30893	0.02	5	
Cd	111	1	No Gas	4.541	4.541	6.58	6112	0.07	5	
Sr	88	1	No Gas	4.669	4.669	3.04	58729	0.01	5	
Mo	95	1	No Gas	4.820	4.820	8.01	11552	0.04	5	
Sn	118	1	No Gas	4.662	4.662	0.38	19608	0.02	5	
Sb	121	1	No Gas	4.846	4.846	1.98	26257	0.02	5	
Ba	137	1	No Gas	4.706	4.706	5.08	9253	0.05	5	
Tl	205	1	No Gas	4.513	4.513	1.95	65170	0.01	5	
Tl	203	1	No Gas	4.802	4.802	0.80	26799	0.02	5	
Pb	208	1	No Gas	4.543	4.543	1.82	88338	0.01	5	
U	238	1	No Gas	4.470	4.470	1.18	93495	0.00	5	
Ca	43	2	He	379.812	379.812	13.73	370	102.65	500	
Sb	121	2	He	4.967	4.967	3.03	13804	0.04	5	
Ti	47	2	He	5.140	5.140	10.12	463	1.11	5	
Cu	63	1	No Gas	4.836	4.836	2.28	25584	0.02	5	
Se	82	1	No Gas	9.259	9.259	97.39	51	18.07	5	NewName2 Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	591378	1.88	579731	102.01	70	120	
Ge	72	2	He	283942	2.74	284936	99.65	70	120	
Ge	72	1	No Gas	885182	2.13	880232	100.56	70	120	
In	115	1	No Gas	1114909	4.38	1062542	104.93	70	120	
Bi	209	1	No Gas	1088136	1.78	1062490	102.41	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	023_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:59:24-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.112	-26.0	34554	2.7	0.5	
Be	9	1	No Gas	0.004	754.6	63	77.9	0.5	
V	51	2	He	-0.033	-95.6	839	7.8	2.5	
Cr	52	2	He	0.012	153.7	943	5.4	2.5	
Fe	56	2	He	1.065	1.5	9877	3.0	100	
Se	78	2	He	-0.864	-92.6	307	6.2	1	
As	75	2	He	-0.003	-2511.9	77	30.1	2.5	
Ca	44	2	He	-18.078	-20.8	437	15.2	100	
Na	23	2	He	-15.319	-70.0	149868	0.7	100	
Mg	24	2	He	0.517	26.1	323	12.9	100	
K	39	2	He	-6.626	-93.6	71759	0.9	100	
Mn	55	2	He	0.033	20.7	260	7.7	2.5	
Co	59	2	He	0.009	27.5	50	20.0	2.5	
Ni	60	2	He	-0.024	-197.1	150	33.3	2.5	
Cu	63	2	He	-0.013	-609.8	733	28.9	1	
Zn	66	2	He	-0.602	-0.8	4104	2.8	2.5	
Al	27	2	He	-0.941	-51.8	280	22.3	5	
B	11	1	No Gas	6.983	6.7	22380	2.9	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-0.599	-1.9	11875	3.2	5	
Si	28	1	No Gas	2.403	85.1	183819	0.5	10	
Ag	107	1	No Gas	-0.014	-174.8	563	31.8	2.5	
Cd	111	1	No Gas	0.010	125.9	20	86.6	1	
Sr	88	1	No Gas	-0.003	-283.9	513	23.1	2.5	
Mo	95	1	No Gas	0.017	37.9	60	28.9	2.5	
Sn	118	1	No Gas	0.092	37.0	1517	9.3	5	
Sb	121	1	No Gas	0.045	17.7	590	9.0	2.5	
Ba	137	1	No Gas	-0.011	-143.9	110	31.5	2.5	
Tl	205	1	No Gas	0.000	1960.6	267	43.5	1	
Tl	203	1	No Gas	0.010	117.4	140	49.5	1	
Pb	208	1	No Gas	-0.029	-40.8	1273	19.0	2.5	
U	238	1	No Gas	0.009	167.0	203	156.3	2.5	
Ca	43	2	He	-6.257	-426.3	23	99.0	100	
Sb	121	2	He	-0.009	-323.8	227	36.7	2.5	
Ti	47	2	He	-0.074	-92.0	3	173.2	2.5	
Se	82	1	No Gas	-4.099	-207.3	-825	-67.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	578437	2.13	579731	99.78	70	120	
Ge	72	2	He	272864	2.79	284936	95.76	70	120	
Ge	72	1	No Gas	859213	2.65	880232	97.61	70	120	
In	115	1	No Gas	1062394	3.65	1062542	99.99	70	120	
Bi	209	1	No Gas	1060780	2.57	1062490	99.84	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	024LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:05:40-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.299	4.299	1.60	71261	0.01	5	
Be	9	1	No Gas	4.882	4.882	3.36	8211	0.06	5	
V	51	2	He	4.659	4.659	3.55	11875	0.04	5	
Cr	52	2	He	4.640	4.640	1.27	13464	0.03	5	
Fe	56	2	He	495.413	495.413	2.70	1303805	0.04	500	
Se	78	2	He	3.934	3.934	18.46	503	0.78	5	
As	75	2	He	4.762	4.762	9.34	1951	0.24	5	
Ca	44	2	He	468.493	468.493	6.08	7982	5.87	500	
Na	23	2	He	372.426	372.426	2.18	356950	0.10	500	
Mg	24	2	He	464.750	464.750	2.00	131780	0.35	500	
K	39	2	He	451.014	451.014	2.63	222600	0.20	500	
Mn	55	2	He	4.556	4.556	4.41	9380	0.05	5	
Co	59	2	He	4.632	4.632	4.83	18650	0.02	5	
Ni	60	2	He	4.733	4.733	4.94	5004	0.09	5	
Cu	63	2	He	4.601	4.601	1.95	13440	0.03	5	
Zn	66	2	He	4.556	4.556	7.55	7219	0.06	5	
Al	27	2	He	5.576	5.576	9.63	1283	0.43	5	
B	11	1	No Gas	21.440	21.440	3.35	35454	0.06	25	
Al	27	1	No Gas	5.320	5.320	1.81	50671	0.01	5	
Si	28	1	No Gas	24.445	24.445	8.46	255753	0.01	25	
Ag	107	1	No Gas	4.492	4.492	2.01	30690	0.01	5	
Cd	111	1	No Gas	4.528	4.528	5.89	6272	0.07	5	
Sr	88	1	No Gas	4.558	4.558	1.45	58951	0.01	5	
Mo	95	1	No Gas	4.519	4.519	1.17	11155	0.04	5	
Sn	118	1	No Gas	4.511	4.511	4.16	19508	0.02	5	
Sb	121	1	No Gas	4.741	4.741	1.53	26287	0.02	5	
Ba	137	1	No Gas	4.421	4.421	5.92	8933	0.05	5	
Tl	205	1	No Gas	4.327	4.327	1.83	64345	0.01	5	
Tl	203	1	No Gas	4.591	4.591	0.43	26385	0.02	5	
Pb	208	1	No Gas	4.401	4.401	1.05	88183	0.00	5	
U	238	1	No Gas	4.285	4.285	1.58	92288	0.00	5	
Ca	43	2	He	452.233	452.233	41.95	443	102.00	500	
Sb	121	2	He	4.691	4.691	0.61	13307	0.04	5	
Ti	47	2	He	4.453	4.453	14.27	410	1.09	5	
Cu	63	1	No Gas	4.720	4.720	3.57	25598	0.02	5	
Se	82	1	No Gas	4.861	4.861	92.34	-244	-2.00	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	610263	3.43	579731	105.27	70	120	
Ge	72	2	He	289656	1.47	284936	101.66	70	120	
Ge	72	1	No Gas	906092	3.55	880232	102.94	70	120	

Sample Report

In	115	1	No Gas	1145306	5.19	1062542	107.79	70	120	
Bi	209	1	No Gas	1120309	3.59	1062490	105.44	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	025ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:07:50-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.139	-59.1	36033	1.9	0	ICSA Main CR1 Failed
Be	9	1	No Gas	-0.011	-43.3	42	18.3	0	ICSA Main CR1 Failed
V	51	2	He	-0.007	-128.1	967	3.2	0	ICSA Main CR1 Failed
Cr	52	2	He	1.193	3.1	4241	2.3	0	ICSA Main CR1 Failed
Fe	56	2	He	98327.225	0.3	260949103	1.4	0	
Se	78	2	He	-1.057	-117.7	324	13.5	0	ICSA Main CR1 Failed
As	75	2	He	0.203	14.8	164	6.5	0	ICSA Main CR1 Failed
Ca	44	2	He	102250.955	0.9	1604264	2.1	0	
Na	23	2	He	100542.189	0.6	52184261	1.9	0	
Mg	24	2	He	99377.474	1.0	28541959	2.3	0	
K	39	2	He	98754.877	0.5	32123525	1.6	0	
Mn	55	2	He	0.478	12.5	1190	11.6	0	ICSA Main CR1 Failed
Co	59	2	He	0.234	18.1	973	17.1	0	ICSA Main CR1 Failed
Ni	60	2	He	0.867	21.8	1080	17.1	0	ICSA Main CR1 Failed
Cu	63	2	He	0.155	31.8	1257	10.3	0	ICSA Main CR1 Failed
Zn	66	2	He	2.457	15.7	6138	2.3	0	ICSA Main CR1 Failed
Al	27	2	He	102968.629	0.9	15774626	2.2	0	
B	11	1	No Gas	1.559	48.6	19053	3.1	0	
Al	27	1	No Gas	97408.423	1.4	630717511	0.9	0	
Si	28	1	No Gas	22.429	2.4	251395	0.6	0	
Ag	107	1	No Gas	0.132	18.3	1603	9.4	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	1.256	1.0	1770	2.0	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	4.035	4.1	53055	3.2	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	2059.047	0.4	5150101	1.0	0	
Sn	118	1	No Gas	0.229	14.5	2224	5.2	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.338	11.6	2234	9.2	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.620	4.5	1397	4.9	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.006	135.8	357	35.1	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.015	111.4	170	56.1	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.140	13.0	4507	8.4	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.014	56.1	297	54.1	0	ICSA Main CR1 Failed
Ca	43	2	He	93664.778	0.5	86906	1.3	0	
Sb	121	2	He	0.256	7.8	990	4.4	0	ICSA Main CR1 Failed
Ti	47	2	He	2023.583	1.4	184381	2.1	0	
Se	82	1	No Gas	5.936	132.8	-175	-315.4	0	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	606789	0.22	579731	104.67	70	120	
Ge	72	2	He	293744	1.34	284936	103.09	70	120	
Ge	72	1	No Gas	910343	0.54	880232	103.42	70	120	
In	115	1	No Gas	1162859	1.09	1062542	109.44	70	120	
Bi	209	1	No Gas	1086476	0.80	1062490	102.26	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	026ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:09:51-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	102.748	2.673	812894	2.40	100	102.7	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	101.253	1.472	162016	1.55	100	101.3	80	120	
V	51	2	He	98.779	0.790	233831	2.04	100	98.8	80	120	
Cr	52	2	He	98.209	1.047	267217	2.14	100	98.2	80	120	
Fe	56	2	He	102150.083	1.182	269105703	2.28	100	102150.1	80	120	ICSB Main CR1 Failed
Se	78	2	He	97.989	2.351	3972	2.78	100	98.0	80	120	
As	75	2	He	99.476	1.303	39369	2.03	100	99.5	80	120	
Ca	44	2	He	106212.212	2.172	1654220	3.36	100	106212.2	80	120	ICSB Main CR1 Failed
Na	23	2	He	104335.825	0.640	53746148	1.92	100	104335.8	80	120	ICSB Main CR1 Failed
Mg	24	2	He	103744.444	0.657	29574019	1.75	100	103744.4	80	120	ICSB Main CR1 Failed
K	39	2	He	102762.077	0.891	33177840	2.08	100	102762.1	80	120	ICSB Main CR1 Failed
Mn	55	2	He	97.787	1.034	198415	2.24	100	97.8	80	120	
Co	59	2	He	96.657	0.159	391558	1.30	100	96.7	80	120	
Ni	60	2	He	95.425	0.233	98068	1.52	100	95.4	80	120	
Cu	63	2	He	95.640	0.644	265104	1.76	100	95.6	80	120	
Zn	66	2	He	96.157	1.086	58463	1.67	100	96.2	80	120	
Al	27	2	He	97163.884	0.754	14774813	1.94	100	97163.9	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	494.860	1.190	406048	1.01	100	494.9	80	120	
Al	27	1	No Gas	91018.474	0.253	580262418	0.81	100	91018.5	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	522.576	1.060	1637735	0.78	100	522.6	80	120	
Ag	107	1	No Gas	96.116	1.549	602133	0.87	100	96.1	80	120	
Cd	111	1	No Gas	99.146	1.807	128390	1.05	100	99.1	80	120	
Sr	88	1	No Gas	105.361	1.638	1265123	0.82	100	105.4	80	120	
Mo	95	1	No Gas	2178.144	1.493	5028621	0.67	100	2178.1	80	120	
Sn	118	1	No Gas	100.025	1.681	380824	0.80	100	100.0	80	120	
Sb	121	1	No Gas	97.448	0.876	527404	0.54	100	97.4	80	120	
Ba	137	1	No Gas	99.482	1.645	185939	0.96	100	99.5	80	120	
Tl	205	1	No Gas	99.968	2.686	1416311	2.32	100	100.0	80	120	
Tl	203	1	No Gas	99.090	1.278	543050	0.82	100	99.1	80	120	
Pb	208	1	No Gas	95.630	0.484	1795470	0.24	100	95.6	80	120	
U	238	1	No Gas	102.406	0.203	2109658	0.36	100	102.4	80	120	
Ca	43	2	He	100412.016	2.978	92499	4.28	100	100412.0	80	120	ICSB Main CR1 Failed
Sb	121	2	He	97.994	1.008	274513	2.05	100	98.0	80	120	
Ti	47	2	He	2005.693	1.601	181416	2.81	100	2005.7	80	120	ICSB Main CR1 Failed
Cu	63	1	No Gas	95.031	0.592	469256	1.15	100	95.0	80	120	
Se	82	1	No Gas	103.326	21.002	6543	22.91	100	103.3	80	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	585020	0.16	579731	100.91	70	120	
Ge	72	2	He	291570	1.29	284936	102.33	70	120	
Ge	72	1	No Gas	896272	0.77	880232	101.82	70	120	
In	115	1	No Gas	1073423	0.89	1062542	101.02	70	120	
Bi	209	1	No Gas	1071889	0.48	1062490	100.88	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:27:11-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	106.450	4.724	879521	0.56	100	106.4	90	110	
Be	9	1	No Gas	104.015	3.567	174135	1.68	100	104.0	90	110	
V	51	2	He	100.971	0.130	249074	1.50	100	101.0	90	110	
Cr	52	2	He	100.477	0.505	284880	1.16	100	100.5	90	110	
Fe	56	2	He	9984.350	0.302	27419215	1.67	10000	99.8	90	110	
Se	78	2	He	104.554	3.085	4392	3.68	100	104.6	90	110	
As	75	2	He	105.109	1.541	43354	2.81	100	105.1	90	110	
Ca	44	2	He	9996.877	0.414	162949	1.43	10000	100.0	90	110	
Na	23	2	He	10086.203	0.566	5572993	1.54	10000	100.9	90	110	
Mg	24	2	He	10166.691	1.571	3021024	2.93	10000	101.7	90	110	
K	39	2	He	10258.709	0.918	3525909	2.11	10000	102.6	90	110	
Mn	55	2	He	101.051	0.710	213682	2.07	100	101.1	90	110	
Co	59	2	He	100.589	0.734	424704	1.94	100	100.6	90	110	
Ni	60	2	He	101.637	1.291	108839	1.34	100	101.6	90	110	
Cu	63	2	He	101.424	0.650	292943	1.52	100	101.4	90	110	
Zn	66	2	He	101.079	1.787	63804	2.80	100	101.1	90	110	
Al	27	2	He	115.109	2.241	18699	0.88	100	115.1	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	451.796	4.453	389357	1.46	500	90.4	90	110	
Al	27	1	No Gas	107.187	0.659	720792	1.24	100	107.2	90	110	
Si	28	1	No Gas	515.199	1.354	1666400	1.34	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	96.486	2.721	660893	1.34	100	96.5	90	110	
Cd	111	1	No Gas	97.261	2.996	137707	1.51	100	97.3	90	110	
Sr	88	1	No Gas	96.533	2.694	1267462	1.57	100	96.5	90	110	
Mo	95	1	No Gas	93.934	3.452	237116	1.96	100	93.9	90	110	
Sn	118	1	No Gas	96.357	2.917	401162	1.42	100	96.4	90	110	
Sb	121	1	No Gas	102.667	0.217	572530	0.73	100	102.7	90	110	
Ba	137	1	No Gas	96.429	1.676	197088	0.69	100	96.4	90	110	
Tl	205	1	No Gas	104.481	1.707	1533285	2.25	100	104.5	90	110	
Tl	203	1	No Gas	104.883	0.764	595355	1.33	100	104.9	90	110	
Pb	208	1	No Gas	97.723	0.853	1900193	0.60	100	97.7	90	110	
U	238	1	No Gas	103.299	1.893	2203996	1.81	100	103.3	90	110	
Ca	43	2	He	9833.975	1.201	9467	0.22	10000	98.3	90	110	
Sb	121	2	He	103.104	1.057	301011	2.35	100	103.1	90	110	
Ti	47	2	He	102.557	5.103	9674	4.27	100	102.6	90	110	
Cu	63	1	No Gas	101.287	0.448	515195	0.96	100	101.3	90	110	
Se	82	1	No Gas	97.887	23.639	6360	26.33	100	97.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	612633	4.07	579731	105.68	70	120	
Ge	72	2	He	303877	1.37	284936	106.65	70	120	
Ge	72	1	No Gas	923498	0.65	880232	104.92	70	120	
In	115	1	No Gas	1173879	1.52	1062542	110.48	70	120	
Bi	209	1	No Gas	1110193	1.21	1062490	104.49	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	030_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:29:08-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.031	-38.0	35102	2.5	0.5	
Be	9	1	No Gas	-0.013	-34.1	37	20.8	0.5	
V	51	2	He	0.109	16.9	1147	5.5	2.5	
Cr	52	2	He	0.033	200.3	987	14.2	2.5	
Fe	56	2	He	0.654	26.9	8810	6.4	100	
Se	78	2	He	0.312	467.4	345	12.2	2	
As	75	2	He	-0.051	-80.5	59	27.9	2.5	
Ca	44	2	He	-18.421	-37.0	430	26.4	100	
Na	23	2	He	-4.714	-282.1	153958	0.7	100	
Mg	24	2	He	0.338	37.2	273	11.8	100	
K	39	2	He	5.683	104.1	74997	1.2	100	
Mn	55	2	He	0.000	95058.5	197	24.0	2.5	
Co	59	2	He	0.005	66.0	33	34.6	2.5	
Ni	60	2	He	-0.117	-21.7	60	44.1	2.5	
Cu	63	2	He	-0.017	-62.9	717	5.6	2	
Zn	66	2	He	-0.033	-1313.7	4377	7.9	2.5	
Al	27	2	He	-1.776	-24.4	160	34.8	5	
B	11	1	No Gas	20.233	10.4	32641	7.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.224	-9.6	8053	6.4	5	
Si	28	1	No Gas	3.880	26.3	188075	2.7	10	
Ag	107	1	No Gas	0.009	182.9	697	12.9	2.5	
Cd	111	1	No Gas	0.008	57.8	17	34.6	1	
Sr	88	1	No Gas	-0.018	-16.3	323	12.9	2.5	
Mo	95	1	No Gas	0.015	14.6	53	10.8	2.5	
Sn	118	1	No Gas	0.293	161.1	2243	78.6	5	
Sb	121	1	No Gas	0.020	51.0	460	13.2	2.5	
Ba	137	1	No Gas	-0.003	-265.1	123	12.4	2.5	
Tl	205	1	No Gas	0.001	319.9	273	15.2	1	
Tl	203	1	No Gas	0.012	61.4	150	29.1	1	
Pb	208	1	No Gas	-0.046	-9.6	953	11.0	2.5	
U	238	1	No Gas	0.006	43.0	143	35.8	2.5	
Ca	43	2	He	-6.433	-260.1	23	65.5	100	
Sb	121	2	He	-0.010	-155.3	220	15.7	2.5	
Ti	47	2	He	0.004	2737.1	10	100.0	2.5	
Cu	63	1	No Gas	-0.047	-84.9	1823	7.7	2.5	
Se	82	1	No Gas	1.131	594.1	-487	-92.8	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	577521	2.70	579731	99.62	70	120	
Ge	72	2	He	271186	3.51	284936	95.17	70	120	
Ge	72	1	No Gas	860304	2.67	880232	97.74	70	120	
In	115	1	No Gas	1047092	2.27	1062542	98.55	70	120	
Bi	209	1	No Gas	1056590	3.05	1062490	99.44	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01
Data File Name	037SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:51:11-05:00
Sample Type	Sample
Dilution	20
Comment	TW DOD 181294
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.996	19.910	8.95	45497	0.00	2000	
Be	9	1	No Gas	-0.019	-0.378	-24.54	28	-0.07	2000	
V	51	2	He	-0.197	-3.947	-20.09	536	-0.04	2000	
Cr	52	2	He	13.980	279.603	0.81	40734	0.03	2000	
Fe	56	2	He	307.417	6148.343	1.09	856730	0.04	200000	
Se	78	2	He	-1.036	-20.723	-66.61	338	-0.31	2000	
As	75	2	He	-0.006	-0.126	-283.94	84	-0.01	2000	
Ca	44	2	He	5130.069	102601.382	1.03	84462	6.07	200000	
Na	23	2	He	21712.342	434246.847	1.02	11859802	0.18	200000	
Mg	24	2	He	3985.833	79716.655	0.27	1190798	0.33	200000	
K	39	2	He	25.648	512.965	4.11	91281	0.03	200000	
Mn	55	2	He	52.220	1044.402	2.04	111139	0.05	2000	
Co	59	2	He	1.523	30.468	2.62	6485	0.02	2000	
Ni	60	2	He	105.013	2100.268	1.18	113073	0.09	2000	
Cu	63	2	He	0.555	11.102	12.01	2464	0.02	2000	
Zn	66	2	He	-0.020	-0.395	-2038.93	4938	0.00	2000	
Al	27	2	He	0.852	17.037	62.84	600	0.14	2000	
B	11	1	No Gas	-7.836	-156.721	-2.83	11857	-0.07	2000	
Al	27	1	No Gas	0.857	17.142	13.21	22742	0.00	2000	
Si	28	1	No Gas	821.671	16433.416	1.49	2591332	0.03	2000	
Ag	107	1	No Gas	-0.039	-0.773	-10.44	473	-0.01	2000	
Cd	111	1	No Gas	0.013	0.252	132.77	27	0.05	2000	
Sr	88	1	No Gas	72.630	1452.610	1.16	996774	0.01	2000	
Mo	95	1	No Gas	0.075	1.492	9.66	220	0.03	2000	
Sn	118	1	No Gas	-0.032	-0.633	-65.63	1213	0.00	2000	
Sb	121	1	No Gas	-0.004	-0.088	-390.15	363	0.00	2000	
Ba	137	1	No Gas	2.850	56.992	2.22	6235	0.05	2000	
Tl	205	1	No Gas	-0.012	-0.240	-18.27	100	-0.01	2000	
Tl	203	1	No Gas	-0.007	-0.149	-14.02	47	-0.02	2000	
Pb	208	1	No Gas	-0.064	-1.282	-6.96	670	-0.01	2000	
U	238	1	No Gas	0.011	0.215	8.23	253	0.00	2000	
Ca	43	2	He	5222.062	104441.240	2.58	5071	102.98	200000	
Sb	121	2	He	-0.054	-1.083	-17.43	120	-0.05	2000	
Ti	47	2	He	-0.078	-1.566	-76.96	3	-2.35	2000	
Cu	63	1	No Gas	0.580	11.596	8.63	5228	0.01	2000	
Zn	66	1	No Gas	0.340	6.802	99.91	12299	0.00	2000	
Se	82	1	No Gas	-2.498	-49.965	-221.88	-790	0.32	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	614491	1.48	579731	106.00	70	120	
Ge	72	2	He	305526	1.21	284936	107.23	70	120	
Ge	72	1	No Gas	940590	0.24	880232	106.86	70	120	
In	115	1	No Gas	1226668	1.86	1062542	115.45	70	120	

Sample Report

Bi	209	1	No Gas	1157669	0.96	1062490	108.96	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01SD
Data File Name	038SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:53:10-05:00
Sample Type	Sample
Dilution	100
Comment	TW DOD 181294
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.099	9.937	87.55	38551	0.00	2000	
Be	9	1	No Gas	-0.015	-1.500	-87.08	35	-0.04	2000	
V	51	2	He	-0.175	-17.490	-14.04	579	-0.03	2000	
Cr	52	2	He	2.974	297.394	2.78	9297	0.03	2000	
Fe	56	2	He	62.358	6235.769	0.75	177003	0.04	200000	
Se	78	2	He	-1.125	-112.504	-35.25	329	-0.34	2000	
As	75	2	He	-0.049	-4.872	-57.41	66	-0.07	2000	
Ca	44	2	He	1020.772	102077.189	1.36	17121	5.96	200000	
Na	23	2	He	4468.905	446890.514	0.50	2534565	0.18	200000	
Mg	24	2	He	769.599	76959.878	0.51	225960	0.34	200000	
K	39	2	He	-12.523	-1252.325	-20.80	76984	-0.02	200000	
Mn	55	2	He	10.660	1065.977	1.75	22445	0.05	2000	
Co	59	2	He	0.304	30.359	7.44	1283	0.02	2000	
Ni	60	2	He	21.024	2102.449	1.38	22385	0.09	2000	
Cu	63	2	He	0.083	8.256	14.55	1077	0.01	2000	
Zn	66	2	He	0.298	29.842	27.16	5031	0.01	2000	
Al	27	2	He	4.351	435.083	5.15	1137	0.38	2000	
B	11	1	No Gas	-9.060	-905.967	-2.53	10944	-0.08	2000	
Al	27	1	No Gas	3.942	394.202	1.03	43695	0.01	2000	
Si	28	1	No Gas	152.517	15251.656	0.56	643877	0.02	2000	
Ag	107	1	No Gas	-0.047	-4.730	-35.76	427	-0.01	2000	
Cd	111	1	No Gas	-0.003	-0.301	-125.33	3	-0.09	2000	
Sr	88	1	No Gas	14.086	1408.638	1.54	201246	0.01	2000	
Mo	95	1	No Gas	0.014	1.441	61.43	63	0.02	2000	
Sn	118	1	No Gas	-0.069	-6.936	-25.41	1090	-0.01	2000	
Sb	121	1	No Gas	-0.001	-0.137	-465.34	383	0.00	2000	
Ba	137	1	No Gas	0.577	57.702	8.91	1437	0.04	2000	
Tl	205	1	No Gas	-0.012	-1.222	-21.08	97	-0.01	2000	
Tl	203	1	No Gas	-0.009	-0.913	-22.38	37	-0.02	2000	
Pb	208	1	No Gas	-0.063	-6.269	-0.83	700	-0.01	2000	
U	238	1	No Gas	0.002	0.175	54.25	53	0.00	2000	
Ca	43	2	He	1075.006	107500.576	3.75	1050	102.38	200000	
Sb	121	2	He	-0.044	-4.405	-26.42	147	-0.03	2000	
Ti	47	2	He	-0.078	-7.792	-78.26	3	-2.34	2000	
Cu	63	1	No Gas	0.107	10.720	15.21	2810	0.00	2000	
Zn	66	1	No Gas	0.033	3.271	879.42	11939	0.00	2000	
Se	82	1	No Gas	-7.195	-719.514	-57.00	-1138	0.63	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	617174	0.51	579731	106.46	70	120	
Ge	72	2	He	300042	2.10	284936	105.30	70	120	
Ge	72	1	No Gas	947419	0.45	880232	107.63	70	120	
In	115	1	No Gas	1273705	2.01	1062542	119.87	70	120	

Sample Report

Bi	209	1	No Gas	1159615	1.39	1062490	109.14	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01PDS
Data File Name	039SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:55:09-05:00
Sample Type	Sample
Dilution	20
Comment	TW DOD 181294
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.120	22.403	4.62	47326	0.00	2000	
Be	9	1	No Gas	119.586	2391.729	0.56	204574	0.06	2000	
V	51	2	He	119.275	2385.505	0.85	301806	0.04	2000	
Cr	52	2	He	132.368	2647.359	0.90	384894	0.03	2000	
Fe	56	2	He	12042.812	240856.237	1.37	33943614	0.04	200000	
Se	78	2	He	117.759	2355.183	3.56	5029	2.34	2000	
As	75	2	He	121.372	2427.449	1.61	51363	0.24	2000	
Ca	44	2	He	17432.962	348659.235	0.51	291072	5.99	200000	
Na	23	2	He	36170.612	723412.232	0.86	20048183	0.18	200000	
Mg	24	2	He	16158.409	323168.188	1.55	4927591	0.33	200000	
K	39	2	He	12156.723	243134.459	1.79	4272301	0.28	200000	
Mn	55	2	He	177.502	3550.049	1.26	385082	0.05	2000	
Co	59	2	He	119.414	2388.287	0.95	517485	0.02	2000	
Ni	60	2	He	234.269	4685.377	1.03	257256	0.09	2000	
Cu	63	2	He	119.515	2390.295	0.86	354159	0.03	2000	
Zn	66	2	He	118.351	2367.011	1.83	75801	0.16	2000	
Al	27	2	He	116.600	2332.004	1.83	19437	0.60	2000	
B	11	1	No Gas	-9.201	-184.012	-2.18	10979	-0.08	2000	
Al	27	1	No Gas	108.823	2176.455	1.07	760630	0.01	2000	
Si	28	1	No Gas	944.801	18896.020	0.73	3012048	0.03	2000	
Ag	107	1	No Gas	108.192	2163.849	1.14	792028	0.01	2000	
Cd	111	1	No Gas	108.685	2173.692	2.02	164465	0.07	2000	
Sr	88	1	No Gas	87.674	1753.480	0.65	1230503	0.01	2000	
Mo	95	1	No Gas	109.431	2188.628	1.41	295269	0.04	2000	
Sn	118	1	No Gas	0.285	5.692	190.52	2672	0.01	2000	
Sb	121	1	No Gas	118.428	2368.560	0.39	686647	0.02	2000	
Ba	137	1	No Gas	111.784	2235.685	1.20	244165	0.05	2000	
Tl	205	1	No Gas	117.361	2347.217	0.78	1800116	0.01	2000	
Tl	203	1	No Gas	116.105	2322.101	0.85	688851	0.02	2000	
Pb	208	1	No Gas	118.605	2372.110	0.80	2410359	0.00	2000	
U	238	1	No Gas	0.011	0.223	15.12	263	0.00	2000	
Ca	43	2	He	17241.626	344832.526	2.34	17011	101.36	200000	
Sb	121	2	He	118.336	2366.722	2.31	354570	0.03	2000	
Ti	47	2	He	119.177	2383.547	4.91	11538	1.03	2000	
Cu	63	1	No Gas	117.843	2356.863	0.76	622873	0.02	2000	
Zn	66	1	No Gas	117.687	2353.739	2.48	186305	0.06	2000	
Se	82	1	No Gas	117.682	2353.648	3.42	8069	1.46	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	625487	0.32	579731	107.89	70	120	
Ge	72	2	He	311899	0.98	284936	109.46	70	120	
Ge	72	1	No Gas	960254	0.79	880232	109.09	70	120	
In	115	1	No Gas	1254538	1.75	1062542	118.07	70	120	

Sample Report

Bi	209	1	No Gas	1160443	0.98	1062490	109.22	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:59:05-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	102.983	5.231	872727	2.28	100	103.0	90	110	
Be	9	1	No Gas	101.314	3.575	173717	1.52	100	101.3	90	110	
V	51	2	He	100.709	0.208	250387	1.37	100	100.7	90	110	
Cr	52	2	He	101.143	0.727	289034	1.64	100	101.1	90	110	
Fe	56	2	He	9928.962	0.687	27480680	1.15	10000	99.3	90	110	
Se	78	2	He	101.879	2.646	4323	2.89	100	101.9	90	110	
As	75	2	He	105.920	0.913	44025	1.09	100	105.9	90	110	
Ca	44	2	He	9906.205	0.277	162757	1.66	10000	99.1	90	110	
Na	23	2	He	10103.559	0.533	5626099	1.03	10000	101.0	90	110	
Mg	24	2	He	10140.138	1.310	3036219	0.98	10000	101.4	90	110	
K	39	2	He	10235.056	1.098	3545181	0.38	10000	102.4	90	110	
Mn	55	2	He	100.230	1.165	213585	0.46	100	100.2	90	110	
Co	59	2	He	100.761	0.230	428763	1.29	100	100.8	90	110	
Ni	60	2	He	100.661	1.629	108637	0.21	100	100.7	90	110	
Cu	63	2	He	101.581	1.005	295689	0.90	100	101.6	90	110	
Zn	66	2	He	101.913	1.126	64784	0.66	100	101.9	90	110	
Al	27	2	He	114.433	1.705	18743	2.22	100	114.4	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	461.622	6.715	387725	2.21	500	92.3	90	110	
Al	27	1	No Gas	103.974	1.514	721276	1.49	100	104.0	90	110	
Si	28	1	No Gas	502.208	1.447	1679564	1.70	5000	10.0	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	94.350	1.574	677538	0.81	100	94.4	90	110	
Cd	111	1	No Gas	94.611	2.236	140434	1.43	100	94.6	90	110	
Sr	88	1	No Gas	94.062	2.766	1294657	2.02	100	94.1	90	110	
Mo	95	1	No Gas	92.031	1.885	243571	1.41	100	92.0	90	110	
Sn	118	1	No Gas	94.002	1.597	410328	0.79	100	94.0	90	110	
Sb	121	1	No Gas	101.791	0.354	585177	0.70	100	101.8	90	110	
Ba	137	1	No Gas	93.661	1.579	200672	0.79	100	93.7	90	110	
Tl	205	1	No Gas	105.016	1.054	1600516	0.89	100	105.0	90	110	
Tl	203	1	No Gas	103.428	0.434	609757	0.90	100	103.4	90	110	
Pb	208	1	No Gas	96.664	0.756	1952278	1.17	100	96.7	90	110	
U	238	1	No Gas	100.185	1.459	2220098	1.40	100	100.2	90	110	
Ca	43	2	He	9954.162	2.289	9657	1.04	10000	99.5	90	110	
Sb	121	2	He	102.642	0.454	302003	1.42	100	102.6	90	110	
Ti	47	2	He	103.022	1.034	9797	1.38	100	103.0	90	110	
Cu	63	1	No Gas	99.794	0.847	523298	0.63	100	99.8	90	110	
Se	82	1	No Gas	101.521	8.058	6817	8.94	100	101.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	627502	4.31	579731	108.24	70	120	
Ge	72	2	He	306276	1.41	284936	107.49	70	120	
Ge	72	1	No Gas	952017	0.47	880232	108.16	70	120	
In	115	1	No Gas	1230430	0.81	1062542	115.80	70	120	
Bi	209	1	No Gas	1153075	1.33	1062490	108.53	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:59:05-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	102.983	5.231	872727	2.28	100	103.0	90	110	
Be	9	1	No Gas	101.314	3.575	173717	1.52	100	101.3	90	110	
V	51	2	He	100.709	0.208	250387	1.37	100	100.7	90	110	
Cr	52	2	He	101.143	0.727	289034	1.64	100	101.1	90	110	
Fe	56	2	He	9928.962	0.687	27480680	1.15	10000	99.3	90	110	
Se	78	2	He	101.879	2.646	4323	2.89	100	101.9	90	110	
As	75	2	He	105.920	0.913	44025	1.09	100	105.9	90	110	
Ca	44	2	He	9906.205	0.277	162757	1.66	10000	99.1	90	110	
Na	23	2	He	10103.559	0.533	5626099	1.03	10000	101.0	90	110	
Mg	24	2	He	10140.138	1.310	3036219	0.98	10000	101.4	90	110	
K	39	2	He	10235.056	1.098	3545181	0.38	10000	102.4	90	110	
Mn	55	2	He	100.230	1.165	213585	0.46	100	100.2	90	110	
Co	59	2	He	100.761	0.230	428763	1.29	100	100.8	90	110	
Ni	60	2	He	100.661	1.629	108637	0.21	100	100.7	90	110	
Cu	63	2	He	101.581	1.005	295689	0.90	100	101.6	90	110	
Zn	66	2	He	101.913	1.126	64784	0.66	100	101.9	90	110	
Al	27	2	He	114.433	1.705	18743	2.22	100	114.4	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	461.622	6.715	387725	2.21	500	92.3	90	110	
Al	27	1	No Gas	103.974	1.514	721276	1.49	100	104.0	90	110	
Si	28	1	No Gas	502.208	1.447	1679564	1.70	5000	10.0	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	94.350	1.574	677538	0.81	100	94.4	90	110	
Cd	111	1	No Gas	94.611	2.236	140434	1.43	100	94.6	90	110	
Sr	88	1	No Gas	94.062	2.766	1294657	2.02	100	94.1	90	110	
Mo	95	1	No Gas	92.031	1.885	243571	1.41	100	92.0	90	110	
Sn	118	1	No Gas	94.002	1.597	410328	0.79	100	94.0	90	110	
Sb	121	1	No Gas	101.791	0.354	585177	0.70	100	101.8	90	110	
Ba	137	1	No Gas	93.661	1.579	200672	0.79	100	93.7	90	110	
Tl	205	1	No Gas	105.016	1.054	1600516	0.89	100	105.0	90	110	
Tl	203	1	No Gas	103.428	0.434	609757	0.90	100	103.4	90	110	
Pb	208	1	No Gas	96.664	0.756	1952278	1.17	100	96.7	90	110	
U	238	1	No Gas	100.185	1.459	2220098	1.40	100	100.2	90	110	
Ca	43	2	He	9954.162	2.289	9657	1.04	10000	99.5	90	110	
Sb	121	2	He	102.642	0.454	302003	1.42	100	102.6	90	110	
Ti	47	2	He	103.022	1.034	9797	1.38	100	103.0	90	110	
Cu	63	1	No Gas	99.794	0.847	523298	0.63	100	99.8	90	110	
Se	82	1	No Gas	101.521	8.058	6817	8.94	100	101.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	627502	4.31	579731	108.24	70	120	
Ge	72	2	He	306276	1.41	284936	107.49	70	120	
Ge	72	1	No Gas	952017	0.47	880232	108.16	70	120	
In	115	1	No Gas	1230430	0.81	1062542	115.80	70	120	
Bi	209	1	No Gas	1153075	1.33	1062490	108.53	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:01:02-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.139	-15.5	35156	2.3	0.5	
Be	9	1	No Gas	0.006	554.7	67	75.9	0.5	
V	51	2	He	-0.144	-10.6	617	4.3	2.5	
Cr	52	2	He	0.004	962.0	957	12.5	2.5	
Fe	56	2	He	1.026	11.5	10121	2.6	100	
Se	78	2	He	-0.009	-7831.3	349	8.4	2	
As	75	2	He	-0.059	-19.5	58	6.7	2.5	
Ca	44	2	He	-19.037	-21.2	437	14.5	100	
Na	23	2	He	-0.333	-2785.7	162606	1.4	100	
Mg	24	2	He	0.492	48.1	327	18.5	100	
K	39	2	He	-0.514	-1252.3	76186	1.4	100	
Mn	55	2	He	0.037	47.2	277	11.6	2.5	
Co	59	2	He	0.009	18.0	53	10.8	2.5	
Ni	60	2	He	-0.099	-1.2	80	0.0	2.5	
Cu	63	2	He	-0.054	-45.6	647	8.8	2	
Zn	66	2	He	-0.043	-1044.9	4551	6.1	2.5	
Al	27	2	He	-1.489	-13.6	210	12.6	5	
B	11	1	No Gas	16.917	19.9	30158	9.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.379	-5.7	7426	7.1	5	
Si	28	1	No Gas	2.110	96.2	191245	1.4	10	
Ag	107	1	No Gas	-0.017	-162.1	583	25.0	2.5	
Cd	111	1	No Gas	0.015	132.7	27	94.4	1	
Sr	88	1	No Gas	-0.011	-188.5	443	51.7	2.5	
Mo	95	1	No Gas	0.028	134.4	87	96.1	2.5	
Sn	118	1	No Gas	-0.027	-112.3	1163	6.3	5	
Sb	121	1	No Gas	0.031	69.6	537	20.4	2.5	
Ba	137	1	No Gas	0.040	87.1	220	24.1	2.5	
Tl	205	1	No Gas	0.004	246.3	327	42.9	1	
Tl	203	1	No Gas	0.013	103.3	157	44.8	1	
Pb	208	1	No Gas	-0.043	-21.3	1040	14.8	2.5	
U	238	1	No Gas	0.007	60.5	160	53.4	2.5	
Ca	43	2	He	-22.074	-0.8	10	0.0	100	
Sb	121	2	He	-0.013	-67.2	223	9.3	2.5	
Ti	47	2	He	-0.038	-173.6	7	86.6	2.5	
Cu	63	1	No Gas	-0.029	-180.4	1990	11.4	2.5	
Se	82	1	No Gas	1.213	568.9	-501	-95.6	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	592077	2.20	579731	102.13	70	120	
Ge	72	2	He	282388	1.48	284936	99.11	70	120	
Ge	72	1	No Gas	897570	1.80	880232	101.97	70	120	
In	115	1	No Gas	1161374	6.64	1062542	109.30	70	120	
Bi	209	1	No Gas	1100009	2.33	1062490	103.53	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:01:02-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.139	-15.5	35156	2.3	0.5	
Be	9	1	No Gas	0.006	554.7	67	75.9	0.5	
V	51	2	He	-0.144	-10.6	617	4.3	2.5	
Cr	52	2	He	0.004	962.0	957	12.5	2.5	
Fe	56	2	He	1.026	11.5	10121	2.6	100	
Se	78	2	He	-0.009	-7831.3	349	8.4	2	
As	75	2	He	-0.059	-19.5	58	6.7	2.5	
Ca	44	2	He	-19.037	-21.2	437	14.5	100	
Na	23	2	He	-0.333	-2785.7	162606	1.4	100	
Mg	24	2	He	0.492	48.1	327	18.5	100	
K	39	2	He	-0.514	-1252.3	76186	1.4	100	
Mn	55	2	He	0.037	47.2	277	11.6	2.5	
Co	59	2	He	0.009	18.0	53	10.8	2.5	
Ni	60	2	He	-0.099	-1.2	80	0.0	2.5	
Cu	63	2	He	-0.054	-45.6	647	8.8	2	
Zn	66	2	He	-0.043	-1044.9	4551	6.1	2.5	
Al	27	2	He	-1.489	-13.6	210	12.6	5	
B	11	1	No Gas	16.917	19.9	30158	9.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.379	-5.7	7426	7.1	5	
Si	28	1	No Gas	2.110	96.2	191245	1.4	10	
Ag	107	1	No Gas	-0.017	-162.1	583	25.0	2.5	
Cd	111	1	No Gas	0.015	132.7	27	94.4	1	
Sr	88	1	No Gas	-0.011	-188.5	443	51.7	2.5	
Mo	95	1	No Gas	0.028	134.4	87	96.1	2.5	
Sn	118	1	No Gas	-0.027	-112.3	1163	6.3	5	
Sb	121	1	No Gas	0.031	69.6	537	20.4	2.5	
Ba	137	1	No Gas	0.040	87.1	220	24.1	2.5	
Tl	205	1	No Gas	0.004	246.3	327	42.9	1	
Tl	203	1	No Gas	0.013	103.3	157	44.8	1	
Pb	208	1	No Gas	-0.043	-21.3	1040	14.8	2.5	
U	238	1	No Gas	0.007	60.5	160	53.4	2.5	
Ca	43	2	He	-22.074	-0.8	10	0.0	100	
Sb	121	2	He	-0.013	-67.2	223	9.3	2.5	
Ti	47	2	He	-0.038	-173.6	7	86.6	2.5	
Cu	63	1	No Gas	-0.029	-180.4	1990	11.4	2.5	
Se	82	1	No Gas	1.213	568.9	-501	-95.6	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	592077	2.20	579731	102.13	70	120	
Ge	72	2	He	282388	1.48	284936	99.11	70	120	
Ge	72	1	No Gas	897570	1.80	880232	101.97	70	120	
In	115	1	No Gas	1161374	6.64	1062542	109.30	70	120	
Bi	209	1	No Gas	1100009	2.33	1062490	103.53	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	053_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:29:09-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	103.362	6.651	895156	3.71	100	103.4	90	110	
Be	9	1	No Gas	98.109	4.748	171923	1.74	100	98.1	90	110	
V	51	2	He	103.085	1.096	241064	2.46	100	103.1	90	110	
Cr	52	2	He	101.738	0.741	273435	1.03	100	101.7	90	110	
Fe	56	2	He	10188.136	0.836	26523374	1.78	10000	101.9	90	110	
Se	78	2	He	100.035	2.091	3999	2.41	100	100.0	90	110	
As	75	2	He	105.570	1.693	41274	2.23	100	105.6	90	110	
Ca	44	2	He	10126.908	0.816	156486	2.19	10000	101.3	90	110	
Na	23	2	He	10804.919	0.099	5647795	1.47	10000	108.0	90	110	
Mg	24	2	He	10528.651	1.321	2965418	1.85	10000	105.3	90	110	
K	39	2	He	10593.057	1.733	3449090	2.81	10000	105.9	90	110	
Mn	55	2	He	101.380	0.719	203215	1.53	100	101.4	90	110	
Co	59	2	He	101.489	1.014	406195	1.67	100	101.5	90	110	
Ni	60	2	He	101.541	0.357	103085	1.07	100	101.5	90	110	
Cu	63	2	He	101.766	0.451	278643	1.54	100	101.8	90	110	
Zn	66	2	He	101.046	1.120	60458	1.18	100	101.0	90	110	
Al	27	2	He	115.711	1.667	17818	0.48	100	115.7	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	481.394	2.622	413037	2.32	500	96.3	90	110	
Al	27	1	No Gas	114.684	3.674	736542	3.73	100	114.7	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	558.936	2.037	1713580	0.97	5000	11.2	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	101.938	1.458	633819	0.47	100	101.9	90	110	
Cd	111	1	No Gas	101.169	1.386	130046	1.43	100	101.2	90	110	
Sr	88	1	No Gas	103.886	2.193	1238244	2.19	100	103.9	90	110	
Mo	95	1	No Gas	98.826	0.784	226525	2.09	100	98.8	90	110	
Sn	118	1	No Gas	100.691	0.466	380543	0.87	100	100.7	90	110	
Sb	121	1	No Gas	101.597	1.439	541893	0.94	100	101.6	90	110	
Ba	137	1	No Gas	101.997	1.347	189223	0.52	100	102.0	90	110	
Tl	205	1	No Gas	106.379	1.981	1483377	1.84	100	106.4	90	110	
Tl	203	1	No Gas	105.296	0.137	567974	0.95	100	105.3	90	110	
Pb	208	1	No Gas	97.389	0.484	1799617	1.07	100	97.4	90	110	
U	238	1	No Gas	102.977	1.160	2088014	1.79	100	103.0	90	110	
Ca	43	2	He	10103.043	2.038	9220	2.29	10000	101.0	90	110	
Sb	121	2	He	102.578	0.841	283893	2.02	100	102.6	90	110	
Ti	47	2	He	103.356	2.278	9247	3.52	100	103.4	90	110	
Cu	63	1	No Gas	101.810	1.167	495288	0.38	100	101.8	90	110	
Se	82	1	No Gas	107.012	7.136	6696	7.12	100	107.0	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	641405	3.79	579731	110.64	70	120	
Ge	72	2	He	288073	1.39	284936	101.10	70	120	
Ge	72	1	No Gas	883343	0.97	880232	100.35	70	120	
In	115	1	No Gas	1065492	1.32	1062542	100.28	70	120	
Bi	209	1	No Gas	1054979	1.01	1062490	99.29	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	054_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:31:05-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.164	28.6	36397	1.2	0.5	
Be	9	1	No Gas	-0.018	-25.4	28	27.0	0.5	
V	51	2	He	1.188	7.1	3486	2.6	2.5	
Cr	52	2	He	-0.012	-364.2	873	16.9	2.5	
Fe	56	2	He	1.079	17.6	9777	2.0	100	
Se	78	2	He	0.717	136.5	357	7.5	2	
As	75	2	He	0.131	17.3	124	6.7	2.5	
Ca	44	2	He	-14.908	-57.8	473	23.7	100	
Na	23	2	He	240.916	8.3	269465	0.5	100	CCB Main CR1 Failed
Mg	24	2	He	0.688	26.2	363	11.1	100	
K	39	2	He	17.586	76.6	78010	1.9	100	
Mn	55	2	He	0.028	97.0	247	18.3	2.5	
Co	59	2	He	0.005	92.2	33	45.8	2.5	
Ni	60	2	He	-0.098	-27.3	77	30.1	2.5	
Cu	63	2	He	0.079	16.2	957	0.6	2	
Zn	66	2	He	-0.010	-3133.3	4354	0.3	2.5	
Al	27	2	He	-1.426	-26.0	210	26.5	5	
B	11	1	No Gas	59.968	8.7	60944	7.7	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.259	-3.2	7522	4.4	5	
Si	28	1	No Gas	11.832	10.8	200459	2.3	10	CCB Main CR1 Failed
Ag	107	1	No Gas	0.006	193.2	640	8.7	2.5	
Cd	111	1	No Gas	0.003	269.3	10	100.0	1	
Sr	88	1	No Gas	-0.009	-85.7	413	20.1	2.5	
Mo	95	1	No Gas	0.013	146.0	47	86.6	2.5	
Sn	118	1	No Gas	-0.037	-66.2	967	10.4	5	
Sb	121	1	No Gas	0.038	21.1	527	7.2	2.5	
Ba	137	1	No Gas	0.015	203.0	147	33.6	2.5	
Tl	205	1	No Gas	-0.004	-175.0	187	52.9	1	
Tl	203	1	No Gas	0.003	285.9	93	48.3	1	
Pb	208	1	No Gas	-0.051	-11.5	793	10.2	2.5	
U	238	1	No Gas	0.004	36.8	93	34.4	2.5	
Ca	43	2	He	-1.458	-1303.9	27	57.3	100	
Sb	121	2	He	0.023	125.8	307	26.4	2.5	
Ti	47	2	He	-0.072	-100.0	3	173.2	2.5	
Cu	63	1	No Gas	0.147	26.0	2624	8.1	2.5	
Se	82	1	No Gas	-23.025	-29.7	-1989	-20.8	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	575078	2.05	579731	99.20	70	120	
Ge	72	2	He	269482	3.91	284936	94.58	70	120	
Ge	72	1	No Gas	823973	1.97	880232	93.61	70	120	
In	115	1	No Gas	993831	1.66	1062542	93.53	70	120	
Bi	209	1	No Gas	990625	2.67	1062490	93.24	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01PDS
Data File Name	056SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:38:38-05:00
Sample Type	Sample
Dilution	20
Comment	TW DOD 181294
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.220	24.396	16.85	52877	0.00	2000	
Be	9	1	No Gas	93.024	1860.482	3.03	174838	0.05	2000	
V	51	2	He	95.084	1901.670	1.13	248723	0.04	2000	
Cr	52	2	He	107.300	2146.007	0.50	322464	0.03	2000	
Fe	56	2	He	9687.711	193754.210	0.97	28204780	0.03	200000	
Se	78	2	He	95.483	1909.660	1.71	4287	2.23	2000	
As	75	2	He	95.122	1902.434	2.24	41601	0.23	2000	
Ca	44	2	He	14382.424	287648.485	1.13	248189	5.79	200000	
Na	23	2	He	30834.488	616689.764	1.21	17680095	0.17	200000	
Mg	24	2	He	13360.775	267215.504	0.26	4208260	0.32	200000	
K	39	2	He	9830.972	196619.448	0.95	3585501	0.27	200000	
Mn	55	2	He	144.002	2880.041	1.05	322716	0.04	2000	
Co	59	2	He	95.125	1902.491	1.04	425777	0.02	2000	
Ni	60	2	He	191.387	3827.749	1.38	217117	0.09	2000	
Cu	63	2	He	94.406	1888.119	0.58	289130	0.03	2000	
Zn	66	2	He	94.363	1887.250	1.35	63488	0.15	2000	
Al	27	2	He	97.659	1953.172	0.84	16897	0.58	2000	
B	11	1	No Gas	47.194	943.881	6.15	61610	0.08	2000	
Al	27	1	No Gas	89.964	1799.274	0.37	643037	0.01	2000	
Si	28	1	No Gas	822.755	16455.090	0.15	2695755	0.03	2000	
Ag	107	1	No Gas	85.986	1719.715	0.19	636740	0.01	2000	
Cd	111	1	No Gas	86.512	1730.238	0.44	132413	0.07	2000	
Sr	88	1	No Gas	69.558	1391.162	0.61	987357	0.01	2000	
Mo	95	1	No Gas	87.493	1749.858	0.24	238769	0.04	2000	
Sn	118	1	No Gas	-0.098	-1.970	-29.60	957	-0.01	2000	
Sb	121	1	No Gas	89.906	1798.110	0.55	530619	0.02	2000	
Ba	137	1	No Gas	88.624	1772.487	1.02	195810	0.05	2000	
Tl	205	1	No Gas	92.218	1844.369	3.44	1455158	0.01	2000	
Tl	203	1	No Gas	90.997	1819.950	4.51	555195	0.02	2000	
Pb	208	1	No Gas	87.084	1741.677	4.99	1819986	0.00	2000	
U	238	1	No Gas	0.012	0.230	3.97	280	0.00	2000	
Ca	43	2	He	14254.233	285084.660	2.55	14531	98.09	200000	
Sb	121	2	He	90.621	1812.428	0.64	280494	0.03	2000	
Ti	47	2	He	98.001	1960.028	2.15	9804	1.00	2000	
Cu	63	1	No Gas	94.802	1896.035	1.15	510425	0.02	2000	
Zn	66	1	No Gas	94.081	1881.619	2.04	154040	0.06	2000	
Se	82	1	No Gas	99.487	1989.742	18.93	6848	1.45	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	687646	3.60	579731	118.61	70	120	
Ge	72	2	He	322152	1.00	284936	113.06	70	120	
Ge	72	1	No Gas	977317	1.15	880232	111.03	70	120	
In	115	1	No Gas	1268602	1.20	1062542	119.39	70	120	

Sample Report

Bi	209	1	No Gas	1195262	5.64	1062490	112.50	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	065_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:56:39-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	99.834	3.769	893387	2.01	100	99.8	90	110	
Be	9	1	No Gas	97.768	3.440	176722	1.85	100	97.8	90	110	
V	51	2	He	104.155	1.522	248441	1.47	100	104.2	90	110	
Cr	52	2	He	102.018	0.336	279730	0.89	100	102.0	90	110	
Fe	56	2	He	10222.544	1.158	27149960	1.59	10000	102.2	90	110	
Se	78	2	He	104.305	3.742	4237	2.95	100	104.3	90	110	
As	75	2	He	106.029	1.595	42290	1.92	100	106.0	90	110	
Ca	44	2	He	10424.357	1.629	164305	2.10	10000	104.2	90	110	
Na	23	2	He	10922.716	0.863	5822659	1.09	10000	109.2	90	110	
Mg	24	2	He	10761.837	1.209	3092121	0.71	10000	107.6	90	110	
K	39	2	He	10769.936	2.206	3575668	2.15	10000	107.7	90	110	
Mn	55	2	He	102.581	1.671	209775	2.10	100	102.6	90	110	
Co	59	2	He	103.536	1.621	422753	1.81	100	103.5	90	110	
Ni	60	2	He	103.211	2.031	106901	2.54	100	103.2	90	110	
Cu	63	2	He	102.501	0.750	286310	0.99	100	102.5	90	110	
Zn	66	2	He	103.594	1.946	63116	2.00	100	103.6	90	110	
Al	27	2	He	118.151	2.844	18556	3.29	100	118.2	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	470.123	1.978	416468	3.08	500	94.0	90	110	
Al	27	1	No Gas	107.505	0.668	706530	1.19	100	107.5	90	110	
Si	28	1	No Gas	588.215	1.073	1833046	0.54	5000	11.8	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.505	2.767	639315	1.37	100	100.5	90	110	
Cd	111	1	No Gas	100.274	1.707	131878	1.41	100	100.3	90	110	
Sr	88	1	No Gas	102.510	4.336	1249516	1.74	100	102.5	90	110	
Mo	95	1	No Gas	99.138	4.368	232382	2.62	100	99.1	90	110	
Sn	118	1	No Gas	100.367	2.954	388027	1.68	100	100.4	90	110	
Sb	121	1	No Gas	100.537	0.225	547997	1.21	100	100.5	90	110	
Ba	137	1	No Gas	100.372	2.161	190520	1.60	100	100.4	90	110	
Tl	205	1	No Gas	105.630	1.512	1464173	0.52	100	105.6	90	110	
Tl	203	1	No Gas	105.111	1.006	563601	0.64	100	105.1	90	110	
Pb	208	1	No Gas	98.323	0.097	1806158	1.09	100	98.3	90	110	
U	238	1	No Gas	103.827	1.255	2092942	2.25	100	103.8	90	110	
Ca	43	2	He	10064.415	0.923	9370	0.40	10000	100.6	90	110	
Sb	121	2	He	102.339	1.031	288937	1.47	100	102.3	90	110	
Ti	47	2	He	103.372	1.677	9433	2.22	100	103.4	90	110	
Cu	63	1	No Gas	103.070	0.915	512374	1.35	100	103.1	90	110	
Se	82	1	No Gas	106.555	7.889	6812	8.61	100	106.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	661106	1.61	579731	114.04	70	120	
Ge	72	2	He	293884	0.60	284936	103.14	70	120	
Ge	72	1	No Gas	902636	1.14	880232	102.55	70	120	
In	115	1	No Gas	1090348	2.54	1062542	102.62	70	120	
Bi	209	1	No Gas	1048751	1.00	1062490	98.71	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	066_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:58:34-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.015	-120.8	37284	0.5	0.5	
Be	9	1	No Gas	-0.015	-21.0	35	14.3	0.5	
V	51	2	He	0.598	13.5	2301	5.2	2.5	
Cr	52	2	He	-0.010	-300.9	917	9.8	2.5	
Fe	56	2	He	1.141	5.5	10394	2.9	100	
Se	78	2	He	-0.294	-171.3	338	3.3	2	
As	75	2	He	0.058	59.8	102	10.5	2.5	
Ca	44	2	He	-18.402	-53.7	447	35.4	100	
Na	23	2	He	286.327	6.1	304463	0.0	100	CCB Main CR1 Failed
Mg	24	2	He	0.660	27.8	373	14.8	100	
K	39	2	He	25.355	29.2	84072	1.0	100	
Mn	55	2	He	0.147	25.0	493	17.2	2.5	
Co	59	2	He	0.009	92.4	50	60.0	2.5	
Ni	60	2	He	-0.072	-44.8	107	30.1	2.5	
Cu	63	2	He	0.000	-33365.4	787	24.2	2	
Zn	66	2	He	0.372	152.8	4771	9.2	2.5	
Al	27	2	He	-1.509	-15.5	207	15.6	5	
B	11	1	No Gas	54.215	9.0	60277	6.9	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.995	-8.5	9637	5.1	5	
Si	28	1	No Gas	22.123	9.7	241082	2.3	10	CCB Main CR1 Failed
Ag	107	1	No Gas	-0.005	-49.2	617	2.5	2.5	
Cd	111	1	No Gas	0.000	8570.3	7	86.6	1	
Sr	88	1	No Gas	-0.003	-222.7	503	17.9	2.5	
Mo	95	1	No Gas	0.007	243.4	37	110.2	2.5	
Sn	118	1	No Gas	-0.026	-129.9	1067	11.5	5	
Sb	121	1	No Gas	0.043	30.5	590	11.9	2.5	
Ba	137	1	No Gas	-0.002	-1124.6	127	27.7	2.5	
Tl	205	1	No Gas	-0.007	-12.3	163	7.1	1	
Tl	203	1	No Gas	-0.009	-51.0	33	75.5	1	
Pb	208	1	No Gas	-0.063	-1.7	623	3.3	2.5	
U	238	1	No Gas	0.004	16.0	87	13.3	2.5	
Ca	43	2	He	-14.328	-95.4	17	69.3	100	
Sb	121	2	He	-0.013	-37.0	223	6.8	2.5	
Ti	47	2	He	-0.076	-84.7	3	173.2	2.5	
Cu	63	1	No Gas	0.160	18.7	2854	5.4	2.5	
Se	82	1	No Gas	-1.455	-897.5	-664	-132.1	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	611395	0.92	579731	105.46	70	120	
Ge	72	2	He	281846	2.83	284936	98.92	70	120	
Ge	72	1	No Gas	876016	0.50	880232	99.52	70	120	
In	115	1	No Gas	1057425	0.67	1062542	99.52	70	120	
Bi	209	1	No Gas	1052447	0.22	1062490	99.05	70	120	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	205CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:07:27-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	37730	0.00
Be	9	1	No Gas	37	56.81
V	51	2	He	2181	0.23
Cr	52	2	He	1030	0.25
Fe	56	2	He	10324	0.02
Se	78	2	He	327	2.23
As	75	2	He	116	15.26
Ca	44	2	He	433	1.34
Na	23	2	He	230792	0.00
Mg	24	2	He	317	8.99
K	39	2	He	90066	0.00
Mn	55	2	He	417	4.80
Co	59	2	He	20	250.00
Ni	60	2	He	223	8.35
Cu	63	2	He	980	1.55
Zn	66	2	He	5518	0.11
Al	27	2	He	477	2.26
B	11	1	No Gas	12883	0.01
Al	27	1	No Gas	20478	0.03
Si	28	1	No Gas	160765	0.00
Ag	107	1	No Gas	230	17.33
Sr	88	1	No Gas	653	0.59
Mo	95	1	No Gas	13	649.52
Sn	118	1	No Gas	1217	0.56
Sb	121	1	No Gas	300	9.88
Ba	137	1	No Gas	130	20.50
Tl	205	1	No Gas	37	42.94
Tl	203	1	No Gas	20	250.00
Pb	208	1	No Gas	617	1.30
U	238	1	No Gas	13	324.76
Ca	43	2	He	27	81.19
Sb	121	2	He	193	7.72
Ti	47	2	He	7	2598.08
Cu	63	1	No Gas	2024	0.21

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	1	No Gas	670807	2.28

Calibration Blank Report

Ge	72	2	He	338750	0.25
Ge	72	1	No Gas	1064833	1.27
In	115	1	No Gas	1360630	1.89
Bi	209	1	No Gas	1388986	2.00

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	206CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:09:34-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	3535	0.06
V	51	2	He	7638	0.02
Cr	52	2	He	7189	0.02
Fe	56	2	He	594274	0.00
Se	78	2	He	423	0.47
As	75	2	He	1054	0.35
Ca	44	2	He	4044	0.14
Na	23	2	He	340140	0.00
Mg	24	2	He	64121	0.00
K	39	2	He	159938	0.00
Mn	55	2	He	5178	0.06
Co	59	2	He	9340	0.05
Ni	60	2	He	2610	0.08
Cu	63	2	He	7556	0.04
Zn	66	2	He	6638	0.09
Al	27	2	He	793	1.77
B	11	1	No Gas	20378	0.01
Al	27	1	No Gas	32679	0.01
Si	28	1	No Gas	192242	0.00
Ag	107	1	No Gas	14705	0.01
Cd	111	1	No Gas	3040	0.40
Sr	88	1	No Gas	27208	0.01
Mo	95	1	No Gas	5111	0.10
Sn	118	1	No Gas	10077	0.02
Sb	121	1	No Gas	12686	0.05
Ba	137	1	No Gas	4614	0.08
Tl	205	1	No Gas	31082	0.00
Tl	203	1	No Gas	12924	0.04
Pb	208	1	No Gas	43938	0.00
U	238	1	No Gas	45053	0.00
Ca	43	2	He	173	8.38
Sb	121	2	He	6388	0.05
Cu	63	1	No Gas	14214	0.02

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	685147	2.85	670807	102.14	70	120	
Ge	72	2	He	342790	0.50	338750	101.19	70	120	
Ge	72	1	No Gas	1121596	0.93	1064833	105.33	70	120	

Calibration Standard Report

In	115	1	No Gas	1379611	1.59	1360630	101.40	70	120	
Bi	209	1	No Gas	1419790	0.38	1388986	102.22	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	207CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:11:40-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	8796	0.02
V	51	2	He	15659	0.01
Cr	52	2	He	16540	0.01
Fe	56	2	He	1587020	0.00
Se	78	2	He	549	0.59
As	75	2	He	2414	0.01
Ca	44	2	He	9370	0.00
Na	23	2	He	501570	0.00
Mg	24	2	He	160456	0.00
K	39	2	He	263610	0.00
Mn	55	2	He	12132	0.03
Co	59	2	He	23100	0.01
Ni	60	2	He	6222	0.07
Cu	63	2	He	16721	0.01
Zn	66	2	He	8666	0.02
Al	27	2	He	1537	0.43
B	11	1	No Gas	32073	0.01
Al	27	1	No Gas	57837	0.00
Si	28	1	No Gas	243445	0.00
Ag	107	1	No Gas	36009	0.00
Cd	111	1	No Gas	7269	0.10
Sr	88	1	No Gas	69946	0.00
Mo	95	1	No Gas	13237	0.01
Sn	118	1	No Gas	22460	0.01
Sb	121	1	No Gas	30726	0.00
Ba	137	1	No Gas	11402	0.03
Tl	205	1	No Gas	76266	0.00
Tl	203	1	No Gas	32135	0.00
Pb	208	1	No Gas	105849	0.00
U	238	1	No Gas	111879	0.00
Ca	43	2	He	530	1.55
Sb	121	2	He	15900	0.01
Cu	63	1	No Gas	29629	0.01

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	658641	0.13	670807	98.19	70	120	
Ge	72	2	He	334894	0.57	338750	98.86	70	120	
Ge	72	1	No Gas	1095297	0.71	1064833	102.86	70	120	

Calibration Standard Report

In	115	1	No Gas	1361230	1.15	1360630	100.04	70	120	
Bi	209	1	No Gas	1401715	1.30	1388986	100.92	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	208CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:13:47-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	17716	0.01
V	51	2	He	29430	0.00
Cr	52	2	He	32506	0.01
Fe	56	2	He	3137494	0.00
Se	78	2	He	760	0.17
As	75	2	He	4657	0.05
Ca	44	2	He	18339	0.01
Na	23	2	He	820148	0.00
Mg	24	2	He	323922	0.00
K	39	2	He	444023	0.00
Mn	55	2	He	23674	0.01
Co	59	2	He	46627	0.00
Ni	60	2	He	12516	0.01
Cu	63	2	He	33184	0.00
Zn	66	2	He	11922	0.03
Al	27	2	He	2404	0.22
B	11	1	No Gas	53144	0.00
Al	27	1	No Gas	84677	0.00
Si	28	1	No Gas	312163	0.00
Ag	107	1	No Gas	72891	0.00
Cd	111	1	No Gas	15559	0.03
Sr	88	1	No Gas	130546	0.00
Mo	95	1	No Gas	26353	0.01
Sn	118	1	No Gas	43924	0.00
Sb	121	1	No Gas	61786	0.00
Ba	137	1	No Gas	21508	0.01
Tl	205	1	No Gas	157097	0.00
Tl	203	1	No Gas	63789	0.00
Pb	208	1	No Gas	215190	0.00
U	238	1	No Gas	228172	0.00
Ca	43	2	He	1100	0.50
Sb	121	2	He	31719	0.01
Cu	63	1	No Gas	57324	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	653287	0.60	670807	97.39	70	120	
Ge	72	2	He	334265	0.91	338750	98.68	70	120	
Ge	72	1	No Gas	1055891	3.38	1064833	99.16	70	120	

Calibration Standard Report

In	115	1	No Gas	1368777	0.68	1360630	100.60	70	120	
Bi	209	1	No Gas	1414056	0.80	1388986	101.80	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	209CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:15:53-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	184695	0.00
V	51	2	He	282718	0.00
Cr	52	2	He	325729	0.00
Fe	56	2	He	31228540	0.00
Se	78	2	He	4809	0.04
As	75	2	He	47614	0.00
Ca	44	2	He	184734	0.00
Na	23	2	He	6354689	0.00
Mg	24	2	He	3446959	0.00
K	39	2	He	3982095	0.00
Mn	55	2	He	239273	0.00
Co	59	2	He	482836	0.00
Ni	60	2	He	122329	0.00
Cu	63	2	He	332226	0.00
Zn	66	2	He	71572	0.00
Al	27	2	He	19133	0.01
B	11	1	No Gas	442611	0.00
Al	27	1	No Gas	711610	0.00
Si	28	1	No Gas	1773451	0.00
Ag	107	1	No Gas	755481	0.00
Cd	111	1	No Gas	156297	0.00
Sr	88	1	No Gas	1444761	0.00
Mo	95	1	No Gas	270914	0.00
Sn	118	1	No Gas	460443	0.00
Sb	121	1	No Gas	642006	0.00
Ba	137	1	No Gas	225869	0.00
Tl	205	1	No Gas	1768441	0.00
Tl	203	1	No Gas	681766	0.00
Pb	208	1	No Gas	2232388	0.00
U	238	1	No Gas	2535316	0.00
Ca	43	2	He	10915	0.03
Sb	121	2	He	335743	0.00
Cu	63	1	No Gas	567642	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	685500	1.95	670807	102.19	70	120	
Ge	72	2	He	340807	0.57	338750	100.61	70	120	
Ge	72	1	No Gas	1099377	2.98	1064833	103.24	70	120	

Calibration Standard Report

In	115	1	No Gas	1336992	1.71	1360630	98.26	70	120	
Bi	209	1	No Gas	1384389	1.57	1388986	99.67	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	210CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:17:56-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	356999	0.00
V	51	2	He	552560	0.00
Cr	52	2	He	634244	0.00
Fe	56	2	He	60455059	0.00
Se	78	2	He	8822	0.01
As	75	2	He	91219	0.00
Ca	44	2	He	358652	0.00
Na	23	2	He	12245754	0.00
Mg	24	2	He	6627219	0.00
K	39	2	He	7450688	0.00
Mn	55	2	He	467010	0.00
Co	59	2	He	942255	0.00
Ni	60	2	He	239817	0.00
Cu	63	2	He	647926	0.00
Zn	66	2	He	134111	0.00
Al	27	2	He	35185	0.01
B	11	1	No Gas	936141	0.00
Al	27	1	No Gas	1431880	0.00
Si	28	1	No Gas	3108594	0.00
Ag	107	1	No Gas	1593637	0.00
Cd	111	1	No Gas	302586	0.00
Sr	88	1	No Gas	2753242	0.00
Mo	95	1	No Gas	531001	0.00
Sn	118	1	No Gas	888216	0.00
Sb	121	1	No Gas	1404987	0.00
Ba	137	1	No Gas	437828	0.00
Tl	205	1	No Gas	3397792	0.00
Tl	203	1	No Gas	1501543	0.00
Pb	208	1	No Gas	4520443	0.00
U	238	1	No Gas	4843356	0.00
Ca	43	2	He	20669	0.01
Sb	121	2	He	655993	0.00
Cu	63	1	No Gas	1173629	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	655435	2.06	670807	97.71	70	120	
Ge	72	2	He	330826	0.64	338750	97.66	70	120	
Ge	72	1	No Gas	1016594	4.12	1064833	95.47	70	120	

Calibration Standard Report

In	115	1	No Gas	1310100	0.93	1360630	96.29	70	120	
Bi	209	1	No Gas	1334930	1.55	1388986	96.11	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICCV
Data File Name	212_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:21:55-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	100.571	2.027	885361	1.81	100	100.6	90	110	
Be	9	1	No Gas	99.196	1.340	182933	0.25	100	99.2	90	110	
V	51	2	He	96.408	1.443	276689	0.45	100	96.4	90	110	
Cr	52	2	He	96.638	2.234	317928	0.83	100	96.6	90	110	
Fe	56	2	He	9741.657	1.308	30551281	0.22	10000	97.4	90	110	
Se	78	2	He	98.227	1.676	4681	1.76	100	98.2	90	110	
As	75	2	He	98.899	2.312	46930	1.10	100	98.9	90	110	
Ca	44	2	He	9787.796	1.508	182140	0.19	10000	97.9	90	110	
Na	23	2	He	9667.101	1.302	6243066	0.63	10000	96.7	90	110	
Mg	24	2	He	9722.730	1.394	3346399	0.58	10000	97.2	90	110	
K	39	2	He	9791.077	1.718	3846972	0.67	10000	97.9	90	110	
Mn	55	2	He	96.979	1.638	234680	0.32	100	97.0	90	110	
Co	59	2	He	97.416	1.104	475309	0.46	100	97.4	90	110	
Ni	60	2	He	96.976	1.330	120419	0.40	100	97.0	90	110	
Cu	63	2	He	97.186	1.174	326522	0.62	100	97.2	90	110	
Zn	66	2	He	98.024	3.201	70925	1.76	100	98.0	90	110	
Al	27	2	He	99.129	0.495	18482	0.99	100	99.1	90	110	
B	11	1	No Gas	513.426	0.710	449467	1.06	500	102.7	90	110	
Al	27	1	No Gas	93.530	5.444	706284	0.66	100	93.5	90	110	
Si	28	1	No Gas	511.183	5.568	1763294	0.39	500	102.2	90	110	
Ag	107	1	No Gas	97.290	0.827	746907	0.61	100	97.3	90	110	
Cd	111	1	No Gas	98.484	0.568	155016	1.83	100	98.5	90	110	
Sr	88	1	No Gas	98.150	1.292	1410184	1.66	100	98.2	90	110	
Mo	95	1	No Gas	97.843	0.745	269556	0.63	100	97.8	90	110	
Sn	118	1	No Gas	98.435	1.819	455486	0.98	100	98.4	90	110	
Sb	121	1	No Gas	88.156	4.474	635305	0.90	100	88.2	90	110	ICV Main CR1 Failed
Ba	137	1	No Gas	97.291	1.170	221530	0.19	100	97.3	90	110	
Tl	205	1	No Gas	96.938	3.269	1751156	1.67	100	96.9	90	110	
Tl	203	1	No Gas	86.046	2.279	669346	0.99	100	86.0	90	110	ICV Main CR1 Failed
Pb	208	1	No Gas	94.965	4.121	2259442	3.04	100	95.0	90	110	
U	238	1	No Gas	96.470	0.989	2487760	1.19	100	96.5	90	110	
Ca	43	2	He	10122.649	2.795	10914	3.96	10000	101.2	90	110	
Sb	121	2	He	97.381	1.623	330751	0.94	100	97.4	90	110	
Ti	47	2	He	92.732	0.405	10271	1.24	100	92.7	90	110	
Cu	63	1	No Gas	92.688	4.966	564432	0.84	100	92.7	90	110	
Se	82	1	No Gas	101.185	4.513	7777	3.14	100	101.2	90	110	

QC ISTD Table

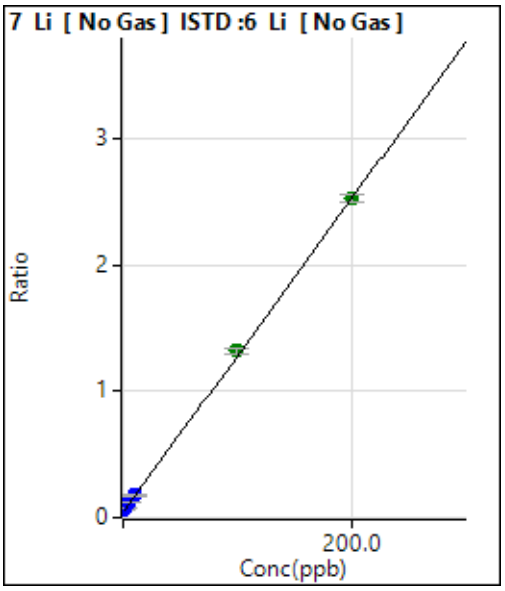
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	678469	1.57	670807	101.14	70	120	
Ge	72	2	He	343008	1.45	338750	101.26	70	120	
Ge	72	1	No Gas	1076637	4.59	1064833	101.11	70	120	
In	115	1	No Gas	1359585	1.36	1360630	99.92	70	120	
Bi	209	1	No Gas	1419194	1.63	1388986	102.17	70	120	

Calibration for 212_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072022A.b\
Analysis File: 072022A.batch.bin
DA Date-Time: 07/20/2022 21:22:39
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	205CALB.d	CAL BLK	07/20/2022 21:07:27
2	206CALS.d	2/10/200	07/20/2022 21:09:34
3	207CALS.d	5/25/500	07/20/2022 21:11:40
4	208CALS.d	10/50/100	07/20/2022 21:13:47
5	209CALS.d	100/500/10K	07/20/2022 21:15:53
6	210CALS.d	200/1000/20K	07/20/2022 21:17:56

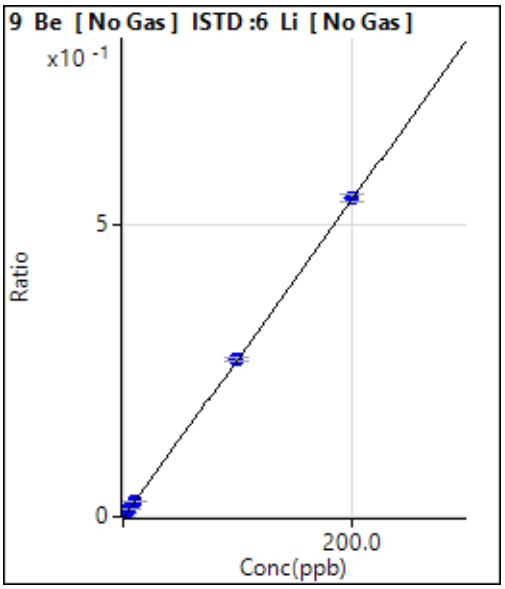
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	37730.40	0.0563	P	1.9	
2	☐	2.000	1.799	53819.05	0.0786	P	3.0	-10.1
3	☐	5.000	4.755	75939.85	0.1153	P	1.5	-4.9
4	☐	10.000	9.629	114860.54	0.1758	P	1.2	-3.7
5	☐	100.000	101.747	904309.91	1.3197	A	2.8	1.7
6	☐	200.000	199.153	1657050.03	2.5292	A	3.0	-0.4

y = 0.0124 * x + 0.0563
R = 0.9999
DL = 0.2614 ppb
BEC = 4.531 ppb

Weight: <None>
Min Conc: <None>

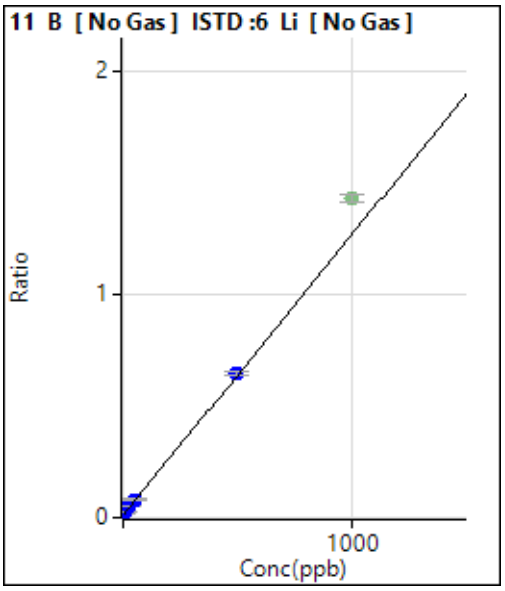


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0001	P	18.6	
2	☐	2.000	1.879	3535.47	0.0052	P	1.1	-6.1
3	☐	5.000	4.894	8796.16	0.0134	P	1.4	-2.1
4	☐	10.000	9.957	17716.22	0.0271	P	1.6	-0.4
5	☐	100.000	99.132	184695.47	0.2695	P	1.6	-0.9
6	☐	200.000	200.440	356998.94	0.5448	P	2.2	0.2

y = 0.0027 * x + 5.4519E-005
R = 1.0000
DL = 0.01118 ppb
BEC = 0.02006 ppb

Weight: <None>
Min Conc: <None>

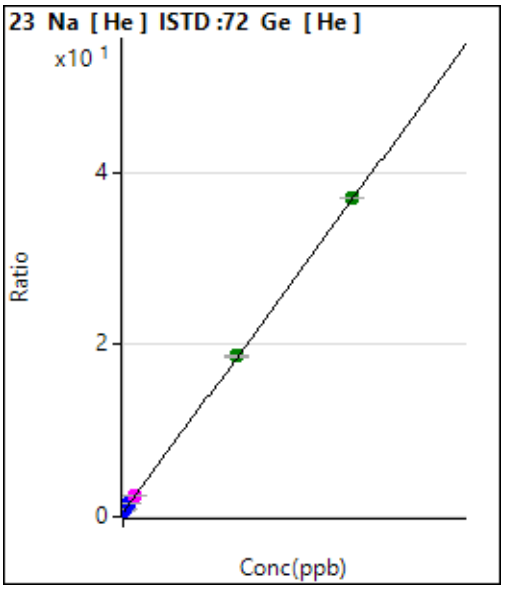
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12882.64	0.0192	P	2.5	
2	☐	10.000	8.415	20378.20	0.0298	P	1.9	-15.9
3	☐	25.000	23.533	32073.39	0.0487	P	1.5	-5.9
4	☐	50.000	49.599	53143.66	0.0814	P	2.7	-0.8
5	☐	500.000	500.145	442611.22	0.6459	P	2.9	0.0
6	☑	1000.000		936140.51	1.4288	A	2.8	

y = 0.0013 * x + 0.0192
R = 1.0000
DL = 1.172 ppb
BEC = 15.33 ppb

Weight: <None>
Min Conc: <None>

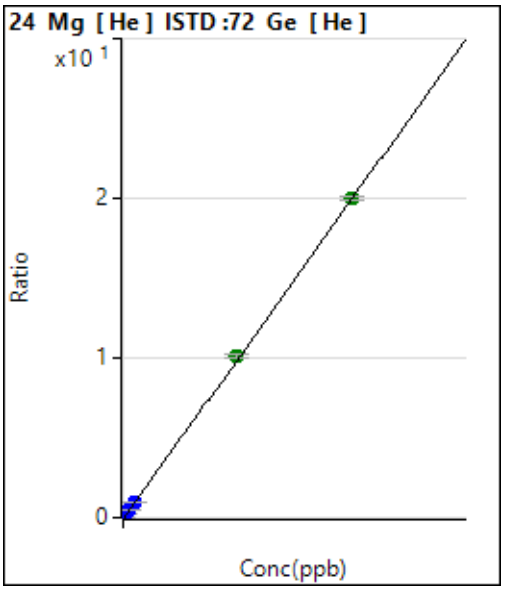


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230791.51	0.6813	P	0.4	
2	☐	200.000	171.583	340140.44	0.9923	P	1.2	-14.2
3	☐	500.000	450.459	501570.40	1.4978	P	1.1	-9.9
4	☐	1000.000	977.912	820148.48	2.4538	M	4.0	-2.2
5	☐	10000.00	9911.818	6354689.07	18.6465	A	1.1	-0.9
6	☐	20000.00	20046.71	12245754.4	37.0160	A	0.3	0.2

y = 0.0018 * x + 0.6813
R = 1.0000
DL = 4.646 ppb
BEC = 375.9 ppb

Weight: <None>
Min Conc: <None>

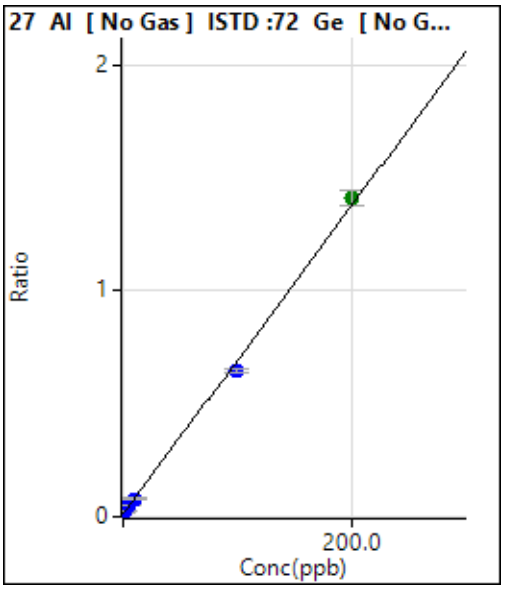
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	316.68	0.0009	P	28.7	
2	☐	200.000	185.497	64120.90	0.1871	P	2.8	-7.3
3	☐	500.000	476.543	160455.53	0.4791	P	0.5	-4.7
4	☐	1000.000	964.807	323922.24	0.9691	P	0.3	-3.5
5	☐	10000.00	10078.69	3446959.22	10.1144	A	2.1	0.8
6	☐	20000.00	19963.14	6627218.86	20.0330	A	0.8	-0.2

y = 0.0010 * x + 9.3527E-004
R = 1.0000
DL = 0.8024 ppb
BEC = 0.9321 ppb

Weight: <None>
Min Conc: <None>

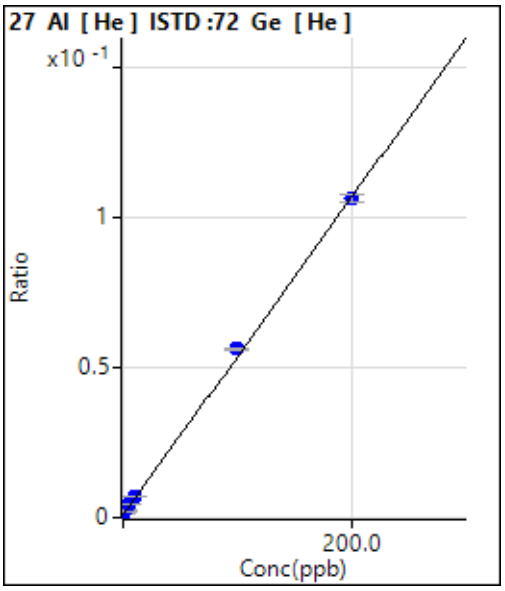


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20477.54	0.0192	P	4.4	
2	☐	2.000	1.454	32678.76	0.0291	P	3.1	-27.3
3	☐	5.000	4.925	57836.94	0.0528	P	2.3	-1.5
4	☐	10.000	8.945	84676.96	0.0802	P	2.8	-10.5
5	☐	100.000	92.157	711609.81	0.6477	P	3.3	-7.8
6	☐	200.000	203.981	1431879.93	1.4103	A	4.7	2.0

y = 0.0068 * x + 0.0192
R = 0.9990
DL = 0.3722 ppb
BEC = 2.819 ppb

Weight: <None>
Min Conc: <None>

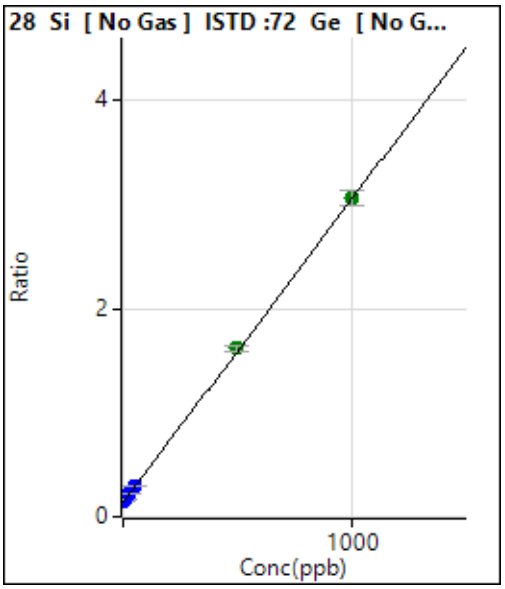
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	476.68	0.0014	P	10.6	
2	☐	2.000	1.716	793.37	0.0023	P	14.6	-14.2
3	☐	5.000	6.009	1536.78	0.0046	P	6.2	20.2
4	☐	10.000	10.921	2403.58	0.0072	P	4.3	9.2
5	☐	100.000	103.387	19133.39	0.0561	P	1.1	3.4
6	☐	200.000	198.238	35184.74	0.1064	P	2.3	-0.9

y = 5.2940E-004 * x + 0.0014
R = 0.9998
DL = 0.8476 ppb
BEC = 2.658 ppb

Weight: <None>
Min Conc: <None>

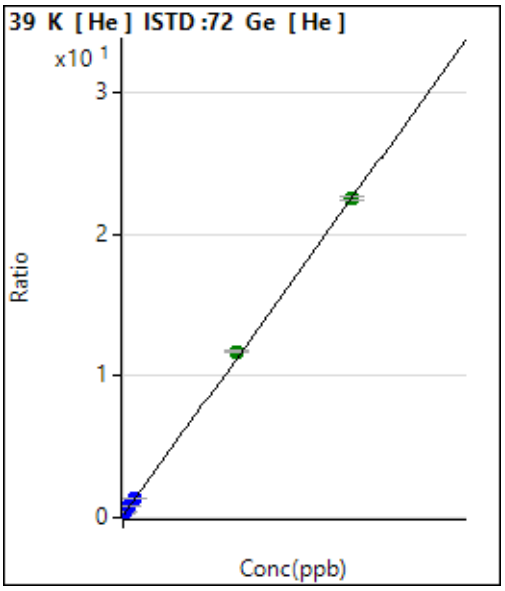


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	160765.18	0.1510	P	1.7	
2	☐	10.000	7.008	192241.55	0.1714	P	1.7	-29.9
3	☐	25.000	24.458	243444.90	0.2223	P	0.9	-2.2
4	☐	50.000	49.712	312162.91	0.2958	P	2.9	-0.6
5	☐	500.000	502.219	1773451.01	1.6142	A	3.3	0.4
6	☐	1000.000	998.948	3108594.33	3.0614	A	4.3	-0.1

y = 0.0029 * x + 0.1510
R = 1.0000
DL = 2.655 ppb
BEC = 51.83 ppb

Weight: <None>
Min Conc: <None>

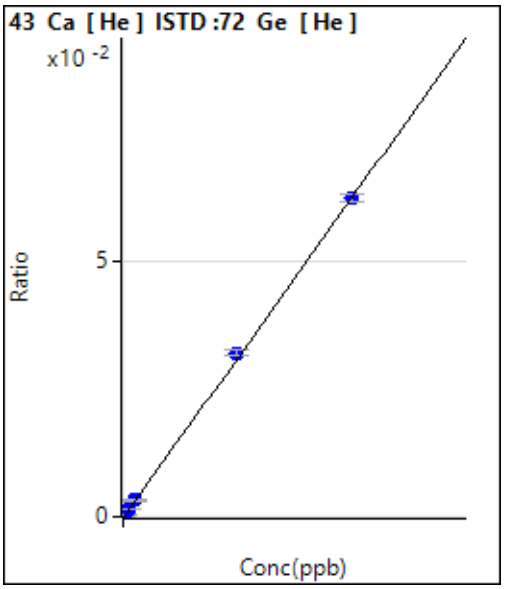
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	90065.66	0.2659	P	1.5	
2	☐	200.000	179.450	159937.67	0.4666	P	1.0	-10.3
3	☐	500.000	466.082	263610.33	0.7872	P	1.3	-6.8
4	☐	1000.000	950.000	444023.30	1.3284	P	1.1	-5.0
5	☐	10000.00	10209.39	3982095.46	11.6850	A	1.4	2.1
6	☐	20000.00	19898.85	7450688.22	22.5225	A	1.1	-0.5

y = 0.0011 * x + 0.2659
R = 0.9999
DL = 10.56 ppb
BEC = 237.7 ppb

Weight: <None>
Min Conc: <None>

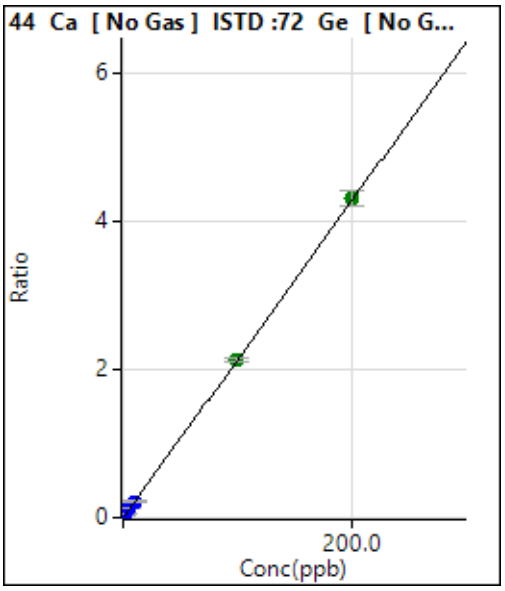


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0001	P	21.6	
2	☐	200.000	136.175	173.34	0.0005	P	14.4	-31.9
3	☐	500.000	479.578	530.02	0.0016	P	7.7	-4.1
4	☐	1000.000	1025.028	1100.05	0.0033	P	6.5	2.5
5	☐	10000.00	10191.35	10914.54	0.0320	P	3.7	1.9
6	☐	20000.00	19904.21	20669.11	0.0625	P	1.9	-0.5

y = 3.1351E-006 * x + 7.8713E-005
R = 0.9999
DL = 16.27 ppb
BEC = 25.11 ppb

Weight: <None>
Min Conc: <None>

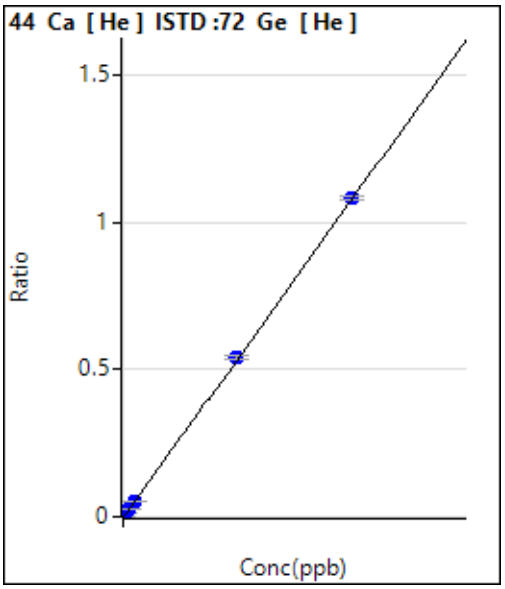
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18158.91	0.0171	P	1.7	
2	☐	2.000	1.796	62237.36	0.0555	P	1.7	-10.2
3	☐	5.000	4.718	129292.65	0.1180	P	0.7	-5.6
4	☐	10.000	9.490	232342.67	0.2202	P	3.3	-5.1
5	☐	100.000	98.755	2341846.01	2.1310	A	2.1	-1.2
6	☐	200.000	200.657	4378805.25	4.3124	A	4.2	0.3

y = 0.0214 * x + 0.0171
R = 1.0000
DL = 0.04012 ppb
BEC = 0.7967 ppb

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	433.35	0.0013	P	5.6	
2	☐	200.000	194.347	4044.00	0.0118	P	5.8	-2.8
3	☐	500.000	493.274	9369.97	0.0280	P	0.7	-1.3
4	☐	1000.000	990.018	18339.14	0.0549	P	2.2	-1.0
5	☐	10000.00	9990.860	184733.80	0.5421	P	1.5	-0.1
6	☐	20000.00	20005.29	358652.37	1.0841	P	0.8	0.0

y = 5.4129E-005 * x + 0.0013
R = 1.0000
DL = 3.939 ppb
BEC = 23.63 ppb

Weight: <None>
Min Conc: <None>