Arnold F. Fleming, P.E.
&
Fleming Lee Shue
Environmental Management & Consulting

Sent via electronic mail (michael.maccabe@dec.ny.gov)

November 21, 2017

Michael D. MacCabe, P.E.
Senior Environmental Engineer
Division of Environmental Remediation
NYS Department of Environmental Conservation
625 Broadway, 12th Floor
Albany, NY 12233-7016

Re: **Semi-Annual Groundwater Monitoring Report – November 2017**
388 Bridge Street Site - Brooklyn, New York
BCP Site #C224134

Dear Mr. MacCabe:

Fleming-Lee Shue Inc. (FLS) presents this Semi-Annual Groundwater Monitoring Report for the 388 Bridge Street property (Site). The groundwater monitoring program was implemented to monitor natural attenuation of volatile organic compounds (VOC) in the groundwater following the downsizing of the soil vapor extraction (SVE) system. The SVE system, installed in 2013, was downsized and modified in 2016 to target the area where the bulk of the contaminant mass remains, primarily in the area of SVE well 2 (SVE-2). Selected soil vapor extraction wells were converted to monitoring wells and included in the groundwater monitoring program. The Site Location Map is included as Figure 1.

Background

Results from subsurface investigations performed by FLS from 2008 to 2010 detected tetrachloroethene (PCE) in both soil and groundwater. The Site was accepted into the NYSDEC Brownfields Cleanup Program (BCP) in August 2009. Remedial activities were conducted in accordance with the NYSDEC-approved Remedial Action Work Plan dated April 2012. The BCP Volunteer achieved a Track 2 remedy at the Site. After completion of the remedial work, residual contamination remained on-Site. Therefore, institutional and engineering controls were incorporated into the Site remedy to control exposure to the remaining contamination.

In June 2013, the SVE system was installed to remove VOCs from soil gas beneath the building slab. The system operated from 2013 through 2016 and included six extraction points (SVE-1, SVE-2, SVE-3, SVE-4, SVE-5 and SVE-6).

In 2016, after monitoring of PCE concentrations and prior approval of NYSDEC, the 2013 SVE system was downsized to limit extraction where the bulk of the PCE mass remains

(SVE-2). Each of the vapor extraction points, except for one location (SVE-2), were converted into groundwater monitoring wells (SVE-MW-1, SVE-MW-3, SVE-MW 4, SVE-MW-5 and SVE-MW-6) to monitor natural attenuation of VOCs.

In July 2016 and with the prior approval of NYSDEC (dated July 29, 2016), SVE-MW-3 and SVE-MW-6 were abandoned because they did not extend into the groundwater table and were therefore not usable as groundwater monitoring wells. Off-Site monitoring wells, MW-3 and MW-7, were destroyed during construction activities.

Once remediation is completed, extraction well SVE-2 will be converted to a groundwater monitoring well and serve as the downgradient well. Figure 2 presents the well locations and results from all three rounds of groundwater sampling.

Groundwater Monitoring Program

The semi-annual groundwater sampling events started in March 2016. The objectives of the groundwater monitoring program include the following:

- Provide a current round of groundwater analytical data from the monitoring wells;
- Evaluate the existing and time-based groundwater conditions at the Site; and
- Evaluate the time-based trends of VOCs.

The groundwater monitoring program involves the following activities:

- Measurement of groundwater field parameters including pH, dissolved oxygen, total dissolved solids, conductivity, oxidation-reduction potential, turbidity, salinity, and temperature to determine groundwater conditions (see Appendix A);
- Collection of groundwater samples for VOCs to evaluate chlorinated VOC concentration trends and monitor natural attenuation;
- Collection of groundwater samples for geochemical parameters including nitrate, nitrite, sulfate, iron (II), total organic carbon, and dissolved organic carbon to evaluate evidence supporting natural attenuation.

On September 26, 2017, groundwater samples were collected from the existing on-Site monitoring wells (SVE-MW-1, SVE-MW 4, and SVE-MW-5).

Summary of Analytical Results

The groundwater analytical results, from all three sampling rounds, were compared to the NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 Ambient Water Quality Standards and Guidance Values (TOGS) and are summarized in Table 1. The laboratory data report is provided in Appendix B.

The groundwater analytical results indicate that PCE is present in concentrations that exceed the TOGS of 5 µg/L in two of the monitoring wells sampled: SVE-MW-4 (34.6 µg/L), and SVE-MW-5 (32 µg/L). Trichloroethene (TCE) was detected at a concentration below the TOGS in all three monitoring wells. There were no other exceedances of the Site's contaminants of concern (PCE and its breakdown products -TCE and cis-1,2-Dichloroethene)

In addition, analytical results indicate Chloroform concentration above the TOGS in one of the monitoring wells (SVE-MW-5) and Nitrogen, Nitrate + Nitrite concentrations above the TOGS in SVE-MW-1.

Conclusions and Recommendations

The only contaminant of concern detected above the TOGS is PCE, which was detected above TOGS in two of the three monitoring wells sampled (SVE-MW-4 and SVE-MW-5). No other contaminants of concern (TCE and cis-1,2-Dichloroethene) were detected at concentration above the TOGS.

During this monitoring event, PCE concentrations in SVE-MW-4 and SVE-MW-5 were higher than in previous sampling events. However, PCE concentrations continue to decline overall.

FLS recommends continuing the groundwater monitoring on a semi-annual basis to further assess groundwater quality. The next groundwater monitoring event is scheduled for March 2018.

Please contact us with any comments or questions.

Sincerely,

Fleming-Lee Shue, Inc.

Camila Israel
Sr. Project Manager

cc:

Roger Fortune	Stahl Realty
Arnold F. Fleming, P.E.	Fleming-Lee-Shue, Inc.

enc**:**

Table 1	Volatile Organic Compounds in Groundwater
Figure 1	Site Location Map
Figure 2	Site Plan and Groundwater Sampling Results
Appendix A	Monitoring Well Purge Logs
Appendix B	Laboratory Analytical Data Report

Tables

Table 1 - 2016 - 2017 Volatile Organic Compounds in Groundwater
2nd Half Semi-Annual Groundwater Report
388 Bridge Street, Brooklyn NY

Client Sample ID:	Units	NY TOGS Class GA GW Standards (NYSDEC 6/2004)	SVE-MW-1				SVE-MW-4				SVE-MW-5			
Lab Sample ID:			JC17514-1	JC28127-3	JC39116-1	JC51891-1	JC17514-2	JC28127-2	JC39116-2	JC51891-2	JC17514-3	JC28127-1	JC39116-3	JC51891-3
Date Sampled:			3/31/2016	9/20/2016	3/17/2017	9/26/2017	3/31/2016	9/20/2016	3/17/2017	9/26/2017	3/31/2016	9/20/2016	3/17/2017	9/26/2017
Matrix:			GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
GC/MS Volatiles (SW846 8260C)														
Acetone	ug/l	-	ND (3.3)	ND (5.0)	ND (5.0)	ND (5.0)	ND (3.3)	ND (5.0)	ND (5.0)	ND (5.0)	ND (3.3)	ND (5.0)	ND (5.0)	ND (5.0)
Benzene	ug/l	1	ND (0.24)	ND (0.14)	ND (0.14)	ND (0.17)	ND (0.24)	ND (0.14)	ND (0.14)	ND (0.17)	ND (0.24)	ND (0.14)	ND (0.14)	ND (0.17)
Bromochloromethane	ug/l	5	ND (0.37)	ND (0.46)	ND (0.46)	ND (0.38)	ND (0.37)	ND (0.46)	ND (0.46)	ND (0.38)	ND (0.37)	ND (0.46)	ND (0.46)	ND (0.38)
Bromodichloromethane	ug/l	-	ND (0.23)	ND (0.55)	ND (0.55)	ND (0.22)	ND (0.23)	ND (0.55)	ND (0.55)	ND (0.22)	ND (0.23)	ND (0.55)	ND (0.55)	ND (0.22)
Bromoform	ug/l	-	ND (0.23)	ND (0.34)	ND (0.34)	ND (0.42)	ND (0.23)	ND (0.34)	ND (0.34)	ND (0.42)	ND (0.23)	ND (0.34)	ND (0.34)	ND (0.42)
Bromomethane	ug/l	5	ND (0.42)	ND (0.46)	ND (0.46)	ND (1.4)	ND (0.42)	ND (0.46)	ND (0.46)	ND (1.4)	ND (0.42)	ND (0.46)	ND (0.46)	ND (1.4)
2-Butanone (MEK)	ug/l	-	ND (5.6)	ND (1.9)	ND (1.9)	ND (4.8)	ND (5.6)	ND (1.9)	ND (1.9)	ND (4.8)	ND (5.6)	ND (1.9)	ND (1.9)	ND (4.8)
Carbon disulfide	ug/l	60	ND (0.25)	ND (0.33)	ND (0.33)	ND (0.23)	ND (0.25)	ND (0.33)	ND (0.33)	ND (0.23)	ND (0.25)	ND (0.33)	ND (0.33)	ND (0.23)
Carbon tetrachloride	ug/l	5	ND (0.22)	ND (0.54)	ND (0.54)	ND (0.34)	ND (0.22)	ND (0.54)	ND (0.54)	ND (0.34)	ND (0.22)	ND (0.54)	ND (0.54)	ND (0.34)
Chlorobenzene	ug/l	5	ND (0.19)	ND (0.17)	ND (0.17)	ND (0.24)	ND (0.19)	ND (0.17)	ND (0.17)	ND (0.24)	ND (0.19)	ND (0.17)	ND (0.17)	ND (0.24)
Chloroethane	ug/l	5	ND (0.34)	ND (0.44)	ND (0.44)	ND (0.59) [a]	ND (0.34)	ND (0.44)	ND (0.44)	ND (0.59) [a]	ND (0.34)	ND (0.44)	ND (0.44)	ND (0.59) [a]
Chloroform	ug/l	7	1.7	1	1.3	ND (0.29)	0.89 J	1.3	0.93 J	3.6	0.79 J	0.85 J	0.71 J	**9.9**
Chloromethane	ug/l	5	ND (0.41)	ND (0.96)	ND (0.96)	ND (0.53) [a]	ND (0.41)	ND (0.96)	ND (0.96)	ND (0.53) [a]	ND (0.41)	ND (0.96)	ND (0.96)	ND (0.53) [a]
Cyclohexane	ug/l	-	ND (0.28)	ND (0.73)	ND (0.73)	ND (0.63)	ND (0.28)	ND (0.73)	ND (0.73)	ND (0.63)	ND (0.28)	ND (0.73)	ND (0.73)	ND (0.63)
1,2-Dibromo-3-chloropropane	ug/l	0.04	ND (0.99)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.99)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.99)	ND (0.69)	ND (0.69)	ND (0.69)
Dibromochloromethane	ug/l	-	ND (0.15)	ND (0.23)	ND (0.23)	ND (0.16)	ND (0.15)	ND (0.23)	ND (0.23)	ND (0.16)	ND (0.15)	ND (0.23)	ND (0.23)	ND (0.16)
1,2-Dibromoethane	ug/l	0.0006	ND (0.23)	ND (0.22)	ND (0.22)	ND (0.21)	ND (0.23)	ND (0.22)	ND (0.22)	ND (0.21)	ND (0.23)	ND (0.22)	ND (0.22)	ND (0.21)
1,2-Dichlorobenzene	ug/l	3	ND (0.19)	ND (0.23)	ND (0.23)	ND (0.50)	ND (0.19)	ND (0.23)	ND (0.23)	ND (0.50)	ND (0.19)	ND (0.23)	ND (0.23)	ND (0.50)
1,3-Dichlorobenzene	ug/l	3	ND (0.23)	ND (0.19)	ND (0.19)	ND (0.50)	ND (0.23)	ND (0.19)	ND (0.19)	ND (0.50)	ND (0.23)	ND (0.19)	ND (0.19)	ND (0.50)
1,4-Dichlorobenzene	ug/l	3	ND (0.27)	ND (0.21)	ND (0.21)	ND (0.50)	ND (0.27)	ND (0.21)	ND (0.21)	ND (0.50)	ND (0.27)	ND (0.21)	ND (0.21)	ND (0.50)
Dichlorodifluoromethane	ug/l	5	ND (0.90)	ND (0.70)	ND (0.70)	ND (1.9) [a]	ND (0.90)	ND (0.70)	ND (0.70)	ND (1.9) [a]	ND (0.90)	ND (0.70)	ND (0.70)	ND (1.9) [a]
1,1-Dichloroethane	ug/l	5	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.21)
1,2-Dichloroethane	ug/l	0.6	ND (0.18)	ND (0.39)	ND (0.39)	ND (0.20)	ND (0.18)	ND (0.39)	ND (0.39)	ND (0.20)	ND (0.18)	ND (0.39)	ND (0.39)	ND (0.20)
1,1-Dichloroethene	ug/l	5	ND (0.51)	ND (0.20)	ND (0.20)	ND (0.47)	ND (0.51)	ND (0.20)	ND (0.20)	ND (0.47)	ND (0.51)	ND (0.20)	ND (0.20)	ND (0.47)
cis-1,2-Dichloroethene	ug/l	5	ND (0.27)	ND (0.31)	ND (0.31)	ND (0.50)	0.85 J	1.6	0.79 J	1.3	0.34 J	ND (0.31)	ND (0.31)	1.4
trans-1,2-Dichloroethene	ug/l	5	ND (0.65)	ND (0.36)	ND (0.36)	ND (0.40)	ND (0.65)	ND (0.36)	ND (0.36)	ND (0.40)	ND (0.65)	ND (0.36)	ND (0.36)	ND (0.40)
1,2-Dichloropropane	ug/l	1	ND (0.39)	ND (0.33)	ND (0.33)	ND (0.24)	ND (0.39)	ND (0.33)	ND (0.33)	ND (0.24)	ND (0.39)	ND (0.33)	ND (0.33)	ND (0.24)
cis-1,3-Dichloropropene	ug/l	-	ND (0.21)	ND (0.19)	ND (0.19)	ND (0.25)	ND (0.21)	ND (0.19)	ND (0.19)	ND (0.25)	ND (0.21)	ND (0.19)	ND (0.19)	ND (0.25)
trans-1,3-Dichloropropene	ug/l	-	ND (0.19)	ND (0.26)	ND (0.26)	ND (0.22)	ND (0.19)	ND (0.26)	ND (0.26)	ND (0.22)	ND (0.19)	ND (0.26)	ND (0.26)	ND (0.22)
1,4-Dioxane	ug/l	-	ND (41)	ND (32)	ND (32)	ND (52)	ND (41)	ND (32)	ND (32)	ND (52)	ND (41)	ND (32)	ND (32)	ND (52)
Ethylbenzene	ug/l	5	ND (0.27)	ND (0.20)	ND (0.20)	ND (0.22)	ND (0.27)	ND (0.20)	ND (0.20)	ND (0.22)	ND (0.27)	ND (0.20)	ND (0.20)	ND (0.22)
Freon 113	ug/l	5	ND (0.52)	ND (1.2)	ND (1.2)	ND (1.2)	ND (0.52)	ND (1.2)	ND (1.2)	ND (1.2)	ND (0.52)	ND (1.2)	ND (1.2)	ND (1.2)
2-Hexanone	ug/l	-	ND (1.7)	ND (1.5)	ND (1.5)	ND (3.3)	ND (1.7)	ND (1.5)	ND (1.5)	ND (3.3)	ND (1.7)	ND (1.5)	ND (1.5)	ND (3.3)
Isopropylbenzene	ug/l	5	ND (0.23)	ND (0.16)	ND (0.16)	ND (0.25)	ND (0.23)	ND (0.16)	ND (0.16)	ND (0.25)	ND (0.23)	ND (0.16)	ND (0.16)	ND (0.25)
Methyl Acetate	ug/l	-	ND (1.9)	ND (1.5)	ND (1.5)	ND (3.1)	ND (1.9)	ND (1.5)	ND (1.5)	ND (3.1)	ND (1.9)	ND (1.5)	ND (1.5)	ND (3.1)
Methylcyclohexane	ug/l	-	ND (0.22)	ND (0.78)	ND (0.78)	ND (1.8)	0.31 J	ND (0.78)	ND (0.78)	ND (1.8)	ND (0.22)	ND (0.78)	ND (0.78)	ND (1.8)
Methyl Tert Butyl Ether	ug/l	10	ND (0.24)	ND (0.34)	ND (0.34)	ND (0.25)	0.24 J	ND (0.34)	ND (0.34)	ND (0.25)	ND (0.24)	ND (0.34)	ND (0.34)	ND (0.25)
4-Methyl-2-pentanone(MIBK)	ug/l	-	ND (1.0)	ND (1.2)	ND (1.2)	ND (3.0)	ND (1.0)	ND (1.2)	ND (1.2)	ND (3.0)	ND (1.0)	ND (1.2)	ND (1.2)	ND (3.0)
Methylene chloride	ug/l	5	ND (0.73)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.73)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.73)	ND (1.0)	ND (1.0)	ND (1.0)
Styrene	ug/l	5	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.24)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.24)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.24)
1,1,2,2-Tetrachloroethane	ug/l	5	ND (0.21)	ND (0.39)	ND (0.39)	ND (0.17)	ND (0.21)	ND (0.39)	ND (0.39)	ND (0.17)	ND (0.21)	ND (0.39)	ND (0.39)	ND (0.17)
Tetrachloroethene	ug/l	5	**11.9**	**11.8**	**9.7**	2.4	**12.5**	**11.9**	**11.6**	**34.6**	**12.1**	**11.3**	**6.6**	**32**
Toluene	ug/l	5	ND (0.16)	ND (0.23)	ND (0.23)	ND (0.25)	ND (0.16)	ND (0.23)	ND (0.23)	ND (0.25)	ND (0.16)	ND (0.23)	ND (0.23)	ND (0.25)
1,2,3-Trichlorobenzene	ug/l	5	ND (0.23)	ND (0.20)	ND (0.50)	ND (0.50)	ND (0.23)	ND (0.20)	ND (0.50)	ND (0.50)	ND (0.23)	ND (0.20)	ND (0.50)	ND (0.50)
1,2,4-Trichlorobenzene	ug/l	5	ND (0.21)	ND (0.25)	ND (0.50)	ND (0.50)	ND (0.21)	ND (0.25)	ND (0.50)	ND (0.50)	ND (0.21)	ND (0.25)	ND (0.50)	ND (0.50)

Table 1 - 2016 - 2017 Volatile Organic Compounds in Groundwater
2nd Half Semi-Annual Groundwater Report
388 Bridge Street, Brooklyn NY

Client Sample ID:	Units	NY TOGS Class GA GW Standards (NYSDEC 6/2004)	SVE-MW-1				SVE-MW-4				SVE-MW-5			
Lab Sample ID:			JC17514-1	JC28127-3	JC39116-1	JC51891-1	JC17514-2	JC28127-2	JC39116-2	JC51891-2	JC17514-3	JC28127-1	JC39116-3	JC51891-3
Date Sampled:			3/31/2016	9/20/2016	3/17/2017	9/26/2017	3/31/2016	9/20/2016	3/17/2017	9/26/2017	3/31/2016	9/20/2016	3/17/2017	9/26/2017
Matrix:			GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
1,1,1-Trichloroethane	ug/l	5	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.25)	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.25)	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.25)
1,1,2-Trichloroethane	ug/l	1	ND (0.21)	ND (0.28)	ND (0.28)	ND (0.24)	ND (0.21)	ND (0.28)	ND (0.28)	ND (0.24)	ND (0.21)	ND (0.28)	ND (0.28)	ND (0.24)
Trichloroethene	ug/l	5	0.49 J	0.40 J	0.46 J	ND (0.27)	**7.8**	**8.8**	**7.2**	2	3.3	2.6	1.4	2.9
Trichlorofluoromethane	ug/l	5	ND (0.43)	ND (0.58)	ND (0.58)	ND (0.60)	ND (0.43)	ND (0.58)	ND (0.58)	ND (0.60)	ND (0.43)	ND (0.58)	ND (0.58)	ND (0.60)
Vinyl chloride	ug/l	2	ND (0.15)	ND (0.33)	ND (0.33)	ND (0.62) [a]	ND (0.15)	ND (0.33)	ND (0.33)	ND (0.62) [a]	ND (0.15)	ND (0.33)	ND (0.33)	ND (0.62) [a]
m,p-Xylene	ug/l	-	ND (0.38)	ND (0.42)	ND (0.42)	ND (0.43)	ND (0.38)	ND (0.42)	ND (0.42)	ND (0.43)	ND (0.38)	ND (0.42)	ND (0.42)	ND (0.43)
o-Xylene	ug/l	5	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.22)
Xylene (total)	ug/l	5	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.22)
General Chemistry														
Dissolved Organic Carbon	mg/l	-	-	<1.0	-	1.5	-	<1.0	-	1.4	-	<1.0	-	1.4
Iron, Ferrous	mg/l	-	-	<0.20	<0.20 [a]		-	<0.20	<0.20 [a]		-	<0.20	<0.20 [a]	
Nitrogen, Nitrate	mg/l	10	-	**12.2**	**10.3** [b]	**15.8** [b]	-	6.7	8.1 [b]	10 [b]	-	9.4	**23.2** [b]	6.3 [b]
Nitrogen, Nitrate + Nitrite	mg/l	10	-	**12.2**	**10.3**	**15.8**	-	6.7	8.1	10	-	9.4	**23.2**	6.3
Nitrogen, Nitrite	mg/l	1	-	<0.010	<0.010	ND (0.010)	-	<0.010	<0.010	0.017	-	<0.010	<0.010	ND (0.010)
Sulfate	mg/l	250	-	95.7	88.3	62.7	-	94.4	96.6	74.7	-	75	108	39.5
Total Organic Carbon	mg/l	-	-	<1.0	1.2		-	1	1		-	<1.0	1.3	

Notes:

ND - not detected

J - estimated concentration

ND - not detected

[a] Associated CCV outside of control limits high, sample was ND.

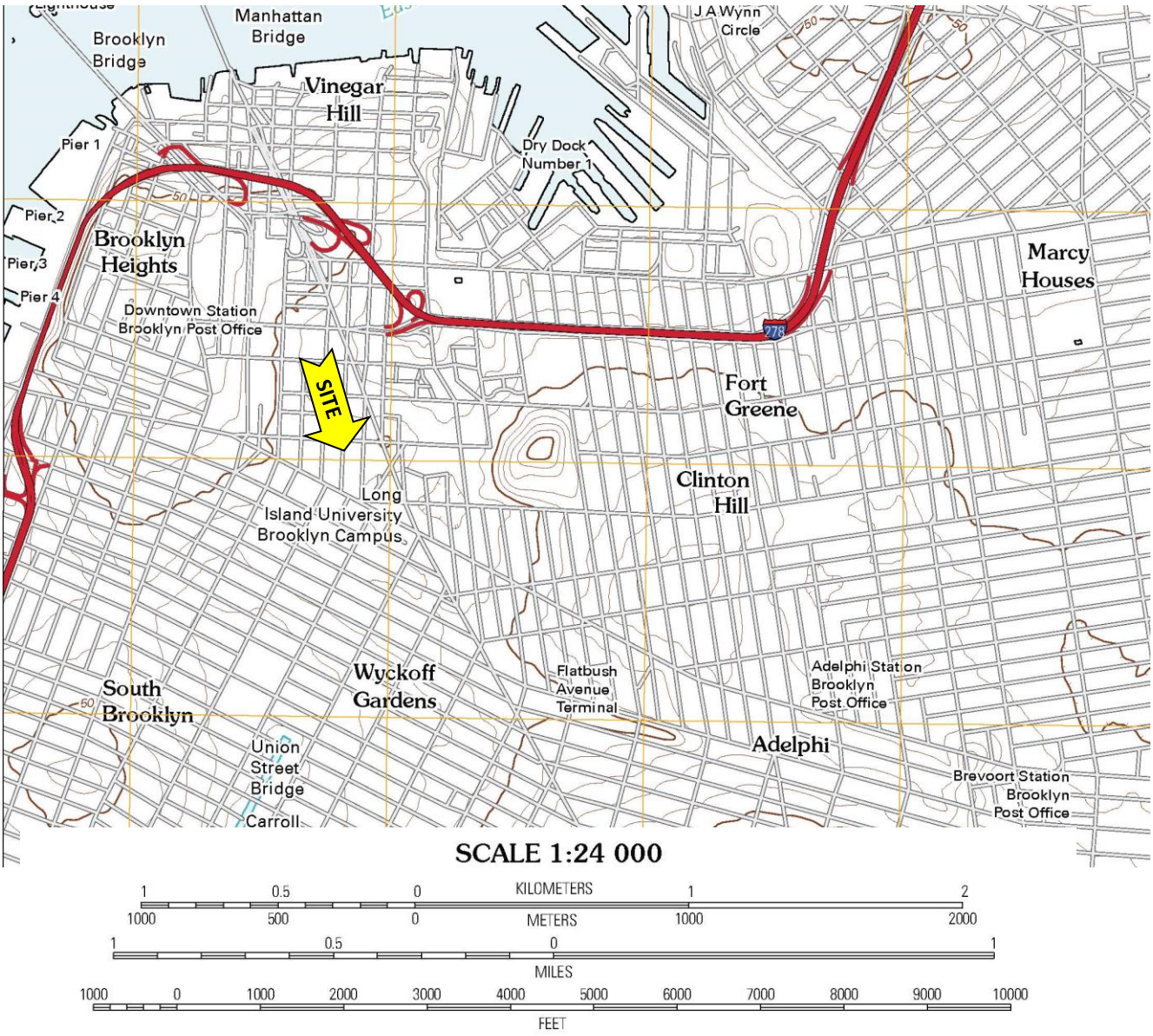
[b] Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

* Groundwater filtered

Exceedances of a standard are highlighted in yellow and bolded

Detection of a compound is highlighted in blue

Figures

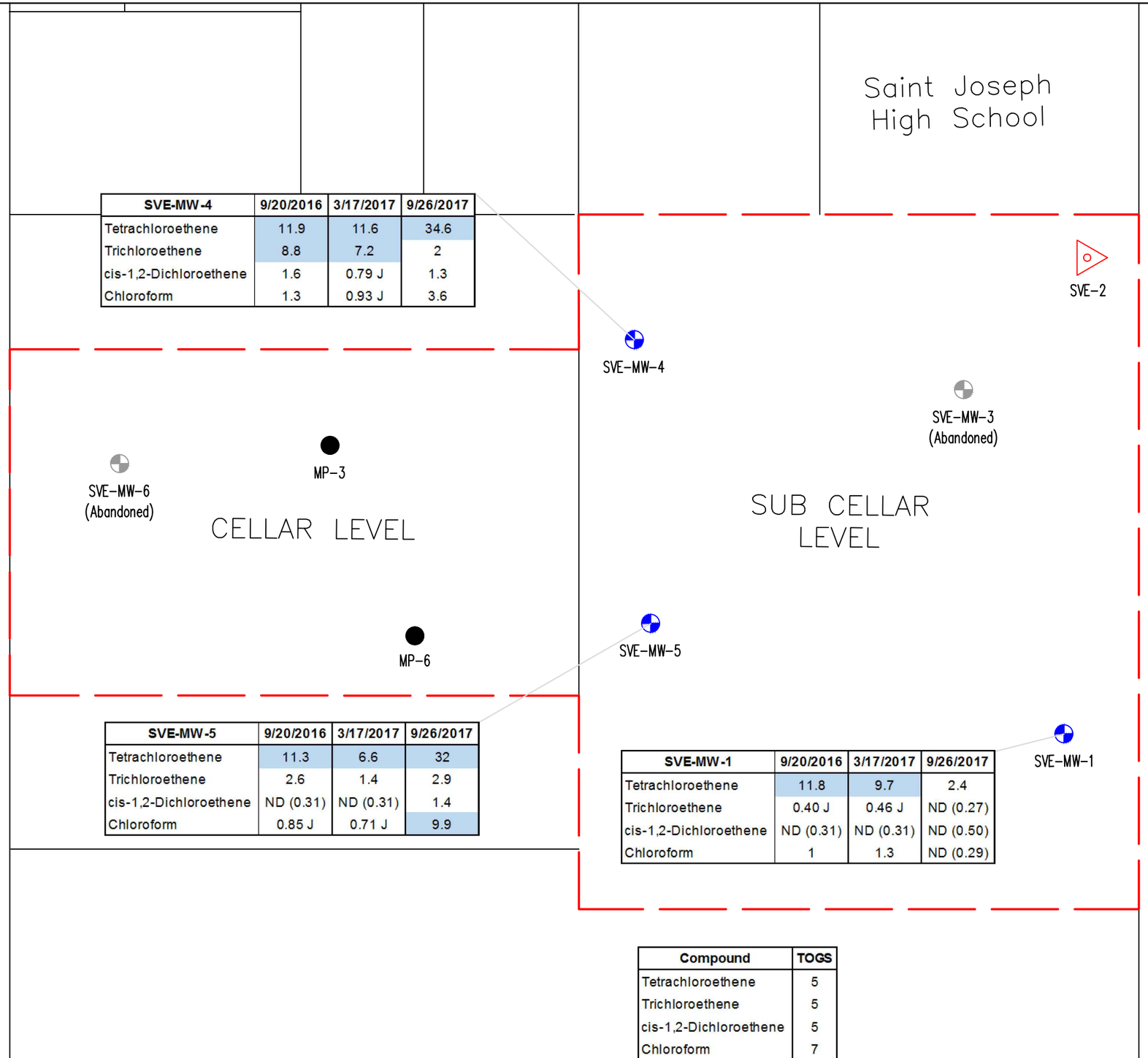


Site: *Brooklyn Quadrangle, New York 7.5 Minute series USGS Topographic Map (79287)\ Obtained from United States Geological Survey topography compiled 2010*

Fleming Lee Shue

FIGURE 1: SITE LOCATION MAP

SITE: 388 Bridge Street
Brooklyn, New York



SVE-MW-4	9/20/2016	3/17/2017	9/26/2017
Tetrachloroethene	11.9	11.6	34.6
Trichloroethene	8.8	7.2	2
cis-1,2-Dichloroethene	1.6	0.79 J	1.3
Chloroform	1.3	0.93 J	3.6

SVE-MW-5	9/20/2016	3/17/2017	9/26/2017
Tetrachloroethene	11.3	6.6	32
Trichloroethene	2.6	1.4	2.9
cis-1,2-Dichloroethene	ND (0.31)	ND (0.31)	1.4
Chloroform	0.85 J	0.71 J	9.9

SVE-MW-1	9/20/2016	3/17/2017	9/26/2017
Tetrachloroethene	11.8	9.7	2.4
Trichloroethene	0.40 J	0.46 J	ND (0.27)
cis-1,2-Dichloroethene	ND (0.31)	ND (0.31)	ND (0.50)
Chloroform	1	1.3	ND (0.29)

Compound	TOGS
Tetrachloroethene	5
Trichloroethene	5
cis-1,2-Dichloroethene	5
Chloroform	7

Notes:
Concentrations in ug/L (ppb)
Exceedances in Technical and Operational Guidance Series (TOGS) standards highlighted in blue
J - estimated concentration (detection limit)
ND - not detected

0 20 40
Scale (feet)

Fleming Lee Shue
Environmental Management & Consulting
158 West 29th Street, 9th Fl.
New York, NY 10001

388 Bridge Street
Brookly, NY
BCP Site # C224134

Figure 2

Site Plan and Chlorinated VOCs in Groundwater

November 2017

Project Number
10149-001

LEGEND

- Site Boundary
- Active SVE Well
- Groundwater Monitoring Well
- Vacuum Monitoring Point

Appendix A

Monitoring Well Purge Logs

Fleming Lee Shue

Environmental Management & Consulting

158 West 29th Street, 9Fl. , New York, New York 10001

Well Purge Log
Project: Stahl Real Estate
Project Location: 388 Bridge St, Brooklyn, NY

Monitoring Well: SVE-MW-1 | Well Volume : _____ gal | Initial Depth to Water: 18.29 ft-btc

Date: 9/26/2107 | Total Gallons Purged: 1.0 gal | Depth to Product: - ft-btc

Time Pump On: 10:40 | Average Purge Rate: _____ mL/min | Total Depth: 19.12 ft-btc

Time of Sample Collection: 11:10 | Purge Method: Peristaltic | Water Column: 0.83 ft

Time Pump Off: _____ | PID Reading: 0.0 ppm | Well Diameter 4 in

Time	Elapsed Time (min.)	DTW (ft-btc)	Well Volume Purged (gal)	Total Volume Purged (gal)	Temp (˚C)	pH (s.u.)	ORP (mV)	Cond (mS/cm)	Turbidity (NTUs)	D.O. (mg/L)	TDS (g/l)	Sal (%)	Odor/Color
10:40	0	-	-	-	20.88	7.9	32	1.4	634	11.25	0.891	0.07	Clear, no odor
10:45	5				21.11	7.46	82	1.21	421	10.34	0.772	0.06	Clear, no odor
10:50	10				21.14	7.45	887	1.17	289	10.19	0.733	0.06	Clear, no odor
10:55	15				21.1	7.44	94	1.03	15.3	10.03	0.654	0.06	Clear, no odor
11:00	2				21.08	7.4	90	1.21	10.9	10.01	0.652	0.06	Clear, no odor
11:05	25				21.06	7.41	92	0.98	11.2	9.96	0.659	0.05	Clear, no odor
11:10	30				21.07	7.4	93	0.97	11.8	9.99	0.651	0.05	Clear, no odor
		Allowable Fluctuations:			3%	± 0.1	± 10 mV	3%	10% if > 5 NTU 3 rounds if < 5 NTU	10% if >0.5 mg/L 3 rounds if < 0.5mg/L			

Notes:

ppm = parts per million
min = minutes
DTW = depth to water
ft-btc = feet below top of casing
gal = gallons
T = temperature
˚C= degrees celsius

s.u.=standard units
ORP=oxidation reduction potential
mV=millivolts
Cond=conductivity
mS/cm= milliSiemens per centimeter
NTUs=Nephelemetric Turbidity Units
mg/L = milligrams per liter

mL/min = milliliters per minute
TDS = Total Dissolved Solids
g/L = grams per liter
Sal= Salinity
wc = water column

Well Volume (gal) = 5.8752 * D^2* WC, where D = well diameter (feet)

Well diameter	1"	2"	4"
Multiply wc by	0.041	0.163	0.653

Fleming Lee Shue

Environmental Management & Consulting

158 West 29th Street, 9Fl. , New York, New York 10001

Well Purge Log
Project: Stahl Real Estate
Project Location: 388 Bridge St, Brooklyn, NY

Monitoring Well: SVE-MW-4 | Well Volume : _____ gal | Initial Depth to Water: 20.71 ft-btc

Date: 9/26/2107 | Total Gallons Purged: 1.5 gal | Depth to Product: - ft-btc

Time Pump On: 11:40 | Average Purge Rate: _____ mL/min | Total Depth: 21.88 ft-btc

Time of Sample Collection: 12:15 | Purge Method: Peristaltic | Water Column: 1.17 ft

Time Pump Off: _____ | PID Reading: 0.8 ppm | Well Diameter 4 in

Time	Elapsed Time (min.)	DTW (ft-btc)	Well Volume Purged (gal)	Total Volume Purged (gal)	Temp (˚C)	pH (s.u.)	ORP (mV)	Cond (mS/cm)	Turbidity (NTUs)	D.O. (mg/L)	TDS (g/l)	Sal (%)	Odor/Color
11:40	0	-	-	-	20.26	7.21	119	0.98	21.7	2.41	0.627	0.05	No odor, clear
11:45	5				19.99	6.92	133	0.976	18.2	1.56	0.624	0.05	No odor, clear
11:50	10				20	6.84	137	0.977	4.6	0.93	0.626	0.05	No odor, clear
11:55	15				20.01	6.63	138	0.983	33.5	0.69	0.629	0.05	No odor, clear
12:00	20				20	6.8	140	0.993	4.7	0.48	0.636	0.05	No odor, clear
12:05	25				20.00	6.79	141	0.998	4	0.41	0.639	0.05	No odor, clear
12:10	30				19.99	6.81	144	0.999	3.3	0.37	0.632	0.05	No odor, clear
12:15	35				20.01	6.83	143	0.997	3.6	0.36	0.634	0.05	No odor, clear
		Allowable Fluctuations:			3%	± 0.1	± 10 mV	3%	10% if > 5 NTU 3 rounds if < 5 NTU	10% if >0.5 mg/L 3 rounds if < 0.5mg/L			

Notes:

ppm = parts per million
min = minutes
DTW = depth to water
ft-btc = feet below top of casing
gal = gallons
T = temperature
˚C= degrees celsius

s.u.=standard units
ORP=oxidation reduction potential
mV=millivolts
Cond=conductivity
mS/cm= milliSiemens per centimeter
NTUs=Nephelemetric Turbidity Units
mg/L = milligrams per liter

mL/min = milliliters per minute
TDS = Total Dissolved Solids
g/L = grams per liter
Sal= Salinity
wc = water column

Well Volume (gal) = 5.8752 * D^2* WC, where D = well diameter (feet)

Well diameter	1"	2"	4"
Multiply wc by	0.041	0.163	0.653

Fleming Lee Shue

Environmental Management & Consulting

158 West 29th Street, 9Fl. , New York, New York 10001

Well Purge Log
Project: Stahl Real Estate
Project Location: 388 Bridge St, Brooklyn, NY

Monitoring Well: SVE-MW-5 | Well Volume : _____ gal | Initial Depth to Water: 18.2 ft-btc

Date: 9/26/2107 | Total Gallons Purged: 2.5 gal | Depth to Product: - ft-btc

Time Pump On: 12:20 | Average Purge Rate: _____ mL/min | Total Depth: 20.65 ft-btc

Time of Sample Collection: _____ | Purge Method: Peristaltic | Water Column: 2.45 ft

Time Pump Off: 12:50 | PID Reading: 0.1 ppm | Well Diameter 4 in

Time	Elapsed Time (min.)	DTW (ft-btc)	Well Volume Purged (gal)	Total Volume Purged (gal)	Temp (˚C)	pH (s.u.)	ORP (mV)	Cond (mS/cm)	Turbidity (NTUs)	D.O. (mg/L)	TDS (g/l)	Sal (%)	Odor/Color
12:20	0	-	-	-	20.31	7.19	132	0.704	27.5	7.11	0.449	0.03	Clear, no odor
12:25	5				20.02	6.87	150	0.698	18.8	5.44	0.446	0.03	Clear, no odor
12:30	10				19.96	6.86	151	0.7	17.4	5.13	0.448	0.03	Clear, no odor
12:35	15				19.99	6.86	152	0.701	30.4	5.39	0.448	0.03	Clear, no odor
12:40	20				19.99	6.85	153	0.702	8.4	5.36	0.448	0.03	Clear, no odor
12:45	25				19.98	6.85	154	0.701	8.1	5.31	0.448	0.03	Clear, no odor
12:50	30				19.97	6.85	154	0.703	7.4	5.3	0.448	0.03	Clear, no odor
		Allowable Fluctuations:			3%	± 0.1	± 10 mV	3%	10% if > 5 NTU 3 rounds if < 5 NTU	10% if >0.5 mg/L 3 rounds if < 0.5mg/L			

Notes:

ppm = parts per million
min = minutes
DTW = depth to water
ft-btc = feet below top of casing
gal = gallons
T = temperature
˚C= degrees celsius

s.u.=standard units
ORP=oxidation reduction potential
mV=millivolts
Cond=conductivity
mS/cm= milliSiemens per centimeter
NTUs=Nephelemetric Turbidity Units
mg/L = milligrams per liter

mL/min = milliliters per minute
TDS = Total Dissolved Solids
g/L = grams per liter
Sal= Salinity
wc = water column

Well Volume (gal) = 5.8752 * D^2* WC, where D = well diameter (feet)

Well diameter	1"	2"	4"
Multiply wc by	0.041	0.163	0.653

Appendix B

Laboratory Analytical Data Report

e-Hardcopy 2.0
Automated Report

Technical Report for

Fleming-Lee Shue, Inc.

388 Bridge Street, Brooklyn, NY

10149-001-1

SGS Accutest Job Number: JC51891

Sampling Date: 09/26/17

Report to:

Fleming-Lee Shue, Inc.
158 West 29th Street 9th Floor
New York, NY 10001
Camila@FlemingLeeShue.com; Adam@FlemingLeeShue.com

ATTN: Camila Israel

Total number of pages in report: 337

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Nancy Cole
Laboratory Director

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

Table of Contents

Table of Contents

Sample Summary

Fleming-Lee Shue, Inc.

Job No: JC51891

388 Bridge Street, Brooklyn, NY
Project No: 10149-001-1

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC51891-1	09/26/17	11:10	JG	09/27/17	AQ	Ground Water	SVE-MW-1
JC51891-1F	09/26/17	11:10	JG	09/27/17	AQ	Groundwater Filtered	SVE-MW-1
JC51891-2	09/26/17	12:15	JG	09/27/17	AQ	Ground Water	SVE-MW-4
JC51891-2F	09/26/17	12:15	JG	09/27/17	AQ	Groundwater Filtered	SVE-MW-4
JC51891-3	09/26/17	12:50	JG	09/27/17	AQ	Ground Water	SVE-MW-5
JC51891-3F	09/26/17	12:50	JG	09/27/17	AQ	Groundwater Filtered	SVE-MW-5

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Fleming-Lee Shue, Inc.	**Job No**	JC51891
Site:	388 Bridge Street, Brooklyn, NY	**Report Date**	10/12/2017 9:46:33 A

On 09/27/2017, 6 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 2.8 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of JC51891 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260C

Matrix: AQ **Batch ID:** V2D7158

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC51834-4MS, JC51834-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 1,1,2,2-Tetrachloroethane are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 1,1,2,2-Tetrachloroethane are outside control limits. Outside control limits due to matrix interference.
- JC51891-1 for Vinyl chloride: Associated CCV outside of control limits high, sample was ND.
- JC51891-1 for Chloroethane: Associated CCV outside of control limits high, sample was ND.
- JC51891-1 for Chloromethane: Associated CCV outside of control limits high, sample was ND.
- JC51891-1 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC51891-3 for Vinyl chloride: Associated CCV outside of control limits high, sample was ND.
- JC51891-2 for Chloromethane: Associated CCV outside of control limits high, sample was ND.
- JC51891-2 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC51891-2 for Vinyl chloride: Associated CCV outside of control limits high, sample was ND.
- JC51891-3 for Chloroethane: Associated CCV outside of control limits high, sample was ND.
- JC51891-3 for Chloromethane: Associated CCV outside of control limits high, sample was ND.
- JC51891-3 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC51891-2 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

General Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP8150

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC51881-1DUP, JC51881-1MS were used as the QC samples for Sulfate.

General Chemistry By Method EPA 353.2/LACHAT

Matrix: AQ	Batch ID: GP8250

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC51891-3DUP, JC51891-3MS were used as the QC samples for Nitrogen, Nitrate + Nitrite.
- Matrix Spike Recovery(s) for Nitrogen, Nitrate + Nitrite are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

General Chemistry By Method EPA353.2/SM4500NO2B

Matrix: AQ	Batch ID: R166097

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JC51891-1 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Matrix: AQ	Batch ID: R166098

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JC51891-2 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Matrix: AQ	Batch ID: R166099

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JC51891-3 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

General Chemistry By Method SM4500NO2 B-11

Matrix: AQ	Batch ID: GN70120

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC51861-1DUP, JC51861-1MS were used as the QC samples for Nitrogen, Nitrite.

General Chemistry By Method SM5310 B-11

Matrix: AQ	Batch ID: GP8282

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC51896-1FMS, JC51896-1FMSD were used as the QC samples for Dissolved Organic Carbon.

SGS Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS Accutest is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS Accutest indicated via signature on the report cover

Summary of Hits

Job Number: JC51891
Account: Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY
Collected: 09/26/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC51891-1	**SVE-MW-1**					
Tetrachloroethene		2.4	1.0	0.50	ug/l	SW846 8260C
Nitrogen, Nitrate [a]		15.8	0.51		mg/l	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite		15.8	0.50		mg/l	EPA 353.2/LACHAT
Sulfate		62.7	10		mg/l	EPA 300/SW846 9056A
JC51891-1F	**SVE-MW-1**					
Dissolved Organic Carbon		1.5	1.0		mg/l	SM5310 B-11
JC51891-2	**SVE-MW-4**					
Chloroform		3.6	1.0	0.29	ug/l	SW846 8260C
cis-1,2-Dichloroethene		1.3	1.0	0.50	ug/l	SW846 8260C
Tetrachloroethene		34.6	1.0	0.50	ug/l	SW846 8260C
Trichloroethene		2.0	1.0	0.27	ug/l	SW846 8260C
Nitrogen, Nitrate [a]		10	0.31		mg/l	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite		10.0	0.30		mg/l	EPA 353.2/LACHAT
Nitrogen, Nitrite		0.017	0.010		mg/l	SM4500NO2 B-11
Sulfate		74.7	10		mg/l	EPA 300/SW846 9056A
JC51891-2F	**SVE-MW-4**					
Dissolved Organic Carbon		1.4	1.0		mg/l	SM5310 B-11
JC51891-3	**SVE-MW-5**					
Chloroform		9.9	1.0	0.29	ug/l	SW846 8260C
cis-1,2-Dichloroethene		1.4	1.0	0.50	ug/l	SW846 8260C
Tetrachloroethene		32.0	1.0	0.50	ug/l	SW846 8260C
Trichloroethene		2.9	1.0	0.27	ug/l	SW846 8260C
Nitrogen, Nitrate [a]		6.3	0.21		mg/l	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite		6.3	0.20		mg/l	EPA 353.2/LACHAT
Sulfate		39.5	4.0		mg/l	EPA 300/SW846 9056A
JC51891-3F	**SVE-MW-5**					
Dissolved Organic Carbon		1.4	1.0		mg/l	SM5310 B-11

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID:	SVE-MW-1		
Lab Sample ID:	JC51891-1	**Date Sampled:**	09/26/17
Matrix:	AQ - Ground Water	**Date Received:**	09/27/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	388 Bridge Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D170618.D	1	10/05/17 07:16	BK	n/a	n/a	V2D7158
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	0.50	0.17	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	1.4	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	4.8	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane [a]	ND	1.0	0.59	ug/l	
67-66-3	Chloroform	ND	1.0	0.29	ug/l	
74-87-3	Chloromethane [a]	ND	1.0	0.53	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.63	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	ND	2.0	1.9	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
123-91-1	1,4-Dioxane	ND	130	52	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
76-13-1	Freon 113	ND	5.0	1.2	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SVE-MW-1		
Lab Sample ID:	JC51891-1	**Date Sampled:**	09/26/17
Matrix:	AQ - Ground Water	**Date Received:**	09/27/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	388 Bridge Street, Brooklyn, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.3	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.25	ug/l	
79-20-9	Methyl Acetate	ND	5.0	3.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	1.8	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	3.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
127-18-4	Tetrachloroethene	2.4	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.60	ug/l	
75-01-4	Vinyl chloride [a]	ND	1.0	0.62	ug/l	
	m,p-Xylene	ND	1.0	0.43	ug/l	
95-47-6	o-Xylene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-120%
17060-07-0	1,2-Dichloroethane-D4	86%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	105%		80-120%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SVE-MW-1		
Lab Sample ID:	JC51891-1	**Date Sampled:**	09/26/17
Matrix:	AQ - Ground Water	**Date Received:**	09/27/17
		Percent Solids:	n/a
Project:	388 Bridge Street, Brooklyn, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [a]	15.8	0.51	mg/l	1	10/05/17 11:04	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	15.8	0.50	mg/l	5	10/05/17 11:04	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	09/27/17 23:31	AT	SM4500NO2 B-11
Sulfate	62.7	10	mg/l	5	10/02/17 20:16	JN	EPA 300/SW846 9056A

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SVE-MW-1		
Lab Sample ID:	JC51891-1F	**Date Sampled:**	09/26/17
Matrix:	AQ - Groundwater Filtered	**Date Received:**	09/27/17
		Percent Solids:	n/a
Project:	388 Bridge Street, Brooklyn, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Dissolved Organic Carbon	1.5	1.0	mg/l	1	10/09/17 16:59	CD	SM5310 B-11

RL = Reporting Limit

SGS Accutest

Report of Analysis

Client Sample ID:	SVE-MW-4		
Lab Sample ID:	JC51891-2	**Date Sampled:**	09/26/17
Matrix:	AQ - Ground Water	**Date Received:**	09/27/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	388 Bridge Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D170619.D	1	10/05/17 07:46	BK	n/a	n/a	V2D7158
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	0.50	0.17	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	1.4	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	4.8	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane [a]	ND	1.0	0.59	ug/l	
67-66-3	Chloroform	3.6	1.0	0.29	ug/l	
74-87-3	Chloromethane [a]	ND	1.0	0.53	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.63	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	ND	2.0	1.9	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.3	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
123-91-1	1,4-Dioxane	ND	130	52	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
76-13-1	Freon 113	ND	5.0	1.2	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SVE-MW-4		
Lab Sample ID:	JC51891-2	**Date Sampled:**	09/26/17
Matrix:	AQ - Ground Water	**Date Received:**	09/27/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	388 Bridge Street, Brooklyn, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.3	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.25	ug/l	
79-20-9	Methyl Acetate	ND	5.0	3.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	1.8	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	3.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
127-18-4	Tetrachloroethene	34.6	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	2.0	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.60	ug/l	
75-01-4	Vinyl chloride [a]	ND	1.0	0.62	ug/l	
	m,p-Xylene	ND	1.0	0.43	ug/l	
95-47-6	o-Xylene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		80-120%
17060-07-0	1,2-Dichloroethane-D4	85%		81-124%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	102%		80-120%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SVE-MW-4		
Lab Sample ID:	JC51891-2	**Date Sampled:**	09/26/17
Matrix:	AQ - Ground Water	**Date Received:**	09/27/17
		Percent Solids:	n/a
Project:	388 Bridge Street, Brooklyn, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [a]	10	0.31	mg/l	1	10/05/17 11:06	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	10.0	0.30	mg/l	3	10/05/17 11:06	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	0.017	0.010	mg/l	1	09/27/17 23:31	AT	SM4500NO2 B-11
Sulfate	74.7	10	mg/l	5	10/02/17 20:37	JN	EPA 300/SW846 9056A

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SVE-MW-4		
Lab Sample ID:	JC51891-2F	**Date Sampled:**	09/26/17
Matrix:	AQ - Groundwater Filtered	**Date Received:**	09/27/17
		Percent Solids:	n/a
Project:	388 Bridge Street, Brooklyn, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Dissolved Organic Carbon	1.4	1.0	mg/l	1	10/09/17 17:11	CD	SM5310 B-11

RL = Reporting Limit

SGS Accutest

Report of Analysis

Client Sample ID:	SVE-MW-5		
Lab Sample ID:	JC51891-3	**Date Sampled:**	09/26/17
Matrix:	AQ - Ground Water	**Date Received:**	09/27/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	388 Bridge Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D170620.D	1	10/05/17 08:17	BK	n/a	n/a	V2D7158
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	0.50	0.17	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	1.4	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	4.8	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane [a]	ND	1.0	0.59	ug/l	
67-66-3	Chloroform	9.9	1.0	0.29	ug/l	
74-87-3	Chloromethane [a]	ND	1.0	0.53	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.63	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane [a]	ND	2.0	1.9	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.4	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
123-91-1	1,4-Dioxane	ND	130	52	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
76-13-1	Freon 113	ND	5.0	1.2	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SVE-MW-5		
Lab Sample ID:	JC51891-3	**Date Sampled:**	09/26/17
Matrix:	AQ - Ground Water	**Date Received:**	09/27/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	388 Bridge Street, Brooklyn, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.3	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.25	ug/l	
79-20-9	Methyl Acetate	ND	5.0	3.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	1.8	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	3.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
127-18-4	Tetrachloroethene	32.0	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	2.9	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.60	ug/l	
75-01-4	Vinyl chloride [a]	ND	1.0	0.62	ug/l	
	m,p-Xylene	ND	1.0	0.43	ug/l	
95-47-6	o-Xylene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	86%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	103%		80-120%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SVE-MW-5		
Lab Sample ID:	JC51891-3	**Date Sampled:**	09/26/17
Matrix:	AQ - Ground Water	**Date Received:**	09/27/17
		Percent Solids:	n/a
Project:	388 Bridge Street, Brooklyn, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [a]	6.3	0.21	mg/l	1	10/05/17 11:07	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	6.3	0.20	mg/l	2	10/05/17 11:07	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	09/27/17 23:31	AT	SM4500NO2 B-11
Sulfate	39.5	4.0	mg/l	2	10/02/17 20:58	JN	EPA 300/SW846 9056A

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SVE-MW-5		
Lab Sample ID:	JC51891-3F	**Date Sampled:**	09/26/17
Matrix:	AQ - Groundwater Filtered	**Date Received:**	09/27/17
		Percent Solids:	n/a
Project:	388 Bridge Street, Brooklyn, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Dissolved Organic Carbon	1.4	1.0	mg/l	1	10/09/17 17:21	CD	SM5310 B-11

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

SGS ACCUTEST

GW

CHAIN OF CUSTODY

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 1

GF

FED-EX Tracking #

Bottle Order Control # JC51891

SGS Accutest Quote #

SGS Accutest Job #

Client / Reporting Information	Project Information	Billing Information (if different from Report to)
Company Name: FLS	Project Name: 388 Bridge St	Company Name
Street Address: 158 W 29th St	Street	Street Address
City: NY State: NY Zip: 10001	City State	City State Zip
Project Contact: Adam Carti E-mail	Project #	
Phone # Fax #	Client Purchase Order #	Attention:
Sampler(s) Name(s): Adam Carti, J. Golding Phone #	Project Manager	

Requested Analysis (see TEST CODE sheet): TCL VOC; Nitrate, Nitrite, Nitrite (Filtered); Sulfate, DOC

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TCL VOC	Nitrate, Nitrite, Nitrite (Filtered)	Sulfate, DOC	LAB USE ONLY
1F	SVE-MW-1		9/26/17	1110	JG	GW	8	6			1	1				X	X	X	G47
2F	SVE-MW-4			1215															I9C4
3F	SVE-MW-5			1250															V983

AC

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

INITIAL ASESSMENT 3B DOM

LABEL VERIFICATION

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [X] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary

NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions: HCl vials for VOCs and as otherwise required

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler: 1	Date Time:	Received By: 1	Relinquished By: 2	Date Time:	Received By: 2
Adam Carti	9/27 1507	Chris Laul	Chris Laul	9/27/17 1733	
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [X] Not intact	Preserved where applicable: NA	On Ice: X	Cooler Temp. 3.6 °C IR

Form:SM088-01CRev.Date:9/13/16

5.1 5

JC51891: Chain of Custody
Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: JC51891 **Client:** _____ **Project:** _____

Date / Time Received: 9/27/2017 5:30:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6);

Cooler Temps (Corrected) °C: Cooler 1: (2.8);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

SM089-02
Rev. Date 12/1/16

JC51891: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

Fleming-Lee Shue, Inc.

Job No: JC51891

388 Bridge Street, Brooklyn, NY
Project No: 10149-001-1

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC51891-1 SVE-MW-1	Collected: 26-SEP-17 11:10 By: JG		Received: 27-SEP-17 By: AS			
JC51891-1	SM4500NO2 B-11	27-SEP-17 23:31	AT			NO2
JC51891-1	EPA 300/SW846 9056A	02-OCT-17 20:16	JN	02-OCT-17	JN	SO4
JC51891-1	SW846 8260C	05-OCT-17 07:16	BK			V8260TCL11
JC51891-1	EPA353.2/SM4500NO2B	05-OCT-17 11:04	BM			NO3O
JC51891-1	EPA 353.2/LACHAT	05-OCT-17 11:04	BM	05-OCT-17	BM	NO32
JC51891-2 SVE-MW-4	Collected: 26-SEP-17 12:15 By: JG		Received: 27-SEP-17 By: AS			
JC51891-2	SM4500NO2 B-11	27-SEP-17 23:31	AT			NO2
JC51891-2	EPA 300/SW846 9056A	02-OCT-17 20:37	JN	02-OCT-17	JN	SO4
JC51891-2	SW846 8260C	05-OCT-17 07:46	BK			V8260TCL11
JC51891-2	EPA353.2/SM4500NO2B	05-OCT-17 11:06	BM			NO3O
JC51891-2	EPA 353.2/LACHAT	05-OCT-17 11:06	BM	05-OCT-17	BM	NO32
JC51891-3 SVE-MW-5	Collected: 26-SEP-17 12:50 By: JG		Received: 27-SEP-17 By: AS			
JC51891-3	SM4500NO2 B-11	27-SEP-17 23:31	AT			NO2
JC51891-3	EPA 300/SW846 9056A	02-OCT-17 20:58	JN	02-OCT-17	JN	SO4
JC51891-3	SW846 8260C	05-OCT-17 08:17	BK			V8260TCL11
JC51891-3	EPA353.2/SM4500NO2B	05-OCT-17 11:07	BM			NO3O
JC51891-3	EPA 353.2/LACHAT	05-OCT-17 11:07	BM	05-OCT-17	BM	NO32
JC51891-1F SVE-MW-1	Collected: 26-SEP-17 11:10 By: JG		Received: 27-SEP-17 By: AS			
JC51891-1F	SM5310 B-11	09-OCT-17 16:59	CD	09-OCT-17	CD	DOC
JC51891-2F SVE-MW-4	Collected: 26-SEP-17 12:15 By: JG		Received: 27-SEP-17 By: AS			
JC51891-2F	SM5310 B-11	09-OCT-17 17:11	CD	09-OCT-17	CD	DOC
JC51891-3F SVE-MW-5	Collected: 26-SEP-17 12:50 By: JG		Received: 27-SEP-17 By: AS			

Internal Sample Tracking Chronicle

Fleming-Lee Shue, Inc.

388 Bridge Street, Brooklyn, NY
Project No: 10149-001-1

Job No: JC51891

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC51891-3F	SM5310 B-11	09-OCT-17 17:21	CD	09-OCT-17	CD	DOC

SGS Accutest Internal Chain of Custody

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY
Received: 09/27/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC51891-1.1	Secured Storage	Andray Tandacharry	09/27/17 23:58	Retrieve from Storage
JC51891-1.1	Andray Tandacharry	Secured Storage	09/28/17 00:12	Return to Storage
JC51891-1.1	Secured Storage	Sahara Feliciano	10/01/17 08:41	Retrieve from Storage
JC51891-1.1	Sahara Feliciano	Secured Staging Area	10/01/17 08:41	Return to Storage
JC51891-1.1	Secured Staging Area	Jaqueline Nicholas	10/01/17 08:49	Retrieve from Storage
JC51891-1.1	Jaqueline Nicholas	Secured Storage	10/01/17 15:31	Return to Storage
JC51891-1.1	Secured Storage	Todd Shoemaker	10/02/17 10:34	Retrieve from Storage
JC51891-1.1	Todd Shoemaker	Secured Staging Area	10/02/17 10:35	Return to Storage
JC51891-1.1	Secured Staging Area	Jaqueline Nicholas	10/02/17 12:04	Retrieve from Storage
JC51891-1.1	Jaqueline Nicholas	Secured Storage	10/02/17 17:33	Return to Storage
JC51891-1.2	Secured Storage	Sahara Feliciano	10/04/17 17:29	Retrieve from Storage
JC51891-1.2	Sahara Feliciano	Secured Staging Area	10/04/17 17:30	Return to Storage
JC51891-1.2	Secured Staging Area	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage
JC51891-1.2	Beatrice Marcelino	Secured Storage	10/06/17 07:07	Return to Storage
JC51891-1.5	Secured Storage	Bridget Kelly	10/04/17 14:05	Retrieve from Storage
JC51891-1.5	Bridget Kelly	GCMS2D	10/04/17 14:05	Load on Instrument
JC51891-1.5	GCMS2D	Henny Salim	10/05/17 11:48	Unload from Instrument
JC51891-1.5	Henny Salim	Secured Storage	10/05/17 11:48	Return to Storage
JC51891-1.7	Secured Storage	Dwayne Johnson	09/29/17 08:23	Retrieve from Storage
JC51891-1.7	Dwayne Johnson	Secured Staging Area	09/29/17 08:23	Return to Storage
JC51891-1.7	Secured Staging Area	Courtney Dringus	09/29/17 08:27	Retrieve from Storage
JC51891-1.7	Courtney Dringus	Secured Storage	09/29/17 14:17	Return to Storage
JC51891-1F.3	Secured Storage	Sahara Feliciano	09/28/17 16:00	Retrieve from Storage
JC51891-1F.3	Sahara Feliciano	Secured Staging Area	09/28/17 16:00	Return to Storage
JC51891-1F.3	Secured Staging Area	Courtney Dringus	09/29/17 08:26	Retrieve from Storage
JC51891-1F.3	Courtney Dringus	Secured Storage	09/29/17 14:17	Return to Storage
JC51891-1F.3	Secured Storage	Sahara Feliciano	10/01/17 12:33	Retrieve from Storage
JC51891-1F.3	Sahara Feliciano	Secured Staging Area	10/01/17 12:33	Return to Storage
JC51891-1F.3	Secured Staging Area	Courtney Dringus	10/02/17 08:04	Retrieve from Storage
JC51891-1F.3	Courtney Dringus	Secured Storage	10/02/17 12:10	Return to Storage
JC51891-1F.4	Secured Storage	Todd Shoemaker	10/04/17 15:15	Retrieve from Storage
JC51891-1F.4	Todd Shoemaker	Secured Staging Area	10/04/17 15:16	Return to Storage
JC51891-1F.4	Secured Staging Area	Courtney Dringus	10/05/17 06:52	Retrieve from Storage
JC51891-1F.4	Courtney Dringus	Secured Storage	10/05/17 13:08	Return to Storage
JC51891-1F.4	Secured Storage	Todd Shoemaker	10/05/17 15:29	Retrieve from Storage
JC51891-1F.4	Todd Shoemaker	Secured Staging Area	10/05/17 15:29	Return to Storage
JC51891-1F.4	Secured Staging Area	Courtney Dringus	10/06/17 07:23	Retrieve from Storage
JC51891-1F.4	Courtney Dringus	Secured Storage	10/06/17 14:36	Return to Storage
JC51891-1F.4	Secured Storage	Todd Shoemaker	10/09/17 08:02	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY
Received: 09/27/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC51891-1F.4	Todd Shoemaker	Secured Staging Area	10/09/17 08:02	Return to Storage
JC51891-1F.4	Secured Staging Area	Courtney Dringus	10/09/17 08:05	Retrieve from Storage
JC51891-1F.4	Courtney Dringus	Secured Storage	10/09/17 15:36	Return to Storage
JC51891-2.1	Secured Storage	Andray Tandacharry	09/27/17 23:58	Retrieve from Storage
JC51891-2.1	Andray Tandacharry	Secured Storage	09/28/17 00:12	Return to Storage
JC51891-2.1	Secured Storage	Sahara Feliciano	10/01/17 08:41	Retrieve from Storage
JC51891-2.1	Sahara Feliciano	Secured Staging Area	10/01/17 08:41	Return to Storage
JC51891-2.1	Secured Staging Area	Jaqueline Nicholas	10/01/17 08:49	Retrieve from Storage
JC51891-2.1	Jaqueline Nicholas	Secured Storage	10/01/17 15:31	Return to Storage
JC51891-2.1	Secured Storage	Todd Shoemaker	10/02/17 10:34	Retrieve from Storage
JC51891-2.1	Todd Shoemaker	Secured Staging Area	10/02/17 10:35	Return to Storage
JC51891-2.1	Secured Staging Area	Jaqueline Nicholas	10/02/17 12:04	Retrieve from Storage
JC51891-2.1	Jaqueline Nicholas	Secured Storage	10/02/17 17:33	Return to Storage
JC51891-2.2	Secured Storage	Sahara Feliciano	10/04/17 17:29	Retrieve from Storage
JC51891-2.2	Sahara Feliciano	Secured Staging Area	10/04/17 17:30	Return to Storage
JC51891-2.2	Secured Staging Area	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage
JC51891-2.2	Beatrice Marcelino	Secured Storage	10/06/17 07:07	Return to Storage
JC51891-2.5	Secured Storage	Dwayne Johnson	09/29/17 08:23	Retrieve from Storage
JC51891-2.5	Dwayne Johnson	Secured Staging Area	09/29/17 08:23	Return to Storage
JC51891-2.5	Secured Staging Area	Courtney Dringus	09/29/17 08:27	Retrieve from Storage
JC51891-2.5	Courtney Dringus	Secured Storage	09/29/17 14:17	Return to Storage
JC51891-2.6	Secured Storage	Bridget Kelly	10/04/17 14:05	Retrieve from Storage
JC51891-2.6	Bridget Kelly	GCMS2D	10/04/17 14:05	Load on Instrument
JC51891-2.6	GCMS2D	Henny Salim	10/05/17 11:48	Unload from Instrument
JC51891-2.6	Henny Salim	Secured Storage	10/05/17 11:48	Return to Storage
JC51891-2F.3	Secured Storage	Sahara Feliciano	09/28/17 16:00	Retrieve from Storage
JC51891-2F.3	Sahara Feliciano	Secured Staging Area	09/28/17 16:00	Return to Storage
JC51891-2F.3	Secured Staging Area	Courtney Dringus	09/29/17 08:26	Retrieve from Storage
JC51891-2F.3	Courtney Dringus	Secured Storage	09/29/17 14:17	Return to Storage
JC51891-2F.3	Secured Storage	Sahara Feliciano	10/01/17 12:33	Retrieve from Storage
JC51891-2F.3	Sahara Feliciano	Secured Staging Area	10/01/17 12:33	Return to Storage
JC51891-2F.3	Secured Staging Area	Courtney Dringus	10/02/17 08:04	Retrieve from Storage
JC51891-2F.3	Courtney Dringus	Secured Storage	10/02/17 12:10	Return to Storage
JC51891-2F.3	Secured Storage	Todd Shoemaker	10/09/17 08:02	Retrieve from Storage
JC51891-2F.3	Todd Shoemaker	Secured Staging Area	10/09/17 08:02	Return to Storage
JC51891-2F.3	Secured Staging Area	Courtney Dringus	10/09/17 08:05	Retrieve from Storage
JC51891-2F.3	Courtney Dringus	Secured Storage	10/09/17 15:36	Return to Storage
JC51891-2F.4	Secured Storage	Todd Shoemaker	10/04/17 15:15	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY
Received: 09/27/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC51891-2F.4	Todd Shoemaker	Secured Staging Area	10/04/17 15:16	Return to Storage
JC51891-2F.4	Secured Staging Area	Courtney Dringus	10/05/17 06:52	Retrieve from Storage
JC51891-2F.4	Courtney Dringus	Secured Storage	10/05/17 13:08	Return to Storage
JC51891-2F.4	Secured Storage	Todd Shoemaker	10/05/17 15:29	Retrieve from Storage
JC51891-2F.4	Todd Shoemaker	Secured Staging Area	10/05/17 15:29	Return to Storage
JC51891-2F.4	Secured Staging Area	Courtney Dringus	10/06/17 07:23	Retrieve from Storage
JC51891-2F.4	Courtney Dringus	Secured Storage	10/06/17 14:36	Return to Storage
JC51891-3.1	Secured Storage	Andray Tandacharry	09/27/17 23:58	Retrieve from Storage
JC51891-3.1	Andray Tandacharry	Secured Storage	09/28/17 00:12	Return to Storage
JC51891-3.1	Secured Storage	Sahara Feliciano	10/01/17 08:41	Retrieve from Storage
JC51891-3.1	Sahara Feliciano	Secured Staging Area	10/01/17 08:41	Return to Storage
JC51891-3.1	Secured Staging Area	Jaqueline Nicholas	10/01/17 08:49	Retrieve from Storage
JC51891-3.1	Jaqueline Nicholas	Secured Storage	10/01/17 15:31	Return to Storage
JC51891-3.1	Secured Storage	Todd Shoemaker	10/02/17 10:34	Retrieve from Storage
JC51891-3.1	Todd Shoemaker	Secured Staging Area	10/02/17 10:35	Return to Storage
JC51891-3.1	Secured Staging Area	Jaqueline Nicholas	10/02/17 12:04	Retrieve from Storage
JC51891-3.1	Jaqueline Nicholas	Secured Storage	10/02/17 17:33	Return to Storage
JC51891-3.2	Secured Storage	Sahara Feliciano	10/04/17 17:29	Retrieve from Storage
JC51891-3.2	Sahara Feliciano	Secured Staging Area	10/04/17 17:30	Return to Storage
JC51891-3.2	Secured Staging Area	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage
JC51891-3.2	Beatrice Marcelino	Secured Storage	10/06/17 07:07	Return to Storage
JC51891-3.6	Secured Storage	Dwayne Johnson	09/29/17 08:23	Retrieve from Storage
JC51891-3.6	Dwayne Johnson	Secured Staging Area	09/29/17 08:23	Return to Storage
JC51891-3.6	Secured Staging Area	Courtney Dringus	09/29/17 08:27	Retrieve from Storage
JC51891-3.6	Courtney Dringus	Secured Storage	09/29/17 14:17	Return to Storage
JC51891-3.6	Secured Storage	Bridget Kelly	10/04/17 14:05	Retrieve from Storage
JC51891-3.6	Bridget Kelly	GCMS2D	10/04/17 14:05	Load on Instrument
JC51891-3.6	GCMS2D	Henny Salim	10/05/17 11:48	Unload from Instrument
JC51891-3.6	Henny Salim	Secured Storage	10/05/17 11:48	Return to Storage
JC51891-3F.3	Secured Storage	Sahara Feliciano	10/01/17 12:33	Retrieve from Storage
JC51891-3F.3	Sahara Feliciano	Secured Staging Area	10/01/17 12:33	Return to Storage
JC51891-3F.3	Secured Staging Area	Courtney Dringus	10/02/17 08:04	Retrieve from Storage
JC51891-3F.3	Courtney Dringus	Secured Storage	10/02/17 12:10	Return to Storage
JC51891-3F.3	Secured Storage	Todd Shoemaker	10/05/17 15:29	Retrieve from Storage
JC51891-3F.3	Todd Shoemaker	Secured Staging Area	10/05/17 15:29	Return to Storage
JC51891-3F.3	Secured Staging Area	Courtney Dringus	10/06/17 07:23	Retrieve from Storage
JC51891-3F.3	Courtney Dringus	Secured Storage	10/06/17 14:36	Return to Storage
JC51891-3F.3	Secured Storage	Todd Shoemaker	10/09/17 08:02	Retrieve from Storage
JC51891-3F.3	Todd Shoemaker	Secured Staging Area	10/09/17 08:02	Return to Storage
JC51891-3F.3	Secured Staging Area	Courtney Dringus	10/09/17 08:05	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY
Received: 09/27/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC51891-3F.3	Courtney Dringus	Secured Storage	10/09/17 15:36	Return to Storage
JC51891-3F.4	Secured Storage	Sahara Feliciano	09/28/17 16:00	Retrieve from Storage
JC51891-3F.4	Sahara Feliciano	Secured Staging Area	09/28/17 16:00	Return to Storage
JC51891-3F.4	Secured Staging Area	Courtney Dringus	09/29/17 08:26	Retrieve from Storage
JC51891-3F.4	Courtney Dringus	Secured Storage	09/29/17 14:17	Return to Storage
JC51891-3F.4	Secured Storage	Todd Shoemaker	10/04/17 15:15	Retrieve from Storage
JC51891-3F.4	Todd Shoemaker	Secured Staging Area	10/04/17 15:16	Return to Storage
JC51891-3F.4	Secured Staging Area	Courtney Dringus	10/05/17 06:52	Retrieve from Storage
JC51891-3F.4	Courtney Dringus	Secured Storage	10/05/17 13:08	Return to Storage

MS Volatiles

6

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D7158-MB	2D170599.D	1	10/04/17	BK	n/a	n/a	V2D7158

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC51891-1, JC51891-2, JC51891-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	0.50	0.17	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	1.4	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	4.8	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	1.0	0.59	ug/l	
67-66-3	Chloroform	ND	1.0	0.29	ug/l	
74-87-3	Chloromethane	ND	1.0	0.53	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.63	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.9	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
123-91-1	1,4-Dioxane	ND	130	52	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
76-13-1	Freon 113	ND	5.0	1.2	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.3	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.25	ug/l	
79-20-9	Methyl Acetate	ND	5.0	3.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	1.8	ug/l	

Method Blank Summary

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D7158-MB	2D170599.D	1	10/04/17	BK	n/a	n/a	V2D7158

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC51891-1, JC51891-2, JC51891-3

CAS No.	Compound	Result	RL	MDL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	3.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.60	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.62	ug/l	
	m,p-Xylene	ND	1.0	0.43	ug/l	
95-47-6	o-Xylene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	80-120%
17060-07-0	1,2-Dichloroethane-D4	87%	81-124%
2037-26-5	Toluene-D8	102%	80-120%
460-00-4	4-Bromofluorobenzene	106%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D7158-MB2	2D170636A.D	1	10/05/17	BK	n/a	n/a	V2D7158

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC51834-4MS, JC51834-4MSD

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	0.50	0.17	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	1.4	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	4.8	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	1.0	0.59	ug/l	
67-66-3	Chloroform	ND	1.0	0.29	ug/l	
74-87-3	Chloromethane	ND	1.0	0.53	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.63	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.9	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
123-91-1	1,4-Dioxane	ND	130	52	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
76-13-1	Freon 113	ND	5.0	1.2	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.3	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.25	ug/l	
79-20-9	Methyl Acetate	ND	5.0	3.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	1.8	ug/l	

Method Blank Summary

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D7158-MB2	2D170636A.D	1	10/05/17	BK	n/a	n/a	V2D7158

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC51834-4MS, JC51834-4MSD

CAS No.	Compound	Result	RL	MDL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	3.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.17	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.60	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.62	ug/l	
	m,p-Xylene	ND	1.0	0.43	ug/l	
95-47-6	o-Xylene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	80-120%
17060-07-0	1,2-Dichloroethane-D4	89%	81-124%
2037-26-5	Toluene-D8	104%	80-120%
460-00-4	4-Bromofluorobenzene	103%	80-120%

Blank Spike Summary

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D7158-BS	2D170600.D	1	10/04/17	BK	n/a	n/a	V2D7158

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC51891-1, JC51891-2, JC51891-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	181	91	42-150
71-43-2	Benzene	50	48.5	97	80-120
74-97-5	Bromochloromethane	50	48.3	97	84-121
75-27-4	Bromodichloromethane	50	48.0	96	83-120
75-25-2	Bromoform	50	50.1	100	76-129
74-83-9	Bromomethane	50	53.3	107	57-138
78-93-3	2-Butanone (MEK)	200	191	96	64-137
75-15-0	Carbon disulfide	50	51.4	103	64-137
56-23-5	Carbon tetrachloride	50	45.8	92	75-135
108-90-7	Chlorobenzene	50	48.8	98	84-117
75-00-3	Chloroethane	50	55.7	111	63-132
67-66-3	Chloroform	50	47.5	95	80-119
74-87-3	Chloromethane	50	57.4	115	46-136
110-82-7	Cyclohexane	50	56.5	113	64-137
96-12-8	1,2-Dibromo-3-chloropropane	50	47.5	95	72-127
124-48-1	Dibromochloromethane	50	48.0	96	80-123
106-93-4	1,2-Dibromoethane	50	48.6	97	84-117
95-50-1	1,2-Dichlorobenzene	50	50.6	101	84-119
541-73-1	1,3-Dichlorobenzene	50	48.9	98	81-117
106-46-7	1,4-Dichlorobenzene	50	49.0	98	82-117
75-71-8	Dichlorodifluoromethane	50	56.3	113	36-149
75-34-3	1,1-Dichloroethane	50	50.8	102	79-120
107-06-2	1,2-Dichloroethane	50	41.4	83	78-126
75-35-4	1,1-Dichloroethene	50	49.7	99	69-126
156-59-2	cis-1,2-Dichloroethene	50	51.7	103	80-120
156-60-5	trans-1,2-Dichloroethene	50	51.0	102	76-120
78-87-5	1,2-Dichloropropane	50	50.5	101	82-121
10061-01-5	cis-1,3-Dichloropropene	50	49.1	98	83-120
10061-02-6	trans-1,3-Dichloropropene	50	48.8	98	82-121
123-91-1	1,4-Dioxane	1250	1410	113	52-147
100-41-4	Ethylbenzene	50	48.2	96	80-120
76-13-1	Freon 113	50	49.8	100	62-182
591-78-6	2-Hexanone	200	195	98	65-132
98-82-8	Isopropylbenzene	50	48.1	96	83-120
79-20-9	Methyl Acetate	50	45.5	91	67-129
108-87-2	Methylcyclohexane	50	51.6	103	71-134

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D7158-BS	2D170600.D	1	10/04/17	BK	n/a	n/a	V2D7158

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC51891-1, JC51891-2, JC51891-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
1634-04-4	Methyl Tert Butyl Ether	50	46.1	92	80-119
108-10-1	4-Methyl-2-pentanone(MIBK)	200	191	96	71-131
75-09-2	Methylene chloride	50	51.2	102	77-120
100-42-5	Styrene	50	51.0	102	82-122
79-34-5	1,1,2,2-Tetrachloroethane	50	51.1	102	76-119
127-18-4	Tetrachloroethene	50	46.4	93	70-131
108-88-3	Toluene	50	48.7	97	80-120
87-61-6	1,2,3-Trichlorobenzene	50	45.4	91	76-134
120-82-1	1,2,4-Trichlorobenzene	50	46.2	92	79-132
71-55-6	1,1,1-Trichloroethane	50	46.9	94	81-128
79-00-5	1,1,2-Trichloroethane	50	50.1	100	83-118
79-01-6	Trichloroethene	50	49.1	98	80-120
75-69-4	Trichlorofluoromethane	50	51.9	104	64-136
75-01-4	Vinyl chloride	50	55.9	112	51-135
	m,p-Xylene	100	93.9	94	80-120
95-47-6	o-Xylene	50	48.5	97	80-120
1330-20-7	Xylene (total)	150	142	95	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	80-120%
17060-07-0	1,2-Dichloroethane-D4	87%	81-124%
2037-26-5	Toluene-D8	99%	80-120%
460-00-4	4-Bromofluorobenzene	98%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC51834-4MS	2D170638.D	1	10/06/17	BK	n/a	n/a	V2D7158
JC51834-4MSD	2D170639.D	1	10/06/17	BK	n/a	n/a	V2D7158
JC51834-4	2D170607.D	1	10/05/17	BK	n/a	n/a	V2D7158

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC51891-1, JC51891-2, JC51891-3

CAS No.	Compound	JC51834-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		200	239	120	200	228	114	5	34-149/17
71-43-2	Benzene	0.32		50	51.8	103	50	51.7	103	0	54-136/10
74-97-5	Bromochloromethane	ND		50	53.2	106	50	52.8	106	1	79-124/11
75-27-4	Bromodichloromethane	ND		50	51.5	103	50	52.4	105	2	79-124/11
75-25-2	Bromoform	ND		50	58.3	117	50	58.5	117	0	71-130/11
74-83-9	Bromomethane	ND		50	60.4	121	50	58.1	116	4	53-142/14
78-93-3	2-Butanone (MEK)	ND		200	243	122	200	239	120	2	54-142/15
75-15-0	Carbon disulfide	ND		50	56.7	113	50	54.4	109	4	59-145/17
56-23-5	Carbon tetrachloride	ND		50	49.0	98	50	47.9	96	2	70-143/12
108-90-7	Chlorobenzene	0.53		50	53.1	105	50	53.5	106	1	78-123/10
75-00-3	Chloroethane	ND		50	62.5	125	50	60.5	121	3	57-141/14
67-66-3	Chloroform	ND		50	50.3	101	50	50.7	101	1	76-123/11
74-87-3	Chloromethane	ND		50	69.3	139	50	65.4	131	6	43-141/16
110-82-7	Cyclohexane	ND		50	66.1	132	50	58.7	117	12	51-155/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	60.4	121	50	59.5	119	2	66-130/13
124-48-1	Dibromochloromethane	ND		50	54.3	109	50	54.5	109	0	76-125/11
106-93-4	1,2-Dibromoethane	ND		50	55.4	111	50	54.9	110	1	78-119/11
95-50-1	1,2-Dichlorobenzene	ND		50	55.7	111	50	55.3	111	1	77-123/11
541-73-1	1,3-Dichlorobenzene	ND		50	53.3	107	50	53.4	107	0	76-122/11
106-46-7	1,4-Dichlorobenzene	ND		50	53.7	107	50	54.0	108	1	76-122/11
75-71-8	Dichlorodifluoromethane	ND		50	62.8	126	50	53.6	107	16	31-159/16
75-34-3	1,1-Dichloroethane	ND		50	53.3	107	50	54.2	108	2	73-126/11
107-06-2	1,2-Dichloroethane	ND		50	45.9	92	50	45.8	92	0	72-131/11
75-35-4	1,1-Dichloroethene	ND		50	56.8	114	50	53.6	107	6	63-136/14
156-59-2	cis-1,2-Dichloroethene	0.66		50	55.7	110	50	55.5	110	0	60-136/11
156-60-5	trans-1,2-Dichloroethene	ND		50	54.1	108	50	54.0	108	0	70-126/11
78-87-5	1,2-Dichloropropane	ND		50	53.9	108	50	54.2	108	1	78-124/10
10061-01-5	cis-1,3-Dichloropropene	ND		50	54.4	109	50	54.9	110	1	79-123/11
10061-02-6	trans-1,3-Dichloropropene	ND		50	54.5	109	50	54.7	109	0	77-123/11
123-91-1	1,4-Dioxane	ND		1250	1440	115	1250	1530	122	6	49-146/26
100-41-4	Ethylbenzene	ND		50	51.3	103	50	51.0	102	1	51-140/20
76-13-1	Freon 113	ND		50	53.8	108	50	47.1	94	13	60-192/14
591-78-6	2-Hexanone	ND		200	247	124	200	254	127	3	56-139/14
98-82-8	Isopropylbenzene	ND		50	51.9	104	50	51.4	103	1	75-129/11
79-20-9	Methyl Acetate	ND		50	44.6	89	50	43.0	86	4	55-131/15
108-87-2	Methylcyclohexane	ND		50	55.7	111	50	49.8	100	11	57-155/13

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC51834-4MS	2D170638.D	1	10/06/17	BK	n/a	n/a	V2D7158
JC51834-4MSD	2D170639.D	1	10/06/17	BK	n/a	n/a	V2D7158
JC51834-4	2D170607.D	1	10/05/17	BK	n/a	n/a	V2D7158

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC51891-1, JC51891-2, JC51891-3

CAS No.	Compound	JC51834-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
1634-04-4	Methyl Tert Butyl Ether	ND		50	50.4	101	50	50.8	102	1	72-123/11
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		200	235	118	200	238	119	1	66-136/13
75-09-2	Methylene chloride	ND		50	54.8	110	50	54.8	110	0	73-125/13
100-42-5	Styrene	ND		50	54.3	109	50	54.2	108	0	75-129/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	61.5	123* [a]	50	61.7	123* [a]	0	71-122/11
127-18-4	Tetrachloroethene	ND		50	49.7	99	50	48.9	98	2	61-139/11
108-88-3	Toluene	ND		50	52.5	105	50	52.7	105	0	60-135/10
87-61-6	1,2,3-Trichlorobenzene	ND		50	54.6	109	50	53.4	107	2	70-138/13
120-82-1	1,2,4-Trichlorobenzene	ND		50	53.8	108	50	52.7	105	2	72-137/13
71-55-6	1,1,1-Trichloroethane	ND		50	49.1	98	50	48.6	97	1	74-138/12
79-00-5	1,1,2-Trichloroethane	ND		50	55.6	111	50	56.5	113	2	78-121/11
79-01-6	Trichloroethene	ND		50	52.7	105	50	52.6	105	0	62-141/10
75-69-4	Trichlorofluoromethane	ND		50	57.6	115	50	53.8	108	7	57-149/14
75-01-4	Vinyl chloride	ND		50	64.9	130	50	62.0	124	5	43-146/15
	m,p-Xylene	ND		100	99.8	100	100	99.6	100	0	50-144/20
95-47-6	o-Xylene	ND		50	52.3	105	50	52.1	104	0	63-134/10
1330-20-7	Xylene (total)	ND		150	152	101	150	152	101	0	56-139/20

CAS No.	Surrogate Recoveries	MS	MSD	JC51834-4	Limits
1868-53-7	Dibromofluoromethane	99%	99%	99%	80-120%
17060-07-0	1,2-Dichloroethane-D4	88%	88%	86%	81-124%
2037-26-5	Toluene-D8	99%	99%	103%	80-120%
460-00-4	4-Bromofluorobenzene	98%	98%	106%	80-120%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample: V2D7107-BFB
Lab File ID: 2D169427.D
Instrument ID: GCMS2D
Injection Date: 08/24/17
Injection Time: 12:13

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	16419	18.0		Pass
75	30.0 - 60.0% of mass 95	42914	47.1		Pass
95	Base peak, 100% relative abundance	91173	100.0		Pass
96	5.0 - 9.0% of mass 95	6054	6.64		Pass
173	Less than 2.0% of mass 174	698	0.77	(0.77) [a]	Pass
174	50.0 - 120.0% of mass 95	91034	99.8		Pass
175	5.0 - 9.0% of mass 174	6870	7.54	(7.55) [a]	Pass
176	95.0 - 101.0% of mass 174	90778	99.6	(99.7) [a]	Pass
177	5.0 - 9.0% of mass 176	5576	6.12	(6.14) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2D7107-IC7107	2D169428.D	08/24/17	12:46	00:33	Initial cal 0.2
V2D7107-IC7107	2D169429.D	08/24/17	13:17	01:04	Initial cal 0.5
V2D7107-IC7107	2D169430.D	08/24/17	13:47	01:34	Initial cal 1
V2D7107-IC7107	2D169431.D	08/24/17	14:18	02:05	Initial cal 2
V2D7107-IC7107	2D169432.D	08/24/17	14:48	02:35	Initial cal 5
V2D7107-IC7107	2D169433.D	08/24/17	15:19	03:06	Initial cal 10
V2D7107-IC7107	2D169434.D	08/24/17	15:49	03:36	Initial cal 20
V2D7107-ICC7107	2D169435.D	08/24/17	16:20	04:07	Initial cal 50
V2D7107-IC7107	2D169436.D	08/24/17	16:50	04:37	Initial cal 100
V2D7107-IC7107	2D169437.D	08/24/17	17:21	05:08	Initial cal 200
V2D7107-ICV7107	2D169440.D	08/24/17	18:52	06:39	Initial cal verification 50
V2D7107-ICV7107	2D169441.D	08/24/17	19:22	07:09	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample:	V2D7158-BFB	**Injection Date:**	10/04/17
Lab File ID:	2D170597A.D	**Injection Time:**	20:35
Instrument ID:	GCMS2D		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	17893	16.6		Pass
75	30.0 - 60.0% of mass 95	48165	44.6		Pass
95	Base peak, 100% relative abundance	107888	100.0		Pass
96	5.0 - 9.0% of mass 95	7244	6.71		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	105491	97.8		Pass
175	5.0 - 9.0% of mass 174	8133	7.54	(7.71) [a]	Pass
176	95.0 - 101.0% of mass 174	103664	96.1	(98.3) [a]	Pass
177	5.0 - 9.0% of mass 176	6821	6.32	(6.58) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2D7158-CC7107	2D170597.D	10/04/17	20:35	00:00	Continuing cal 50
V2D7158-MB	2D170599.D	10/04/17	21:37	01:02	Method Blank
V2D7158-BS	2D170600.D	10/04/17	22:07	01:32	Blank Spike
ZZZZZZ	2D170604.D	10/05/17	00:10	03:35	(unrelated sample)
ZZZZZZ	2D170605.D	10/05/17	00:41	04:06	(unrelated sample)
ZZZZZZ	2D170606.D	10/05/17	01:11	04:36	(unrelated sample)
JC51834-4	2D170607.D	10/05/17	01:42	05:07	(used for QC only; not part of job JC51891)
ZZZZZZ	2D170612.D	10/05/17	04:14	07:39	(unrelated sample)
ZZZZZZ	2D170613.D	10/05/17	04:44	08:09	(unrelated sample)
ZZZZZZ	2D170614.D	10/05/17	05:15	08:40	(unrelated sample)
ZZZZZZ	2D170615.D	10/05/17	05:45	09:10	(unrelated sample)
ZZZZZZ	2D170616.D	10/05/17	06:16	09:41	(unrelated sample)
ZZZZZZ	2D170617.D	10/05/17	06:46	10:11	(unrelated sample)
JC51891-1	2D170618.D	10/05/17	07:16	10:41	SVE-MW-1
JC51891-2	2D170619.D	10/05/17	07:46	11:11	SVE-MW-4
JC51891-3	2D170620.D	10/05/17	08:17	11:42	SVE-MW-5

Instrument Performance Check (BFB)

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample:	V2D7159-BFB	**Injection Date:**	10/05/17
Lab File ID:	2D170634B.D	**Injection Time:**	20:50
Instrument ID:	GCMS2D		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	14304	16.5		Pass
75	30.0 - 60.0% of mass 95	38653	44.7		Pass
95	Base peak, 100% relative abundance	86547	100.0		Pass
96	5.0 - 9.0% of mass 95	5797	6.70		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	84312	97.4		Pass
175	5.0 - 9.0% of mass 174	6285	7.26	(7.45) [a]	Pass
176	95.0 - 101.0% of mass 174	82461	95.3	(97.8) [a]	Pass
177	5.0 - 9.0% of mass 176	5641	6.52	(6.84) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2D7159-CC7107	2D170634A.D	10/05/17	20:50	00:00	Continuing cal 50
V2D7159-MB	2D170636.D	10/05/17	22:58	02:08	Method Blank
V2D7158-MB2	2D170636A.D	10/05/17	22:58	02:08	Method Blank
V2D7158-BS2	2D170637A.D	10/05/17	23:29	02:39	Blank Spike
V2D7159-BS	2D170637.D	10/05/17	23:29	02:39	Blank Spike
JC51834-4MS	2D170638.D	10/06/17	00:12	03:22	Matrix Spike
JC51834-4MSD	2D170639.D	10/06/17	00:43	03:53	Matrix Spike Duplicate
JC51971-28MS	2D170640.D	10/06/17	01:13	04:23	Matrix Spike
JC51971-28MSD	2D170641.D	10/06/17	01:44	04:54	Matrix Spike Duplicate
JC51971-28	2D170642.D	10/06/17	02:15	05:25	(used for QC only; not part of job JC51891)
JC51971-28	2D170643.D	10/06/17	02:45	05:55	(used for QC only; not part of job JC51891)
ZZZZZZ	2D170644.D	10/06/17	03:15	06:25	(unrelated sample)
ZZZZZZ	2D170645.D	10/06/17	03:45	06:55	(unrelated sample)
ZZZZZZ	2D170646.D	10/06/17	04:16	07:26	(unrelated sample)
ZZZZZZ	2D170647.D	10/06/17	04:46	07:56	(unrelated sample)
ZZZZZZ	2D170648.D	10/06/17	05:16	08:26	(unrelated sample)
ZZZZZZ	2D170649.D	10/06/17	05:47	08:57	(unrelated sample)
ZZZZZZ	2D170651.D	10/06/17	06:48	09:58	(unrelated sample)

Internal Standard Area Summary

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Check Std:	V2D7158-CC7107	**Injection Date:**	10/04/17
Lab File ID:	2D170597.D	**Injection Time:**	20:35
Instrument ID:	GCMS2D	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	98032	7.38	284366	10.09	404823	11.24	402161	15.46	209591	18.26
Upper Limit [a]	196064	7.88	568732	10.59	809646	11.74	804322	15.96	419182	18.76
Lower Limit [b]	49016	6.88	142183	9.59	202412	10.74	201081	14.96	104796	17.76

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2D7158-MB	108373	7.37	291610	10.09	413410	11.24	400024	15.46	187511	18.26
V2D7158-BS	98770	7.37	274850	10.09	391868	11.24	389862	15.46	206552	18.26
ZZZZZZ	109385	7.37	285985	10.09	404337	11.24	394552	15.46	185288	18.26
ZZZZZZ	104778	7.37	281920	10.09	401450	11.24	384320	15.46	181368	18.26
ZZZZZZ	107019	7.38	289459	10.09	405371	11.24	390933	15.46	183570	18.26
JC51834-4	107178	7.38	287510	10.09	406048	11.24	391666	15.46	184122	18.26
ZZZZZZ	101150	7.37	293363	10.09	406830	11.24	393340	15.46	183638	18.26
ZZZZZZ	97998	7.37	281494	10.09	391618	11.24	375432	15.46	177934	18.26
ZZZZZZ	98624	7.38	281571	10.09	386575	11.24	377690	15.46	178503	18.26
ZZZZZZ	99691	7.38	280752	10.09	396750	11.24	376391	15.46	180565	18.26
ZZZZZZ	97604	7.38	289375	10.09	403067	11.24	384511	15.46	183960	18.26
ZZZZZZ	94526	7.38	277111	10.09	385907	11.24	371455	15.46	176501	18.26
JC51891-1	94438	7.37	270765	10.09	378841	11.24	360608	15.46	168905	18.26
JC51891-2	94469	7.37	274158	10.09	384489	11.24	368072	15.46	176649	18.26
JC51891-3	94239	7.38	269427	10.09	374806	11.24	360208	15.46	168129	18.26

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Check Std:	V2D7159-CC7107	**Injection Date:**	10/05/17
Lab File ID:	2D170634A.D	**Injection Time:**	20:50
Instrument ID:	GCMS2D	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	103883	7.39	238829	10.09	339508	11.25	338114	15.47	173710	18.26
Upper Limit [a]	207766	7.89	477658	10.59	679016	11.75	676228	15.97	347420	18.76
Lower Limit [b]	51942	6.89	119415	9.59	169754	10.75	169057	14.97	86855	17.76

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2D7158-MB2	110909	7.39	255778	10.09	358397	11.25	340095	15.47	160263	18.26
V2D7159-MB	110909	7.39	255778	10.09	358397	11.25	340095	15.47	160263	18.26
V2D7158-BS2	100974	7.38	239720	10.10	340779	11.25	338781	15.47	174269	18.26
V2D7159-BS	100974	7.38	239720	10.10	340779	11.25	338781	15.47	174269	18.26
JC51834-4MS	107523	7.38	240440	10.09	342759	11.24	339110	15.47	175289	18.26
JC51834-4MSD	109048	7.38	247585	10.09	352495	11.25	348201	15.47	179414	18.26
JC51971-28MS	104849	7.38	238681	10.09	341650	11.25	330548	15.47	170134	18.26
JC51971-28MSD	104892	7.38	239402	10.09	341267	11.25	335672	15.47	170859	18.26
JC51971-28	112633	7.38	255870	10.09	362183	11.25	337485	15.47	159103	18.26
JC51971-28	110023	7.39	253994	10.10	357479	11.25	332606	15.47	157096	18.26
ZZZZZZ	106939	7.39	249800	10.10	351800	11.25	324150	15.47	154954	18.26
ZZZZZZ	107806	7.38	256461	10.09	360779	11.25	339167	15.47	158393	18.26
ZZZZZZ	105398	7.38	244503	10.09	340161	11.24	320893	15.47	152494	18.26
ZZZZZZ	103767	7.38	236351	10.10	333187	11.25	315953	15.47	148999	18.26
ZZZZZZ	104296	7.38	238468	10.10	335863	11.25	313906	15.47	145495	18.26
ZZZZZZ	100520	7.38	233870	10.09	326509	11.25	310326	15.47	146759	18.26
ZZZZZZ	97441	7.38	235202	10.09	325017	11.24	308735	15.47	145861	18.26

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Surrogate Recovery Summary

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC51891-1	2D170618.D	99	86	103	105
JC51891-2	2D170619.D	98	85	102	102
JC51891-3	2D170620.D	97	86	103	103
JC51834-4MS	2D170638.D	99	88	99	98
JC51834-4MSD	2D170639.D	99	88	99	98
V2D7158-BS	2D170600.D	98	87	99	98
V2D7158-MB	2D170599.D	100	87	102	106
V2D7158-MB2	2D170636A.D	99	89	104	103

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	80-120%
S2 = 1,2-Dichloroethane-D4	81-124%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	80-120%

Initial Calibration Summary

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample: V2D7107-ICC7107
Lab FileID: 2D169435.D

Response Factor Report MS2D

Method : C:\MSDCHEM\1\METHODS\M2D7107.M (RTE Integrator)
Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
Last Update : Mon Aug 28 11:37:12 2017
Response via : Initial Calibration

Calibration Files
1 =2D169430.D 2 =2D169431.D 100 =2D169436.D 50 =2D169435.D
20 =2D169434.D 200 =2D169437.D 5 =2D169432.D 0.5 =2D169429.D
10 =2D169433.D 0.2 =2D169428.D = =

Compound	1	2	100	50	20	200	5	0.5	10	0.2	Avg	%RSD
1) I tert butyl alcohol-d9	ISTD											
2) tertiary butyl alcohol												
	1.118	1.218	1.219	1.153	1.268	1.306			1.136		1.203	5.82
3) ethyl alcohol												
	0.184	0.133	0.114	0.108	0.100	0.125	0.126		0.102		0.124	21.76
---- Quadratic regression ---- Coefficient = 0.9961												
Response Ratio = 0.01697 + 0.09704 *A + 0.00072 *A^2												
4) 1,4-dioxane												
			0.105	0.104	0.102	0.106	0.111		0.096		0.104	4.77
5) I pentafluorobenzene	ISTD											
6) chlorodifluoromethane												
	0.559	0.610	0.689	0.698	0.639	0.657	0.712	0.671	0.629		0.652	7.40
7) dichlorodifluoromethane												
		0.596	0.678	0.697	0.643	0.651	0.620		0.631		0.645	5.32
8) chloromethane												
	0.680	0.740	0.758	0.787	0.732	0.729	0.651	0.814	0.692		0.731	7.06
9) vinyl chloride												
	0.712	0.757	0.756	0.782	0.727	0.715	0.683	0.852	0.691		0.742	7.07
10) bromomethane												
	0.508	0.457	0.484	0.500	0.460	0.482	0.448		0.447		0.473	4.96
11) chloroethane												
	0.336	0.366	0.350	0.360	0.341	0.346	0.321	0.344	0.330		0.344	4.06
12) trichlorofluoromethane												
	0.634	0.697	0.771	0.784	0.746	0.765	0.709	0.660	0.715		0.720	7.15
13) ethyl ether												
	0.233	0.223	0.246	0.243	0.235	0.240	0.273	0.224	0.234		0.239	6.31
14) acrolein												
		0.102	0.093	0.091	0.087	0.088	0.083		0.089		0.090	6.47
15) 1,1-dichloroethene												
	0.397	0.425	0.425	0.451	0.424	0.406	0.510	0.486	0.418	0.501	0.444	9.18
16) freon 113												
	0.314	0.391	0.416	0.453	0.423	0.405	0.484	0.417	0.413		0.413	11.19
17) 2-chloropropane												
	0.947	0.912	0.852	0.889	0.829	0.813	0.976		0.827		0.881	6.85
18) acetone												
	0.034	0.040	0.033	0.036	0.035	0.032	0.040		0.035		0.036	8.30
19) acetonitrile												
		0.056	0.059	0.060	0.058	0.060	0.069		0.060		0.060	7.01
20) iodomethane												
	0.843	0.907	0.969	1.003	0.943	0.947	1.064	0.970	0.910		0.951	6.59
21) carbon disulfide												
	1.547	1.624	1.607	1.702	1.614	1.548	1.838		1.590		1.634	5.86

Initial Calibration Summary

Job Number: JC51891 **Sample:** V2D7107-ICC7107
Account: FLSNYNY Fleming-Lee Shue, Inc. **Lab FileID:** 2D169435.D
Project: 388 Bridge Street, Brooklyn, NY

22) methylene chloride
0.486 0.484 0.490 0.498 0.477 0.467 0.556 0.535 0.473 0.496 6.01
23) methyl acetate
0.365 0.365 0.350 0.351 0.353 0.336 0.439 0.352 0.364 8.71
24) methyl tert butyl ether
1.306 1.357 1.401 1.429 1.372 1.344 1.589 1.617 1.367 1.463 1.424 7.30
25) trans-1,2-dichloroethene
0.405 0.472 0.446 0.460 0.435 0.419 0.539 0.442 0.452 9.04
26) hexane
0.556 0.595 0.630 0.675 0.618 0.603 0.732 0.645 0.607 0.629 8.09
27) di-isopropyl ether
1.556 1.605 1.587 1.654 1.620 1.488 1.923 1.612 1.631 7.86
28) 2-butanone
0.040 0.044 0.044 0.042 0.043 0.045 0.042 0.043 4.18
29) 1,1-dichloroethane
0.768 0.817 0.855 0.876 0.830 0.808 0.986 0.901 0.813 0.841 0.849 7.14
30) chloroprene
0.628 0.706 0.695 0.723 0.687 0.664 0.807 0.689 0.700 7.39
31) acrylonitrile
0.175 0.169 0.164 0.169 0.174 0.160 0.168 3.40
32) vinyl acetate
0.076 0.077 0.068 0.072 0.073 0.065 0.072 6.30
33) ethyl tert-butyl ether
1.486 1.534 1.632 1.654 1.584 1.560 1.827 1.722 1.535 1.615 6.64
34) ethyl acetate
0.058 0.061 0.059 0.054 0.058 0.070 0.062 0.060 8.05
35) 2,2-dichloropropane
0.698 0.699 0.650 0.689 0.676 0.618 0.815 0.683 0.691 8.26
36) cis-1,2-dichloroethene
0.462 0.499 0.508 0.522 0.499 0.479 0.597 0.504 0.509 7.89
37) propionitrile
0.053 0.058 0.059 0.057 0.056 0.068 0.056 0.058 7.79
38) tert-Butyl Formate **This compound doesn't meet initial calibration QC criteria**
0.281 0.325 0.321 0.307 0.317 0.353 0.290 0.314 7.57
39) bromochloromethane
0.250 0.267 0.272 0.274 0.261 0.258 0.307 0.287 0.258 0.270 6.52
40) tetrahydrofuran
0.052 0.055 0.056 0.054 0.053 0.057 0.053 0.054 3.49
41) chloroform
0.802 0.854 0.826 0.852 0.819 0.783 0.968 0.815 0.840 6.78
42) dibromofluoromethane (s)
0.451 0.449 0.453 0.449 0.446 0.448 0.442 0.443 0.449 0.452 0.448 0.83
43) methacrylonitrile
0.182 0.178 0.174 0.180 0.200 0.165 0.180 6.49
44) 1,1,1-trichloroethane
0.653 0.739 0.759 0.774 0.725 0.745 0.838 0.777 0.698 0.656 0.736 7.71
45) cyclohexane
0.644 0.673 0.646 0.616 0.635 0.651 0.644 2.89
46) 1,1-dichloropropene
0.562 0.600 0.616 0.637 0.604 0.594 0.691 0.591 0.612 6.27
47) isobutyl alcohol
0.021 0.018 0.018 0.018 0.018 0.024 0.020 0.020 11.91
48) carbon tetrachloride
0.590 0.622 0.668 0.694 0.649 0.653 0.761 0.732 0.637 0.667 8.06
49) tert-amyl alcohol
0.020 0.022 0.022 0.021 0.023 0.024 0.021 0.022 5.40

50) I 1,4-difluorobenzene ----------ISTD----------
51) 1,2-dichloroethane-d4 (s)
0.359 0.359 0.355 0.362 0.364 0.349 0.361 0.357 0.365 0.358 0.359 1.30

52) benzene
1.282 1.297 1.229 1.304 1.267 1.150 1.519 1.499 1.244 1.405 1.320 9.01
53) iso-octane
1.179 1.336 1.321 1.477 1.374 1.252 1.596 1.341 1.359 9.50
54) tert-amyl methyl ether
0.967 1.044 0.998 1.039 1.037 0.939 1.229 1.023 1.035 8.42
55) heptane
0.206 0.233 0.236 0.253 0.234 0.222 0.285 0.265 0.241 0.242 9.71
56) isopropyl acetate
0.060 0.061 0.059 0.059 0.064 0.054 0.059 5.83
57) 1,2-dichloroethane
0.404 0.445 0.444 0.457 0.452 0.413 0.539 0.509 0.450 0.457 9.38
58) n-butyl alcohol
0.007 0.008 0.008 0.008 0.008 0.009 0.008 0.008 8.45
59) ethyl acrylate
0.337 0.375 0.378 0.367 0.357 0.417 0.353 0.369 6.86
60) trichloroethene
0.329 0.340 0.362 0.377 0.353 0.347 0.404 0.367 0.345 0.358 6.29
61) 2-nitropropane
0.073 0.080 0.079 0.072 0.084 0.086 0.072 0.078 7.72
62) 2-chloroethyl vinyl ether
0.102 0.141 0.141 0.129 0.138 0.138 0.119 0.130 11.04
63) methyl methacrylate
0.051 0.075 0.078 0.074 0.073 0.086 0.071 0.072 14.48
64) 1,2-dichloropropane
0.321 0.326 0.333 0.354 0.340 0.313 0.410 0.356 0.335 0.343 8.43
65) dibromomethane
0.189 0.215 0.215 0.220 0.214 0.203 0.255 0.236 0.211 0.218 8.61
66) methylcyclohexane
0.522 0.602 0.614 0.672 0.620 0.589 0.726 0.695 0.600 0.626 9.86
67) bromodichloromethane
0.388 0.425 0.463 0.464 0.436 0.445 0.512 0.463 0.423 0.446 7.78
68) epichlorohydrin
0.026 0.029 0.029 0.027 0.029 0.033 0.028 0.029 7.96
69) cis-1,3-dichloropropene
0.469 0.522 0.557 0.570 0.545 0.531 0.622 0.566 0.525 0.545 7.69
70) 4-methyl-2-pentanone
0.099 0.110 0.115 0.118 0.116 0.110 0.135 0.116 0.115 8.61
71) 3-methyl-1-butanol
0.012 0.013 0.014 0.013 0.013 0.015 0.013 0.013 6.94

72) I chlorobenzene-d5 ----------ISTD----------
73) toluene-d8 (s)
1.218 1.225 1.175 1.174 1.193 1.168 1.218 1.224 1.215 1.235 1.205 2.05
74) toluene
0.804 0.812 0.783 0.810 0.786 0.755 0.966 0.874 0.778 0.812 0.818 7.41
75) trans-1,3-dichloropropene
0.381 0.424 0.507 0.514 0.487 0.496 0.548 0.442 0.468 0.474 10.85
76) ethyl methacrylate
0.371 0.418 0.423 0.408 0.406 0.469 0.398 0.413 7.23
77) 1,1,2-trichloroethane
0.228 0.259 0.253 0.260 0.253 0.245 0.301 0.255 0.256 0.257 7.56
78) 3,3-dimethyl-1-butanol
0.026 0.031 0.031 0.028 0.032 0.033 0.029 0.030 8.14
79) tetrachloroethene
0.337 0.354 0.324 0.345 0.330 0.309 0.419 0.330 0.343 9.74
80) 1,3-dichloropropane
0.437 0.503 0.471 0.491 0.484 0.445 0.587 0.499 0.490 0.490 8.80
81) 2-hexanone
0.090 0.102 0.104 0.107 0.107 0.101 0.121 0.105 0.104 8.26

Initial Calibration Summary

Job Number: JC51891 **Sample:** V2D7107-ICC7107
Account: FLSNYNY Fleming-Lee Shue, Inc. **Lab FileID:** 2D169435.D
Project: 388 Bridge Street, Brooklyn, NY

82) butyl acetate
0.182 0.185 0.202 0.204 0.200 0.201 0.225 0.198 0.200 6.49
83) dibromochloromethane
0.305 0.347 0.386 0.383 0.361 0.371 0.417 0.400 0.357 0.370 8.88
84) 1,2-dibromoethane
0.280 0.325 0.340 0.341 0.327 0.331 0.384 0.327 0.328 0.331 8.04
85) n-butyl ether
1.209 1.308 1.346 1.406 1.365 1.280 1.582 1.402 1.324 1.358 7.65
86) chlorobenzene
0.893 0.970 0.959 0.990 0.951 0.915 1.154 1.061 0.946 1.005 0.984 7.70
87) 1,1,1,2-tetrachloroethane
0.331 0.353 0.378 0.385 0.370 0.370 0.425 0.388 0.354 0.373 7.09
88) ethylbenzene
1.490 1.602 1.497 1.591 1.572 1.414 1.918 1.825 1.561 1.601 1.607 9.52
89) m,p-xylene
1.160 1.217 1.180 1.243 1.234 1.118 1.505 1.445 1.231 1.287 1.262 9.72
90) o-xylene
0.616 0.643 0.638 0.665 0.647 0.615 0.771 0.697 0.633 0.658 7.50
91) styrene
0.861 0.978 1.027 1.077 1.053 0.980 1.209 1.032 1.023 1.027 9.03
92) butyl acrylate
0.701 0.697 0.640 0.704 0.677 0.597 0.669 6.41
93) bromoform
0.224 0.237 0.313 0.301 0.278 0.311 0.301 0.257 0.262 0.276 11.91
94) isopropylbenzene
1.554 1.636 1.688 1.782 1.711 1.619 2.017 1.978 1.679 1.700 1.736 8.67
95) cis-1,4-dichloro-2-butene
0.121 0.105 0.084 0.136 0.066 0.070 0.097 29.30
---- Quadratic regression ---- Coefficient = 0.9991
Response Ratio = -0.00507 + 0.10128 *A + 0.00912 *A^2

96) I 1,4-dichlorobenzene-d ----------ISTD----------
97) 4-bromofluorobenzene (s)
0.913 0.919 0.868 0.868 0.873 0.848 0.887 0.912 0.889 0.938 0.892 3.17
98) bromobenzene
0.883 0.925 0.864 0.893 0.857 0.785 1.061 1.004 0.893 0.902 0.907 8.52
99) 1,1,2,2-tetrachloroethane
0.683 0.753 0.761 0.774 0.744 0.709 0.917 0.872 0.753 0.774 9.63
100) trans-1,4-dichloro-2-butene
0.162 0.144 0.118 0.167 0.098 0.096 0.131 24.20
---- Linear regression ---- Coefficient = 0.9964
Response Ratio = -0.01105 + 0.16631 *A

101) 1,2,3-trichloropropane
0.178 0.203 0.191 0.193 0.197 0.176 0.237 0.197 0.197 9.55
102) n-propylbenzene
3.351 3.555 3.385 3.601 3.515 3.124 4.186 3.510 3.528 8.67
103) 2-chlorotoluene
0.781 0.821 0.780 0.812 0.777 0.726 0.929 0.821 0.795 0.805 6.83
104) 4-chlorotoluene
2.085 2.231 2.111 2.175 2.101 1.963 2.550 2.524 2.137 2.209 9.05
105) 1,3,5-trimethylbenzene
2.548 2.745 2.540 2.695 2.628 2.386 3.183 3.055 2.632 2.735 2.715 8.84
106) tert-butylbenzene
2.259 2.464 2.392 2.504 2.369 2.268 2.753 2.777 2.352 2.359 2.450 7.45
107) 1,2,4-trimethylbenzene
2.524 2.798 2.628 2.770 2.713 2.457 3.165 2.995 2.736 2.765 2.755 7.54
108) sec-butylbenzene
3.167 3.474 3.504 3.727 3.567 3.282 4.062 3.866 3.476 3.297 3.542 7.81

Initial Calibration Summary

Job Number: JC51891 **Sample:** V2D7107-ICC7107
Account: FLSNYNY Fleming-Lee Shue, Inc. **Lab FileID:** 2D169435.D
Project: 388 Bridge Street, Brooklyn, NY

```
109)  1,3-dichlorobenzene
           1.556 1.594 1.551 1.624 1.595 1.465 1.857 1.843 1.606 1.662  1.635    7.62
110)  p-isopropyltoluene
           2.636 2.898 2.995 3.134 2.976 2.819 3.394 3.201 2.953 2.836  2.984    7.21
111)  1,4-dichlorobenzene
           1.508 1.578 1.595 1.632 1.539 1.524 1.783 1.737 1.508 1.860  1.626    7.69
112)  1,2-dichlorobenzene
           1.462 1.614 1.655 1.724 1.655 1.555 1.908 1.733 1.637 1.700  1.664    7.09
113)  benzyl chloride
                       1.433 1.395 1.269 1.386 1.317       1.175        1.329    7.22
114)  n-butylbenzene
                  1.233 1.465 1.530 1.385 1.410 1.485       1.328        1.405    7.21
115)  1,2-dibromo-3-chloropropane
                  0.156 0.207 0.200 0.184 0.207 0.186       0.169        0.187   10.40
116)  nitrobenzene
                       0.024 0.021 0.017 0.027             0.015        0.021   22.96
               ---- Linear regression ----  Coefficient =  0.9952
                 Response Ratio = -0.00308 + 0.02663 *A

117)  1,3,5-trichlorobenzene
                  1.322 1.694 1.751 1.568 1.555 1.681       1.487        1.580    9.25
118)  hexachlorobutadiene
           0.638 0.739 0.803 0.866 0.806 0.727 0.892       0.768        0.780   10.38
119)  naphthalene
                       2.677 2.622 2.261 2.494 2.127       2.056        2.373   11.04
120)  2-ethylhexyl acrylate
                       0.523 0.395 0.224 0.594             0.146        0.376   50.67
               ---- Linear regression ----  Coefficient =  0.9906
                 Response Ratio = -0.02373 + 0.59585 *A

121)  1,2,4-trichlorobenzene
           0.658 0.846 1.402 1.407 1.207 1.301 1.181       1.097        1.137   23.33
               ---- Linear regression ----  Coefficient =  0.9976
                 Response Ratio = -0.01747 + 1.34309 *A

122)  1,2,3-trichlorobenzene
           0.648 0.800 1.278 1.268 1.119 1.176 1.091       1.017        1.050   21.22
               ---- Linear regression ----  Coefficient =  0.9976
                 Response Ratio = -0.01423 + 1.21721 *A

123)  hexachloroethane
                  0.484 0.649 0.636 0.560 0.637 0.589       0.525        0.583   10.82
124)  2-methylnaphthalene  **This compound doesn't meet initial calibration QC criteria**
                       1.256 1.095 0.743 1.311             0.544        0.990   33.69
               ---- Linear regression ----  Coefficient =  0.9996
                 Response Ratio = -0.11145 + 1.36500 *A

 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M2D7107.M         Mon Aug 28 11:50:17 2017   GCMS2D
```

Initial Calibration Verification

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample: V2D7107-ICV7107
Lab FileID: 2D169440.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2D169440.D Vial: 14
Acq On : 24 Aug 2017 6:52 pm Operator: JiaminC
Sample : icv7107-50 Inst : MS2D
Misc : MS19320,V2D7107,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2D7107.M (RTE Integrator)
Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
Last Update : Mon Aug 28 11:37:12 2017
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	100	0.00	7.40
2		tertiary butyl alcohol	1.203	1.290	-7.2	106	0.00	7.53
			True	Calc.	% Drift			
3		ethyl alcohol	5000.000	5375.170	-7.5	106	0.00	6.02
			AvgRF	CCRF	% Dev			
4		1,4-dioxane	0.104	0.101	2.9	98	0.00	12.20
5	I	pentafluorobenzene	1.000	1.000	0.0	103	0.00	10.11
6		chlorodifluoromethane	0.652	0.573	12.1	84	0.00	3.89
7		dichlorodifluoromethane	0.645	0.818	-26.8	121	0.00	3.87
8		chloromethane	0.731	0.833	-14.0	109	0.00	4.21
9		vinyl chloride	0.742	0.810	-9.2	107	0.00	4.47
10		bromomethane	0.473	0.500	-5.7	103	0.00	5.11
11		chloroethane	0.344	0.366	-6.4	104	0.00	5.28
12		trichlorofluoromethane	0.720	0.803	-11.5	105	0.00	5.79
13		ethyl ether	0.239	0.236	1.3	100	0.00	6.21
14		acrolein	0.090	0.091	-1.1	103	0.00	6.45
15		1,1-dichloroethene	0.444	0.426	4.1	97	0.00	6.64
16		freon 113	0.413	0.489	-18.4	111	0.00	6.64
17	m	2-chloropropane	0.881	0.876	0.6	101	0.00	6.40
18		acetone	0.036	0.035	2.8	100	0.00	6.69
19		acetonitrile	0.060	0.033	45.0#	56	0.00	7.16
20		iodomethane	0.951	0.956	-0.5	98	0.00	6.92
21		carbon disulfide	1.634	1.634	0.0	99	0.00	7.06
22		methylene chloride	0.496	0.499	-0.6	103	0.00	7.41
23		methyl acetate	0.364	0.315	13.5	92	0.00	7.21
24		methyl tert butyl ether	1.424	1.426	-0.1	103	0.00	7.83
25		trans-1,2-dichloroethene	0.452	0.447	1.1	100	0.00	7.85
26		hexane	0.629	0.522	17.0	80	0.00	8.25
27		di-isopropyl ether	1.631	1.637	-0.4	102	0.00	8.56
28		2-butanone	0.043	0.043	0.0	100	0.00	9.39
29		1,1-dichloroethane	0.849	0.889	-4.7	104	0.00	8.51
30		chloroprene	0.700	0.720	-2.9	102	0.00	8.65
31		acrylonitrile	0.168	0.185	-10.1	113	0.00	7.79
32		vinyl acetate	0.072	0.079	-9.7	104	0.00	8.53
33		ethyl tert-butyl ether	1.615	1.616	-0.1	101	0.00	9.12
34		ethyl acetate	0.060	0.060	0.0	105	0.00	9.44
35		2,2-dichloropropane	0.691	0.762	-10.3	114	0.00	9.43
36		cis-1,2-dichloroethene	0.509	0.534	-4.9	105	0.00	9.40
37		propionitrile	0.058	0.058	0.0	102	0.00	9.49

Initial Calibration Verification

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample: V2D7107-ICV7107
Lab FileID: 2D169440.D

38		tert-Butyl Formate	0.314	0.137	56.4#	44#	0.00	9.95
39		bromochloromethane	0.270	0.272	-0.7	102	0.00	9.78
40		tetrahydrofuran	0.054	0.055	-1.9	102	0.00	9.85
41		chloroform	0.840	0.869	-3.5	105	0.00	9.86
42	S	dibromofluoromethane (s)	0.448	0.451	-0.7	103	0.00	10.11
43		methacrylonitrile	0.180	0.172	4.4	99	0.00	9.73
44		1,1,1-trichloroethane	0.736	0.782	-6.3	104	0.00	10.20
45		cyclohexane	0.644	0.674	-4.7	103	0.00	10.30
46		1,1-dichloropropene	0.612	0.641	-4.7	104	0.00	10.43
47		isobutyl alcohol	0.020	0.019	5.0	104	0.00	10.45
48		carbon tetrachloride	0.667	0.694	-4.0	103	0.00	10.45
49		tert-amyl alcohol	0.022	0.022	0.0	106	0.01	10.63
50	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	11.26
51	S	1,2-dichloroethane-d4 (s)	0.359	0.356	0.8	102	0.00	10.65
52		benzene	1.320	1.295	1.9	103	0.00	10.76
53		iso-octane	1.359	1.421	-4.6	100	0.00	10.83
54		tert-amyl methyl ether	1.035	1.014	2.0	101	0.00	10.85
55		heptane	0.242	0.254	-5.0	104	0.00	11.05
56		isopropyl acetate	0.059	0.061	-3.4	104	0.00	10.73
57		1,2-dichloroethane	0.457	0.468	-2.4	106	0.00	10.76
58		n-butyl alcohol	0.008	0.008	0.0	104	0.00	11.43
59		ethyl acrylate	0.369	0.381	-3.3	104	0.00	11.75
60		trichloroethene	0.358	0.382	-6.7	105	0.00	11.69
61		2-nitropropane	0.078	0.079	-1.3	104	0.00	12.73
62		2-chloroethyl vinyl ether	0.130	0.122	6.2	90	0.00	12.79
63		methyl methacrylate	0.072	0.076	-5.6	101	0.00	12.10
64		1,2-dichloropropane	0.343	0.350	-2.0	102	0.00	12.04
65		dibromomethane	0.218	0.219	-0.5	103	0.00	12.23
66		methylcyclohexane	0.626	0.608	2.9	94	0.00	12.01
67		bromodichloromethane	0.446	0.478	-7.2	107	0.00	12.41
68		epichlorohydrin	0.029	0.028	3.4	100	0.00	12.92
69		cis-1,3-dichloropropene	0.545	0.585	-7.3	106	0.00	13.05
70		4-methyl-2-pentanone	0.115	0.114	0.9	99	0.00	13.23
71		3-methyl-1-butanol	0.013	0.013	0.0	101	0.00	13.25
72	I	chlorobenzene-d5	1.000	1.000	0.0	102	0.00	15.48
73	S	toluene-d8 (s)	1.205	1.180	2.1	102	0.00	13.46
74		toluene	0.818	0.835	-2.1	105	0.00	13.56
75		trans-1,3-dichloropropene	0.474	0.542	-14.3	107	0.00	13.82
76		ethyl methacrylate	0.413	0.419	-1.5	101	0.00	13.88
77		1,1,2-trichloroethane	0.257	0.269	-4.7	105	0.00	14.10
78		3,3-dimethyl-1-butanol	0.030	0.031	-3.3	104	0.00	14.63
79		tetrachloroethene	0.343	0.356	-3.8	105	0.00	14.34
80		1,3-dichloropropane	0.490	0.504	-2.9	104	0.00	14.35
81		2-hexanone	0.104	0.105	-1.0	100	0.00	14.40
82		butyl acetate	0.200	0.206	-3.0	103	0.00	14.53
83		dibromochloromethane	0.370	0.403	-8.9	107	0.00	14.68
84		1,2-dibromoethane	0.331	0.351	-6.0	104	0.00	14.87
85	m	n-butyl ether	1.358	1.469	-8.2	106	0.00	15.52
86		chlorobenzene	0.984	1.007	-2.3	103	0.00	15.52
87		1,1,1,2-tetrachloroethane	0.373	0.395	-5.9	104	0.00	15.61
88		ethylbenzene	1.607	1.607	0.0	103	0.00	15.63
89		m,p-xylene	1.262	1.268	-0.5	104	0.00	15.77
90		o-xylene	0.658	0.671	-2.0	102	0.00	16.31
91		styrene	1.027	1.093	-6.4	103	0.00	16.33
92		butyl acrylate	0.669	0.708	-5.8	103	0.00	16.15
93		bromoform	0.276	0.307	-11.2	104	0.00	16.61
94		isopropylbenzene	1.736	1.782	-2.6	101	0.00	16.77

Initial Calibration Verification

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample: V2D7107-ICV7107
Lab FileID: 2D169440.D

			True	Calc.	% Drift			
95		cis-1,4-dichloro-2-butene	50.000	55.910	-11.8	116	0.00	16.83

			AvgRF	CCRF	% Dev			
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	18.27
97	S	4-bromofluorobenzene (s)	0.892	0.876	1.8	103	0.00	16.98
98		bromobenzene	0.907	0.916	-1.0	104	0.00	17.19
99		1,1,2,2-tetrachloroethane	0.774	0.794	-2.6	104	0.00	17.11

			True	Calc.	% Drift			
100		trans-1,4-dichloro-2-bute	50.000	57.490	-15.0	127	0.00	17.17

			AvgRF	CCRF	% Dev			
101		1,2,3-trichloropropane	0.197	0.196	0.5	104	0.00	17.19
102		n-propylbenzene	3.528	3.651	-3.5	103	0.00	17.25
103		2-chlorotoluene	0.805	0.821	-2.0	103	0.00	17.40
104		4-chlorotoluene	2.209	2.225	-0.7	104	0.00	17.51
105		1,3,5-trimethylbenzene	2.715	2.705	0.4	102	0.00	17.44
106		tert-butylbenzene	2.450	2.547	-4.0	103	0.00	17.82
107		1,2,4-trimethylbenzene	2.755	2.782	-1.0	102	0.00	17.86
108		sec-butylbenzene	3.542	3.695	-4.3	101	0.00	18.05
109		1,3-dichlorobenzene	1.635	1.677	-2.6	105	0.00	18.21
110		p-isopropyltoluene	2.984	3.212	-7.6	104	0.00	18.18
111		1,4-dichlorobenzene	1.626	1.670	-2.7	104	0.00	18.30
112		1,2-dichlorobenzene	1.664	1.760	-5.8	104	0.00	18.68
113		benzyl chloride	1.329	1.430	-7.6	104	0.00	18.42
114		n-butylbenzene	1.405	1.556	-10.7	104	0.00	18.60
115		1,2-dibromo-3-chloropropa	0.187	0.202	-8.0	103	0.00	19.41

			True	Calc.	% Drift			
116		nitrobenzene	50.000	45.776	8.4	102	0.00	19.60

			AvgRF	CCRF	% Dev			
117		1,3,5-trichlorobenzene	1.580	1.659	-5.0	96	0.00	19.60
118		hexachlorobutadiene	0.780	0.885	-13.5	104	0.00	20.29
119		naphthalene	2.373	2.598	-9.5	101	0.00	20.43

			True	Calc.	% Drift			
120		2-ethylhexyl acrylate	10.000	9.995	0.1	123	0.00	20.18
121		1,2,4-trichlorobenzene	50.000	54.021	-8.0	104	0.00	20.17
122	m	1,2,3-trichlorobenzene	50.000	53.959	-7.9	104	0.00	20.65

			AvgRF	CCRF	% Dev			
123		hexachloroethane	0.583	0.651	-11.7	104	0.00	18.94

			True	Calc.	% Drift			
124		2-methylnaphthalene	25.000	11.334	54.7#	37	0.00	21.48

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2D169435.D M2D7107.M Mon Aug 28 11:50:06 2017 GCMS2D

6.7.2

6

Initial Calibration Verification

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample: V2D7107-ICV7107
Lab FileID: 2D169441.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2D169441.D Vial: 15
Acq On : 24 Aug 2017 7:22 pm Operator: JiaminC
Sample : icv7107-50 Inst : MS2D
Misc : MS19320,V2D7107,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2D7107.M (RTE Integrator)
Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
Last Update : Mon Aug 28 11:37:12 2017
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	112	0.00	7.39
2		tertiary butyl alcohol		NA				
		----------	True	Calc.	% Drift	----------		
3		ethyl alcohol		NA				
		----------	AvgRF	CCRF	% Dev	----------		
4		1,4-dioxane		NA				
5	I	pentafluorobenzene	1.000	1.000	0.0	112	0.00	10.11
6		chlorodifluoromethane		NA				
7		dichlorodifluoromethane		NA				
8		chloromethane		NA				
9		vinyl chloride		NA				
10		bromomethane		NA				
11		chloroethane		NA				
12		trichlorofluoromethane		NA				
13		ethyl ether		NA				
14		acrolein		NA				
15		1,1-dichloroethene		NA				
16		freon 113		NA				
17	m	2-chloropropane		NA				
18		acetone		NA				
19		acetonitrile	0.060	0.058	3.3	109	0.00	7.16
20		iodomethane		NA				
21		carbon disulfide		NA				
22		methylene chloride		NA				
23		methyl acetate		NA				
24		methyl tert butyl ether		NA				
25		trans-1,2-dichloroethene		NA				
26		hexane		NA				
27		di-isopropyl ether		NA				
28		2-butanone		NA				
29		1,1-dichloroethane		NA				
30		chloroprene		NA				
31		acrylonitrile		NA				
32		vinyl acetate		NA				
33		ethyl tert-butyl ether		NA				
34		ethyl acetate		NA				
35		2,2-dichloropropane		NA				
36		cis-1,2-dichloroethene		NA				
37		propionitrile		NA				

Initial Calibration Verification

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample: V2D7107-ICV7107
Lab FileID: 2D169441.D

38		tert-Butyl Formate		----------NA----------				
39		bromochloromethane		----------NA----------				
40		tetrahydrofuran		----------NA----------				
41		chloroform		----------NA----------				
42	S	dibromofluoromethane (s)	0.448	0.453	-1.1	113	0.00	10.11
43		methacrylonitrile		----------NA----------				
44		1,1,1-trichloroethane		----------NA----------				
45		cyclohexane		----------NA----------				
46		1,1-dichloropropene		----------NA----------				
47		isobutyl alcohol		----------NA----------				
48		carbon tetrachloride		----------NA----------				
49		tert-amyl alcohol		----------NA----------				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	111	0.00	11.26
51	S	1,2-dichloroethane-d4 (s)	0.359	0.360	-0.3	111	0.00	10.65
52		benzene		----------NA----------				
53		iso-octane		----------NA----------				
54		tert-amyl methyl ether		----------NA----------				
55		heptane		----------NA----------				
56		isopropyl acetate		----------NA----------				
57		1,2-dichloroethane		----------NA----------				
58		n-butyl alcohol		----------NA----------				
59		ethyl acrylate		----------NA----------				
60		trichloroethene		----------NA----------				
61		2-nitropropane		----------NA----------				
62		2-chloroethyl vinyl ether		----------NA----------				
63		methyl methacrylate		----------NA----------				
64		1,2-dichloropropane		----------NA----------				
65		dibromomethane		----------NA----------				
66		methylcyclohexane		----------NA----------				
67		bromodichloromethane		----------NA----------				
68		epichlorohydrin		----------NA----------				
69		cis-1,3-dichloropropene		----------NA----------				
70		4-methyl-2-pentanone		----------NA----------				
71		3-methyl-1-butanol		----------NA----------				
72	I	chlorobenzene-d5	1.000	1.000	0.0	107	0.00	15.48
73	S	toluene-d8 (s)	1.205	1.217	-1.0	111	0.00	13.46
74		toluene		----------NA----------				
75		trans-1,3-dichloropropene		----------NA----------				
76		ethyl methacrylate		----------NA----------				
77		1,1,2-trichloroethane		----------NA----------				
78		3,3-dimethyl-1-butanol		----------NA----------				
79		tetrachloroethene		----------NA----------				
80		1,3-dichloropropane		----------NA----------				
81		2-hexanone		----------NA----------				
82		butyl acetate		----------NA----------				
83		dibromochloromethane		----------NA----------				
84		1,2-dibromoethane		----------NA----------				
85	m	n-butyl ether		----------NA----------				
86		chlorobenzene		----------NA----------				
87		1,1,1,2-tetrachloroethane		----------NA----------				
88		ethylbenzene		----------NA----------				
89		m,p-xylene		----------NA----------				
90		o-xylene		----------NA----------				
91		styrene		----------NA----------				
92		butyl acrylate		----------NA----------				
93		bromoform		----------NA----------				
94		isopropylbenzene		----------NA----------				

Initial Calibration Verification

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample: V2D7107-ICV7107
Lab FileID: 2D169441.D

			True	Calc.	% Drift			
95		cis-1,4-dichloro-2-butene		----------NA----------				
			AvgRF	CCRF	% Dev			
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	98	0.00	18.27
97	S	4-bromofluorobenzene (s)	0.892	0.924	-3.6	105	0.00	16.98
98		bromobenzene		----------NA----------				
99		1,1,2,2-tetrachloroethane		----------NA----------				
			True	Calc.	% Drift			
100		trans-1,4-dichloro-2-bute		----------NA----------				
			AvgRF	CCRF	% Dev			
101		1,2,3-trichloropropane		----------NA----------				
102		n-propylbenzene		----------NA----------				
103		2-chlorotoluene		----------NA----------				
104		4-chlorotoluene		----------NA----------				
105		1,3,5-trimethylbenzene		----------NA----------				
106		tert-butylbenzene		----------NA----------				
107		1,2,4-trimethylbenzene		----------NA----------				
108		sec-butylbenzene		----------NA----------				
109		1,3-dichlorobenzene		----------NA----------				
110		p-isopropyltoluene		----------NA----------				
111		1,4-dichlorobenzene		----------NA----------				
112		1,2-dichlorobenzene		----------NA----------				
113		benzyl chloride		----------NA----------				
114		n-butylbenzene		----------NA----------				
115		1,2-dibromo-3-chloropropa		----------NA----------				
			True	Calc.	% Drift			
116		nitrobenzene		----------NA----------				
			AvgRF	CCRF	% Dev			
117		1,3,5-trichlorobenzene		----------NA----------				
118		hexachlorobutadiene		----------NA----------				
119		naphthalene		----------NA----------				
			True	Calc.	% Drift			
120		2-ethylhexyl acrylate		----------NA----------				
121		1,2,4-trichlorobenzene		----------NA----------				
122	m	1,2,3-trichlorobenzene		----------NA----------				
			AvgRF	CCRF	% Dev			
123		hexachloroethane		----------NA----------				
			True	Calc.	% Drift			
124		2-methylnaphthalene		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2D169435.D M2D7107.M Mon Aug 28 11:50:08 2017 GCMS2D

Continuing Calibration Summary

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample: V2D7158-CC7107
Lab FileID: 2D170597.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\v2d7158\2d170597.d Vial: 23
Acq On : 4 Oct 2017 8:35 pm Operator: BridgetK
Sample : cc7107-50 Inst : MS2D
Misc : MS20595,V2D7158,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2D7107.M (RTE Integrator)
Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
Last Update : Mon Sep 25 15:37:47 2017
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	91	-0.01	7.38
2		tertiary butyl alcohol	1.203	1.265	-5.2	94	-0.02	7.50
			True	Calc.	% Drift			
3		ethyl alcohol	5000.000	6594.659	-31.9#	119	-0.02	5.99
			AvgRF	CCRF	% Dev			
4		1,4-dioxane	0.104	0.114	-9.6	100	-0.02	12.18
5	I	pentafluorobenzene	1.000	1.000	0.0	107	-0.02	10.09
6		chlorodifluoromethane	0.652	0.725	-11.2	111	-0.02	3.88
7		dichlorodifluoromethane	0.645	0.775	-20.2#	118	-0.01	3.86
8		chloromethane	0.731	0.918	-25.6#	124	-0.02	4.20
9		vinyl chloride	0.742	0.900	-21.3#	123	-0.02	4.46
10		bromomethane	0.473	0.539	-14.0	115	-0.02	5.09
11		chloroethane	0.344	0.414	-20.3#	122	-0.02	5.26
12		trichlorofluoromethane	0.720	0.778	-8.1	106	-0.01	5.78
13		ethyl ether	0.239	0.256	-7.1	112	-0.02	6.19
14		acrolein	0.090	0.085	5.6	100	-0.02	6.43
15		1,1-dichloroethene	0.444	0.463	-4.3	109	-0.02	6.62
16		freon 113	0.413	0.429	-3.9	101	-0.02	6.62
17	m	2-chloropropane	0.881	0.909	-3.2	109	-0.02	6.38
18		acetone	0.036	0.031	13.9	92	-0.01	6.68
19		acetonitrile	0.060	0.053	11.7	93	-0.02	7.14
20		iodomethane	0.951	0.953	-0.2	101	-0.02	6.90
21		carbon disulfide	1.634	1.752	-7.2	110	-0.02	7.03
22		methylene chloride	0.496	0.512	-3.2	109	-0.02	7.39
23		methyl acetate	0.364	0.306	15.9	93	-0.02	7.19
24		methyl tert butyl ether	1.424	1.301	8.6	97	-0.02	7.81
25		trans-1,2-dichloroethene	0.452	0.478	-5.8	111	-0.02	7.83
26		hexane	0.629	0.640	-1.7	101	-0.02	8.23
27		di-isopropyl ether	1.631	1.574	3.5	101	-0.02	8.54
28		2-butanone	0.043	0.040	7.0	95	-0.02	9.37
29		1,1-dichloroethane	0.849	0.881	-3.8	107	-0.02	8.49
30		chloroprene	0.700	0.670	4.3	99	-0.02	8.63
31		acrylonitrile	0.168	0.154	8.3	97	-0.02	7.77
32		vinyl acetate	0.072	0.069	4.2	95	-0.02	8.51
33		ethyl tert-butyl ether	1.615	1.554	3.8	100	-0.02	9.10
34		ethyl acetate	0.060	0.055	8.3	100	-0.02	9.42
35		2,2-dichloropropane	0.691	0.573	17.1	89	-0.02	9.41
36		cis-1,2-dichloroethene	0.509	0.534	-4.9	109	-0.02	9.38
37		propionitrile	0.058	0.057	1.7	103	-0.02	9.47

Continuing Calibration Summary

Job Number: JC51891 **Sample:** V2D7158-CC7107
Account: FLSNYNY Fleming-Lee Shue, Inc. **Lab FileID:** 2D170597.D
Project: 388 Bridge Street, Brooklyn, NY

38		tert-Butyl Formate	0.314	0.095	69.7#	31#	-0.02	9.93
39		bromochloromethane	0.270	0.261	3.3	102	-0.02	9.76
40		tetrahydrofuran	0.054	0.049	9.3	93	-0.01	9.83
41		chloroform	0.840	0.816	2.9	102	-0.02	9.84
42	S	dibromofluoromethane (s)	0.448	0.441	1.6	104	-0.02	10.09
43		methacrylonitrile	0.180	0.161	10.6	96	-0.02	9.71
44		1,1,1-trichloroethane	0.736	0.713	3.1	98	-0.02	10.18
45		cyclohexane	0.644	0.762	-18.3	121	-0.02	10.28
46		1,1-dichloropropene	0.612	0.630	-2.9	105	-0.02	10.40
47		isobutyl alcohol	0.020	0.015	25.0#	89	-0.02	10.43
48		carbon tetrachloride	0.667	0.628	5.8	96	-0.02	10.43
49		tert-amyl alcohol	0.022	0.019	13.6	95	-0.01	10.61
50	I	1,4-difluorobenzene	1.000	1.000	0.0	109	-0.02	11.24
51	S	1,2-dichloroethane-d4 (s)	0.359	0.308	14.2	93	-0.02	10.62
52		benzene	1.320	1.313	0.5	110	-0.02	10.73
53		iso-octane	1.359	1.358	0.1	100	-0.02	10.81
54		tert-amyl methyl ether	1.035	0.941	9.1	99	-0.02	10.83
55		heptane	0.242	0.227	6.2	98	-0.02	11.03
56		isopropyl acetate	0.059	0.054	8.5	97	-0.02	10.71
57		1,2-dichloroethane	0.457	0.380	16.8	91	-0.02	10.74
58		n-butyl alcohol	0.008	0.007	12.5	98	-0.02	11.41
59		ethyl acrylate	0.369	0.337	8.7	97	-0.02	11.73
60		trichloroethene	0.358	0.362	-1.1	105	-0.02	11.67
61		2-nitropropane	0.078	0.061	21.8#	84	-0.02	12.71
62		2-chloroethyl vinyl ether	0.130	0.121	6.9	94	-0.02	12.77
63		methyl methacrylate	0.072	0.070	2.8	98	-0.02	12.09
64		1,2-dichloropropane	0.343	0.357	-4.1	110	-0.02	12.02
65		dibromomethane	0.218	0.198	9.2	98	-0.02	12.20
66		methylcyclohexane	0.626	0.671	-7.2	109	-0.02	11.99
67		bromodichloromethane	0.446	0.433	2.9	102	-0.02	12.40
68		epichlorohydrin	0.029	0.024	17.2	90	-0.01	12.90
69		cis-1,3-dichloropropene	0.545	0.548	-0.6	105	-0.02	13.04
70		4-methyl-2-pentanone	0.115	0.107	7.0	99	-0.02	13.21
71		3-methyl-1-butanol	0.013	0.013	0.0	101	-0.02	13.23
72	I	chlorobenzene-d5	1.000	1.000	0.0	109	-0.01	15.46
73	S	toluene-d8 (s)	1.205	1.190	1.2	110	-0.02	13.44
74		toluene	0.818	0.822	-0.5	110	-0.02	13.54
75		trans-1,3-dichloropropene	0.474	0.463	2.3	98	-0.01	13.81
76		ethyl methacrylate	0.413	0.395	4.4	102	-0.02	13.86
77		1,1,2-trichloroethane	0.257	0.250	2.7	105	-0.02	14.08
78		3,3-dimethyl-1-butanol	0.030	0.029	3.3	104	-0.02	14.61
79		tetrachloroethene	0.343	0.330	3.8	104	-0.02	14.32
80		1,3-dichloropropane	0.490	0.477	2.7	106	-0.02	14.33
81		2-hexanone	0.104	0.100	3.8	102	-0.02	14.38
82		butyl acetate	0.200	0.197	1.5	105	-0.02	14.51
83		dibromochloromethane	0.370	0.354	4.3	100	-0.02	14.66
84		1,2-dibromoethane	0.331	0.313	5.4	100	-0.01	14.86
85	m	n-butyl ether	1.358	1.538	-13.3	119	-0.02	15.50
86		chlorobenzene	0.984	0.974	1.0	107	-0.02	15.50
87		1,1,1,2-tetrachloroethane	0.373	0.361	3.2	102	-0.02	15.59
88		ethylbenzene	1.607	1.578	1.8	108	-0.02	15.61
89		m,p-xylene	1.262	1.209	4.2	106	-0.02	15.76
90		o-xylene	0.658	0.654	0.6	107	-0.02	16.30
91		styrene	1.027	1.065	-3.7	108	-0.01	16.31
92		butyl acrylate	0.669	0.645	3.6	101	-0.01	16.14
93		bromoform	0.276	0.269	2.5	97	-0.02	16.60
94		isopropylbenzene	1.736	1.722	0.8	105	-0.02	16.75

Continuing Calibration Summary

Job Number: JC51891 **Sample:** V2D7158-CC7107
Account: FLSNYNY Fleming-Lee Shue, Inc. **Lab FileID:** 2D170597.D
Project: 388 Bridge Street, Brooklyn, NY

			True	Calc.	% Drift			
95		cis-1,4-dichloro-2-butene	50.000	17.142	65.7#	32	-0.02	16.82

			AvgRF	CCRF	% Dev			
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	103	-0.01	18.26
97	S	4-bromofluorobenzene (s)	0.892	0.883	1.0	105	-0.02	16.96
98		bromobenzene	0.907	0.910	-0.3	105	-0.01	17.18
99		1,1,2,2-tetrachloroethane	0.774	0.783	-1.2	104	-0.01	17.09

			True	Calc.	% Drift			
100		trans-1,4-dichloro-2-bute	50.000	17.611	64.8#	34	-0.01	17.16

			AvgRF	CCRF	% Dev			
101		1,2,3-trichloropropane	0.197	0.182	7.6	97	-0.01	17.17
102		n-propylbenzene	3.528	3.784	-7.3	108	-0.01	17.24
103		2-chlorotoluene	0.805	0.829	-3.0	105	-0.02	17.38
104		4-chlorotoluene	2.209	2.259	-2.3	107	-0.02	17.49
105		1,3,5-trimethylbenzene	2.715	2.683	1.2	102	-0.01	17.42
106		tert-butylbenzene	2.450	2.465	-0.6	101	-0.02	17.80
107		1,2,4-trimethylbenzene	2.755	2.769	-0.5	103	-0.01	17.85
108		sec-butylbenzene	3.542	3.765	-6.3	104	-0.01	18.04
109		1,3-dichlorobenzene	1.635	1.636	-0.1	104	-0.01	18.19
110		p-isopropyltoluene	2.984	3.126	-4.8	103	-0.01	18.17
111		1,4-dichlorobenzene	1.626	1.628	-0.1	103	-0.01	18.28
112		1,2-dichlorobenzene	1.664	1.682	-1.1	100	-0.01	18.67
113		benzyl chloride	1.329	1.062	20.1#	78	-0.01	18.40
114		n-butylbenzene	1.405	1.585	-12.8	107	-0.01	18.58
115		1,2-dibromo-3-chloropropa	0.187	0.173	7.5	89	-0.01	19.40

			True	Calc.	% Drift			
116		nitrobenzene	50.000	56.709	-13.4	131	-0.02	19.59

			AvgRF	CCRF	% Dev			
117		1,3,5-trichlorobenzene	1.580	1.567	0.8	92	-0.02	19.58
118		hexachlorobutadiene	0.780	0.768	1.5	91	-0.02	20.28
119		naphthalene	2.373	2.252	5.1	88	-0.01	20.41

			True	Calc.	% Drift			
120		2-ethylhexyl acrylate	10.000	8.329	16.7	98	-0.01	20.17
121		1,2,4-trichlorobenzene	50.000	47.421	5.2	92	-0.02	20.16
122	m	1,2,3-trichlorobenzene	50.000	46.017	8.0	90	-0.02	20.63

			AvgRF	CCRF	% Dev			
123		hexachloroethane	0.583	0.601	-3.1	97	-0.02	18.92

			True	Calc.	% Drift			
124		2-methylnaphthalene	25.000	19.675	21.3#	80	-0.02	21.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2D169435.D M2D7107.M Thu Oct 05 21:18:55 2017

Continuing Calibration Summary

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample: V2D7159-CC7107
Lab FileID: 2D170634A.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\v2d7159\2d170634a.d Vial: 3
Acq On : 5 Oct 2017 8:50 pm Operator: BridgetK
Sample : cc7107-50 Inst : MS2D
Misc : MS20600,V2D7159,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2D7107.M (RTE Integrator)
Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
Last Update : Mon Sep 25 15:37:47 2017
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	96	0.00	7.39
2		tertiary butyl alcohol	1.203	1.241	-3.2	98	0.00	7.52
			True	Calc.	% Drift			
3		ethyl alcohol	5000.000	6073.547	-21.5#	116	-0.02	6.00
			AvgRF	CCRF	% Dev			
4		1,4-dioxane	0.104	0.114	-9.6	105	0.00	12.19
5	I	pentafluorobenzene	1.000	1.000	0.0	89	-0.01	10.09
6		chlorodifluoromethane	0.652	0.597	8.4	76	0.00	3.89
7		dichlorodifluoromethane	0.645	0.587	9.0	75	0.00	3.87
8		chloromethane	0.731	0.759	-3.8	86	-0.02	4.20
9		vinyl chloride	0.742	0.789	-6.3	90	-0.01	4.46
10		bromomethane	0.473	0.493	-4.2	88	-0.01	5.10
11		chloroethane	0.344	0.367	-6.7	91	-0.01	5.27
12		trichlorofluoromethane	0.720	0.726	-0.8	83	0.00	5.79
13		ethyl ether	0.239	0.263	-10.0	97	0.00	6.20
14		acrolein	0.090	0.101	-12.2	99	-0.01	6.44
15		1,1-dichloroethene	0.444	0.444	0.0	88	0.00	6.63
16		freon 113	0.413	0.388	6.1	77	-0.01	6.63
17	m	2-chloropropane	0.881	0.798	9.4	80	0.00	6.39
18		acetone	0.036	0.048	-33.3#	121	0.00	6.68
19		acetonitrile	0.060	0.065	-8.3	97	-0.01	7.15
20		iodomethane	0.951	0.936	1.6	83	0.00	6.91
21		carbon disulfide	1.634	1.668	-2.1	88	-0.01	7.04
22		methylene chloride	0.496	0.507	-2.2	91	-0.01	7.40
23		methyl acetate	0.364	0.370	-1.6	94	-0.01	7.20
24		methyl tert butyl ether	1.424	1.336	6.2	84	-0.01	7.82
25		trans-1,2-dichloroethene	0.452	0.455	-0.7	88	-0.01	7.83
26		hexane	0.629	0.612	2.7	81	-0.01	8.23
27		di-isopropyl ether	1.631	1.518	6.9	82	-0.01	8.54
28		2-butanone	0.043	0.051	-18.6	103	0.00	9.38
29		1,1-dichloroethane	0.849	0.847	0.2	87	-0.01	8.50
30		chloroprene	0.700	0.621	11.3	77	0.00	8.64
31		acrylonitrile	0.168	0.183	-8.9	97	-0.01	7.78
32		vinyl acetate	0.072	0.076	-5.6	88	-0.01	8.52
33		ethyl tert-butyl ether	1.615	1.511	6.4	82	0.00	9.11
34		ethyl acetate	0.060	0.064	-6.7	97	0.00	9.43
35		2,2-dichloropropane	0.691	0.631	8.7	82	-0.01	9.41
36		cis-1,2-dichloroethene	0.509	0.511	-0.4	88	-0.01	9.39
37		propionitrile	0.058	0.069	-19.0	105	-0.01	9.48

Continuing Calibration Summary

Job Number: JC51891 **Sample:** V2D7159-CC7107
Account: FLSNYNY Fleming-Lee Shue, Inc. **Lab FileID:** 2D170634A.D
Project: 388 Bridge Street, Brooklyn, NY

38		tert-Butyl Formate	0.314	0.119	62.1#	33#	-0.01	9.94
39		bromochloromethane	0.270	0.266	1.5	87	0.00	9.77
40		tetrahydrofuran	0.054	0.058	-7.4	94	0.00	9.84
41		chloroform	0.840	0.781	7.0	82	-0.02	9.85
42	S	dibromofluoromethane (s)	0.448	0.445	0.7	89	-0.01	10.10
43		methacrylonitrile	0.180	0.187	-3.9	94	-0.01	9.72
44		1,1,1-trichloroethane	0.736	0.656	10.9	76	0.00	10.19
45		cyclohexane	0.644	0.656	-1.9	87	-0.01	10.29
46		1,1-dichloropropene	0.612	0.590	3.6	83	-0.01	10.41
47		isobutyl alcohol	0.020	0.019	5.0	93	0.00	10.45
48		carbon tetrachloride	0.667	0.588	11.8	76	-0.01	10.44
49		tert-amyl alcohol	0.022	0.023	-4.5	92	0.00	10.61
50	I	1,4-difluorobenzene	1.000	1.000	0.0	92	0.00	11.25
51	S	1,2-dichloroethane-d4 (s)	0.359	0.318	11.4	81	-0.01	10.63
52		benzene	1.320	1.255	4.9	88	0.00	10.74
53		iso-octane	1.359	1.345	1.0	83	-0.01	10.82
54		tert-amyl methyl ether	1.035	0.948	8.4	84	0.00	10.84
55		heptane	0.242	0.236	2.5	85	0.00	11.04
56		isopropyl acetate	0.059	0.062	-5.1	94	-0.01	10.71
57		1,2-dichloroethane	0.457	0.389	14.9	78	-0.01	10.75
58		n-butyl alcohol	0.008	0.009	-12.5	102	0.00	11.43
59		ethyl acrylate	0.369	0.376	-1.9	91	0.00	11.74
60		trichloroethene	0.358	0.346	3.4	84	-0.01	11.68
61		2-nitropropane	0.078	0.074	5.1	86	0.00	12.73
62		2-chloroethyl vinyl ether	0.130	0.066	49.2#	43#	0.00	12.78
63		methyl methacrylate	0.072	0.078	-8.3	92	0.00	12.10
64		1,2-dichloropropane	0.343	0.343	0.0	89	0.00	12.03
65		dibromomethane	0.218	0.205	6.0	85	-0.01	12.21
66		methylcyclohexane	0.626	0.621	0.8	85	-0.01	11.99
67		bromodichloromethane	0.446	0.428	4.0	84	-0.01	12.40
68		epichlorohydrin	0.029	0.029	0.0	90	0.00	12.91
69		cis-1,3-dichloropropene	0.545	0.561	-2.9	90	0.00	13.05
70		4-methyl-2-pentanone	0.115	0.122	-6.1	95	0.00	13.22
71		3-methyl-1-butanol	0.013	0.015	-15.4	99	0.00	13.24
72	I	chlorobenzene-d5	1.000	1.000	0.0	91	0.00	15.47
73	S	toluene-d8 (s)	1.205	1.192	1.1	93	-0.01	13.45
74		toluene	0.818	0.787	3.8	89	0.00	13.55
75		trans-1,3-dichloropropene	0.474	0.488	-3.0	87	0.00	13.81
76		ethyl methacrylate	0.413	0.416	-0.7	90	0.00	13.87
77		1,1,2-trichloroethane	0.257	0.262	-1.9	92	-0.01	14.09
78		3,3-dimethyl-1-butanol	0.030	0.032	-6.7	97	-0.01	14.61
79		tetrachloroethene	0.343	0.310	9.6	82	0.00	14.33
80		1,3-dichloropropane	0.490	0.494	-0.8	92	-0.01	14.34
81		2-hexanone	0.104	0.117	-12.5	101	-0.01	14.38
82		butyl acetate	0.200	0.212	-6.0	95	-0.01	14.51
83		dibromochloromethane	0.370	0.363	1.9	87	0.00	14.67
84		1,2-dibromoethane	0.331	0.335	-1.2	90	0.00	14.86
85	m	n-butyl ether	1.358	1.463	-7.7	95	-0.01	15.51
86		chlorobenzene	0.984	0.948	3.7	88	0.00	15.51
87		1,1,1,2-tetrachloroethane	0.373	0.354	5.1	84	-0.01	15.59
88		ethylbenzene	1.607	1.518	5.5	87	-0.01	15.61
89		m,p-xylene	1.262	1.168	7.4	86	0.00	15.77
90		o-xylene	0.658	0.632	4.0	87	0.00	16.31
91		styrene	1.027	1.032	-0.5	88	0.00	16.32
92		butyl acrylate	0.669	0.655	2.1	86	0.00	16.14
93		bromoform	0.276	0.290	-5.1	88	-0.01	16.60
94		isopropylbenzene	1.736	1.635	5.8	84	0.00	16.76

Continuing Calibration Summary

Job Number: JC51891
Account: FLSNYNY Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Sample: V2D7159-CC7107
Lab FileID: 2D170634A.D

			True	Calc.	% Drift			
95		cis-1,4-dichloro-2-butene	50.000	54.066	-8.1	101	0.00	16.83

			AvgRF	CCRF	% Dev			
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	85	0.00	18.26
97	S	4-bromofluorobenzene (s)	0.892	0.882	1.1	87	-0.01	16.97
98		bromobenzene	0.907	0.889	2.0	85	0.00	17.18
99		1,1,2,2-tetrachloroethane	0.774	0.869	-12.3	96	0.00	17.10

			True	Calc.	% Drift			
100		trans-1,4-dichloro-2-bute	50.000	53.385	-6.8	99	0.00	17.16

			AvgRF	CCRF	% Dev			
101		1,2,3-trichloropropane	0.197	0.206	-4.6	91	0.00	17.18
102		n-propylbenzene	3.528	3.667	-3.9	87	0.00	17.25
103		2-chlorotoluene	0.805	0.800	0.6	84	0.00	17.39
104		4-chlorotoluene	2.209	2.161	2.2	85	0.00	17.50
105		1,3,5-trimethylbenzene	2.715	2.620	3.5	83	0.00	17.43
106		tert-butylbenzene	2.450	2.455	-0.2	84	0.00	17.81
107		1,2,4-trimethylbenzene	2.755	2.731	0.9	84	0.00	17.85
108		sec-butylbenzene	3.542	3.661	-3.4	84	0.00	18.04
109		1,3-dichlorobenzene	1.635	1.615	1.2	85	0.00	18.20
110		p-isopropyltoluene	2.984	3.057	-2.4	83	0.00	18.17
111		1,4-dichlorobenzene	1.626	1.605	1.3	84	0.00	18.29
112		1,2-dichlorobenzene	1.664	1.694	-1.8	84	0.00	18.68
113		benzyl chloride	1.329	1.619	-21.8#	99	0.00	18.41
114		n-butylbenzene	1.405	1.533	-9.1	86	0.00	18.59
115		1,2-dibromo-3-chloropropa	0.187	0.207	-10.7	88	0.00	19.41

			True	Calc.	% Drift			
116		nitrobenzene	50.000	76.893	-53.8#	152	0.00	19.60

			AvgRF	CCRF	% Dev			
117		1,3,5-trichlorobenzene	1.580	1.584	-0.3	77	0.00	19.59
118		hexachlorobutadiene	0.780	0.792	-1.5	78	0.00	20.29
119		naphthalene	2.373	2.615	-10.2	85	0.00	20.42

			True	Calc.	% Drift			
120		2-ethylhexyl acrylate	10.000	6.971	30.3#	64	0.00	20.18
121		1,2,4-trichlorobenzene	50.000	50.010	-0.0	80	0.00	20.17
122	m	1,2,3-trichlorobenzene	50.000	50.178	-0.4	81	-0.01	20.63

			AvgRF	CCRF	% Dev			
123		hexachloroethane	0.583	0.643	-10.3	86	0.00	18.93

			True	Calc.	% Drift			
124		2-methylnaphthalene	25.000	20.904	16.4	72	0.00	21.48

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2D169435.D M2D7107.M Mon Oct 09 01:21:08 2017

MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : X:\Complete\dayton 20171006\v2d7158\
Data File : 2d170618.d
Acq On : 5 Oct 2017 7:16 am
Operator : BridgetK
Sample : jc51891-1 Inst : MS2D
Misc : MS20651,V2D7158,5,,,,1
ALS Vial : 44 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 11 20:06:14 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 15:37:47 2017
Response via : Initial Calibration

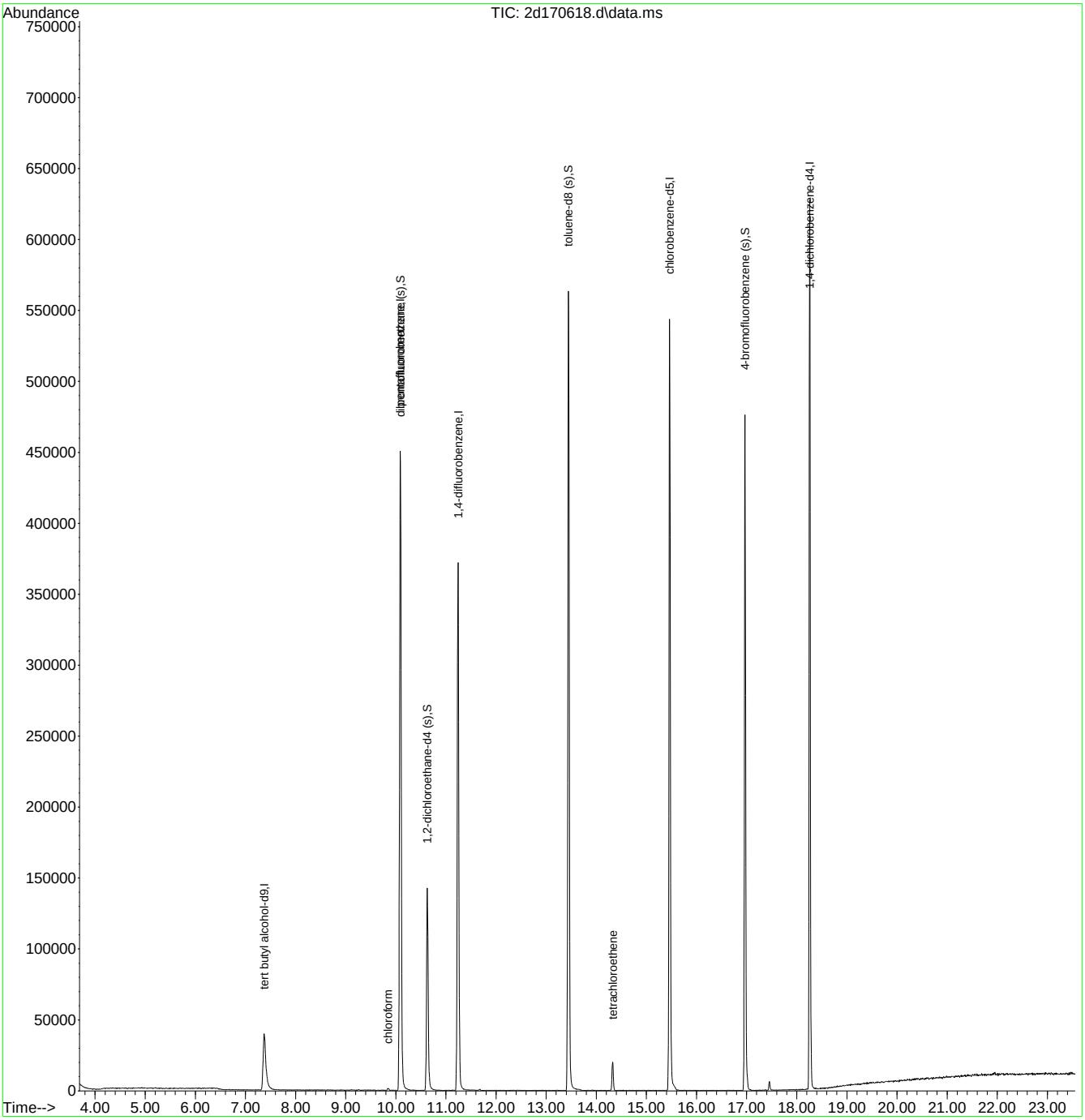
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.373	65	94438	500.00	ug/L	-0.02
5) pentafluorobenzene	10.088	168	270765	50.00	ug/L	-0.02
50) 1,4-difluorobenzene	11.242	114	378841	50.00	ug/L	-0.01
72) chlorobenzene-d5	15.463	117	360608	50.00	ug/L	-0.01
96) 1,4-dichlorobenzene-d4	18.257	152	168905	50.00	ug/L	-0.01
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.094	113	119917	49.40	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.80%			
51) 1,2-dichloroethane-d4 (s)	10.628	65	116278	42.76	ug/L	-0.02
Spiked Amount 50.000	Range 81 - 124		Recovery = 85.52%			
73) toluene-d8 (s)	13.444	98	447929	51.56	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.12%			
97) 4-bromofluorobenzene (s)	16.967	95	157613	52.33	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.66%			
Target Compounds						Qvalue
41) chloroform	9.842	83	1293	0.28	ug/L	94
79) tetrachloroethene	14.330	164	5860	2.37	ug/L	86

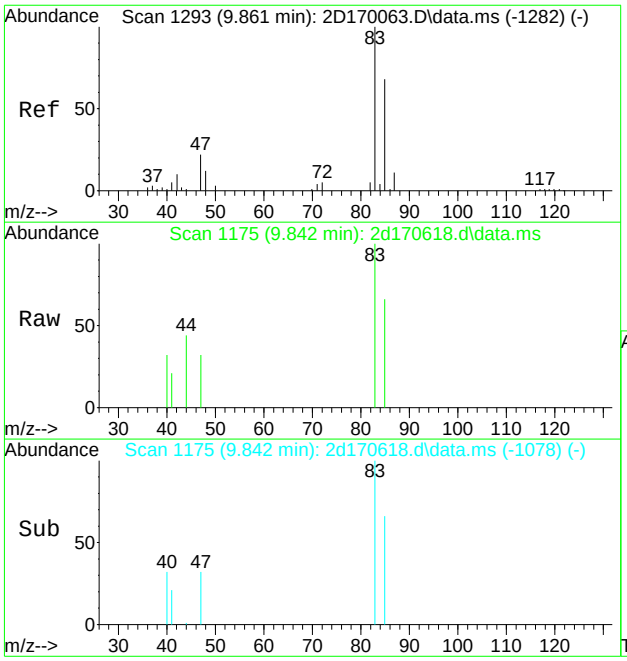
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\Complete\dayton 20171006\v2d7158\
Data File : 2d170618.d
Acq On : 5 Oct 2017 7:16 am
Operator : BridgetK
Sample : jc51891-1 Inst : MS2D
Misc : MS20651,V2D7158,5,,,,1
ALS Vial : 44 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 11 20:06:14 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 15:37:47 2017
Response via : Initial Calibration

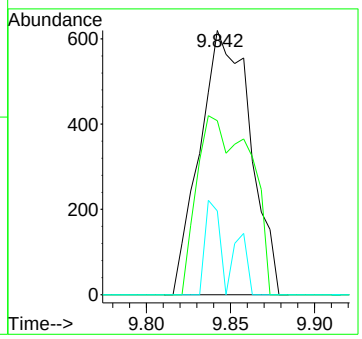


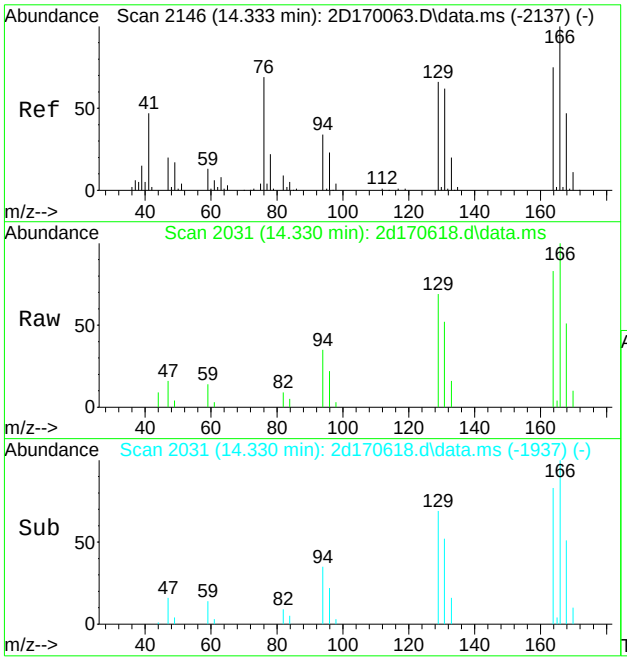


#41
chloroform
Concen: 0.28 ug/L
RT: 9.842 min Scan# 1175
Delta R.T. -0.024 min
Lab File: 2d170618.d
Acq: 5 Oct 2017 7:16 am

Tgt Ion: 83 Resp: 1293

Ion	Ratio	Lower	Upper
83	100		
85	65.8	33.1	93.1
47	31.6	0.0	55.0

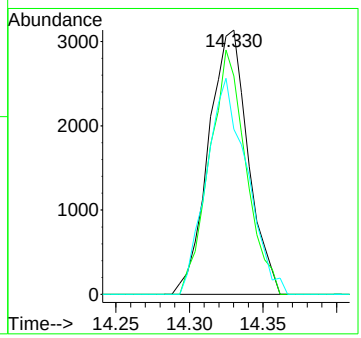




#79
tetrachloroethene
Concen: 2.37 ug/L
RT: 14.330 min Scan# 2031
Delta R.T. -0.008 min
Lab File: 2d170618.d
Acq: 5 Oct 2017 7:16 am

Tgt Ion:164 Resp: 5860

Ion	Ratio	Lower	Upper
164	100		
129	82.6	56.6	116.6
131	62.4	54.2	114.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7158\
Data File : 2d170619.d
Acq On : 5 Oct 2017 7:46 am
Operator : BridgetK
Sample : jc51891-2 Inst : MS2D
Misc : MS20651,V2D7158,5,,,,1
ALS Vial : 45 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 05 23:06:18 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration

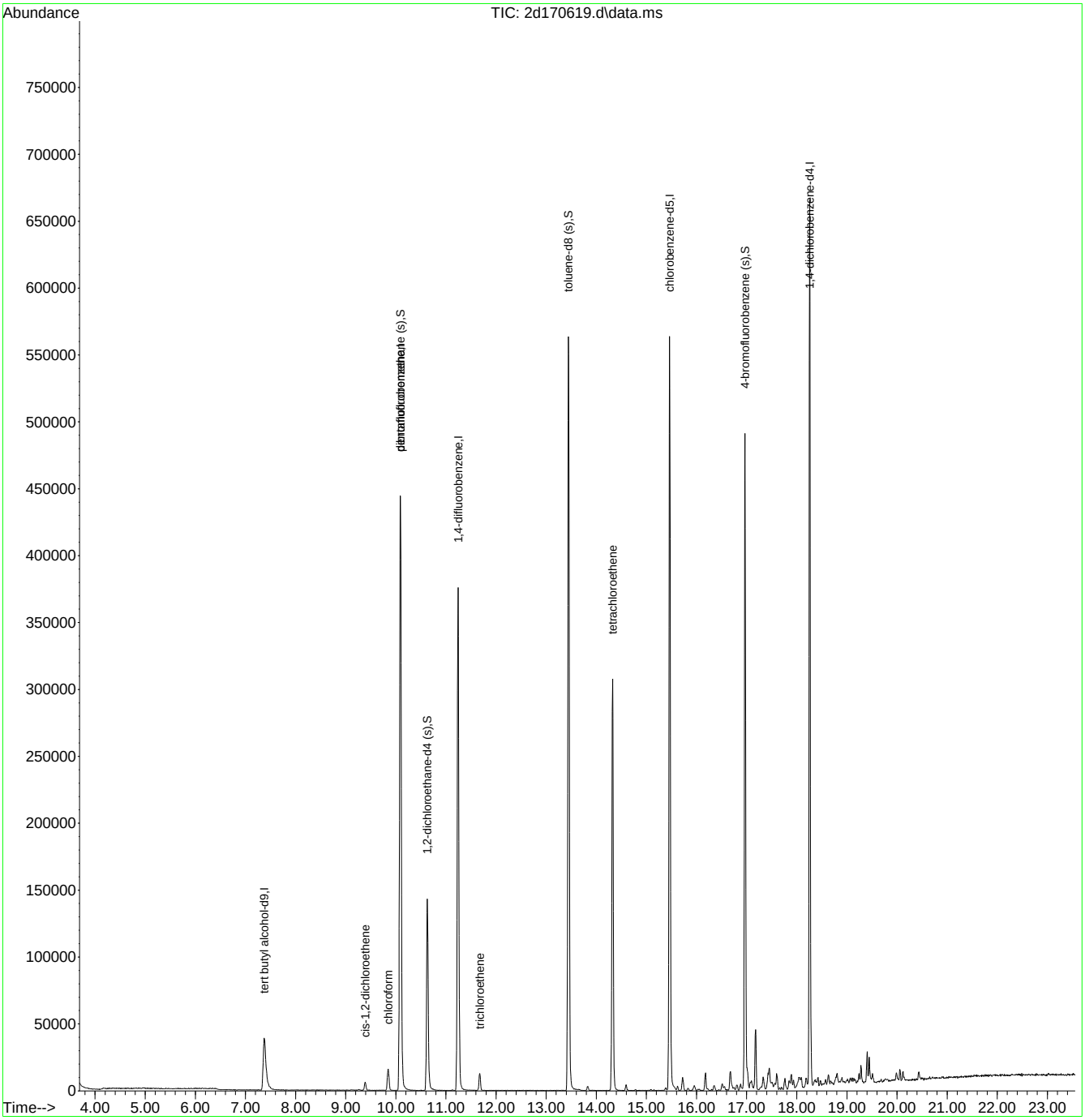
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.373	65	94469	500.00	ug/L	-0.02
5) pentafluorobenzene	10.094	168	274158	50.00	ug/L	-0.01
50) 1,4-difluorobenzene	11.242	114	384489	50.00	ug/L	-0.01
72) chlorobenzene-d5	15.463	117	368072	50.00	ug/L	-0.01
96) 1,4-dichlorobenzene-d4	18.257	152	176649	50.00	ug/L	-0.01
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.094	113	120112	48.87	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.74%			
51) 1,2-dichloroethane-d4 (s)	10.629	65	116924	42.37	ug/L	-0.02
Spiked Amount 50.000	Range 81 - 124		Recovery = 84.74%			
73) toluene-d8 (s)	13.444	98	452495	51.03	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.06%			
97) 4-bromofluorobenzene (s)	16.967	95	160918	51.09	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.18%			
Target Compounds						Qvalue
36) cis-1,2-dichloroethene	9.391	96	3503	1.26	ug/L #	79
41) chloroform	9.847	83	16582	3.60	ug/L	94
60) trichloroethene	11.677	130	5609	2.04	ug/L	95
79) tetrachloroethene	14.325	164	87441	34.60	ug/L	97

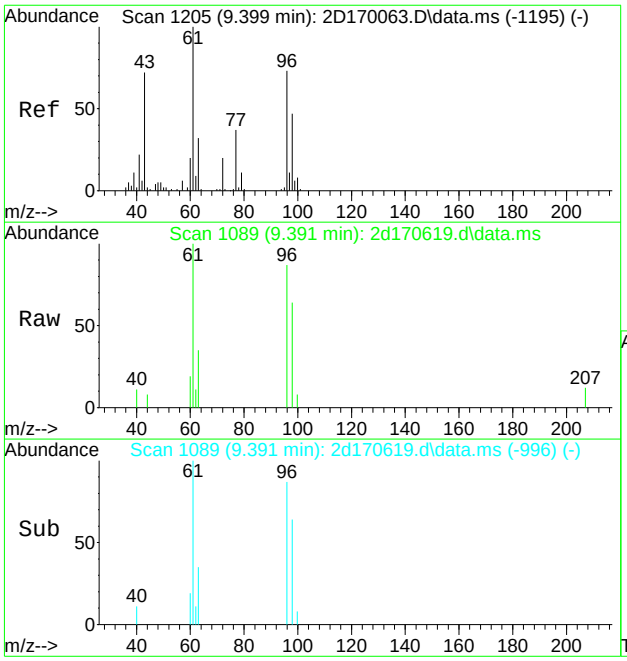
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7158\
Data File : 2d170619.d
Acq On : 5 Oct 2017 7:46 am
Operator : BridgetK
Sample : jc51891-2 Inst : MS2D
Misc : MS20651,V2D7158,5,,,,1
ALS Vial : 45 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 05 23:06:18 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration

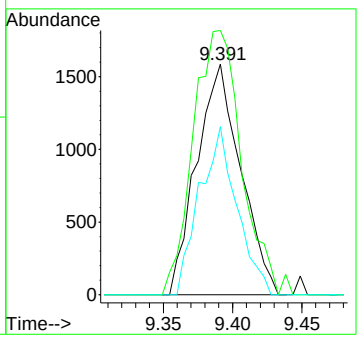


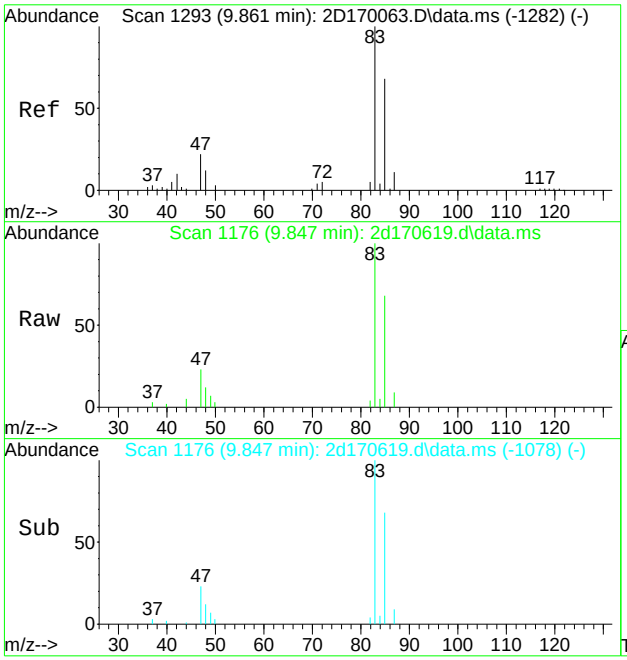


#36
cis-1,2-dichloroethene
Concen: 1.26 ug/L
RT: 9.391 min Scan# 1089
Delta R.T. -0.013 min
Lab File: 2d170619.d
Acq: 5 Oct 2017 7:46 am

Tgt Ion: 96 Resp: 3503

Ion	Ratio	Lower	Upper
96	100		
61	114.6	115.2	175.2#
98	72.9	33.7	93.7

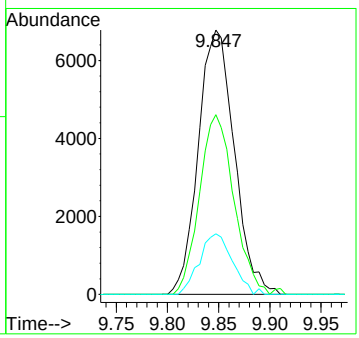


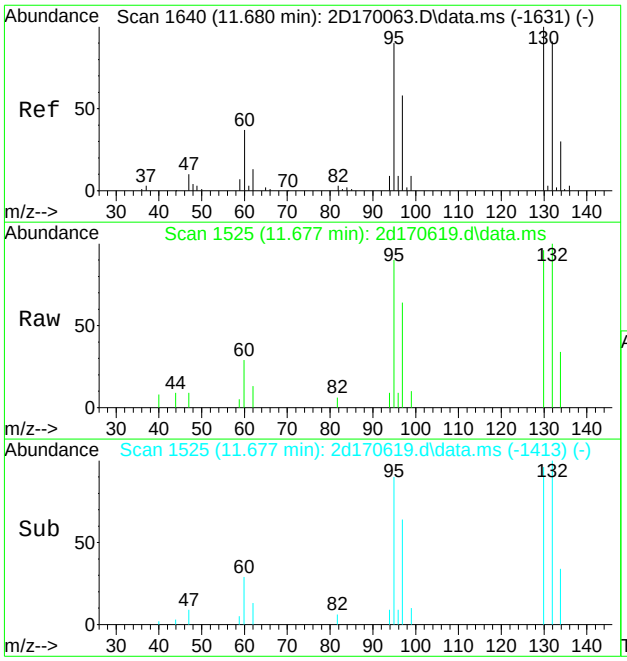


#41
chloroform
Concen: 3.60 ug/L
RT: 9.847 min Scan# 1176
Delta R.T. -0.019 min
Lab File: 2d170619.d
Acq: 5 Oct 2017 7:46 am

Tgt Ion: 83 Resp: 16582

Ion	Ratio	Lower	Upper
83	100		
85	67.9	33.1	93.1
47	22.9	0.0	55.0

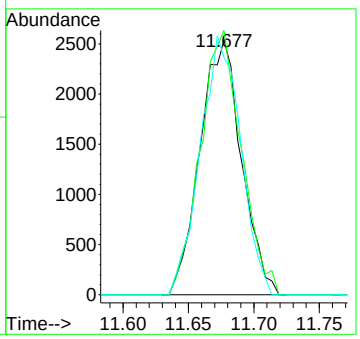


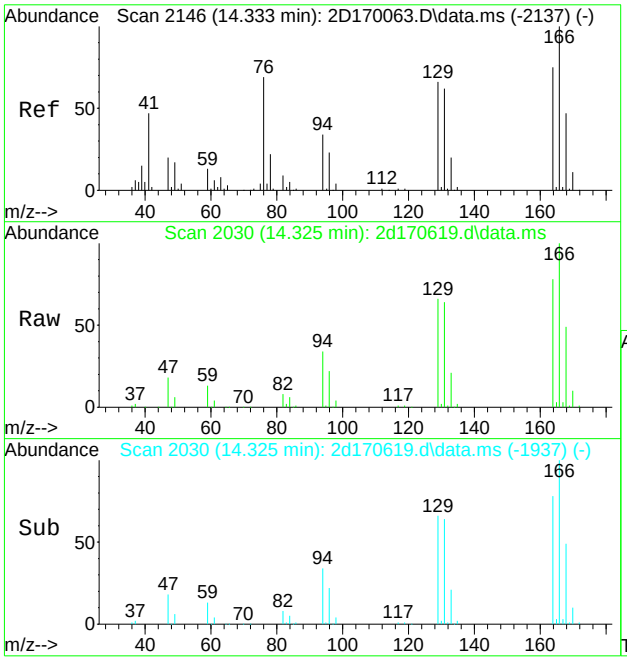


#60
trichloroethene
Concen: 2.04 ug/L
RT: 11.677 min Scan# 1525
Delta R.T. -0.013 min
Lab File: 2d170619.d
Acq: 5 Oct 2017 7:46 am

Tgt Ion:130 Resp: 5609

Ion	Ratio	Lower	Upper
130	100		
132	103.9	67.0	127.0
95	93.3	60.7	120.7

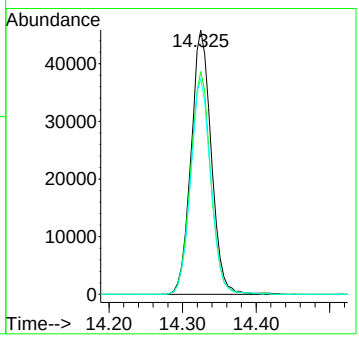




#79
tetrachloroethene
Concen: 34.60 ug/L
RT: 14.325 min Scan# 2030
Delta R.T. -0.013 min
Lab File: 2d170619.d
Acq: 5 Oct 2017 7:46 am

Tgt Ion:164 Resp: 87441

Ion	Ratio	Lower	Upper
164	100		
129	84.3	56.6	116.6
131	81.6	54.2	114.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7158\
Data File : 2d170620.d
Acq On : 5 Oct 2017 8:17 am
Operator : BridgetK
Sample : jc51891-3 Inst : MS2D
Misc : MS20651,V2D7158,5,,,,1
ALS Vial : 46 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 05 23:07:00 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration

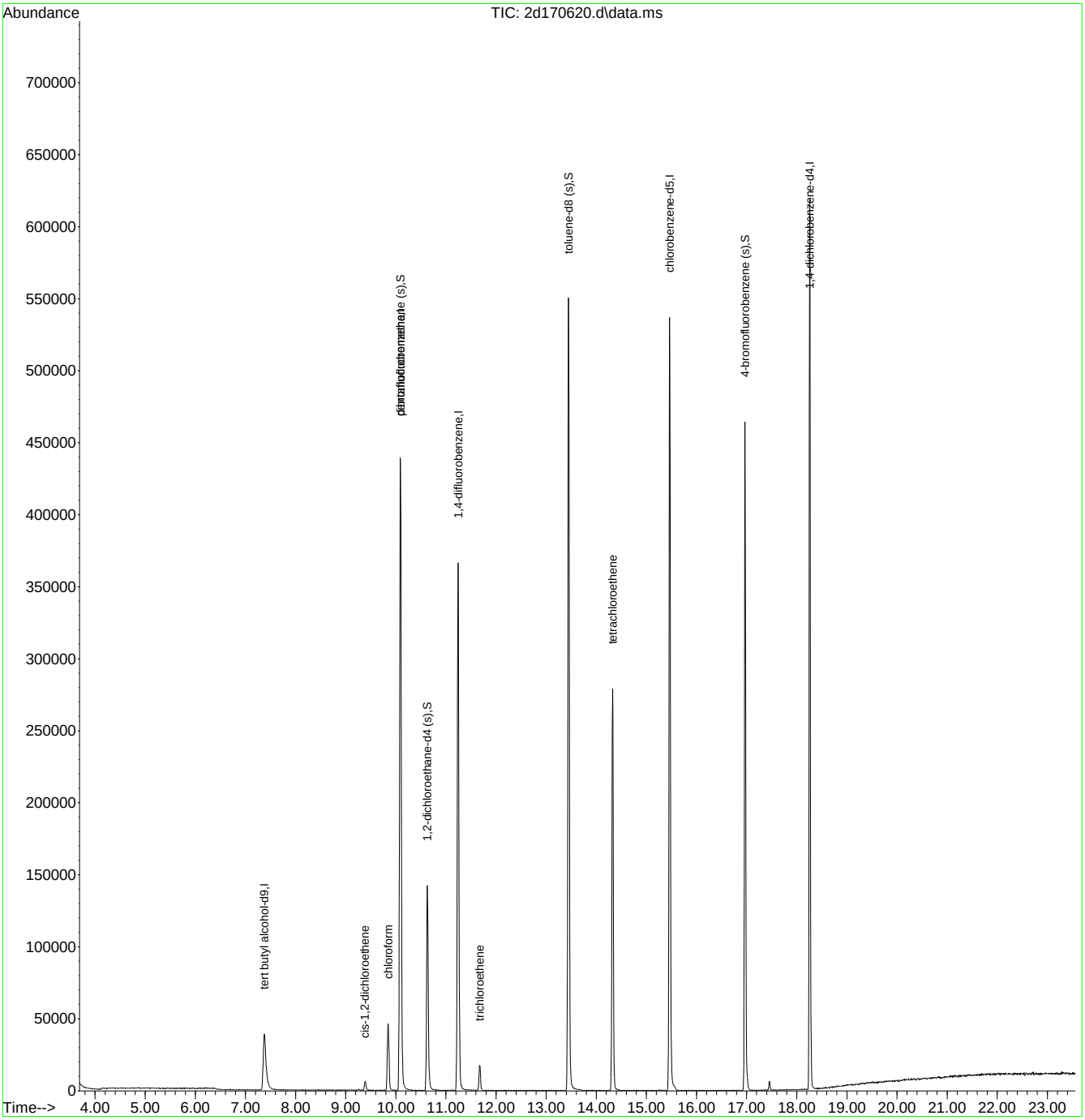
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.378	65	94239	500.00	ug/L	-0.01
5) pentafluorobenzene	10.094	168	269427	50.00	ug/L	-0.01
50) 1,4-difluorobenzene	11.242	114	374806	50.00	ug/L	-0.01
72) chlorobenzene-d5	15.463	117	360208	50.00	ug/L	-0.01
96) 1,4-dichlorobenzene-d4	18.257	152	168129	50.00	ug/L	-0.01
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.094	113	117623	48.70	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.40%			
51) 1,2-dichloroethane-d4 (s)	10.629	65	115599	42.97	ug/L	-0.02
Spiked Amount 50.000	Range 81 - 124		Recovery = 85.94%			
73) toluene-d8 (s)	13.449	98	446557	51.46	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.92%			
97) 4-bromofluorobenzene (s)	16.967	95	154304	51.47	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.94%			
Target Compounds						Qvalue
36) cis-1,2-dichloroethene	9.381	96	3839	1.40	ug/L	# 79
41) chloroform	9.847	83	44992	9.94	ug/L	99
60) trichloroethene	11.672	130	7842	2.92	ug/L	96
79) tetrachloroethene	14.325	164	79145	32.00	ug/L	99

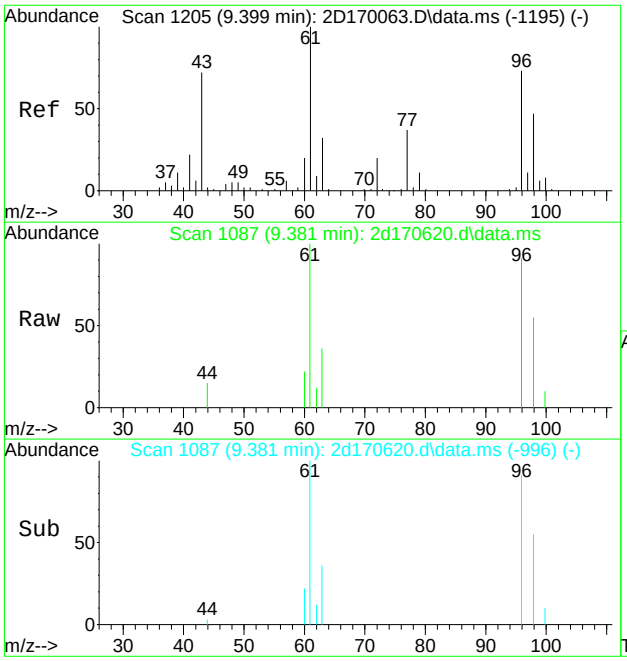
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7158\
Data File : 2d170620.d
Acq On : 5 Oct 2017 8:17 am
Operator : BridgetK
Sample : jc51891-3 Inst : MS2D
Misc : MS20651,V2D7158,5,,,,1
ALS Vial : 46 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 05 23:07:00 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration

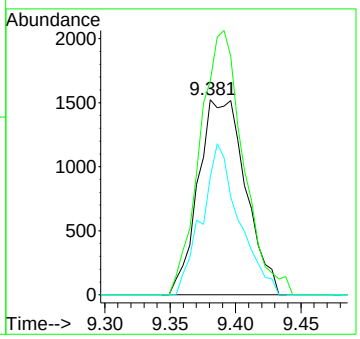


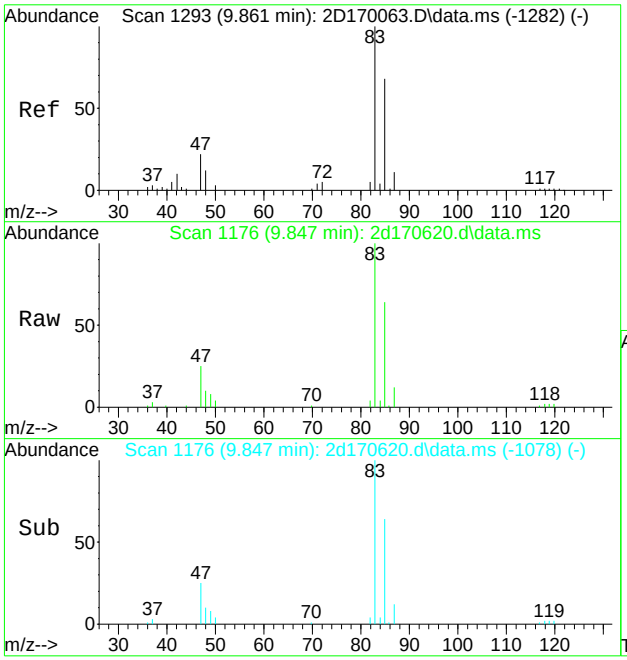


#36
cis-1,2-dichloroethene
Concen: 1.40 ug/L
RT: 9.381 min Scan# 1087
Delta R.T. -0.024 min
Lab File: 2d170620.d
Acq: 5 Oct 2017 8:17 am

Tgt Ion: 96 Resp: 3839

Ion	Ratio	Lower	Upper
96	100		
61	109.6	115.2	175.2#
98	60.4	33.7	93.7

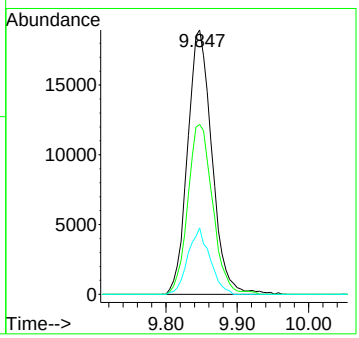


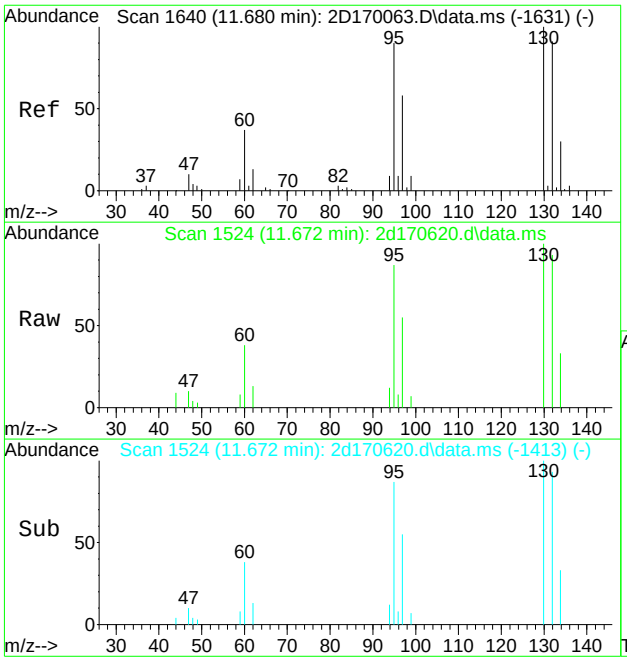


#41
chloroform
Concen: 9.94 ug/L
RT: 9.847 min Scan# 1176
Delta R.T. -0.019 min
Lab File: 2d170620.d
Acq: 5 Oct 2017 8:17 am

Tgt Ion: 83 Resp: 44992

Ion	Ratio	Lower	Upper
83	100		
85	64.2	33.1	93.1
47	25.1	0.0	55.0

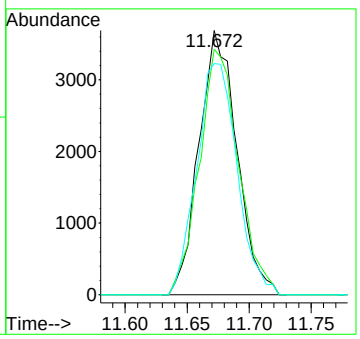


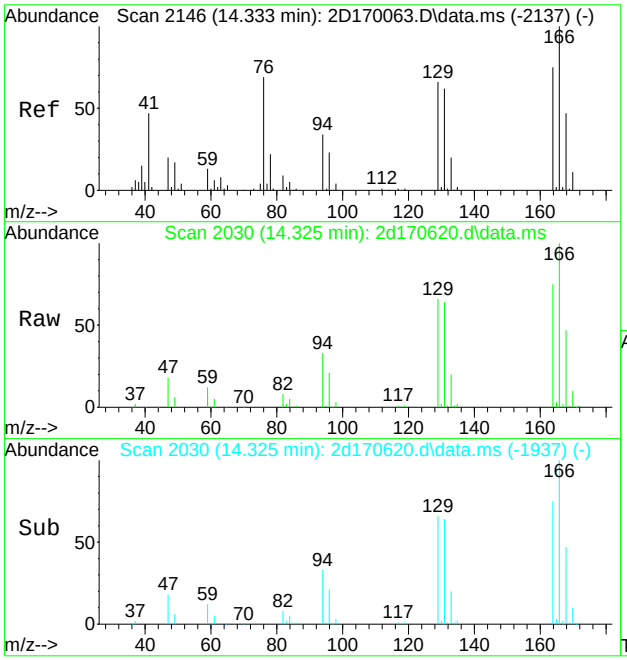


#60
trichloroethene
Concen: 2.92 ug/L
RT: 11.672 min Scan# 1524
Delta R.T. -0.019 min
Lab File: 2d170620.d
Acq: 5 Oct 2017 8:17 am

Tgt Ion:130 Resp: 7842

Ion	Ratio	Lower	Upper
130	100		
132	92.8	67.0	127.0
95	87.4	60.7	120.7

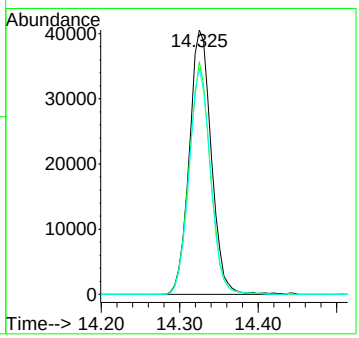




#79
tetrachloroethene
Concen: 32.00 ug/L
RT: 14.325 min Scan# 2030
Delta R.T. -0.013 min
Lab File: 2d170620.d
Acq: 5 Oct 2017 8:17 am

Tgt Ion:164 Resp: 79145

Ion	Ratio	Lower	Upper
164	100		
129	87.9	56.6	116.6
131	85.3	54.2	114.2



Quantitation Report (QT Reviewed)

Data Path : X:\Complete\dayton 20171006\v2d7158\
Data File : 2d170599.d
Acq On : 4 Oct 2017 9:37 pm
Operator : BridgetK
Sample : mb Inst : MS2D
Misc : MS20651,V2D7158,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 11 03:19:04 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration

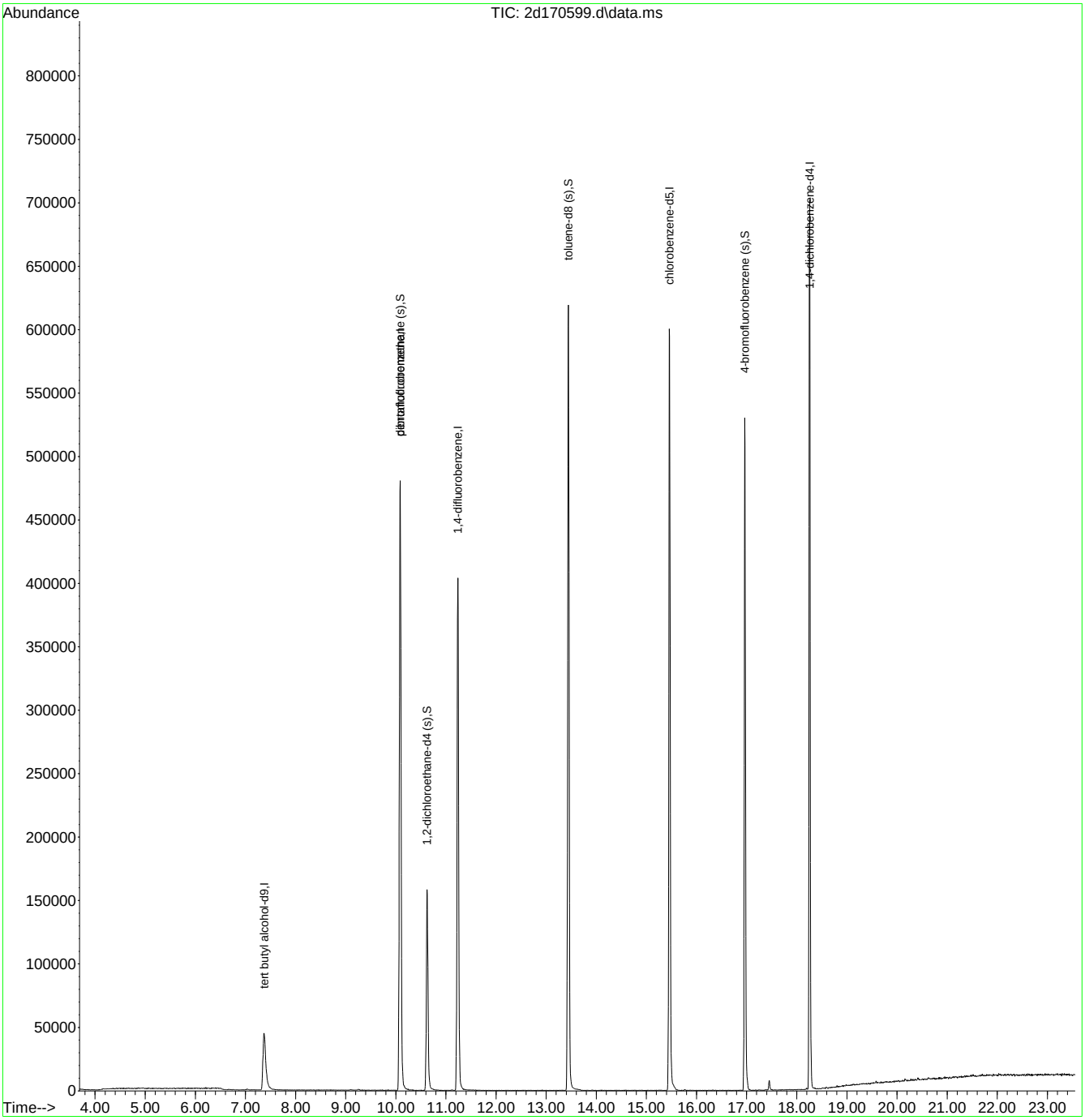
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.373	65	108373	500.00	ug/L	-0.02
5) pentafluorobenzene	10.089	168	291610	50.00	ug/L	-0.02
50) 1,4-difluorobenzene	11.237	114	413410	50.00	ug/L	-0.02
72) chlorobenzene-d5	15.457	117	400024	50.00	ug/L	-0.02
96) 1,4-dichlorobenzene-d4	18.257	152	187511	50.00	ug/L	-0.01
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.089	113	130457	49.90	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.80%			
51) 1,2-dichloroethane-d4 (s)	10.623	65	128805	43.41	ug/L	-0.02
Spiked Amount 50.000	Range 81 - 124		Recovery = 86.82%			
73) toluene-d8 (s)	13.444	98	493351	51.19	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.38%			
97) 4-bromofluorobenzene (s)	16.962	95	176671	52.84	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.68%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\Complete\dayton 20171006\v2d7158\
Data File : 2d170599.d
Acq On : 4 Oct 2017 9:37 pm
Operator : BridgetK
Sample : mb Inst : MS2D
Misc : MS20651,V2D7158,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 11 03:19:04 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7159\
Data File : 2d170636a.d
Acq On : 5 Oct 2017 10:58 pm
Operator : BridgetK
Sample : mb2 Inst : MS2D
Misc : MS20600,V2D7158,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 09 00:44:12 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 05 10:21:48 2017
Response via : Initial Calibration

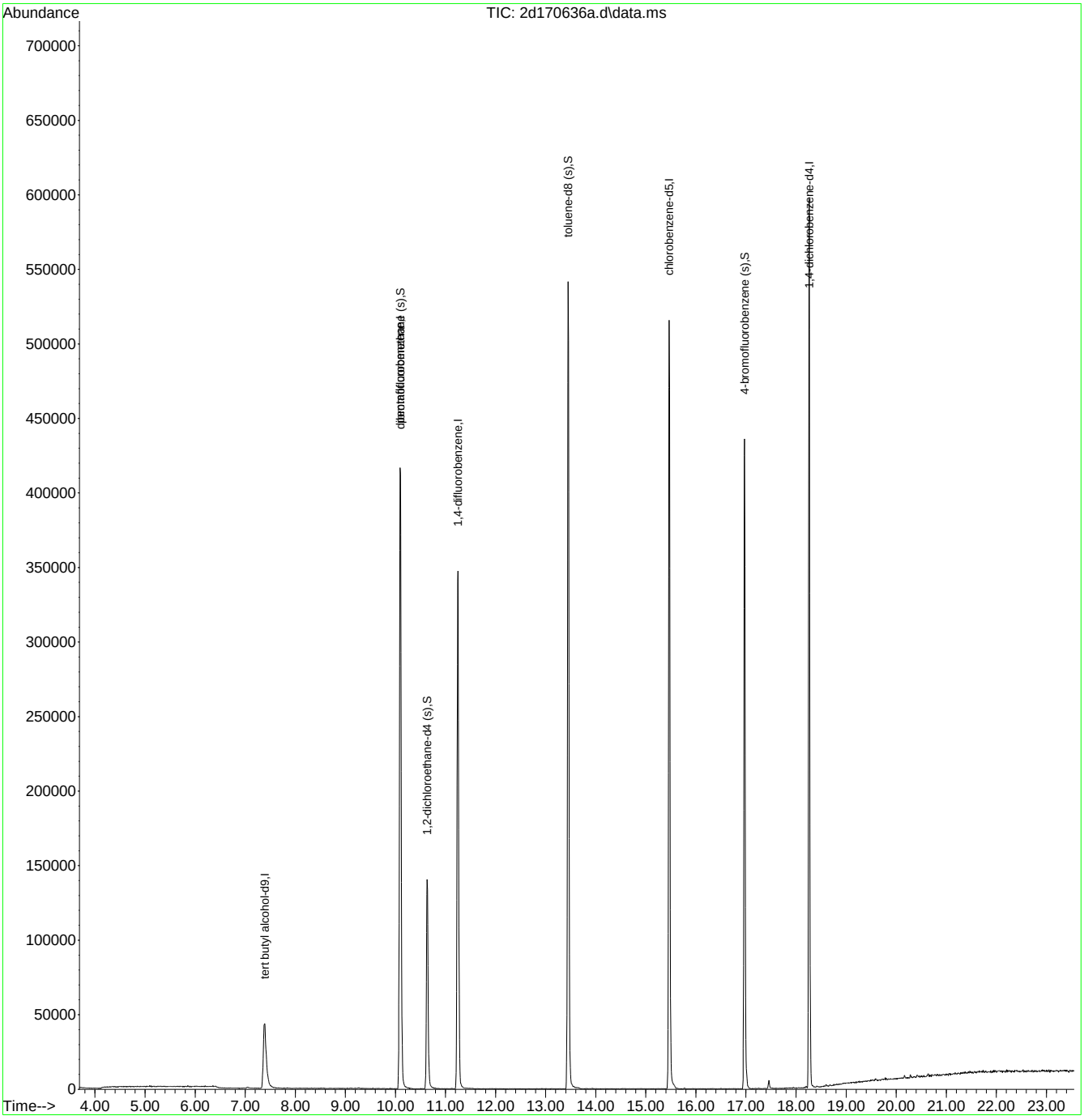
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.388	65	110909	500.00	ug/L	0.00
5) pentafluorobenzene	10.094	168	255778	50.00	ug/L	-0.01
50) 1,4-difluorobenzene	11.247	114	358397	50.00	ug/L	0.00
72) chlorobenzene-d5	15.468	117	340095	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	18.262	152	160263	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.099	113	112982	49.27	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.54%			
51) 1,2-dichloroethane-d4 (s)	10.634	65	114696	44.59	ug/L	-0.01
Spiked Amount 50.000	Range 81 - 124		Recovery = 89.18%			
73) toluene-d8 (s)	13.449	98	424584	51.82	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.64%			
97) 4-bromofluorobenzene (s)	16.973	95	147141	51.49	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.98%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7159\
Data File : 2d170636a.d
Acq On : 5 Oct 2017 10:58 pm
Operator : BridgetK
Sample : mb2 Inst : MS2D
Misc : MS20600,V2D7158,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 09 00:44:12 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 05 10:21:48 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7158\
Data File : 2d170600.d
Acq On : 4 Oct 2017 10:07 pm
Operator : BridgetK
Sample : bs Inst : MS2D
Misc : MS20595,V2D7158,5,,,,1
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 05 10:48:31 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 05 10:21:48 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.367	65	98770	500.00	ug/L		-0.02
5) pentafluorobenzene	10.089	168	274850	50.00	ug/L		-0.02
50) 1,4-difluorobenzene	11.237	114	391868	50.00	ug/L		-0.02
72) chlorobenzene-d5	15.463	117	389862	50.00	ug/L		-0.01
96) 1,4-dichlorobenzene-d4	18.257	152	206552	50.00	ug/L		-0.01
System Monitoring Compounds							
42) dibromofluoromethane (s)	10.089	113	121330	49.24	ug/L		-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.48%				
51) 1,2-dichloroethane-d4 (s)	10.623	65	122125	43.42	ug/L		-0.02
Spiked Amount 50.000	Range 81 - 124		Recovery = 86.84%				
73) toluene-d8 (s)	13.439	98	463267	49.32	ug/L		-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.64%				
97) 4-bromofluorobenzene (s)	16.962	95	180526	49.02	ug/L		-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.04%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.504	59	63605	267.70	ug/L		99
3) ethyl alcohol	5.983	45	142604	6690.10	ug/L		99
4) 1,4-dioxane	12.175	88	29048	1414.77	ug/L		99
6) chlorodifluoromethane	3.870	51	184773	51.59	ug/L		99
7) dichlorodifluoromethane	3.849	85	199664	56.29	ug/L		99
8) chloromethane	4.185	50	230869	57.42	ug/L		100
9) vinyl chloride	4.447	62	228093	55.95	ug/L		100
10) bromomethane	5.081	94	138539	53.26	ug/L		99
11) chloroethane	5.260	64	105201	55.65	ug/L		97
12) trichlorofluoromethane	5.768	101	205292	51.86	ug/L		99
13) ethyl ether	6.183	74	70982	54.02	ug/L		94
14) acrolein	6.429	56	24261	48.77	ug/L		89
15) 1,1-dichloroethene	6.612	96	121294	49.67	ug/L		93
16) freon 113	6.612	151	113082	49.83	ug/L		99
17) 2-chloropropane	6.371	43	241172	49.82	ug/L		93
18) acetone	6.670	58	35574	181.41	ug/L	#	77
19) acetonitrile	7.137	41	152224	459.79	ug/L		96
20) iodomethane	6.890	142	257577	49.28	ug/L		95
21) carbon disulfide	7.021	76	462002	51.44	ug/L		95
22) methylene chloride	7.388	84	139627	51.21	ug/L		90
23) methyl acetate	7.189	43	90909	45.46	ug/L		99
24) methyl tert butyl ether	7.808	73	360587	46.05	ug/L		97
25) trans-1,2-dichloroethene	7.824	96	126908	51.05	ug/L		100
26) hexane	8.222	57	165757	47.94	ug/L		96
27) di-isopropyl ether	8.531	45	425955	47.52	ug/L		95
28) 2-butanone	9.360	72	44906	191.03	ug/L	#	86
29) 1,1-dichloroethane	8.489	63	237071	50.77	ug/L		99
30) chloroprene	8.626	53	175545	45.64	ug/L		95
31) acrylonitrile	7.766	53	43934	47.46	ug/L		98
32) vinyl acetate	8.505	86	18901	47.79	ug/L	#	87
33) ethyl tert-butyl ether	9.098	59	423772	47.74	ug/L		98
34) ethyl acetate	9.417	45	16133	48.69	ug/L	#	72
35) 2,2-dichloropropane	9.402	77	146512	38.57	ug/L		92
36) cis-1,2-dichloroethene	9.381	96	144511	51.68	ug/L		94
37) propionitrile	9.470	54	165389	517.79	ug/L		96
38) tert-Butyl Formate	9.926	59	25920	15.04	ug/L		97
39) bromochloromethane	9.753	128	71757	48.28	ug/L		99
40) tetrahydrofuran	9.832	72	14254	47.93	ug/L	#	79
41) chloroform	9.842	83	219169	47.47	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7158\
Data File : 2d170600.d
Acq On : 4 Oct 2017 10:07 pm
Operator : BridgetK
Sample : bs Inst : MS2D
Misc : MS20595,V2D7158,5,,,,1
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 05 10:48:31 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 05 10:21:48 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) methacrylonitrile	9.711	67	45652	46.20	ug/L		88
44) 1,1,1-trichloroethane	10.172	97	189646	46.86	ug/L		99
45) cyclohexane	10.277	84	199917	56.45	ug/L		84
46) 1,1-dichloropropene	10.403	75	165509	49.21	ug/L		99
47) isobutyl alcohol	10.435	43	44745	415.81	ug/L		96
48) carbon tetrachloride	10.429	117	168138	45.84	ug/L		99
49) tert-amyl alcohol	10.602	73	27450	227.62	ug/L		95
52) benzene	10.733	78	501610	48.50	ug/L		99
53) iso-octane	10.807	57	509393	47.81	ug/L		95
54) tert-amyl methyl ether	10.833	73	367625	45.34	ug/L		98
55) heptane	11.032	57	86764	45.81	ug/L		97
56) isopropyl acetate	10.702	87	22034	47.29	ug/L	#	78
57) 1,2-dichloroethane	10.739	62	148264	41.40	ug/L		99
58) n-butyl alcohol	11.410	56	154179	2488.53	ug/L		95
59) ethyl acrylate	11.730	55	135925	46.98	ug/L		97
60) trichloroethene	11.667	130	137930	49.13	ug/L		97
61) 2-nitropropane	12.715	41	24469	40.05	ug/L		91
62) 2-chloroethyl vinyl ether	12.773	63	249034	244.89	ug/L		99
63) methyl methacrylate	12.086	100	28359	49.92	ug/L	#	81
64) 1,2-dichloropropane	12.018	63	135768	50.47	ug/L		97
65) dibromomethane	12.201	93	77670	45.56	ug/L		93
66) methylcyclohexane	11.981	83	253147	51.57	ug/L		97
67) bromodichloromethane	12.390	83	168141	48.05	ug/L		100
68) epichlorohydrin	12.904	57	49309	220.39	ug/L		95
69) cis-1,3-dichloropropene	13.035	75	209970	49.14	ug/L		90
70) 4-methyl-2-pentanone	13.213	58	171824	190.70	ug/L		91
71) 3-methyl-1-butanol	13.234	55	102728	989.44	ug/L		93
74) toluene	13.538	92	310923	48.74	ug/L		98
75) trans-1,3-dichloropropene	13.806	75	180519	48.82	ug/L		99
76) ethyl methacrylate	13.864	69	155476	48.25	ug/L		93
77) 1,1,2-trichloroethane	14.084	83	100209	50.09	ug/L		97
78) 3,3-dimethyl-1-butanol	14.608	57	113154	484.98	ug/L		97
79) tetrachloroethene	14.320	164	124323	46.45	ug/L		98
80) 1,3-dichloropropane	14.330	76	188783	49.45	ug/L		94
81) 2-hexanone	14.377	58	158668	194.78	ug/L		90
82) butyl acetate	14.508	56	77578	49.84	ug/L		85
83) dibromochloromethane	14.660	129	138328	47.98	ug/L		99
84) 1,2-dibromoethane	14.854	107	125702	48.65	ug/L		99
85) n-butyl ether	15.505	57	583349	55.10	ug/L		99
86) chlorobenzene	15.499	112	374417	48.78	ug/L		99
87) 1,1,1,2-tetrachloroethane	15.589	131	139780	48.10	ug/L		96
88) ethylbenzene	15.609	91	603769	48.18	ug/L		99
89) m,p-xylene	15.756	91	923750	93.88	ug/L		98
90) o-xylene	16.296	106	248958	48.50	ug/L		98
91) styrene	16.312	104	408528	51.03	ug/L		93
92) butyl acrylate	16.139	55	250920	48.08	ug/L		98
93) bromoform	16.595	173	107764	50.08	ug/L		98
94) isopropylbenzene	16.747	105	651863	48.15	ug/L		100
95) cis-1,4-dichloro-2-butene	16.821	88	19297	25.75	ug/L		91
98) bromobenzene	17.177	156	184148	49.16	ug/L		97
99) 1,1,2,2-tetrachloroethane	17.093	83	163555	51.14	ug/L		99
100) trans-1,4-dichloro-2-b...	17.156	53	15980	26.58	ug/L	#	3
101) 1,2,3-trichloropropane	17.172	110	38528	47.46	ug/L	#	86
102) n-propylbenzene	17.240	91	750049	51.46	ug/L		99
103) 2-chlorotoluene	17.376	126	164723	49.55	ug/L		97
104) 4-chlorotoluene	17.492	91	442935	48.55	ug/L		97
105) 1,3,5-trimethylbenzene	17.424	105	531210	47.36	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7158\
Data File : 2d170600.d
Acq On : 4 Oct 2017 10:07 pm
Operator : BridgetK
Sample : bs Inst : MS2D
Misc : MS20595,V2D7158,5,,,,1
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 05 10:48:31 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 05 10:21:48 2017
Response via : Initial Calibration

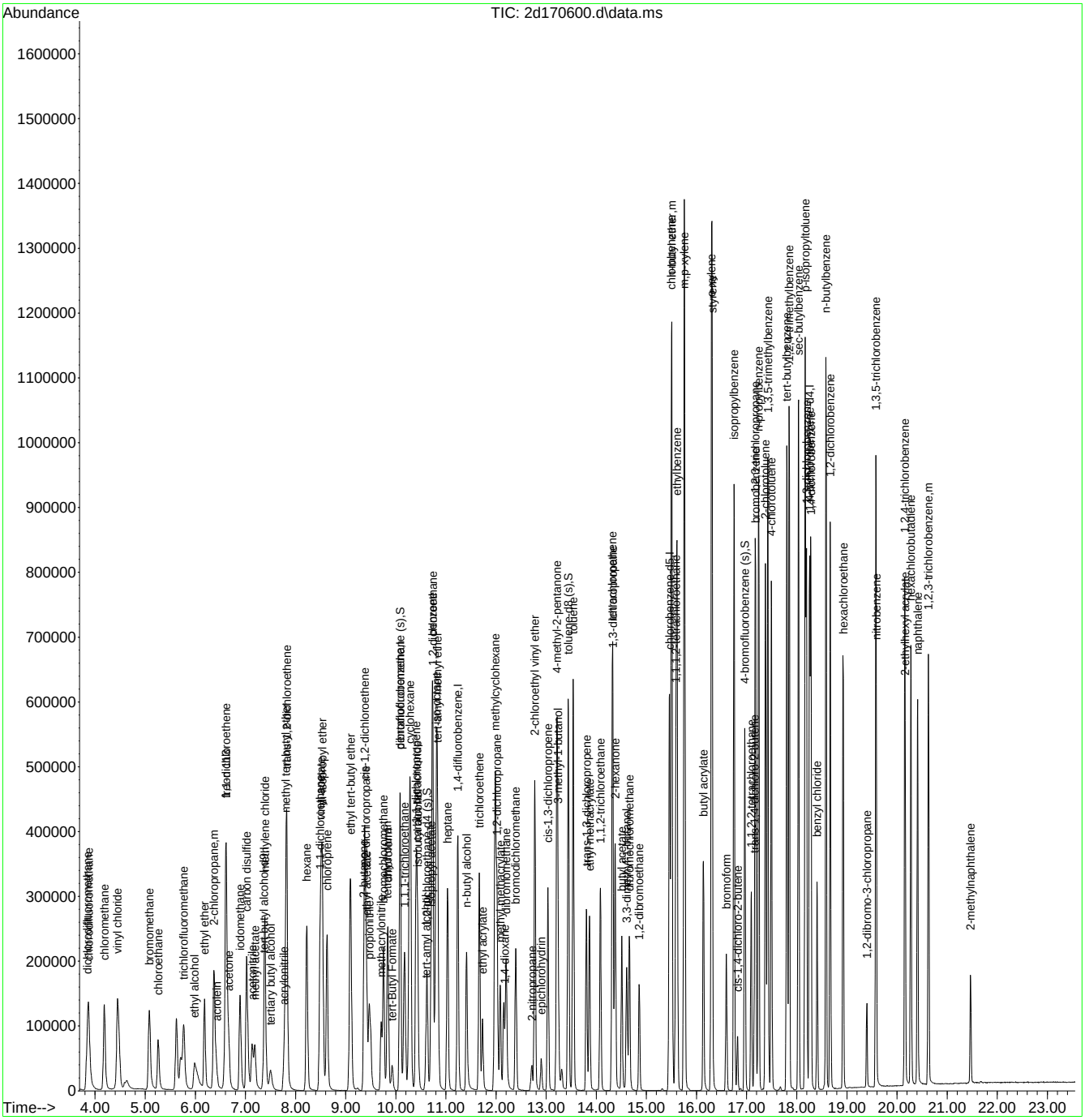
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) tert-butylbenzene	17.801	119	487790	48.20	ug/L	99
107) 1,2,4-trimethylbenzene	17.848	105	558098	49.03	ug/L	99
108) sec-butylbenzene	18.037	105	747472	51.08	ug/L	99
109) 1,3-dichlorobenzene	18.194	146	330261	48.89	ug/L	99
110) p-isopropyltoluene	18.168	119	620040	50.30	ug/L	98
111) 1,4-dichlorobenzene	18.283	146	329069	48.98	ug/L	99
112) 1,2-dichlorobenzene	18.666	146	347583	50.55	ug/L	99
113) benzyl chloride	18.404	91	213572	38.89	ug/L	98
114) n-butylbenzene	18.582	92	311705	53.70	ug/L	99
115) 1,2-dibromo-3-chloropr...	19.400	157	36726	47.50	ug/L	96
116) nitrobenzene	19.589	77	5803	58.54	ug/L	99
117) 1,3,5-trichlorobenzene	19.578	180	316669	48.52	ug/L	99
118) hexachlorobutadiene	20.276	225	153911	47.77	ug/L	98
119) naphthalene	20.412	128	466754	47.62	ug/L	99
120) 2-ethylhexyl acrylate	20.166	70	14623	7.93	ug/L	95
121) 1,2,4-trichlorobenzene	20.155	180	252850	46.22	ug/L	99
122) 1,2,3-trichlorobenzene	20.627	180	225273	45.38	ug/L	99
123) hexachloroethane	18.928	201	123307	51.22	ug/L	94
124) 2-methylnaphthalene	21.466	142	84245	19.02	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7158\
Data File : 2d170600.d
Acq On : 4 Oct 2017 10:07 pm
Operator : BridgetK
Sample : bs Inst : MS2D
Misc : MS20595,V2D7158,5,,,,1
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 05 10:48:31 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 05 10:21:48 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7159\
Data File : 2d170638.d
Acq On : 6 Oct 2017 12:12 am
Operator : BridgetK
Sample : jc51834-4ms Inst : MS2D
Misc : MS20600,V2D7158,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 09 00:45:25 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.378	65	107523	500.00	ug/L	-0.01
5) pentafluorobenzene	10.094	168	240440	50.00	ug/L	-0.01
50) 1,4-difluorobenzene	11.242	114	342759	50.00	ug/L	-0.01
72) chlorobenzene-d5	15.468	117	339110	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	18.262	152	175289	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.094	113	107127	49.70	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.40%			
51) 1,2-dichloroethane-d4 (s)	10.629	65	108648	44.16	ug/L	-0.02
Spiked Amount 50.000	Range 81 - 124		Recovery = 88.32%			
73) toluene-d8 (s)	13.449	98	403971	49.45	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.90%			
97) 4-bromofluorobenzene (s)	16.967	95	152461	48.78	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.56%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.509	59	73593	284.53	ug/L	98
3) ethyl alcohol	5.999	45	147260	6369.51	ug/L	98
4) 1,4-dioxane	12.186	88	32162	1438.92	ug/L	98
6) chlorodifluoromethane	3.881	51	157160	50.16	ug/L	97
7) dichlorodifluoromethane	3.865	85	194960	62.83	ug/L	96
8) chloromethane	4.201	50	243644	69.26	ug/L	100
9) vinyl chloride	4.463	62	231438	64.89	ug/L	100
10) bromomethane	5.092	94	137410	60.39	ug/L	95
11) chloroethane	5.270	64	103427	62.55	ug/L	96
12) trichlorofluoromethane	5.784	101	199511	57.62	ug/L	99
13) ethyl ether	6.193	74	68601	59.68	ug/L	94
14) acrolein	6.434	56	26116	60.02	ug/L	99
15) 1,1-dichloroethene	6.633	96	121425	56.85	ug/L	89
16) freon 113	6.633	151	106853	53.82	ug/L	99
17) 2-chloropropane	6.387	43	217294	51.31	ug/L	93
18) acetone	6.675	58	41020	239.12	ug/L #	74
19) acetonitrile	7.147	41	165788	572.42	ug/L	95
20) iodomethane	6.911	142	243917	53.35	ug/L	97
21) carbon disulfide	7.063	76	445425	56.69	ug/L	96
22) methylene chloride	7.404	84	130712	54.80	ug/L	91
23) methyl acetate	7.200	43	77995	44.59	ug/L	98
24) methyl tert butyl ether	7.818	73	345287	50.41	ug/L	99
25) trans-1,2-dichloroethene	7.834	96	117620	54.08	ug/L	96
26) hexane	8.232	57	151707	50.16	ug/L	96
27) di-isopropyl ether	8.537	45	392532	50.05	ug/L	98
28) 2-butanone	9.375	72	50027	243.28	ug/L #	83
29) 1,1-dichloroethane	8.495	63	217715	53.30	ug/L	99
30) chloroprene	8.636	53	162926	48.42	ug/L	94
31) acrylonitrile	7.771	53	46257	57.12	ug/L	96
32) vinyl acetate	8.516	86	14510	41.93	ug/L	95
33) ethyl tert-butyl ether	9.103	59	389178	50.12	ug/L	97
34) ethyl acetate	9.423	45	11933	41.17	ug/L	92
35) 2,2-dichloropropane	9.412	77	127793	38.46	ug/L	92
36) cis-1,2-dichloroethene	9.386	96	136202	55.68	ug/L	91
37) propionitrile	9.480	54	180691	646.65	ug/L	99
38) tert-Butyl Formate	10.178	59	1837	1.22	ug/L #	23
39) bromochloromethane	9.763	128	69177	53.21	ug/L	93
40) tetrahydrofuran	9.837	72	15027	57.76	ug/L	89
41) chloroform	9.847	83	203370	50.35	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7159\
Data File : 2d170638.d
Acq On : 6 Oct 2017 12:12 am
Operator : BridgetK
Sample : jc51834-4ms Inst : MS2D
Misc : MS20600,V2D7158,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 09 00:45:25 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) methacrylonitrile	9.716	67	48985	56.67	ug/L		82
44) 1,1,1-trichloroethane	10.183	97	173750	49.08	ug/L		98
45) cyclohexane	10.283	84	204840	66.12	ug/L	#	74
46) 1,1-dichloropropene	10.414	75	154344	52.46	ug/L		96
47) isobutyl alcohol	10.440	43	50023	531.38	ug/L		94
48) carbon tetrachloride	10.435	117	157322	49.03	ug/L		99
49) tert-amyl alcohol	10.618	73	31347	297.14	ug/L		95
52) benzene	10.739	78	468541	51.79	ug/L		98
53) iso-octane	10.817	57	480236	51.53	ug/L		95
54) tert-amyl methyl ether	10.838	73	349173	49.23	ug/L		99
55) heptane	11.038	57	77336	46.68	ug/L		98
56) isopropyl acetate	10.712	87	19686	48.30	ug/L	#	80
57) 1,2-dichloroethane	10.749	62	143681	45.87	ug/L		99
58) n-butyl alcohol	11.420	56	176780	3262.13	ug/L		92
59) ethyl acrylate	11.740	55	140678	55.59	ug/L		98
60) trichloroethene	11.672	130	129378	52.69	ug/L		96
61) 2-nitropropane	12.721	41	25408	47.54	ug/L		93
63) methyl methacrylate	12.091	100	29122	58.61	ug/L	#	84
64) 1,2-dichloropropane	12.023	63	126902	53.94	ug/L		96
65) dibromomethane	12.207	93	76472	51.29	ug/L		96
66) methylcyclohexane	11.992	83	239120	55.69	ug/L		96
67) bromodichloromethane	12.401	83	157656	51.51	ug/L		100
68) epichlorohydrin	12.909	57	3636	18.58	ug/L		87
69) cis-1,3-dichloropropene	13.040	75	203159	54.36	ug/L		89
70) 4-methyl-2-pentanone	13.224	58	185425	235.28	ug/L		91
71) 3-methyl-1-butanol	13.245	55	114142	1256.89	ug/L		91
74) toluene	13.544	92	291218	52.49	ug/L		98
75) trans-1,3-dichloropropene	13.811	75	175137	54.45	ug/L		98
76) ethyl methacrylate	13.869	69	156213	55.74	ug/L		91
77) 1,1,2-trichloroethane	14.089	83	96728	55.59	ug/L		96
78) 3,3-dimethyl-1-butanol	14.613	57	126958	625.58	ug/L		98
79) tetrachloroethene	14.325	164	115694	49.69	ug/L		98
80) 1,3-dichloropropane	14.335	76	183042	55.12	ug/L		94
81) 2-hexanone	14.383	58	174745	246.62	ug/L		89
82) butyl acetate	14.514	56	61891	45.71	ug/L		86
83) dibromochloromethane	14.666	129	136133	54.29	ug/L		99
84) 1,2-dibromoethane	14.865	107	124410	55.35	ug/L		96
85) n-butyl ether	15.510	57	544223	59.09	ug/L		100
86) chlorobenzene	15.505	112	354539	53.10	ug/L		98
87) 1,1,1,2-tetrachloroethane	15.594	131	131786	52.13	ug/L		98
88) ethylbenzene	15.615	91	559254	51.31	ug/L		99
89) m,p-xylene	15.762	91	854325	99.82	ug/L		100
90) o-xylene	16.307	106	233326	52.25	ug/L		93
91) styrene	16.317	104	378212	54.32	ug/L		92
92) butyl acrylate	16.144	55	248649	54.78	ug/L		97
93) bromoform	16.600	173	109153	58.31	ug/L		99
94) isopropylbenzene	16.752	105	611305	51.91	ug/L		99
95) cis-1,4-dichloro-2-butene	16.826	88	41426	56.97	ug/L		92
98) bromobenzene	17.182	156	170534	53.65	ug/L		99
99) 1,1,2,2-tetrachloroethane	17.098	83	166881	61.49	ug/L		100
100) trans-1,4-dichloro-2-b...	17.161	53	30005	54.78	ug/L	#	74
101) 1,2,3-trichloropropane	17.177	110	39607	57.49	ug/L		94
102) n-propylbenzene	17.245	91	694455	56.14	ug/L		99
103) 2-chlorotoluene	17.382	126	153096	54.27	ug/L		98
104) 4-chlorotoluene	17.497	91	410322	52.99	ug/L		97
105) 1,3,5-trimethylbenzene	17.429	105	495190	52.03	ug/L		99
106) tert-butylbenzene	17.812	119	463105	53.92	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7159\
Data File : 2d170638.d
Acq On : 6 Oct 2017 12:12 am
Operator : BridgetK
Sample : jc51834-4ms Inst : MS2D
Misc : MS20600,V2D7158,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 09 00:45:25 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration

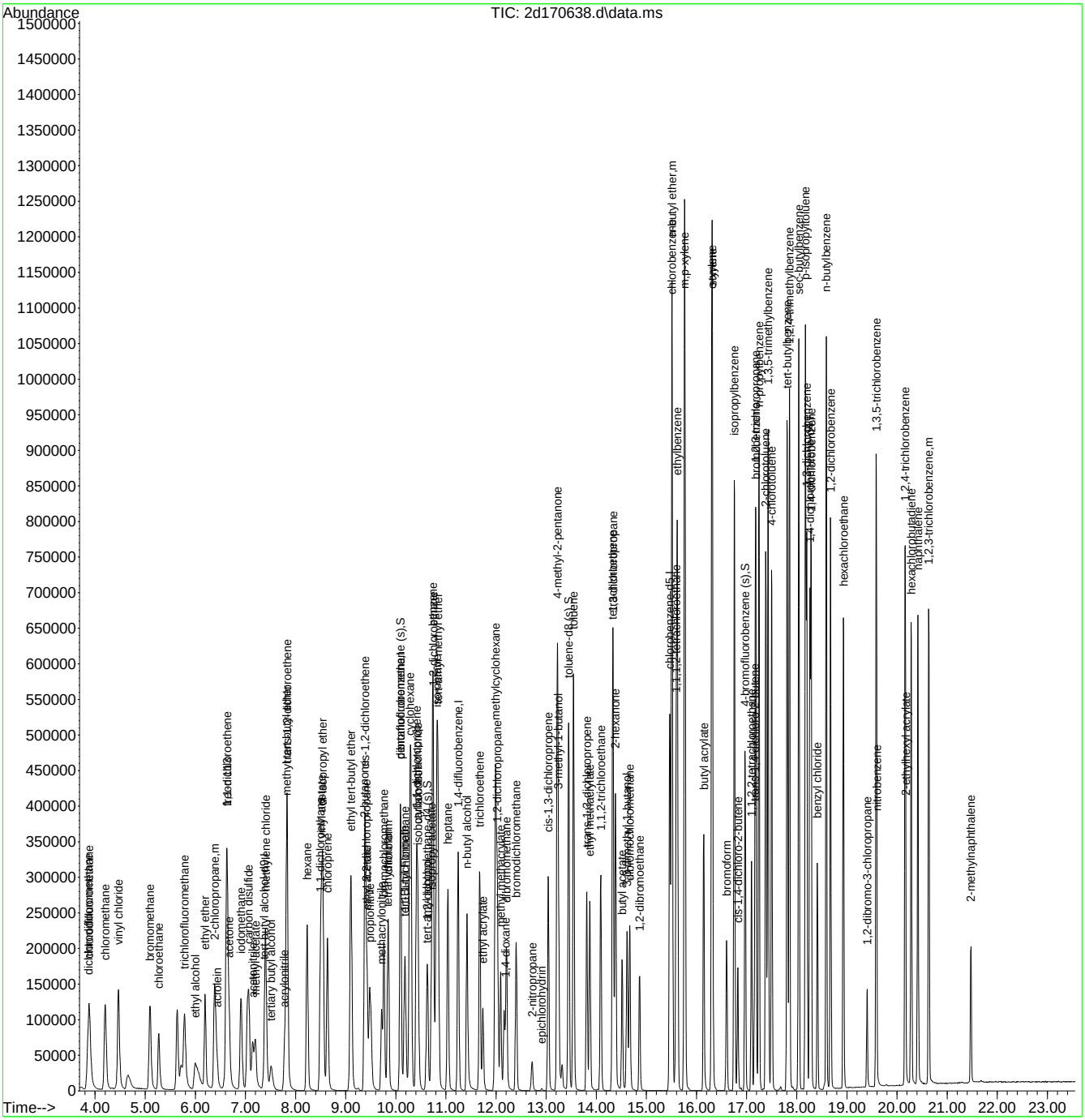
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 1,2,4-trimethylbenzene	17.853	105	513248	53.14	ug/L	98
108) sec-butylbenzene	18.042	105	702865	56.60	ug/L	99
109) 1,3-dichlorobenzene	18.200	146	305284	53.25	ug/L	99
110) p-isopropyltoluene	18.173	119	584475	55.87	ug/L	98
111) 1,4-dichlorobenzene	18.289	146	306393	53.74	ug/L	98
112) 1,2-dichlorobenzene	18.677	146	324968	55.69	ug/L	98
113) benzyl chloride	18.409	91	213509	45.81	ug/L	99
114) n-butylbenzene	18.587	92	288386	58.54	ug/L	99
115) 1,2-dibromo-3-chloropr...	19.405	157	39620	60.39	ug/L	98
116) nitrobenzene	19.599	77	6836	79.02	ug/L	100
117) 1,3,5-trichlorobenzene	19.589	180	297396	53.70	ug/L	99
118) hexachlorobutadiene	20.286	225	148812	54.42	ug/L	99
119) naphthalene	20.417	128	508852	61.17	ug/L	99
120) 2-ethylhexyl acrylate	20.176	70	12044	7.76	ug/L	98
121) 1,2,4-trichlorobenzene	20.166	180	250307	53.81	ug/L	99
122) 1,2,3-trichlorobenzene	20.632	180	230675	54.64	ug/L	100
123) hexachloroethane	18.934	201	125989	61.67	ug/L	94
124) 2-methylnaphthalene	21.476	142	98492	24.66	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7159\
Data File : 2d170638.d
Acq On : 6 Oct 2017 12:12 am
Operator : BridgetK
Sample : jc51834-4ms Inst : MS2D
Misc : MS20600,V2D7158,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 09 00:45:25 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7159\
Data File : 2d170639.d
Acq On : 6 Oct 2017 12:43 am
Operator : BridgetK
Sample : jc51834-4msd Inst : MS2D
Misc : MS20600,V2D7158,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 09 00:45:47 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.383	65	109048	500.00	ug/L	0.00
5) pentafluorobenzene	10.094	168	247585	50.00	ug/L	-0.01
50) 1,4-difluorobenzene	11.247	114	352495	50.00	ug/L	0.00
72) chlorobenzene-d5	15.468	117	348201	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	18.262	152	179414	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.099	113	110241	49.67	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.34%			
51) 1,2-dichloroethane-d4 (s)	10.634	65	111881	44.22	ug/L	-0.01
Spiked Amount 50.000	Range 81 - 124		Recovery = 88.44%			
73) toluene-d8 (s)	13.449	98	413224	49.26	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.52%			
97) 4-bromofluorobenzene (s)	16.967	95	156859	49.03	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.06%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.514	59	74745	284.94	ug/L	94
3) ethyl alcohol	5.999	45	146062	6238.62	ug/L	98
4) 1,4-dioxane	12.186	88	34595	1526.12	ug/L	94
6) chlorodifluoromethane	3.881	51	154062	47.75	ug/L	98
7) dichlorodifluoromethane	3.854	85	171399	53.64	ug/L	98
8) chloromethane	4.195	50	236897	65.40	ug/L	100
9) vinyl chloride	4.457	62	227737	62.01	ug/L	98
10) bromomethane	5.087	94	136191	58.12	ug/L	99
11) chloroethane	5.265	64	102989	60.48	ug/L	97
12) trichlorofluoromethane	5.773	101	191666	53.75	ug/L	98
13) ethyl ether	6.193	74	70746	59.77	ug/L	96
14) acrolein	6.439	56	25134	56.09	ug/L	93
15) 1,1-dichloroethene	6.623	96	117958	53.63	ug/L	90
16) freon 113	6.628	151	96301	47.11	ug/L	99
17) 2-chloropropane	6.382	43	219054	50.24	ug/L	93
18) acetone	6.675	58	40207	227.61	ug/L #	75
19) acetonitrile	7.147	41	165357	554.46	ug/L	96
20) iodomethane	6.906	142	243676	51.76	ug/L	96
21) carbon disulfide	7.053	76	440231	54.42	ug/L	95
22) methylene chloride	7.399	84	134499	54.76	ug/L	92
23) methyl acetate	7.194	43	77492	43.02	ug/L	98
24) methyl tert butyl ether	7.818	73	358500	50.83	ug/L	100
25) trans-1,2-dichloroethene	7.834	96	121032	54.05	ug/L	96
26) hexane	8.232	57	135868	43.62	ug/L	96
27) di-isopropyl ether	8.542	45	405882	50.26	ug/L	91
28) 2-butanone	9.375	72	50524	238.60	ug/L #	85
29) 1,1-dichloroethane	8.495	63	228078	54.23	ug/L	98
30) chloroprene	8.636	53	167725	48.41	ug/L	93
31) acrylonitrile	7.771	53	47451	56.90	ug/L	98
32) vinyl acetate	8.521	86	14999	42.10	ug/L #	85
33) ethyl tert-butyl ether	9.103	59	405240	50.68	ug/L	97
34) ethyl acetate	9.428	45	11978	40.13	ug/L #	68
35) 2,2-dichloropropane	9.412	77	129998	37.99	ug/L	92
36) cis-1,2-dichloroethene	9.386	96	139719	55.47	ug/L	93
37) propionitrile	9.480	54	186222	647.21	ug/L	99
38) tert-Butyl Formate	10.172	59	1923	1.24	ug/L #	23
39) bromochloromethane	9.763	128	70633	52.76	ug/L	95
40) tetrahydrofuran	9.837	72	15387	57.44	ug/L	89
41) chloroform	9.852	83	210893	50.70	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7159\
Data File : 2d170639.d
Acq On : 6 Oct 2017 12:43 am
Operator : BridgetK
Sample : jc51834-4msd Inst : MS2D
Misc : MS20600,V2D7158,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 09 00:45:47 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) methacrylonitrile	9.716	67	50457	56.68	ug/L		89
44) 1,1,1-trichloroethane	10.183	97	177225	48.61	ug/L		99
45) cyclohexane	10.282	84	187107	58.65	ug/L	#	76
46) 1,1-dichloropropene	10.413	75	157600	52.02	ug/L		97
47) isobutyl alcohol	10.440	43	51730	533.66	ug/L		94
48) carbon tetrachloride	10.440	117	158233	47.89	ug/L		98
49) tert-amyl alcohol	10.613	73	32587	299.98	ug/L		91
52) benzene	10.739	78	481434	51.75	ug/L		99
53) iso-octane	10.817	57	411853	42.97	ug/L		97
54) tert-amyl methyl ether	10.838	73	364162	49.93	ug/L		97
55) heptane	11.043	57	71284	41.84	ug/L		96
56) isopropyl acetate	10.712	87	20075	47.90	ug/L	#	86
57) 1,2-dichloroethane	10.744	62	147420	45.76	ug/L		98
58) n-butyl alcohol	11.420	56	179703	3224.48	ug/L		93
59) ethyl acrylate	11.740	55	146159	56.16	ug/L		98
60) trichloroethene	11.677	130	132838	52.60	ug/L		99
61) 2-nitropropane	12.720	41	26845	48.84	ug/L		92
63) methyl methacrylate	12.091	100	30003	58.72	ug/L	#	85
64) 1,2-dichloropropane	12.028	63	131203	54.22	ug/L		100
65) dibromomethane	12.212	93	79091	51.58	ug/L		94
66) methylcyclohexane	11.992	83	219933	49.80	ug/L		96
67) bromodichloromethane	12.401	83	164990	52.41	ug/L		99
68) epichlorohydrin	12.909	57	3430	17.04	ug/L		95
69) cis-1,3-dichloropropene	13.040	75	211067	54.92	ug/L		90
70) 4-methyl-2-pentanone	13.224	58	193035	238.17	ug/L		88
71) 3-methyl-1-butanol	13.245	55	117471	1257.82	ug/L		92
74) toluene	13.549	92	300186	52.69	ug/L		99
75) trans-1,3-dichloropropene	13.811	75	180488	54.65	ug/L		99
76) ethyl methacrylate	13.874	69	158577	55.11	ug/L		91
77) 1,1,2-trichloroethane	14.089	83	101010	56.53	ug/L		98
78) 3,3-dimethyl-1-butanol	14.613	57	134529	645.58	ug/L		99
79) tetrachloroethene	14.330	164	117017	48.95	ug/L		98
80) 1,3-dichloropropane	14.335	76	189072	55.45	ug/L		94
81) 2-hexanone	14.382	58	184944	254.20	ug/L	#	88
82) butyl acetate	14.514	56	62909	45.25	ug/L	#	82
83) dibromochloromethane	14.666	129	140214	54.45	ug/L		100
84) 1,2-dibromoethane	14.865	107	126687	54.90	ug/L		100
85) n-butyl ether	15.510	57	561587	59.39	ug/L		100
86) chlorobenzene	15.504	112	366938	53.52	ug/L		98
87) 1,1,1,2-tetrachloroethane	15.594	131	135130	52.06	ug/L		98
88) ethylbenzene	15.620	91	570845	51.01	ug/L		100
89) m,p-xylene	15.767	91	875193	99.59	ug/L		99
90) o-xylene	16.307	106	238672	52.06	ug/L		97
91) styrene	16.317	104	387734	54.23	ug/L		93
92) butyl acrylate	16.144	55	255469	54.81	ug/L		97
93) bromoform	16.600	173	112384	58.47	ug/L		99
94) isopropylbenzene	16.758	105	621765	51.42	ug/L		99
95) cis-1,4-dichloro-2-butene	16.826	88	37060	50.46	ug/L		92
98) bromobenzene	17.182	156	175872	54.05	ug/L		100
99) 1,1,2,2-tetrachloroethane	17.098	83	171354	61.69	ug/L		100
100) trans-1,4-dichloro-2-b...	17.161	53	29092	52.07	ug/L	#	73
101) 1,2,3-trichloropropane	17.177	110	40387	57.27	ug/L		93
102) n-propylbenzene	17.245	91	701636	55.42	ug/L		99
103) 2-chlorotoluene	17.387	126	155882	53.99	ug/L		97
104) 4-chlorotoluene	17.497	91	422647	53.33	ug/L		97
105) 1,3,5-trimethylbenzene	17.429	105	506516	51.99	ug/L		99
106) tert-butylbenzene	17.811	119	472071	53.70	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7159\
Data File : 2d170639.d
Acq On : 6 Oct 2017 12:43 am
Operator : BridgetK
Sample : jc51834-4msd Inst : MS2D
Misc : MS20600,V2D7158,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 09 00:45:47 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration

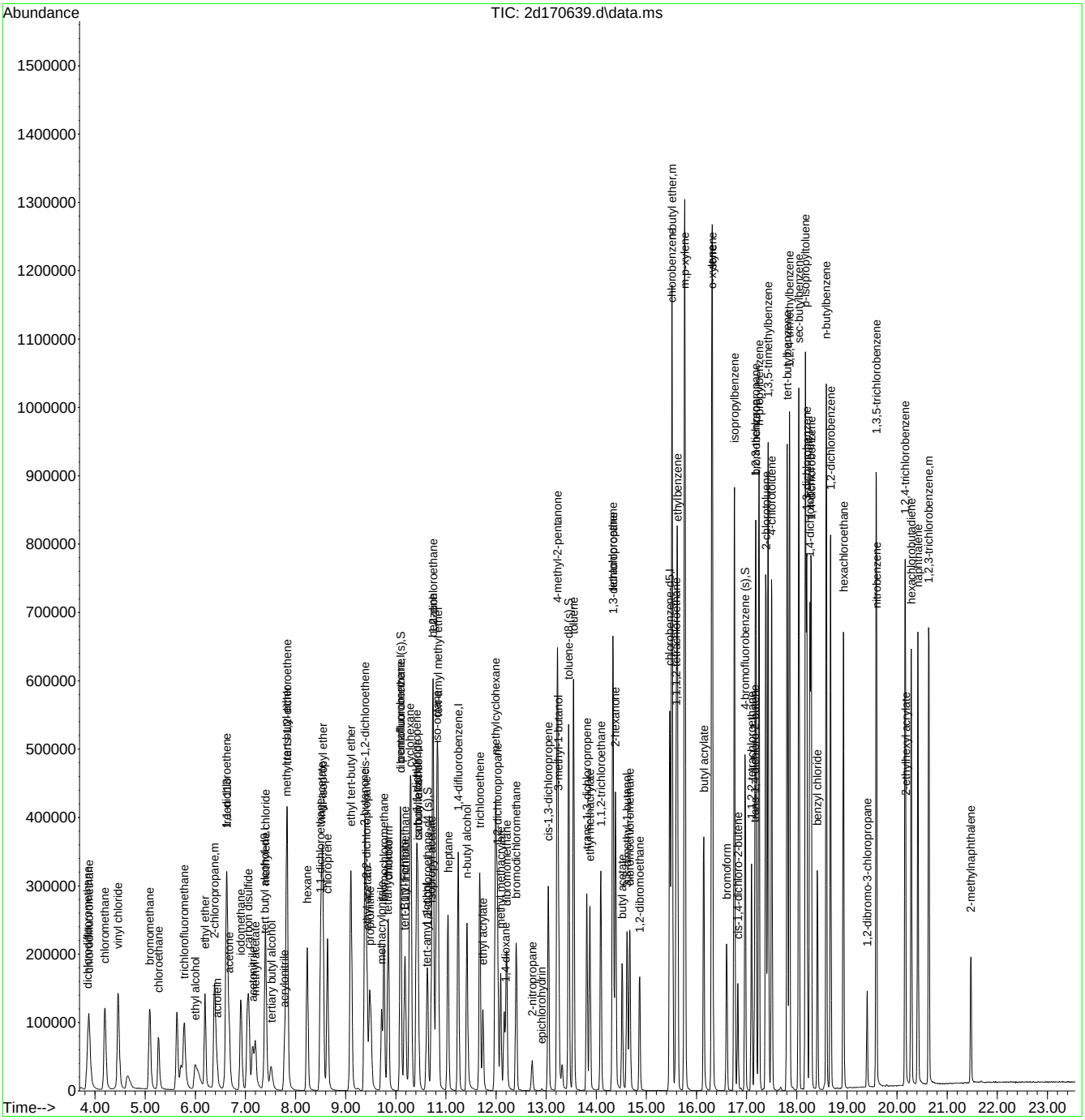
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 1,2,4-trimethylbenzene	17.853	105	525656	53.17	ug/L	99
108) sec-butylbenzene	18.042	105	707912	55.70	ug/L	99
109) 1,3-dichlorobenzene	18.199	146	313382	53.41	ug/L	99
110) p-isopropyltoluene	18.173	119	582083	54.36	ug/L	99
111) 1,4-dichlorobenzene	18.288	146	314955	53.97	ug/L	98
112) 1,2-dichlorobenzene	18.676	146	330498	55.34	ug/L	99
113) benzyl chloride	18.409	91	216611	45.41	ug/L	99
114) n-butylbenzene	18.587	92	287015	56.93	ug/L	99
115) 1,2-dibromo-3-chloropr...	19.405	157	39943	59.48	ug/L	98
116) nitrobenzene	19.594	77	6691	75.81	ug/L	91
117) 1,3,5-trichlorobenzene	19.589	180	299974	52.92	ug/L	98
118) hexachlorobutadiene	20.286	225	148975	53.23	ug/L	99
119) naphthalene	20.417	128	510003	59.90	ug/L	99
120) 2-ethylhexyl acrylate	20.176	70	11649	7.44	ug/L	89
121) 1,2,4-trichlorobenzene	20.166	180	250743	52.68	ug/L	98
122) 1,2,3-trichlorobenzene	20.632	180	230886	53.45	ug/L	100
123) hexachloroethane	18.933	201	126513	60.50	ug/L	93
124) 2-methylnaphthalene	21.476	142	96219	23.73	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7159\
Data File : 2d170639.d
Acq On : 6 Oct 2017 12:43 am
Operator : BridgetK
Sample : jc51834-4msd Inst : MS2D
Misc : MS20600,V2D7158,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

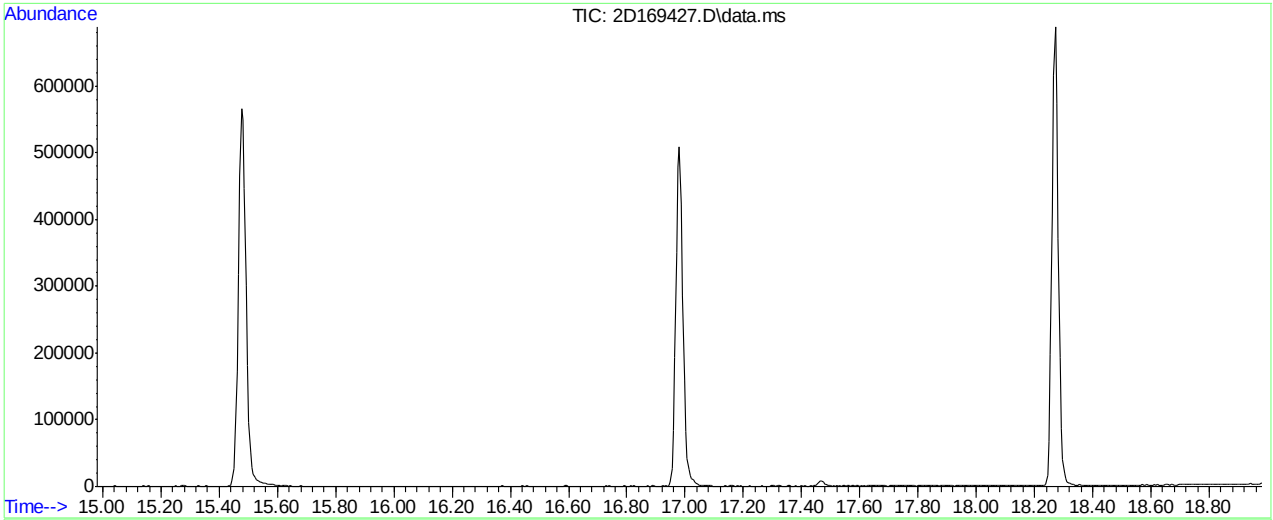
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 09 00:45:47 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration

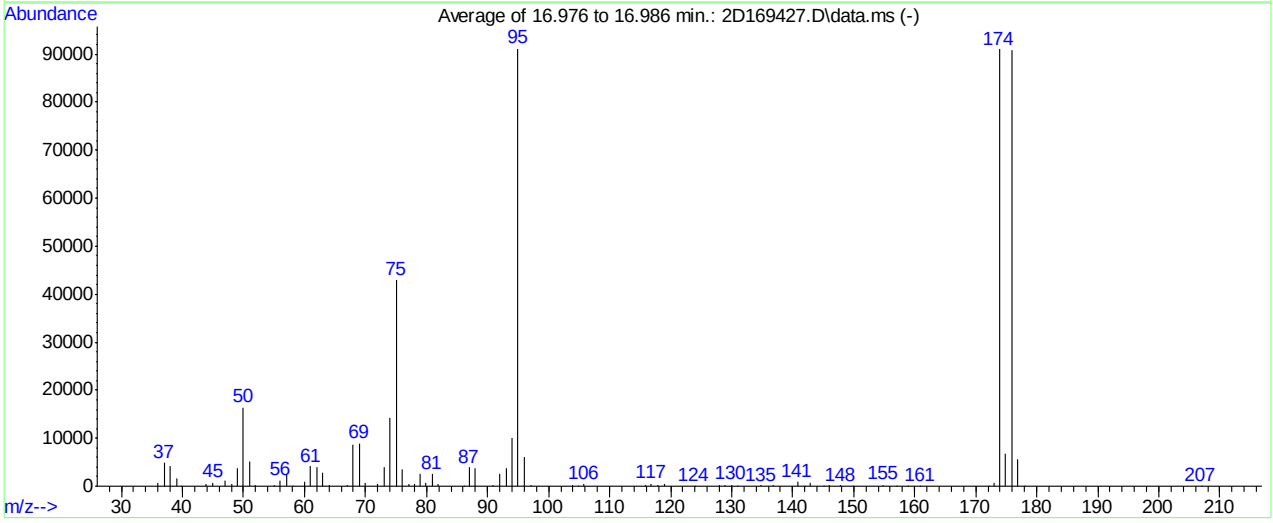


BFB

Data File : C:\msdchem\1\DATA\2D169427.D Vial: 1
Acq On : 24 Aug 2017 12:13 pm Operator: JiaminC
Sample : bfb Inst : MS2D
Misc : MS19320,V2D7107,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2D7107.M (RTE Integrator)
Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um





AutoFind: Scans 2650, 2651, 2652; Background Corrected with Scan 2641

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.0	16419	PASS
75	95	30	60	47.1	42914	PASS
95	95	100	100	100.0	91173	PASS
96	95	5	9	6.6	6054	PASS
173	174	0.00	2	0.8	698	PASS
174	95	50	120	99.8	91034	PASS
175	174	5	9	7.5	6870	PASS
176	174	95	101	99.7	90778	PASS
177	176	5	9	6.1	5576	PASS

2D169427.D M2D7107.M Mon Aug 28 11:50:26 2017 GCMS2D

Average of 16.976 to 16.986 min.: 2D169427.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	824	51.00	5105	66.95	262	78.90	2563
37.00	4839	52.00	211	68.00	8539	79.95	651
38.05	4109	55.00	241	69.00	8880	80.90	2554
39.00	1554	56.00	1272	70.00	709	81.85	529
39.90	22	57.00	2248	71.95	459	86.05	117
43.95	549	57.95	91	73.00	3951	87.00	3862
45.00	748	60.00	837	74.00	14165	87.95	3835
47.00	1109	61.00	4157	75.00	42914	90.90	358
48.05	518	62.00	4016	76.00	3580	92.00	2540
49.00	3761	63.00	2926	77.05	558	93.00	3675
50.00	16419	64.00	266	77.95	404	94.00	10106

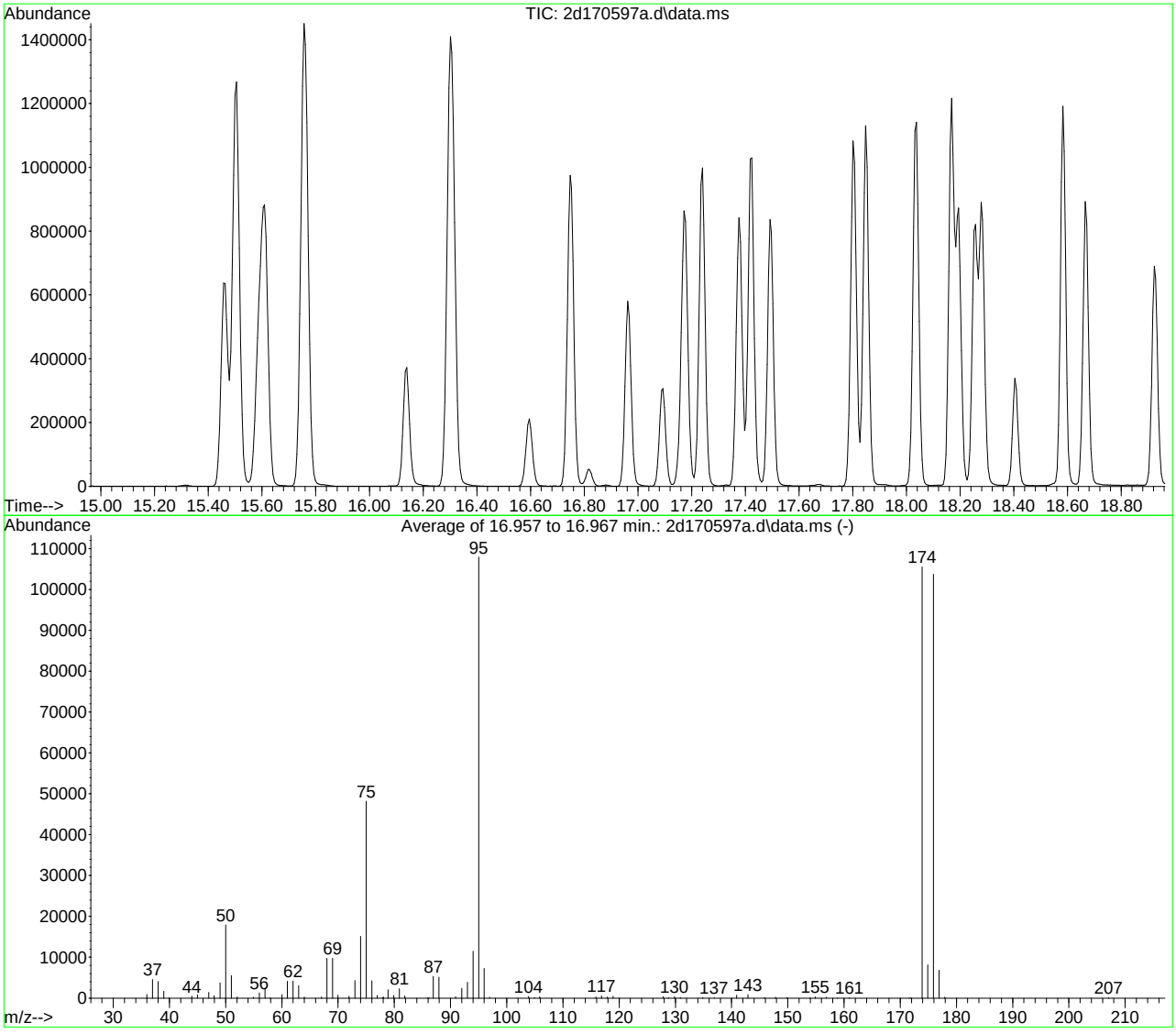
Average of 16.976 to 16.986 min.: 2D169427.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	91173	127.90	325	147.85	203	176.90	5576
96.00	6054	128.90	128	149.80	47	177.90	101
97.05	191	129.95	348	154.90	245	206.90	52
103.90	348	130.85	86	156.95	101		
104.80	56	134.85	155	158.85	120		
105.85	380	136.85	169	160.90	94		
115.85	335	140.85	871	172.10	46		
116.85	561	141.90	43	173.00	698		
117.85	340	142.90	825	173.90	91034		
118.90	457	145.00	49	174.90	6870		
123.90	40	145.90	167	175.90	90778		

BFB

Data File : C:\msdchem\1\data\v2d7158\2d170597a.d Vial: 23
Acq On : 4 Oct 2017 8:35 pm Operator: BridgetK
Sample : bfb Inst : MS2D
Misc : MS20595,V2D7158,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2D7107.M (RTE Integrator)
Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um



AutoFind: Scans 2532, 2533, 2534; Background Corrected with Scan 2523

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.6	17893	PASS
75	95	30	60	44.6	48165	PASS
95	95	100	100	100.0	107888	PASS
96	95	5	9	6.7	7244	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	97.8	105491	PASS
175	174	5	9	7.7	8133	PASS
176	174	95	101	98.3	103664	PASS
177	176	5	9	6.6	6821	PASS

2d170597a.d M2D7107.M Thu Oct 05 21:14:39 2017

Average of 16.957 to 16.967 min.: 2d170597a.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	919	51.00	5520	67.05	265	78.05	318
37.00	4535	52.05	287	68.00	9716	78.90	2028
38.00	4052	54.95	247	69.00	9750	79.90	674
39.00	1644	56.00	1312	70.00	699	80.90	2273
39.95	42	57.00	2410	71.95	505	81.85	515
44.00	464	57.90	59	73.00	4303	85.90	71
45.00	793	60.00	836	74.00	15098	86.15	103
47.00	1441	61.00	4144	75.00	48165	86.95	5323
47.95	568	62.00	4197	76.00	4235	87.95	5100
49.00	3764	63.00	3063	76.95	654	90.90	321
50.00	17893	64.00	281	77.90	141	92.00	2455

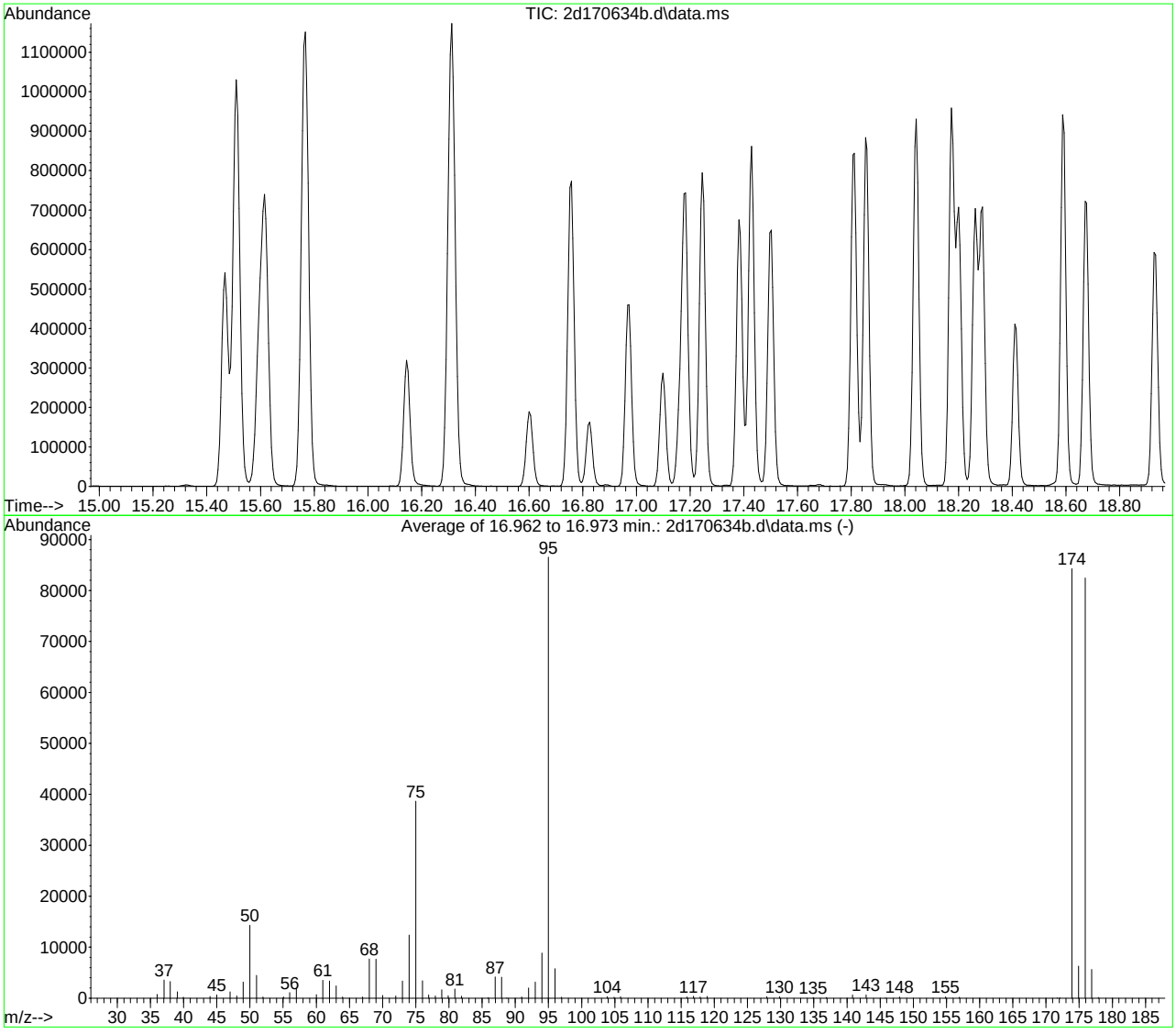
Average of 16.957 to 16.967 min.: 2d170597a.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.00	3865	118.90	486	149.85	93	176.90	6821
94.00	11495	127.85	331	153.90	50	177.90	205
95.00	107888	128.80	106	154.90	296	207.05	97
96.00	7244	129.85	369	156.85	231		
96.95	192	130.90	140	158.80	41		
103.90	433	134.85	176	160.95	81		
104.95	143	136.90	109	171.60	57		
105.85	378	140.90	744	171.90	66		
115.85	307	142.90	861	173.90	105491		
116.85	544	145.85	155	174.90	8133		
117.90	301	147.80	233	175.90	103664		

BFB

Data File : C:\msdchem\1\data\v2d7159\2d170634b.d Vial: 3
Acq On : 5 Oct 2017 8:50 pm Operator: BridgetK
Sample : bfb Inst : MS2D
Misc : MS20600,V2D7159,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2D7107.M (RTE Integrator)
Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um



AutoFind: Scans 2533, 2534, 2535; Background Corrected with Scan 2525

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.5	14304	PASS
75	95	30	60	44.7	38653	PASS
95	95	100	100	100.0	86547	PASS
96	95	5	9	6.7	5797	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	97.4	84312	PASS
175	174	5	9	7.5	6285	PASS
176	174	95	101	97.8	82461	PASS
177	176	5	9	6.8	5641	PASS

2d170634b.d M2D7107.M Mon Oct 09 01:11:16 2017

Average of 16.962 to 16.973 min.: 2d170634b.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	726	51.00	4478	68.00	7711	79.90	491
37.05	3563	51.95	204	69.00	7631	80.90	1778
38.00	3276	55.05	226	70.00	544	81.90	380
39.05	1223	56.00	1111	72.00	413	85.90	58
39.95	169	57.00	1903	73.00	3342	86.95	4163
44.00	345	60.00	681	74.00	12389	87.95	4099
45.00	643	61.00	3521	75.00	38653	88.70	54
47.00	1252	62.00	3379	76.00	3418	90.95	230
48.00	446	63.00	2409	76.95	646	92.00	2006
49.00	3142	63.95	249	77.95	449	93.00	3139
50.00	14304	67.00	229	78.90	1627	94.00	8878

Average of 16.962 to 16.973 min.: 2d170634b.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	86547	129.85	304	173.90	84312		
96.00	5797	134.90	116	174.90	6285		
96.95	176	136.90	114	175.90	82461		
103.85	297	140.85	625	176.90	5641		
104.90	187	142.90	635	177.90	108		
105.85	284	145.80	47				
115.85	240	147.90	229				
116.85	380	154.85	221				
117.85	245	156.95	168				
118.90	339	171.70	43				
127.90	283	172.10	50				

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169428.D
Acq On : 24 Aug 2017 12:46 pm
Operator : JiaminC
Sample : ic7107-0.2
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 28 11:36:08 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:26:27 2017
Response via : Initial Calibration

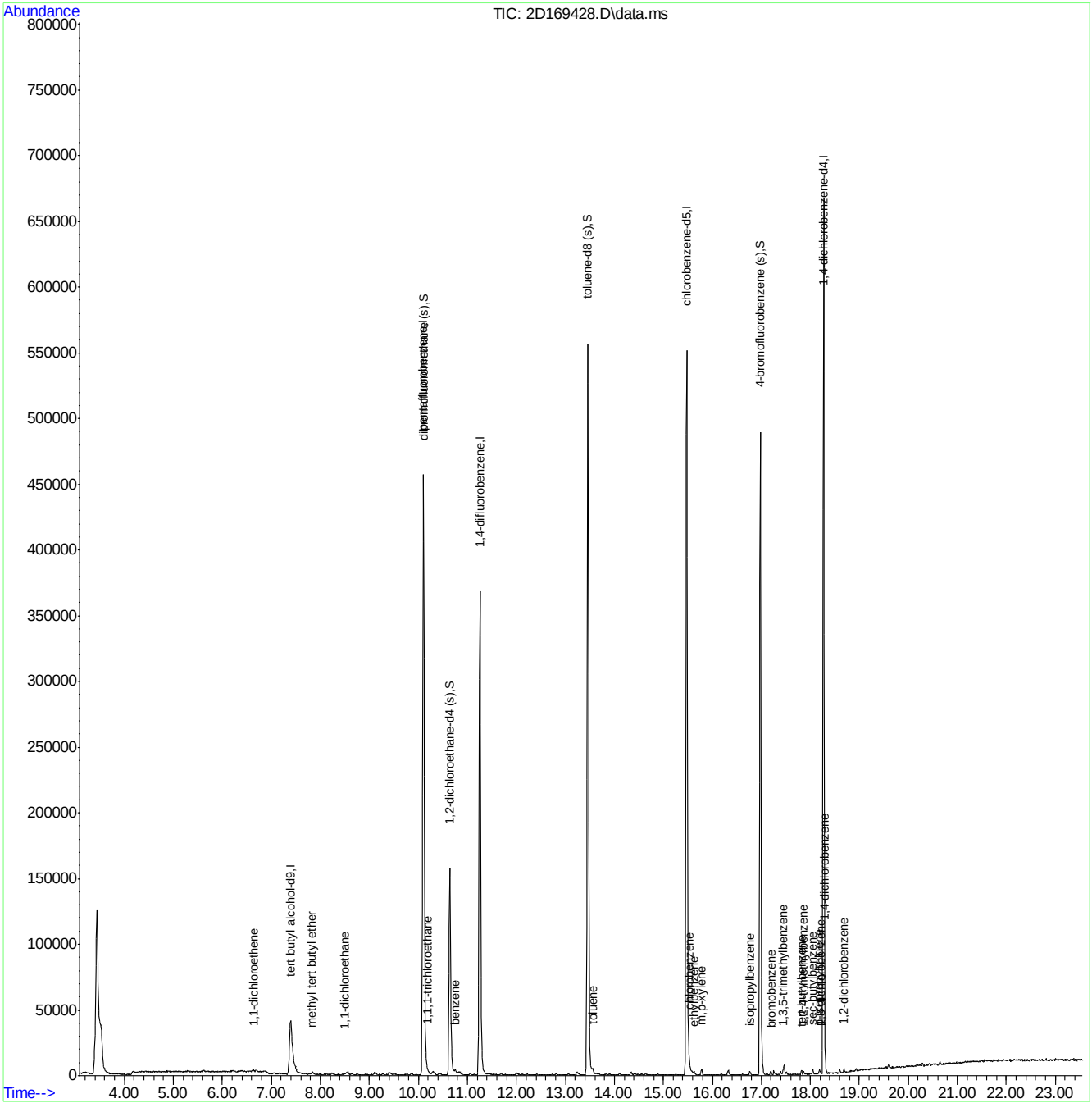
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.391	65	108687	500.00	ug/L		0.00
5) pentafluorobenzene	10.102	168	271782	50.00	ug/L		0.00
50) 1,4-difluorobenzene	11.256	114	374602	50.00	ug/L		0.00
72) chlorobenzene-d5	15.476	117	356096	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	18.271	152	175393	50.00	ug/L		0.00
System Monitoring Compounds							
42) dibromofluoromethane (s)	10.107	113	122786	50.45	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.90%				
51) 1,2-dichloroethane-d4 (s)	10.642	65	134143	49.88	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 99.76%				
73) toluene-d8 (s)	13.458	98	439949	51.56	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 103.12%				
97) 4-bromofluorobenzene (s)	16.981	95	164573	53.18	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 106.36%				
Target Compounds							Qvalue
15) 1,1-dichloroethene	6.642	96	545	0.23	ug/L	#	52
24) methyl tert butyl ether	7.827	73	1590	0.20	ug/L		53
29) 1,1-dichloroethane	8.503	63	914	0.20	ug/L		83
44) 1,1,1-trichloroethane	10.191	97	713	0.18	ug/L	#	60
52) benzene	10.752	78	2106	0.21	ug/L		93
74) toluene	13.557	92	1156	0.20	ug/L		85
86) chlorobenzene	15.523	112	1432	0.20	ug/L		96
88) ethylbenzene	15.633	91	2280	0.20	ug/L		87
89) m,p-xylene	15.780	91	3665	0.41	ug/L		98
94) isopropylbenzene	16.766	105	2421	0.19	ug/L		96
98) bromobenzene	17.201	156	633	0.20	ug/L	#	83
105) 1,3,5-trimethylbenzene	17.442	105	1919	0.20	ug/L		88
106) tert-butylbenzene	17.825	119	1655	0.19	ug/L		95
107) 1,2,4-trimethylbenzene	17.867	105	1940	0.20	ug/L		90
108) sec-butylbenzene	18.050	105	2313	0.18	ug/L		97
109) 1,3-dichlorobenzene	18.213	146	1166	0.20	ug/L		89
110) p-isopropyltoluene	18.182	119	1990	0.19	ug/L		93
111) 1,4-dichlorobenzene	18.292	146	1305	0.23	ug/L		71
112) 1,2-dichlorobenzene	18.685	146	1193	0.20	ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169428.D
Acq On : 24 Aug 2017 12:46 pm
Operator : JiaminC
Sample : ic7107-0.2
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 28 11:36:08 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:26:27 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169429.D
Acq On : 24 Aug 2017 1:17 pm
Operator : JiaminC
Sample : ic7107-0.5
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 28 11:37:20 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:21:53 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.397	65	108934	500.00	ug/L		0.00
5) pentafluorobenzene	10.107	168	275157	50.00	ug/L		0.00
50) 1,4-difluorobenzene	11.261	114	377959	50.00	ug/L		0.00
72) chlorobenzene-d5	15.481	117	361761	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	18.271	152	185640	50.00	ug/L		0.00
System Monitoring Compounds							
42) dibromofluoromethane (s)	10.113	113	121852	49.37	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.74%				
51) 1,2-dichloroethane-d4 (s)	10.647	65	135106	49.76	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 99.52%				
73) toluene-d8 (s)	13.463	98	442898	51.25	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 102.50%				
97) 4-bromofluorobenzene (s)	16.981	95	169263	51.92	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 103.84%				
Target Compounds							Qvalue
6) chlorodifluoromethane	3.889	51	1846	0.51	ug/L		65
8) chloromethane	4.177	50	2240	0.57	ug/L		88
9) vinyl chloride	4.445	62	2343	0.59	ug/L		93
11) chloroethane	5.284	64	946	0.50	ug/L		94
12) trichlorofluoromethane	5.777	101	1816	0.45	ug/L		84
13) ethyl ether	6.212	74	615	0.46	ug/L	#	67
15) 1,1-dichloroethene	6.636	96	1338	0.56	ug/L		89
16) freon 113	6.647	151	1148	0.50	ug/L		91
20) iodomethane	6.920	142	2668	0.51	ug/L		94
22) methylene chloride	7.407	84	1472	0.54	ug/L		87
24) methyl tert butyl ether	7.842	73	4449	0.58	ug/L		99
26) hexane	8.246	57	1774	0.51	ug/L		83
29) 1,1-dichloroethane	8.513	63	2479	0.53	ug/L		91
33) ethyl tert-butyl ether	9.122	59	4739	0.53	ug/L		88
39) bromochloromethane	9.782	128	791	0.54	ug/L	#	79
44) 1,1,1-trichloroethane	10.186	97	2137	0.52	ug/L		79
48) carbon tetrachloride	10.453	117	2014	0.55	ug/L		86
52) benzene	10.763	78	5667	0.58	ug/L		92
55) heptane	11.051	57	1003	0.55	ug/L		93
57) 1,2-dichloroethane	10.757	62	1923	0.56	ug/L		78
60) trichloroethene	11.691	130	1386	0.51	ug/L		78
64) 1,2-dichloropropane	12.037	63	1346	0.52	ug/L		83
65) dibromomethane	12.225	93	892	0.55	ug/L		92
66) methylcyclohexane	12.005	83	2625	0.56	ug/L		93
67) bromodichloromethane	12.414	83	1751	0.52	ug/L		90
69) cis-1,3-dichloropropene	13.059	75	2141	0.52	ug/L		99
74) toluene	13.562	92	3161	0.54	ug/L		93
75) trans-1,3-dichloropropene	13.830	75	1600	0.46	ug/L		85
77) 1,1,2-trichloroethane	14.102	83	921	0.50	ug/L		89
80) 1,3-dichloropropane	14.359	76	1805	0.51	ug/L		96
83) dibromochloromethane	14.679	129	1447	0.54	ug/L		85
84) 1,2-dibromoethane	14.878	107	1182	0.49	ug/L		79

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169429.D
Acq On : 24 Aug 2017 1:17 pm
Operator : JiaminC
Sample : ic7107-0.5
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 28 11:37:20 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:21:53 2017
Response via : Initial Calibration

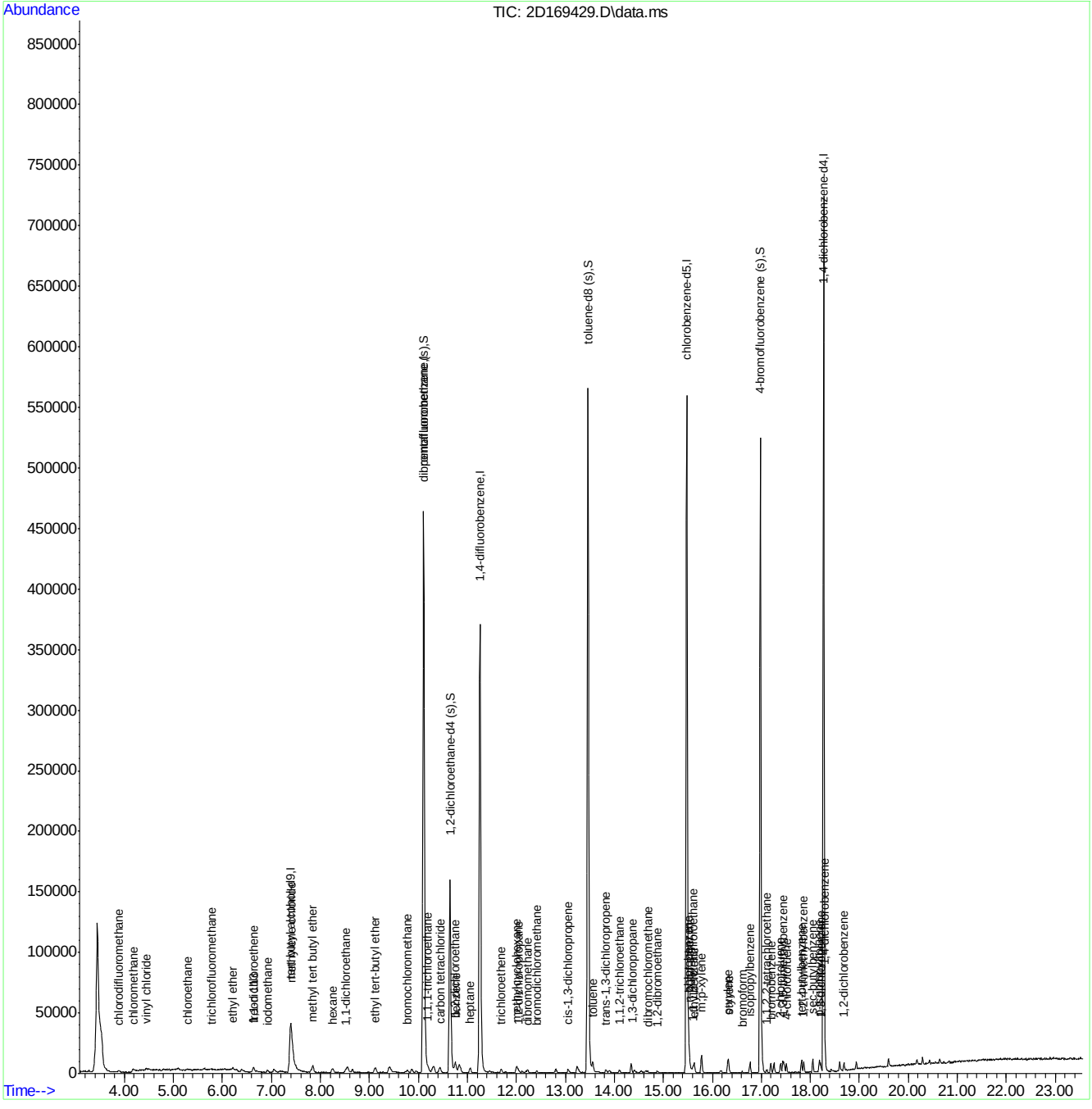
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
85)	n-butyl ether	15.529	57	5072	0.52	ug/L	97
86)	chlorobenzene	15.518	112	3837	0.55	ug/L	93
87)	1,1,1,2-tetrachloroethane	15.612	131	1404	0.52	ug/L	91
88)	ethylbenzene	15.633	91	6601	0.58	ug/L	95
89)	m,p-xylene	15.775	91	10455	1.17	ug/L	93
90)	o-xylene	16.320	106	2523	0.53	ug/L	85
91)	styrene	16.331	104	3732	0.50	ug/L	95
93)	bromoform	16.614	173	928	0.45	ug/L	89
94)	isopropylbenzene	16.771	105	7155	0.57	ug/L	99
98)	bromobenzene	17.196	156	1863	0.56	ug/L	92
99)	1,1,2,2-tetrachloroethane	17.112	83	1619	0.57	ug/L	95
103)	2-chlorotoluene	17.395	126	1524	0.51	ug/L	90
104)	4-chlorotoluene	17.510	91	4686	0.58	ug/L	90
105)	1,3,5-trimethylbenzene	17.437	105	5672	0.57	ug/L	98
106)	tert-butylbenzene	17.820	119	5156	0.58	ug/L	94
107)	1,2,4-trimethylbenzene	17.862	105	5560	0.55	ug/L	94
108)	sec-butylbenzene	18.050	105	7177	0.55	ug/L	98
109)	1,3-dichlorobenzene	18.213	146	3421	0.57	ug/L	96
110)	p-isopropyltoluene	18.182	119	5943	0.54	ug/L	98
111)	1,4-dichlorobenzene	18.297	146	3225	0.55	ug/L	80
112)	1,2-dichlorobenzene	18.685	146	3218	0.52	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169429.D
Acq On : 24 Aug 2017 1:17 pm
Operator : JiaminC
Sample : ic7107-0.5
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 28 11:37:20 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:21:53 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169430.D
Acq On : 24 Aug 2017 1:47 pm
Operator : JiaminC
Sample : ic7107-1
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 16:54:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:13:29 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.397	65	109301	500.00	ug/L		0.00
5) pentafluorobenzene	10.107	168	273726	50.00	ug/L		0.00
50) 1,4-difluorobenzene	11.255	114	376815	50.00	ug/L		0.00
72) chlorobenzene-d5	15.481	117	363332	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	18.271	152	185768	50.00	ug/L		0.00
System Monitoring Compounds							
42) dibromofluoromethane (s)	10.107	113	123502	50.35	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.70%				
51) 1,2-dichloroethane-d4 (s)	10.647	65	135325	49.99	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 99.98%				
73) toluene-d8 (s)	13.463	98	442403	51.14	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 102.28%				
97) 4-bromofluorobenzene (s)	16.981	95	169599	52.34	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 104.68%				
Target Compounds							Qvalue
3) ethyl alcohol	6.012	45	4019	163.38	ug/L		100
6) chlorodifluoromethane	3.873	51	3058	0.83	ug/L		90
8) chloromethane	4.183	50	3724	0.94	ug/L		98
9) vinyl chloride	4.445	62	3896	0.98	ug/L		89
10) bromomethane	5.090	94	2779	1.08	ug/L		98
11) chloroethane	5.278	64	1840	0.98	ug/L		94
12) trichlorofluoromethane	5.776	101	3469	0.85	ug/L		86
13) ethyl ether	6.206	74	1277	0.95	ug/L	#	68
15) 1,1-dichloroethene	6.636	96	2172	0.90	ug/L		83
16) freon 113	6.636	151	1719	0.73	ug/L	#	79
17) 2-chloropropane	6.400	43	5182	1.10	ug/L		98
18) acetone	6.699	58	745	3.87	ug/L		96
20) iodomethane	6.914	142	4615	0.87	ug/L		100
21) carbon disulfide	7.045	76	8468	0.94	ug/L		94
22) methylene chloride	7.412	84	2661	0.99	ug/L		87
23) methyl acetate	7.213	43	1997	1.00	ug/L		62
24) methyl tert butyl ether	7.837	73	7150	0.92	ug/L		93
25) trans-1,2-dichloroethene	7.853	96	2217	0.89	ug/L		84
26) hexane	8.246	57	3046	0.86	ug/L		92
27) di-isopropyl ether	8.550	45	8518	0.94	ug/L		84
29) 1,1-dichloroethane	8.503	63	4204	0.89	ug/L		96
30) chloroprene	8.650	53	3439	0.88	ug/L		90
33) ethyl tert-butyl ether	9.122	59	8133	0.91	ug/L		96
35) 2,2-dichloropropane	9.426	77	3821	1.01	ug/L		96
36) cis-1,2-dichloroethene	9.405	96	2528	0.89	ug/L		98
39) bromochloromethane	9.777	128	1367	0.92	ug/L	#	68
41) chloroform	9.866	83	4390	0.95	ug/L		98
44) 1,1,1-trichloroethane	10.191	97	3573	0.86	ug/L		93
46) 1,1-dichloropropene	10.427	75	3079	0.90	ug/L		90
48) carbon tetrachloride	10.448	117	3228	0.87	ug/L		96
52) benzene	10.752	78	9662	1.00	ug/L		99
53) iso-octane	10.826	57	8882	0.85	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169430.D
Acq On : 24 Aug 2017 1:47 pm
Operator : JiaminC
Sample : ic7107-1
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 16:54:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:13:29 2017
Response via : Initial Calibration

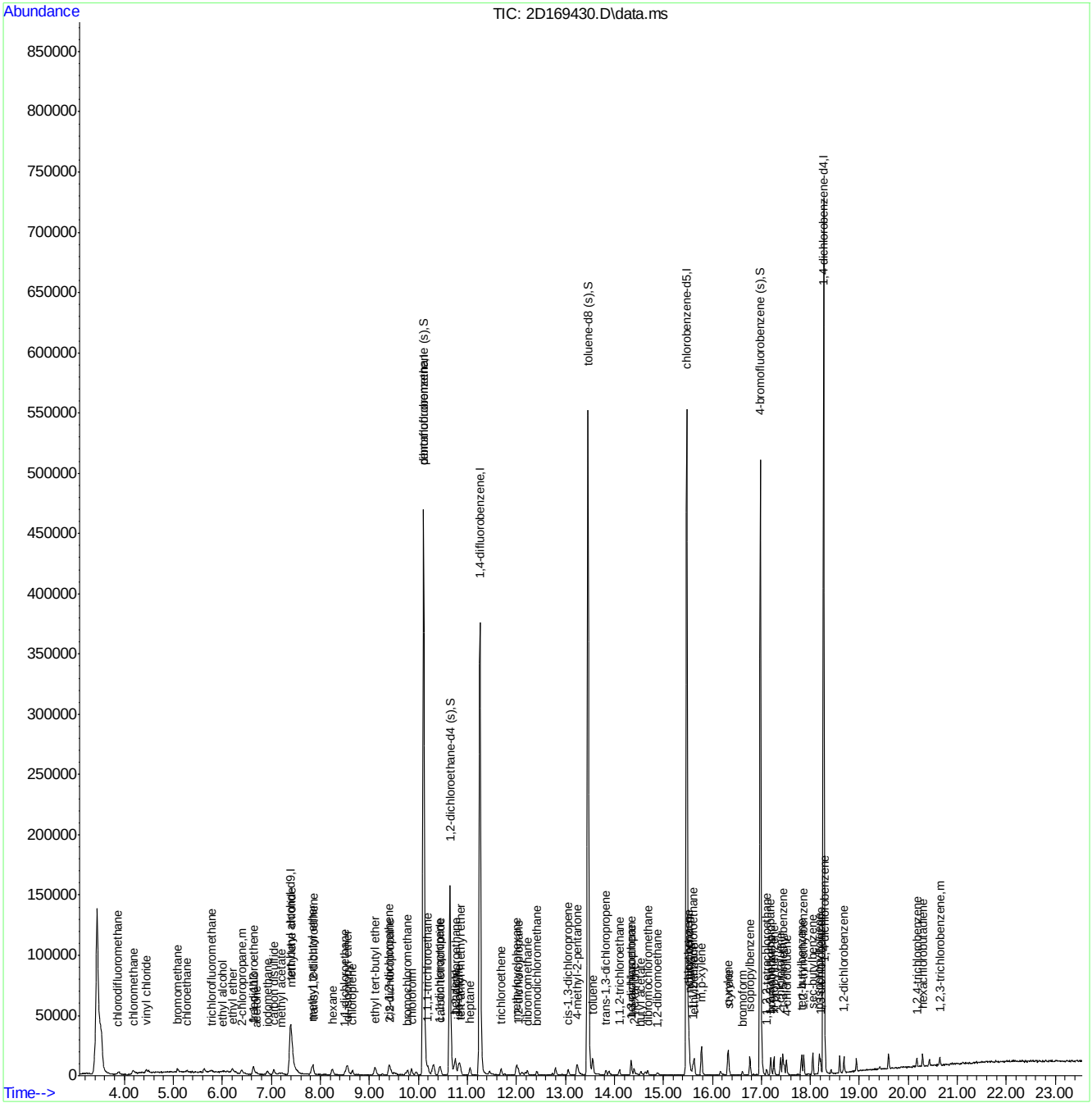
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
54) tert-amyl methyl ether	10.857	73	7287	0.93	ug/L		96
55) heptane	11.056	57	1550	0.84	ug/L		82
57) 1,2-dichloroethane	10.763	62	3043	0.88	ug/L		88
60) trichloroethene	11.691	130	2478	0.90	ug/L		90
64) 1,2-dichloropropane	12.042	63	2422	0.92	ug/L		88
65) dibromomethane	12.225	93	1426	0.86	ug/L		83
66) methylcyclohexane	12.005	83	3931	0.82	ug/L		95
67) bromodichloromethane	12.414	83	2924	0.85	ug/L		88
69) cis-1,3-dichloropropene	13.059	75	3535	0.84	ug/L		95
70) 4-methyl-2-pentanone	13.237	58	2998	3.36	ug/L		89
74) toluene	13.562	92	5845	0.99	ug/L		91
75) trans-1,3-dichloropropene	13.830	75	2767	0.76	ug/L		93
77) 1,1,2-trichloroethane	14.108	83	1656	0.87	ug/L	#	75
79) tetrachloroethene	14.344	164	2446	0.98	ug/L		93
80) 1,3-dichloropropane	14.354	76	3172	0.88	ug/L		89
81) 2-hexanone	14.401	58	2614	3.35	ug/L		89
82) butyl acetate	14.532	56	1322	0.89	ug/L	#	57
83) dibromochloromethane	14.684	129	2214	0.80	ug/L		98
84) 1,2-dibromoethane	14.878	107	2034	0.82	ug/L		87
85) n-butyl ether	15.523	57	8787	0.87	ug/L		94
86) chlorobenzene	15.518	112	6488	0.91	ug/L		100
87) 1,1,1,2-tetrachloroethane	15.607	131	2405	0.87	ug/L		91
88) ethylbenzene	15.633	91	10825	0.94	ug/L		97
89) m,p-xylene	15.780	91	16858	1.85	ug/L		96
90) o-xylene	16.320	106	4477	0.93	ug/L		86
91) styrene	16.331	104	6255	0.81	ug/L		97
93) bromoform	16.614	173	1626	0.76	ug/L		80
94) isopropylbenzene	16.766	105	11294	0.89	ug/L		97
98) bromobenzene	17.196	156	3281	0.99	ug/L		88
99) 1,1,2,2-tetrachloroethane	17.107	83	2539	0.88	ug/L		98
101) 1,2,3-trichloropropane	17.191	110	663	0.90	ug/L	#	72
102) n-propylbenzene	17.259	91	12451	0.94	ug/L		99
103) 2-chlorotoluene	17.395	126	2902	0.97	ug/L		98
104) 4-chlorotoluene	17.516	91	7747	0.96	ug/L		98
105) 1,3,5-trimethylbenzene	17.437	105	9467	0.95	ug/L		97
106) tert-butylbenzene	17.814	119	8392	0.93	ug/L		96
107) 1,2,4-trimethylbenzene	17.867	105	9376	0.92	ug/L		98
108) sec-butylbenzene	18.050	105	11765	0.88	ug/L		97
109) 1,3-dichlorobenzene	18.213	146	5782	0.96	ug/L		88
110) p-isopropyltoluene	18.181	119	9792	0.87	ug/L		97
111) 1,4-dichlorobenzene	18.297	146	5602	0.94	ug/L		91
112) 1,2-dichlorobenzene	18.685	146	5430	0.87	ug/L		97
118) hexachlorobutadiene	20.294	225	2369	0.79	ug/L		90
121) 1,2,4-trichlorobenzene	20.179	180	2443	0.52	ug/L		86
122) 1,2,3-trichlorobenzene	20.646	180	2407	0.56	ug/L		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169430.D
Acq On : 24 Aug 2017 1:47 pm
Operator : JiaminC
Sample : ic7107-1
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 16:54:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:13:29 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169431.D
Acq On : 24 Aug 2017 2:18 pm
Operator : JiaminC
Sample : ic7107-2
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 25 16:12:14 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:08:41 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.397	65	110678	500.00	ug/L		0.00
5) pentafluorobenzene	10.107	168	273936	50.00	ug/L		0.00
50) 1,4-difluorobenzene	11.255	114	376268	50.00	ug/L		0.00
72) chlorobenzene-d5	15.481	117	360665	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	18.271	152	185059	50.00	ug/L		0.00
System Monitoring Compounds							
42) dibromofluoromethane (s)	10.112	113	122916	50.08	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.16%				
51) 1,2-dichloroethane-d4 (s)	10.647	65	135076	49.98	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 99.96%				
73) toluene-d8 (s)	13.463	98	441901	51.46	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 102.92%				
97) 4-bromofluorobenzene (s)	16.981	95	170115	52.70	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 105.40%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.533	59	2475	9.19	ug/L		72
3) ethyl alcohol	6.012	45	5884	236.21	ug/L		80
6) chlorodifluoromethane	3.889	51	6689	1.82	ug/L		94
7) dichlorodifluoromethane	3.873	85	6533	1.82	ug/L		93
8) chloromethane	4.183	50	8109	2.04	ug/L		97
9) vinyl chloride	4.450	62	8300	2.09	ug/L		94
10) bromomethane	5.095	94	5007	1.94	ug/L		98
11) chloroethane	5.284	64	4008	2.14	ug/L		93
12) trichlorofluoromethane	5.787	101	7639	1.86	ug/L		92
13) ethyl ether	6.206	74	2442	1.82	ug/L		94
14) acrolein	6.448	56	1116	2.30	ug/L		91
15) 1,1-dichloroethene	6.636	96	4652	1.93	ug/L		93
16) freon 113	6.636	151	4284	1.81	ug/L		95
17) 2-chloropropane	6.395	43	9990	2.11	ug/L		93
18) acetone	6.704	58	1769	9.18	ug/L	#	65
19) acetonitrile	7.166	41	6138	18.39	ug/L		97
20) iodomethane	6.925	142	9943	1.87	ug/L		97
21) carbon disulfide	7.056	76	17800	1.97	ug/L		99
22) methylene chloride	7.412	84	5306	1.96	ug/L		96
23) methyl acetate	7.223	43	3994	2.01	ug/L		94
24) methyl tert butyl ether	7.842	73	14871	1.92	ug/L		94
25) trans-1,2-dichloroethene	7.853	96	5168	2.06	ug/L		90
26) hexane	8.246	57	6522	1.85	ug/L		93
27) di-isopropyl ether	8.555	45	17591	1.95	ug/L		81
28) 2-butanone	9.394	72	1733	7.31	ug/L		89
29) 1,1-dichloroethane	8.519	63	8951	1.90	ug/L		97
30) chloroprene	8.655	53	7737	1.99	ug/L		93
33) ethyl tert-butyl ether	9.121	59	16810	1.88	ug/L		95
34) ethyl acetate	9.452	45	637	1.92	ug/L	#	22
35) 2,2-dichloropropane	9.426	77	7662	2.03	ug/L		98
36) cis-1,2-dichloroethene	9.399	96	5467	1.93	ug/L		85
37) propionitrile	9.504	54	5856	18.15	ug/L		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169431.D
Acq On : 24 Aug 2017 2:18 pm
Operator : JiaminC
Sample : ic7107-2
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 25 16:12:14 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:08:41 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) tert-Butyl Formate	9.945	59	3083	1.76	ug/L		92
39) bromochloromethane	9.787	128	2925	1.97	ug/L	#	80
40) tetrahydrofuran	9.855	72	569	1.91	ug/L	#	54
41) chloroform	9.866	83	9363	2.03	ug/L		96
44) 1,1,1-trichloroethane	10.191	97	8094	1.95	ug/L		98
46) 1,1-dichloropropene	10.427	75	6573	1.93	ug/L		95
47) isobutyl alcohol	10.453	43	2250	21.15	ug/L		87
48) carbon tetrachloride	10.448	117	6820	1.84	ug/L		91
49) tert-amyl alcohol	10.626	73	1108	9.10	ug/L		89
52) benzene	10.757	78	19526	2.02	ug/L		99
53) iso-octane	10.825	57	20101	1.92	ug/L		95
54) tert-amyl methyl ether	10.857	73	15715	2.00	ug/L		97
55) heptane	11.051	57	3510	1.90	ug/L		95
57) 1,2-dichloroethane	10.763	62	6695	1.94	ug/L		98
58) n-butyl alcohol	11.449	56	4944	80.83	ug/L		93
59) ethyl acrylate	11.759	55	5077	1.80	ug/L		87
60) trichloroethene	11.691	130	5115	1.86	ug/L		97
61) 2-nitropropane	12.744	41	1100	1.86	ug/L		80
62) 2-chloroethyl vinyl ether	12.797	63	7709	7.63	ug/L		95
63) methyl methacrylate	12.110	100	771	1.35	ug/L	#	76
64) 1,2-dichloropropane	12.042	63	4914	1.88	ug/L		99
65) dibromomethane	12.220	93	3241	1.96	ug/L		78
66) methylcyclohexane	12.005	83	9054	1.89	ug/L		94
67) bromodichloromethane	12.419	83	6401	1.86	ug/L		87
68) epichlorohydrin	12.933	57	1947	8.92	ug/L		91
69) cis-1,3-dichloropropene	13.059	75	7849	1.87	ug/L		96
70) 4-methyl-2-pentanone	13.243	58	6640	7.46	ug/L		99
71) 3-methyl-1-butanol	13.263	55	3568	35.17	ug/L		88
74) toluene	13.562	92	11719	2.00	ug/L		98
75) trans-1,3-dichloropropene	13.824	75	6110	1.68	ug/L		92
76) ethyl methacrylate	13.893	69	5352	1.77	ug/L		90
77) 1,1,2-trichloroethane	14.108	83	3733	1.98	ug/L		93
78) 3,3-dimethyl-1-butanol	14.627	57	3772	17.12	ug/L		97
79) tetrachloroethene	14.344	164	5107	2.07	ug/L		96
80) 1,3-dichloropropane	14.349	76	7260	2.03	ug/L		96
81) 2-hexanone	14.401	58	5886	7.60	ug/L		96
82) butyl acetate	14.532	56	2675	1.81	ug/L		93
83) dibromochloromethane	14.684	129	5000	1.83	ug/L		95
84) 1,2-dibromoethane	14.873	107	4685	1.90	ug/L		95
85) n-butyl ether	15.523	57	18865	1.89	ug/L		97
86) chlorobenzene	15.518	112	14000	1.97	ug/L		93
87) 1,1,1,2-tetrachloroethane	15.607	131	5099	1.86	ug/L		97
88) ethylbenzene	15.633	91	23113	2.01	ug/L		97
89) m,p-xylene	15.775	91	35108	3.89	ug/L		100
90) o-xylene	16.320	106	9278	1.94	ug/L		99
91) styrene	16.336	104	14109	1.84	ug/L		93
93) bromoform	16.614	173	3424	1.61	ug/L		96
94) isopropylbenzene	16.766	105	23599	1.87	ug/L		95
98) bromobenzene	17.196	156	6849	2.07	ug/L		99
99) 1,1,2,2-tetrachloroethane	17.112	83	5577	1.94	ug/L		90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169431.D
Acq On : 24 Aug 2017 2:18 pm
Operator : JiaminC
Sample : ic7107-2
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 25 16:12:14 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:08:41 2017
Response via : Initial Calibration

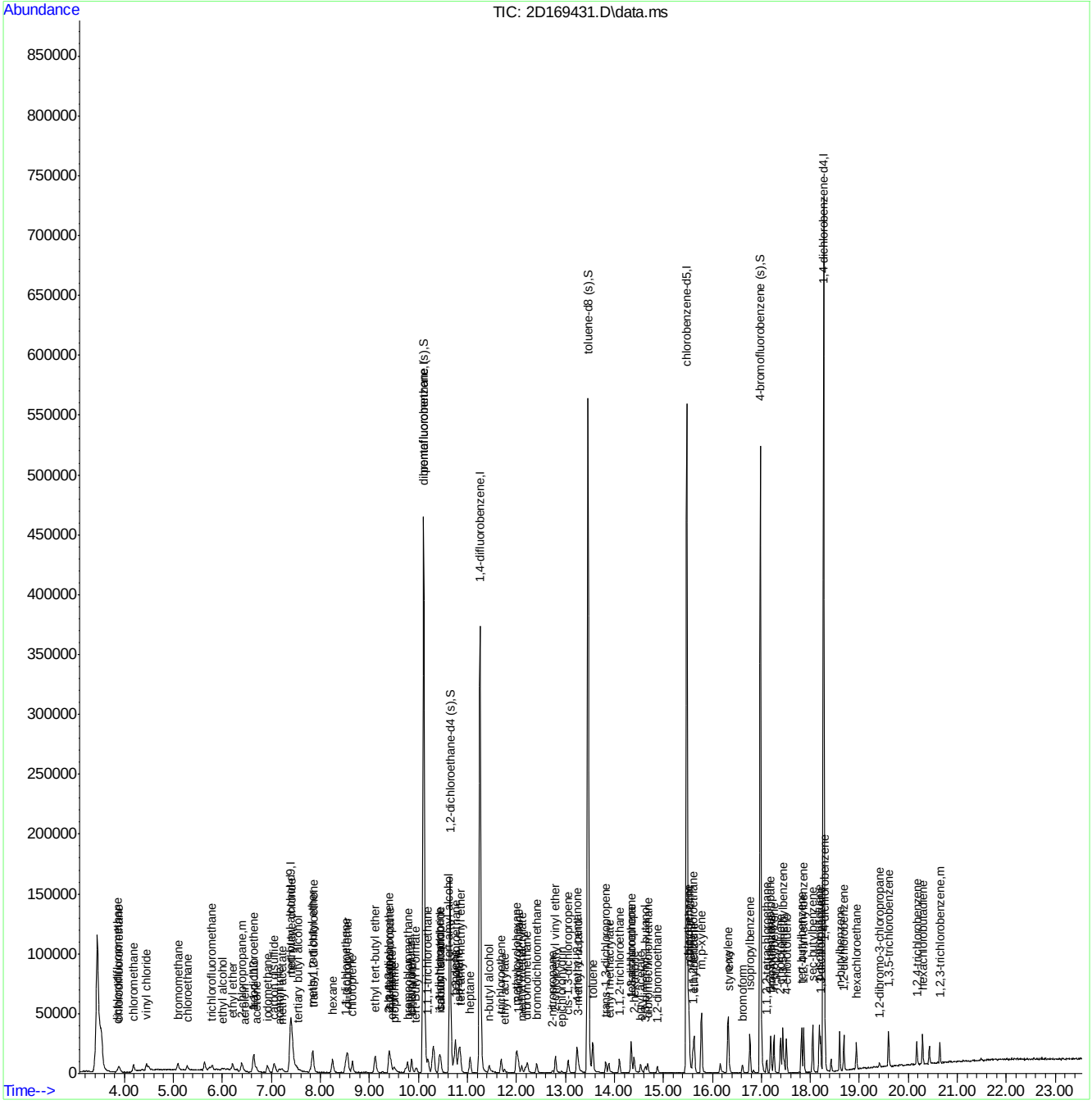
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
101) 1,2,3-trichloropropane	17.191	110	1505	2.05	ug/L	#	53
102) n-propylbenzene	17.259	91	26316	2.00	ug/L		96
103) 2-chlorotoluene	17.390	126	6079	2.05	ug/L		95
104) 4-chlorotoluene	17.510	91	16513	2.05	ug/L		99
105) 1,3,5-trimethylbenzene	17.437	105	20321	2.05	ug/L		94
106) tert-butylbenzene	17.820	119	18242	2.02	ug/L		97
107) 1,2,4-trimethylbenzene	17.867	105	20712	2.04	ug/L		95
108) sec-butylbenzene	18.050	105	25719	1.93	ug/L		98
109) 1,3-dichlorobenzene	18.213	146	11797	1.97	ug/L		95
110) p-isopropyltoluene	18.181	119	21449	1.90	ug/L		99
111) 1,4-dichlorobenzene	18.297	146	11682	1.98	ug/L		91
112) 1,2-dichlorobenzene	18.685	146	11950	1.91	ug/L		93
114) n-butylbenzene	18.601	92	9127	1.72	ug/L		97
115) 1,2-dibromo-3-chloropr...	19.419	157	1156	1.62	ug/L		93
117) 1,3,5-trichlorobenzene	19.597	180	9789	1.63	ug/L		97
118) hexachlorobutadiene	20.289	225	5474	1.83	ug/L		95
121) 1,2,4-trichlorobenzene	20.174	180	6262	1.34	ug/L		98
122) 1,2,3-trichlorobenzene	20.646	180	5921	1.38	ug/L		96
123) hexachloroethane	18.942	201	3581	1.61	ug/L		89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169431.D
Acq On : 24 Aug 2017 2:18 pm
Operator : JiaminC
Sample : ic7107-2
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 25 16:12:14 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:08:41 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169432.D
Acq On : 24 Aug 2017 2:48 pm
Operator : JiaminC
Sample : ic7107-5
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 25 16:21:06 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 15:41:16 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.391	65	106097	500.00	ug/L		0.00
5) pentafluorobenzene	10.107	168	270652	50.00	ug/L		0.00
50) 1,4-difluorobenzene	11.256	114	368862	50.00	ug/L		0.00
72) chlorobenzene-d5	15.476	117	354977	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	18.271	152	191341	50.00	ug/L		0.00
System Monitoring Compounds							
42) dibromofluoromethane (s)	10.107	113	119602	49.18	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.36%				
51) 1,2-dichloroethane-d4 (s)	10.647	65	133189	49.92	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 99.84%				
73) toluene-d8 (s)	13.463	98	432268	51.86	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 103.72%				
97) 4-bromofluorobenzene (s)	16.981	95	169763	51.13	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 102.26%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.522	59	6930	26.79	ug/L		78
3) ethyl alcohol	6.007	45	13397	583.09	ug/L		90
4) 1,4-dioxane	12.199	88	2942	133.46	ug/L		86
6) chlorodifluoromethane	3.879	51	19271	5.10	ug/L		98
7) dichlorodifluoromethane	3.868	85	16779	4.44	ug/L		94
8) chloromethane	4.183	50	17626	4.14	ug/L		97
9) vinyl chloride	4.450	62	18482	4.37	ug/L		99
10) bromomethane	5.090	94	12122	4.48	ug/L		91
11) chloroethane	5.273	64	8686	4.46	ug/L		95
12) trichlorofluoromethane	5.782	101	19176	4.52	ug/L		97
13) ethyl ether	6.206	74	7396	5.62	ug/L		93
14) acrolein	6.442	56	2258	4.58	ug/L		78
15) 1,1-dichloroethene	6.631	96	13800	5.66	ug/L		99
16) freon 113	6.626	151	13087	5.33	ug/L		97
17) 2-chloropropane	6.390	43	26427	5.49	ug/L		98
18) acetone	6.689	58	4313	22.33	ug/L		95
19) acetonitrile	7.155	41	18727	57.58	ug/L		96
20) iodomethane	6.914	142	28784	5.30	ug/L		95
21) carbon disulfide	7.051	76	49733	5.40	ug/L		97
22) methylene chloride	7.407	84	15035	5.58	ug/L		98
23) methyl acetate	7.213	43	11877	6.25	ug/L		92
24) methyl tert butyl ether	7.827	73	43004	5.56	ug/L		99
25) trans-1,2-dichloroethene	7.848	96	14582	5.85	ug/L		87
26) hexane	8.241	57	19818	5.43	ug/L		92
27) di-isopropyl ether	8.550	45	52059	5.82	ug/L		91
28) 2-butanone	9.394	72	4841	20.10	ug/L		99
29) 1,1-dichloroethane	8.508	63	26673	5.63	ug/L		96
30) chloroprene	8.650	53	21832	5.58	ug/L		96
31) acrylonitrile	7.790	53	4710	5.14	ug/L		91
32) vinyl acetate	8.534	86	1979	4.72	ug/L	#	84
33) ethyl tert-butyl ether	9.122	59	49444	5.52	ug/L		99
34) ethyl acetate	9.436	45	1884	5.92	ug/L		93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169432.D
Acq On : 24 Aug 2017 2:48 pm
Operator : JiaminC
Sample : ic7107-5
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 25 16:21:06 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 15:41:16 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35) 2,2-dichloropropane	9.426	77	22056	5.91	ug/L		99
36) cis-1,2-dichloroethene	9.399	96	16158	5.72	ug/L		96
37) propionitrile	9.499	54	18273	57.16	ug/L		96
38) tert-Butyl Formate	9.945	59	9546	5.49	ug/L		92
39) bromochloromethane	9.782	128	8308	5.61	ug/L		89
40) tetrahydrofuran	9.856	72	1550	5.15	ug/L	#	85
41) chloroform	9.861	83	26204	5.68	ug/L		96
43) methacrylonitrile	9.735	67	5413	5.61	ug/L		86
44) 1,1,1-trichloroethane	10.196	97	22676	5.41	ug/L		94
45) cyclohexane	10.291	84	17194	4.72	ug/L	#	66
46) 1,1-dichloropropene	10.427	75	18699	5.42	ug/L		96
47) isobutyl alcohol	10.459	43	6599	66.86	ug/L		95
48) carbon tetrachloride	10.453	117	20590	5.48	ug/L		98
49) tert-amyl alcohol	10.632	73	3213	27.23	ug/L		88
52) benzene	10.752	78	56032	5.83	ug/L		98
53) iso-octane	10.820	57	58867	5.40	ug/L		99
54) tert-amyl methyl ether	10.852	73	45326	5.91	ug/L		97
55) heptane	11.056	57	10513	5.63	ug/L		96
56) isopropyl acetate	10.726	87	2374	5.31	ug/L	#	49
57) 1,2-dichloroethane	10.757	62	19898	5.90	ug/L		99
58) n-butyl alcohol	11.439	56	15912	261.52	ug/L		99
59) ethyl acrylate	11.754	55	15391	5.52	ug/L		99
60) trichloroethene	11.691	130	14907	5.36	ug/L		100
61) 2-nitropropane	12.739	41	3186	5.48	ug/L		98
62) 2-chloroethyl vinyl ether	12.792	63	25483	24.57	ug/L		99
63) methyl methacrylate	12.110	100	3160	5.52	ug/L	#	86
64) 1,2-dichloropropane	12.037	63	15138	5.79	ug/L		96
65) dibromomethane	12.220	93	9389	5.79	ug/L		95
66) methylcyclohexane	12.000	83	26763	5.40	ug/L		98
67) bromodichloromethane	12.419	83	18875	5.51	ug/L		97
68) epichlorohydrin	12.928	57	6058	28.02	ug/L		90
69) cis-1,3-dichloropropene	13.059	75	22942	5.46	ug/L		99
70) 4-methyl-2-pentanone	13.237	58	19857	22.78	ug/L		99
71) 3-methyl-1-butanol	13.258	55	11002	109.22	ug/L		93
74) toluene	13.562	92	34284	5.96	ug/L		97
75) trans-1,3-dichloropropene	13.825	75	19459	5.33	ug/L		96
76) ethyl methacrylate	13.887	69	16655	5.55	ug/L		99
77) 1,1,2-trichloroethane	14.102	83	10698	5.80	ug/L		97
78) 3,3-dimethyl-1-butanol	14.632	57	11685	53.91	ug/L		94
79) tetrachloroethene	14.338	164	14869	6.07	ug/L		99
80) 1,3-dichloropropane	14.349	76	20827	5.98	ug/L		97
81) 2-hexanone	14.396	58	17221	22.75	ug/L		96
82) butyl acetate	14.532	56	7978	5.50	ug/L		97
83) dibromochloromethane	14.684	129	14819	5.44	ug/L		96
84) 1,2-dibromoethane	14.878	107	13631	5.63	ug/L		98
85) n-butyl ether	15.523	57	56140	5.62	ug/L		99
86) chlorobenzene	15.518	112	40971	5.83	ug/L		95
87) 1,1,1,2-tetrachloroethane	15.602	131	15072	5.51	ug/L		100
88) ethylbenzene	15.628	91	68067	6.03	ug/L		96
89) m,p-xylene	15.775	91	106855	12.10	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169432.D
Acq On : 24 Aug 2017 2:48 pm
Operator : JiaminC
Sample : ic7107-5
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 25 16:21:06 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 15:41:16 2017
Response via : Initial Calibration

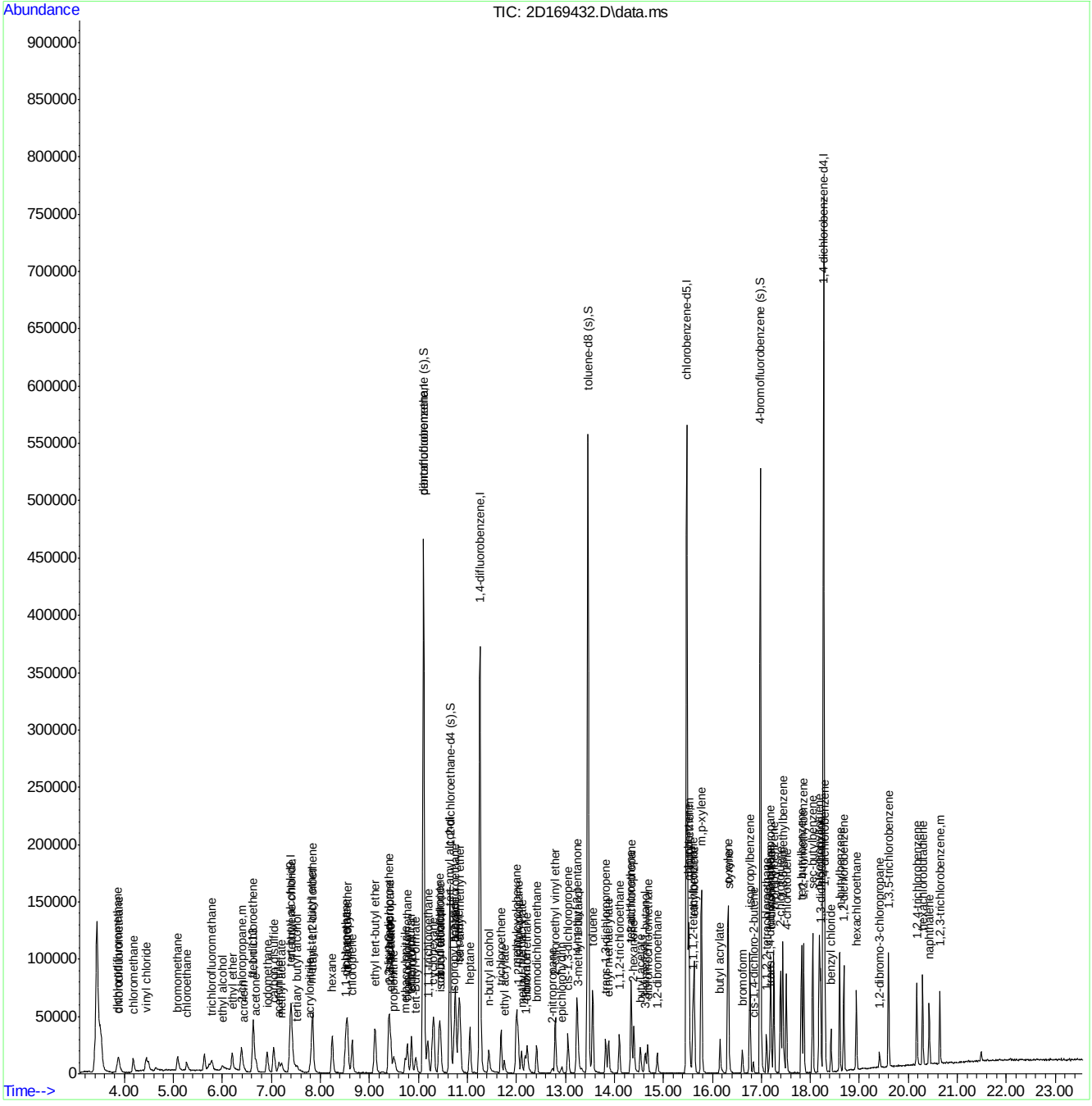
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
90) o-xylene	16.315	106	27385	5.80	ug/L		91
91) styrene	16.331	104	42933	5.61	ug/L		96
92) butyl acrylate	16.158	55	24034	4.86	ug/L		98
93) bromoform	16.614	173	10699	5.01	ug/L		97
94) isopropylbenzene	16.766	105	71603	5.66	ug/L		99
95) cis-1,4-dichloro-2-butene	16.839	88	2328	3.13	ug/L		92
98) bromobenzene	17.196	156	20309	5.94	ug/L		95
99) 1,1,2,2-tetrachloroethane	17.112	83	17547	5.92	ug/L		97
100) trans-1,4-dichloro-2-b...	17.175	53	1868	3.39	ug/L	#	14
101) 1,2,3-trichloropropane	17.191	110	4536	6.16	ug/L	#	83
102) n-propylbenzene	17.254	91	80100	5.81	ug/L		98
103) 2-chlorotoluene	17.395	126	17770	5.72	ug/L		96
104) 4-chlorotoluene	17.510	91	48799	5.86	ug/L		99
105) 1,3,5-trimethylbenzene	17.437	105	60910	5.91	ug/L		98
106) tert-butylbenzene	17.820	119	52676	5.50	ug/L		99
107) 1,2,4-trimethylbenzene	17.867	105	60553	5.71	ug/L		98
108) sec-butylbenzene	18.050	105	77714	5.45	ug/L		98
109) 1,3-dichlorobenzene	18.208	146	35529	5.72	ug/L		99
110) p-isopropyltoluene	18.182	119	64939	5.41	ug/L		99
111) 1,4-dichlorobenzene	18.297	146	34114	5.46	ug/L		97
112) 1,2-dichlorobenzene	18.685	146	36505	5.53	ug/L		98
113) benzyl chloride	18.423	91	25209	4.72	ug/L		97
114) n-butylbenzene	18.601	92	28416	4.85	ug/L		97
115) 1,2-dibromo-3-chloropr...	19.419	157	3552	4.63	ug/L		98
117) 1,3,5-trichlorobenzene	19.597	180	32163	4.80	ug/L		95
118) hexachlorobutadiene	20.294	225	17067	5.15	ug/L		99
119) naphthalene	20.426	128	40702	4.06	ug/L		99
121) 1,2,4-trichlorobenzene	20.174	180	22593	4.20	ug/L		99
122) 1,2,3-trichlorobenzene	20.646	180	20881	4.30	ug/L		96
123) hexachloroethane	18.942	201	11264	4.63	ug/L		82

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169432.D
Acq On : 24 Aug 2017 2:48 pm
Operator : JiaminC
Sample : ic7107-5
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 25 16:21:06 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 15:41:16 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169433.D
Acq On : 24 Aug 2017 3:19 pm
Operator : JiaminC
Sample : ic7107-10
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 25 16:51:24 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:51:21 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.391	65	109562	500.00	ug/L		0.00
5) pentafluorobenzene	10.107	168	268036	50.00	ug/L		0.00
50) 1,4-difluorobenzene	11.261	114	368558	50.00	ug/L		0.00
72) chlorobenzene-d5	15.481	117	357833	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	18.271	152	191541	50.00	ug/L		0.00
System Monitoring Compounds							
42) dibromofluoromethane (s)	10.112	113	120426	50.11	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.22%				
51) 1,2-dichloroethane-d4 (s)	10.647	65	134385	50.80	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 101.60%				
73) toluene-d8 (s)	13.463	98	434768	50.43	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 100.86%				
97) 4-bromofluorobenzene (s)	16.981	95	170328	49.87	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.74%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.522	59	12451	47.24	ug/L		90
3) ethyl alcohol	6.018	45	22281	947.12	ug/L		97
4) 1,4-dioxane	12.199	88	5255	230.73	ug/L		96
6) chlorodifluoromethane	3.894	51	33740	9.66	ug/L		96
7) dichlorodifluoromethane	3.873	85	33832	9.99	ug/L		95
8) chloromethane	4.198	50	37080	9.46	ug/L		96
9) vinyl chloride	4.466	62	37049	9.32	ug/L		99
10) bromomethane	5.100	94	23964	9.45	ug/L		100
11) chloroethane	5.284	64	17705	9.60	ug/L		97
12) trichlorofluoromethane	5.787	101	38312	9.93	ug/L		89
13) ethyl ether	6.206	74	12531	9.78	ug/L		98
14) acrolein	6.448	56	4770	9.83	ug/L		94
15) 1,1-dichloroethene	6.636	96	22393	9.40	ug/L		98
16) freon 113	6.642	151	22164	10.01	ug/L		96
17) 2-chloropropane	6.400	43	44343	9.39	ug/L		97
18) acetone	6.699	58	7539	39.42	ug/L	#	86
19) acetonitrile	7.161	41	32227	99.82	ug/L		93
20) iodomethane	6.919	142	48798	9.57	ug/L		97
21) carbon disulfide	7.056	76	85233	9.73	ug/L		99
22) methylene chloride	7.418	84	25338	9.53	ug/L		95
23) methyl acetate	7.218	43	18847	9.66	ug/L		97
24) methyl tert butyl ether	7.832	73	73288	9.60	ug/L		97
25) trans-1,2-dichloroethene	7.853	96	23716	9.78	ug/L		98
26) hexane	8.246	57	32515	9.64	ug/L		96
27) di-isopropyl ether	8.550	45	86429	9.89	ug/L		84
28) 2-butanone	9.389	72	8991	39.22	ug/L		90
29) 1,1-dichloroethane	8.513	63	43608	9.58	ug/L		96
30) chloroprene	8.655	53	36917	9.84	ug/L		98
31) acrylonitrile	7.790	53	8570	9.49	ug/L		94
32) vinyl acetate	8.534	86	3503	9.08	ug/L		99
33) ethyl tert-butyl ether	9.122	59	82294	9.51	ug/L		97
34) ethyl acetate	9.447	45	3307	10.23	ug/L	#	61

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169433.D
Acq On : 24 Aug 2017 3:19 pm
Operator : JiaminC
Sample : ic7107-10
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 25 16:51:24 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:51:21 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35) 2,2-dichloropropane	9.426	77	36628	9.89	ug/L		99
36) cis-1,2-dichloroethene	9.410	96	27008	9.90	ug/L		99
37) propionitrile	9.494	54	29818	95.72	ug/L		92
38) tert-Butyl Formate	9.950	59	15530	9.24	ug/L		99
39) bromochloromethane	9.782	128	13852	9.56	ug/L		91
40) tetrahydrofuran	9.856	72	2819	9.72	ug/L	#	76
41) chloroform	9.866	83	43664	9.70	ug/L		94
43) methacrylonitrile	9.730	67	8833	9.17	ug/L		90
44) 1,1,1-trichloroethane	10.191	97	37436	9.49	ug/L		99
45) cyclohexane	10.301	84	34916	10.11	ug/L		88
46) 1,1-dichloropropene	10.427	75	31666	9.49	ug/L		96
47) isobutyl alcohol	10.459	43	10519	100.24	ug/L		90
48) carbon tetrachloride	10.453	117	34170	9.55	ug/L		98
49) tert-amyl alcohol	10.632	73	5688	48.37	ug/L		97
52) benzene	10.757	78	91704	9.43	ug/L		97
53) iso-octane	10.826	57	98824	9.86	ug/L		99
54) tert-amyl methyl ether	10.852	73	75404	9.89	ug/L		98
55) heptane	11.056	57	17733	9.95	ug/L		96
56) isopropyl acetate	10.731	87	3955	9.03	ug/L	#	86
57) 1,2-dichloroethane	10.763	62	33184	9.85	ug/L		97
58) n-butyl alcohol	11.434	56	28046	481.31	ug/L		97
59) ethyl acrylate	11.754	55	26000	9.56	ug/L		97
60) trichloroethene	11.691	130	25463	9.64	ug/L		97
61) 2-nitropropane	12.739	41	5279	9.19	ug/L		91
62) 2-chloroethyl vinyl ether	12.797	63	44003	46.01	ug/L		99
63) methyl methacrylate	12.110	100	5244	9.82	ug/L		93
64) 1,2-dichloropropane	12.042	63	24684	9.76	ug/L		96
65) dibromomethane	12.225	93	15573	9.71	ug/L		94
66) methylcyclohexane	12.005	83	44196	9.57	ug/L		98
67) bromodichloromethane	12.419	83	31161	9.47	ug/L		98
68) epichlorohydrin	12.928	57	10250	48.71	ug/L		95
69) cis-1,3-dichloropropene	13.054	75	38686	9.63	ug/L		98
70) 4-methyl-2-pentanone	13.232	58	34346	40.53	ug/L		98
71) 3-methyl-1-butanol	13.258	55	19239	197.02	ug/L		99
74) toluene	13.557	92	55681	9.51	ug/L		97
75) trans-1,3-dichloropropene	13.825	75	33499	9.87	ug/L		98
76) ethyl methacrylate	13.887	69	28472	9.76	ug/L		99
77) 1,1,2-trichloroethane	14.102	83	18297	9.96	ug/L		98
78) 3,3-dimethyl-1-butanol	14.632	57	20867	97.44	ug/L		98
79) tetrachloroethene	14.344	164	23597	9.53	ug/L		98
80) 1,3-dichloropropane	14.349	76	35100	10.02	ug/L		99
81) 2-hexanone	14.396	58	29928	40.03	ug/L		96
82) butyl acetate	14.527	56	14171	9.92	ug/L		92
83) dibromochloromethane	14.679	129	25567	9.66	ug/L		98
84) 1,2-dibromoethane	14.878	107	23453	9.89	ug/L		99
85) n-butyl ether	15.523	57	94734	9.75	ug/L		99
86) chlorobenzene	15.518	112	67727	9.61	ug/L		97
87) 1,1,1,2-tetrachloroethane	15.607	131	25358	9.51	ug/L		99
88) ethylbenzene	15.628	91	111724	9.71	ug/L		99
89) m,p-xylene	15.775	91	176127	19.50	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169433.D
Acq On : 24 Aug 2017 3:19 pm
Operator : JiaminC
Sample : ic7107-10
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 25 16:51:24 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:51:21 2017
Response via : Initial Calibration

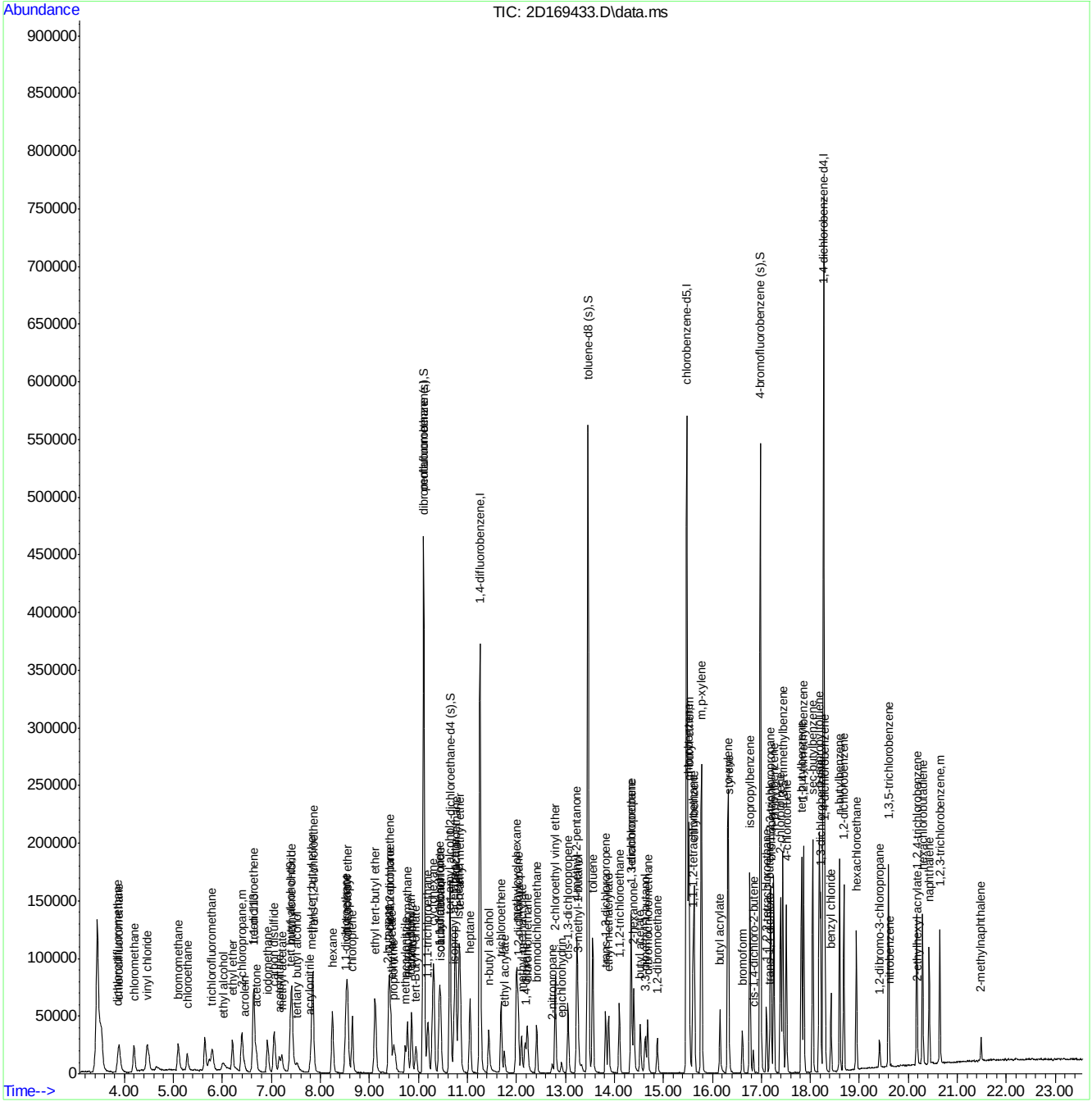
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
90) o-xylene	16.315	106	45271	9.61	ug/L		97
91) styrene	16.331	104	73197	9.96	ug/L		95
92) butyl acrylate	16.158	55	42708	8.92	ug/L		98
93) bromoform	16.614	173	18757	9.50	ug/L		95
94) isopropylbenzene	16.766	105	120125	9.67	ug/L		98
95) cis-1,4-dichloro-2-butene	16.839	88	4995	9.24	ug/L		86
98) bromobenzene	17.196	156	34226	9.85	ug/L		92
99) 1,1,2,2-tetrachloroethane	17.107	83	28847	9.73	ug/L		97
100) trans-1,4-dichloro-2-b...	17.170	53	3659	9.06	ug/L		86
101) 1,2,3-trichloropropane	17.191	110	7543	10.02	ug/L	#	89
102) n-propylbenzene	17.253	91	134446	9.88	ug/L		98
103) 2-chlorotoluene	17.395	126	30461	9.88	ug/L		99
104) 4-chlorotoluene	17.510	91	81881	9.68	ug/L		97
105) 1,3,5-trimethylbenzene	17.437	105	100817	9.69	ug/L		97
106) tert-butylbenzene	17.820	119	90120	9.60	ug/L		99
107) 1,2,4-trimethylbenzene	17.867	105	104825	9.93	ug/L		99
108) sec-butylbenzene	18.050	105	133144	9.81	ug/L		99
109) 1,3-dichlorobenzene	18.213	146	61504	9.82	ug/L		93
110) p-isopropyltoluene	18.181	119	113132	9.90	ug/L		99
111) 1,4-dichlorobenzene	18.297	146	57768	9.27	ug/L		97
112) 1,2-dichlorobenzene	18.685	146	62726	9.84	ug/L		99
113) benzyl chloride	18.423	91	45007	8.84	ug/L		98
114) n-butylbenzene	18.596	92	50855	9.45	ug/L		98
115) 1,2-dibromo-3-chloropr...	19.414	157	6493	9.06	ug/L		93
116) nitrobenzene	19.613	77	575	11.42	ug/L		79
117) 1,3,5-trichlorobenzene	19.597	180	56979	9.42	ug/L		98
118) hexachlorobutadiene	20.294	225	29438	9.85	ug/L		96
119) naphthalene	20.426	128	78743	8.66	ug/L		99
120) 2-ethylhexyl acrylate	20.190	70	1120	3.11	ug/L		93
121) 1,2,4-trichlorobenzene	20.174	180	42039	8.82	ug/L		99
122) 1,2,3-trichlorobenzene	20.646	180	38959	8.94	ug/L		96
123) hexachloroethane	18.942	201	20093	9.00	ug/L		91
124) 2-methylnaphthalene	21.485	142	10421	6.08	ug/L		92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169433.D
Acq On : 24 Aug 2017 3:19 pm
Operator : JiaminC
Sample : ic7107-10
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 25 16:51:24 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:51:21 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169434.D
Acq On : 24 Aug 2017 3:49 pm
Operator : JiaminC
Sample : ic7107-20
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 25 16:04:03 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:03:59 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.391	65	108423	500.00	ug/L		0.00
5) pentafluorobenzene	10.107	168	267499	50.00	ug/L		0.00
50) 1,4-difluorobenzene	11.255	114	367342	50.00	ug/L		0.00
72) chlorobenzene-d5	15.476	117	362833	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	18.271	152	198824	50.00	ug/L		0.00
System Monitoring Compounds							
42) dibromofluoromethane (s)	10.112	113	119311	49.91	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.82%				
51) 1,2-dichloroethane-d4 (s)	10.647	65	133771	50.24	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 100.48%				
73) toluene-d8 (s)	13.463	98	432935	49.62	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.24%				
97) 4-bromofluorobenzene (s)	16.981	95	173511	49.51	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.02%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.528	59	25012	94.50	ug/L		97
3) ethyl alcohol	6.012	45	43290	1781.21	ug/L		96
4) 1,4-dioxane	12.199	88	11044	491.72	ug/L		98
6) chlorodifluoromethane	3.889	51	68349	18.79	ug/L		97
7) dichlorodifluoromethane	3.873	85	68799	19.80	ug/L		99
8) chloromethane	4.204	50	78323	20.62	ug/L		99
9) vinyl chloride	4.471	62	77822	20.24	ug/L		97
10) bromomethane	5.105	94	49234	19.79	ug/L		95
11) chloroethane	5.284	64	36539	20.26	ug/L		98
12) trichlorofluoromethane	5.792	101	79771	20.26	ug/L		99
13) ethyl ether	6.206	74	25185	18.82	ug/L		98
14) acrolein	6.453	56	9347	19.89	ug/L		95
15) 1,1-dichloroethene	6.636	96	45337	18.45	ug/L		99
16) freon 113	6.636	151	45217	18.78	ug/L		96
17) 2-chloropropane	6.395	43	88660	18.47	ug/L		99
18) acetone	6.699	58	14946	75.72	ug/L		89
19) acetonitrile	7.155	41	61629	182.47	ug/L		99
20) iodomethane	6.919	142	100918	19.01	ug/L		100
21) carbon disulfide	7.056	76	172750	18.89	ug/L		98
22) methylene chloride	7.418	84	50988	18.74	ug/L		96
23) methyl acetate	7.218	43	37820	18.58	ug/L		99
24) methyl tert butyl ether	7.837	73	146785	18.77	ug/L		98
25) trans-1,2-dichloroethene	7.853	96	46550	18.11	ug/L		97
26) hexane	8.246	57	66100	18.41	ug/L		96
27) di-isopropyl ether	8.550	45	173384	18.73	ug/L		89
28) 2-butanone	9.384	72	18011	77.02	ug/L		97
29) 1,1-dichloroethane	8.513	63	88811	18.62	ug/L		99
30) chloroprene	8.655	53	73495	18.58	ug/L		98
31) acrylonitrile	7.790	53	17544	19.55	ug/L		98
32) vinyl acetate	8.529	86	7299	18.96	ug/L	#	92
33) ethyl tert-butyl ether	9.116	59	169514	18.95	ug/L		98
34) ethyl acetate	9.441	45	5774	17.03	ug/L	#	75

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169434.D
Acq On : 24 Aug 2017 3:49 pm
Operator : JiaminC
Sample : ic7107-20
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 25 16:04:03 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:03:59 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35) 2,2-dichloropropane	9.431	77	72365	18.55	ug/L		97
36) cis-1,2-dichloroethene	9.405	96	53380	18.44	ug/L		96
37) propionitrile	9.494	54	60633	186.61	ug/L		97
38) tert-Butyl Formate	9.950	59	32880	19.13	ug/L		99
39) bromochloromethane	9.777	128	27892	18.64	ug/L		97
40) tetrahydrofuran	9.856	72	5786	19.62	ug/L		91
41) chloroform	9.866	83	87652	18.65	ug/L		98
43) methacrylonitrile	9.730	67	18566	19.17	ug/L		95
44) 1,1,1-trichloroethane	10.196	97	77527	18.82	ug/L		99
45) cyclohexane	10.296	84	69138	19.79	ug/L	#	81
46) 1,1-dichloropropene	10.427	75	64604	18.88	ug/L		99
47) isobutyl alcohol	10.448	43	19615	176.73	ug/L		94
48) carbon tetrachloride	10.453	117	69394	18.60	ug/L		99
49) tert-amyl alcohol	10.626	73	11453	96.20	ug/L		97
52) benzene	10.752	78	186141	18.69	ug/L		99
53) iso-octane	10.826	57	201892	18.68	ug/L		98
54) tert-amyl methyl ether	10.852	73	152436	18.91	ug/L		99
55) heptane	11.051	57	34367	18.02	ug/L		96
56) isopropyl acetate	10.726	87	8677	19.83	ug/L	#	92
57) 1,2-dichloroethane	10.763	62	66426	18.75	ug/L		98
58) n-butyl alcohol	11.434	56	58050	968.12	ug/L		97
59) ethyl acrylate	11.754	55	53898	19.17	ug/L		98
60) trichloroethene	11.691	130	51869	18.80	ug/L		96
61) 2-nitropropane	12.734	41	10547	18.19	ug/L		92
62) 2-chloroethyl vinyl ether	12.792	63	94767	97.20	ug/L		96
63) methyl methacrylate	12.105	100	10845	18.89	ug/L	#	85
64) 1,2-dichloropropane	12.042	63	49992	18.56	ug/L		96
65) dibromomethane	12.220	93	31416	18.71	ug/L		97
66) methylcyclohexane	12.005	83	91155	18.64	ug/L		100
67) bromodichloromethane	12.414	83	64009	18.69	ug/L		99
68) epichlorohydrin	12.923	57	19475	88.40	ug/L		97
69) cis-1,3-dichloropropene	13.059	75	80066	19.05	ug/L		97
70) 4-methyl-2-pentanone	13.232	58	68242	75.47	ug/L		99
71) 3-methyl-1-butanol	13.258	55	38924	381.91	ug/L		96
74) toluene	13.557	92	114087	18.47	ug/L		99
75) trans-1,3-dichloropropene	13.825	75	70682	19.09	ug/L		99
76) ethyl methacrylate	13.882	69	59252	18.99	ug/L		99
77) 1,1,2-trichloroethane	14.102	83	36737	18.59	ug/L		96
78) 3,3-dimethyl-1-butanol	14.627	57	40132	179.16	ug/L		97
79) tetrachloroethene	14.338	164	47881	18.10	ug/L		96
80) 1,3-dichloropropane	14.349	76	70279	18.53	ug/L		96
81) 2-hexanone	14.396	58	61850	76.91	ug/L		97
82) butyl acetate	14.527	56	29062	19.16	ug/L		94
83) dibromochloromethane	14.679	129	52425	18.71	ug/L		98
84) 1,2-dibromoethane	14.878	107	47513	18.66	ug/L		97
85) n-butyl ether	15.523	57	198133	19.00	ug/L		98
86) chlorobenzene	15.518	112	138047	18.47	ug/L		99
87) 1,1,1,2-tetrachloroethane	15.607	131	53658	19.06	ug/L		99
88) ethylbenzene	15.628	91	228213	18.61	ug/L		99
89) m,p-xylene	15.775	91	358139	37.21	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169434.D
Acq On : 24 Aug 2017 3:49 pm
Operator : JiaminC
Sample : ic7107-20
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 25 16:04:03 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:03:59 2017
Response via : Initial Calibration

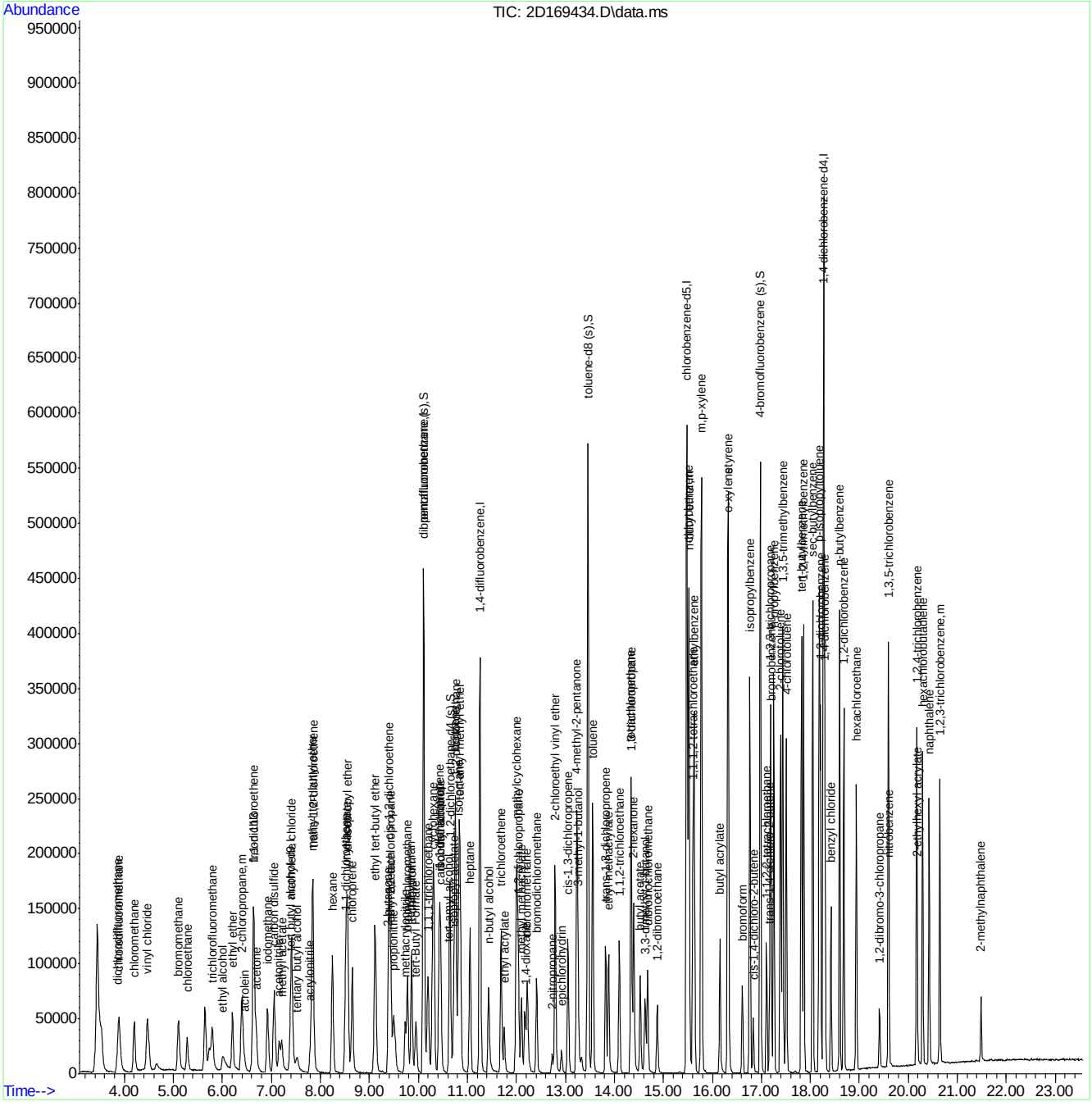
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
90) o-xylene	16.315	106	93866	18.75	ug/L		96
91) styrene	16.325	104	152818	19.09	ug/L		99
92) butyl acrylate	16.152	55	92822	19.47	ug/L		98
93) bromoform	16.614	173	40390	19.32	ug/L		96
94) isopropylbenzene	16.766	105	248331	18.74	ug/L		100
95) cis-1,4-dichloro-2-butene	16.839	88	12164	20.94	ug/L		89
98) bromobenzene	17.196	156	68133	18.05	ug/L		96
99) 1,1,2,2-tetrachloroethane	17.107	83	59141	18.25	ug/L		100
100) trans-1,4-dichloro-2-b...	17.170	53	9399	21.02	ug/L		97
101) 1,2,3-trichloropropane	17.191	110	15634	18.83	ug/L	#	91
102) n-propylbenzene	17.253	91	279517	18.67	ug/L		99
103) 2-chlorotoluene	17.395	126	61798	18.39	ug/L		99
104) 4-chlorotoluene	17.510	91	167105	18.37	ug/L		97
105) 1,3,5-trimethylbenzene	17.437	105	209034	18.53	ug/L		99
106) tert-butylbenzene	17.820	119	188439	18.68	ug/L		98
107) 1,2,4-trimethylbenzene	17.862	105	215747	18.77	ug/L		100
108) sec-butylbenzene	18.050	105	283719	19.00	ug/L		99
109) 1,3-dichlorobenzene	18.208	146	126841	18.81	ug/L		100
110) p-isopropyltoluene	18.182	119	236658	18.83	ug/L		99
111) 1,4-dichlorobenzene	18.297	146	122374	18.76	ug/L		100
112) 1,2-dichlorobenzene	18.685	146	131631	18.85	ug/L		98
113) benzyl chloride	18.423	91	100952	19.59	ug/L		100
114) n-butylbenzene	18.596	92	110157	19.14	ug/L		98
115) 1,2-dibromo-3-chloropr...	19.414	157	14621	19.86	ug/L		100
116) nitrobenzene	19.608	77	1390	19.25	ug/L		99
117) 1,3,5-trichlorobenzene	19.597	180	124678	19.12	ug/L		99
118) hexachlorobutadiene	20.294	225	64124	19.15	ug/L		99
119) naphthalene	20.426	128	179781	19.93	ug/L		99
120) 2-ethylhexyl acrylate	20.184	70	3557	3.30	ug/L		82
121) 1,2,4-trichlorobenzene	20.174	180	95978	19.65	ug/L		97
122) 1,2,3-trichlorobenzene	20.646	180	88985	19.88	ug/L		100
123) hexachloroethane	18.942	201	44569	19.23	ug/L		94
124) 2-methylnaphthalene	21.485	142	29554	10.53	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169434.D
Acq On : 24 Aug 2017 3:49 pm
Operator : JiaminC
Sample : ic7107-20
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 25 16:04:03 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:03:59 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169435.D
Acq On : 24 Aug 2017 4:20 pm
Operator : JiaminC
Sample : icc7107-50
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 25 15:41:19 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 15:41:16 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.391	65	107891	500.00	ug/L	0.00
5) pentafluorobenzene	10.107	168	266976	50.00	ug/L	0.00
50) 1,4-difluorobenzene	11.255	114	370933	50.00	ug/L	0.00
72) chlorobenzene-d5	15.476	117	369707	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	18.271	152	203567	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.112	113	119945	50.00	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.00%			
51) 1,2-dichloroethane-d4 (s)	10.647	65	134147	50.00	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 100.00%			
73) toluene-d8 (s)	13.463	98	434048	50.00	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 100.00%			
97) 4-bromofluorobenzene (s)	16.981	95	176635	50.00	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.00%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.522	59	65767	250.00	ug/L	100
3) ethyl alcohol	6.018	45	116821	5000.00	ug/L	100
4) 1,4-dioxane	12.199	88	28020	1250.00	ug/L	100
6) chlorodifluoromethane	3.894	51	186327	50.00	ug/L	100
7) dichlorodifluoromethane	3.873	85	186181	50.00	ug/L	100
8) chloromethane	4.214	50	210105	50.00	ug/L	100
9) vinyl chloride	4.476	62	208752	50.00	ug/L	100
10) bromomethane	5.111	94	133483	50.00	ug/L	100
11) chloroethane	5.284	64	96113	50.00	ug/L	100
12) trichlorofluoromethane	5.792	101	209415	50.00	ug/L	100
13) ethyl ether	6.206	74	64957	50.00	ug/L	100
14) acrolein	6.453	56	24309	50.00	ug/L	100
15) 1,1-dichloroethene	6.636	96	120318	50.00	ug/L	100
16) freon 113	6.642	151	120988	50.00	ug/L	100
17) 2-chloropropane	6.400	43	237288	50.00	ug/L	100
18) acetone	6.689	58	38112	200.00	ug/L	100
19) acetonitrile	7.161	41	160410	500.00	ug/L	100
20) iodomethane	6.919	142	267862	50.00	ug/L	100
21) carbon disulfide	7.056	76	454382	50.00	ug/L	100
22) methylene chloride	7.412	84	132923	50.00	ug/L	100
23) methyl acetate	7.213	43	93758	50.00	ug/L	100
24) methyl tert butyl ether	7.832	73	381532	50.00	ug/L	100
25) trans-1,2-dichloroethene	7.847	96	122898	50.00	ug/L	100
26) hexane	8.246	57	180082	50.00	ug/L	100
27) di-isopropyl ether	8.555	45	441535	50.00	ug/L	100
28) 2-butanone	9.389	72	47514	200.00	ug/L	100
29) 1,1-dichloroethane	8.513	63	233834	50.00	ug/L	100
30) chloroprene	8.650	53	192968	50.00	ug/L	100
31) acrylonitrile	7.790	53	45177	50.00	ug/L	100
32) vinyl acetate	8.529	86	20669	50.00	ug/L	100
33) ethyl tert-butyl ether	9.116	59	441452	50.00	ug/L	100
34) ethyl acetate	9.436	45	15696	50.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169435.D
Acq On : 24 Aug 2017 4:20 pm
Operator : JiaminC
Sample : icc7107-50
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 25 15:41:19 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 15:41:16 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) 2,2-dichloropropane	9.426	77	183981	50.00	ug/L	100
36) cis-1,2-dichloroethene	9.405	96	139380	50.00	ug/L	100
37) propionitrile	9.494	54	157672	500.00	ug/L	100
38) tert-Butyl Formate	9.950	59	85787	50.00	ug/L	100
39) bromochloromethane	9.777	128	73078	50.00	ug/L	100
40) tetrahydrofuran	9.845	72	14831	50.00	ug/L	100
41) chloroform	9.866	83	227550	50.00	ug/L	100
43) methacrylonitrile	9.730	67	47579	50.00	ug/L	100
44) 1,1,1-trichloroethane	10.196	97	206679	50.00	ug/L	100
45) cyclohexane	10.301	84	179589	50.00	ug/L	100
46) 1,1-dichloropropene	10.427	75	170009	50.00	ug/L	100
47) isobutyl alcohol	10.453	43	48681	500.00	ug/L	100
48) carbon tetrachloride	10.453	117	185325	50.00	ug/L	100
49) tert-amyl alcohol	10.621	73	29099	250.00	ug/L	100
52) benzene	10.752	78	483538	50.00	ug/L	100
53) iso-octane	10.831	57	548032	50.00	ug/L	100
54) tert-amyl methyl ether	10.852	73	385473	50.00	ug/L	100
55) heptane	11.051	57	93872	50.00	ug/L	100
56) isopropyl acetate	10.726	87	22491	50.00	ug/L	100
57) 1,2-dichloroethane	10.763	62	169624	50.00	ug/L	100
58) n-butyl alcohol	11.434	56	152963	2500.00	ug/L	100
59) ethyl acrylate	11.748	55	140198	50.00	ug/L	100
60) trichloroethene	11.691	130	139761	50.00	ug/L	100
61) 2-nitropropane	12.734	41	29232	50.00	ug/L	100
62) 2-chloroethyl vinyl ether	12.792	63	260700	250.00	ug/L	100
63) methyl methacrylate	12.105	100	28789	50.00	ug/L	100
64) 1,2-dichloropropane	12.037	63	131443	50.00	ug/L	100
65) dibromomethane	12.220	93	81562	50.00	ug/L	100
66) methylcyclohexane	12.005	83	249249	50.00	ug/L	100
67) bromodichloromethane	12.414	83	172150	50.00	ug/L	100
68) epichlorohydrin	12.917	57	54353	250.00	ug/L	100
69) cis-1,3-dichloropropene	13.054	75	211287	50.00	ug/L	100
70) 4-methyl-2-pentanone	13.232	58	175313	200.00	ug/L	100
71) 3-methyl-1-butanol	13.253	55	101294	1000.00	ug/L	100
74) toluene	13.557	92	299478	50.00	ug/L	100
75) trans-1,3-dichloropropene	13.819	75	190202	50.00	ug/L	100
76) ethyl methacrylate	13.882	69	156302	50.00	ug/L	100
77) 1,1,2-trichloroethane	14.102	83	96031	50.00	ug/L	100
78) 3,3-dimethyl-1-butanol	14.627	57	112869	500.00	ug/L	100
79) tetrachloroethene	14.338	164	127479	50.00	ug/L	100
80) 1,3-dichloropropane	14.349	76	181411	50.00	ug/L	100
81) 2-hexanone	14.396	58	157690	200.00	ug/L	100
82) butyl acetate	14.527	56	75489	50.00	ug/L	100
83) dibromochloromethane	14.679	129	141772	50.00	ug/L	100
84) 1,2-dibromoethane	14.873	107	126021	50.00	ug/L	100
85) n-butyl ether	15.523	57	519823	50.00	ug/L	100
86) chlorobenzene	15.518	112	366045	50.00	ug/L	100
87) 1,1,1,2-tetrachloroethane	15.607	131	142379	50.00	ug/L	100
88) ethylbenzene	15.628	91	588262	50.00	ug/L	100
89) m,p-xylene	15.775	91	919426	100.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169435.D
Acq On : 24 Aug 2017 4:20 pm
Operator : JiaminC
Sample : icc7107-50
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 25 15:41:19 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 15:41:16 2017
Response via : Initial Calibration

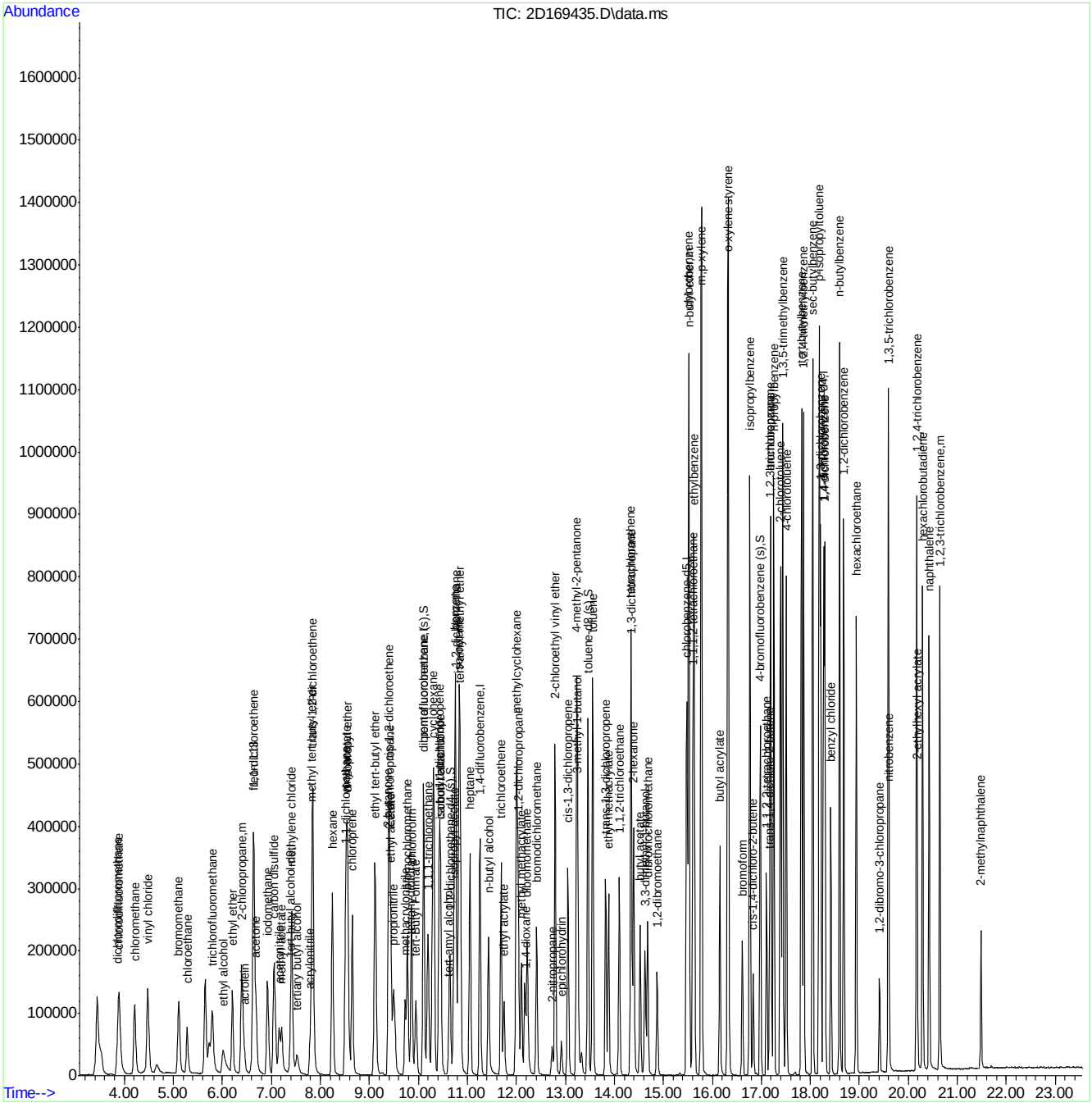
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90)	o-xylene	16.315	106	245932	50.00	ug/L	100
91)	styrene	16.325	104	398316	50.00	ug/L	100
92)	butyl acrylate	16.152	55	257784	50.00	ug/L	100
93)	bromoform	16.614	173	111130	50.00	ug/L	100
94)	isopropylbenzene	16.766	105	658914	50.00	ug/L	100
95)	cis-1,4-dichloro-2-butene	16.834	88	38722	50.00	ug/L	100
98)	bromobenzene	17.191	156	181805	50.00	ug/L	100
99)	1,1,2,2-tetrachloroethane	17.107	83	157618	50.00	ug/L	100
100)	trans-1,4-dichloro-2-b...	17.170	53	29353	50.00	ug/L	100
101)	1,2,3-trichloropropane	17.185	110	39187	50.00	ug/L	100
102)	n-propylbenzene	17.253	91	733068	50.00	ug/L	100
103)	2-chlorotoluene	17.395	126	165247	50.00	ug/L	100
104)	4-chlorotoluene	17.510	91	442693	50.00	ug/L	100
105)	1,3,5-trimethylbenzene	17.437	105	548701	50.00	ug/L	100
106)	tert-butylbenzene	17.820	119	509756	50.00	ug/L	100
107)	1,2,4-trimethylbenzene	17.862	105	563978	50.00	ug/L	100
108)	sec-butylbenzene	18.050	105	758615	50.00	ug/L	100
109)	1,3-dichlorobenzene	18.208	146	330616	50.00	ug/L	100
110)	p-isopropyltoluene	18.181	119	638063	50.00	ug/L	100
111)	1,4-dichlorobenzene	18.297	146	332159	50.00	ug/L	100
112)	1,2-dichlorobenzene	18.680	146	350905	50.00	ug/L	100
113)	benzyl chloride	18.417	91	284002	50.00	ug/L	100
114)	n-butylbenzene	18.596	92	311384	50.00	ug/L	100
115)	1,2-dibromo-3-chloropr...	19.414	157	40767	50.00	ug/L	100
116)	nitrobenzene	19.608	77	4337	50.00	ug/L	100
117)	1,3,5-trichlorobenzene	19.597	180	356446	50.00	ug/L	100
118)	hexachlorobutadiene	20.294	225	176199	50.00	ug/L	100
119)	naphthalene	20.425	128	533663	50.00	ug/L	100
120)	2-ethylhexyl acrylate	20.184	70	16094	10.00	ug/L	100
121)	1,2,4-trichlorobenzene	20.174	180	286348	50.00	ug/L	100
122)	1,2,3-trichlorobenzene	20.646	180	258165	50.00	ug/L	100
123)	hexachloroethane	18.942	201	129390	50.00	ug/L	100
124)	2-methylnaphthalene	21.485	142	111438	25.00	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169435.D
Acq On : 24 Aug 2017 4:20 pm
Operator : JiaminC
Sample : icc7107-50
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 25 15:41:19 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 15:41:16 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169436.D
Acq On : 24 Aug 2017 4:50 pm
Operator : JiaminC
Sample : ic7107-100
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 25 16:07:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:07:12 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.397	65	106540	500.00	ug/L		0.00
5) pentafluorobenzene	10.107	168	266266	50.00	ug/L		0.00
50) 1,4-difluorobenzene	11.261	114	376498	50.00	ug/L		0.00
72) chlorobenzene-d5	15.476	117	373981	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	18.271	152	207028	50.00	ug/L		0.00
System Monitoring Compounds							
42) dibromofluoromethane (s)	10.107	113	120697	50.71	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.42%				
51) 1,2-dichloroethane-d4 (s)	10.647	65	133535	49.25	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 98.50%				
73) toluene-d8 (s)	13.463	98	439496	49.23	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 98.46%				
97) 4-bromofluorobenzene (s)	16.981	95	179757	49.73	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.46%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.528	59	129799	500.71	ug/L		97
3) ethyl alcohol	6.023	45	242875	10155.14	ug/L		100
4) 1,4-dioxane	12.199	88	55874	2527.47	ug/L		95
6) chlorodifluoromethane	3.894	51	367030	103.32	ug/L		99
7) dichlorodifluoromethane	3.873	85	361105	104.55	ug/L		99
8) chloromethane	4.225	50	403558	105.51	ug/L		99
9) vinyl chloride	4.481	62	402618	105.06	ug/L		99
10) bromomethane	5.111	94	257909	103.63	ug/L		99
11) chloroethane	5.278	64	186422	103.02	ug/L		99
12) trichlorofluoromethane	5.792	101	410733	103.71	ug/L		99
13) ethyl ether	6.206	74	131102	100.45	ug/L		98
14) acrolein	6.453	56	49569	106.14	ug/L		95
15) 1,1-dichloroethene	6.636	96	226241	96.19	ug/L		98
16) freon 113	6.642	151	221509	95.51	ug/L		98
17) 2-chloropropane	6.395	43	453941	98.34	ug/L		99
18) acetone	6.694	58	71031	375.38	ug/L		97
19) acetonitrile	7.161	41	314623	963.79	ug/L		97
20) iodomethane	6.920	142	516280	99.59	ug/L		99
21) carbon disulfide	7.051	76	855639	96.88	ug/L		99
22) methylene chloride	7.412	84	260716	99.12	ug/L		97
23) methyl acetate	7.213	43	186529	95.67	ug/L		99
24) methyl tert butyl ether	7.832	73	745959	98.64	ug/L		100
25) trans-1,2-dichloroethene	7.848	96	237440	97.12	ug/L		99
26) hexane	8.246	57	335677	97.45	ug/L		97
27) di-isopropyl ether	8.555	45	844965	95.60	ug/L		99
28) 2-butanone	9.389	72	92930	403.62	ug/L		96
29) 1,1-dichloroethane	8.513	63	455204	99.10	ug/L		99
30) chloroprene	8.650	53	369923	97.31	ug/L		99
31) acrylonitrile	7.790	53	93025	104.50	ug/L		99
32) vinyl acetate	8.529	86	40308	106.30	ug/L	#	85
33) ethyl tert-butyl ether	9.116	59	868925	99.99	ug/L		98
34) ethyl acetate	9.436	45	32747	101.69	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169436.D
Acq On : 24 Aug 2017 4:50 pm
Operator : JiaminC
Sample : ic7107-100
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 25 16:07:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:07:12 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35) 2,2-dichloropropane	9.426	77	346004	93.32	ug/L		98
36) cis-1,2-dichloroethene	9.405	96	270647	97.72	ug/L		98
37) propionitrile	9.494	54	310175	987.00	ug/L		100
38) tert-Butyl Formate	9.950	59	172991	102.26	ug/L		96
39) bromochloromethane	9.777	128	144830	100.19	ug/L		98
40) tetrahydrofuran	9.850	72	29079	100.31	ug/L		95
41) chloroform	9.861	83	439790	97.44	ug/L		97
43) methacrylonitrile	9.735	67	96959	101.54	ug/L		97
44) 1,1,1-trichloroethane	10.196	97	404115	100.38	ug/L		99
45) cyclohexane	10.296	84	342825	99.91	ug/L	#	79
46) 1,1-dichloropropene	10.427	75	328252	98.90	ug/L		98
47) isobutyl alcohol	10.453	43	96310	918.84	ug/L		97
48) carbon tetrachloride	10.453	117	355700	98.41	ug/L		99
49) tert-amyl alcohol	10.626	73	58719	495.39	ug/L		90
52) benzene	10.757	78	925716	94.81	ug/L		99
53) iso-octane	10.831	57	994939	93.84	ug/L		100
54) tert-amyl methyl ether	10.852	73	751730	94.77	ug/L		98
55) heptane	11.051	57	177629	95.51	ug/L		98
56) isopropyl acetate	10.726	87	45278	101.37	ug/L		100
57) 1,2-dichloroethane	10.763	62	334192	96.00	ug/L		99
58) n-butyl alcohol	11.434	56	310233	5083.06	ug/L		99
59) ethyl acrylate	11.748	55	282005	100.02	ug/L		99
60) trichloroethene	11.691	130	272615	99.11	ug/L		99
61) 2-nitropropane	12.734	41	60031	101.45	ug/L		95
62) 2-chloroethyl vinyl ether	12.792	63	530531	529.80	ug/L		98
63) methyl methacrylate	12.105	100	56114	97.64	ug/L		95
64) 1,2-dichloropropane	12.042	63	250431	94.89	ug/L		99
65) dibromomethane	12.220	93	161777	97.46	ug/L		98
66) methylcyclohexane	12.005	83	462133	95.71	ug/L		98
67) bromodichloromethane	12.414	83	348326	101.47	ug/L		100
68) epichlorohydrin	12.923	57	108581	496.83	ug/L		99
69) cis-1,3-dichloropropene	13.054	75	419407	99.73	ug/L		99
70) 4-methyl-2-pentanone	13.232	58	345532	385.44	ug/L		99
71) 3-methyl-1-butanol	13.253	55	198008	1941.24	ug/L		98
74) toluene	13.557	92	585891	95.64	ug/L		97
75) trans-1,3-dichloropropene	13.825	75	379527	100.92	ug/L		98
76) ethyl methacrylate	13.882	69	312615	99.34	ug/L		99
77) 1,1,2-trichloroethane	14.102	83	189296	96.24	ug/L		98
78) 3,3-dimethyl-1-butanol	14.627	57	230201	1008.83	ug/L		99
79) tetrachloroethene	14.338	164	242148	93.46	ug/L		100
80) 1,3-dichloropropane	14.349	76	352068	94.23	ug/L		100
81) 2-hexanone	14.396	58	310388	384.17	ug/L		99
82) butyl acetate	14.527	56	150933	98.17	ug/L		94
83) dibromochloromethane	14.679	129	288406	101.96	ug/L		99
84) 1,2-dibromoethane	14.873	107	254258	99.33	ug/L		99
85) n-butyl ether	15.523	57	1006461	96.72	ug/L		98
86) chlorobenzene	15.518	112	717444	96.76	ug/L		99
87) 1,1,1,2-tetrachloroethane	15.607	131	282808	99.30	ug/L		98
88) ethylbenzene	15.628	91	1119969	92.93	ug/L		99
89) m,p-xylene	15.775	91	1764947	186.37	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169436.D
Acq On : 24 Aug 2017 4:50 pm
Operator : JiaminC
Sample : ic7107-100
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 25 16:07:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:07:12 2017
Response via : Initial Calibration

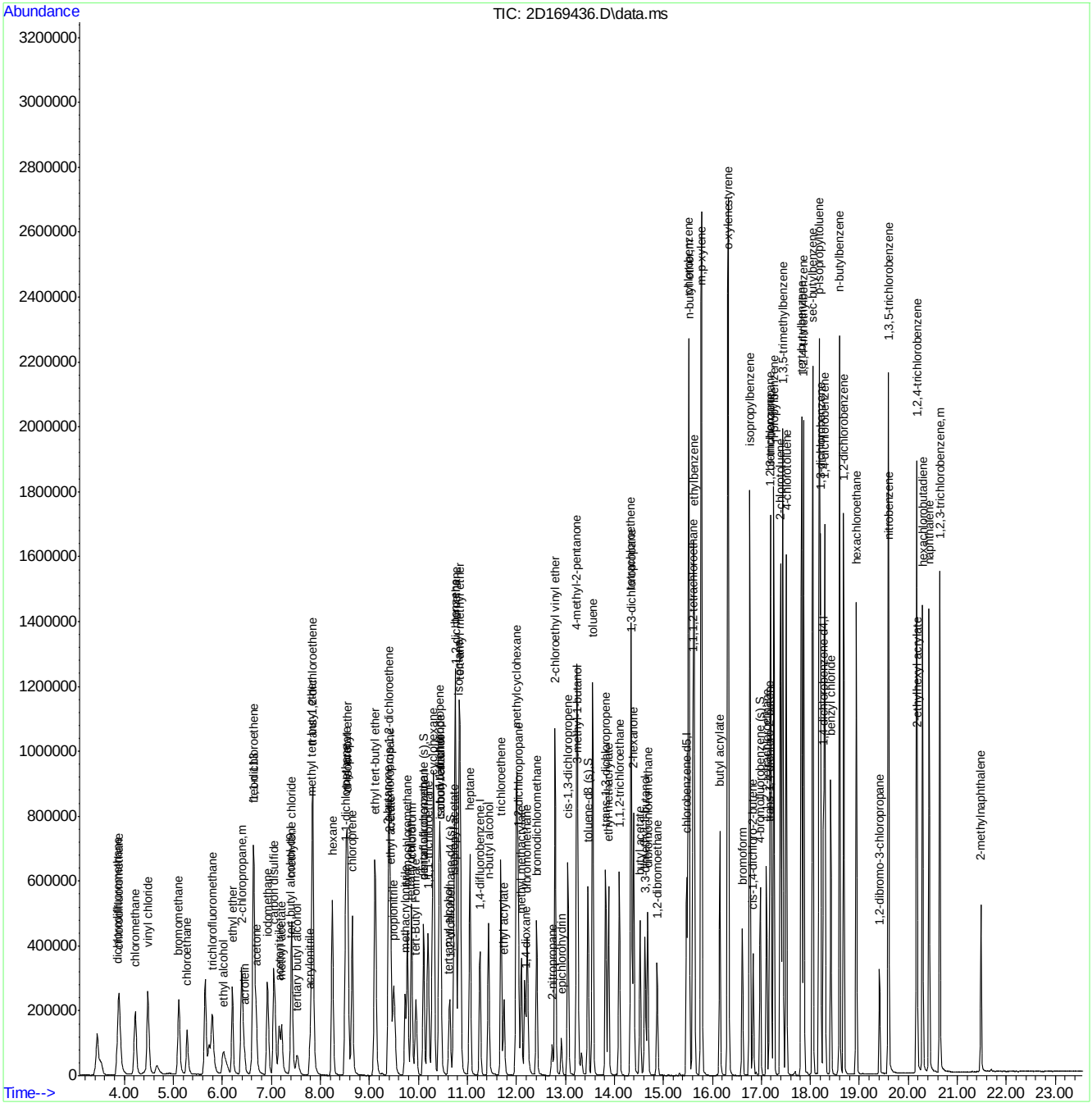
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90)	o-xylene	16.315	106	476887	95.70	ug/L	97
91)	styrene	16.326	104	767879	96.07	ug/L	99
92)	butyl acrylate	16.152	55	524675	105.82	ug/L	100
93)	bromoform	16.614	173	234022	107.63	ug/L	98
94)	isopropylbenzene	16.766	105	1262333	95.80	ug/L	99
95)	cis-1,4-dichloro-2-butene	16.834	88	90192	131.17	ug/L	96
98)	bromobenzene	17.191	156	357670	96.20	ug/L	100
99)	1,1,2,2-tetrachloroethane	17.107	83	315136	97.64	ug/L	99
100)	trans-1,4-dichloro-2-b...	17.170	53	67236	130.36	ug/L	97
101)	1,2,3-trichloropropane	17.185	110	79063	95.52	ug/L	92
102)	n-propylbenzene	17.254	91	1401740	94.38	ug/L	100
103)	2-chlorotoluene	17.395	126	322847	96.53	ug/L	99
104)	4-chlorotoluene	17.510	91	874111	96.60	ug/L	100
105)	1,3,5-trimethylbenzene	17.437	105	1051844	93.91	ug/L	100
106)	tert-butylbenzene	17.820	119	990519	97.67	ug/L	100
107)	1,2,4-trimethylbenzene	17.862	105	1088346	94.95	ug/L	99
108)	sec-butylbenzene	18.050	105	1450927	96.73	ug/L	99
109)	1,3-dichlorobenzene	18.208	146	642356	95.22	ug/L	99
110)	p-isopropyltoluene	18.182	119	1239903	98.01	ug/L	100
111)	1,4-dichlorobenzene	18.297	146	660265	99.84	ug/L	99
112)	1,2-dichlorobenzene	18.685	146	685449	97.62	ug/L	98
113)	benzyl chloride	18.417	91	593547	109.54	ug/L	99
114)	n-butylbenzene	18.596	92	606607	102.63	ug/L	99
115)	1,2-dibromo-3-chloropr...	19.414	157	85818	109.47	ug/L	99
116)	nitrobenzene	19.602	77	9882	118.19	ug/L	92
117)	1,3,5-trichlorobenzene	19.597	180	701479	105.34	ug/L	100
118)	hexachlorobutadiene	20.294	225	332463	98.90	ug/L	99
119)	naphthalene	20.426	128	1108611	115.81	ug/L	100
120)	2-ethylhexyl acrylate	20.184	70	43304	30.78	ug/L	97
121)	1,2,4-trichlorobenzene	20.174	180	580500	113.19	ug/L	98
122)	1,2,3-trichlorobenzene	20.646	180	529227	112.69	ug/L	100
123)	hexachloroethane	18.942	201	268783	110.17	ug/L	97
124)	2-methylnaphthalene	21.485	142	260122	75.30	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169436.D
Acq On : 24 Aug 2017 4:50 pm
Operator : JiaminC
Sample : ic7107-100
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 25 16:07:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:07:12 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169437.D
Acq On : 24 Aug 2017 5:21 pm
Operator : JiaminC
Sample : ic7107-200
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 25 16:06:48 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:05:58 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.407	65	109055	500.00	ug/L	0.02
5) pentafluorobenzene	10.107	168	275659	50.00	ug/L	0.00
50) 1,4-difluorobenzene	11.261	114	395546	50.00	ug/L	0.00
72) chlorobenzene-d5	15.476	117	387953	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	18.271	152	224996	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.113	113	123590	50.19	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.38%			
51) 1,2-dichloroethane-d4 (s)	10.647	65	137973	48.06	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 96.12%			
73) toluene-d8 (s)	13.463	98	453186	48.67	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 97.34%			
97) 4-bromofluorobenzene (s)	16.981	95	190824	48.23	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 96.46%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.533	59	276472	1052.95	ug/L	94
3) ethyl alcohol	6.028	45	545957	22961.72	ug/L	99
4) 1,4-dioxane	12.199	88	115767	5145.80	ug/L	95
6) chlorodifluoromethane	3.894	51	724651	196.32	ug/L	99
7) dichlorodifluoromethane	3.868	85	718203	201.08	ug/L	100
8) chloromethane	4.235	50	804171	203.87	ug/L	98
9) vinyl chloride	4.481	62	788436	198.40	ug/L	99
10) bromomethane	5.105	94	531078	207.71	ug/L	99
11) chloroethane	5.278	64	381943	204.86	ug/L	99
12) trichlorofluoromethane	5.787	101	843981	207.35	ug/L	99
13) ethyl ether	6.206	74	264377	194.60	ug/L	97
14) acrolein	6.453	56	96674	199.93	ug/L	96
15) 1,1-dichloroethene	6.636	96	447987	180.37	ug/L	98
16) freon 113	6.636	151	446382	182.69	ug/L	99
17) 2-chloropropane	6.395	43	896354	184.70	ug/L	99
18) acetone	6.694	58	141390	704.52	ug/L	95
19) acetonitrile	7.161	41	656170	1927.50	ug/L	97
20) iodomethane	6.920	142	1044395	193.29	ug/L	99
21) carbon disulfide	7.051	76	1707221	183.67	ug/L	99
22) methylene chloride	7.412	84	514945	186.56	ug/L	97
23) methyl acetate	7.213	43	370082	179.60	ug/L	99
24) methyl tert butyl ether	7.837	73	1481471	186.71	ug/L	100
25) trans-1,2-dichloroethene	7.848	96	462016	178.63	ug/L	98
26) hexane	8.246	57	665070	183.40	ug/L	98
27) di-isopropyl ether	8.555	45	1641037	174.84	ug/L	100
28) 2-butanone	9.389	72	189446	793.49	ug/L	97
29) 1,1-dichloroethane	8.513	63	890793	184.40	ug/L	100
30) chloroprene	8.655	53	732338	182.91	ug/L	99
31) acrylonitrile	7.790	53	186048	202.35	ug/L	98
32) vinyl acetate	8.529	86	79326	202.58	ug/L	98
33) ethyl tert-butyl ether	9.122	59	1719596	189.04	ug/L	98
34) ethyl acetate	9.441	45	64270	191.06	ug/L #	73

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169437.D
Acq On : 24 Aug 2017 5:21 pm
Operator : JiaminC
Sample : ic7107-200
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 25 16:06:48 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:05:58 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) 2,2-dichloropropane	9.431	77	681176	172.58	ug/L	99
36) cis-1,2-dichloroethene	9.405	96	527918	180.52	ug/L	97
37) propionitrile	9.494	54	619677	1882.24	ug/L	99
38) tert-Butyl Formate	9.950	59	349917	199.74	ug/L	97
39) bromochloromethane	9.777	128	283945	187.32	ug/L	95
40) tetrahydrofuran	9.850	72	58102	192.07	ug/L	97
41) chloroform	9.866	83	863777	181.43	ug/L	97
43) methacrylonitrile	9.730	67	198497	201.00	ug/L	97
44) 1,1,1-trichloroethane	10.202	97	821388	196.37	ug/L	99
45) cyclohexane	10.301	84	679469	189.21	ug/L	94
46) 1,1-dichloropropene	10.427	75	655032	188.43	ug/L	98
47) isobutyl alcohol	10.453	43	196744	1771.68	ug/L	97
48) carbon tetrachloride	10.453	117	719855	190.55	ug/L	100
49) tert-amyl alcohol	10.632	73	127467	1048.90	ug/L	97
52) benzene	10.757	78	1819156	172.46	ug/L	99
53) iso-octane	10.831	57	1981188	173.07	ug/L	98
54) tert-amyl methyl ether	10.857	73	1485226	173.50	ug/L	98
55) heptane	11.051	57	351784	175.67	ug/L	98
56) isopropyl acetate	10.726	87	93152	198.15	ug/L	99
57) 1,2-dichloroethane	10.763	62	652661	173.78	ug/L	99
58) n-butyl alcohol	11.434	56	643989	10054.32	ug/L	99
59) ethyl acrylate	11.748	55	565402	188.73	ug/L	99
60) trichloroethene	11.691	130	549047	187.66	ug/L	99
61) 2-nitropropane	12.734	41	133433	218.64	ug/L	94
62) 2-chloroethyl vinyl ether	12.797	63	1090257	1045.81	ug/L	98
63) methyl methacrylate	12.105	100	116114	190.48	ug/L	95
64) 1,2-dichloropropane	12.042	63	494546	173.67	ug/L	99
65) dibromomethane	12.220	93	320707	180.28	ug/L	100
66) methylcyclohexane	12.005	83	931258	179.90	ug/L	97
67) bromodichloromethane	12.414	83	704318	194.16	ug/L	99
68) epichlorohydrin	12.923	57	226615	983.78	ug/L	99
69) cis-1,3-dichloropropene	13.054	75	840166	187.86	ug/L	99
70) 4-methyl-2-pentanone	13.232	58	695678	724.77	ug/L	96
71) 3-methyl-1-butanol	13.258	55	407166	3752.56	ug/L	94
74) toluene	13.557	92	1172005	180.90	ug/L	95
75) trans-1,3-dichloropropene	13.825	75	770043	196.74	ug/L	98
76) ethyl methacrylate	13.882	69	629385	191.08	ug/L	99
77) 1,1,2-trichloroethane	14.102	83	380106	183.15	ug/L	98
78) 3,3-dimethyl-1-butanol	14.627	57	500957	2147.55	ug/L	100
79) tetrachloroethene	14.338	164	478874	173.45	ug/L	96
80) 1,3-dichloropropane	14.349	76	691264	173.66	ug/L	100
81) 2-hexanone	14.396	58	627530	736.92	ug/L	97
82) butyl acetate	14.527	56	311345	194.04	ug/L	95
83) dibromochloromethane	14.679	129	576467	195.59	ug/L	99
84) 1,2-dibromoethane	14.878	107	514011	192.03	ug/L	99
85) n-butyl ether	15.523	57	1986222	180.39	ug/L	98
86) chlorobenzene	15.518	112	1419218	181.02	ug/L	98
87) 1,1,1,2-tetrachloroethane	15.607	131	574262	193.02	ug/L	98
88) ethylbenzene	15.628	91	2194120	170.29	ug/L	99
89) m,p-xylene	15.775	91	3469328	343.10	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169437.D
Acq On : 24 Aug 2017 5:21 pm
Operator : JiaminC
Sample : ic7107-200
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 25 16:06:48 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:05:58 2017
Response via : Initial Calibration

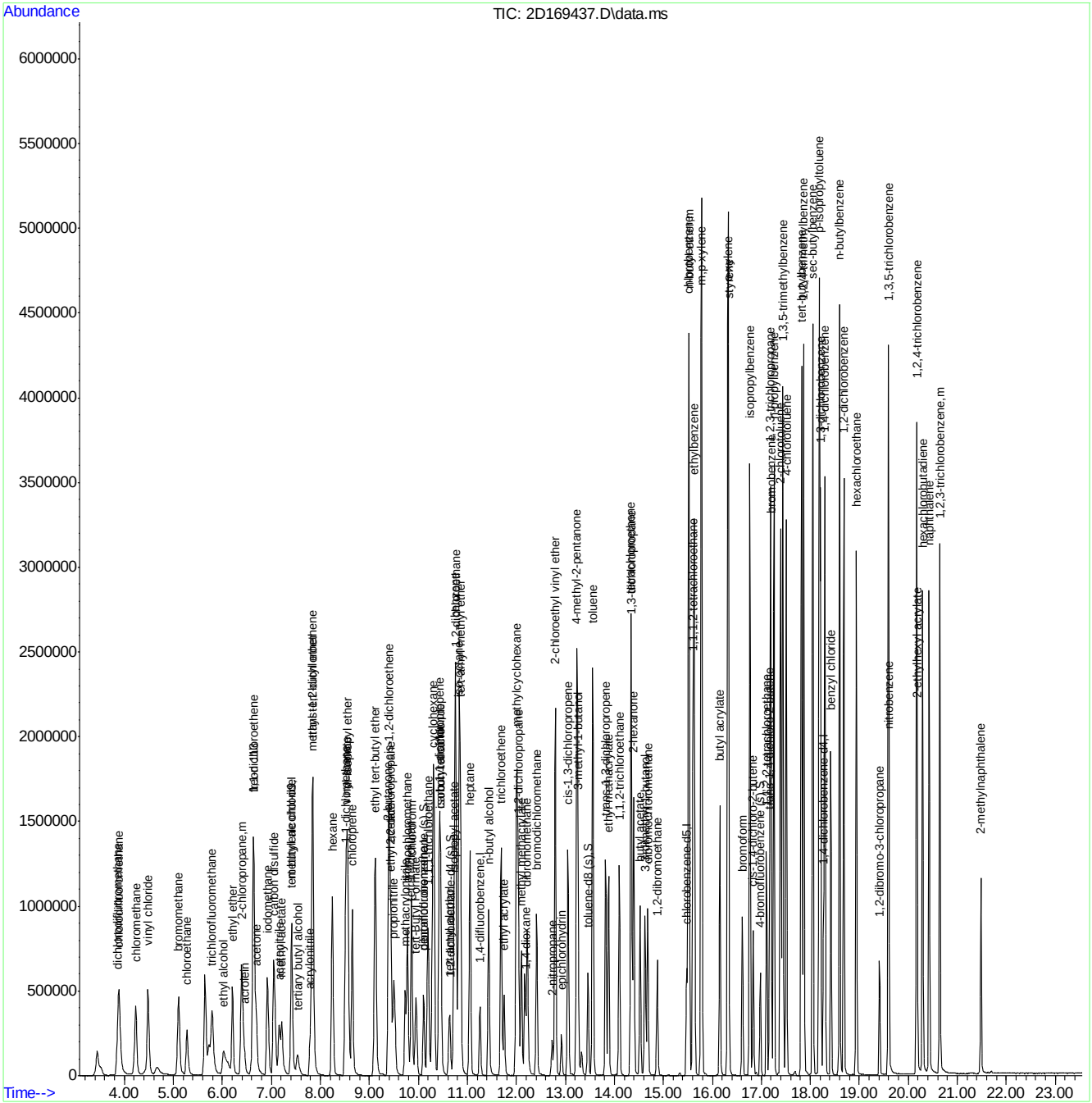
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
90)	o-xylene	16.315	106	954509	181.18	ug/L		94
91)	styrene	16.331	104	1521474	179.79	ug/L		95
92)	butyl acrylate	16.153	55	1092051	215.65	ug/L		99
93)	bromoform	16.614	173	482739	217.85	ug/L		98
94)	isopropylbenzene	16.766	105	2512498	180.17	ug/L		98
95)	cis-1,4-dichloro-2-butene	16.834	88	210588	335.15	ug/L		97
98)	bromobenzene	17.196	156	706430	169.50	ug/L		93
99)	1,1,2,2-tetrachloroethane	17.107	83	638366	177.99	ug/L		99
100)	trans-1,4-dichloro-2-b...	17.170	53	150572	293.83	ug/L	#	84
101)	1,2,3-trichloropropane	17.191	110	158835	171.54	ug/L	#	86
102)	n-propylbenzene	17.259	91	2811542	168.73	ug/L		98
103)	2-chlorotoluene	17.395	126	653631	175.39	ug/L		97
104)	4-chlorotoluene	17.510	91	1766577	175.19	ug/L		100
105)	1,3,5-trimethylbenzene	17.437	105	2147521	171.38	ug/L		99
106)	tert-butylbenzene	17.820	119	2041155	181.82	ug/L		98
107)	1,2,4-trimethylbenzene	17.867	105	2211494	172.68	ug/L		97
108)	sec-butylbenzene	18.050	105	2953855	177.04	ug/L		99
109)	1,3-dichlorobenzene	18.208	146	1318298	175.39	ug/L		98
110)	p-isopropyltoluene	18.182	119	2537102	181.04	ug/L		98
111)	1,4-dichlorobenzene	18.297	146	1371931	188.74	ug/L		97
112)	1,2-dichlorobenzene	18.685	146	1399592	179.68	ug/L		98
113)	benzyl chloride	18.423	91	1247609	215.05	ug/L		99
114)	n-butylbenzene	18.596	92	1269230	196.99	ug/L		97
115)	1,2-dibromo-3-chloropr...	19.414	157	186645	224.43	ug/L		99
116)	nitrobenzene	19.608	77	24284	300.96	ug/L		100
117)	1,3,5-trichlorobenzene	19.597	180	1399048	191.71	ug/L		99
118)	hexachlorobutadiene	20.294	225	654457	174.58	ug/L		98
119)	naphthalene	20.426	128	2244848	220.13	ug/L		100
120)	2-ethylhexyl acrylate	20.184	70	106893	93.14	ug/L		95
121)	1,2,4-trichlorobenzene	20.174	180	1171040	212.80	ug/L		97
122)	1,2,3-trichlorobenzene	20.646	180	1057977	209.20	ug/L		99
123)	hexachloroethane	18.942	201	573274	220.67	ug/L		96
124)	2-methylnaphthalene	21.485	142	590127	183.42	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169437.D
Acq On : 24 Aug 2017 5:21 pm
Operator : JiaminC
Sample : ic7107-200
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 25 16:06:48 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Aug 25 16:05:58 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169440.D
Acq On : 24 Aug 2017 6:52 pm
Operator : JiaminC
Sample : icv7107-50
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 28 11:38:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Aug 28 11:37:12 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.397	65	108324	500.00	ug/L		0.00
5) pentafluorobenzene	10.107	168	274681	50.00	ug/L		0.00
50) 1,4-difluorobenzene	11.255	114	383973	50.00	ug/L		0.00
72) chlorobenzene-d5	15.476	117	375366	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	18.271	152	207116	50.00	ug/L		0.00
System Monitoring Compounds							
42) dibromofluoromethane (s)	10.112	113	123750	50.25	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.50%				
51) 1,2-dichloroethane-d4 (s)	10.647	65	136771	49.63	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 99.26%				
73) toluene-d8 (s)	13.463	98	442865	48.97	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 97.94%				
97) 4-bromofluorobenzene (s)	16.981	95	181341	49.10	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 98.20%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.528	59	69878	268.17	ug/L		99
3) ethyl alcohol	6.018	45	123823	5375.17	ug/L		98
4) 1,4-dioxane	12.199	88	27428	1218.04	ug/L		94
6) chlorodifluoromethane	3.889	51	157400	43.97	ug/L		95
7) dichlorodifluoromethane	3.873	85	224698	63.38	ug/L		98
8) chloromethane	4.209	50	228823	56.94	ug/L		99
9) vinyl chloride	4.471	62	222436	54.59	ug/L		99
10) bromomethane	5.105	94	137448	52.87	ug/L		100
11) chloroethane	5.278	64	100432	53.16	ug/L		98
12) trichlorofluoromethane	5.787	101	220434	55.72	ug/L		99
13) ethyl ether	6.206	74	64948	49.46	ug/L		97
14) acrolein	6.453	56	24921	50.13	ug/L		96
15) 1,1-dichloroethene	6.636	96	116931	47.92	ug/L		95
16) freon 113	6.636	151	134198	59.17	ug/L		97
17) 2-chloropropane	6.395	43	240535	49.72	ug/L		98
18) acetone	6.689	58	38073	194.27	ug/L		97
19) acetonitrile	7.155	41	90130	272.40	ug/L		97
20) iodomethane	6.919	142	262552	50.27	ug/L		98
21) carbon disulfide	7.056	76	448955	50.02	ug/L		99
22) methylene chloride	7.412	84	137013	50.28	ug/L		99
23) methyl acetate	7.213	43	86646	43.36	ug/L		98
24) methyl tert butyl ether	7.832	73	783435	100.12	ug/L		91
25) trans-1,2-dichloroethene	7.847	96	122664	49.37	ug/L		98
26) hexane	8.246	57	143446	41.51	ug/L		99
27) di-isopropyl ether	8.555	45	449577	50.18	ug/L		99
28) 2-butanone	9.389	72	47723	203.14	ug/L		99
29) 1,1-dichloroethane	8.513	63	244274	52.35	ug/L		99
30) chloroprene	8.650	53	494741	128.70	ug/L		98
31) acrylonitrile	7.790	53	50839	54.95	ug/L		99
32) vinyl acetate	8.529	86	21585	54.60	ug/L	#	92
33) ethyl tert-butyl ether	9.116	59	443850	50.03	ug/L		98
34) ethyl acetate	9.441	45	16461	49.71	ug/L	#	77

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169440.D
Acq On : 24 Aug 2017 6:52 pm
Operator : JiaminC
Sample : icv7107-50
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 28 11:38:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Aug 28 11:37:12 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35) 2,2-dichloropropane	9.426	77	209440	55.17	ug/L		98
36) cis-1,2-dichloroethene	9.405	96	146588	52.46	ug/L		98
37) propionitrile	9.494	54	160625	503.18	ug/L		99
38) tert-Butyl Formate	9.950	59	37694	21.89	ug/L		98
39) bromochloromethane	9.777	128	74767	50.34	ug/L		94
40) tetrahydrofuran	9.850	72	15156	50.99	ug/L		97
41) chloroform	9.861	83	238692	51.73	ug/L		98
43) methacrylonitrile	9.730	67	47159	47.75	ug/L		97
44) 1,1,1-trichloroethane	10.196	97	214899	53.13	ug/L		99
45) cyclohexane	10.296	84	185039	52.28	ug/L	#	80
46) 1,1-dichloropropene	10.427	75	175979	52.35	ug/L		99
47) isobutyl alcohol	10.453	43	50816	472.52	ug/L		95
48) carbon tetrachloride	10.453	117	190614	52.00	ug/L		98
49) tert-amyl alcohol	10.632	73	30897	256.36	ug/L		98
52) benzene	10.757	78	497175	49.06	ug/L		100
53) iso-octane	10.831	57	545651	52.27	ug/L		98
54) tert-amyl methyl ether	10.852	73	389238	48.99	ug/L		99
55) heptane	11.051	57	97416	52.49	ug/L		97
56) isopropyl acetate	10.726	87	23358	51.16	ug/L		94
57) 1,2-dichloroethane	10.763	62	179850	51.25	ug/L		98
58) n-butyl alcohol	11.434	56	159207	2622.52	ug/L		98
59) ethyl acrylate	11.748	55	146429	51.65	ug/L		98
60) trichloroethene	11.691	130	146514	53.26	ug/L		98
61) 2-nitropropane	12.734	41	30382	50.75	ug/L		98
62) 2-chloroethyl vinyl ether	12.792	63	234177	235.01	ug/L		100
63) methyl methacrylate	12.105	100	29090	52.26	ug/L		95
64) 1,2-dichloropropane	12.042	63	134367	50.98	ug/L		100
65) dibromomethane	12.225	93	84171	50.39	ug/L		96
66) methylcyclohexane	12.005	83	233466	48.53	ug/L		92
67) bromodichloromethane	12.414	83	183512	53.52	ug/L		100
68) epichlorohydrin	12.923	57	54606	249.08	ug/L		99
69) cis-1,3-dichloropropene	13.054	75	224748	53.68	ug/L		99
70) 4-methyl-2-pentanone	13.232	58	174375	197.51	ug/L		99
71) 3-methyl-1-butanol	13.253	55	102708	1009.59	ug/L		99
74) toluene	13.557	92	313516	51.05	ug/L		97
75) trans-1,3-dichloropropene	13.825	75	203327	57.11	ug/L		100
76) ethyl methacrylate	13.882	69	157091	50.64	ug/L		98
77) 1,1,2-trichloroethane	14.102	83	100872	52.37	ug/L		98
78) 3,3-dimethyl-1-butanol	14.627	57	117753	524.18	ug/L		97
79) tetrachloroethene	14.338	164	133526	51.81	ug/L		97
80) 1,3-dichloropropane	14.349	76	189093	51.44	ug/L		99
81) 2-hexanone	14.396	58	158185	201.69	ug/L		99
82) butyl acetate	14.527	56	77426	51.67	ug/L		98
83) dibromochloromethane	14.679	129	151451	54.56	ug/L		97
84) 1,2-dibromoethane	14.873	107	131606	52.90	ug/L		98
85) n-butyl ether	15.523	57	551454	54.10	ug/L		100
86) chlorobenzene	15.518	112	377860	51.13	ug/L		98
87) 1,1,1,2-tetrachloroethane	15.607	131	148321	53.01	ug/L		97
88) ethylbenzene	15.628	91	603111	49.99	ug/L		99
89) m,p-xylene	15.775	91	952041	100.50	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169440.D
Acq On : 24 Aug 2017 6:52 pm
Operator : JiaminC
Sample : icv7107-50
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 28 11:38:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Aug 28 11:37:12 2017
Response via : Initial Calibration

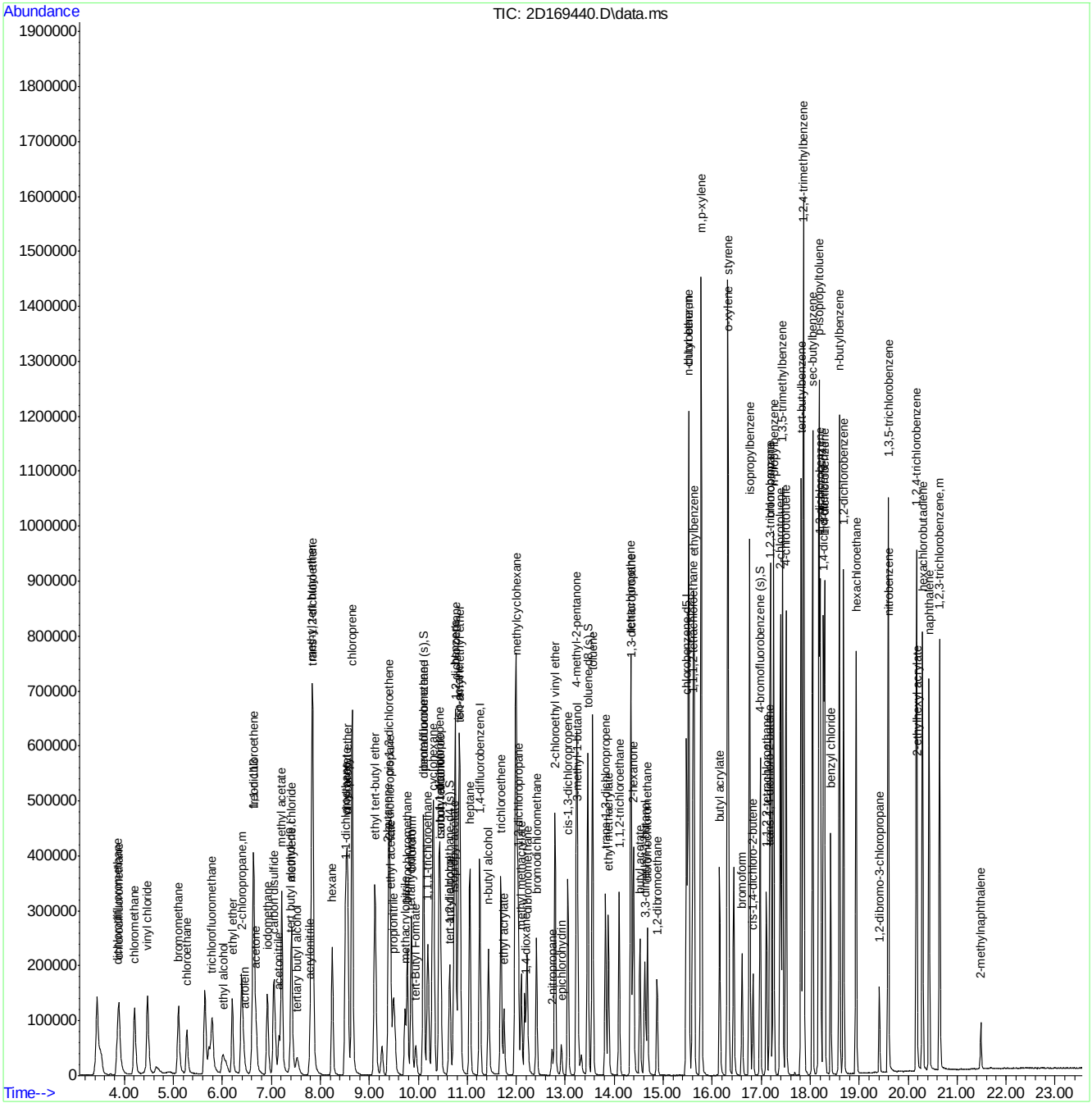
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90) o-xylene	16.315	106	251884	50.96	ug/L	99
91) styrene	16.325	104	410249	53.23	ug/L	99
92) butyl acrylate	16.152	55	265904	52.92	ug/L	99
93) bromoform	16.614	173	115094	55.55	ug/L	97
94) isopropylbenzene	16.766	105	668782	51.31	ug/L	99
95) cis-1,4-dichloro-2-butene	16.834	88	44885	55.91	ug/L	93
98) bromobenzene	17.191	156	189715	50.51	ug/L	98
99) 1,1,2,2-tetrachloroethane	17.107	83	164504	51.30	ug/L	100
100) trans-1,4-dichloro-2-b...	17.170	53	37318	57.49	ug/L	94
101) 1,2,3-trichloropropane	17.185	110	40620	49.90	ug/L	95
102) n-propylbenzene	17.253	91	756153	51.74	ug/L	99
103) 2-chlorotoluene	17.395	126	170053	51.02	ug/L	99
104) 4-chlorotoluene	17.510	91	460912	50.38	ug/L	99
105) 1,3,5-trimethylbenzene	17.437	105	560268	49.82	ug/L	100
106) tert-butylbenzene	17.820	119	527569	51.99	ug/L	99
107) 1,2,4-trimethylbenzene	17.862	105	576175	50.48	ug/L	100
108) sec-butylbenzene	18.050	105	765225	52.15	ug/L	100
109) 1,3-dichlorobenzene	18.208	146	347244	51.26	ug/L	98
110) p-isopropyltoluene	18.181	119	665329	53.82	ug/L	100
111) 1,4-dichlorobenzene	18.297	146	345882	51.34	ug/L	99
112) 1,2-dichlorobenzene	18.685	146	364607	52.88	ug/L	99
113) benzyl chloride	18.417	91	296239	53.79	ug/L	98
114) n-butylbenzene	18.596	92	322361	55.39	ug/L	99
115) 1,2-dibromo-3-chloropr...	19.414	157	41792	53.91	ug/L	98
116) nitrobenzene	19.602	77	4411	45.78	ug/L	81
117) 1,3,5-trichlorobenzene	19.597	180	343624	52.51	ug/L	99
118) hexachlorobutadiene	20.294	225	183288	56.73	ug/L	99
119) naphthalene	20.425	128	538109	54.75	ug/L	99
120) 2-ethylhexyl acrylate	20.184	70	19755	9.99	ug/L	97
121) 1,2,4-trichlorobenzene	20.174	180	296930	54.02	ug/L	98
122) 1,2,3-trichlorobenzene	20.646	180	269120	53.96	ug/L	99
123) hexachloroethane	18.942	201	134816	55.85	ug/L	100
124) 2-methylnaphthalene	21.485	142	41002	11.33	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169440.D
Acq On : 24 Aug 2017 6:52 pm
Operator : JiaminC
Sample : icv7107-50
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 28 11:38:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Aug 28 11:37:12 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169441.D
Acq On : 24 Aug 2017 7:22 pm
Operator : JiaminC
Sample : icv7107-50
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 28 11:39:40 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Aug 28 11:37:12 2017
Response via : Initial Calibration

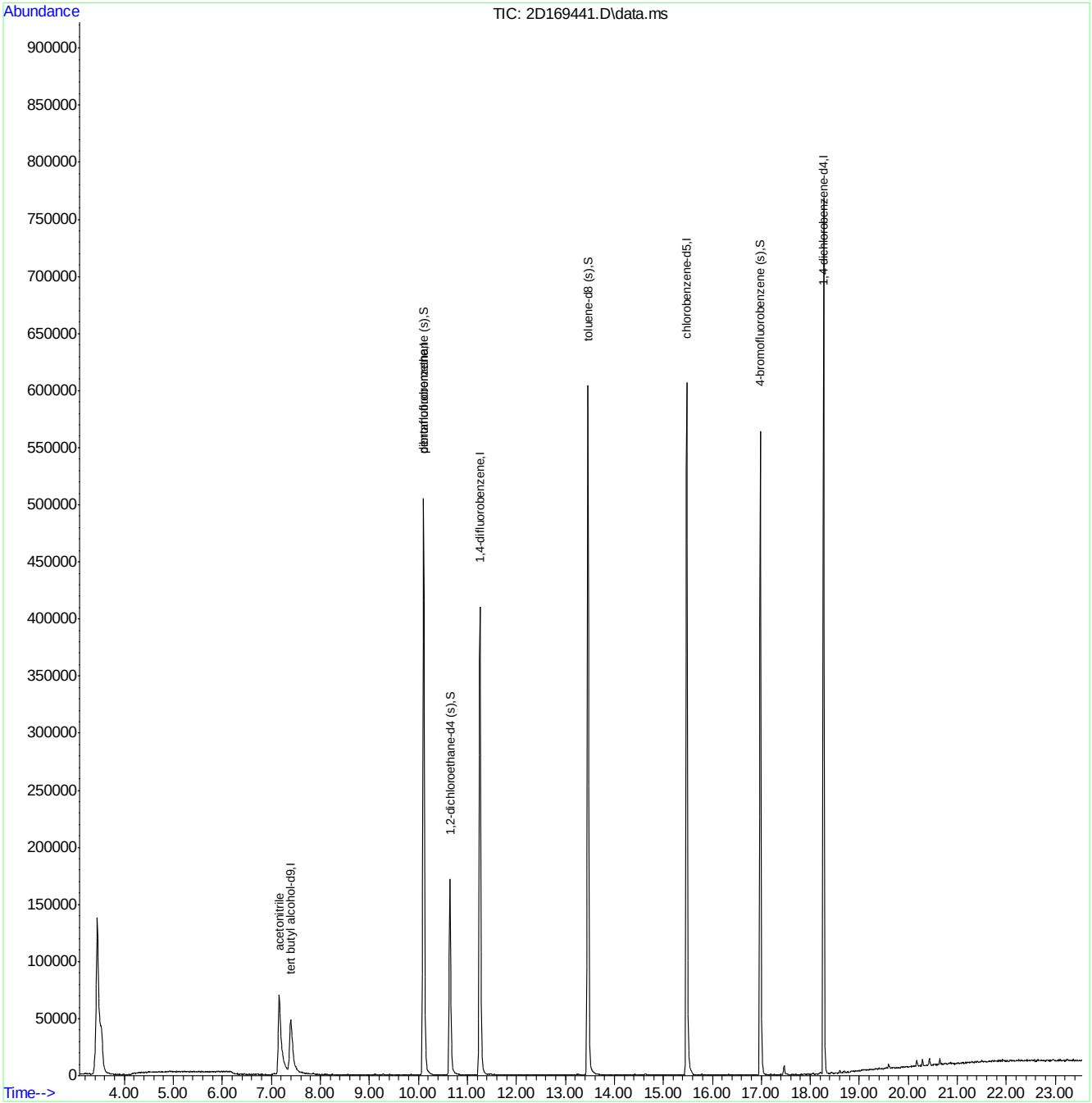
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.391	65	121229	500.00	ug/L	0.00
5) pentafluorobenzene	10.107	168	299102	50.00	ug/L	0.00
50) 1,4-difluorobenzene	11.255	114	411927	50.00	ug/L	0.00
72) chlorobenzene-d5	15.476	117	394976	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	18.271	152	200334	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.107	113	135471	50.52	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.04%			
51) 1,2-dichloroethane-d4 (s)	10.647	65	148327	50.17	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 100.34%			
73) toluene-d8 (s)	13.463	98	480799	50.53	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 101.06%			
97) 4-bromofluorobenzene (s)	16.981	95	185188	51.84	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 103.68%			
Target Compounds						Qvalue
19) acetonitrile	7.161	41	174494	484.32	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2D169441.D
Acq On : 24 Aug 2017 7:22 pm
Operator : JiaminC
Sample : icv7107-50
Misc : MS19320,V2D7107,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 28 11:39:40 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Aug 28 11:37:12 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7158\
Data File : 2d170597.d
Acq On : 4 Oct 2017 8:35 pm
Operator : BridgetK
Sample : cc7107-50 Inst : MS2D
Misc : MS20595,V2D7158,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 05 09:23:25 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.378	65	98032	500.00	ug/L		-0.01
5) pentafluorobenzene	10.089	168	284366	50.00	ug/L		-0.02
50) 1,4-difluorobenzene	11.237	114	404823	50.00	ug/L		-0.02
72) chlorobenzene-d5	15.463	117	402161	50.00	ug/L		-0.01
96) 1,4-dichlorobenzene-d4	18.257	152	209591	50.00	ug/L		-0.01
System Monitoring Compounds							
42) dibromofluoromethane (s)	10.089	113	125277	49.14	ug/L		-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.28%				
51) 1,2-dichloroethane-d4 (s)	10.623	65	124723	42.93	ug/L		-0.02
Spiked Amount 50.000	Range 81 - 124		Recovery = 85.86%				
73) toluene-d8 (s)	13.444	98	478404	49.38	ug/L		-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.76%				
97) 4-bromofluorobenzene (s)	16.962	95	185033	49.51	ug/L		-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.02%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	7.504	59	61993	262.88	ug/L		98
3) ethyl alcohol	5.994	45	139366	6594.66	ug/L		98
4) 1,4-dioxane	12.175	88	28031	1375.51	ug/L		95
6) chlorodifluoromethane	3.876	51	206267	55.66	ug/L		99
7) dichlorodifluoromethane	3.860	85	220489	60.08	ug/L		99
8) chloromethane	4.195	50	261108	62.76	ug/L		99
9) vinyl chloride	4.458	62	256071	60.71	ug/L		99
10) bromomethane	5.087	94	153140	56.90	ug/L		98
11) chloroethane	5.265	64	117626	60.15	ug/L		96
12) trichlorofluoromethane	5.779	101	221343	54.05	ug/L		98
13) ethyl ether	6.188	74	72791	53.54	ug/L		95
14) acrolein	6.429	56	24297	47.21	ug/L		90
15) 1,1-dichloroethene	6.618	96	131647	52.11	ug/L		92
16) freon 113	6.623	151	121893	51.91	ug/L		98
17) 2-chloropropane	6.377	43	258460	51.61	ug/L		94
18) acetone	6.675	58	35116	173.08	ug/L	#	77
19) acetonitrile	7.142	41	149759	437.21	ug/L		96
20) iodomethane	6.896	142	270984	50.11	ug/L		96
21) carbon disulfide	7.032	76	498305	53.63	ug/L		95
22) methylene chloride	7.394	84	145529	51.58	ug/L		92
23) methyl acetate	7.194	43	86921	42.01	ug/L		98
24) methyl tert butyl ether	7.813	73	369989	45.67	ug/L		100
25) trans-1,2-dichloroethene	7.829	96	136030	52.89	ug/L		98
26) hexane	8.227	57	181856	50.84	ug/L		97
27) di-isopropyl ether	8.537	45	447488	48.25	ug/L		92
28) 2-butanone	9.365	72	44973	184.92	ug/L	#	86
29) 1,1-dichloroethane	8.489	63	250478	51.85	ug/L		100
30) chloroprene	8.631	53	190617	47.90	ug/L		93
31) acrylonitrile	7.766	53	43884	45.82	ug/L		95
32) vinyl acetate	8.510	86	19693	48.12	ug/L	#	93
33) ethyl tert-butyl ether	9.098	59	441789	48.11	ug/L		98
34) ethyl acetate	9.417	45	15653	45.66	ug/L	#	88
35) 2,2-dichloropropane	9.407	77	162975	41.47	ug/L		92
36) cis-1,2-dichloroethene	9.381	96	151923	52.51	ug/L		95
37) propionitrile	9.470	54	162789	492.59	ug/L		94
38) tert-Butyl Formate	9.931	59	26949	15.11	ug/L		94
39) bromochloromethane	9.758	128	74258	48.29	ug/L		95
40) tetrahydrofuran	9.832	72	13864	45.06	ug/L		89
41) chloroform	9.842	83	232148	48.59	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7158\
Data File : 2d170597.d
Acq On : 4 Oct 2017 8:35 pm
Operator : BridgetK
Sample : cc7107-50 Inst : MS2D
Misc : MS20595,V2D7158,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 05 09:23:25 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) methacrylonitrile	9.711	67	45795	44.79	ug/L		87
44) 1,1,1-trichloroethane	10.178	97	202832	48.44	ug/L		98
45) cyclohexane	10.277	84	216706	59.14	ug/L		79
46) 1,1-dichloropropene	10.403	75	179078	51.46	ug/L		98
47) isobutyl alcohol	10.435	43	43329	389.18	ug/L		97
48) carbon tetrachloride	10.435	117	178453	47.02	ug/L		99
49) tert-amyl alcohol	10.608	73	27562	220.90	ug/L		94
52) benzene	10.733	78	531610	49.75	ug/L		100
53) iso-octane	10.807	57	549819	49.95	ug/L		95
54) tert-amyl methyl ether	10.833	73	380904	45.47	ug/L		99
55) heptane	11.032	57	91712	46.87	ug/L		97
56) isopropyl acetate	10.707	87	21773	45.23	ug/L	#	83
57) 1,2-dichloroethane	10.739	62	153775	41.56	ug/L		99
58) n-butyl alcohol	11.410	56	150362	2349.26	ug/L		94
59) ethyl acrylate	11.730	55	136475	45.66	ug/L		98
60) trichloroethene	11.667	130	146588	50.55	ug/L		98
61) 2-nitropropane	12.710	41	24571	38.93	ug/L		98
62) 2-chloroethyl vinyl ether	12.773	63	245828	234.00	ug/L		98
63) methyl methacrylate	12.086	100	28153	47.97	ug/L	#	79
64) 1,2-dichloropropane	12.018	63	144407	51.97	ug/L		100
65) dibromomethane	12.202	93	80040	45.45	ug/L		98
66) methylcyclohexane	11.987	83	271805	53.59	ug/L		98
67) bromodichloromethane	12.396	83	175287	48.49	ug/L		100
68) epichlorohydrin	12.904	57	48879	211.48	ug/L		96
69) cis-1,3-dichloropropene	13.035	75	221672	50.22	ug/L		90
70) 4-methyl-2-pentanone	13.213	58	173825	186.75	ug/L		94
71) 3-methyl-1-butanol	13.234	55	102522	955.86	ug/L		95
74) toluene	13.539	92	330711	50.26	ug/L		98
75) trans-1,3-dichloropropene	13.806	75	186296	48.84	ug/L		98
76) ethyl methacrylate	13.864	69	158660	47.74	ug/L		91
77) 1,1,2-trichloroethane	14.084	83	100621	48.76	ug/L		97
78) 3,3-dimethyl-1-butanol	14.608	57	116845	485.48	ug/L		98
79) tetrachloroethene	14.320	164	132902	48.13	ug/L		98
80) 1,3-dichloropropane	14.330	76	191908	48.73	ug/L		94
81) 2-hexanone	14.377	58	161287	191.94	ug/L	#	88
82) butyl acetate	14.508	56	79131	49.28	ug/L		86
83) dibromochloromethane	14.661	129	142413	47.89	ug/L		99
84) 1,2-dibromoethane	14.860	107	125714	47.16	ug/L		99
85) n-butyl ether	15.505	57	618517	56.63	ug/L		99
86) chlorobenzene	15.499	112	391879	49.49	ug/L		99
87) 1,1,1,2-tetrachloroethane	15.589	131	145330	48.48	ug/L		95
88) ethylbenzene	15.610	91	634764	49.11	ug/L		99
89) m,p-xylene	15.756	91	972645	95.83	ug/L		99
90) o-xylene	16.296	106	262941	49.65	ug/L		95
91) styrene	16.312	104	428416	51.88	ug/L		92
92) butyl acrylate	16.139	55	259493	48.20	ug/L		98
93) bromoform	16.595	173	108000	48.65	ug/L		99
94) isopropylbenzene	16.747	105	692416	49.58	ug/L		99
95) cis-1,4-dichloro-2-butene	16.815	88	12355	17.14	ug/L		93
98) bromobenzene	17.177	156	190703	50.17	ug/L		97
99) 1,1,2,2-tetrachloroethane	17.093	83	164118	50.57	ug/L		99
100) trans-1,4-dichloro-2-b...	17.156	53	9962	17.61	ug/L	#	1
101) 1,2,3-trichloropropane	17.172	110	38148	46.31	ug/L	#	79
102) n-propylbenzene	17.240	91	793114	53.62	ug/L		99
103) 2-chlorotoluene	17.376	126	173843	51.54	ug/L		96
104) 4-chlorotoluene	17.492	91	473495	51.14	ug/L		97
105) 1,3,5-trimethylbenzene	17.424	105	562320	49.41	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7158\
Data File : 2d170597.d
Acq On : 4 Oct 2017 8:35 pm
Operator : BridgetK
Sample : cc7107-50 Inst : MS2D
Misc : MS20595,V2D7158,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 05 09:23:25 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration

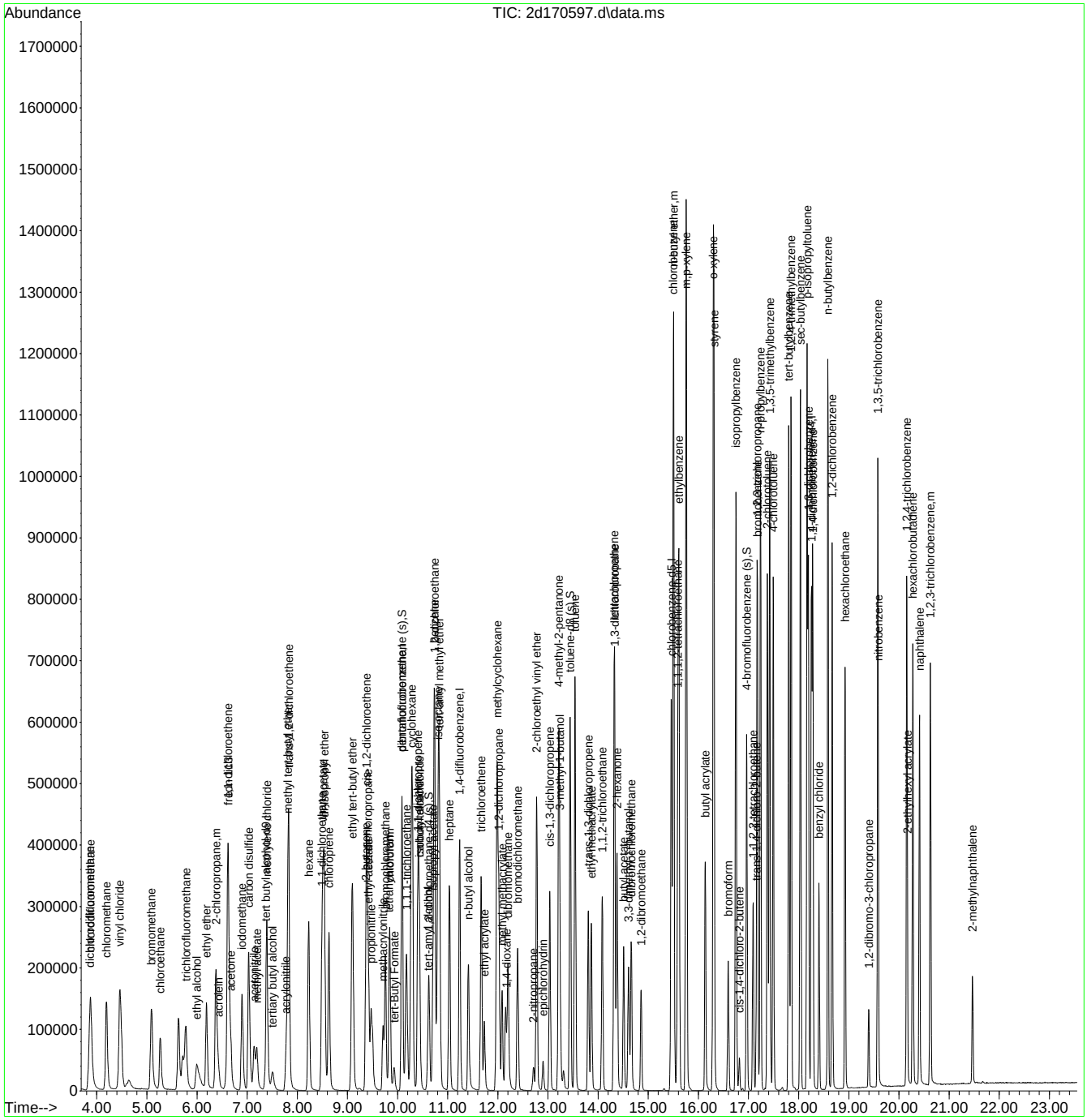
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) tert-butylbenzene	17.801	119	516649	50.31	ug/L	99
107) 1,2,4-trimethylbenzene	17.848	105	580334	50.25	ug/L	98
108) sec-butylbenzene	18.037	105	789142	53.15	ug/L	99
109) 1,3-dichlorobenzene	18.194	146	342971	50.04	ug/L	98
110) p-isopropyltoluene	18.168	119	655245	52.38	ug/L	98
111) 1,4-dichlorobenzene	18.283	146	341211	50.05	ug/L	99
112) 1,2-dichlorobenzene	18.666	146	352542	50.53	ug/L	100
113) benzyl chloride	18.404	91	222673	39.96	ug/L	99
114) n-butylbenzene	18.582	92	332103	56.39	ug/L	99
115) 1,2-dibromo-3-chloropr...	19.400	157	36222	46.17	ug/L	98
116) nitrobenzene	19.589	77	5684	56.71	ug/L	89
117) 1,3,5-trichlorobenzene	19.578	180	328503	49.61	ug/L	99
118) hexachlorobutadiene	20.276	225	160991	49.24	ug/L	98
119) naphthalene	20.412	128	471961	47.45	ug/L	99
120) 2-ethylhexyl acrylate	20.171	70	15830	8.33	ug/L	94
121) 1,2,4-trichlorobenzene	20.155	180	263316	47.42	ug/L	98
122) 1,2,3-trichlorobenzene	20.627	180	231811	46.02	ug/L	100
123) hexachloroethane	18.923	201	125937	51.56	ug/L	96
124) 2-methylnaphthalene	21.466	142	89219	19.68	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7158\
Data File : 2d170597.d
Acq On : 4 Oct 2017 8:35 pm
Operator : BridgetK
Sample : cc7107-50 Inst : MS2D
Misc : MS20595,V2D7158,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 05 09:23:25 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7159\
Data File : 2d170634a.d
Acq On : 5 Oct 2017 8:50 pm
Operator : BridgetK
Sample : cc7107-50 Inst : MS2D
Misc : MS20600,V2D7159,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 05 21:14:23 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.388	65	103883	500.00	ug/L	0.00
5) pentafluorobenzene	10.094	168	238829	50.00	ug/L	-0.01
50) 1,4-difluorobenzene	11.247	114	339508	50.00	ug/L	0.00
72) chlorobenzene-d5	15.468	117	338114	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	18.262	152	173710	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	10.099	113	106273	49.63	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.26%			
51) 1,2-dichloroethane-d4 (s)	10.634	65	108037	44.34	ug/L	-0.01
Spiked Amount 50.000	Range 81 - 124		Recovery = 88.68%			
73) toluene-d8 (s)	13.449	98	403028	49.48	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.96%			
97) 4-bromofluorobenzene (s)	16.967	95	153141	49.44	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.88%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.519	59	64463	257.96	ug/L	95
3) ethyl alcohol	5.999	45	135210	6073.55	ug/L	96
4) 1,4-dioxane	12.191	88	29480	1365.14	ug/L	90
6) chlorodifluoromethane	3.886	51	142482	45.78	ug/L	99
7) dichlorodifluoromethane	3.870	85	140105	45.45	ug/L	100
8) chloromethane	4.195	50	181223	51.87	ug/L	100
9) vinyl chloride	4.463	62	188437	53.19	ug/L	100
10) bromomethane	5.097	94	117768	52.10	ug/L	99
11) chloroethane	5.270	64	87639	53.36	ug/L	95
12) trichlorofluoromethane	5.789	101	173290	50.38	ug/L	97
13) ethyl ether	6.198	74	62830	55.03	ug/L	93
14) acrolein	6.439	56	24181	55.95	ug/L	92
15) 1,1-dichloroethene	6.628	96	105985	49.95	ug/L	94
16) freon 113	6.628	151	92754	47.03	ug/L	97
17) 2-chloropropane	6.392	43	190520	45.30	ug/L	93
18) acetone	6.681	58	46161	270.90	ug/L #	77
19) acetonitrile	7.147	41	155414	540.22	ug/L	95
20) iodomethane	6.911	142	223561	49.23	ug/L	95
21) carbon disulfide	7.042	76	398254	51.03	ug/L	96
22) methylene chloride	7.399	84	121170	51.14	ug/L	92
23) methyl acetate	7.200	43	88434	50.89	ug/L	94
24) methyl tert butyl ether	7.818	73	319119	46.90	ug/L	100
25) trans-1,2-dichloroethene	7.834	96	108551	50.25	ug/L	98
26) hexane	8.232	57	146236	48.67	ug/L	95
27) di-isopropyl ether	8.542	45	362473	46.53	ug/L	98
28) 2-butanone	9.381	72	48926	239.53	ug/L #	79
29) 1,1-dichloroethane	8.500	63	202337	49.87	ug/L	99
30) chloroprene	8.641	53	148330	44.38	ug/L	95
31) acrylonitrile	7.776	53	43810	54.46	ug/L	94
32) vinyl acetate	8.516	86	18266	53.15	ug/L #	80
33) ethyl tert-butyl ether	9.108	59	360882	46.79	ug/L	98
34) ethyl acetate	9.428	45	15248	52.96	ug/L #	74
35) 2,2-dichloropropane	9.412	77	150767	45.68	ug/L	94
36) cis-1,2-dichloroethene	9.391	96	121969	50.20	ug/L	94
37) propionitrile	9.480	54	164932	594.23	ug/L	94
38) tert-Butyl Formate	9.936	59	28532	19.05	ug/L	95
39) bromochloromethane	9.769	128	63541	49.20	ug/L	91
40) tetrahydrofuran	9.842	72	13945	53.96	ug/L #	83
41) chloroform	9.847	83	186611	46.51	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7159\
Data File : 2d170634a.d
Acq On : 5 Oct 2017 8:50 pm
Operator : BridgetK
Sample : cc7107-50 Inst : MS2D
Misc : MS20600,V2D7159,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 05 21:14:23 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) methacrylonitrile	9.716	67	44726	52.09	ug/L		87
44) 1,1,1-trichloroethane	10.188	97	156760	44.58	ug/L		96
45) cyclohexane	10.288	84	156603	50.89	ug/L		88
46) 1,1-dichloropropene	10.414	75	140947	48.23	ug/L		97
47) isobutyl alcohol	10.445	43	45189	483.27	ug/L		96
48) carbon tetrachloride	10.440	117	140497	44.08	ug/L		98
49) tert-amyl alcohol	10.613	73	26877	256.49	ug/L		95
52) benzene	10.744	78	426242	47.57	ug/L		100
53) iso-octane	10.817	57	456534	49.46	ug/L		95
54) tert-amyl methyl ether	10.843	73	321883	45.82	ug/L		99
55) heptane	11.043	57	80172	48.86	ug/L		96
56) isopropyl acetate	10.712	87	21100	52.27	ug/L	#	79
57) 1,2-dichloroethane	10.749	62	131993	42.54	ug/L		99
58) n-butyl alcohol	11.425	56	155643	2899.59	ug/L		92
59) ethyl acrylate	11.740	55	127650	50.93	ug/L		98
60) trichloroethene	11.677	130	117337	48.24	ug/L		97
61) 2-nitropropane	12.726	41	25117	47.45	ug/L		93
62) 2-chloroethyl vinyl ether	12.783	63	111701	126.78	ug/L		100
63) methyl methacrylate	12.097	100	26416	53.67	ug/L	#	86
64) 1,2-dichloropropane	12.028	63	116389	49.94	ug/L		99
65) dibromomethane	12.207	93	69511	47.06	ug/L		98
66) methylcyclohexane	11.992	83	210790	49.56	ug/L		97
67) bromodichloromethane	12.401	83	145209	47.90	ug/L		99
68) epichlorohydrin	12.909	57	49183	253.73	ug/L		98
69) cis-1,3-dichloropropene	13.046	75	190341	51.42	ug/L		89
70) 4-methyl-2-pentanone	13.224	58	166139	212.83	ug/L		88
71) 3-methyl-1-butanol	13.245	55	100052	1112.29	ug/L		93
74) toluene	13.549	92	266203	48.12	ug/L		98
75) trans-1,3-dichloropropene	13.811	75	164928	51.43	ug/L		99
76) ethyl methacrylate	13.874	69	140576	50.31	ug/L		92
77) 1,1,2-trichloroethane	14.089	83	88539	51.03	ug/L		96
78) 3,3-dimethyl-1-butanol	14.613	57	109496	541.13	ug/L		99
79) tetrachloroethene	14.330	164	104910	45.19	ug/L		98
80) 1,3-dichloropropane	14.335	76	167195	50.49	ug/L		93
81) 2-hexanone	14.383	58	158835	224.83	ug/L		89
82) butyl acetate	14.514	56	71694	53.11	ug/L	#	84
83) dibromochloromethane	14.671	129	122872	49.14	ug/L		99
84) 1,2-dibromoethane	14.865	107	113104	50.47	ug/L		100
85) n-butyl ether	15.510	57	494754	53.88	ug/L		99
86) chlorobenzene	15.510	112	320529	48.15	ug/L		99
87) 1,1,1,2-tetrachloroethane	15.594	131	119757	47.52	ug/L		98
88) ethylbenzene	15.615	91	513323	47.23	ug/L		99
89) m,p-xylene	15.767	91	789755	92.55	ug/L		99
90) o-xylene	16.307	106	213537	47.96	ug/L		96
91) styrene	16.317	104	349013	50.27	ug/L		93
92) butyl acrylate	16.144	55	221588	48.96	ug/L		97
93) bromoform	16.600	173	98066	52.54	ug/L		99
94) isopropylbenzene	16.758	105	552765	47.08	ug/L		99
95) cis-1,4-dichloro-2-butene	16.826	88	38918	54.07	ug/L		91
98) bromobenzene	17.182	156	154380	49.01	ug/L		98
99) 1,1,2,2-tetrachloroethane	17.098	83	150949	56.12	ug/L		99
100) trans-1,4-dichloro-2-b...	17.161	53	28927	53.39	ug/L	#	81
101) 1,2,3-trichloropropane	17.177	110	35812	52.45	ug/L		95
102) n-propylbenzene	17.245	91	637067	51.97	ug/L		99
103) 2-chlorotoluene	17.387	126	138907	49.69	ug/L		96
104) 4-chlorotoluene	17.502	91	375390	48.92	ug/L		98
105) 1,3,5-trimethylbenzene	17.429	105	455058	48.25	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7159\
Data File : 2d170634a.d
Acq On : 5 Oct 2017 8:50 pm
Operator : BridgetK
Sample : cc7107-50 Inst : MS2D
Misc : MS20600,V2D7159,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 05 21:14:23 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration

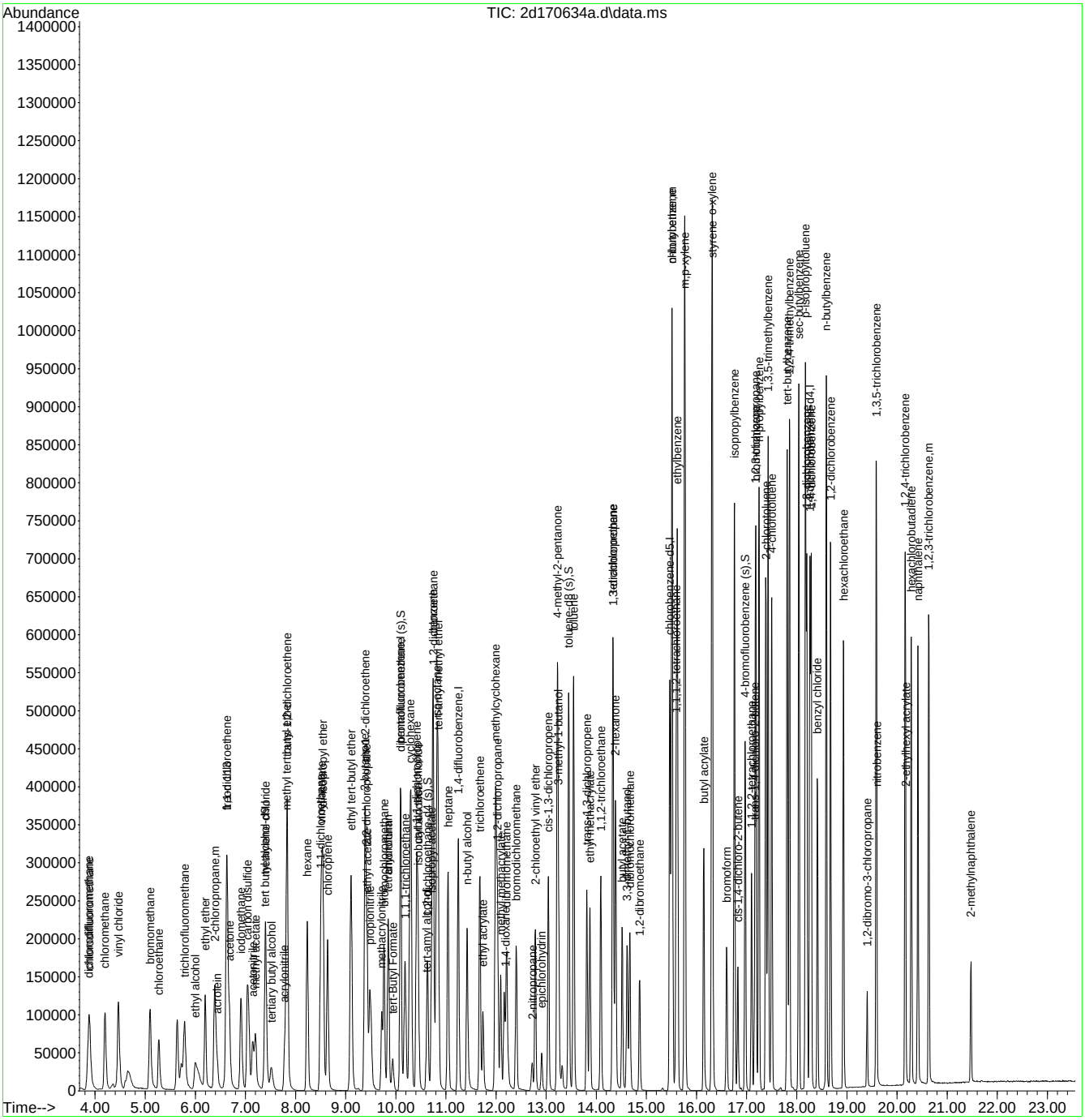
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) tert-butylbenzene	17.811	119	426428	50.10	ug/L	96
107) 1,2,4-trimethylbenzene	17.853	105	474339	49.55	ug/L	99
108) sec-butylbenzene	18.042	105	635894	51.67	ug/L	99
109) 1,3-dichlorobenzene	18.199	146	280508	49.38	ug/L	99
110) p-isopropyltoluene	18.173	119	531038	51.22	ug/L	98
111) 1,4-dichlorobenzene	18.289	146	278881	49.36	ug/L	98
112) 1,2-dichlorobenzene	18.677	146	294257	50.89	ug/L	99
113) benzyl chloride	18.409	91	281321	60.91	ug/L	99
114) n-butylbenzene	18.587	92	266381	54.57	ug/L	98
115) 1,2-dibromo-3-chloropr...	19.405	157	35879	55.18	ug/L	99
116) nitrobenzene	19.599	77	6578	76.89	ug/L	98
117) 1,3,5-trichlorobenzene	19.589	180	275187	50.14	ug/L	99
118) hexachlorobutadiene	20.286	225	137620	50.79	ug/L	100
119) naphthalene	20.417	128	454231	55.10	ug/L	99
120) 2-ethylhexyl acrylate	20.176	70	10310	6.97	ug/L	99
121) 1,2,4-trichlorobenzene	20.166	180	230321	50.01	ug/L	99
122) 1,2,3-trichlorobenzene	20.632	180	209722	50.18	ug/L	100
123) hexachloroethane	18.933	201	111730	55.19	ug/L	94
124) 2-methylnaphthalene	21.476	142	79773	20.90	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\v2d7159\
Data File : 2d170634a.d
Acq On : 5 Oct 2017 8:50 pm
Operator : BridgetK
Sample : cc7107-50 Inst : MS2D
Misc : MS20600,V2D7159,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2D7107.M
Quant Results File: M2D7107.RES
Quant Time: Oct 05 21:14:23 2017
Quant Title : SW-846 Method 8260C, DB624 60m x 0.25mm x 1.4um
QLast Update : Tue Oct 03 11:34:33 2017
Response via : Initial Calibration



SGS

VOLATILE ANALYSIS LOG

Batch ID: V2D7107

Print Analyst Name: JTa-Min Chu

Date: 8/24/17

Analyst Signature:

Columns: DB624(60M X0.25MM X 1.4UM)

Method V8260C

Initial Cal. Method M2D 7107 7077 JMC@8/24/17

Standard Data

Lot #	Description	Conc.
V17-2530	73(6) ~~100-1000~~ ABK	100-10000ppm
V17-2530	74(3) C	100ppm
V17-2530	75(4+) E	100ppm
V17-2530	47 I/S	2500/2500ppm
V17-2530	52(2) Acetonitrile	1000ppm

Standard Data

Lot #	Description	Conc.
V17-2530	82(5) EXTAB	100-10000ppm
V17-2530	67(2) ExtC	100ppm
V17-2530	41(5) ExtE	100ppm
V17-2530	51(3) Hexane	100ppm
V17-2530	50(1) Ketones	300ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 8/25/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml) or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	20 169427	BFB				1	5		1X.				QC	12:13PM	
	169428	IC7107-0.2	8260C Initial	A/B	/	2	5		1X.		~		QC	2MABK,CE1000ML	
	169429	IC7107-0.5	V	A/B	/	3	5		1X		~		QC	5MABK,CE1000ML	
	169430	IC7107-1	V	A/B	/	4	5		1X		~		QC	1MABK,CE1100ML	
	169431	IC7107-2	V	A/B	/	5	5		1X		~		QC	2MABK,CE1100ML	
	169432	IC7107-5	V	A/B	/	6	5		1X		~		QC	5MABK,CE1100ML	
	169433	IC7107-10	V	A/B	/	7	5		1X		~		QC	10MABK,CE1100ML	
	169434	IC7107-20	V	A/B	/	8	5		1X		~		QC	20MABK,CE1100ML	
	169435	IC7107-50	V	A/B	/	9	5		1X		~		QC	50MABK,CE1100ML	
	169436	IC7107-100	V	A/B	/	10	5		1X		~		QC	50MABK,CE150ML	
	169437	IC7107-200	V	A/B	/	11	5		1X		~		QC	100MABK,CE150ML	
	169438	IB				12	5		1X		~		C/D		
	169439	IB				13	5		1X		~		C/D		
	169440	ICV7107-50	V	A/B	/	14	5		1X		~		QC	50MEXTAB,C,E,Hexane, Ketone/100ML	
	169441	ICV7107-50	V	A/B	/	15	5		1X		~		QC	50MACetonitrile/100ML 7:22	
	169442	IB				16	5		1X				C/D		

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

37

Form: OR001-10
Rev. Date: 1/19/16

7.2.1 7

SGS

VOLATILE ANALYSIS LOG

Batch ID: V2D7158

Date: 10/4/17

Print Analyst Name: BJ dorsteller

Analyst Signature: Bridget Keller

Columns: DB624(60mx0.25mmx1.4um)

Method 8260C

Initial Cal. Method M2D7107

Standard Data

Lot #	Description	Conc.
1074501B3	(25) ABC	100
1074501B9	(8) C	100
1074501B5	(53) E	100
1074501B0	D	250/500
216015	Methanol	

Standard Data

Lot #	Description	Conc.

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: _____ Date: 10/6/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	D170597A	BFB					5		1X		W		OK	8:35PM	
	170597	CC7107-50					5		1x		W		OK	SCC ABK C E 1100mL	
	170598	BB					5		1x		W		OK		
	170599	MB					5		1x		W		OK		
	170600	BS					5		1x		W		OK	SCC ABK C E 100mL	
	170601	JCS1834-4MS	20600 SC	S	W29		5		1X		W		NG	SCC ABK C E 100mL 20mL ABK CE 40mL	
	170602	JCS1834-4MSD	✓	S	W32		5		1X		W		NG		✓
	170603	BB					5		1x		W		OK		
	170604	JCS1808-6	20651 SCC	S	W2		5		1X		W		OK		✓
	170605	JCS1808-7	✓	S	W7		5		1X		W		OK		✓
	170606	JCS1834-6	20600 SC	S	W1		5		1X		W		OK		✓
	170607	JCS1834-4	✓	S	W31		5		1X		W		OK		✓
	170608	JCS1834-1	✓	G	W3		2/50		25X		W		OK	K 25X CCWL	✓
	170609	JCS1834-2	✓	G	W3		2/50		25X		W		RR	RR 25X CCW	✓
	170610	JCS1834-3	✓	G	W4		5		1X		W		RR	RR 1X CCW	✓
	170611	JCS1834-7	✓	G	W4		5		1X		W		RR	RR 1X CCWL	✓
	170612	JCS1834-8	✓	G	W3		5		1X		W		OK		✓

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

243

Form: OR001-10
Rev. Date: 1/19/16

7.7.2 7

SGS

VOLATILE ANALYSIS LOG

Batch ID: V2D7158

Date: 10/4/17

Print Analyst Name: Bridget Kelly

Analyst Signature: Bridget Kelly

Columns: DB-624(CAMKO)SN.MXI.(40)

Method 8260C

Initial Cal. Method Re2D7107

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	SCPJ243	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: _____ Date: 10/6/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
D	170a3	ICS1824-1	20051 TCN01	W	5		5		1X		W		OK		V
	170a4	ICS1824-2	V	W	2		5		1X		W		OK		✓
	170a5	ICS1824-3	✓	W	3		5		1X		W		OK		✓
	170a6	ICS1824-5	✓	W	5		5		1X		W		OK		✓
	170a7	ICS1824-6	✓	W	5		5		1X		W		OK		✓
	170a8	ICS1891-1	TCN1	W	5		5		1X		W		OK		✓
	170a9	ICS1891-2	V	W	6		5		1X		W		OK		✓
	170a10	ICS1891-3	✓	W	6		5		1X		W		OK	8:17AM	✓

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate. Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result. All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

245

Form: OR001-10
Rev. Date: 1/19/16

SGS

VOLATILE ANALYSIS LOG

Batch ID: V2D7159 / V2D7160 V2D7158 HU 10/17

Date: 10/5/2017

Print Analyst Name: Henry Salvo

Analyst Signature: HU

Columns: DB 624 (60m x 0.25mm x 1.4um)

Method V8260

Initial Cal. Method MSD7107

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
V0972530	123.33 ABK	100 ppm
V0972530	144.4 C	100 ppm
V0972520	103.67 E	100 ppm
V0972530	130 IJ	25/2500 ppm
216315	pH paper	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: HU Date: ~~10/9~~ HU 10/9 10/10/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	D170623A	BFB				1	5						PP	8:08 pm	
	170634	CC7107-50				1	5						MS	return	
	170634B	BFB				2	5						QC	DUP ABK, CE / 100mL	
	170634A	CC7107-50				2	5						QC	8:50 PM #18	
	170635	IB				3	5								
	170636	MB2/MB				4	5						QC		
	170637	BS2/BS				5	5						QC	2UABK,CE/50mL VD7158	
	170638	JC51834-4MS	20000 SL	S	2F	6	5		1X				QC		✓
	170639	JC51834-4MSD	✓		2A	7	5		1X				QC		✓
	170640	JC51971-28MS	20665 TW11		2	8	5/50		10X				QC		✓
	170641	JC51971-28MSD	✓		2	9	5/50		10X				QC		✓
	170642	JC51971-28	✓		2	10	5/50		100X				~~QC~~ QL	HU 10/16	✓
	170643	JC51971-28	✓		2	11	5/50		10X				QC		✓
	~~170644~~	~~JC51971-28~~ HU 10/17	✓				~~5/50~~	HU 10/17	~~100X~~				C		
	170644	JC51971-3F	✓		3	12	5/50		2X				QC/DL		✓
	170645	JC51971-2F	✓		3	13	5/50		20X				QC		✓
	170646	JC51971-4F	✓		1	14	5/50		5X				QC/DL	LID K	✓
	170647	JC51971-3A	✓		1	15	5/50		5X				QC/DL	LID K	✓

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate. Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result. All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

249

Form: OR001-10
Rev. Date: 1/19/16

7.7.2 7

SGS

VOLATILE ANALYSIS LOG

Batch ID: V2D7159 / ~~V2D7160~~ V2D7158 HW 10/17

Date: 10/5/2017

Print Analyst Name: Henry Salwin

Analyst Signature: HS

Columns: RTX 624 (60m x 0.25mm x 1.4um)

Method V8260

Initial Cal. Method M2D7107

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
V0728530	123.33 ABK	100 ppm
V0192530	144.4 C	100 ppm
V0192520	168.67 E	100 ppm
V0192530	130 IIS	25 ~~200~~ ppm
216315	pH paper	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: HS Date: ~~10/10~~ HW 10/16 10/10/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	D170623A	BFB				1	5						PP	8:08 pm	
	170634 84	CC7107-50				1	5						NG	return	
	170634B BFB					2	5						QC	~~QUABK,CE~~ QUABK,CE/100mL	
	170634A CC7107-50													8:10 pm #18	
	170635	IB				3	5								
	170636	MB2/MB				4	5						QC		
	170637	BS2/BS				5	5						QC	~~QUABK,CE~~/10mL V2D7158	
	170638	JC51834-4MS	20600 SL	S	21	6	5		1K				QC		✓
	170639	JC51834-4MSD	✓		7	7	5		1K				QC		✓
	170640	JC51971-28MS	20605 TW11		2	8	5/10		10X				Q		✓
	170641	JC51971-28MSD	✓		2	9	5/10		10X				QC		✓
	170642	JC51971-28	✓		2	10	~~5.04~~/10		100X				~~QC~~ QC DL HW 10/16		✓
	170643	JC51971-28	✓		2	11	5/10		10X				QC		✓
	~~170644~~	~~JC51971-28~~ HW 10/17	✓				~~5.04~~/10	HW 10/17	~~100X~~				C		
	170644 44	JC51971-2S	✓		3	12	9.5/10		2X				QC DL		✓
	170645 45	JC51971-2S	✓		3	13	2.17/10		20X				QC		✓
	170646 46	JC51971-4S	✓		1	14	1.9/10		5X				QC DL	LIDL	✓
	170646 47	JC51971-3S	✓		3	15	1.9/10		5X				QC DL	LIDL	✓

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate. Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result. All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

SGS

VOLATILE ANALYSIS LOG

Batch ID: ~~VD7160~~ HW 9/19/16 VD7159

Date: 10/5/2016

Print Analyst Name: Henry Lelim

Analyst Signature: HW

Columns: DB624(60mx0.25mmx1.40um)

Method V8260

Initial Cal. Method MDP7107

Standard Data		
Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: HW Date: 10/10/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	DD170648	JC51971-1	8260T TCL	W	1	16	5		1X		✓	✓	OK		✓
	170649	JC51971-2	✓	W	2	17	5		1X		✓	✓	OK		✓
	170650	JC51971-3	✓		1	18	5		1X		✓	✓	NG	Acc hit	✓
	170651	JC51971-4	✓		2	19	5		1X		✓	✓	OK		✓
	170652	JC51971-5	✓		1	20	5		1X		✓	✓	NG	Acc hit	✓
	170653	JC51971-6	✓		1	21	5		1X		✓	✓	NG	↓ 7:49 cm	✓
	170654	JC51971-7	✓		1	22	5		1X				NR		
	170655	JC51971-8	✓	W	2	23	5		1X				NR		
														HW 10/6/16	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

251

Form: OR001-10
Rev. Date: 1/19/16

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC51891
Account: FLSNYNY - Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Bromide	GP8150/GN70302	0.50	0.0	mg/l	1	1.02	102.0	90-110%
Dissolved Organic Carbon	GP8282/GN70666	1.0	0.0	mg/l	10	9.92	99.2	90-110%
Nitrogen, Nitrate + Nitrite	GP8250/GN70496	0.10	0.051	mg/l	2	2.16	108.0	90-110%
Nitrogen, Nitrite	GN70120	0.010	0.0	mg/l	0.04	0.040	100.0	90-110%
Sulfate	GP8150/GN70302	2.0	0.0	mg/l	10	9.79	97.9	90-110%

Associated Samples:
Batch GP8150: JC51891-1, JC51891-2, JC51891-3
Batch GP8250: JC51891-1, JC51891-2, JC51891-3
Batch GP8282: JC51891-1F, JC51891-2F, JC51891-3F
Batch GN70120: JC51891-1, JC51891-2, JC51891-3
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC51891
Account: FLSNYNY - Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Bromide	GP8150/GN70302	JC51881-1	mg/l	1.9	1.8	5.4	0-20%
Nitrogen, Nitrate + Nitrite	GP8250/GN70496	JC51891-3	mg/l	6.3	6.3	0.0	0-33%
Nitrogen, Nitrite	GN70120	JC51861-1	mg/l	0.0	0.0	0.0	0-11%
Sulfate	GP8150/GN70302	JC51881-1	mg/l	25.5	25.5	0.0	0-20%

Associated Samples:
Batch GP8150: JC51891-1, JC51891-2, JC51891-3
Batch GP8250: JC51891-1, JC51891-2, JC51891-3
Batch GN70120: JC51891-1, JC51891-2, JC51891-3
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC51891
Account: FLSNYNY - Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP8150/GN70302	JC51881-1	mg/l	1.9	3	4.9	100.0	80-120%
Dissolved Organic Carbon	GP8282/GN70666	JC51896-1F	mg/l	8.3	10	18.8	105.0	66-128%
Nitrogen, Nitrate + Nitrite	GP8250/GN70496	JC51891-3	mg/l	6.3	1	7.0	70.0(a)	90-110%
Nitrogen, Nitrite	GN70120	JC51861-1	mg/l	0.0	0.04	0.038	95.0	22-140%
Sulfate	GP8150/GN70302	JC51881-1	mg/l	25.5	30	56.3	102.7	80-120%

Associated Samples:
Batch GP8150: JC51891-1, JC51891-2, JC51891-3
Batch GP8250: JC51891-1, JC51891-2, JC51891-3
Batch GP8282: JC51891-1F, JC51891-2F, JC51891-3F
Batch GN70120: JC51891-1, JC51891-2, JC51891-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC51891
Account: FLSNYNY - Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Dissolved Organic Carbon	GP8282/GN70666	JC51896-1F	mg/l	8.3	10	18.0	4.3	20%

Associated Samples:
Batch GP8282: JC51891-1F, JC51891-2F, JC51891-3F
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC51891
Account: FLSNYNY - Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

File ID: 1117100201.TXT Date Analyzed: 10/02/17 Methods: EPA 300/SW846 9056A
Analyst: JN Run ID: GN70302
Parameters: Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:25	GN70302-STD1	1		Manually integrated chrom. peaks reviewed and verified to comply with criteria of Accutest SOP EQA044.
15:45	GN70302-STD2	1		STDB
16:06	GN70302-STD3	1		STDC
16:27	GN70302-STD4	1		STDD
16:48	GN70302-STD5	1		STDE
17:09	GN70302-STD6	1		STDF
14:11	GN70302-ICV1	1		
14:32	GN70302-CCV1	1		
14:53	GN70302-CCB1	1		
15:14	GP8150-MB2	1		
15:14	GP8141-MB3	1		
15:35	GP8150-B2	1		
15:35	GP8141-B3	1		
15:56	GP8150-S1	3		
16:26	GP8150-D1	2		
16:46	JC51881-1	2		(sample used for QC only; not part of login JC51891)
17:07	GP8150-S2	3		
17:28	JC51881-3	2		(sample used for QC only; not part of login JC51891)
17:49	ZZZZZZ	2		
18:10	ZZZZZZ	40		
18:31	ZZZZZZ	2		
18:52	GN70302-CCV2	1		
19:13	GN70302-CCB2	1		
19:34	ZZZZZZ	2		
19:55	ZZZZZZ	2		
20:16	JC51891-1	5		
20:37	JC51891-2	5		
20:58	JC51891-3	2		
21:18	ZZZZZZ	3		
21:39	ZZZZZZ	2		
22:00	GP8170-MB1	1		
22:21	GP8170-B1	1		
22:42	GP8170-S1	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC51891
Account: FLSNYNY - Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

File ID: 1117100201.TXT Date Analyzed: 10/02/17 Methods: EPA 300/SW846 9056A
Analyst: JN Run ID: GN70302
Parameters: Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
23:03	GN70302-CCV3	1		
23:24	GN70302-CCB3	1		
23:45	GP8170-D1	1		
00:06	JC52003-2	1		(sample used for QC only; not part of login JC51891)
00:27	GP8170-S2	1		Over calibration curve. See rerun at dilution for so4
00:48	JC52036-1	1		(sample used for QC only; not part of login JC51891)
01:09	ZZZZZZ	1		
01:30	ZZZZZZ	1		
01:50	ZZZZZZ	1		
02:11	ZZZZZZ	1		
02:32	ZZZZZZ	1		
02:53	ZZZZZZ	1		
03:14	GN70302-CCV4	1		
03:35	GN70302-CCB4	1		
03:56	ZZZZZZ	1		
04:17	ZZZZZZ	1		
04:38	ZZZZZZ	1		
04:59	ZZZZZZ	1		
05:20	ZZZZZZ	1		
05:41	ZZZZZZ	1		
06:02	ZZZZZZ	1		
06:22	ZZZZZZ	1		
06:43	ZZZZZZ	1		
07:04	ZZZZZZ	1		
07:25	GN70302-CCV5	1		
07:46	GN70302-CCB5	1		
08:07	ZZZZZZ	1		
08:28	ZZZZZZ	1		
08:49	GN70302-CCV6	1		
09:10	GN70302-CCB6	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: JC51891
Account: FLSNYNY - Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

File ID: 1117100201.TXT Date Analyzed: 10/02/17 Methods: EPA 300/SW846 9056A
Run ID: GN70302 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN70302-ICV1	Sulfate	9.5	2.0	0.53	10	95.0	90-110
GN70302-CCV1	Sulfate	12.4	2.0	0.53	12.5	99.2	90-110
GN70302-CCB1	Sulfate	0.53 U	2.0	0.53			
GN70302-CCV2	Sulfate	11.7	2.0	0.53	12.5	93.6	90-110
GN70302-CCB2	Sulfate	0.53 U	2.0	0.53			
GN70302-CCV3	Sulfate	11.9	2.0	0.53	12.5	95.2	90-110
GN70302-CCB3	Sulfate	0.53 U	2.0	0.53			
GN70302-CCV4	Sulfate	11.8	2.0	0.53	12.5	94.4	90-110
GN70302-CCB4	Sulfate	0.53 U	2.0	0.53			
GN70302-CCV5	Sulfate	11.8	2.0	0.53	12.5	94.4	90-110
GN70302-CCB5	Sulfate	0.53 U	2.0	0.53			
GN70302-CCV6	Sulfate	11.7	2.0	0.53	12.5	93.6	90-110
GN70302-CCB6	Sulfate	0.53 U	2.0	0.53			

(!) Outside of QC limits

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC51891
Account: FLSNYNY - Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

File ID: E100517W1.NO32 Date Analyzed: 10/05/17 Methods: EPA 353.2 M/LACHAT, EPA 353.2/LACHAT
Analyst: BM Run ID: GN70496
Parameters: Nitrogen, Nitrate + Nitrite

Time	Sample Description	Dilution Factor	PS Recov	Comments
08:57	GN70496-STD1	1		STDA
08:58	GN70496-STD2	1		STDB
08:59	GN70496-STD3	1		STDC
09:00	GN70496-STD4	1		STDD
09:01	GN70496-STD5	1		STDE
09:03	GN70496-STD6	1		STDF
09:04	GN70496-STD7	1		STDG
09:06	GN70496-ICV1	1		
09:07	GN70496-ICB1	1		
09:08	GN70496-CCV1	1		
09:09	GN70496-CCB1	1		
09:10	GP8249-MB1	1		
09:12	GP8249-B1	1		
09:13	GP8249-S1	1		
09:14	GP8249-S2	1		
09:15	GP8249-D1	1		
09:16	ZZZZZZ	1		
09:17	JC51764-2	1		(sample used for QC only; not part of login JC51891)
09:18	ZZZZZZ	1		
09:19	ZZZZZZ	1		
09:21	ZZZZZZ	1		
09:22	GN70496-CCV2	1		
09:23	GN70496-CCB2	1		
09:24	ZZZZZZ	1		
09:25	ZZZZZZ	1		
09:26	ZZZZZZ	1		
09:27	ZZZZZZ	1		
09:28	ZZZZZZ	1		
09:30	ZZZZZZ	1		
09:31	ZZZZZZ	1		
09:32	ZZZZZZ	1		
09:33	ZZZZZZ	1		
09:34	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC51891
Account: FLSNYNY - Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

File ID: E100517W1.NO32 Date Analyzed: 10/05/17 Methods: EPA 353.2 M/LACHAT, EPA 353.2/LACHAT
Analyst: BM Run ID: GN70496
Parameters: Nitrogen, Nitrate + Nitrite

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:35	GN70496-CCV3	1		
09:36	GN70496-CCB3	1		
09:37	ZZZZZZ	1		
09:39	ZZZZZZ	1		
09:40	JC51861-2	1		(sample used for QC only; not part of login JC51891)
09:41	ZZZZZZ	1		
09:42	ZZZZZZ	1		
09:43	GP8250-MB1	1		
09:44	GP8250-B1	1		
09:45	GP8250-S1	1		Over calibration curve. See rerun at dilution.
09:46	GP8250-S2	1		Over calibration curve. See rerun at dilution.
09:48	GP8250-D1	1		Over calibration curve. See rerun at dilution.
09:49	GN70496-CCV4	1		
09:50	GN70496-CCB4	1		
09:51	ZZZZZZ	1		
09:52	ZZZZZZ	1		
09:53	JC51891-1	1		Over calibration curve. See rerun at dilution.
09:54	JC51891-2	1		Over calibration curve. See rerun at dilution.
09:55	JC51891-3	1		Over calibration curve. See rerun at dilution.
09:57	ZZZZZZ	1		
09:58	ZZZZZZ	1		
09:59	ZZZZZZ	1		
10:00	ZZZZZZ	1		
10:01	ZZZZZZ	1		
10:02	GN70496-CCV5	1		
10:03	GN70496-CCB5	1		
10:04	ZZZZZZ	1		
10:05	ZZZZZZ	1		
10:07	ZZZZZZ	1		
10:08	ZZZZZZ	1		
10:09	ZZZZZZ	1		
10:10	ZZZZZZ	1		
10:11	JC51947-2	1		(sample used for QC only; not part of login JC51891)

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC51891
Account: FLSNYNY - Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

File ID: E100517W1.NO32 Date Analyzed: 10/05/17 Methods: EPA 353.2 M/LACHAT, EPA 353.2/LACHAT
Analyst: BM Run ID: GN70496
Parameters: Nitrogen, Nitrate + Nitrite

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:12	ZZZZZZ	1		
10:13	ZZZZZZ	1		
10:14	ZZZZZZ	1		
10:16	GN70496-CCV6	1		
10:17	GN70496-CCB6	1		
10:18	GP8251-MB1	1		
10:19	GP8251-B1	1		
10:20	GP8251-S1	1		
10:21	GP8251-S2	1		
10:22	GP8251-D1	1		
10:23	ZZZZZZ	1		
10:25	JC51956-2	1		(sample used for QC only; not part of login JC51891)
10:26	ZZZZZZ	1		
10:27	ZZZZZZ	1		
10:28	ZZZZZZ	1		
10:29	GN70496-CCV7	1		
10:30	GN70496-CCB7	1		
10:31	ZZZZZZ	1		
10:32	ZZZZZZ	1		
10:34	ZZZZZZ	1		
10:35	ZZZZZZ	1		
10:36	ZZZZZZ	1		
10:37	ZZZZZZ	1		
10:38	ZZZZZZ	1		
10:39	ZZZZZZ	1		
10:40	JC52003-2	1		(sample used for QC only; not part of login JC51891)
10:41	ZZZZZZ	1		
10:43	GN70496-CCV8	1		
10:44	GN70496-CCB8	1		
10:45	ZZZZZZ	1		
10:46	GP8237-MB1	1		
10:47	GP8237-B1	1		
10:48	GP8237-S1	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC51891
Account: FLSNYNY - Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

File ID: E100517W1.NO32 Date Analyzed: 10/05/17 Methods: EPA 353.2 M/LACHAT, EPA 353.2/LACHAT
Analyst: BM Run ID: GN70496
Parameters: Nitrogen, Nitrate + Nitrite

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:49	GP8237-D1	1		
10:50	JC51989-1	1		(sample used for QC only; not part of login JC51891)
10:52	ZZZZZZ	1		
10:53	ZZZZZZ	1		
10:54	GN70496-STD8	1		STDGCONF
10:55	GN70496-STD9	1		STDCCONF
10:56	GN70496-CCV9	1		
10:57	GN70496-CCB9	1		
10:58	GN70496-STD10	1		STDBCONF
10:59	GN70496-STD11	1		STDACONF
11:00	GP8250-S1	3		
11:02	GP8250-S2	3		
11:03	GP8250-D1	3		
11:04	JC51891-1	5		1:5 dilution.
11:05	JC51891-1	10		1:10 dilution for confirmation only.
11:06	JC51891-2	3		1:3 dilution.
11:07	JC51891-3	2		1:2 dilution.
11:08	JC51947-2	2		(sample used for QC only; not part of login JC51891)
11:09	GN70496-CCV10	1		
11:11	GN70496-CCB10	1		
11:12	ZZZZZZ	3		
11:15	JC51891-2	6		1:6 dilution for confirmation only.
11:18	GN70496-CCV11	1		
11:19	GN70496-CCB11	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: JC51891
Account: FLSNYNY - Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

File ID: E100517W1.NO32 Date Analyzed: 10/05/17 Methods: EPA 353.2 M/LACHAT, EPA 353.2/LACHAT
Run ID: GN70496 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN70496-ICV1	Nitrogen, Nitrate + Nitrite	2.0	0.10	0.043	2	100.0	90-110
GN70496-ICB1	Nitrogen, Nitrate + Nitrite	-0.060	0.10	0.043			
GN70496-CCV1	Nitrogen, Nitrate + Nitrite	2.7	0.10	0.043	2.5	108.0	90-110
GN70496-CCB1	Nitrogen, Nitrate + Nitrite	-0.064	0.10	0.043			
GN70496-CCV2	Nitrogen, Nitrate + Nitrite	2.7	0.10	0.043	2.5	108.0	90-110
GN70496-CCB2	Nitrogen, Nitrate + Nitrite	-0.062	0.10	0.043			
GN70496-CCV3	Nitrogen, Nitrate + Nitrite	2.7	0.10	0.043	2.5	108.0	90-110
GN70496-CCB3	Nitrogen, Nitrate + Nitrite	-0.060	0.10	0.043			
GN70496-CCV4	Nitrogen, Nitrate + Nitrite	2.7	0.10	0.043	2.5	108.0	90-110
GN70496-CCB4	Nitrogen, Nitrate + Nitrite	-0.058	0.10	0.043			
GN70496-CCV5	Nitrogen, Nitrate + Nitrite	2.7	0.10	0.043	2.5	108.0	90-110
GN70496-CCB5	Nitrogen, Nitrate + Nitrite	-0.063	0.10	0.043			
GN70496-CCV6	Nitrogen, Nitrate + Nitrite	2.7	0.10	0.043	2.5	108.0	90-110
GN70496-CCB6	Nitrogen, Nitrate + Nitrite	-0.067	0.10	0.043			
GN70496-CCV7	Nitrogen, Nitrate + Nitrite	2.7	0.10	0.043	2.5	108.0	90-110
GN70496-CCB7	Nitrogen, Nitrate + Nitrite	-0.059	0.10	0.043			
GN70496-CCV8	Nitrogen, Nitrate + Nitrite	2.7	0.10	0.043	2.5	108.0	90-110
GN70496-CCB8	Nitrogen, Nitrate + Nitrite	-0.061	0.10	0.043			
GN70496-CCV9	Nitrogen, Nitrate + Nitrite	2.7	0.10	0.043	2.5	108.0	90-110
GN70496-CCB9	Nitrogen, Nitrate + Nitrite	-0.065	0.10	0.043			
GN70496-CCV10	Nitrogen, Nitrate + Nitrite	2.7	0.10	0.043	2.5	108.0	90-110
GN70496-CCB10	Nitrogen, Nitrate + Nitrite	-0.065	0.10	0.043			
GN70496-CCV11	Nitrogen, Nitrate + Nitrite	2.7	0.10	0.043	2.5	108.0	90-110
GN70496-CCB11	Nitrogen, Nitrate + Nitrite	-0.065	0.10	0.043			

(!) Outside of QC limits

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC51891
Account: FLSNYNY - Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

File ID: E71009W1.TXT Date Analyzed: 10/09/17 Methods: SM5310 B-11
Analyst: CD Run ID: GN70666
Parameters: Dissolved Organic Carbon

Time	Sample Description	Dilution Factor	PS Recov	Comments
07:19	ZZZZZZ	1		
08:24	GN70666-CRI1	1		
08:36	GN70666-HSTD1	1		
08:47	GN70666-ICV1	1		
08:57	GN70666-ICB1	1		
09:09	GN70666-CCV1	1		
09:19	GN70666-CCB1	1		
09:30	ZZZZZZ	1		
09:41	GP8345-MB1	1		
09:54	GP8345-B1	1		
10:40	ZZZZZZ	1		
10:52	ZZZZZZ	1		
11:03	JC52688-1	1		(sample used for QC only; not part of login JC51891)
11:15	GP8345-S1	1		
11:26	GP8345-MSD1	1		
11:36	ZZZZZZ	1		
11:47	ZZZZZZ	1		
11:59	GN70666-CCVA1	1		
12:12	GN70666-CCB2	1		
12:21	ZZZZZZ	1		
12:32	ZZZZZZ	1		
12:43	ZZZZZZ	1		
12:54	ZZZZZZ	1		
13:05	ZZZZZZ	1		
13:18	GN70666-CCV2	1		
13:30	GN70666-CCB3	1		
13:39	ZZZZZZ	1		
14:34	GP8297-MB2	1		
14:46	GP8297-B2	1		
14:57	FA48089-2	10		(sample used for QC only; not part of login JC51891)
15:17	GP8297-S1	20		
15:28	GP8297-MSD1	20		
15:51	ZZZZZZ	10		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC51891
Account: FLSNYNY - Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

File ID: E71009W1.TXT Date Analyzed: 10/09/17 Methods: SM5310 B-11
Analyst: CD Run ID: GN70666
Parameters: Dissolved Organic Carbon

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:02	ZZZZZZ	10		
16:14	GN70666-CCVA2	1		
16:24	GN70666-CCB4	1		
16:40	GP8282-MB1	1		
16:48	GP8282-B1	1		
16:59	JC51891-1F	1		average of 3 injections
17:11	JC51891-2F	1		average of 3 injections
17:21	JC51891-3F	1		
17:32	JC51896-1F	1		(sample used for QC only; not part of login JC51891)
17:44	GP8282-S1	1		
17:55	GP8282-MSD1	1		
18:06	ZZZZZZ	1		
18:17	ZZZZZZ	1		
18:29	GN70666-CCV3	1		
18:39	GN70666-CCB5	1		
18:52	GP8283-MB1	1		
19:03	GP8283-B1	1		
19:13	ZZZZZZ	1		
19:24	ZZZZZZ	1		
19:35	JC52411-3F	1		(sample used for QC only; not part of login JC51891)
19:48	GP8283-S1	1		
20:08	GP8283-MSD1	1		
20:19	ZZZZZZ	1		
20:30	ZZZZZZ	1		
20:41	ZZZZZZ	1		
20:53	GN70666-CCVA3	1		average of 3 injections
21:09	GN70666-CCB6	1		
21:17	ZZZZZZ	1		
21:27	GP8348-MB1	1		
21:39	GP8348-B1	1		average of 3 injections
21:51	ZZZZZZ	1		
22:03	ZZZZZZ	1		
22:14	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC51891
Account: FLSNYNY - Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

File ID: E71009W1.TXT Date Analyzed: 10/09/17 Methods: SM5310 B-11
Analyst: CD Run ID: GN70666
Parameters: Dissolved Organic Carbon

Time	Sample Description	Dilution Factor	PS Recov	Comments
22:26	ZZZZZZ	1		
22:36	ZZZZZZ	1		
22:48	ZZZZZZ	1		
22:59	ZZZZZZ	1		
23:10	GN70666-CCV4	1		
23:23	GN70666-CCB7	1		
23:42	ZZZZZZ	1		
23:53	JC52633-2	1		(sample used for QC only; not part of login JC51891)
00:04	GP8348-S1	1		
00:15	GP8348-MSD1	1		average of 3 injections
00:27	ZZZZZZ	1		
00:39	GN70666-CCVA4	1		average of 3 injections
00:51	GN70666-CCB8	1		
01:04	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: JC51891
Account: FLSNYNY - Fleming-Lee Shue, Inc.
Project: 388 Bridge Street, Brooklyn, NY

File ID: E71009W1.TXT Date Analyzed: 10/09/17 Methods: SM5310 B-11
Run ID: GN70666 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN70666-CRI1	Total Organic Carbon	1.2	1.0	0.62	1	120.0	70-130
GN70666-HSTD1	Total Organic Carbon	47.5	1.0	0.62	50	95.0	90-110
GN70666-ICV1	Total Organic Carbon	19.2	1.0	0.62	20	96.0	90-110
GN70666-ICB1	Total Organic Carbon	0.62 U	1.0	0.62			
GN70666-CCV1	Total Organic Carbon	23.6	1.0	0.62	25	94.4	90-110
GN70666-CCB1	Total Organic Carbon	0.62 U	1.0	0.62			
GN70666-CCVA1	Total Organic Carbon	47.5	1.0	0.62	50	95.0	
GN70666-CCB2	Total Organic Carbon	0.62 U	1.0	0.62			
GN70666-CCV2	Total Organic Carbon	23.5	1.0	0.62	25	94.0	90-110
GN70666-CCB3	Total Organic Carbon	0.62 U	1.0	0.62			
GN70666-CCVA2	Total Organic Carbon	47.1	1.0	0.62	50	94.2	
GN70666-CCB4	Total Organic Carbon	0.62 U	1.0	0.62			
GN70666-CCV3	Total Organic Carbon	23.3	1.0	0.62	25	93.2	90-110
GN70666-CCB5	Total Organic Carbon	0.62 U	1.0	0.62			
GN70666-CCVA3	Total Organic Carbon	45.9	1.0	0.62	50	91.8	
GN70666-CCB6	Total Organic Carbon	0.62 U	1.0	0.62			
GN70666-CCV4	Total Organic Carbon	23.8	1.0	0.62	25	95.2	90-110
GN70666-CCB7	Total Organic Carbon	0.62 U	1.0	0.62			
GN70666-CCVA4	Total Organic Carbon	46.1	1.0	0.62	50	92.2	
GN70666-CCB8	Total Organic Carbon	0.62 U	1.0	0.62			

(!) Outside of QC limits

General Chemistry

Raw Data

SGS ACCUTEST

Test: Nitrogen, Nitrite
Product: NO2
Method: SM4500NO2 B-11 (Aqueous) ◉ Units: mg/l
SM4500NO2 B-11 M (Solids) ○ mg/kg

Analyst: AT
GN Batch ID: GN70120
GP Batch ID:
Date: 9/27/2017
Instrument ID: N

Original Calibration Information Calibration Date: 7/27/2017

	Blank	Std 1	Std 2	Std 3	Std 4	Std 5	Std 6	Std 7
Known:	0.000	0.010	0.025	0.050	0.075	0.100	0.200	
Absorbance:	0.000	0.028	0.086	0.176	0.259	0.333	0.733	
Actual Value:	0.003	0.010	0.026	0.051	0.073	0.094	0.203	

Continuing Calibration Check Standards Data: 9/27/2017

	Blank	Std 1	Std 6
Known:	0.000	0.010	0.200
Absorbance:	0.000	0.026	0.715
Recovery:	0.0%	97.2%	99.1%
Actual Value:		0.010	0.198

Correlation Coeff. = 0.99894
Slope = 0.27350
Intercept = 0.00261

Bottle #	Sample ID	Time Analyzed	Initial Wt (g) or Vol (ml)	Final Vol (ml)	Dilution	Sample Abs	Background Abs.	Result From Curve (mg/L)	Final Result	DL	Units	Factor	pH between 5 and 9 (Y or N)
	ICV	23:11	50	50	1	0.347	NA	0.098	0.098	NA	mg/l	NA	Y
	CCV	23:11	50	50	1	0.344	NA	0.097	0.097	NA	mg/l	NA	Y
	GN70120-MB1	23:18	50	50	1	0.001	0.000	0.003	0.003	0.010	mg/l	1	Y
	GN70120-B1	23:18	50	50	1	0.138	0.000	0.040	0.040	0.010	mg/l	1	Y
2	GN70120-S1	23:18	50	50	1	0.129	0.001	0.038	0.038	0.010	mg/l	1	Y
2	GN70120-D1	23:18	50	50	1	0.004	0.001	0.003	0.003	0.010	mg/l	1	Y
3	JC51838-2 conF	23:18	50	50	1	0.134	0.132	0.003	0.003	0.010	mg/l	1	Y
3	JC51838-10 conF	23:18	50	50	1	0.002	0.002	0.003	0.003	0.010	mg/l	1	Y
3	JC51857-1CONF	23:18	50	50	1	1.005	0.008	0.275	0.275	0.010	mg/l	1	Y
3	JC51857-5	23:18	50	50	1	0.004	0.000	0.004	0.004	0.010	mg/l	1	Y
8	JC51859-2	23:18	50	50	1	0.024	0.022	0.003	0.003	0.010	mg/l	1	Y
8	JC51859-4	23:18	50	50	1	0.068	0.066	0.003	0.003	0.010	mg/l	1	Y
	CCVA	23:18	50	50	1	0.713	NA	0.198	0.198	NA	mg/l	NA	Y
8	JC51859-5	23:25	50	50	1	0.038	0.022	0.007	0.007	0.010	mg/l	1	Y
*2	JC51861-1	23:25	50	50	1	0.003	0.001	0.003	0.003	0.010	mg/l	1	Y
2	JC51861-2	23:25	50	50	1	0.002	0.001	0.003	0.003	0.010	mg/l	1	Y
1	JC51896-1CONF	23:25	50	50	1	2.569	0.016	0.701	0.701	0.010	mg/l	1	Y
1	JC51896-2	23:25	50	50	1	0.004	0.004	0.003	0.003	0.010	mg/l	1	Y
3	JC51857-1	23:25	50	50	10	0.151	0.001	0.044	0.436	0.100	mg/l	1	Y
1	JC51896-1	23:25	50	50	25	0.173	0.001	0.050	1.241	0.250	mg/l	1	Y
^2	JC51881-1	23:25	50	50	1	0.009	0.004	0.004	0.004	0.010	mg/l	1	Y
^2	JC51881-3	23:25	50	50	1	0.004	0.002	0.003	0.003	0.010	mg/l	1	Y
5	JC51886-19	23:25	50	50	1	0.007	0.004	0.003	0.003	0.010	mg/l	1	Y
	CCV	23:25	50	50	1	0.344	NA	0.097	0.097	NA	mg/l	NA	Y
5	JC51886-20	23:31	50	50	1	0.010	0.009	0.003	0.003	0.010	mg/l	1	Y
^3	JC51904-2	23:31	50	50	1	0.003	0.000	0.003	0.003	0.010	mg/l		Y
3	JC51904-7	23:31	50	50	1	0.002	0.001	0.003	0.003	0.010	mg/l		Y
1	JC51891-1	23:31	50	50	1	0.014	0.012	0.003	0.003	0.010	mg/l		Y
1	JC51891-2	23:31	50	50	1	0.053	0.002	0.017	0.017	0.010	mg/l	1	Y
1	JC51891-3	23:31	50	50	1	0.009	0.003	0.004	0.004	0.010	mg/l	1	Y
	GN70120-MB1F	23:31	50	50	1	0.001	0.000	0.003	0.003	0.010	mg/l	1	Y
	GN70120-B1FC	23:31	50	50	1	0.138	0.000	0.040	0.040	0.010	mg/l	1	Y
		23:31	50	50	1								Y
		23:31	50	50	1								Y
	CCVA	23:31	50	50	1	0.713		0.198	0.198	NA	mg/l	NA	Y

B1/S1 2ml 1ppm NO2 STD 25ml 1/pz/Sep 9

JC51857-1 1:10 5ml 25ml 1/pz
JC51896-1 1:25 2ml 25ml 1/pz

QC JC51861-1

1 Sep & Re titrated w/ orange tube

Analyst: AT Date: 9/27/17 QC Reviewer: [signature] Date: 9/29/17

ACCUTEST

Test: **Nitrogen, Nitrite**
Product: **NO2**
Method: **SM18 4500 NO2B (aqueous)**
SM18 4500 NO2B M (solids)

Units: mg/l
mg/kg

Analyst: AT
GNBatch ID: GN70120
GPBatch ID:
Date: 9/27/12

Preparation Batch QC Summary Units = mg/l

Method Blank ID: GN70120-MB1 Date: 9/27/12 Result: <DL DL: 0.016 <DL: Y
Spike Blank ID: -B1 Date: " Result: 0.050 Spike: 0.050 %Rec.: 100
Duplicate ID: -B1 Samp. Result: <DL Dup. Result: <DL %RPD: 0
MS ID: -S1 Samp. Result: " MS Result: 0.033 Spike: 0.050 %Rec: 95

Method Blank ID: Date: Result: DL: <DL:
Spike Blank ID: Date: Result: Spike: %Rec.:
Duplicate ID: Samp. Result: Dup. Result: %RPD:
MS ID: Samp. Result: MS Result: Spike: %Rec:

Analysis Batch QC Summary Units = mg/l

ICV (Ext): 9/27/12 Result: 0.098 TV: 0.100 %Rec: 98

CCV: 9/27/12 Result: 0.097 TV: 0.100 %Rec.: 97
CCVA: Result: 0.198 TV: 0.200 %Rec.: 99
CCV: Result: 0.097 TV: 0.100 %Rec.: 97
CCVA: Result: 0.198 TV: 0.200 %Rec.: 99
CCV: Result: TV: 0.100 %Rec.:
CCVA: Result: TV: 0.200 %Rec.:

CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:

Reagent Reference Numbers:

Analyst: AT Date: 9/27/12

Comments:

Form: GN032-01
Rev. Date:9/4/09]

SGS ACCUTEST

GENERAL CHEMISTRY STANDARD PREPARATION LOG

Product: NO2

GN or GP Number: GN70120

Intermediate Standard Description	Stock used to prepare standard	Stock concentration	Stock volume or weight used with units	Balance or Autopipet ID (*)	Diluent	Final Volume	Final Conc. of Intermediate (mg/l)	Expiration Date	Analyst	Date
NO2 100 mg/L	ERA Lot 150116 Exp: 1/31/2018	1000 mg/L	10.0 ml	A	DI water	100 ml	100 mg/L	9/27/17	AT	9/27/17
NO2 10 mg/L	NO2 100 mg/L	100 mg/L	10.0 ml	A	DI water	100 ml	10 mg/L	9/27/17	AT	9/27/17
NO2 1 mg/L	NO2 100 mg/L	100 mg/L	1.0 ml	A	DI water	100 ml	1 mg/L	9/27/17	AT	9/27/17
NO2 100 mg/L	ERA Lot 032616 Exp: 6/30/2018	100 mg/l	10	A	DI water	100 ml	10 mg/L	9/27/17	AT	9/27/17
NO2 10 mg/L	NO2 100 mg/L	100 mg/L	10.0 ml	A	DI water	100 ml	10 mg/L	9/27/17	AT	9/27/17

Standard Description	Intermediate or Stock used to prepare standard	Intermediate or Stock concentration	Intermediate or Stock volume used in ml	Balance or Autopipet ID (*)	Diluent	Final Volume	Final Conc. of Standard (mg/l)	Expiration Date	Analyst	Date
0.2 mg/L	**1.0 mg/L**	**1.0 mg/L**	**20.0 ml**	**A**	**DI water**	**100 ml**	**0.2 mg/L**	9/27/17	AT	9/27/17
0.1 mg/L	**1.0 mg/L**	**1.0 mg/L**	10ml	**A**	**DI water**	**100 ml**	0.1mg/L			
0.075 mg/L	**1.0 mg/L**	**1.0 mg/L**	7.5ml	**A**	**DI water**	**100 ml**	0.075mg/L			
0.05 mg/L	**1.0 mg/L**	**1.0 mg/L**	5ml	**A**	**DI water**	**100ml**	0.05mg/L			
0.025 mg/L	**1.0 mg/L**	**1.0 mg/L**	2.5ml	**A**	**DI water**	**100 ml**	0.025mg/L			
0.01 mg/L	**1.0 mg/L**	**1.0 mg/L**	**1.0 ml**	**A**	**DI water**	**100 ml**	**0.01 mg/L**	9/27/17	AT	9/27/17
0 mg/L	**NA**	**NA**	**NA**	**NA**	**DI water**	**100 ml**	**0 mg/L**	9/27/17	AT	9/27/17
NO2 1 mg/L	NO2 100 mg/L	100 mg/L	1.0 ml	A	DI water	100 ml	1 mg/L	9/27/17	AT	9/27/17
ICV	**1.0 mg/L**	100mg/l	1 ml	A	DI water	100 ml	0.1mg/l	9/27/17	AT	9/27/17
CCV	**1.0 mg/L**	**1.0 mg/L**	**10.0 ml**	**A**	**DI water**	**100 ml**	0.1mg/l	9/27/17	AT	9/27/17
CCVA	**1.0 mg/L**	**1.0 mg/L**	**20.0 ml**	**A**	**DI water**	**100 ml**	0.2mg/l	9/27/17	AT	9/27/17

* If Class A glass pipets are used, enter an A. For balances or autopipets, then enter the appropriate Accutest ID number.

Form: GN121-01
Rev. Date: 1/13/09

SGS ACCUTEST

Reagent Information Log - Nitrite as Nitrogen

On 7 6/20

Reagent	Reagent # or Manufacturer/Lot
Calibration Source: 1000 mg/l nitrite stock	ERA LOT#150116 XP:01/31/2018
External Check	ERA LOT #320616 XP: 6/1/2018
Spiking Solution Source (1 PPM)	ERA LOT#150116 XP:01/31/2018
Color Reagent	GNE9-52297-NO2 XP: 10/21/2017
NH4OH	FISHER 153331 XP:7/15/21

All standards and stocks were made as described in the SOP for this method (circle one): Y or N
If no (N), see attached page for standards prep.

Form: GN087A-42
Rev. Date:9/27/2017

LABORATORY REVIEW SIGNATURE FORM
(To be stored with the raw data)

File ID: 1117100201.TXT
Analyst: JN

Date Analyzed: 10/02/17
Run ID: GN70302

Methods: EPA 300/SW846 9056A

The following analyst(s) have reviewd this run and attest that, to the best of their knowledge, this documentation is complete and correct:

Analyst: _____ Date 10/3/17

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

The following supervisor or their designee has reviewed this run and attests that, to the best of their knowledge, this documentation is complete and correct:

Supervisor (or designee): _____ Date 10/4/17

Sequence: C17100201
Operator: Chemistry

Title:
Datasource: D7P90QH1_local
Location: Carbonate Sequences\2017\OCT
Timebase: ICS2000
#Samples: 63

GN70302

Created: 10/2/2017 10:24:49 AM by Chemistry
Last Update: 10/2/2017 1:45:16 PM by Chemistry

No.	Name	Type	Pos.	Dil. Factor	Comment	Inj. Date/Time	Status	Program
1	BLANKCONF	Unknown	1	1.0000			Single	carbonate 4_17
2	STDA	Standard	1	1.0000		9/8/2017 3:25:23 PM	Finished	carbonate 4_17
3	STDB	Standard	2	1.0000		9/8/2017 3:45:53 PM	Finished	carbonate 4_17
4	STDC	Standard	3	1.0000		9/8/2017 4:06:48 PM	Finished	carbonate 4_17
5	STDD	Standard	4	1.0000		9/8/2017 4:27:43 PM	Finished	carbonate 4_17
6	STDE	Standard	5	1.0000		9/8/2017 4:48:38 PM	Finished	carbonate 4_17
7	STDF	Standard	6	1.0000		9/8/2017 5:09:33 PM	Finished	carbonate 4_17
8	ICV	Unknown	2	1.0000			Single	carbonate 4_17
9	CCV	Unknown	3	1.0000			Single	carbonate 4_17
10	CCB	Unknown	4	1.0000			Single	carbonate 4_17
11	MB	Unknown	5	1.0000			Single	carbonate 4_17
12	BSP	Unknown	6	1.0000			Single	carbonate 4_17
13	GP8150-S1 2	Unknown	7	3.0000			Single	carbonate 4_17
14	GP8150-D1 2	Unknown	8	2.0000			Single	carbonate 4_17
15	JC51881-1 2	Unknown	9	2.0000			Single	carbonate 4_17
16	GP8150-S2 2	Unknown	10	3.0000			Single	carbonate 4_17
17	JC51881-3 2	Unknown	11	2.0000			Single	carbonate 4_17
18	JC51881-2 2	Unknown	12	2.0000			Single	carbonate 4_17
19	JC51881-6 2	Unknown	13	40.0000			Single	carbonate 4_17
20	JC51881-7 2	Unknown	14	2.0000			Single	carbonate 4_17
21	CCV	Unknown	15	1.0000			Single	carbonate 4_17
22	CCB	Unknown	16	1.0000			Single	carbonate 4_17
23	JC51807-2 2	Unknown	17	2.0000			Single	carbonate 4_17
24	JC51807-6 2	Unknown	18	2.0000			Single	carbonate 4_17
25	JC51891-1 1	Unknown	19	5.0000			Single	carbonate 4_17
26	JC51891-2 1	Unknown	20	5.0000			Single	carbonate 4_17
27	JC51891-3 1	Unknown	21	2.0000			Single	carbonate 4_17
28	JC51941-6 4	Unknown	22	3.0000			Single	carbonate 4_17
29	JC51942-3 4	Unknown	23	2.0000			Single	carbonate 4_17
30	MB	Unknown	24	1.0000			Single	carbonate 4_17
31	BSP	Unknown	25	1.0000			Single	carbonate 4_17
32	GP8170-S1 6	Unknown	26	1.0000			Single	carbonate 4_17
33	CCV	Unknown	27	1.0000			Single	carbonate 4_17
34	CCB	Unknown	28	1.0000			Single	carbonate 4_17
35	GP8170-D1 6	Unknown	29	1.0000			Single	carbonate 4_17
36	JC52003-2 6	Unknown	30	1.0000			Single	carbonate 4_17
37	GP8170-S2 2	Unknown	31	1.0000			Single	carbonate 4_17
38	JC52036-1 2	Unknown	32	1.0000			Single	carbonate 4_17
39	JC52036-2 2	Unknown	33	1.0000			Single	carbonate 4_17
40	JC52003-1 4	Unknown	34	1.0000			Single	carbonate 4_17
41	JC52003-3 5	Unknown	35	1.0000			Single	carbonate 4_17
42	JC52003-4 4b	Unknown	36	1.0000			Single	carbonate 4_17

GP8150(2)

GP8141(3)

GP8170(6)

Sequence: C17100201
Operator: Chemistry

Title:
Datasource: D7P90QH1_local
Location: Carbonate Sequences\2017\OCT
Timebase: ICS2000
#Samples: 63

Created: 10/2/2017 10:24:49 AM by Chemistry
Last Update: 10/2/2017 1:45:16 PM by Chemistry

No.	Name	Type	Pos.	Dil. Factor	Comment	Inj. Date/Time	Status	Program
43	JC51975-8	Unknown	37	1.0000			Single	carbonate 4_17
44	JC51975-10	Unknown	38	1.0000			Single	carbonate 4_17
45	CCV	Unknown	39	1.0000			Single	carbonate 4_17
46	CCB	Unknown	40	1.0000			Single	carbonate 4_17
47	JC51975-11	Unknown	41	1.0000			Single	carbonate 4_17
48	JC51975-12	Unknown	42	1.0000			Single	carbonate 4_17
49	JC51975-13	Unknown	43	1.0000			Single	carbonate 4_17
50	JC52030-1	Unknown	44	1.0000			Single	carbonate 4_17
51	JC52030-3	Unknown	45	1.0000			Single	carbonate 4_17
52	JC52030-5	Unknown	46	1.0000			Single	carbonate 4_17
53	JC52030-7	Unknown	47	1.0000			Single	carbonate 4_17
54	JC51971-34	Unknown	48	1.0000			Single	carbonate 4_17
55	JC51971-35	Unknown	49	1.0000			Single	carbonate 4_17
56	JC51996-1	Unknown	50	1.0000			Single	carbonate 4_17
57	CCV	Unknown	1	1.0000			Single	carbonate 4_17
58	CCB	Unknown	2	1.0000			Single	carbonate 4_17
59	JC51996-2	Unknown	3	1.0000			Single	carbonate 4_17
60	JC51996-3	Unknown	4	1.0000			Single	carbonate 4_17
61	CCV	Unknown	5	1.0000			Single	carbonate 4_17
62	CCB	Unknown	6	1.0000			Single	carbonate 4_17
63	NIGHT	Unknown	7	1.0000			Single	NIGHTNIGHT

Sequence: C17100201
Operator: Chemistry

Printed: 10/3/2017 10:56:12 AM

Title:
Datasource: D7P90QH1_local
Location: Carbonate Sequences\2017\OCT
Timebase: ICS2000
#Samples: 62

GN70302

Created: 10/2/2017 10:24:49 AM by Chemistry
Last Update: 10/3/2017 8:54:54 AM by Chemistry

No.	Name	Type	Pos.	Dil. Factor	Comment	Inj. Date/Time	Status	Program
1	BLANKCONF	Unknown	1	1.0000		10/2/2017 1:50:59 PM	Finished	carbonate 4_17
2	STDA	Standard	1	1.0000		9/8/2017 3:25:23 PM	Finished	carbonate 4_17
3	STDB	Standard	2	1.0000		9/8/2017 3:45:53 PM	Finished	carbonate 4_17
4	STDC	Standard	3	1.0000		9/8/2017 4:06:48 PM	Finished	carbonate 4_17
5	STDD	Standard	4	1.0000		9/8/2017 4:27:43 PM	Finished	carbonate 4_17
6	STDE	Standard	5	1.0000		9/8/2017 4:48:38 PM	Finished	carbonate 4_17
7	STDF	Standard	6	1.0000		9/8/2017 5:09:33 PM	Finished	carbonate 4_17
8	ICV	Unknown	2	1.0000		10/2/2017 2:11:28 PM	Finished	carbonate 4_17
9	CCV	Unknown	3	1.0000		10/2/2017 2:32:23 PM	Finished	carbonate 4_17
10	CCB	Unknown	4	1.0000		10/2/2017 2:53:18 PM	Finished	carbonate 4_17
11	MB	Unknown	5	1.0000		10/2/2017 3:14:14 PM	Finished	carbonate 4_17
12	BSP	Unknown	6	1.0000		10/2/2017 3:35:09 PM	Finished	carbonate 4_17
13	GP8150-S1	Unknown	7	3.0000		10/2/2017 3:56:03 PM	Finished	carbonate 4_17
14	GP8150-D1	Unknown	8	2.0000		10/2/2017 4:26:20 PM	Finished	carbonate 4_17
15	JC51881-1	Unknown	9	2.0000		10/2/2017 4:46:54 PM	Finished	carbonate 4_17
16	GP8150-S2	Unknown	10	3.0000		10/2/2017 5:07:50 PM	Finished	carbonate 4_17
17	JC51881-3	Unknown	11	2.0000		10/2/2017 5:28:45 PM	Finished	carbonate 4_17
18	JC51881-2	Unknown	12	2.0000		10/2/2017 5:49:41 PM	Finished	carbonate 4_17
19	JC51881-6	Unknown	13	40.0000		10/2/2017 6:10:36 PM	Finished	carbonate 4_17
20	JC51881-7	Unknown	14	2.0000		10/2/2017 6:31:31 PM	Finished	carbonate 4_17
21	CCV	Unknown	15	1.0000		10/2/2017 6:52:27 PM	Finished	carbonate 4_17
22	CCB	Unknown	16	1.0000		10/2/2017 7:13:22 PM	Finished	carbonate 4_17
23	JC51807-2	Unknown	17	2.0000		10/2/2017 7:34:18 PM	Finished	carbonate 4_17
24	JC51807-6	Unknown	18	2.0000		10/2/2017 7:55:14 PM	Finished	carbonate 4_17
25	JC51891-1	Unknown	19	5.0000		10/2/2017 8:16:10 PM	Finished	carbonate 4_17
26	JC51891-2	Unknown	20	5.0000		10/2/2017 8:37:06 PM	Finished	carbonate 4_17
27	JC51891-3	Unknown	21	2.0000		10/2/2017 8:58:01 PM	Finished	carbonate 4_17
28	JC51941-6	Unknown	22	3.0000		10/2/2017 9:18:56 PM	Finished	carbonate 4_17
29	JC51942-3	Unknown	23	2.0000		10/2/2017 9:39:51 PM	Finished	carbonate 4_17
30	MB	Unknown	24	1.0000		10/2/2017 10:00:47 PM	Finished	carbonate 4_17
31	BSP	Unknown	25	1.0000		10/2/2017 10:21:42 PM	Finished	carbonate 4_17
32	GP8170-S1	Unknown	26	1.0000		10/2/2017 10:42:38 PM	Finished	carbonate 4_17
33	CCV	Unknown	27	1.0000		10/2/2017 11:03:33 PM	Finished	carbonate 4_17
34	CCB	Unknown	28	1.0000		10/2/2017 11:24:29 PM	Finished	carbonate 4_17
35	GP8170-D1	Unknown	29	1.0000		10/2/2017 11:45:24 PM	Finished	carbonate 4_17
36	JC52003-2	Unknown	30	1.0000		10/3/2017 12:06:19 AM	Finished	carbonate 4_17
37	GP8170-S2	Unknown	31	1.0000		10/3/2017 12:27:14 AM	Finished	carbonate 4_17
38	JC52036-1	Unknown	32	1.0000		10/3/2017 12:48:10 AM	Finished	carbonate 4_17
39	JC52036-2	Unknown	33	1.0000		10/3/2017 1:09:06 AM	Finished	carbonate 4_17
40	JC52003-1	Unknown	34	1.0000		10/3/2017 1:30:02 AM	Finished	carbonate 4_17
41	JC52003-3	Unknown	35	1.0000		10/3/2017 1:50:57 AM	Finished	carbonate 4_17
42	JC52003-4	Unknown	36	1.0000		10/3/2017 2:11:54 AM	Finished	carbonate 4_17

Sequence: C17100201
Operator: Chemistry

Title:
Datasource: D7P90QH1_local
Location: Carbonate Sequences\2017\OCT
Timebase: ICS2000
#Samples: 62

Created: 10/2/2017 10:24:49 AM by Chemistry
Last Update: 10/3/2017 8:54:54 AM by Chemistry

No.	Name	Type	Pos.	Dil. Factor	Comment	Inj. Date/Time	Status	Program
43	JC51975-8	Unknown	37	1.0000		10/3/2017 2:32:49 AM	Finished	carbonate 4_17
44	JC51975-10	Unknown	38	1.0000		10/3/2017 2:53:44 AM	Finished	carbonate 4_17
45	CCV	Unknown	39	1.0000		10/3/2017 3:14:40 AM	Finished	carbonate 4_17
46	CCB	Unknown	40	1.0000		10/3/2017 3:35:35 AM	Finished	carbonate 4_17
47	JC51975-11	Unknown	41	1.0000		10/3/2017 3:56:31 AM	Finished	carbonate 4_17
48	JC51975-12	Unknown	42	1.0000		10/3/2017 4:17:27 AM	Finished	carbonate 4_17
49	JC51975-13	Unknown	43	1.0000		10/3/2017 4:38:22 AM	Finished	carbonate 4_17
50	JC52030-1	Unknown	44	1.0000		10/3/2017 4:59:18 AM	Finished	carbonate 4_17
51	JC52030-3	Unknown	45	1.0000		10/3/2017 5:20:13 AM	Finished	carbonate 4_17
52	JC52030-5	Unknown	46	1.0000		10/3/2017 5:41:08 AM	Finished	carbonate 4_17
53	JC52030-7	Unknown	47	1.0000		10/3/2017 6:02:03 AM	Finished	carbonate 4_17
54	JC51971-34	Unknown	48	1.0000		10/3/2017 6:22:59 AM	Finished	carbonate 4_17
55	JC51971-35	Unknown	49	1.0000		10/3/2017 6:43:54 AM	Finished	carbonate 4_17
56	JC51996-1	Unknown	50	1.0000		10/3/2017 7:04:50 AM	Finished	carbonate 4_17
57	CCV	Unknown	1	1.0000		10/3/2017 7:25:45 AM	Finished	carbonate 4_17
58	CCB	Unknown	2	1.0000		10/3/2017 7:46:41 AM	Finished	carbonate 4_17
59	JC51996-2	Unknown	3	1.0000		10/3/2017 8:07:35 AM	Finished	carbonate 4_17
60	JC51996-3	Unknown	4	1.0000		10/3/2017 8:28:30 AM	Finished	carbonate 4_17
61	CCV	Unknown	5	1.0000		10/3/2017 8:49:26 AM	Finished	carbonate 4_17
62	CCB	Unknown	6	1.0000		10/3/2017 9:10:22 AM	Finished	carbonate 4_17

ACCUTEST.

Analyst _____ Product BRO/SO4 Autopipette # 41

Date 10/2/17 Batch ID GN70302 Class A Grad. Cyl.

Sample Dilution Prep Log

Sample ID	Dilution	Initial Volume	Final Volume	Comments
~~GP8141-S1~~ (2)		mL	mL	
GP8150-S1	1:3	10 mL	30 mL	0.3mL GN17-422-100 SO4/Bro
GP8150-D1	1:2	10 mL	20 mL	SO4/Bro for confirmation
JC51881-1	1:2	10 mL	20 mL	SO4/Bro
GP8150-S2	1:3	10 mL	30 mL	Bro for conf
JC51881-3	1:2	10 mL	20 mL	Bro for conf
JC51881-2	1:2	10 mL	20 mL	Bro for conf
~~JC51881-5~~	~~1:5~~	~~10~~ mL	~~50~~ mL	~~SO4~~ (2)
JC51881-6	1:40	1 mL	40 mL	SO4
JC51881-7	1:2	10 mL	20 mL	Bro for conf
JC51891-1	1:5	10 mL	50 mL	SO4
JC51891-2	1:5	10 mL	50 mL	SO4
JC51891-3	1:2	10 mL	20 mL	SO4
~~JC51891 (2)~~		mL	mL	
JC51941-6	1:3	10 mL	30 mL	SO4
JC51942-3	1:2	10 mL	20 mL	SO4
		mL	mL	
JC51807-2	1:2	10 mL	20 mL	Bro Conf
JC51807-6	1:2	10 mL	20 mL	Bro Conf
		mL	mL	
		mL	mL	
		mL	mL	
		mL	mL	

QC Reviewer: _____ Date: _____

Form: GN165-01
Rev. Date: 2/25/03

SGS ACCUTEST

Analyst: [signature]

Product: Bn/SO4

Prep Date: 10/2/17

Batch ID: GN 70302

Pipette ID: 41

Balance ID: N/A

Sample Prep Log

Sample ID	Initial Sample Amount	Final Volume (mL)
BSP	0.5mL Carb Spike	50
GP8170-S1	0.5mL Carb Spike	50
GP8170-S2	0.5mL Carb Spike	50

Reviewer: _____

Date: _____

Form: GN166-04
Revised: 10/27/16

SGS

Standard Preparation Log - Carbonate/ Bicarbonate

Intermediate Standard Description	Std ID	Stock used to prepare standard	Stock Conc (mg/l)	Stock Volume (ml)	Balance or Autopipet ID(*)	Diluent	Final Volume (ml)	Final Conc of Intermediate (mg/l)	Expiration Date	Analyst	Date
100 ppm FBro	GN17-422-98	GN17-432-05/06	10000	10	A	DI Water	100	100	10/06/17	YR	9/29/17
10 ppm FBro	GN17-422-99	GN17-422-98	100	10	A	DI Water	100	10	10/06/17	YR	9/29/17
Carb Spike	GN17-422-100	GN17-432-04	4000	25	A	DI Water	100	1000	10/6/17	YR	9/29/17
Carb Spike	↓	GN17-432-05	1000	10	A	DI Water	100	100	10/6/17	YR	9/29/17
Carb Spike	↓	GN17-432-06	1000	10	A	DI Water	100	100	10/6/17	YR	9/29/17
100ppm CH/BC	GN17-432-13	GN17-432-04	4000	2.5	A	DI Water	100	100	10/4/17	JN	9/29/17

Standard Description	Std ID	Intermediate or Stock concentration	Intermediate or Stock conc (mg/l)	Intermediate or Stock volume in (ml)	Balance or Autopipet ID (*)	Diluent	Final Volume (ml)	Final Conc of Intermediate (mg/l)	Expiration Date	Analyst	Date
CCV	GN17-422-101	GN17-432-13	100	12.5	A	DI Water	100	12.5	10/4/17	YR	9/29/17
↓	↓	GN17-422-98	100	2.5	A	DI Water	100	2.5	10/4/17	YR	9/29/17
						DI Water	100				
ICV	GN17-422-102	GN16-402-73	1000	1.0	41	DI Water	100	10	10/6/17	YR	9/29/17
↓	↓	GN16-402-74	1000	0.1	41	DI Water	100	1.0	10/6/17	YR	9/29/17
						DI Water	100				
						DI Water	100				
						DI Water	100				
						DI Water	100				
						DI Water	100				
						DI Water	100				

(*) If class A glass pipets are used, enter an A. For balances or auto-pipets, then enter ID number.

Form: GN315-01
Rev Date: 6/6/17

017

ACCUTEST

Reagent Information Log - IONC IC-C - Water /Soil

GN Batch ID#: GN70302

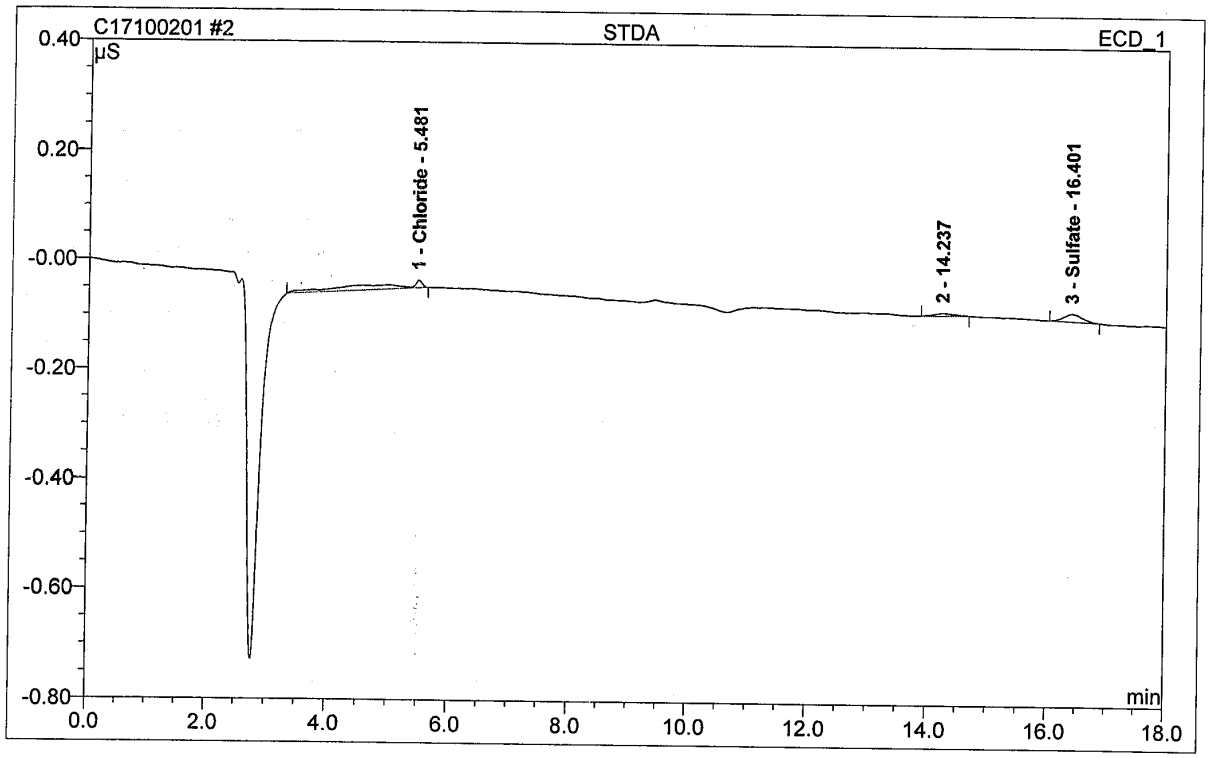
Reagent	Reagent # or Manufacturer/Lot	Exp. Date
Filter lot numbers	GREENWOOD #160802033	NA
Eluent	gne9-52196-ic	10/12/2017

Reason codes for data corrections: 1-reviewer error correction: 2-transcription error; 3-computer error; 4-analyst error

Form : GN087A-76
Rev. Date: 4/7/09

2 STDA

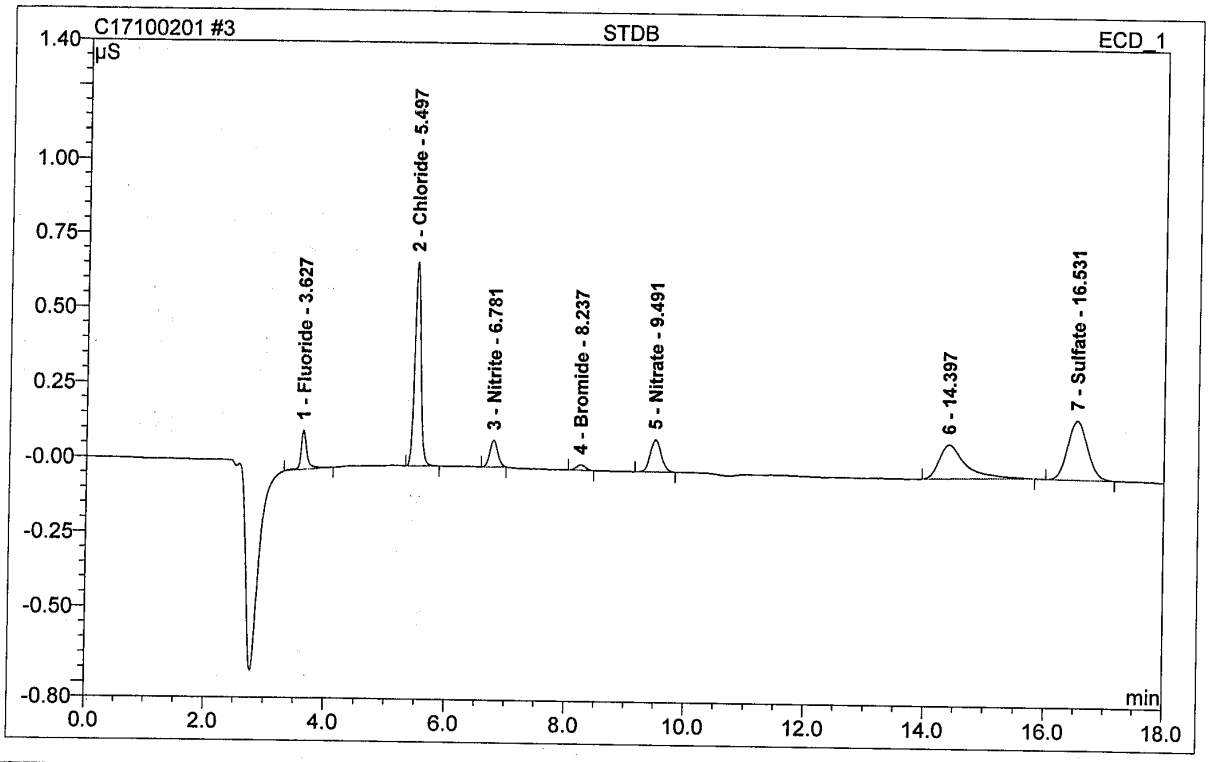
Sample Name:	**STDA**	*Injection Volume:*	**4800.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**9/8/2017 15:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	5.48	Chloride	0.013	0.013	65.25	0.066	BMB
2	14.24	n.a.	0.005	0.002	9.17	n.a.	BMB
3	16.40	Sulfate	0.014	0.005	25.57	0.041	BMB
Total:			0.033	0.020	100.00	0.107	

3 STDB

Sample Name:	**STDB**	*Injection Volume:*	**4800.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**9/8/2017 15:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.63	Fluoride	0.130	0.015	5.49	0.052	BMB
2	5.50	Chloride	0.679	0.082	29.94	0.409	BMB
3	6.78	Nitrite	0.088	0.014	5.02	0.044	BMB
4	8.24	Bromide	0.018	0.003	1.16	0.047	BMB
5	9.49	Nitrate	0.107	0.023	8.45	0.054	BMB
6	14.40	n.a.	0.113	0.059	21.75	n.a.	BMB
7	16.53	Sulfate	0.197	0.077	28.20	0.603	BMB
Total:			1.333	0.273	100.00	1.209	

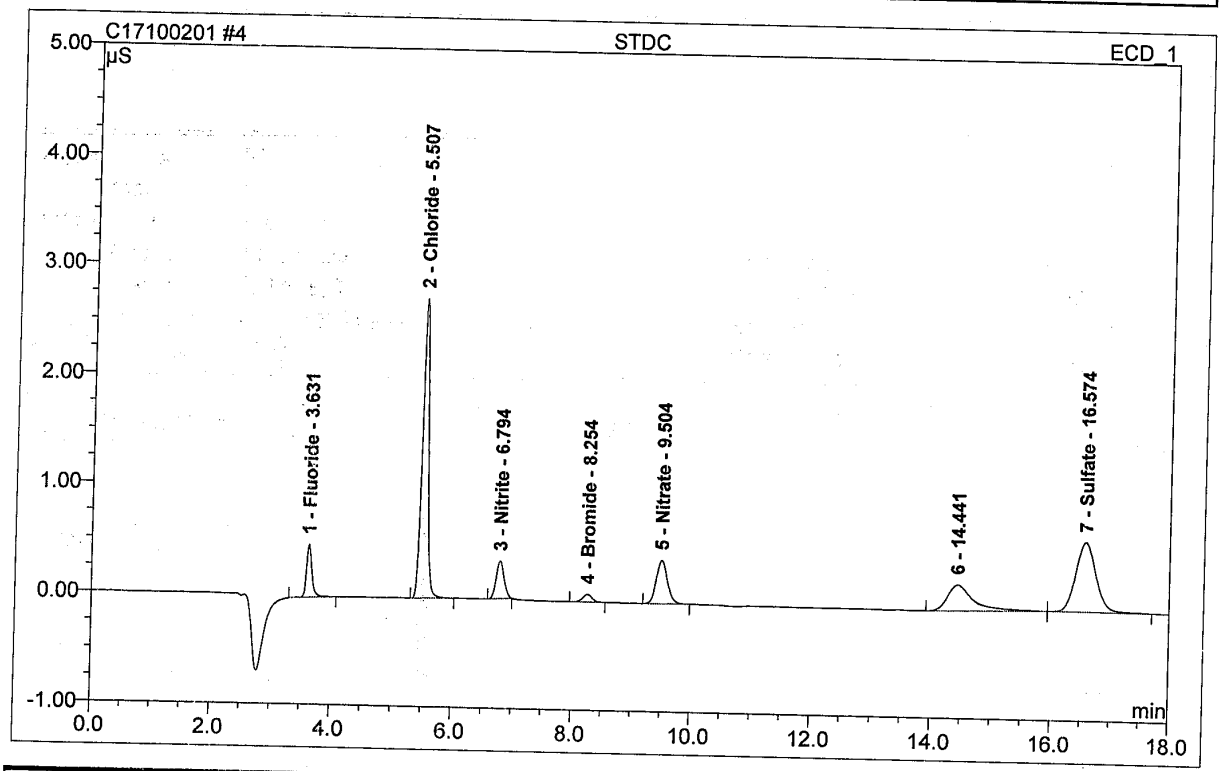
anionssystem3/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR11 Build 3161 (184582)

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

4 STDC

Sample Name:	**STDC**	*Injection Volume:*	**4800.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**9/8/2017 16:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.63	Fluoride	0.483	0.051	5.60	0.177	BMB
2	5.51	Chloride	2.733	0.326	36.10	1.633	BMB
3	6.79	Nitrite	0.343	0.052	5.78	0.169	BMB
4	8.25	Bromide	0.069	0.013	1.40	0.188	BMB
5	9.50	Nitrate	0.398	0.087	9.57	0.203	BMB
6	14.44	n.a.	0.239	0.121	13.40	n.a.	BMB
7	16.57	Sulfate	0.639	0.254	28.15	1.995	bMB
Total:			4.905	0.904	100.00	4.365	

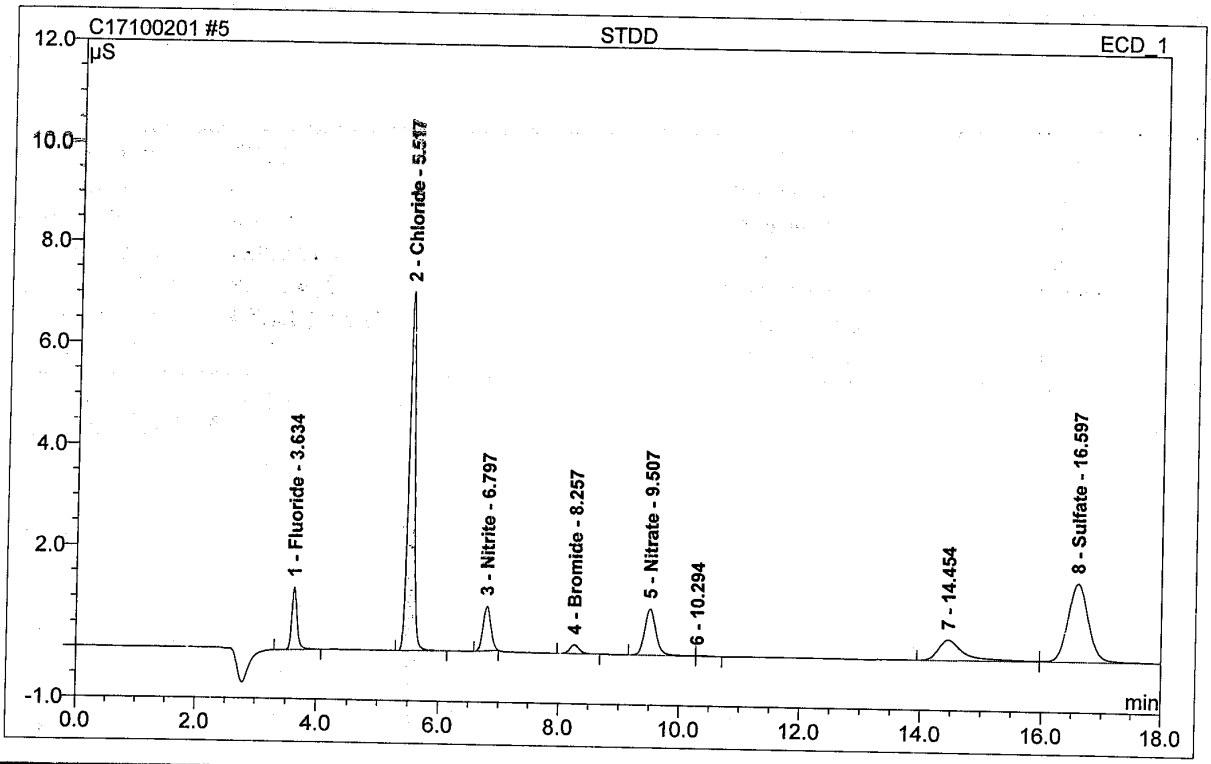
anionssystem3/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR11 Build 3161 (184582)

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

5 STDD

Sample Name:	**STDD**	*Injection Volume:*	**4800.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**9/8/2017 16:27**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.63	Fluoride	1.230	0.125	5.76	0.436	BMB
2	5.52	Chloride	7.074	0.830	38.35	4.157	BMB
3	6.80	Nitrite	0.881	0.134	6.17	0.432	BMB
4	8.26	Bromide	0.177	0.033	1.51	0.488	BMB
5	9.51	Nitrate	0.913	0.205	9.46	0.480	BM
6	10.29	n.a.	0.010	0.003	0.13	n.a.	MB
7	14.45	n.a.	0.410	0.209	9.66	n.a.	BM
8	16.60	Sulfate	1.556	0.627	28.96	4.917	MB
Total:			12.251	2.165	100.00	10.910	

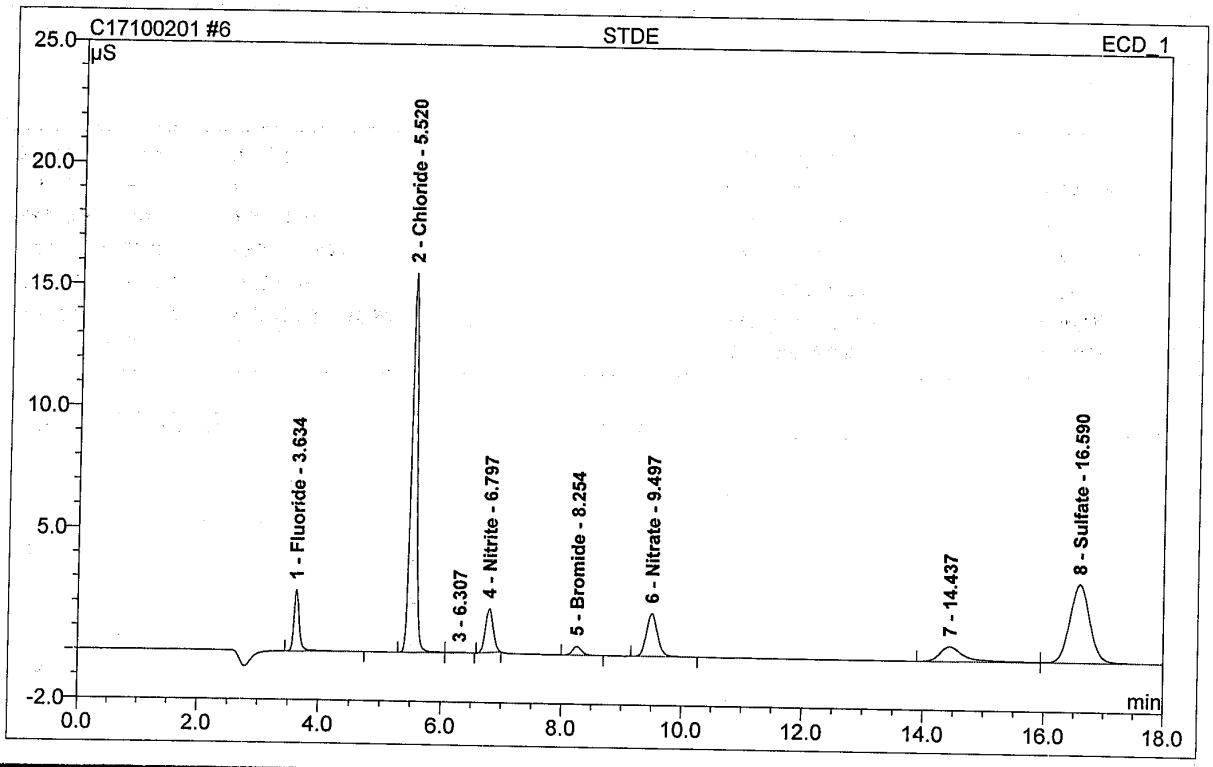
anionssystem3/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR11 Build 3161 (184582)

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

6 STDE

Sample Name:	**STDE**	*Injection Volume:*	**4800.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**9/8/2017 16:48**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.63	Fluoride	2.510	0.259	5.97	0.907	BMB
2	5.52	Chloride	15.577	1.787	41.18	8.950	BM
3	6.31	n.a.	0.011	0.004	0.09	n.a.	MB
4	6.80	Nitrite	1.796	0.273	6.29	0.883	BMB
5	8.25	Bromide	0.358	0.066	1.52	0.980	BMB
6	9.50	Nitrate	1.759	0.381	8.78	0.892	BMB
7	14.44	n.a.	0.613	0.297	6.84	n.a.	BM
8	16.59	Sulfate	3.234	1.273	29.33	9.982	MB
Total:			25.858	4.340	100.00	22.594	

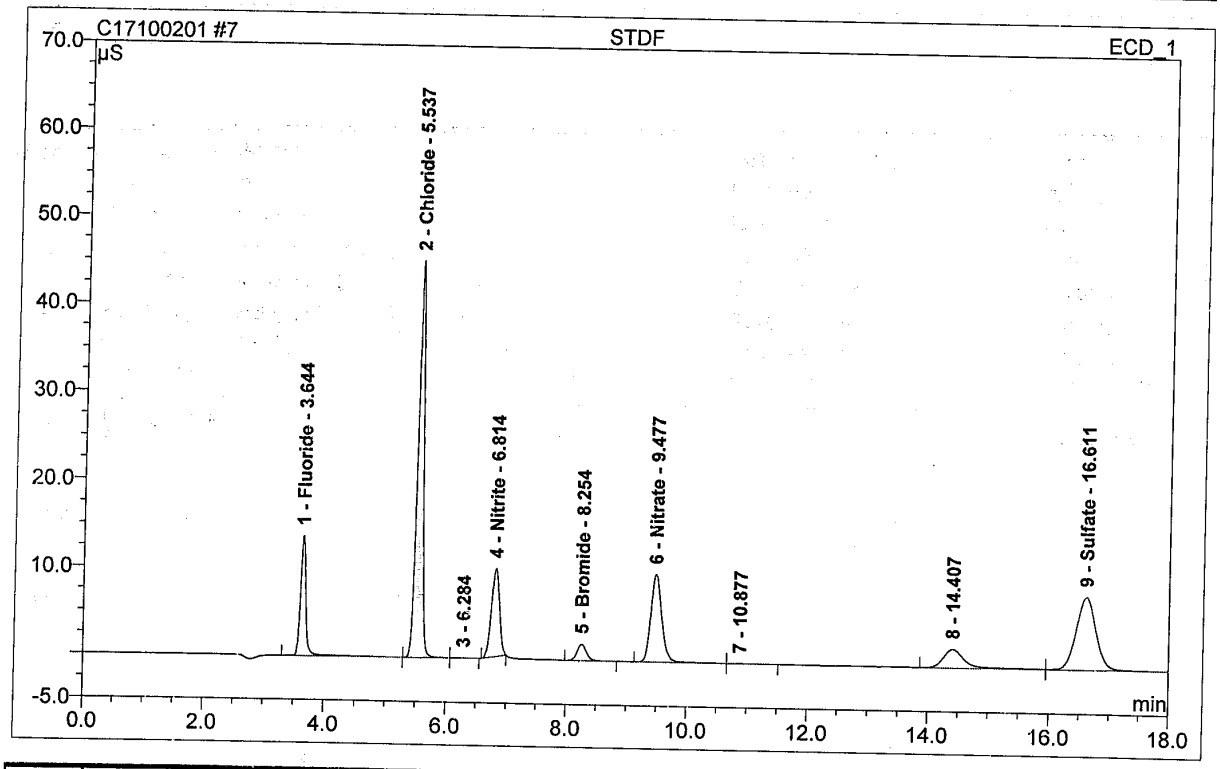
anionssystem3/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR11 Build 3161 (184582)

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

7 STDF

Sample Name:	**STDF**	*Injection Volume:*	**4800.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**9/8/2017 17:09**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**

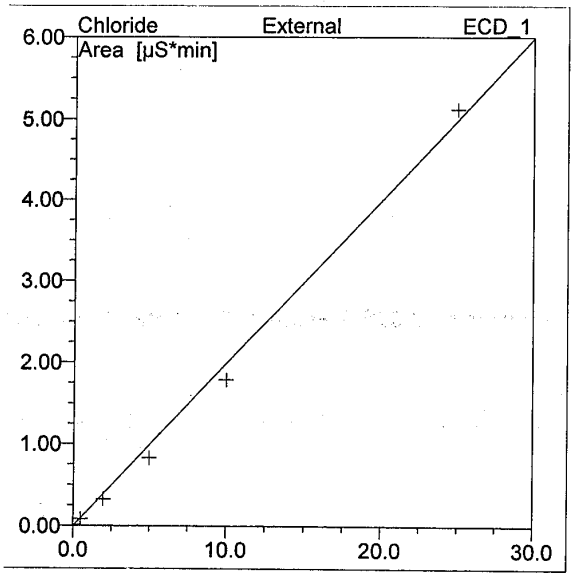


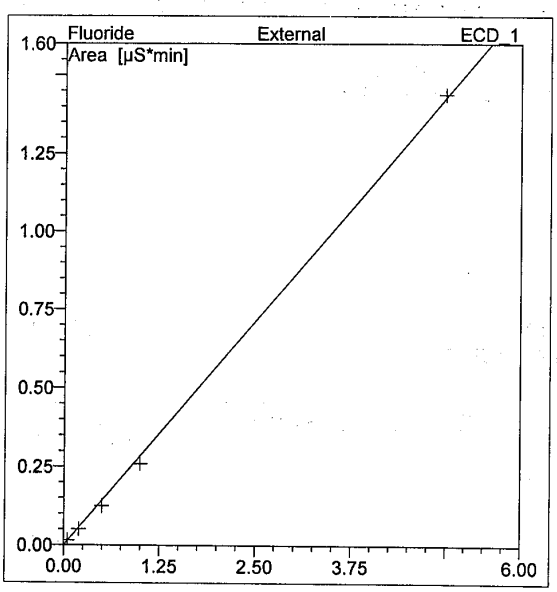
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.64	Fluoride	13.744	1.437	9.79	5.026	BMB
2	5.54	Chloride	45.194	5.116	34.86	25.620	BM
3	6.28	n.a.	0.030	0.010	0.07	n.a.	MB
4	6.81	Nitrite	10.127	1.555	10.59	5.031	BMB
5	8.25	Bromide	1.853	0.336	2.29	5.006	BMB
6	9.48	Nitrate	10.046	2.145	14.61	5.023	BM
7	10.88	n.a.	0.025	0.011	0.07	n.a.	MB
8	14.41	n.a.	2.113	0.877	5.97	n.a.	BM
9	16.61	Sulfate	8.324	3.191	21.74	25.022	MB
Total:			91.455	14.677	100.00	70.729	

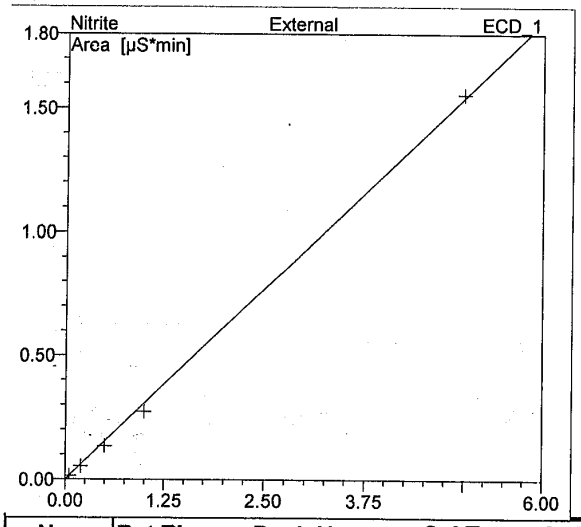
anionssystem3/Integration

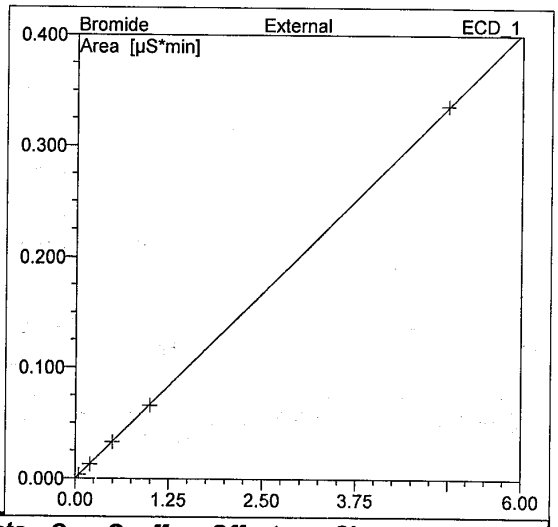
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR11 Build 3161 (184582)

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201







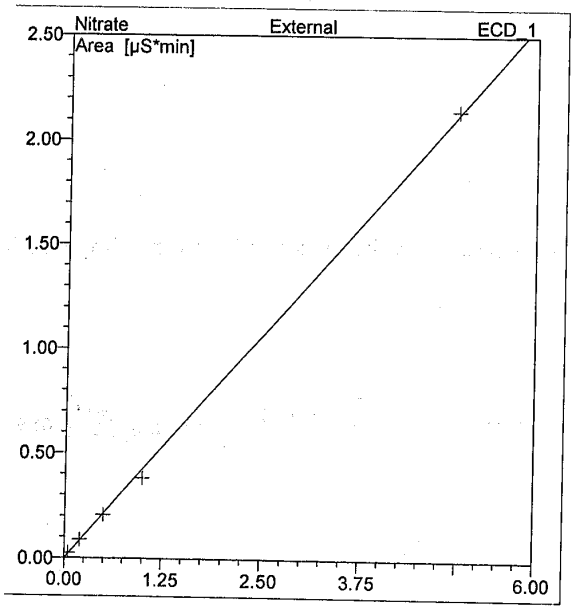


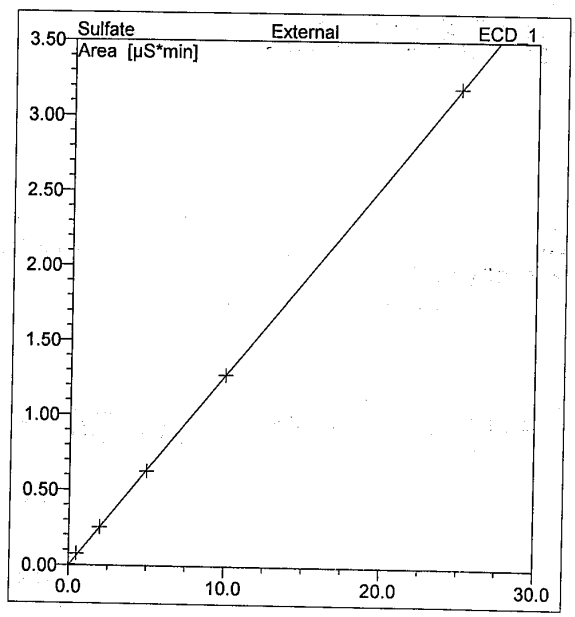
No.	Ret.Time min	Peak Name	Cal.Type	Points	Corr.Coeff. %	Offset	Slope	Curve
1	3.64	Fluoride	Lin	5	99.9802	0.0000	0.2860	0.0000
2	5.54	Chloride	Lin	6	99.8354	0.0000	0.1997	0.0000
3	6.28	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	6.81	Nitrite	Lin	5	99.9740	0.0000	0.3091	0.0000
5	8.25	Bromide	Lin	5	99.9994	0.0000	0.0672	0.0000
6	9.48	Nitrate	Lin	5	99.9725	0.0000	0.4269	0.0000
7	10.88	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	14.41	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
9	16.61	Sulfate	Lin	6	99.9979	0.0000	0.1275	0.0000
Average:					99.9599	0.0000	0.2361	0.0000

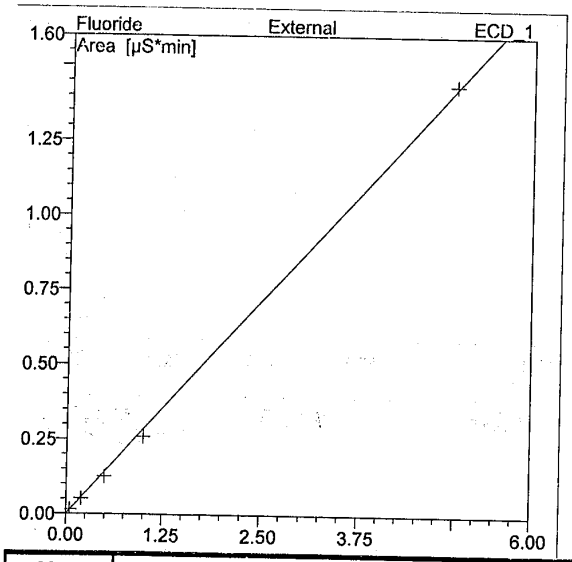
anionssystem3/Calibration(Curr.Peak)

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR11 Build 3161 (184582)

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201







No.	Ret.Time min	Peak Name	Cal.Type	Points	Corr.Coeff. %	Offset	Slope	Curve
1	3.64	Fluoride	Lin	5	99.9802	0.0000	0.2860	0.0000
2	5.54	Chloride	Lin	6	99.8354	0.0000	0.1997	0.0000
3	6.28	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	6.81	Nitrite	Lin	5	99.9740	0.0000	0.3091	0.0000
5	8.25	Bromide	Lin	5	99.9994	0.0000	0.0672	0.0000
6	9.48	Nitrate	Lin	5	99.9725	0.0000	0.4269	0.0000
7	10.88	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	14.41	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
9	16.61	Sulfate	Lin	6	99.9979	0.0000	0.1275	0.0000

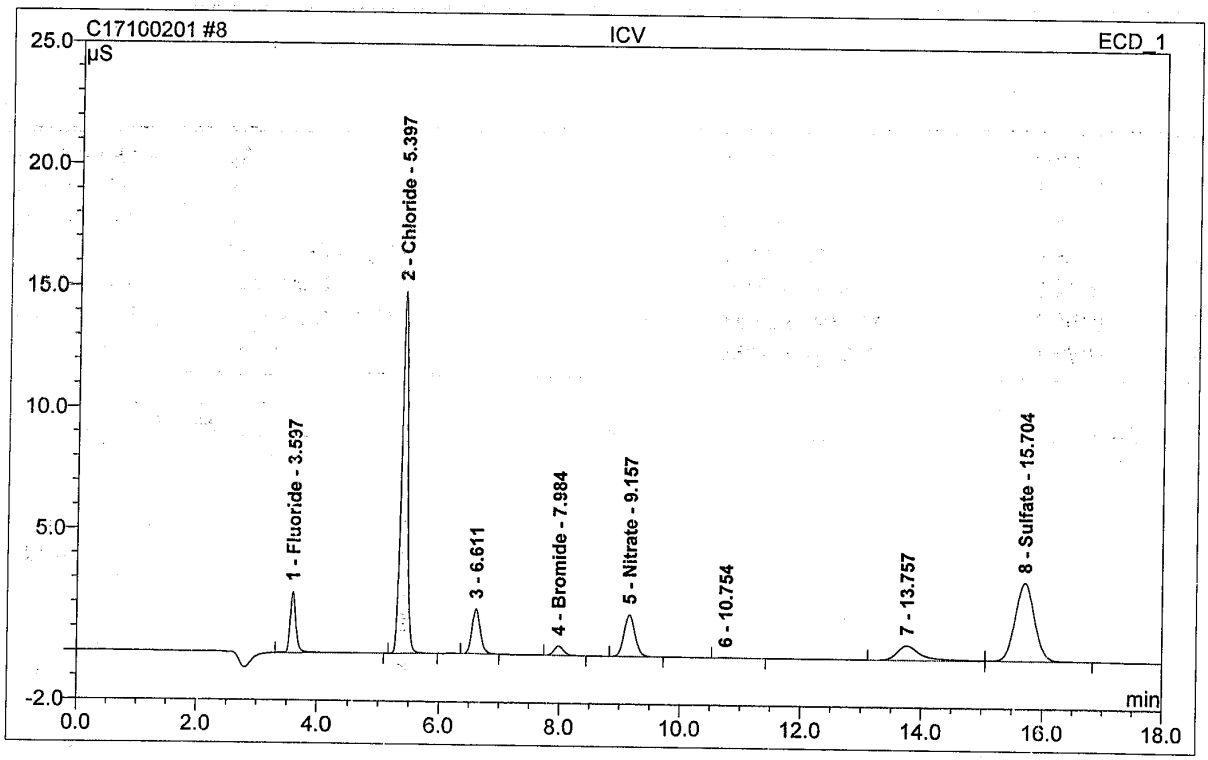
anionssystem3/Calibration(Curr.Peak)

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR11 Build 3161 (184582)

Average:		99.9599	0.0000	0.2361	0.0000

8 ICV

Sample Name:	**ICV**	*Injection Volume:*	**4800.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/2/2017 14:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	2.490	0.279	6.52	0.976	BMB
2	5.40	Chloride	14.892	1.780	41.60	8.916	BMB
3	6.61	n.a.	1.820	0.295	6.90	n.a.	BMB
4	7.98	Bromide	0.393	0.073	1.69	1.080	BMB
5	9.16	Nitrate	1.701	0.363	8.47	0.850	BMB
6	10.75	n.a.	0.010	0.004	0.09	n.a.	BMB
7	13.76	n.a.	0.594	0.280	6.55	n.a.	BM
8	15.70	Sulfate	3.209	1.206	28.18	9.457	MB
Total:			25.110	4.280	100.00	21.278	

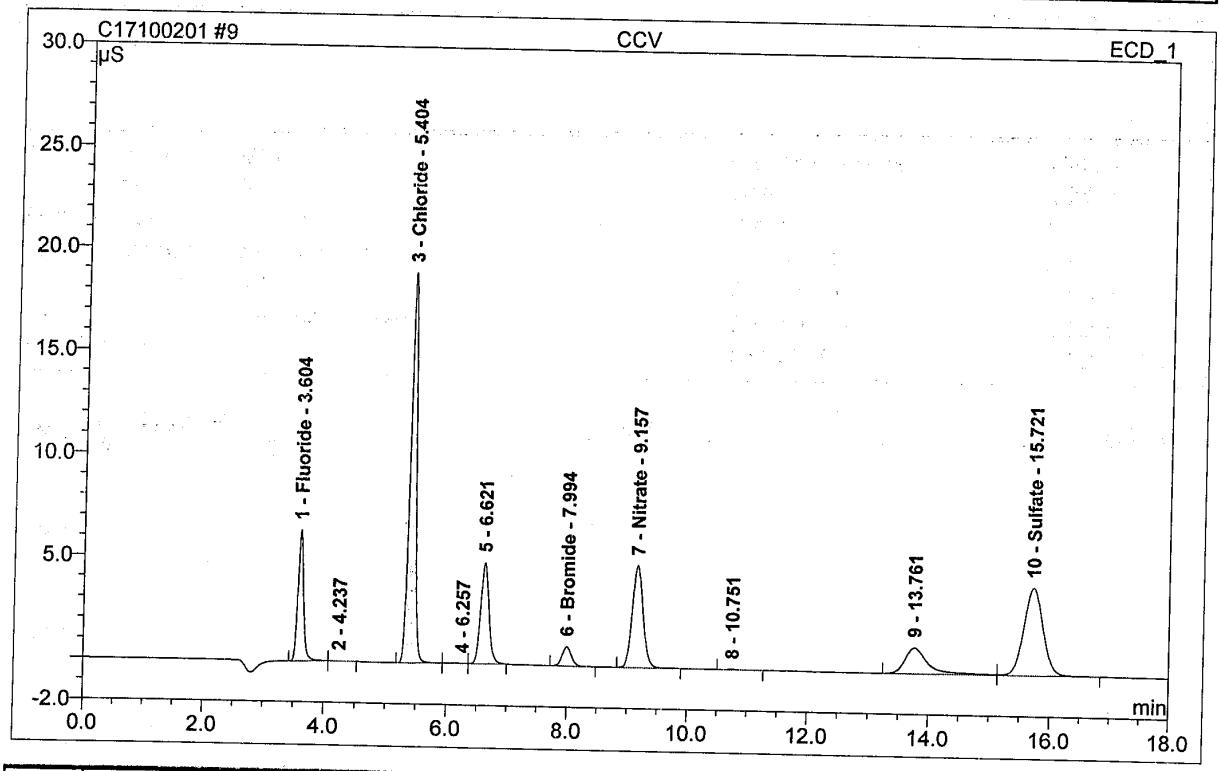
anionssystem3/Integration

Chromeleon (c) Dionex 1996-200
Version 6.80 SR11 Build 3161 (184582)

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

9 CCV

Sample Name:	**CCV**	*Injection Volume:*	**4800.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/2/2017 14:32**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



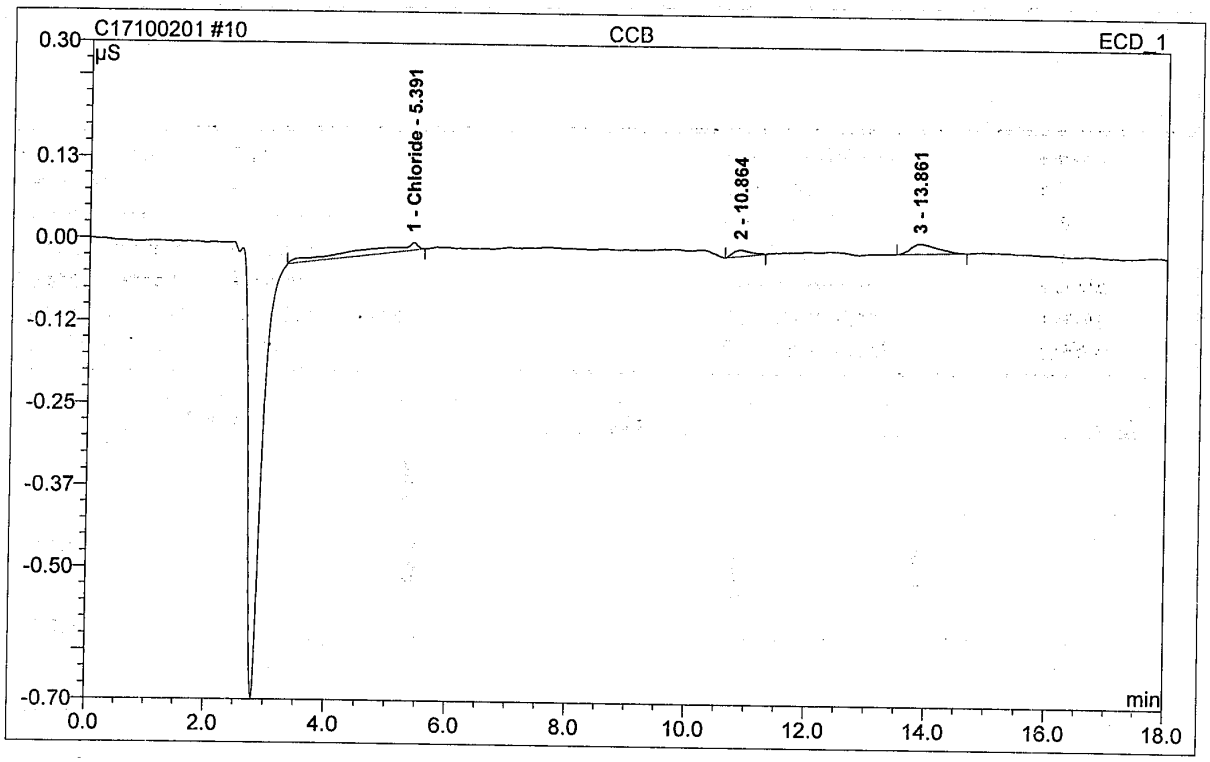
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	6.370	0.683	9.61	2.389	BMb
2	4.24	n.a.	0.008	0.002	0.02	n.a.	bMB
3	5.40	Chloride	18.959	2.256	31.74	11.296	BM
4	6.26	n.a.	0.012	0.004	0.06	n.a.	M
5	6.62	n.a.	4.906	0.797	11.21	n.a.	MB
6	7.99	Bromide	0.936	0.172	2.42	2.557	BMB
7	9.16	Nitrate	4.960	1.045	14.70	2.447	BMB
8	10.75	n.a.	0.014	0.005	0.07	n.a.	BMB
9	13.76	n.a.	1.249	0.557	7.84	n.a.	BM
10	15.72	Sulfate	4.245	1.587	22.33	12.445	MB
Total:			41.659	7.107	100.00	31.133	

anionssystem3/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR11 Build 3161 (184582)

10 CCB

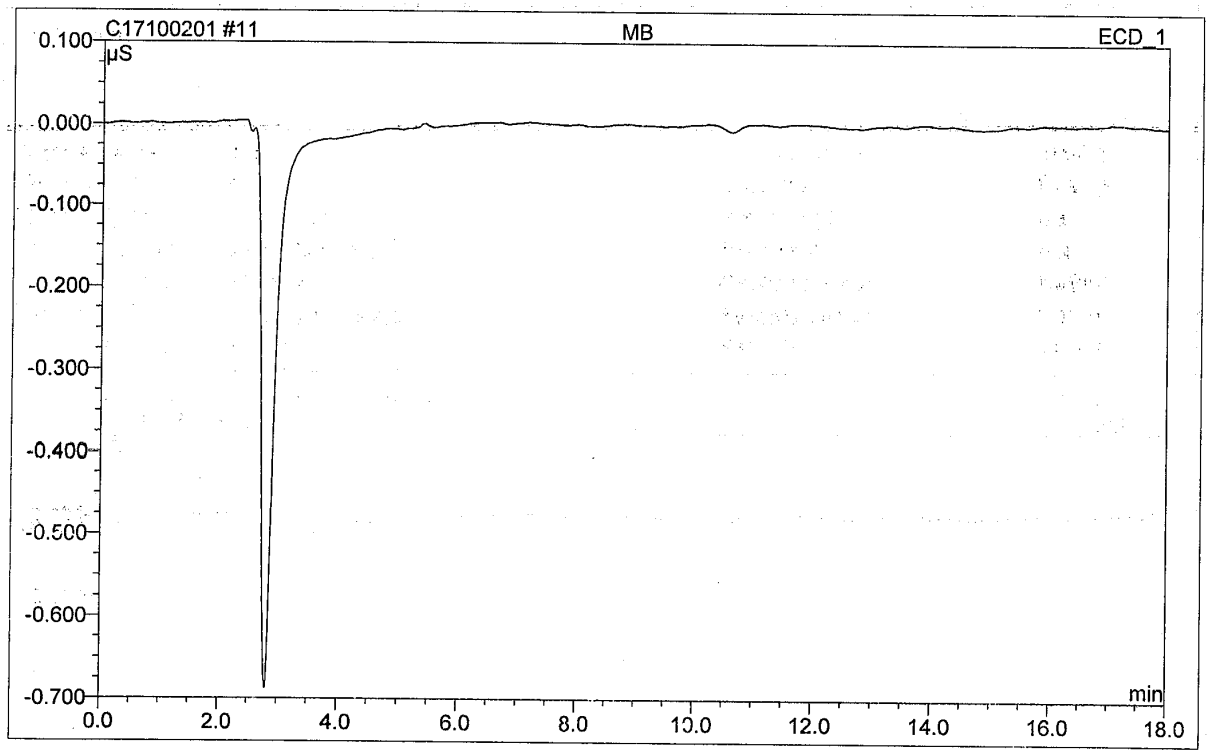
Sample Name:	**CCB**	*Injection Volume:*	**4800.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/2/2017 14:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	5.39	Chloride	0.011	0.015	56.27	0.074	BMB
2	10.86	n.a.	0.010	0.003	12.60	n.a.	BMB
3	13.86	n.a.	0.016	0.008	31.12	n.a.	BMB
Total:			0.037	0.026	100.00	0.074	

11 MB

Sample Name:	**MB**	*Injection Volume:*	**4800.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/2/2017 15:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

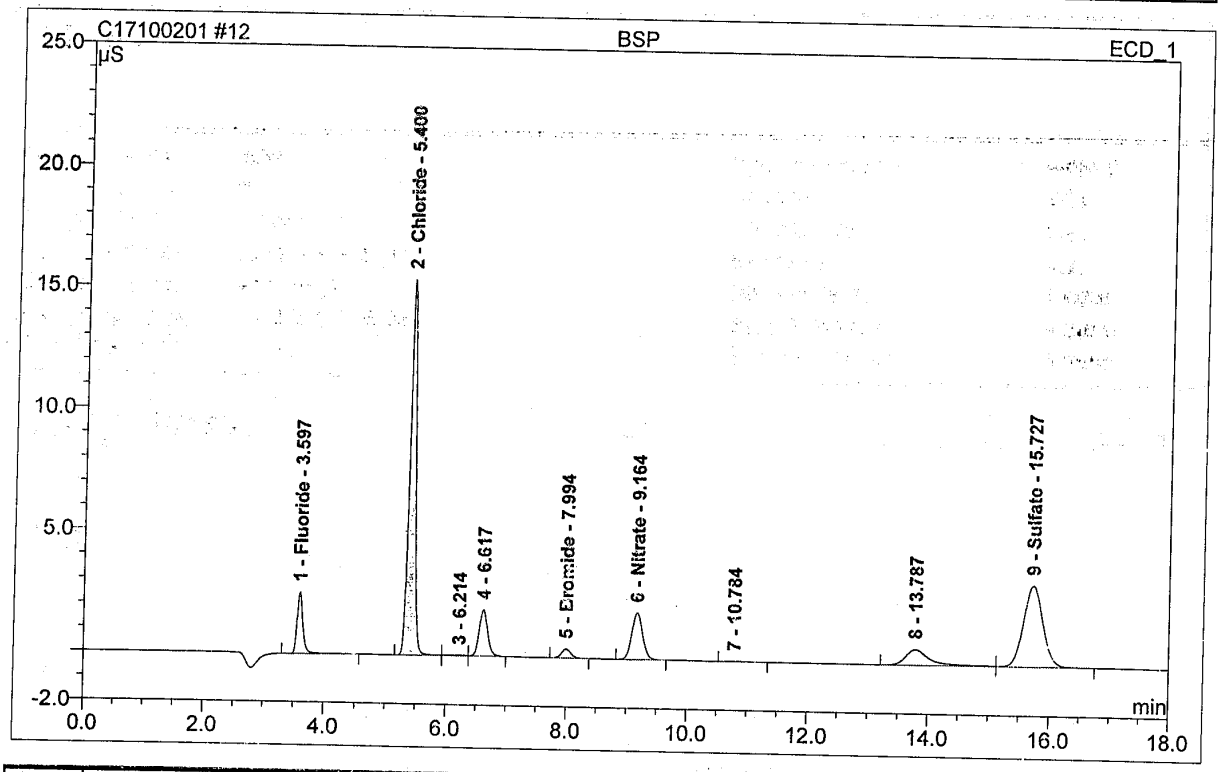
anionssystem3/Integration

Chromeleon (c) Dionex 1996-200
Version 6.80 SR11 Build 3161 (184582

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

12 BSP

Sample Name:	**BSP**	*Injection Volume:*	**4800.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/2/2017 15:35**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



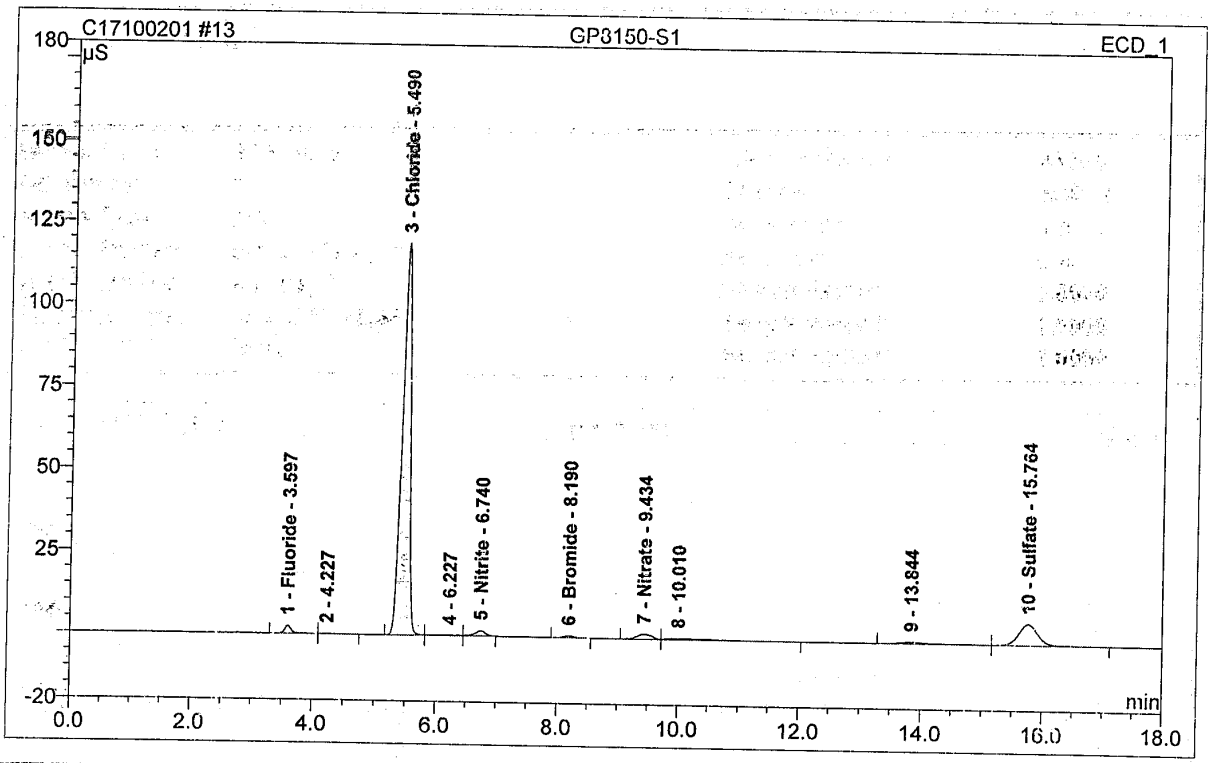
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	2.511	0.277	6.19	0.969	BMB
2	5.40	Chloride	15.417	1.850	41.35	9.265	BM
3	6.21	n.a.	0.020	0.007	0.16	n.a.	M
4	6.62	n.a.	1.900	0.311	6.94	n.a.	MB
5	7.99	Bromide	0.372	0.069	1.54	1.023	BMB
6	9.16	Nitrate	1.913	0.406	9.08	0.951	BMB
7	10.78	n.a.	0.012	0.004	0.10	n.a.	BMB
8	13.79	n.a.	0.645	0.302	6.76	n.a.	BM
9	15.73	Sulfate	3.334	1.248	27.90	9.789	MB
Total:			26.124	4.475	100.00	21.998	

anionssystem3/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR11 Build 3161 (184582)

13 GP8150-S1

Sample Name:	**GP8150-S1**	*Injection Volume:*	**4800.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**3.0000**
Recording Time:	**10/2/2017 15:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



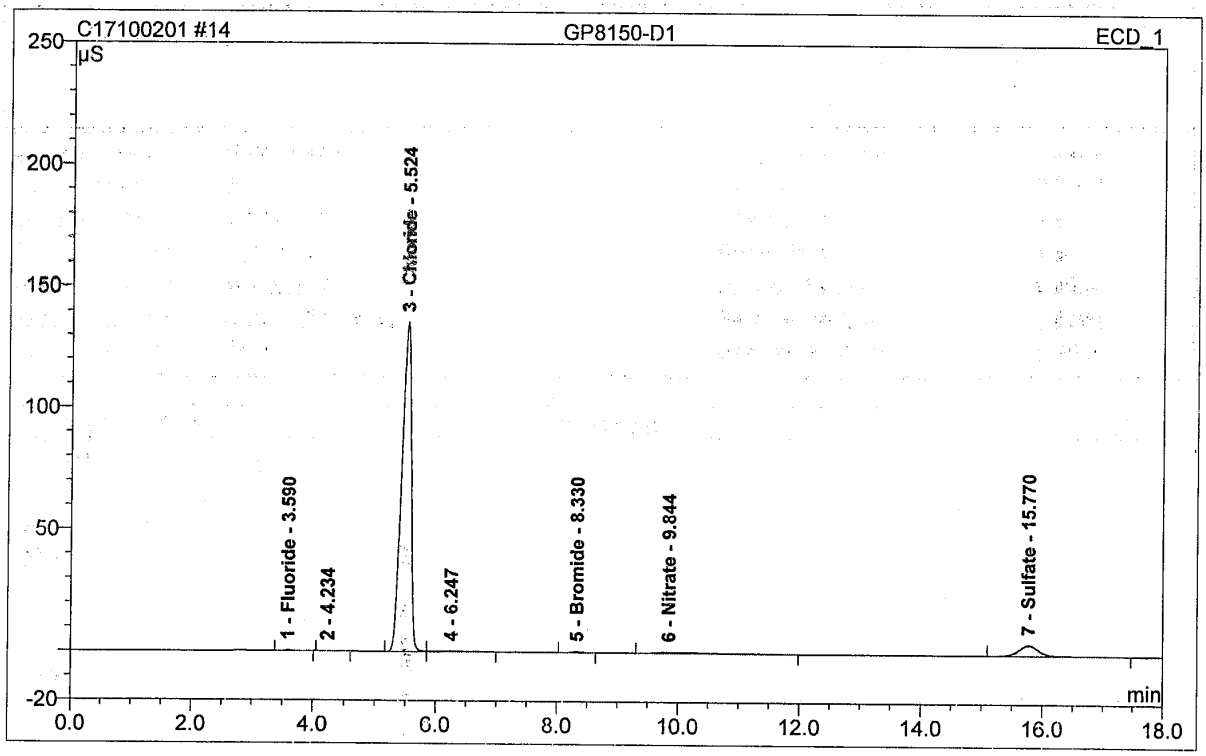
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	2.411	0.295	1.31	3.098	BM
2	4.23	n.a.	0.049	0.011	0.05	n.a.	MB
3	5.49	Chloride	119.124	18.442	81.66	277.061	BM
4	6.23	n.a.	0.171	0.086	0.38	n.a.	M
5	6.74	Nitrite	1.621	0.329	1.46	3.195	MB
6	8.19	Bromide	0.601	0.109	0.48	4.879	BMB
7	9.43	Nitrate	1.547	0.423	1.87	2.973	BM
8	10.01	n.a.	0.334	0.243	1.07	n.a.	MB
9	13.84	n.a.	0.441	0.251	1.11	n.a.	BM
10	15.76	Sulfate	6.474	2.393	10.60	56.299	MB
Total:			132.772	22.583	100.00	347.504	

anionssystem3/Integration

Chromeleon (c) Dionex 1996-200
Version 6.80 SR11 Build 3161 (184582)

14 GP8150-D1

Sample Name:	**GP8150-D1**	*Injection Volume:*	**4800.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/2/2017 16:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.316	0.044	0.17	0.307	BMB
2	4.23	n.a.	0.047	0.007	0.03	n.a.	BMB
3	5.52	Chloride	135.523	24.255	91.54	242.921	BM
4	6.25	n.a.	0.232	0.151	0.57	n.a.	MB
5	8.33	Bromide	0.346	0.062	0.23	1.841	BMB
6	9.84	Nitrate	0.408	0.349	1.32	1.635	BMB
7	15.77	Sulfate	4.364	1.628	6.15	25.539	BMB
Total:			141.236	26.495	100.00	272.243	

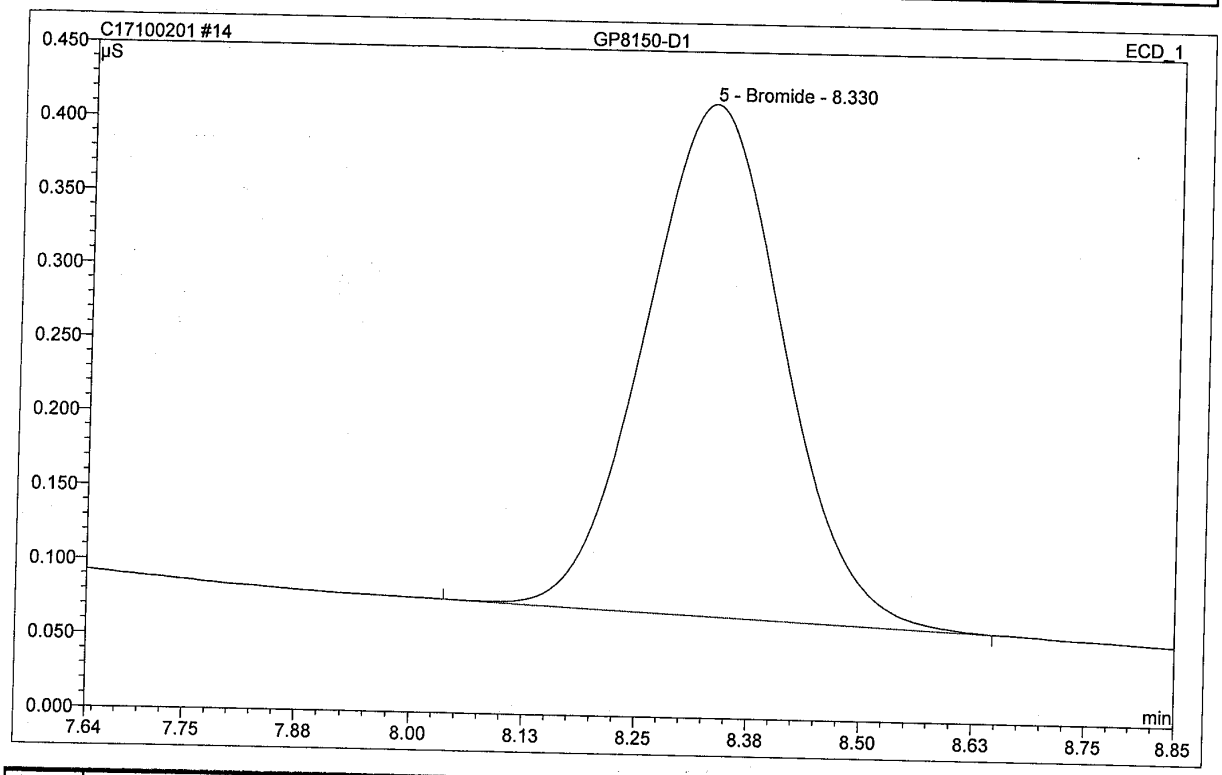
anionssystem3/Integration

Chromeleon (c) Dionex 1996-200
Version 6.80 SR11 Build 3161 (184582

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

14 GP8150-D1

Sample Name:	**GP8150-D1**	*Injection Volume:*	**4800.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/2/2017 16:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



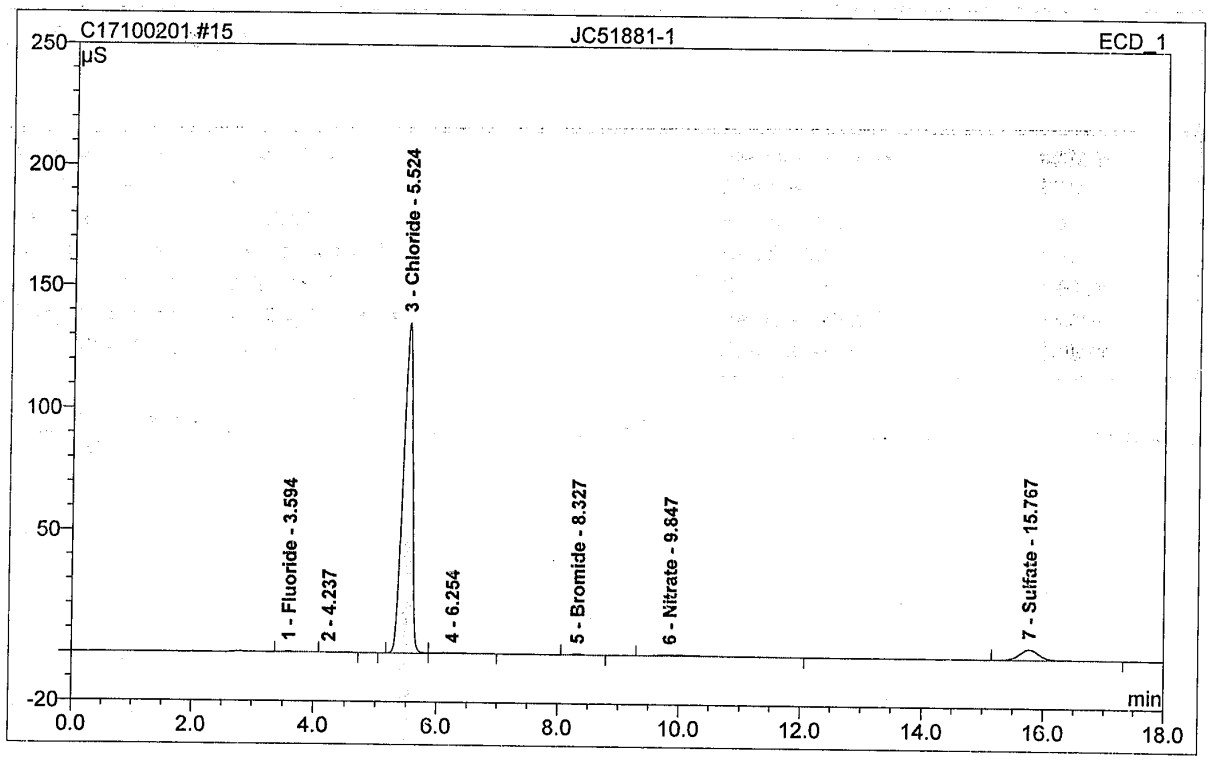
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.316	0.044	0.17	0.307	BMB
2	4.23	n.a.	0.047	0.007	0.03	n.a.	BMB
3	5.52	Chloride	135.523	24.255	91.54	242.921	BM
4	6.25	n.a.	0.232	0.151	0.57	n.a.	MB
5	8.33	Bromide	0.346	0.062	0.23	1.841	BMB
6	9.84	Nitrate	0.408	0.349	1.32	1.635	BMB
7	15.77	Sulfate	4.364	1.628	6.15	25.539	BMB
Total:			141.236	26.495	100.00	272.243	

anionssystem3/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR11 Build 3161 (184582)

15 JC51881-1

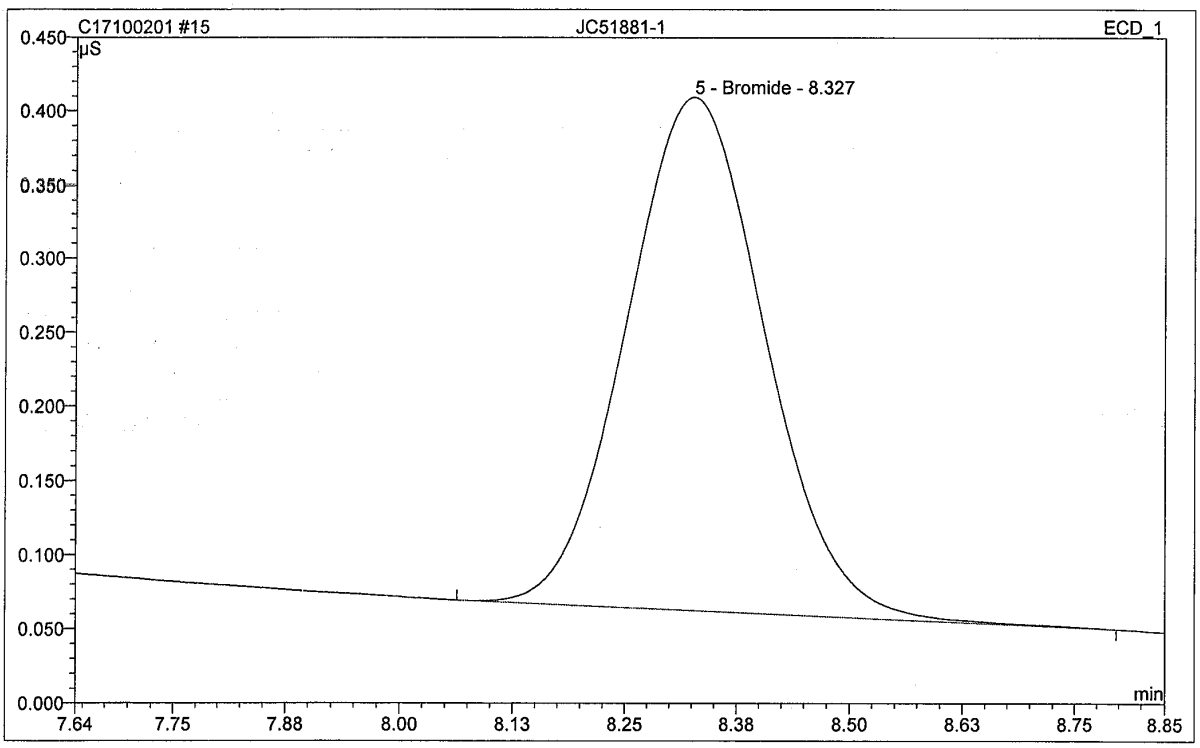
Sample Name:	**JC51881-1**	*Injection Volume:*	**4800.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/2/2017 16:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.318	0.052	0.20	0.362	BMB
2	4.24	n.a.	0.050	0.008	0.03	n.a.	Rd
3	5.52	Chloride	135.491	24.175	91.49	242.122	BM
4	6.25	n.a.	0.232	0.153	0.58	n.a.	MB
5	8.33	Bromide	0.347	0.062	0.24	1.854	BMB
6	9.85	Nitrate	0.407	0.349	1.32	1.636	BMB
7	15.77	Sulfate	4.350	1.623	6.14	25.461	BMB
Total:			141.194	26.422	100.00	271.435	

15 JC51881-1

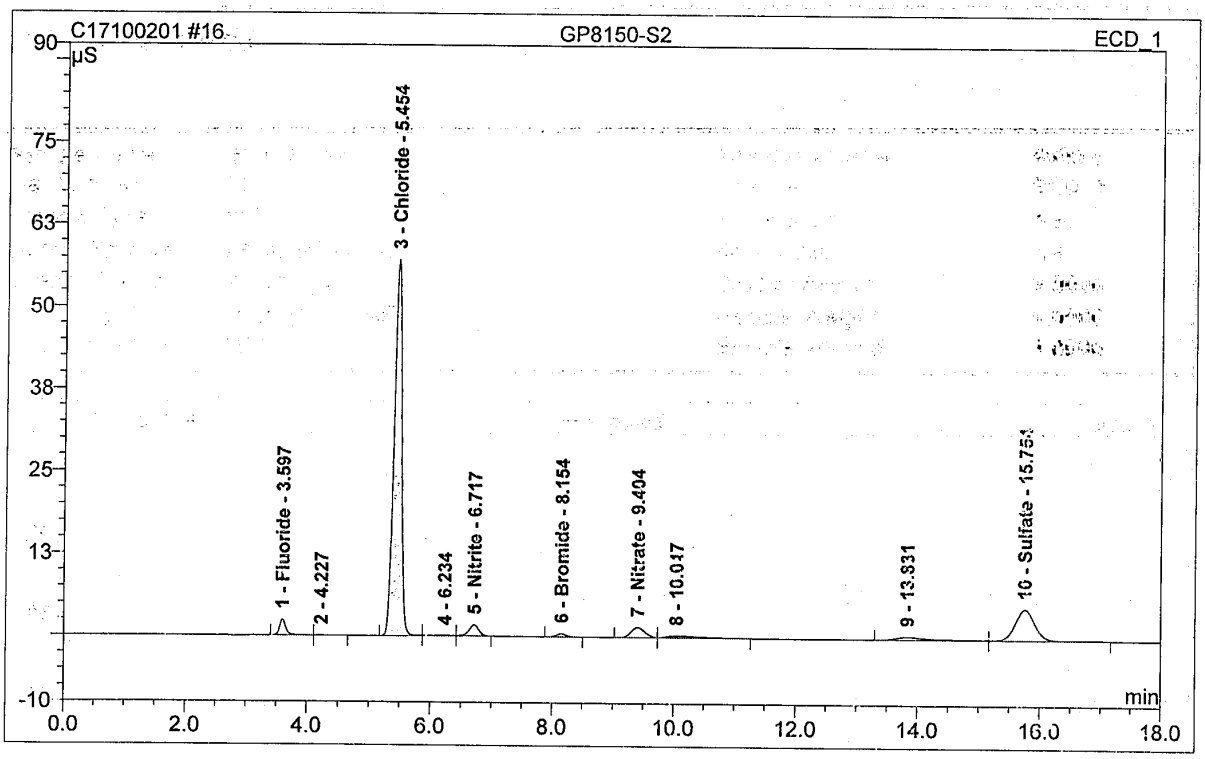
Sample Name:	**JC51881-1**	*Injection Volume:*	**4800.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/2/2017 16:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.318	0.052	0.20	0.362	BMB
2	4.24	n.a.	0.050	0.008	0.03	n.a.	Rd
3	5.52	Chloride	135.491	24.175	91.49	242.122	BM
4	6.25	n.a.	0.232	0.153	0.58	n.a.	MB
5	8.33	Bromide	0.347	0.062	0.24	1.854	BMB
6	9.85	Nitrate	0.407	0.349	1.32	1.636	BMB
7	15.77	Sulfate	4.350	1.623	6.14	25.461	BMB
Total:			141.194	26.422	100.00	271.435	

16 GP8150-S2

Sample Name:	**GP8150-S2**	*Injection Volume:*	**4800.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**3.0000**
Recording Time:	**10/2/2017 17:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	2.393	0.285	2.44	2.990	BM
2	4.23	n.a.	0.017	0.005	0.04	n.a.	MB
3	5.45	Chloride	57.221	8.324	71.18	125.049	BM
4	6.23	n.a.	0.080	0.038	0.32	n.a.	M
5	6.72	Nitrite	1.696	0.320	2.74	3.110	MB
6	8.15	Bromide	0.512	0.093	0.80	4.175	BMB
7	9.40	Nitrate	1.547	0.411	3.51	2.886	BM
8	10.05	n.a.	0.299	0.198	1.69	n.a.	MB
9	13.83	n.a.	0.450	0.256	2.19	n.a.	BM
10	15.75	Sulfate	4.718	1.764	15.08	41.493	MB
Total:			68.932	11.694	100.00	179.702	

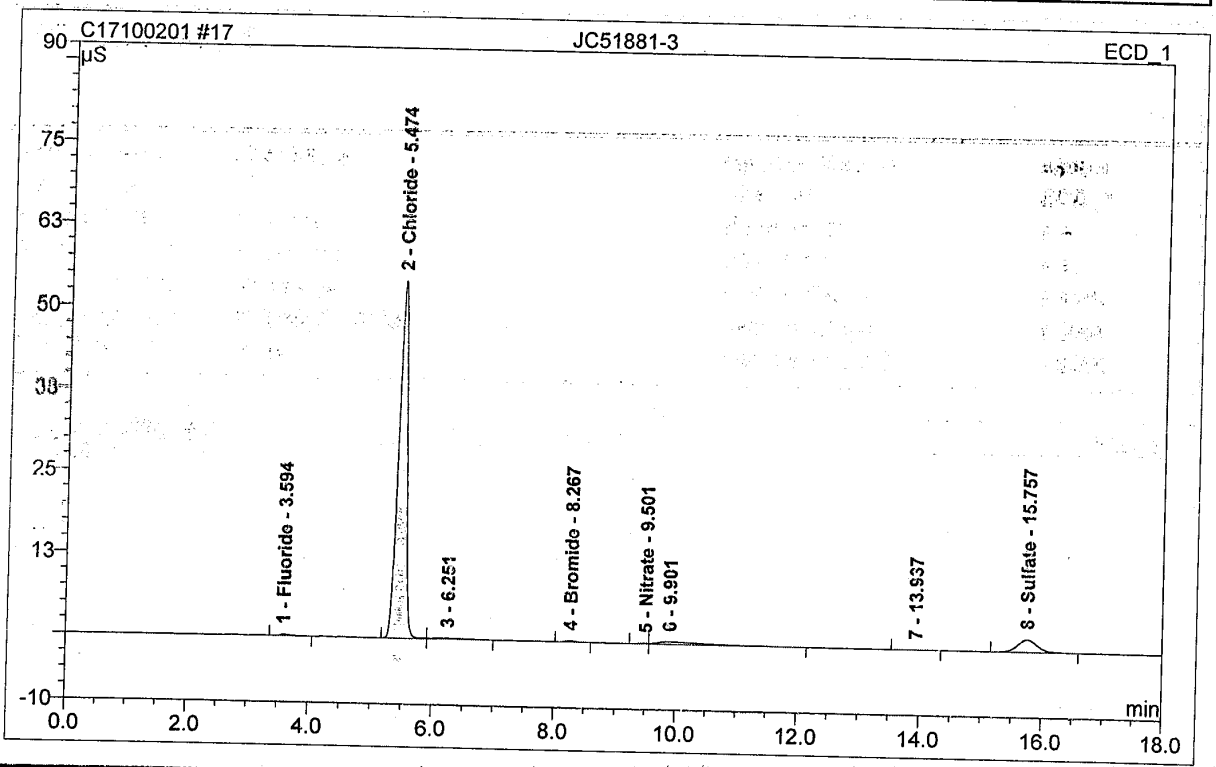
anionssystem3/Integration

Chromeleon (c) Dionex 1996-20(
Version 6.80 SR1 Build 3161 (18.

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

17 JC51881-3

Sample Name:	**JC51881-3**	*Injection Volume:*	**4000.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/2/2017 17:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.223	0.037	0.37	0.258	BMB
2	5.47	Chloride	54.373	8.900	88.40	89.137	BM
3	6.25	n.a.	0.103	0.063	0.63	n.a.	MB
4	8.27	Bromide	0.208	0.038	0.37	1.117	BMB
5	9.50	Nitrate	0.053	0.008	0.08	0.035	BM
6	9.90	n.a.	0.373	0.302	3.00	n.a.	MB
7	13.94	n.a.	0.010	0.004	0.04	n.a.	BMB
8	15.76	Sulfate	1.908	0.717	7.12	11.250	BMB
Total:			57.251	10.068	100.00	101.797	

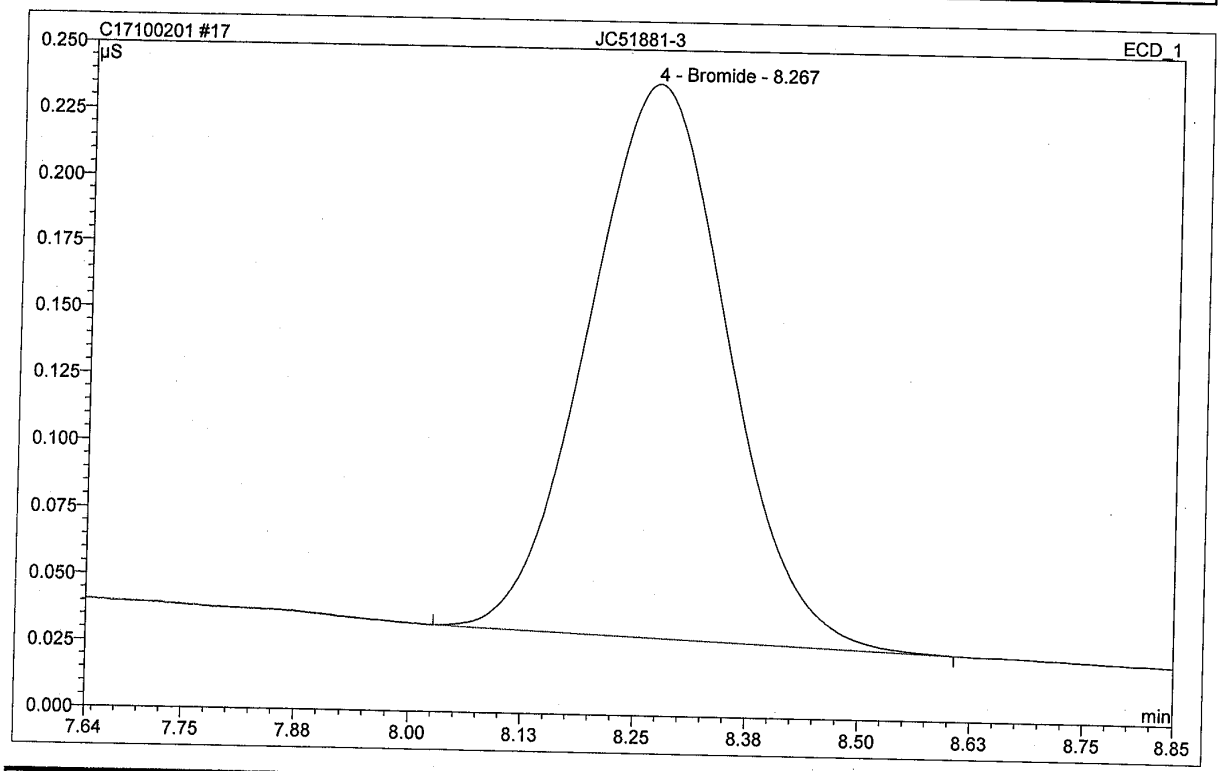
anionssystem3/Integration

Chromeleon (c) Dionex 1996-200
Version 6.80 SR11 Build 3161 (184582

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

17 JC51881-3

Sample Name:	**JC51881-3**	*Injection Volume:*	**4800.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/2/2017 17:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.223	0.037	0.37	0.258	BMB
2	5.47	Chloride	54.373	8.900	88.40	89.137	BM
3	6.25	n.a.	0.103	0.063	0.63	n.a.	MB
4	8.27	Bromide	0.208	0.038	0.37	1.117	BMB
5	9.50	Nitrate	0.053	0.008	0.08	0.035	BM
6	9.90	n.a.	0.373	0.302	3.00	n.a.	MB
7	13.94	n.a.	0.010	0.004	0.04	n.a.	BMB
8	15.76	Sulfate	1.908	0.717	7.12	11.250	BMB
Total:			57.251	10.068	100.00	101.797	

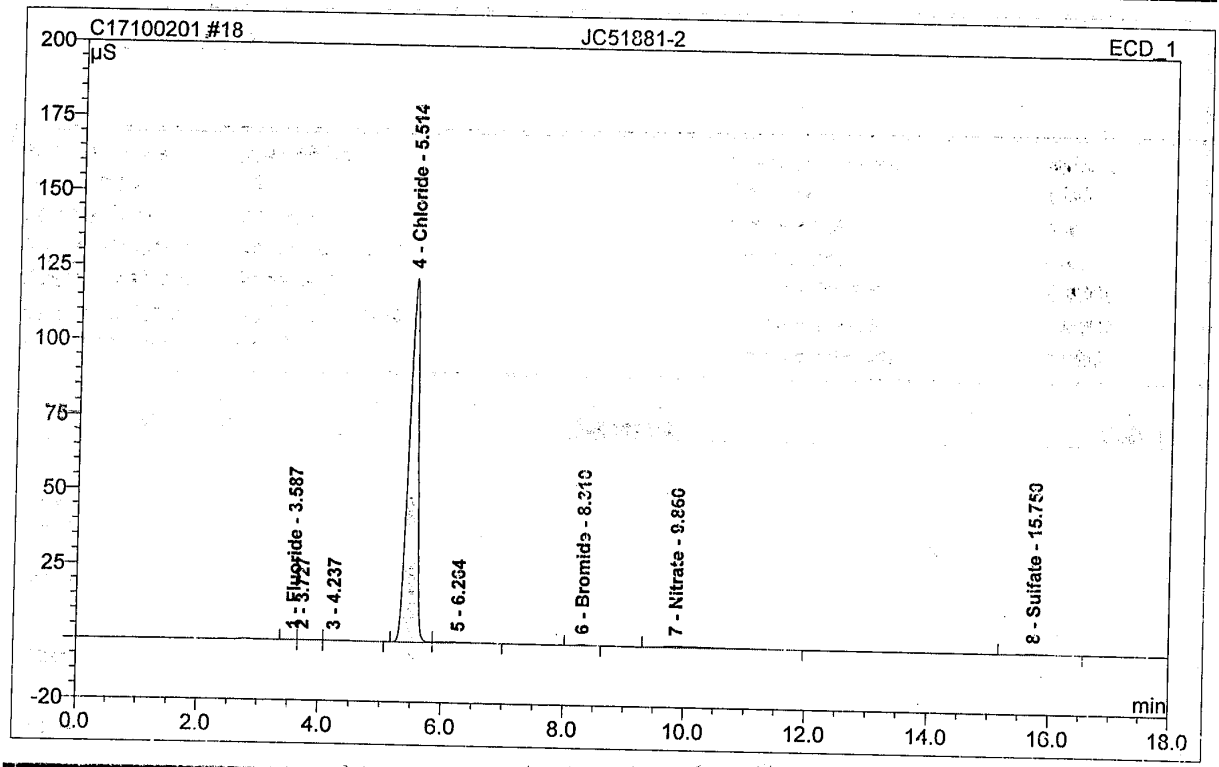
anionssystem3/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR11 Build 3161 (184582)

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

18 JC51881-2

Sample Name:	**JC51881-2**	*Injection Volume:*	**4800.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/2/2017 17:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.030	0.004	0.02	0.027	BM
2	3.73	n.a.	0.033	0.003	0.04	n.a.	M
3	4.24	n.a.	0.026	0.012	0.05	n.a.	MB
4	5.51	Chloride	121.702	21.080	97.18	211.190	BM
5	6.26	n.a.	0.214	0.142	0.65	n.a.	MB
6	8.31	Bromide	0.251	0.045	0.21	1.339	BMB
7	9.86	Nitrate	0.394	0.328	1.51	1.537	BMB
8	15.75	Sulfate	0.177	0.073	0.34	1.142	BMB
Total:			122.827	21.697	100.00	215.235	

anionssystem3/Integration

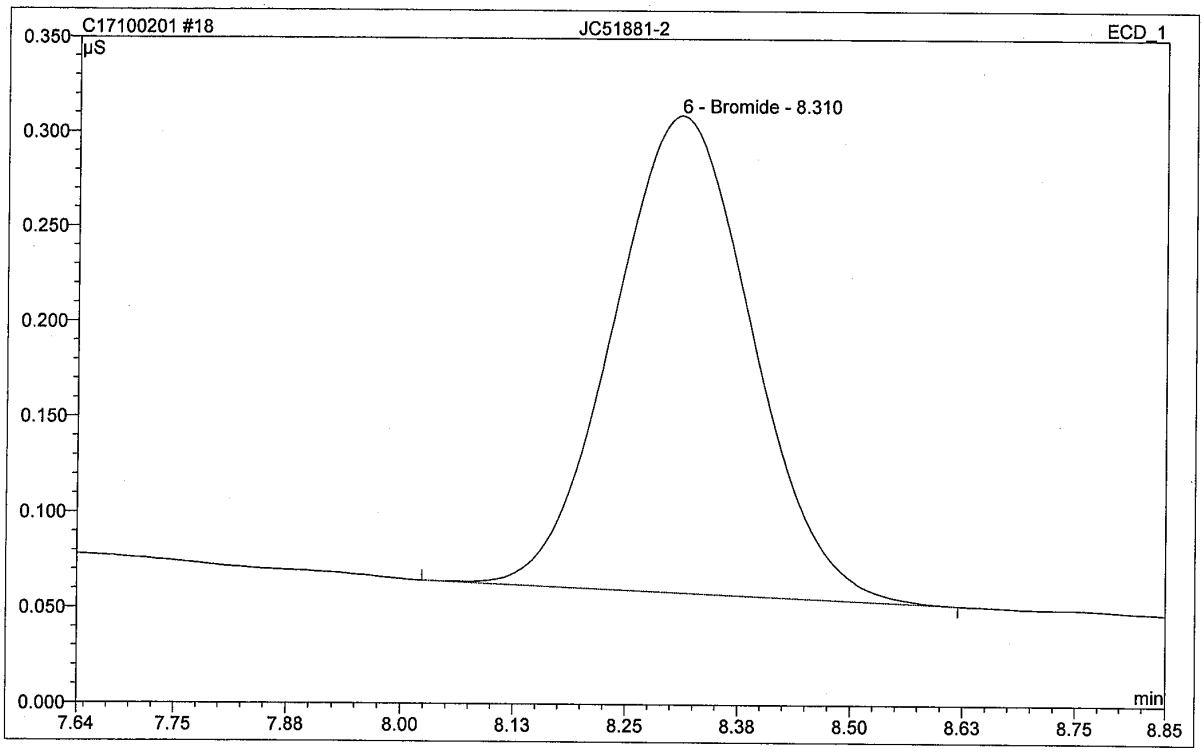
9.2 9

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

10/3/2017 8:41 AM

18 JC51881-2

Sample Name:	**JC51881-2**	*Injection Volume:*	**4800.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/2/2017 17:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



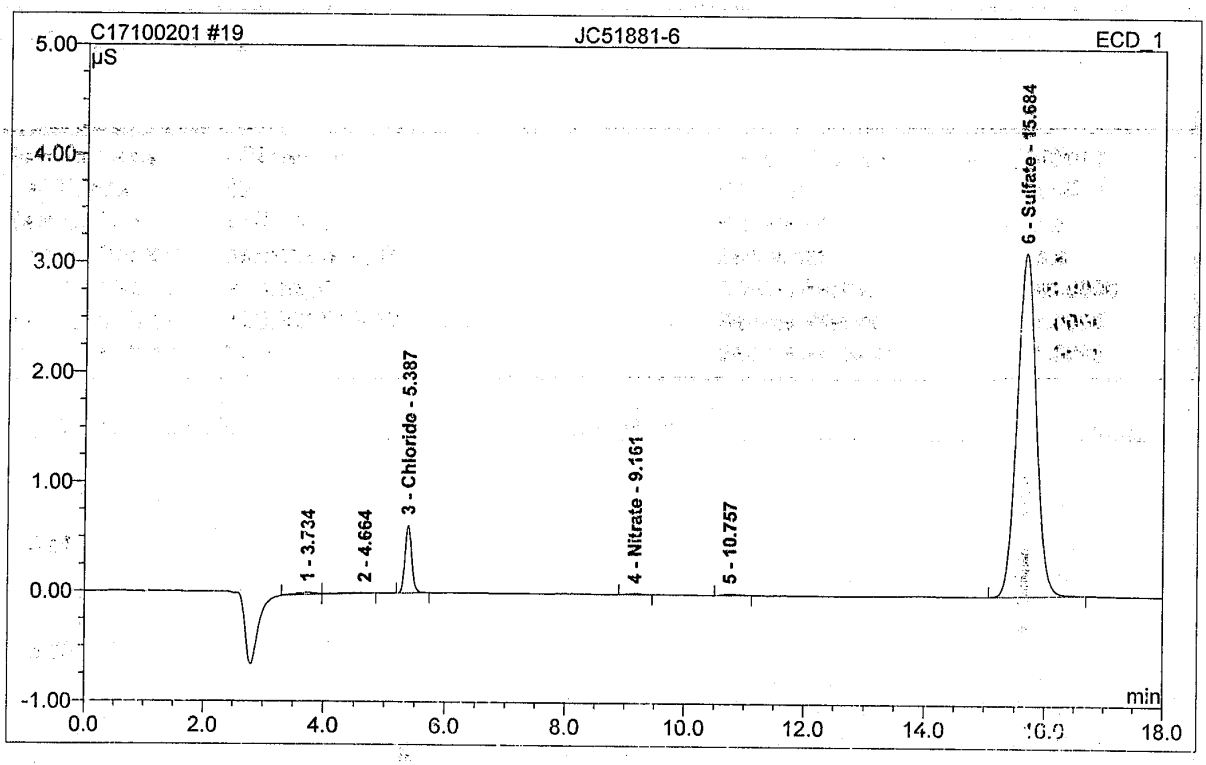
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.030	0.004	0.02	0.027	BM
2	3.73	n.a.	0.033	0.008	0.04	n.a.	M
3	4.24	n.a.	0.026	0.012	0.05	n.a.	MB
4	5.51	Chloride	121.702	21.086	97.18	211.190	BM
5	6.26	n.a.	0.214	0.142	0.65	n.a.	MB
6	8.31	Bromide	0.251	0.045	0.21	1.339	BMB
7	9.86	Nitrate	0.394	0.328	1.51	1.537	BMB
8	15.75	Sulfate	0.177	0.073	0.34	1.142	BMB
Total:			122.827	21.697	100.00	215.235	

anionssystem3/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR11 Build 3161 (184582)

19 JC51881-6

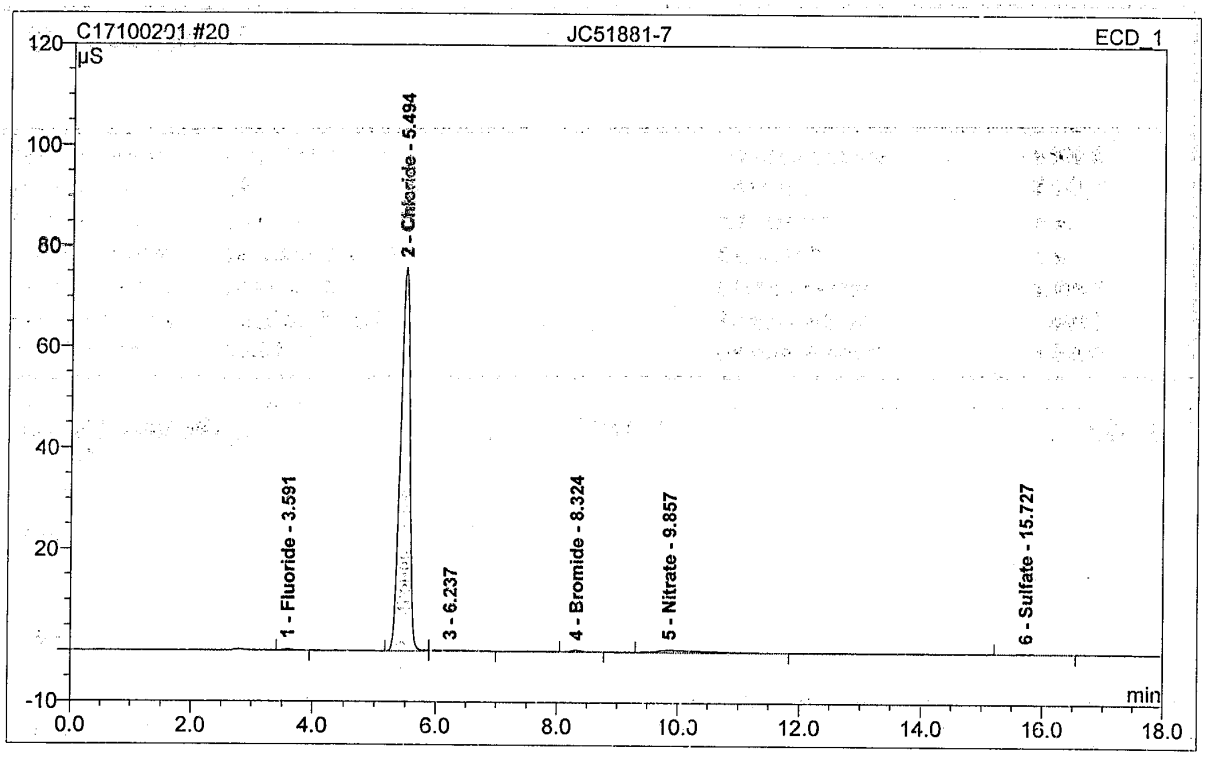
Sample Name:	**JC51881-6**	*Injection Volume:*	**4800.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**40.0000**
Recording Time:	**10/2/2017 18:10**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.73	n.a.	0.023	0.007	0.55	n.a.	BM
2	4.66	n.a.	0.005	0.004	0.34	n.a.	MB
3	5.39	Chloride	0.619	0.079	6.24	15.765	BMB
4	9.16	Nitrate	0.009	0.002	0.15	0.177	BMB
5	10.76	n.a.	0.013	0.004	0.31	n.a.	BMB
6	15.68	Sulfate	3.126	1.165	92.40	365.319	BMB
Total:			3.794	1.260	100.00	381.261	

20 JC51881-7

Sample Name:	**JC51881-7**	*Injection Volume:*	**4600.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/2/2017 18:31**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.271	0.035	0.25	0.244	BMB
2	5.49	Chloride	75.786	13.423	96.01	134.434	BM
3	6.24	n.a.	0.145	0.092	0.66	n.a.	MB
4	8.32	Bromide	0.288	0.052	0.37	1.552	BMB
5	9.86	Nitrate	0.412	0.355	2.54	1.665	BMB
6	15.73	Sulfate	0.049	0.024	0.17	0.373	BMB
Total:			76.952	13.981	100.00	138.267	

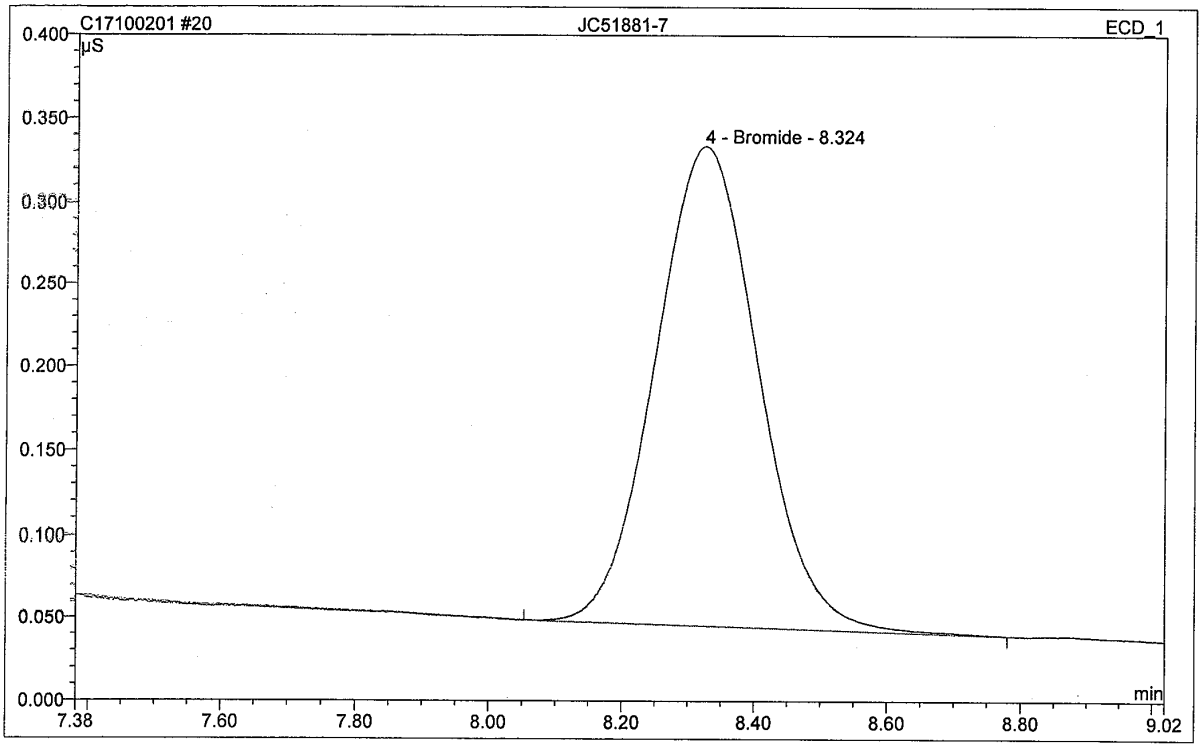
anionssystem3/Integration

Chromeleon (c) Dionex 1996-20..
Version 6.80 SR11 Build 3161 (18458)

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

20 JC51881-7

Sample Name:	**JC51881-7**	*Injection Volume:*	**4800.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/2/2017 18:31**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.271	0.035	0.25	0.244	BMB
2	5.49	Chloride	75.786	13.423	96.01	134.434	BM
3	6.24	n.a.	0.145	0.092	0.66	n.a.	MB
4	8.32	Bromide	0.288	0.052	0.37	1.552	BMB
5	9.86	Nitrate	0.412	0.355	2.54	1.665	BMB
6	15.73	Sulfate	0.049	0.024	0.17	0.373	BMB
Total:			76.952	13.981	100.00	138.267	

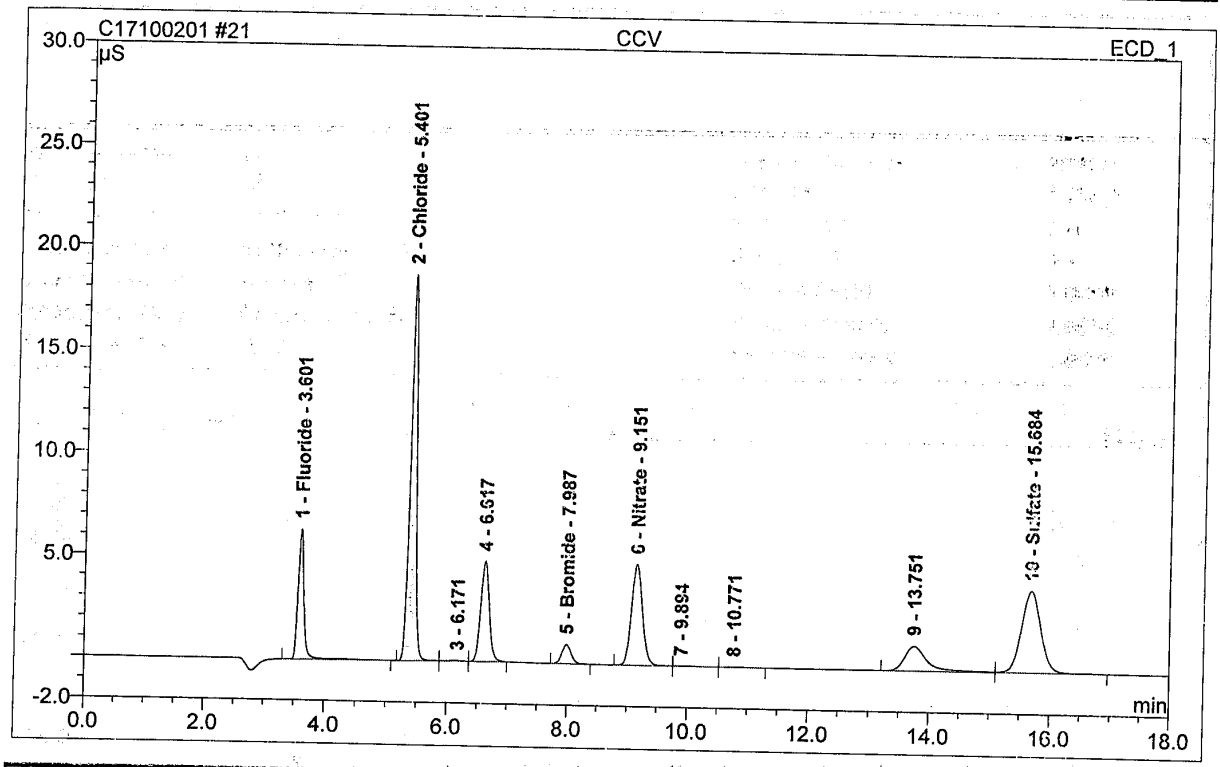
anionssystem3/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR11 Build 3161 (184582)

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

21 CCV

Sample Name:	**CCV**	*Injection Volume:*	**4800.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/2/2017 18:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



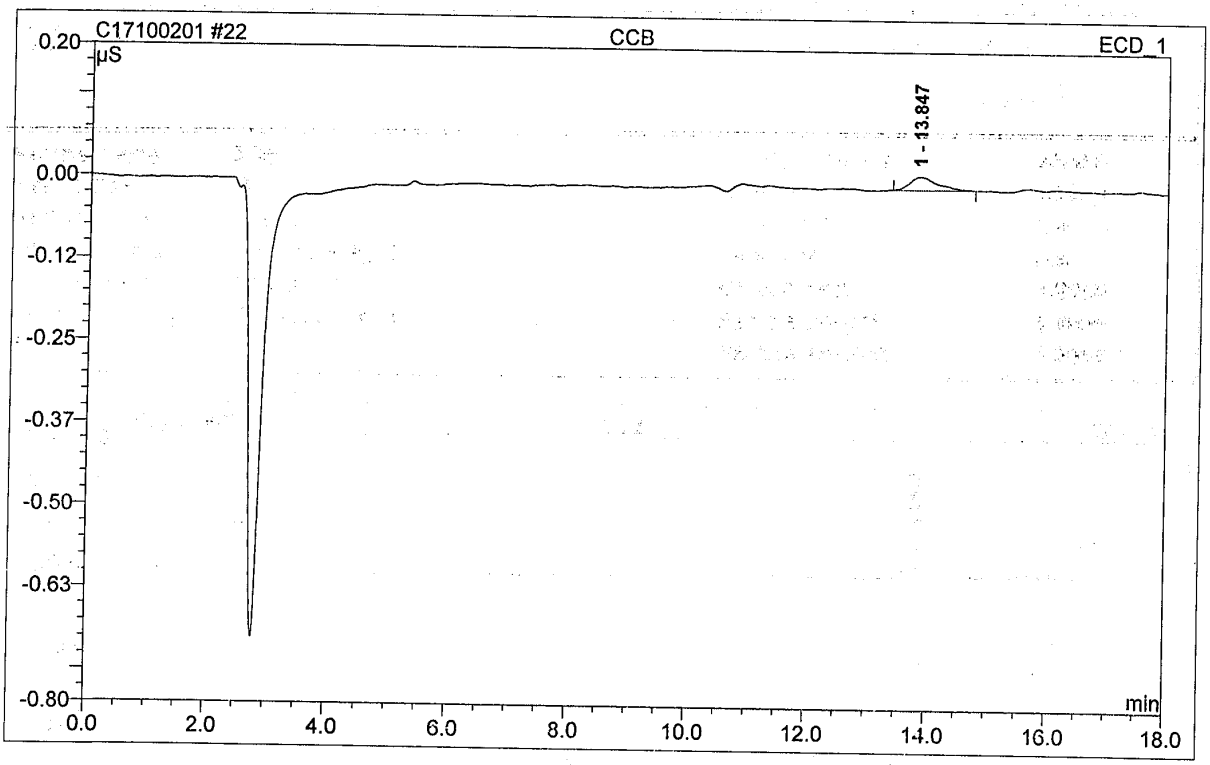
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	6.356	0.710	10.12	2.484	BMB
2	5.40	Chloride	18.772	2.247	32.01	11.252	BM
3	6.17	n.a.	0.017	0.006	0.09	n.a.	M
4	6.62	n.a.	4.907	0.800	11.40	n.a.	MB
5	7.99	Bromide	0.930	0.171	2.44	2.549	BMB
6	9.15	Nitrate	4.931	1.045	14.88	2.447	BM
7	9.89	n.a.	0.012	0.006	0.09	n.a.	MB
8	10.77	n.a.	0.013	0.005	0.07	n.a.	BMB
9	13.75	n.a.	1.212	0.536	7.63	n.a.	BM
10	15.68	Sulfate	3.988	1.495	21.29	11.723	MB
Total:			41.139	7.021	100.00	30.455	

anionssystem3/Integration

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

22 CCB

Sample Name:	**CCB**	*Injection Volume:*	**4800.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/2/2017 19:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



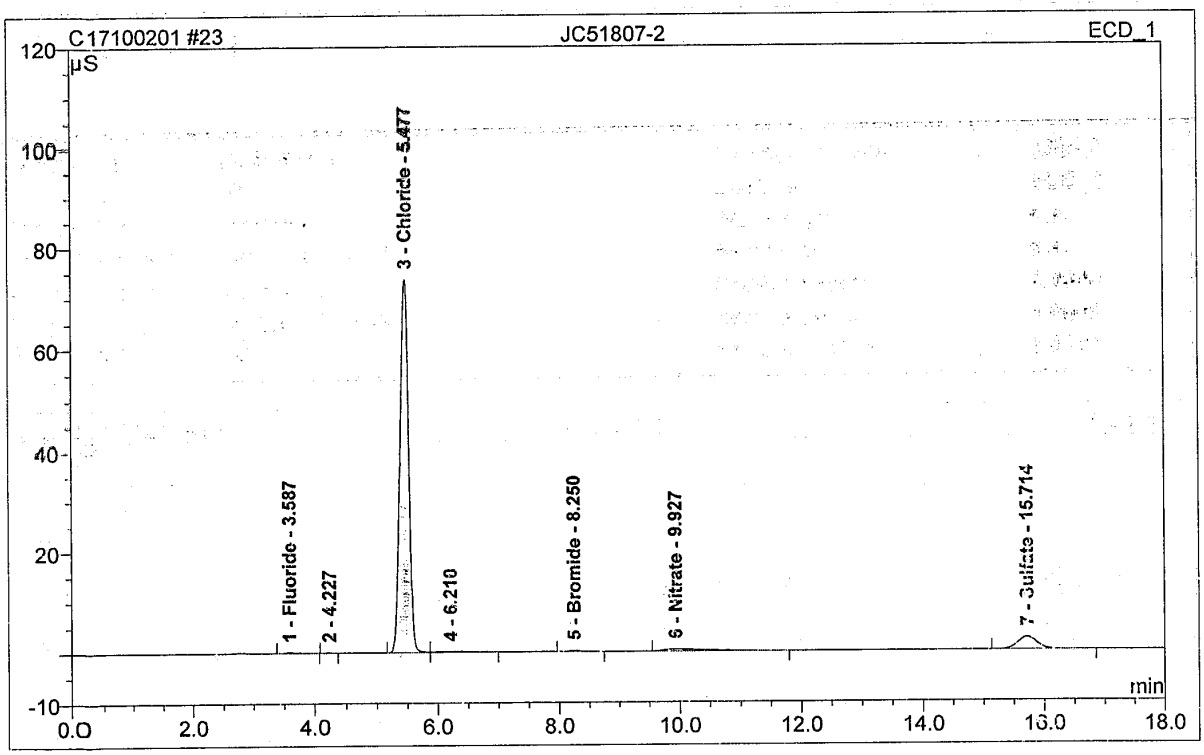
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.85	n.a.	0.020	0.011	100.00	n.a.	BMB
Total:			0.020	0.011	100.00	0.000	

anionssystem3/Integration

Chromeleon (c) Dionex 1996-20[illegible]
Version 6.80 SR11 Build 3161 (18458

23 JC51807-2

Sample Name:	**JC51807-2**	*Injection Volume:*	**4800.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/2/2017 19:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.133	0.018	0.13	0.125	BMB
2	4.23	n.a.	0.016	0.002	0.02	n.a.	BMB
3	5.48	Chloride	73.681	12.036	89.90	120.544	BM
4	6.21	n.a.	0.136	0.086	0.64	n.a.	MB
5	8.25	Bromide	0.219	0.040	0.30	1.185	BMB
6	9.93	Nitrate	0.362	0.283	2.12	1.328	BMB
7	15.71	Sulfate	2.460	0.923	6.90	14.480	BMB
Total:			77.008	13.388	100.00	137.662	

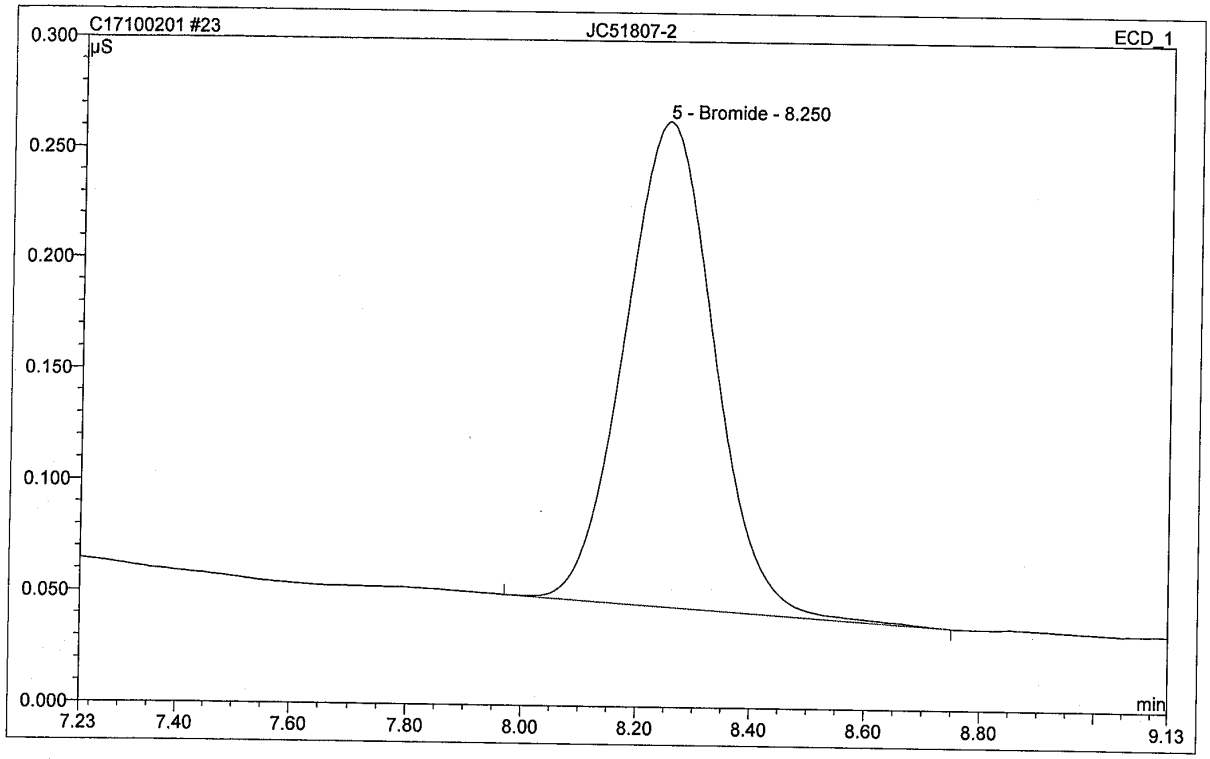
anions-system3/Integration

Chromeleon (c) Dionex 1996-20
Version 6.80 SR11 Build 3161 (184582

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

23 JC51807-2

Sample Name:	**JC51807-2**	*Injection Volume:*	**4800.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/2/2017 19:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



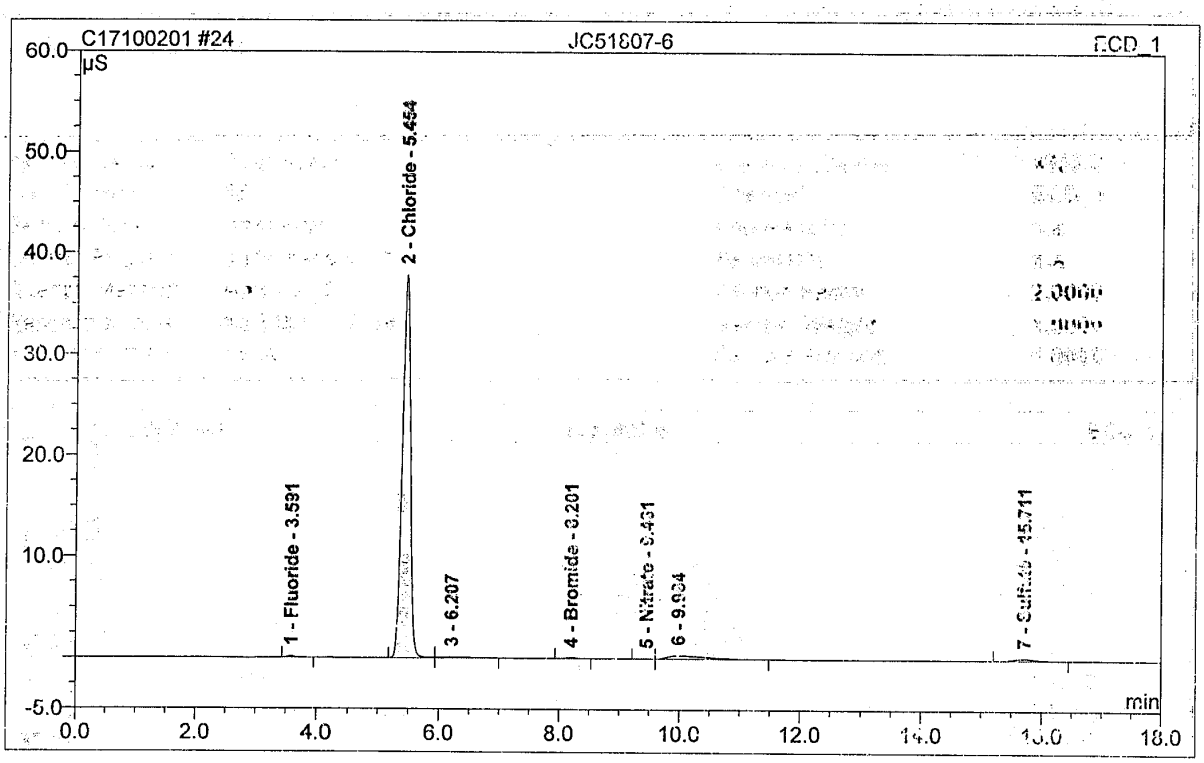
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.133	0.018	0.13	0.125	BMB
2	4.23	n.a.	0.016	0.002	0.02	n.a.	BMB
3	5.48	Chloride	73.681	12.036	89.90	120.544	BM
4	6.21	n.a.	0.136	0.086	0.64	n.a.	MB
5	8.25	Bromide	0.219	0.040	0.30	1.186	BMB
6	9.93	Nitrate	0.362	0.283	2.12	1.328	BMB
7	15.71	Sulfate	2.460	0.923	6.90	14.480	BMB
Total:			77.008	13.388	100.00	137.662	

anionssystem3/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR11 Build 3161 (184582)

24 JC51807-6

Sample Name:	**JC51807-6**	*Injection Volume:*	**4000.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/2/2017 19:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**

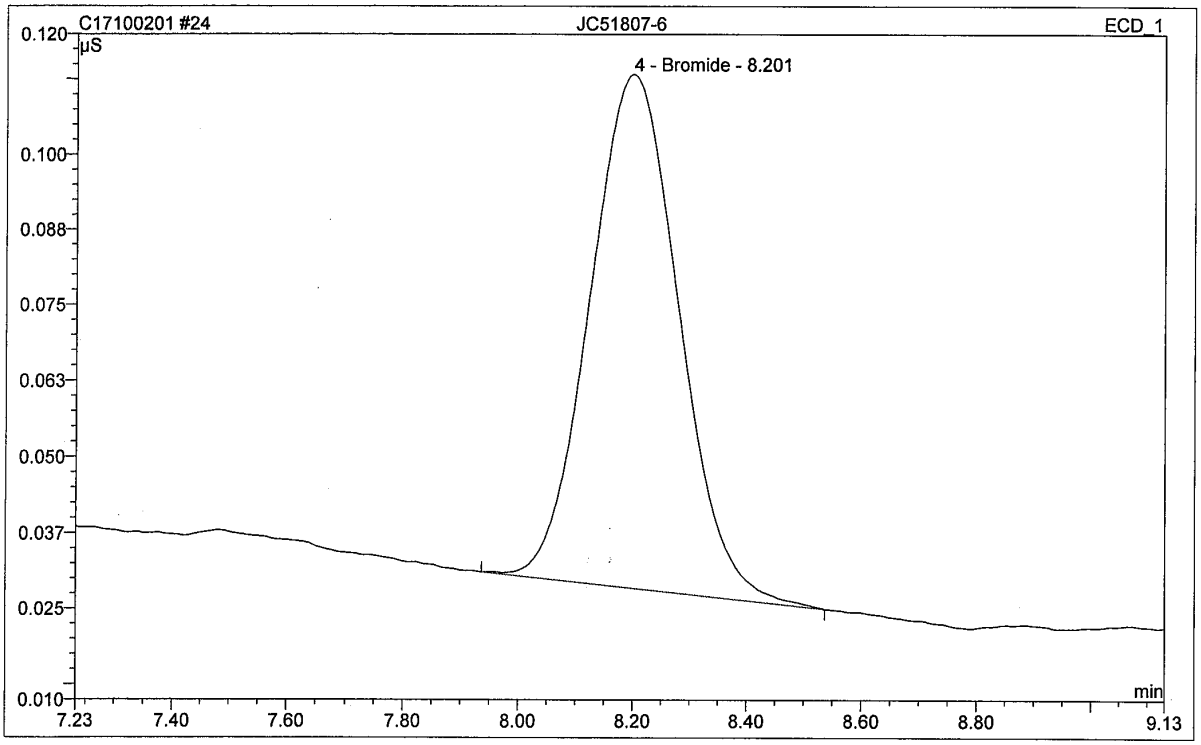


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.133	0.016	0.26	0.113	BMB
2	5.45	Chloride	37.866	5.835	93.54	58.437	BM
3	6.21	n.a.	0.070	0.042	0.68	n.a.	MB
4	8.20	Bromide	0.065	0.015	0.25	0.457	BMB
5	9.46	Nitrate	0.009	0.002	0.03	0.009	BM
6	9.98	n.a.	0.335	0.245	3.93	n.a.	MB
7	15.71	Sulfate	0.209	0.082	1.32	1.292	BMB
Total:			38.707	6.238	100.00	60.309	

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

24 JC51807-6

Sample Name:	**JC51807-6**	*Injection Volume:*	**4800.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/2/2017 19:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**

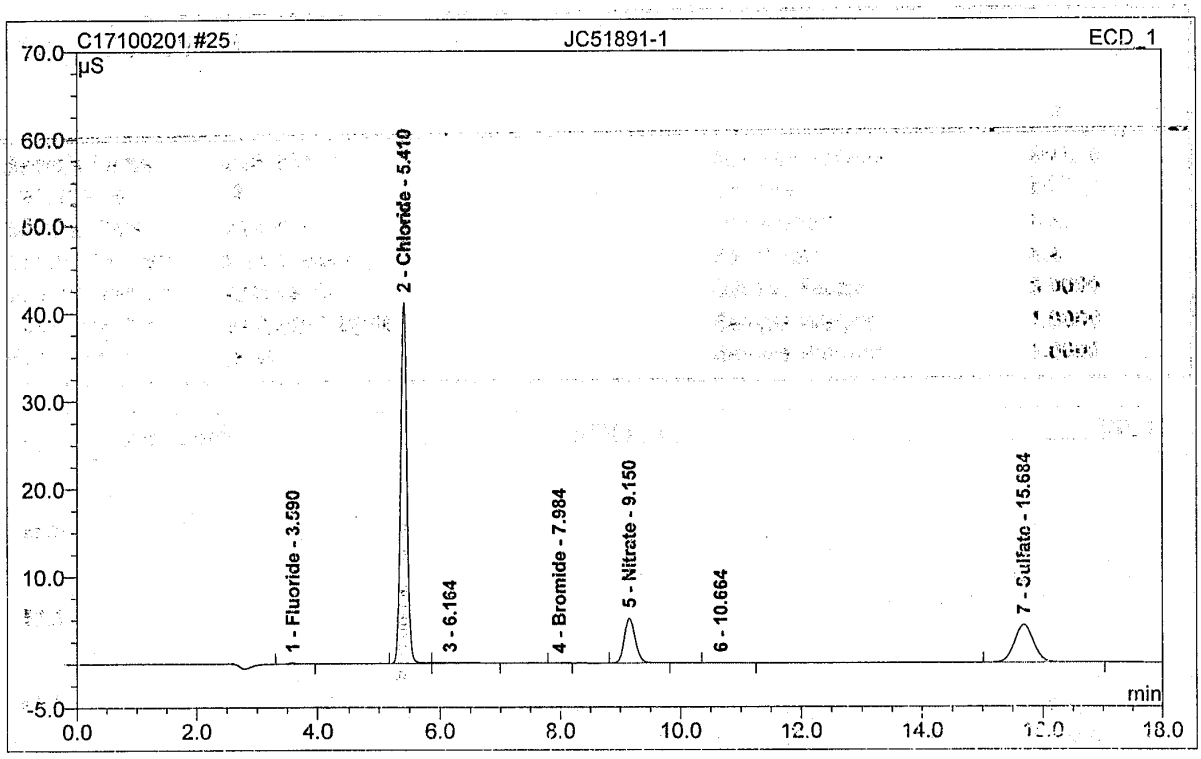


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.133	0.016	0.26	0.113	BMB
2	5.45	Chloride	37.866	5.835	93.54	58.437	BM
3	6.21	n.a.	0.070	0.042	0.68	n.a.	MB
4	8.20	Bromide	0.085	0.015	0.25	0.457	BMB
5	9.46	Nitrate	0.009	0.002	0.03	0.009	BM
6	9.98	n.a.	0.335	0.245	3.93	n.a.	MB
7	15.71	Sulfate	0.209	0.082	1.32	1.292	BMB
Total:			38.707	6.238	100.00	60.309	

anionssystem3/Integration

25 JC51891-1

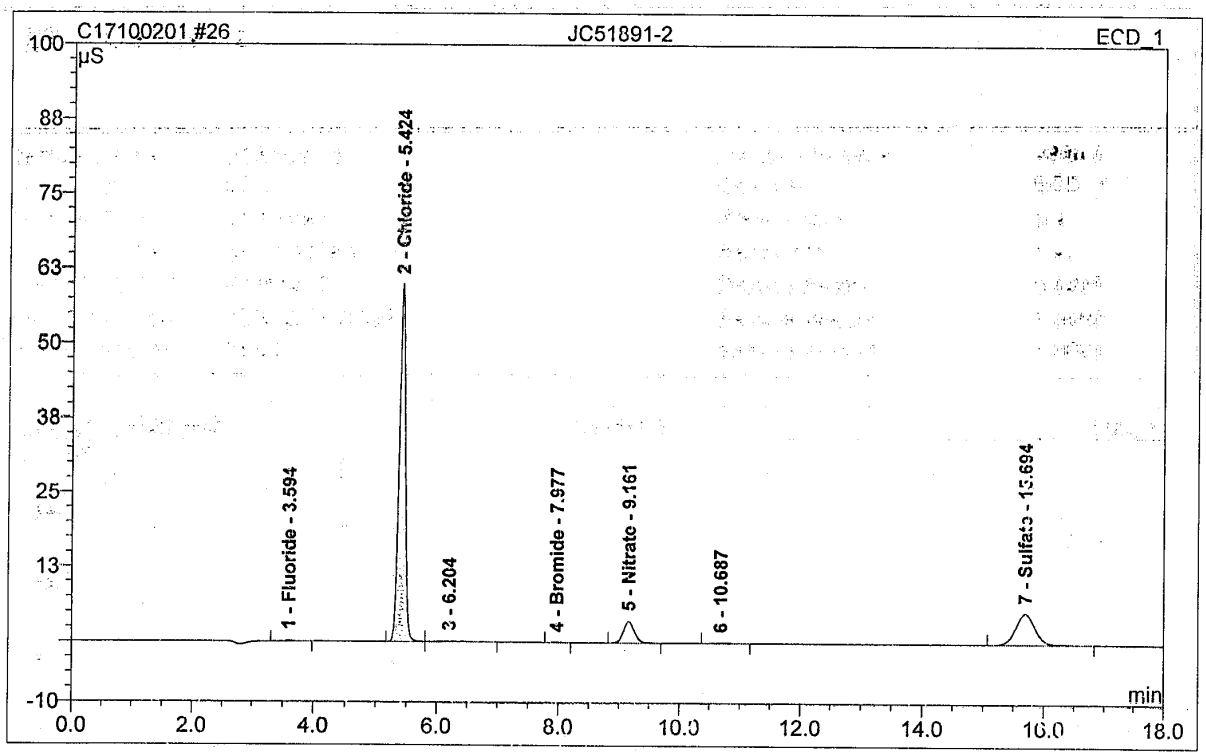
Sample Name:	**JC51891-1**	*Injection Volume:*	**4800.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**5.0000**
Recording Time:	**10/2/2017 20:16**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.118	0.015	0.19	0.258	BMB
2	5.41	Chloride	41.134	4.869	63.96	121.916	BM
3	6.16	n.a.	0.060	0.039	0.51	n.a.	MB
4	7.98	Bromide	0.013	0.002	0.03	0.165	BMB
5	9.15	Nitrate	5.104	1.077	14.15	12.615	BMB
6	10.66	n.a.	0.032	0.012	0.15	n.a.	BMB
7	15.68	Sulfate	4.306	1.599	21.01	62.719	BMB
Total:			50.766	7.613	100.00	197.674	

26 JC51891-2

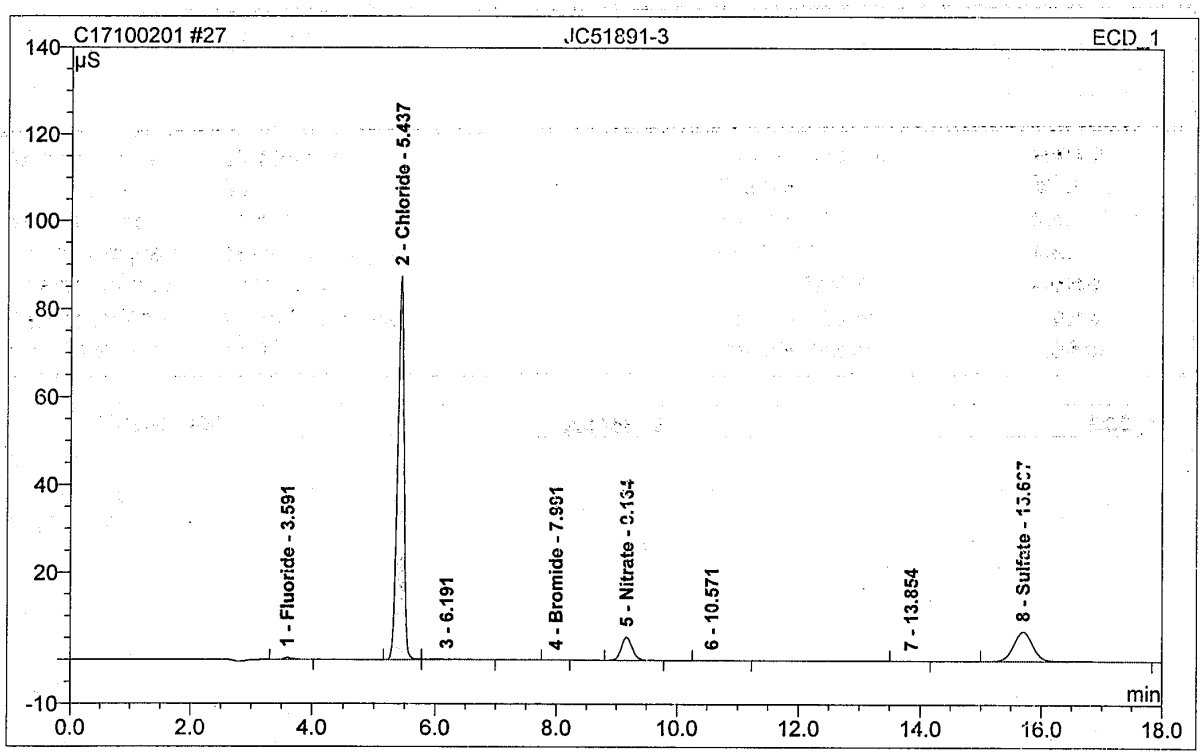
Sample Name:	**JC51891-2**	*Injection Volume:*	**4500.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**5.0000**
Recording Time:	**10/2/2017 20:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.185	0.024	0.24	0.421	BMB
2	5.42	Chloride	59.856	7.108	72.16	177.977	BM
3	6.20	n.a.	0.083	0.056	0.57	n.a.	MB
4	7.98	Bromide	0.006	0.001	0.01	0.083	BMB
5	9.16	Nitrate	3.532	0.748	7.60	8.764	BMB
6	10.69	n.a.	0.027	0.009	0.10	n.a.	BMB
7	15.69	Sulfate	5.145	1.904	19.33	74.669	BMB
Total:			68.834	9.851	100.00	261.913	

27 JC51891-3

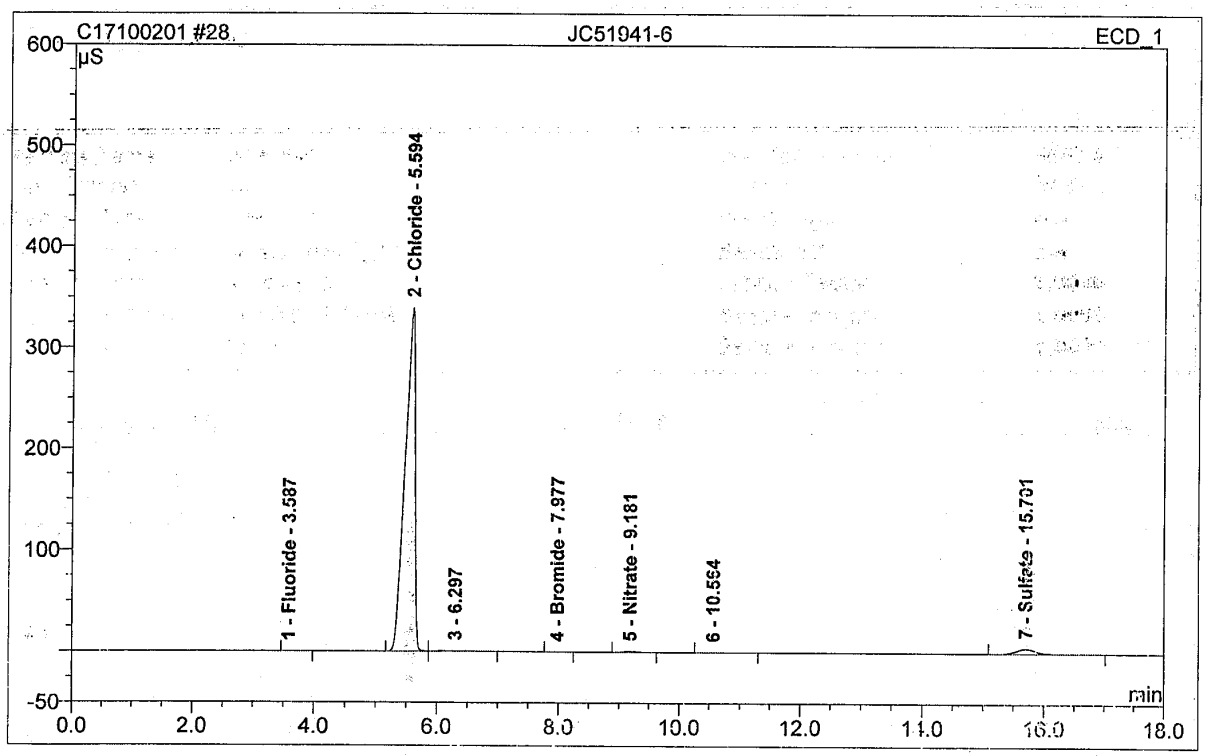
Sample Name:	**JC51891-3**	*Injection Volume:*	**4300.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/2/2017 20:58**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.490	0.063	0.44	0.440	BMB
2	5.44	Chloride	87.432	10.606	73.60	106.222	BM
3	6.19	n.a.	0.107	0.076	0.53	n.a.	MB
4	7.99	Bromide	0.010	0.002	0.01	0.054	BMB
5	9.16	Nitrate	5.268	1.119	7.76	5.241	BMB
6	10.57	n.a.	0.066	0.026	0.18	n.a.	BMB
7	13.85	n.a.	0.005	0.002	0.01	n.a.	BMB
8	15.70	Sulfate	6.788	2.517	17.47	39.478	BMB
Total:			100.166	14.410	100.00	151.435	

28 JC51941-6

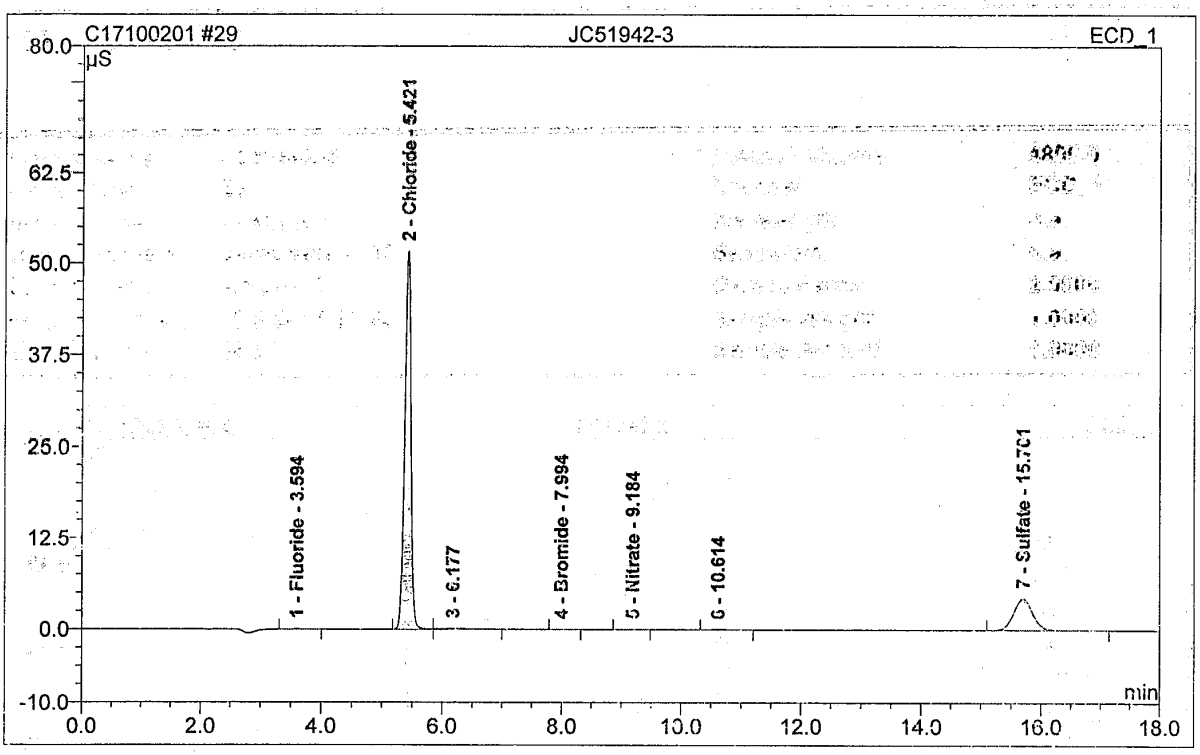
Sample Name:	**JC51941-6**	*Injection Volume:*	**4800.0**
Vial Number:	**22**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**3.0000**
Recording Time:	**10/2/2017 21:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.045	0.007	0.01	0.074	BMB
2	5.59	Chloride	339.920	63.342	96.31	951.594	BM
3	6.30	n.a.	0.496	0.323	0.49	n.a.	MB
4	7.98	Bromide	0.018	0.003	0.01	0.154	BMB
5	9.18	Nitrate	0.716	0.153	0.23	1.077	BMB
6	10.56	n.a.	0.063	0.025	0.04	n.a.	BMB
7	15.70	Sulfate	5.165	1.913	2.91	45.007	BMB
Total:			346.423	65.766	100.00	997.907	

29 JC51942-3

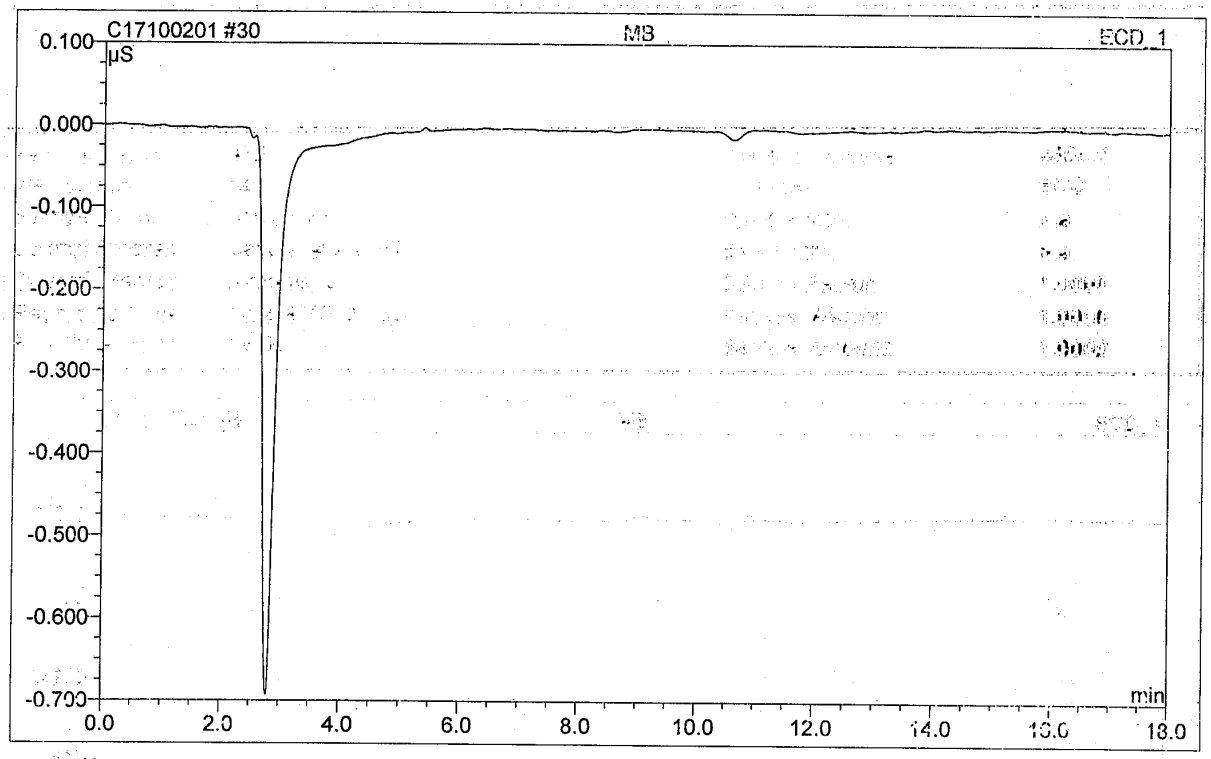
Sample Name:	**JC51942-3**	*Injection Volume:*	[illegible]
Vial Number:	**23**	*Channel:*	ECD_1
Sample Type:	**unknown**	*Wavelength:*	n.a.
Control Program:	**carbonate 4_17**	*Bandwidth:*	n.a.
Quantif. Method:	**Anions_C**	*Dilution Factor:*	2.0000
Recording Time:	**10/2/2017 21:39**	*Sample Weight:*	1.0000
Run Time (min):	**18.00**	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.043	0.007	0.09	0.043	BMB
2	5.42	Chloride	51.634	6.138	78.42	61.478	BM
3	6.18	n.a.	0.075	0.049	0.62	n.a.	MB
4	7.99	Bromide	0.016	0.003	0.04	0.088	BMB
5	9.18	Nitrate	0.009	0.002	0.03	0.010	BMB
6	10.61	n.a.	0.048	0.018	0.23	n.a.	BMB
7	15.70	Sulfate	4.327	1.611	20.58	25.253	BMB
Total:			56.152	7.827	100.00	86.869	

30 MB

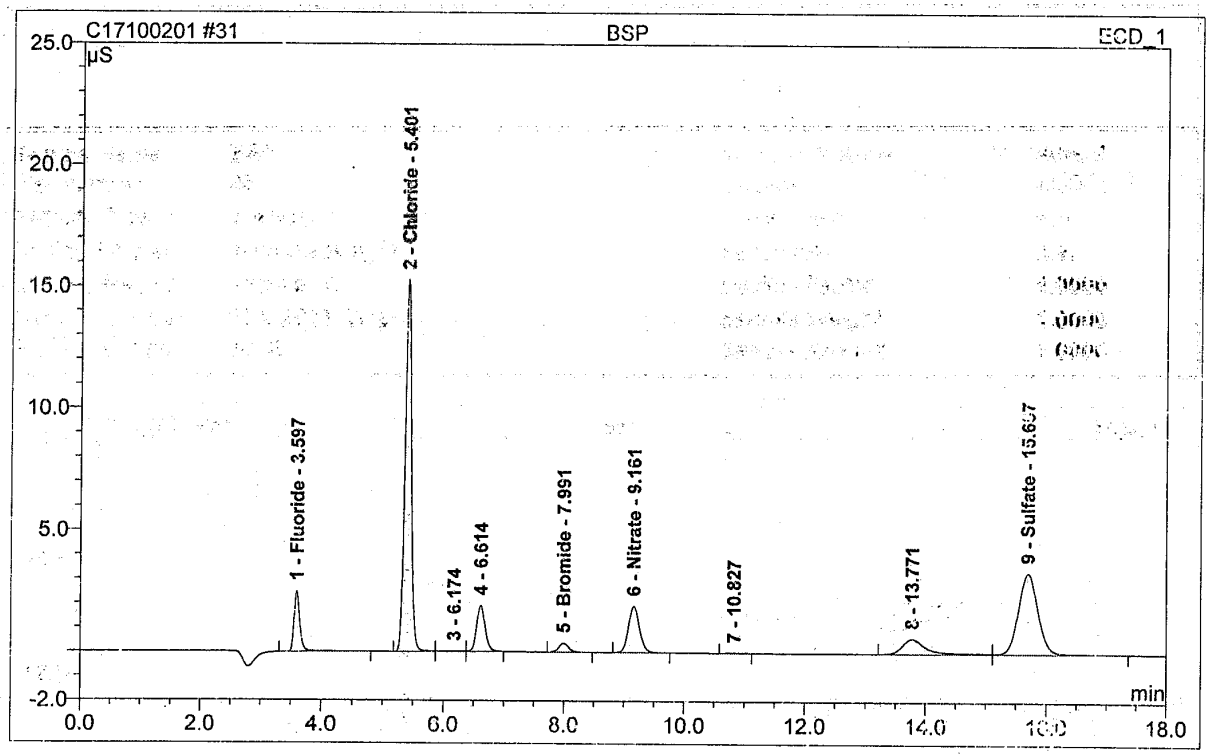
Sample Name:	**MB**	*Injection Volume:*	**4800.0**
Vial Number:	**24**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/2/2017 22:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

31 BSP

Sample Name:	**BSP**	*Injection Volume:*	**4800.0**
Vial Number:	**25**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/2/2017 22:21**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**

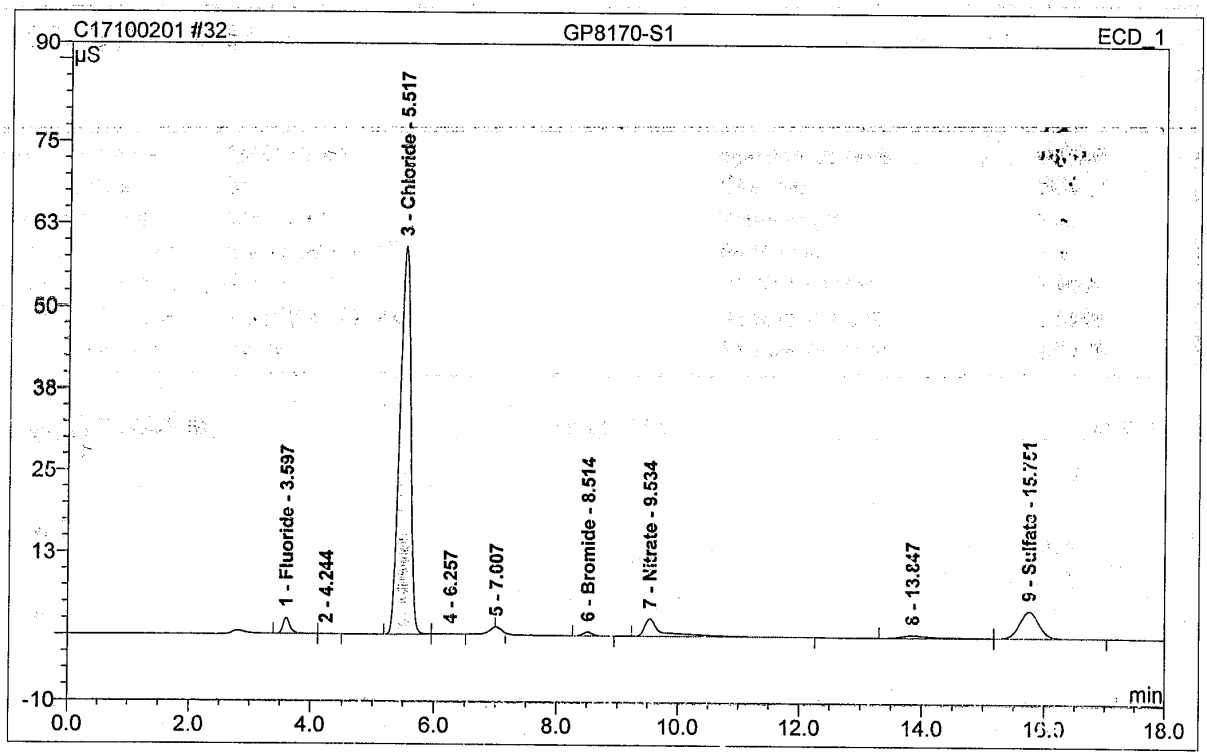


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	2.483	0.280	6.24	0.977	BMB
2	5.40	Chloride	15.255	1.847	41.22	9.251	BM
3	6.17	n.a.	0.020	0.008	0.19	n.a.	M
4	6.61	n.a.	1.891	0.311	6.95	n.a.	MB
5	7.99	Bromide	0.370	0.069	1.54	1.026	BMB
6	9.16	Nitrate	1.906	0.408	9.09	0.954	BMB
7	10.83	n.a.	0.010	0.003	0.06	n.a.	BMB
8	13.77	n.a.	0.622	0.291	6.49	n.a.	BM
9	15.70	Sulfate	3.339	1.265	28.23	9.922	MB
Total:			25.902	4.482	100.00	22.131	

anionssystem3/Integration

32 GP8170-S1

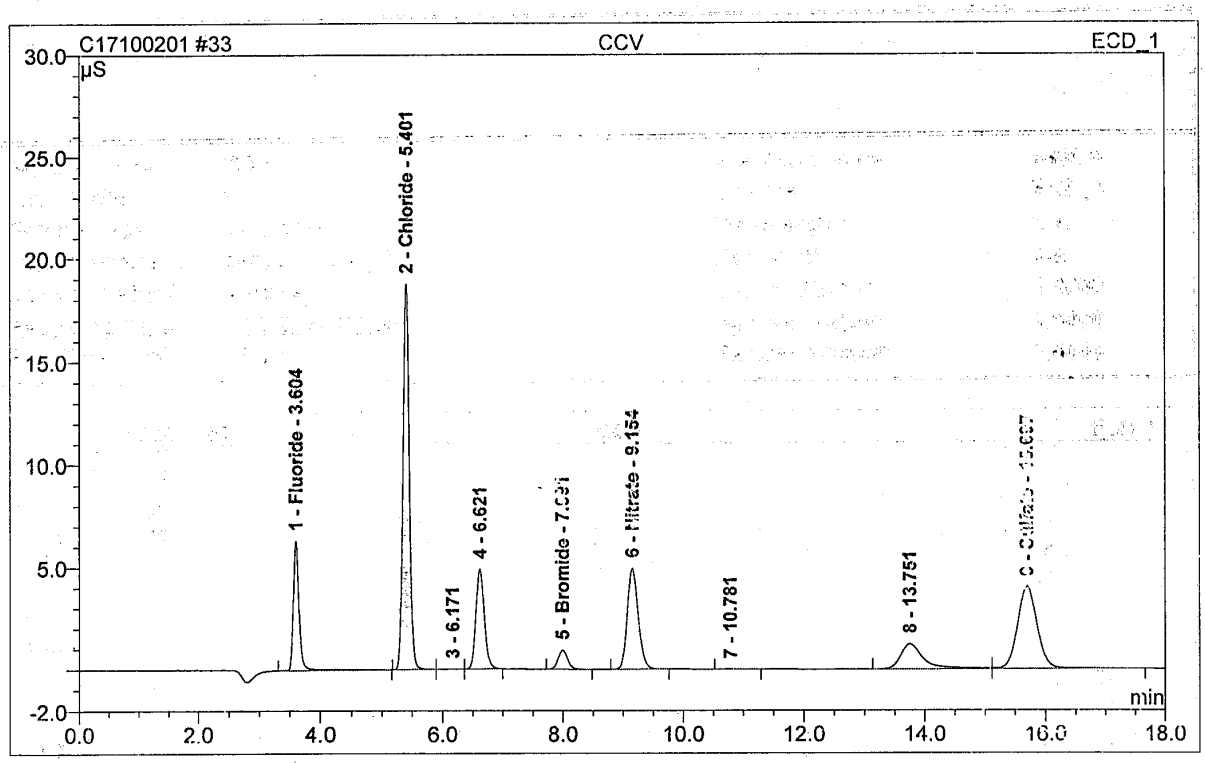
Sample Name:	**GP8170-S1**	*Injection Volume:*	**4990.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/2/2017 22:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	2.399	0.328	2.16	1.148	BMB
2	4.24	n.a.	0.010	0.002	0.01	n.a.	BMB
3	5.52	Chloride	59.037	12.014	79.09	60.165	BM
4	6.26	n.a.	0.054	0.021	0.14	n.a.	MB
5	7.01	n.a.	0.056	0.014	0.09	n.a.	BMB
6	8.51	Bromide	0.601	0.105	0.69	1.564	BMB
7	9.53	Nitrate	2.653	0.949	6.24	2.222	BMB
8	13.85	n.a.	0.337	0.227	1.49	n.a.	BM
9	15.75	Sulfate	4.095	1.531	10.08	12.006	MB
Total:			69.293	15.199	100.00	77.102	

33 CCV

Sample Name:	**CCV**	*Injection Volume:*	**4800.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/2/2017 23:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**

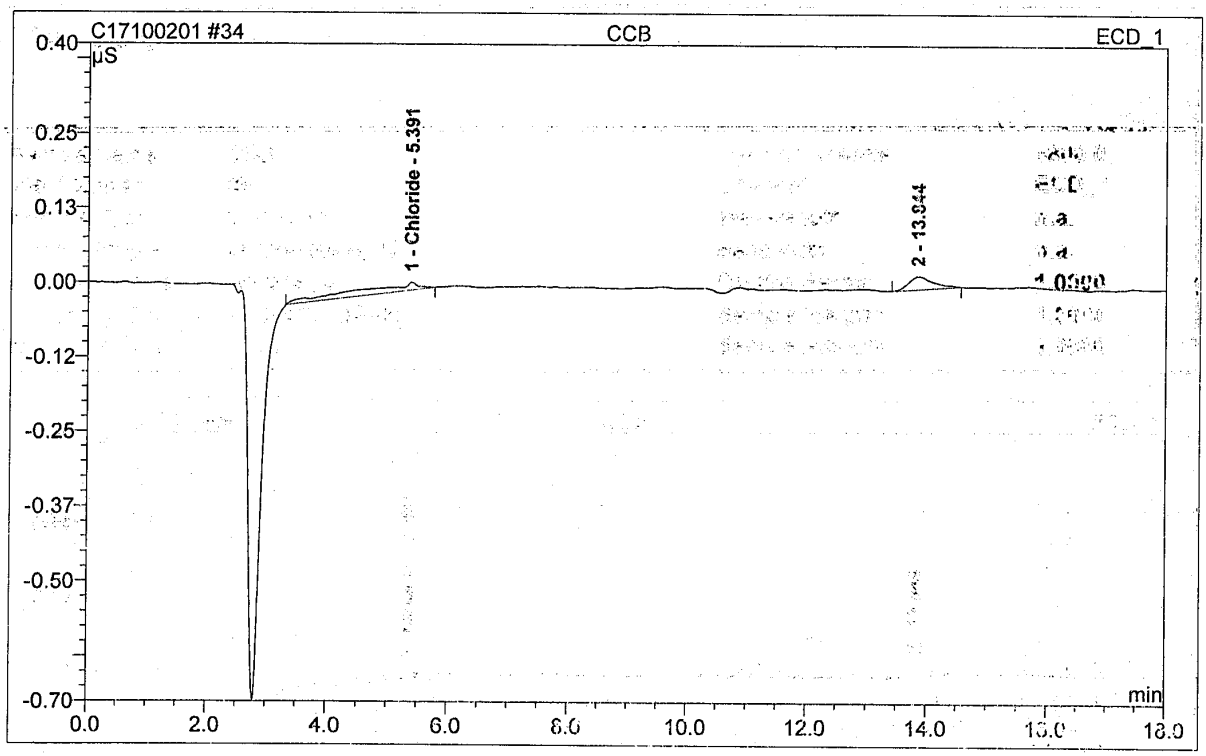


No.	Ret.Time min	Peak Name	Height uS	Area uS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	6.330	0.711	10.07	2.460	BMB
2	5.40	Chloride	18.733	2.259	31.98	11.317	BM
3	6.17	n.a.	0.015	0.005	0.07	n.a.	M
4	6.62	n.a.	4.897	0.801	11.33	n.a.	MB
5	7.99	Bromide	0.931	0.172	2.43	2.559	BMB
6	9.15	Nitrate	4.944	1.045	14.80	2.449	BMB
7	10.78	n.a.	0.014	0.005	0.07	n.a.	BMB
8	13.75	n.a.	1.221	0.547	7.74	n.a.	BM
9	15.70	Sulfate	4.008	1.520	21.51	11.020	MB
Total:			41.116	7.065	100.00	30.730	

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

34 CCB

Sample Name:	**CCB**	*Injection Volume:*	**4000.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	n.a.
Control Program:	**carbonate 4_17**	*Bandwidth:*	n.a.
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/2/2017 23:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**

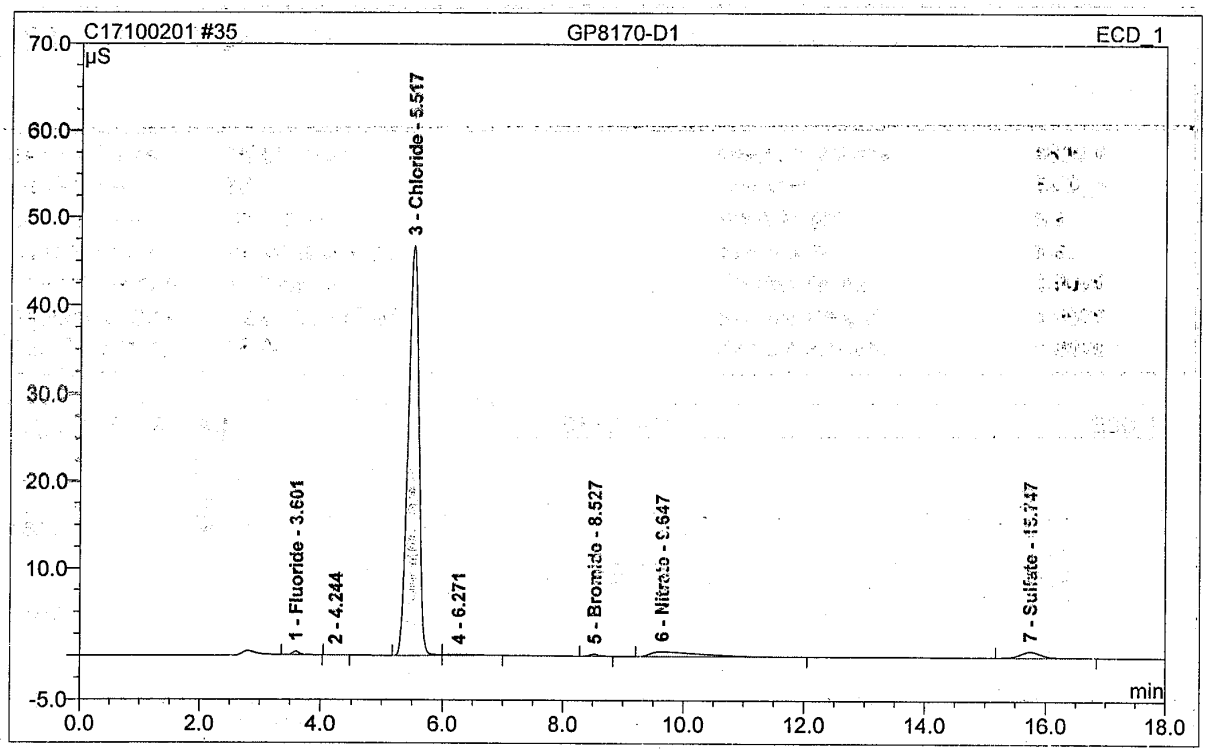


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	5.39	Chloride	0.013	0.018	63.76	0.091	BMB
2	13.84	n.a.	0.021	0.010	36.24	n.a.	BMB
Total:			0.034	0.029	100.00	0.091	

anionssystem3/Integration

35 GP8170-D1

Sample Name:	**GP8170-D1**	*Injection Volume:*	**4000.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/2/2017 23:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**

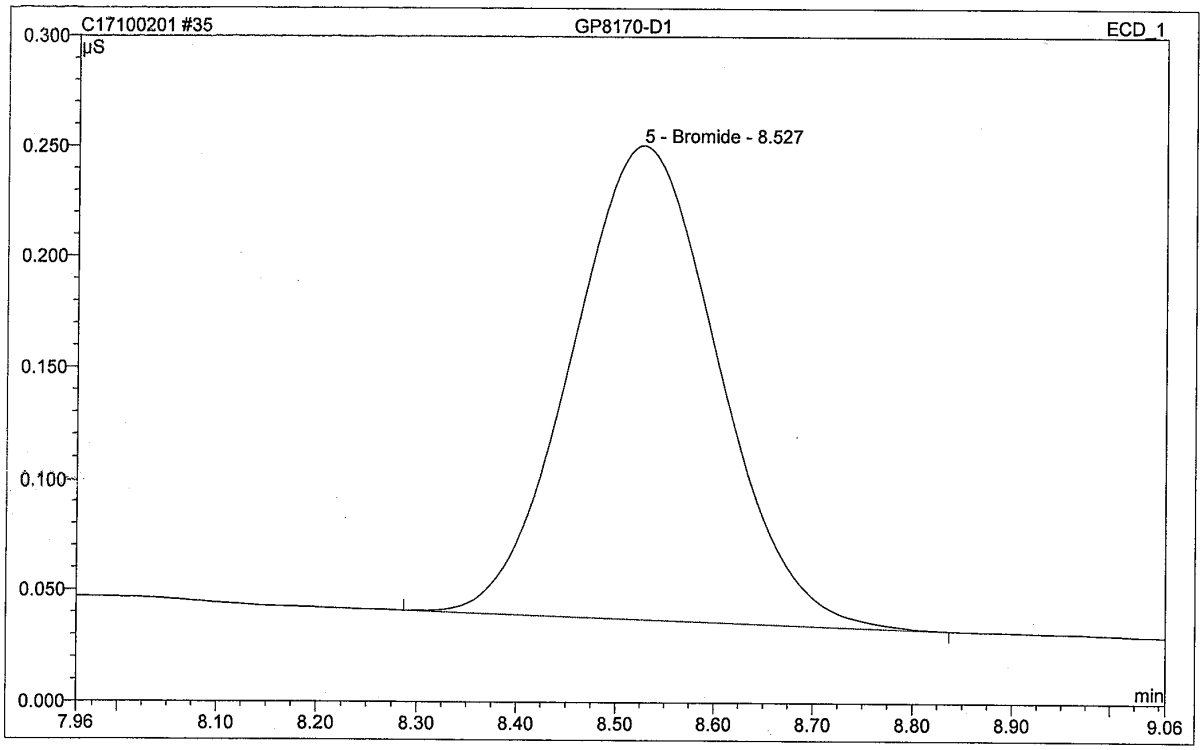


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	0.400	0.051	0.48	0.178	BMB
2	4.24	n.a.	0.010	0.002	0.02	n.a.	BMB
3	5.52	Chloride	46.740	9.646	91.02	48.303	BM
4	6.27	n.a.	0.104	0.060	0.57	n.a.	MB
5	8.53	Bromide	0.214	0.037	0.35	0.545	BMB
6	9.65	Nitrate	0.552	0.531	5.01	1.243	BMB
7	15.75	Sulfate	0.698	0.272	2.56	2.130	BMB
Total:			48.718	10.598	100.00	52.400	

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

35 GP8170-D1

Sample Name:	**GP8170-D1**	*Injection Volume:*	**4800.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/2/2017 23:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



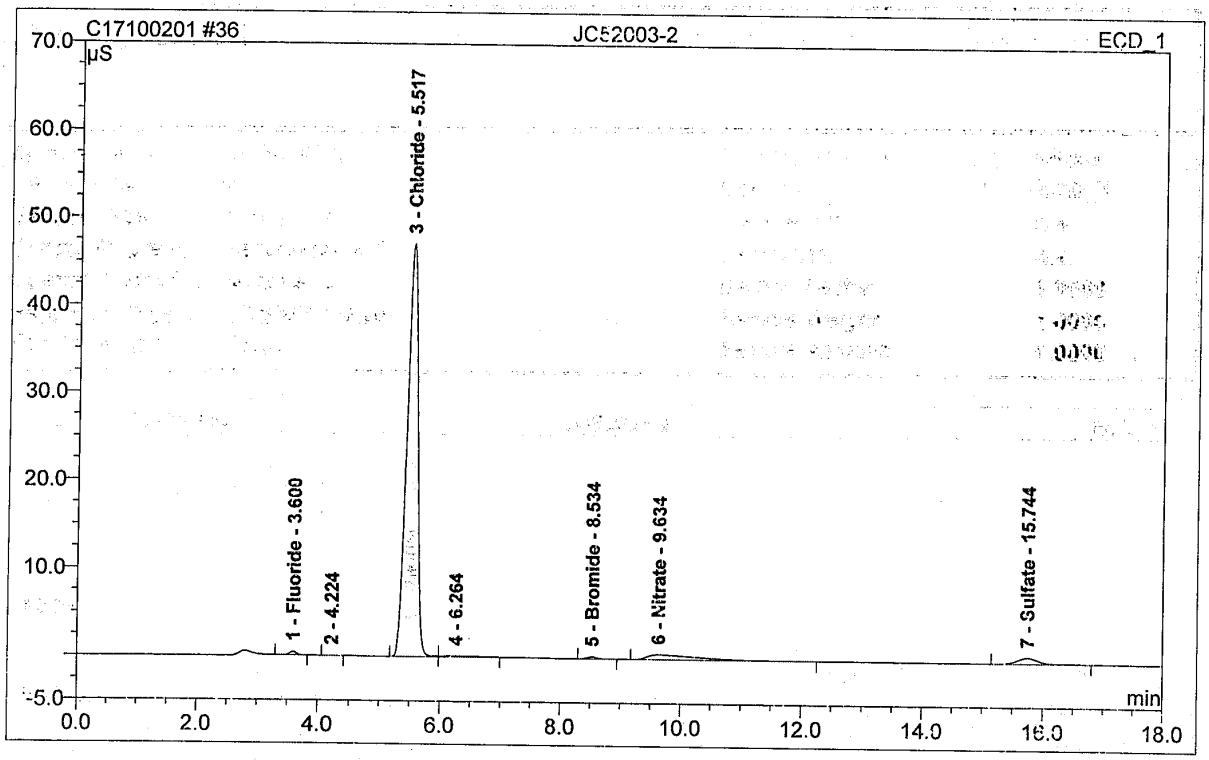
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	0.400	0.051	0.48	0.178	BMB
2	4.24	n.a.	0.010	0.002	0.02	n.a.	BMB
3	5.52	Chloride	46.740	9.646	91.02	48.303	BM
4	6.27	n.a.	0.104	0.060	0.57	n.a.	MB
5	8.53	Bromide	0.214	0.037	0.35	0.545	BMB
6	9.65	Nitrate	0.552	0.531	5.01	1.243	BMB
7	15.75	Sulfate	0.698	0.272	2.56	2.130	BMB
Total:			48.718	10.598	100.00	52.400	

anionssystem3/Integration

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

36 JC52003-2

Sample Name:	**JC52003-2**	*Injection Volume:*	**4800.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 0:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	0.395	0.048	0.45	0.169	BMB
2	4.22	n.a.	0.008	0.001	0.01	n.a.	BMB
3	5.52	Chloride	47.087	9.744	91.09	48.796	BM
4	6.26	n.a.	0.106	0.062	0.58	n.a.	MB
5	8.53	Bromide	0.216	0.037	0.35	0.553	BMB
6	9.63	Nitrate	0.555	0.537	5.02	1.258	BMB
7	15.74	Sulfate	0.696	0.268	2.51	2.102	BMB
Total:			49.064	10.698	100.00	52.877	

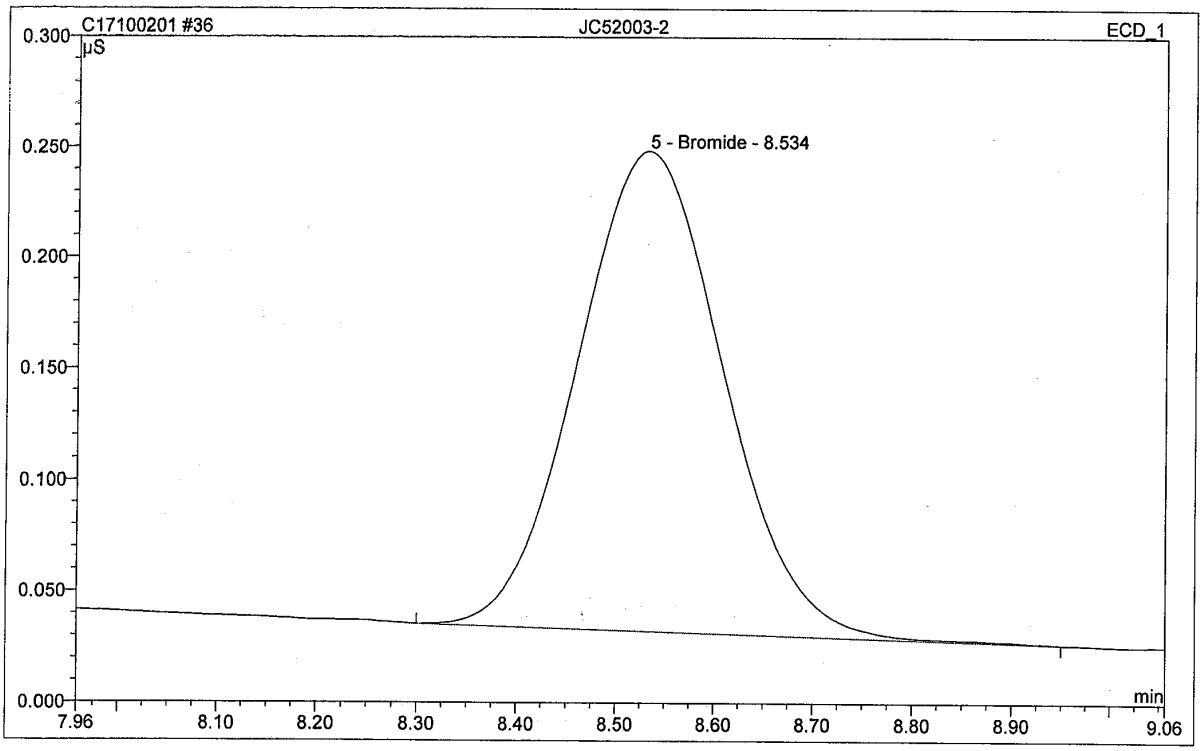
anionssystem3/Integration

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

10/3/2017 8:45 AM

36 JC52003-2

Sample Name:	**JC52003-2**	*Injection Volume:*	**4800.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 0:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



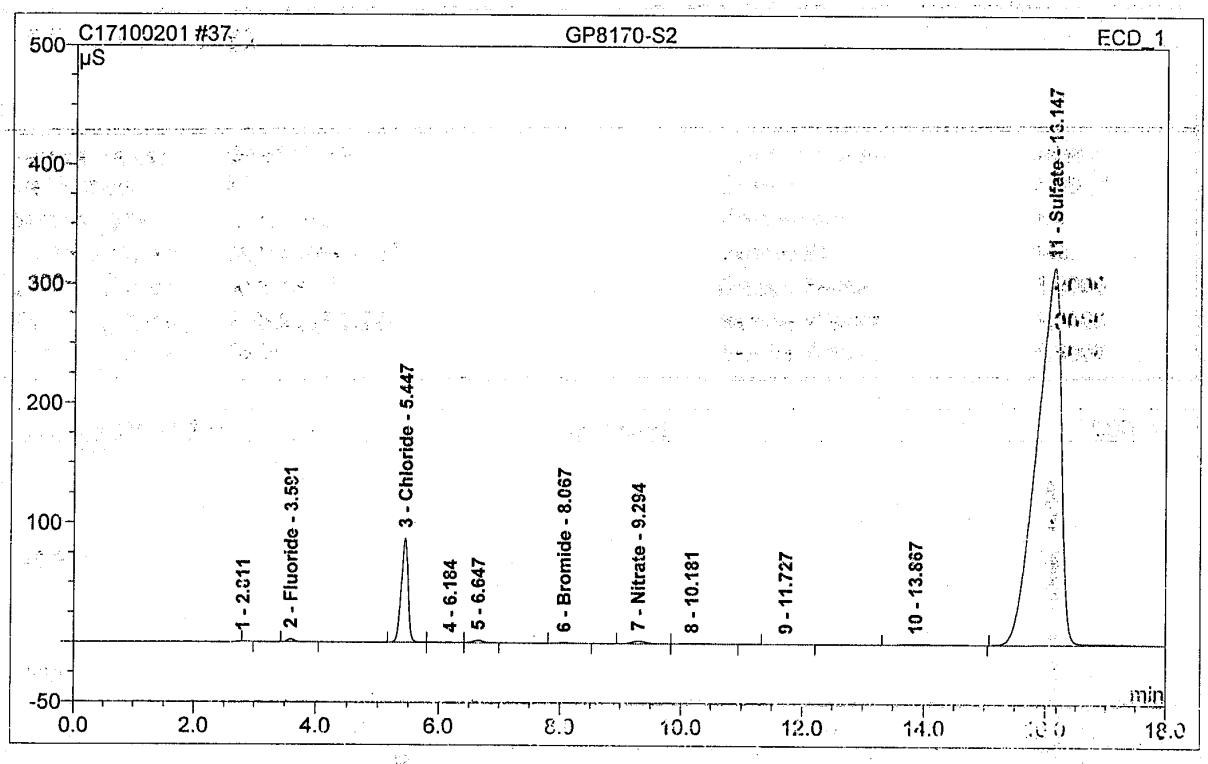
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	0.395	0.048	0.45	0.169	BMB
2	4.22	n.a.	0.008	0.001	0.01	n.a.	BMB
3	5.52	Chloride	47.087	9.744	91.09	48.796	BM
4	6.26	n.a.	0.106	0.062	0.58	n.a.	MB
5	8.53	Bromide	0.216	0.037	0.35	0.553	BMB
6	9.63	Nitrate	0.555	0.537	5.02	1.258	BMB
7	15.74	Sulfate	0.696	0.268	2.51	2.102	BMB
Total:			49.064	10.698	100.00	52.877	

anionssystem3/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR11 Build 3161 (184582)

37 GP8170-S2

Sample Name:	**GP8170-S2**	*Injection Volume:*	**4800.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 0:27**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.81	n.a.	0.026	0.005	0.00	n.a.	BMB
2	3.59	Fluoride	2.574	0.314	0.20	1.097	BMB
3	5.45	Chloride	87.127	11.443	7.19	57.302	BM
4	6.18	n.a.	0.116	0.057	0.04	n.a.	M
5	6.65	n.a.	1.994	0.360	0.23	n.a.	MB
6	8.07	Bromide	0.496	0.092	0.06	1.375	BMB
7	9.29	Nitrate	2.183	0.536	0.34	1.255	BMB
8	10.18	n.a.	0.230	0.132	0.08	n.a.	BMB
9	11.73	n.a.	0.012	0.005	0.00	n.a.	BMB
10	13.87	n.a.	0.513	0.309	0.19	n.a.	BMB
11	16.15	Sulfate	315.105	149.695	91.07	1166.101	BMB

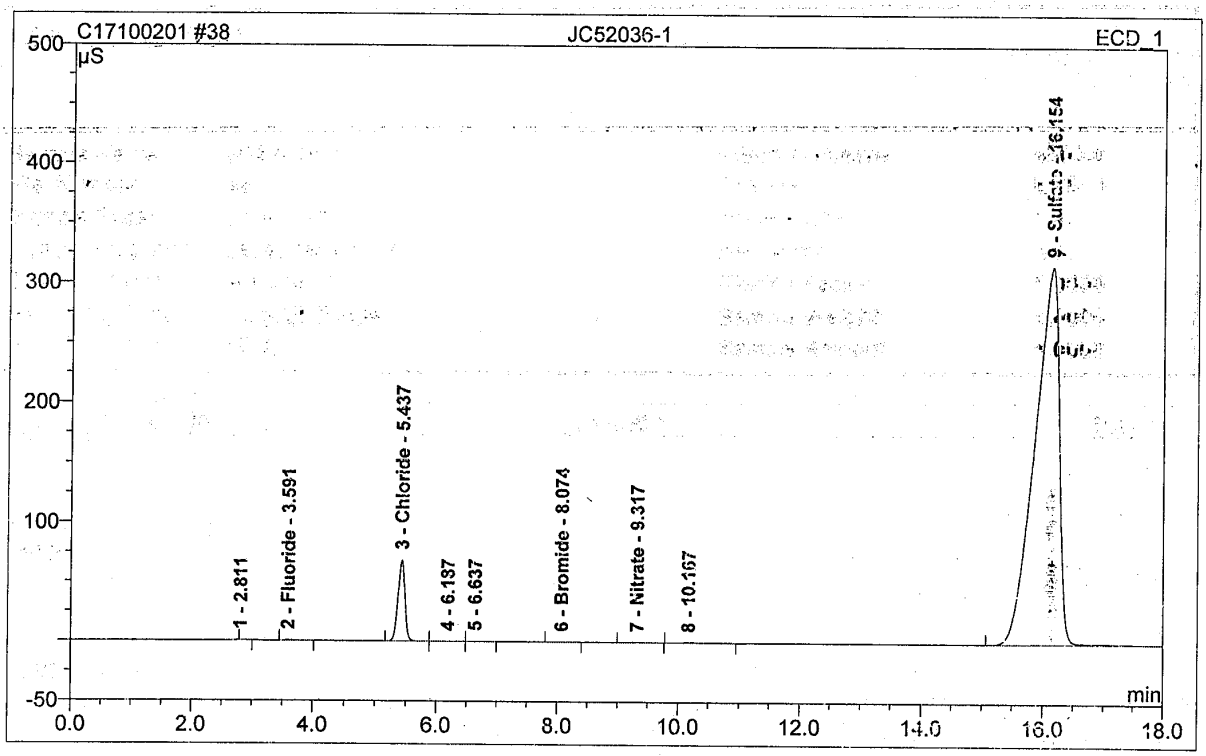
anionssystem3/Integration

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

Total:		410.406	159.147	100.00	1205.191

38 JC52036-1

Sample Name:	**JC52036-1**	*Injection Volume:*	**4800.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 0:48**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area	Rel.Area %	Amount	Type
1	2.81	n.a.	0.024	0.000	0.00	n.a.	BMB
2	3.59	Fluoride	0.375	0.049	0.03	0.170	BMB
3	5.44	Chloride	68.406	8.930	5.73	44.751	BM
4	6.19	n.a.	0.101	0.049	0.03	n.a.	M
5	6.64	n.a.	0.095	0.023	0.01	n.a.	MB
6	8.07	Bromide	0.117	0.022	0.01	0.324	BMB
7	9.32	Nitrate	0.426	0.102	0.07	0.240	BMB
8	10.17	n.a.	0.236	0.140	0.09	n.a.	BMB
9	16.15	Sulfate	316.194	146.604	94.02	1149.723	BMB
Total:			385.974	155.930	100.00	1195.207	

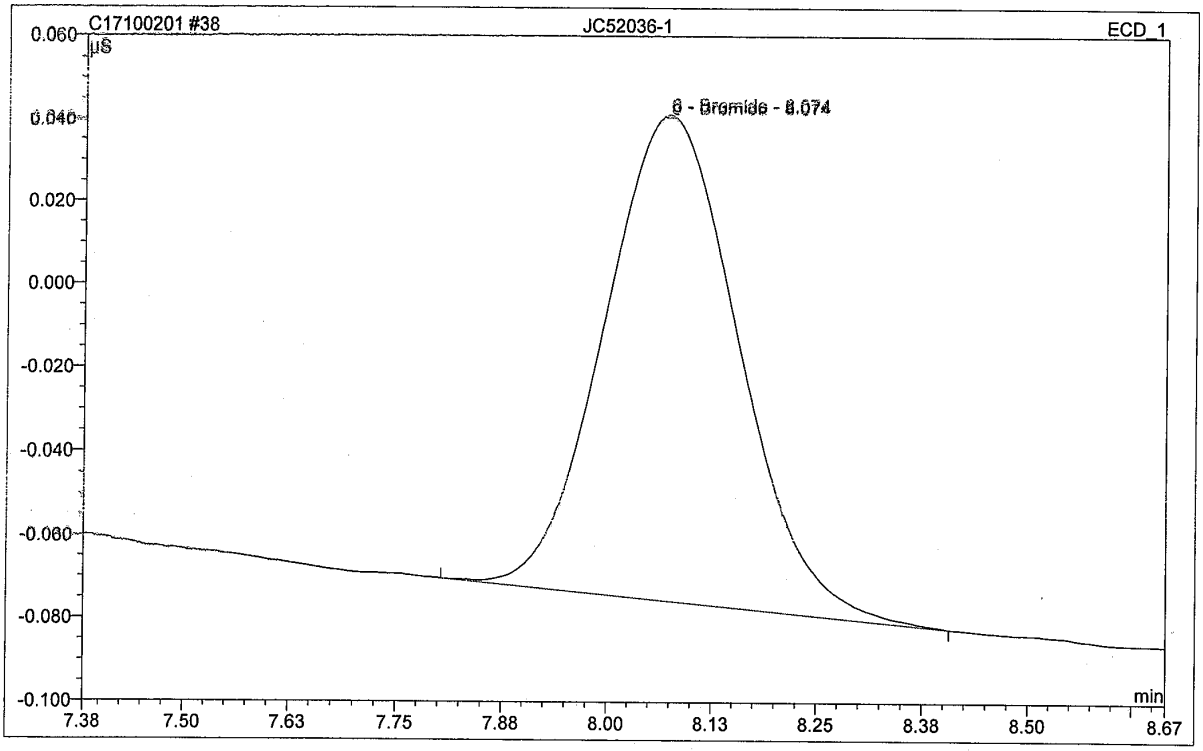
anionssystem3/Integration

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

10/3/2017 8:46 AM

38 JC52036-1

Sample Name:	**JC52036-1**	*Injection Volume:*	**4800.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 0:48**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.81	n.a.	0.024	0.005	0.00	n.a.	BMB
2	3.59	Fluoride	0.375	0.049	0.03	0.170	BMB
3	5.44	Chloride	68.406	8.936	5.73	44.751	BM
4	6.19	n.a.	0.101	0.049	0.03	n.a.	M
5	6.64	n.a.	0.095	0.023	0.01	n.a.	MB
6	8.07	Bromide	0.117	0.022	0.01	0.324	BMB
7	9.32	Nitrate	0.426	0.102	0.07	0.240	BMB
8	10.17	n.a.	0.236	0.140	0.09	n.a.	BMB
9	16.15	Sulfate	316.194	146.604	94.02	1149.723	BMB
Total:			385.974	155.930	100.00	1195.207	

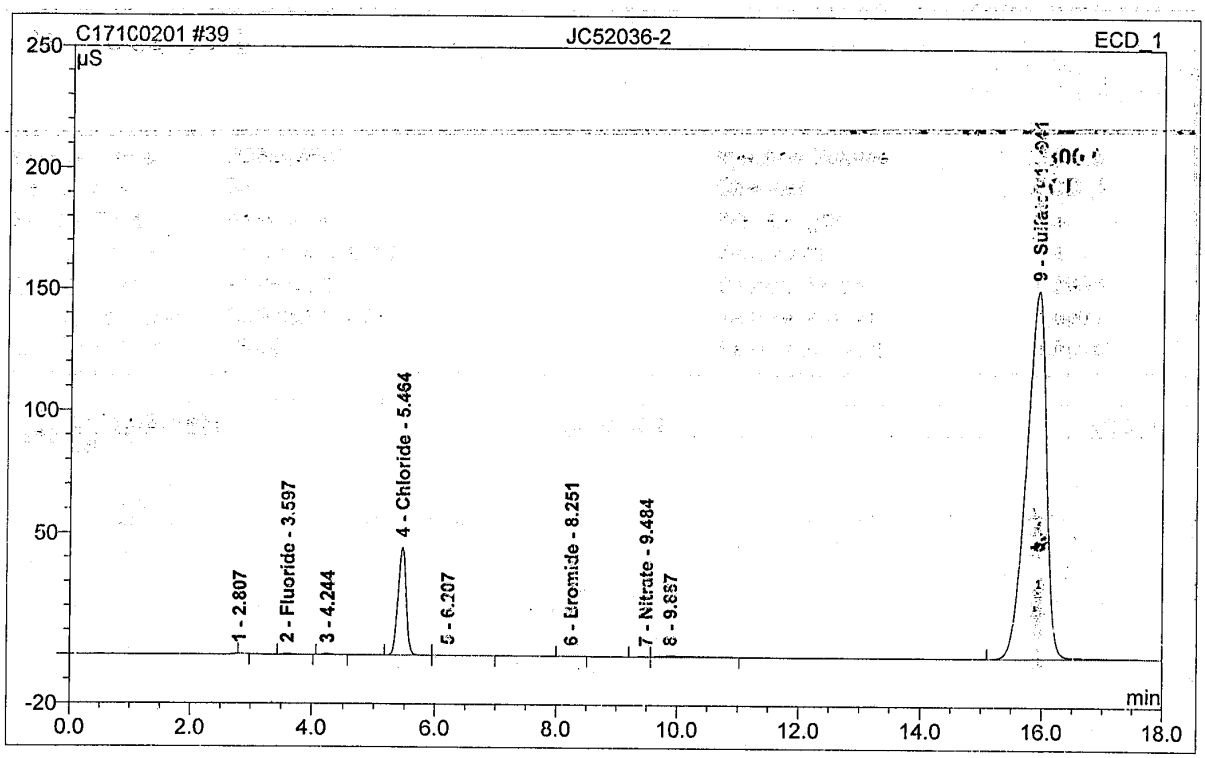
anionssystem3/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR11 Build 3161 (184582)

39 JC52036-2

Chromeleon [illegible] 2001
[illegible] SR11 [illegible] 84582)

Sample Name:	**JC52036-2**	*Injection Volume:*	[illegible].0
Vial Number:	**33**	*Channel:*	ECD_1
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 1:09**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



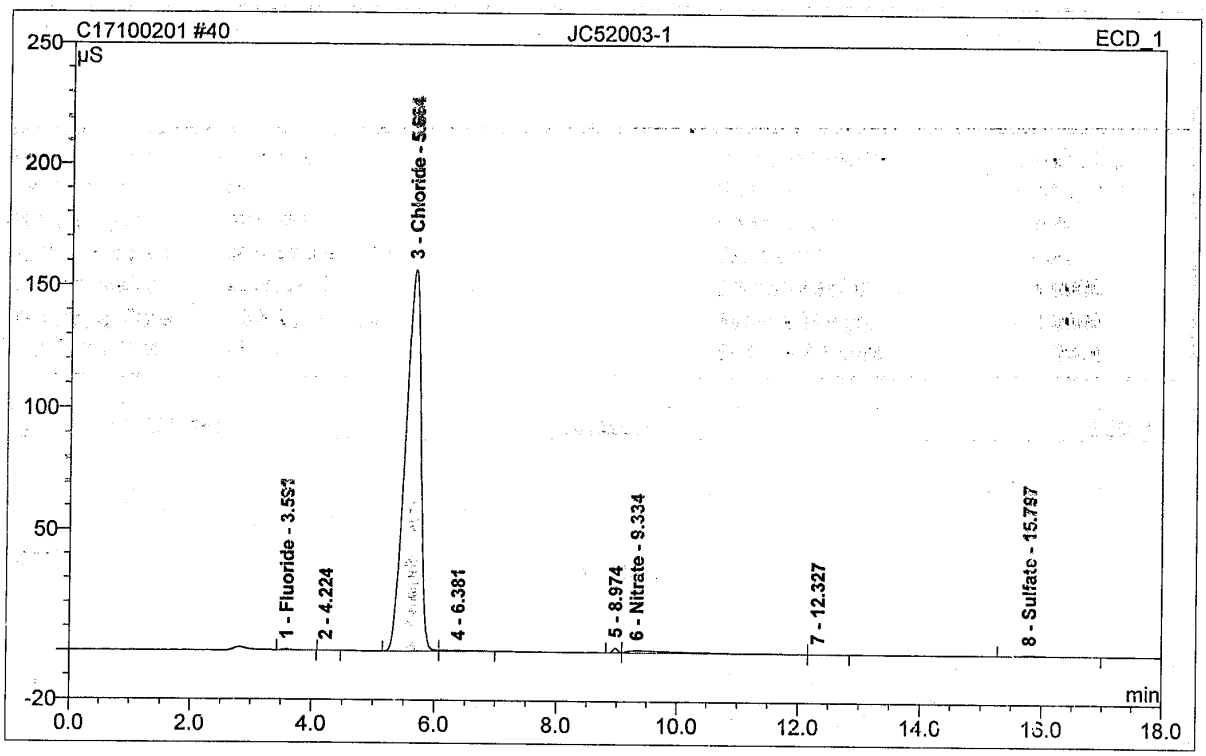
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.81	n.a.	0.014	0.003	0.01	n.a.	BMB
2	3.60	Fluoride	0.371	0.048	0.07	0.167	BMB
3	4.24	n.a.	0.433	0.056	0.09	n.a.	BMB
4	5.46	Chloride	44.331	6.820	10.55	34.154	BM
5	6.21	n.a.	0.076	0.046	0.07	n.a.	MB
6	8.25	Bromide	0.093	0.017	0.03	0.253	BMB
7	9.48	Nitrate	0.070	0.011	0.02	0.025	BM
8	9.89	n.a.	0.373	0.274	0.42	n.a.	MB
9	15.94	Sulfate	151.188	57.373	88.75	449.939	BMB
Total:			196.955	64.648	100.00	484.543	

anionssystem3/Integration

Chromeleon (c) Dionex 1996-200[illegible]
Version 6.80 SR11 Build 3161 (184583)

40 JC52003-1

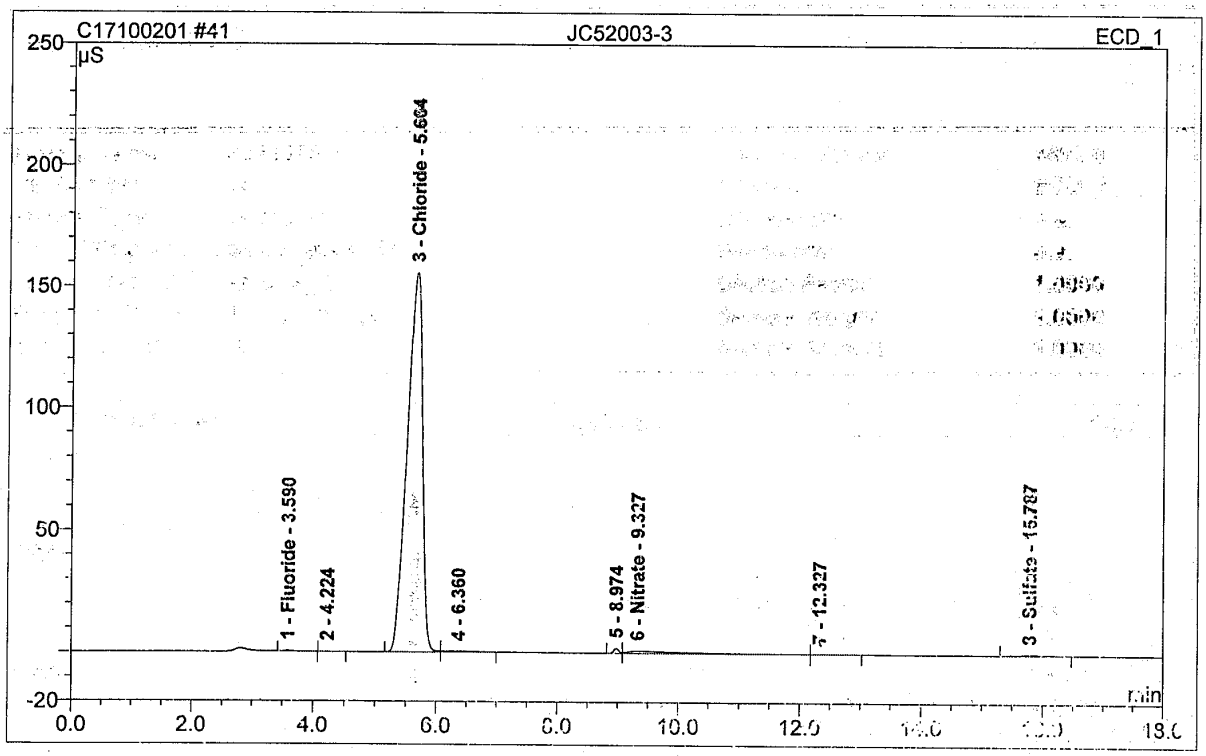
Sample Name:	**JC52003-1**	*Injection Volume:*	**4800.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 1:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.303	0.047	0.10	0.166	BMB
2	4.22	n.a.	0.024	0.004	0.01	n.a.	BMB
3	5.66	Chloride	156.766	45.226	96.71	226.481	BM
4	6.38	n.a.	0.355	0.214	0.46	n.a.	MB
5	8.97	n.a.	1.933	0.195	0.42	n.a.	BM
6	9.33	Nitrate	0.956	0.984	2.10	2.304	M
7	12.33	n.a.	0.014	0.006	0.01	n.a.	MB
8	15.80	Sulfate	0.209	0.088	0.19	0.688	BMB
Total:			160.560	46.765	100.00	229.640	

41 JC52003-3

Sample Name:	**JC52003-3**	*Injection Volume:*	**4800.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 1:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**

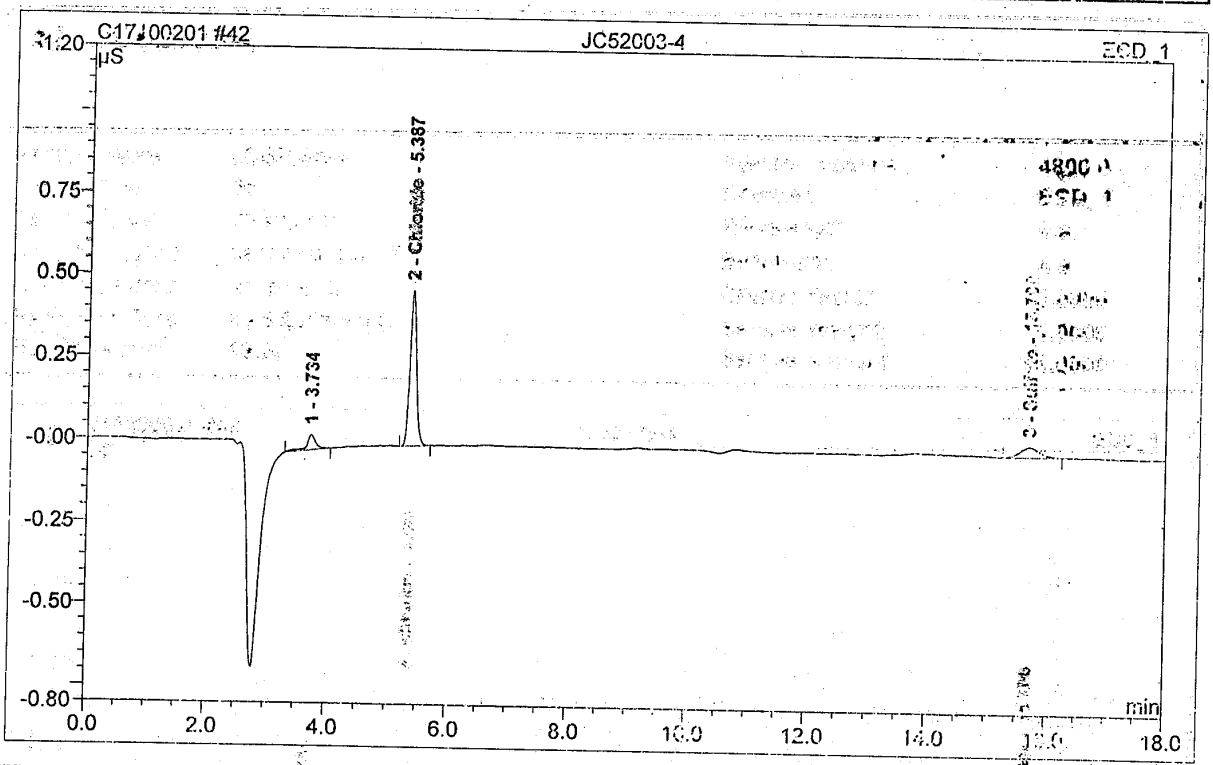


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.300	0.046	0.10	0.160	BMB
2	4.22	n.a.	0.023	0.004	0.01	n.a.	BMB
3	5.66	Chloride	155.826	45.008	96.70	225.389	BM
4	6.36	n.a.	0.349	0.211	0.45	n.a.	MB
5	8.97	n.a.	1.929	0.195	0.42	n.a.	BM
6	9.33	Nitrate	0.969	0.996	2.14	2.333	M
7	12.33	n.a.	0.014	0.006	0.01	n.a.	MB
8	15.79	Sulfate	0.193	0.076	0.16	0.5[illegible]	[illegible]
Total:			159.603	46.542	100.00	[illegible]	

Operator:Chemistry Timebase:ICS2000 Sequence.C17100201

42 JC52003-4

Sample Name:	**JC52003-4**	*Injection Volume:*	
Vial Number:	**36**	*Channel:*	
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	
Recording Time:	**10/3/2017 2:11**	*Sample Weight:*	
Run Time (min):	**18.00**	*Sample Amount:*	



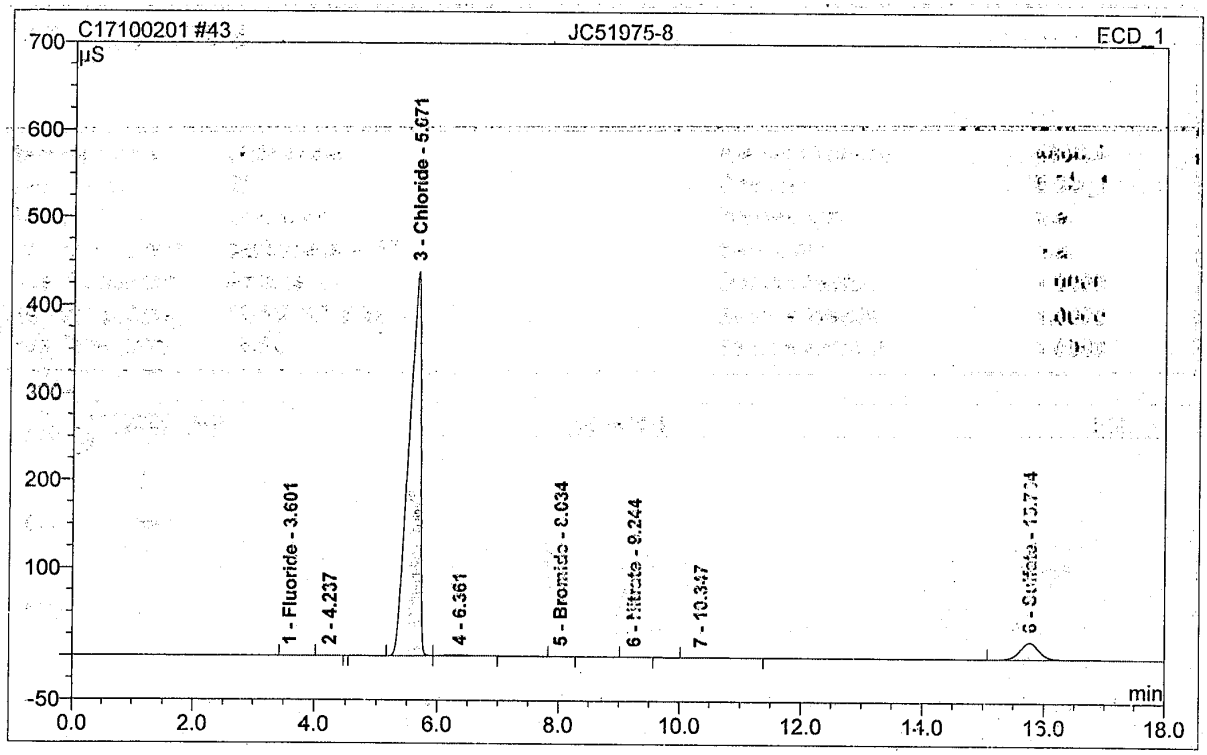
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.73	n.a.	0.045	0.008	9.38	n.a.	BMB
2	5.39	Chloride	0.471	0.060	75.16	0.332	BMB
3	15.70	Sulfate	0.031	0.012	15.16	0.055	BMB
Total:			0.548	0.080	100.00	0.387	

anionssystem3/Integration

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201 Page 46-80
10/3/2017 10:29 AM

43 JC51975-8

Sample Name:	**JC51975-8**	*Injection Volume:*	**[illegible]**
Vial Number:	**37**	*Channel:*	**ECD_1 [illegible]**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 2:32**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



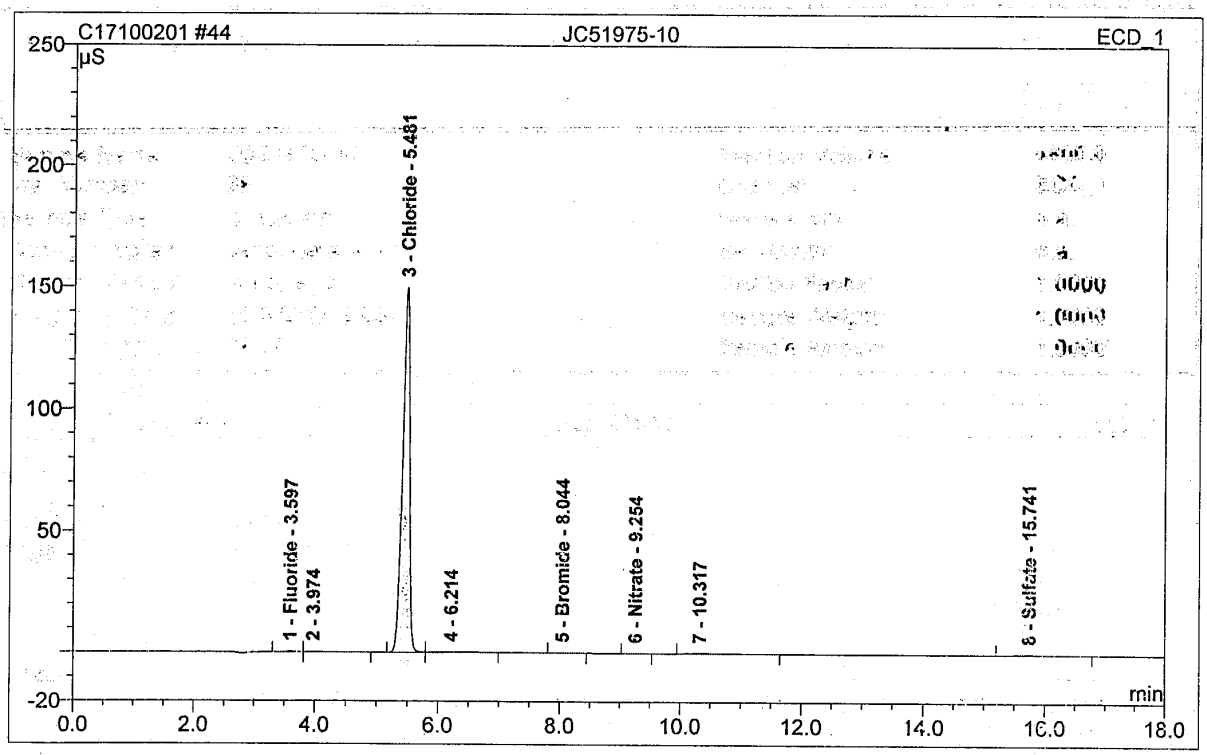
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	0.091	0.018	0.02	0.034	BMB
2	4.24	n.a.	0.008	0.002	0.00	n.a.	Rd
3	5.67	Chloride	438.826	99.021	92.83	[illegible]	BM
4	6.36	n.a.	0.603	0.424	0.40	n.a.	MB
5	8.03	Bromide	0.048	0.030	0.01	0.123	BMB
6	9.24	Nitrate	0.107	0.023	0.02	0.054	BMB
7	10.35	n.a.	0.142	0.071	0.07	n.a.	BMB
8	15.76	Sulfate	19.248	7.103	6.66	55.703	BMB
Total:			459.133	106.670	100.00	551.816	

anionssystem3/integration

Chromeleon (c) Dionex 1996-20[illegible]
Version 6.80 SR13 Build 3161 (1843[illegible])

44 JC51975-10

Sample Name:	**JC51975-10**	*Injection Volume:*	**4000.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 2:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**



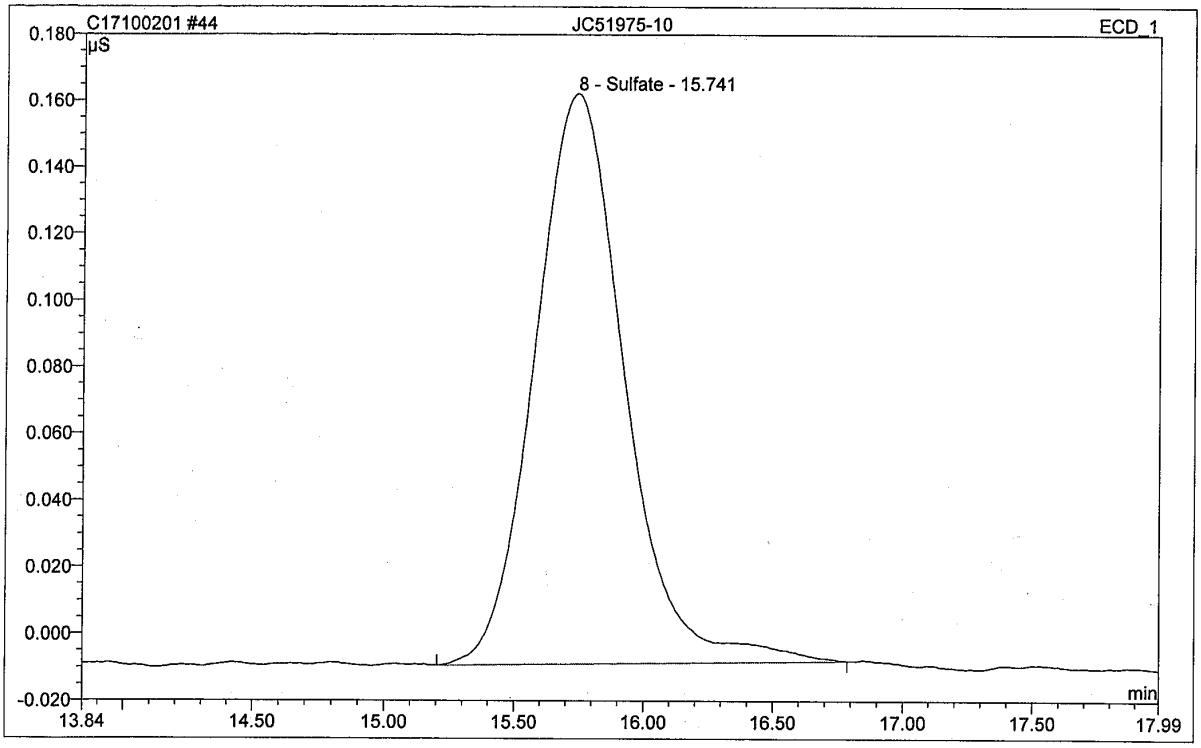
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	0.253	0.036	0.18	0.125	BM
2	3.97	n.a.	0.134	0.040	0.20	n.a.	MB
3	5.48	Chloride	149.784	19.811	98.08	99.206	BM
4	6.21	n.a.	0.192	0.133	0.66	n.a.	MB
5	8.04	Bromide	0.072	0.013	0.07	0.201	BMB
6	9.25	Nitrate	0.010	0.002	0.01	0.005	BMB
7	10.32	n.a.	0.167	0.095	0.47	n.a.	BMB
8	15.74	Sulfate	0.171	0.069	0.34	0.541	BMB
Total:			150.782	20.198	100.00	100.078	

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

10/3/2017 8:50 AM

44 JC51975-10

Sample Name:	**JC51975-10**	*Injection Volume:*	**4800.0**
Vial Number:	**38**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 2:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



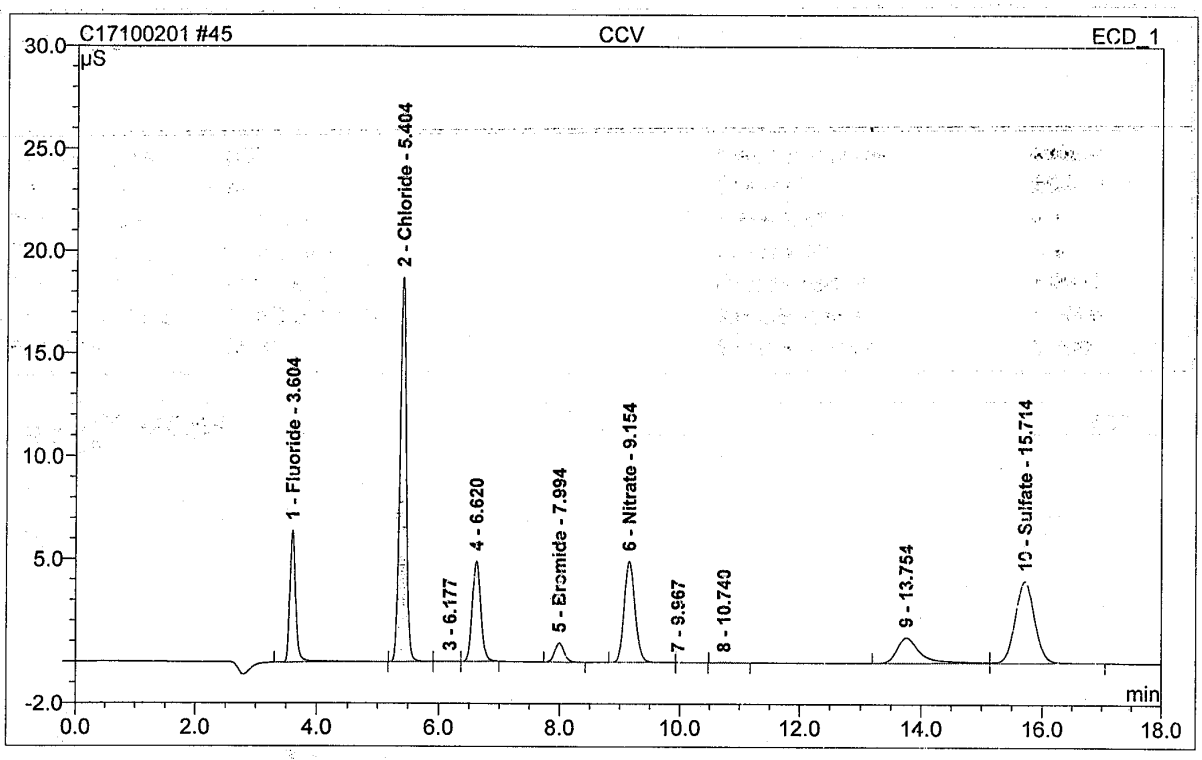
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	0.253	0.036	0.18	0.125	BM
2	3.97	n.a.	0.134	0.040	0.20	n.a.	MB
3	5.48	Chloride	149.784	19.811	98.08	99.206	BM
4	6.21	n.a.	0.192	0.133	0.66	n.a.	MB
5	8.04	Bromide	0.072	0.013	0.07	0.201	BMB
6	9.25	Nitrate	0.010	0.002	0.01	0.005	BMB
7	10.32	n.a.	0.167	0.095	0.47	n.a.	BMB
8	15.74	Sulfate	0.171	0.069	0.34	0.541	BMB
Total:			150.782	20.198	100.00	100.078	

anionssystem3/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR11 Build 3161 (184582)

45 CCV

Sample Name:	**CCV**	*Injection Volume:*	**4850.0**
Vial Number:	**39**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 3:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**

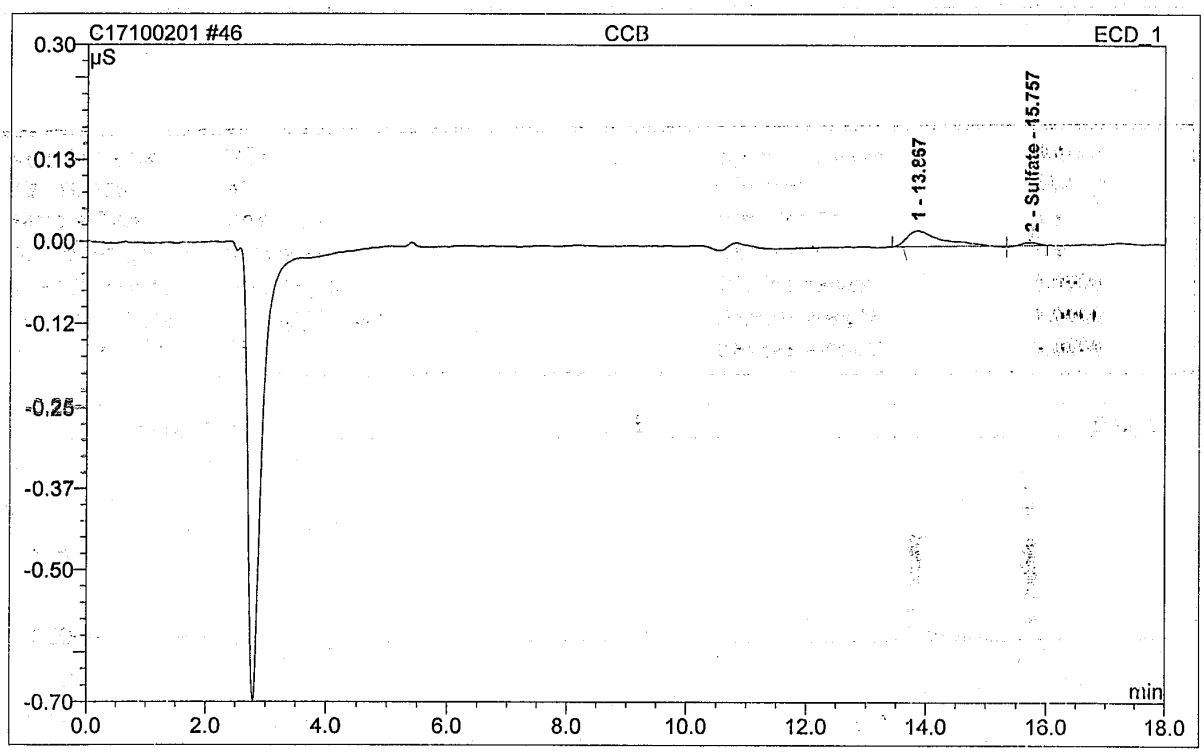


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	6.410	0.721	10.18	2.520	BMB
2	5.40	Chloride	18.704	2.247	31.75	11.250	BM
3	6.18	n.a.	0.012	0.004	0.06	n.a.	M
4	6.62	n.a.	4.887	0.798	11.27	n.a.	MB
5	7.99	Bromide	0.928	0.171	2.42	2.549	BMB
6	9.15	Nitrate	4.913	1.044	14.76	2.443	BM
7	9.97	n.a.	0.009	0.003	0.04	n.a.	MB
8	10.74	n.a.	0.014	0.004	0.06	n.a.	BMB
9	13.75	n.a.	1.244	0.579	8.18	n.a.	BM
10	15.71	Sulfate	3.988	1.506	21.28	11.809	MB
Total:			41.109	7.076	100.00	30.575	

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

46 CCB

Sample Name:	**CCB**	*Injection Volume:*	**4800.0**
Vial Number:	**40**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 3:35**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**

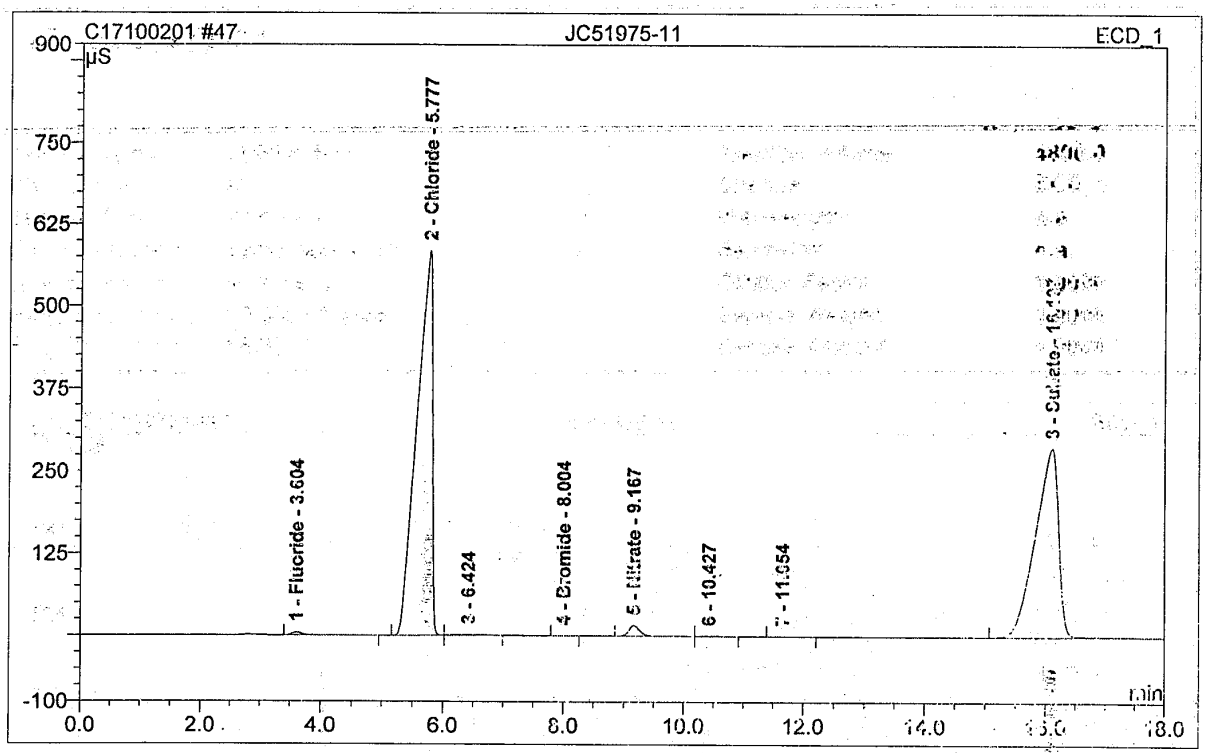


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.87	n.a.	0.024	0.016	93.07	n.a.	BM
2	15.76	Sulfate	0.004	0.001	6.93	0.009	MB
Total:			0.028	0.017	100.00	0.009	

anionssystem3/Integration

47 JC51975-11

Sample Name:	**JC51975-11**	*Injection Volume:*	[illegible]
Vial Number:	**41**	*Channel:*	ECD_1
Sample Type:	**unknown**	*Wavelength:*	n.a.
Control Program:	**carbonate 4_17**	*Bandwidth:*	n.a.
Quantif. Method:	**Anions_C**	*Dilution Factor:*	1.0000
Recording Time:	**10/3/2017 3:56**	*Sample Weight:*	1.0000
Run Time (min):	**18.00**	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	4.529	0.783	0.26	2.739	BMB
2	5.78	Chloride	584.146	170.929	56.03	855.033	BM
3	6.42	n.a.	0.947	0.583	0.19	n.a.	MB
4	8.00	Bromide	0.090	0.016	0.01	0.240	BMB
5	9.17	Nitrate	15.926	3.402	1.12	7.033	BM
6	10.43	n.a.	0.113	0.047	0.02	n.a.	MB
7	11.65	n.a.	0.011	0.004	0.00	n.a.	BMB
8	16.11	Sulfate	287.308	130.201	42.63	[illegible]	[illegible]
Total:			893.143	306.967	100.00	1000.788	

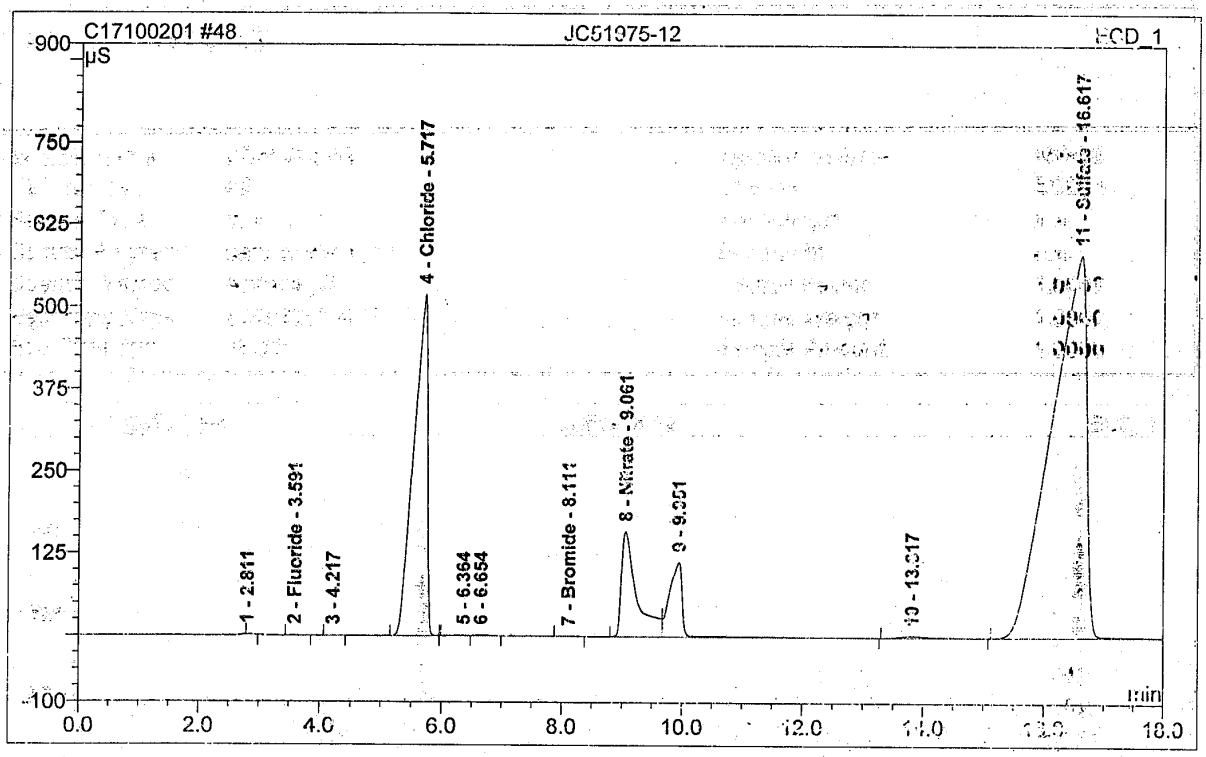
anionssystem3/Integration

Chromeleon (c) Dionex 1996-20..
Version 6.80 SR11 Build 3161 (1845C..

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201 10/3/2017 10:29 AM

48 JC51975-12

Sample Name:	**JC51975-12**	*Injection Volume:*	**4830.0**
Vial Number:	**42**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantit. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 4:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height uS	Area uS*min	Rel.Area %	Amount	Type
1	2.81	n.a.	0.080	0.015	0.00	n.a.	BMB
2	3.59	Fluoride	0.343	0.048	0.01	0.199	BMB
3	4.22	n.a.	0.029	0.004	0.00	n.a.	BMB
4	5.72	Chloride	519.321	135.135	22.45	676.720	BMB
5	6.36	n.a.	0.209	0.063	0.01	n.a.	BMB
6	6.65	n.a.	1.191	0.600	0.10	n.a.	BMB
7	8.11	Bromide	0.094	0.016	0.00	0.244	BMB
8	9.06	Nitrate	159.118	47.411	7.83	111.017	BMB
9	9.95	n.a.	112.737	27.637	4.59	n.a.	BMB
10	13.32	n.a.	2.462	1.199	0.20	n.a.	BMB
11	16.62	Sulfate	581.501	389.787	64.76	3956.332	BMB

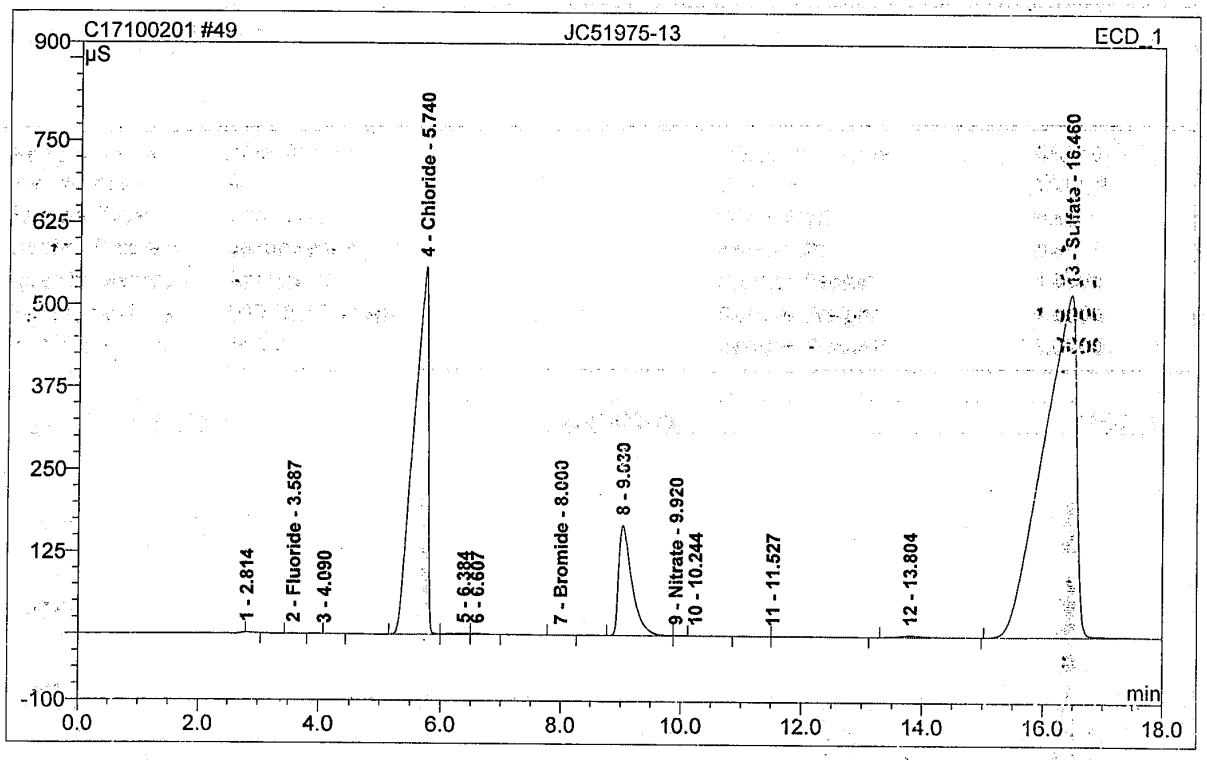
anionssystem3/Integration

Total:		1377.084	601.937	100.00	3845.024

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201 Page 53-6
10/3/2017 10:29 AM

49 JC51975-13

Sample Name:	**JC51975-13**	*Injection Volume:*	**4800.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 4:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.81	n.a.	0.090	0.019	0.00	n.a.	BMB
2	3.59	Fluoride	0.678	0.030	0.02	0.313	BMB
3	4.09	n.a.	0.000	0.002	0.00	n.a.	BMB
4	5.74	Chloride	558.804	154.407	28.94	773.232	BM
5	6.38	n.a.	0.942	0.388	0.07	n.a.	M
6	6.61	n.a.	0.923	0.244	0.05	n.a.	MB
7	8.00	Bromide	0.095	0.018	0.00	0.267	BMB
8	9.03	n.a.	167.538	43.349	8.12	n.a.	BM
9	9.92	Nitrate	0.562	0.417	0.08	0.976	M
10	10.24	n.a.	0.067	0.027	0.01	n.a.	Rd
11	11.53	n.a.	0.059	0.042	0.01	n.a.	MB

anionssystem3/Integration

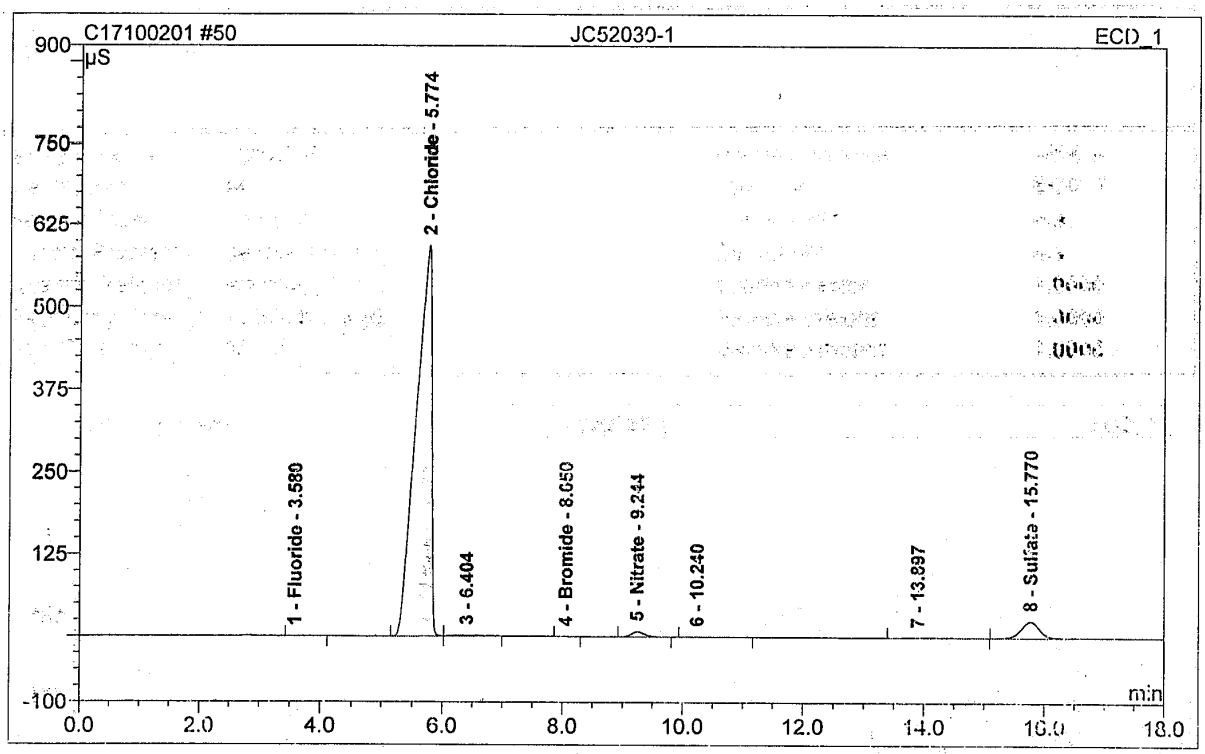
Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

12	13.80	n.a.	2.300	1.131	0.21	n.a.	BMB
13	16.46	Sulfate	521.734	333.418	62.49	2614.790	BMB
Total:			1253.792	533.551	100.00	3389.578	

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

50 JC52030-1

Sample Name:	**JC52030-1**	*Injection Volume:*	**4800.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 4:59**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



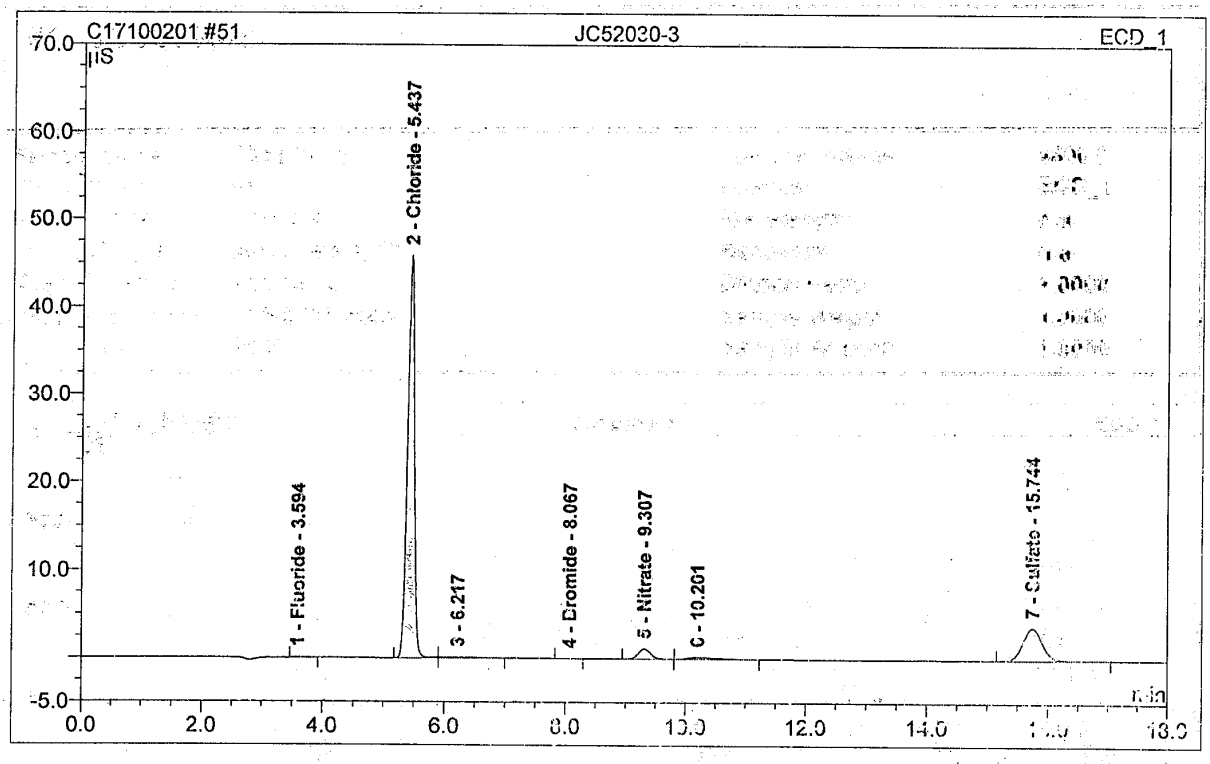
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.58	Fluoride	0.162	0.023	0.01	0.062	BMB
2	5.77	Chloride	593.361	176.419	93.72	883.459	BM
3	6.40	n.a.	1.036	0.635	0.34	n.a.	MB
4	8.05	Bromide	0.050	0.009	0.00	0.135	BMB
5	9.24	Nitrate	7.850	1.968	1.05	4.610	BMB
6	10.24	n.a.	0.179	0.090	0.05	n.a.	BMB
7	13.90	n.a.	0.089	0.056	0.03	n.a.	BMB
8	15.77	Sulfate	25.238	9.047	4.81	70.962	BMB
Total:			627.993	183.248	100.00	959.227	

anionssystem3/Integration

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201 Page 56-61
10/3/2017 10:29 AM

51 JC52030-3

Sample Name:	**JC52030-3**	*Injection Volume:*	**4000.0**
Vial Number:	**45**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 5:20**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**

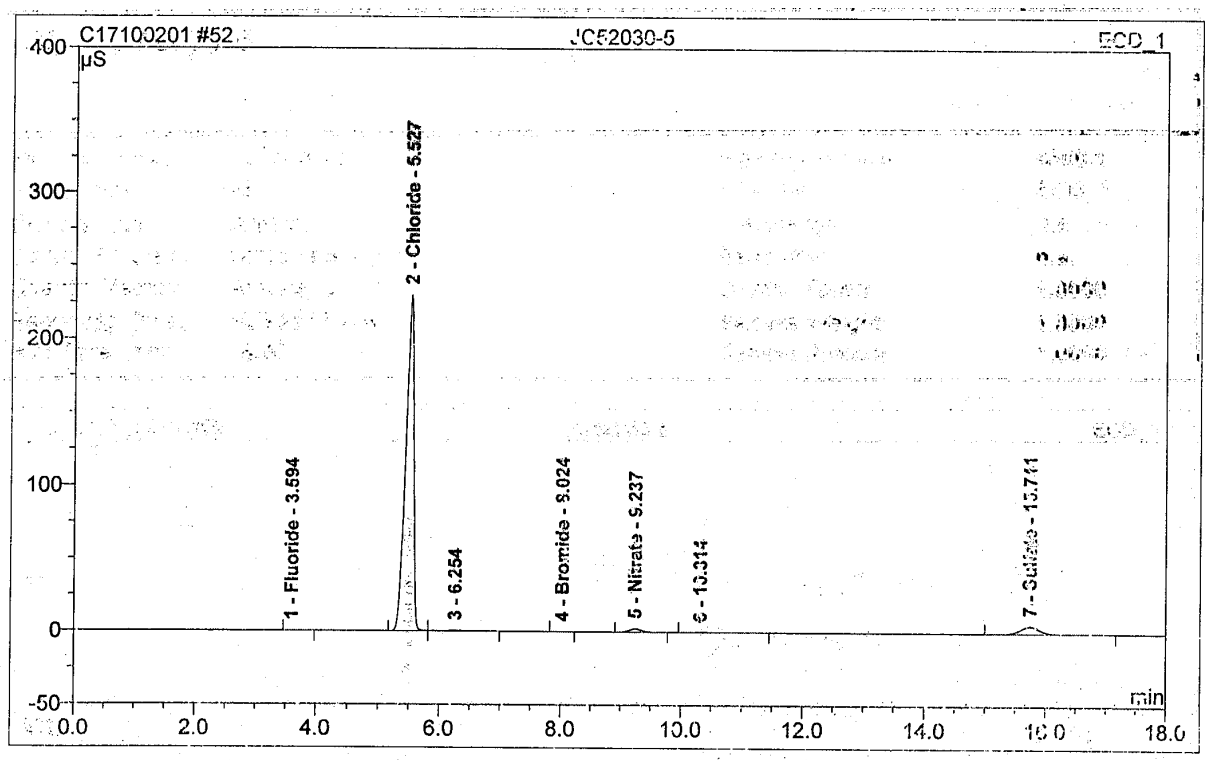


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.056	0.007	0.08	0.023	BMB
2	5.44	Chloride	45.900	5.996	76.47	30.027	BM
3	6.22	n.a.	0.074	0.048	0.61	n.a.	MB
4	8.07	Bromide	0.010	0.002	0.02	0.027	BMB
5	9.31	Nitrate	1.152	0.276	3.53	0.647	BMB
6	10.20	n.a.	0.210	0.119	1.52	n.a.	BMB
7	15.74	Sulfate	3.722	1.393	17.77	10.927	BMB
Total:			51.124	7.841	100.00	41.651	

anionssystem3/Integration

52 JC52030-5

Sample Name:	**JC52030-5**	*Injection Volume:*	**4000.0**
Vial Number:	**46**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 5:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**

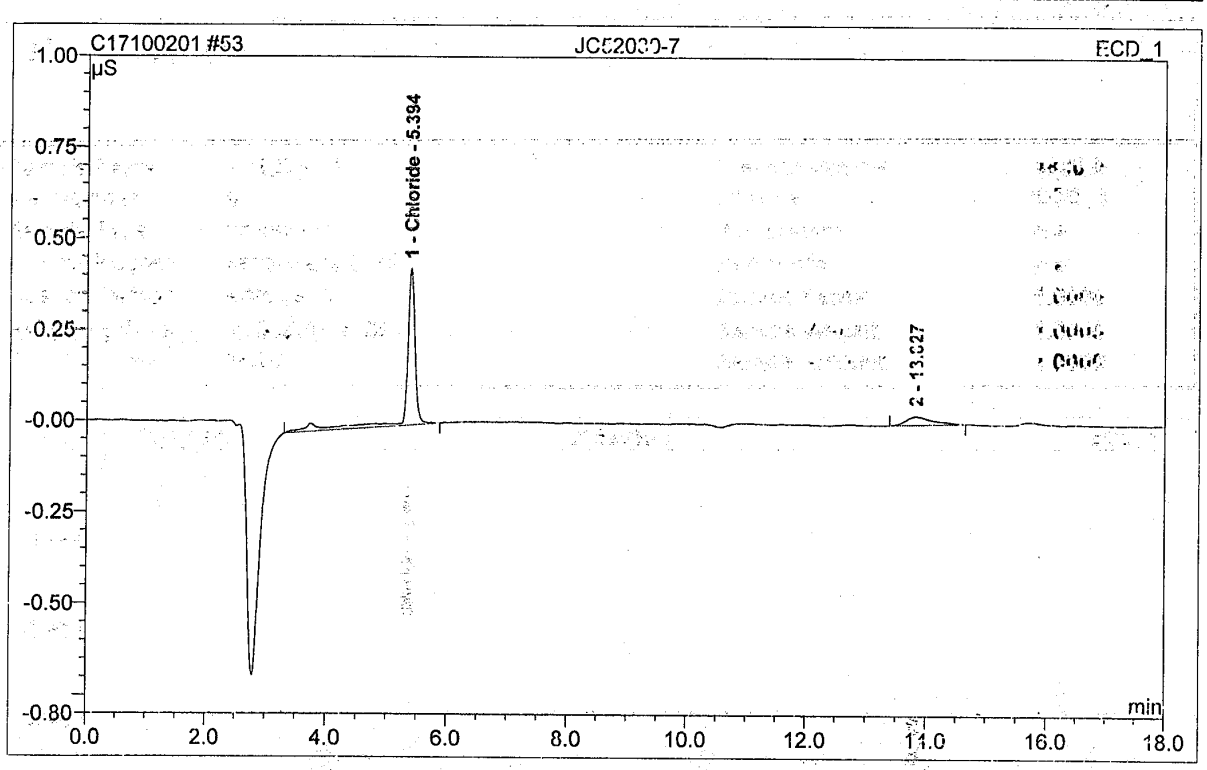


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.59	Fluoride	0.155	0.020	0.05	0.070	BMB
2	5.53	Chloride	230.039	34.763	92.59	174.084	BM
3	6.25	n.a.	0.303	0.202	0.54	n.a.	MB
4	8.02	Bromide	0.014	0.002	0.01	0.036	BMB
5	9.24	Nitrate	2.323	0.530	1.41	1.241	BMB
6	10.31	n.a.	0.150	0.077	0.21	n.a.	BMB
7	15.74	Sulfate	5.247	1.951	5.20	15.299	BMB
Total:			238.230	37.545	100.00	190.730	

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

53 JC52030-7

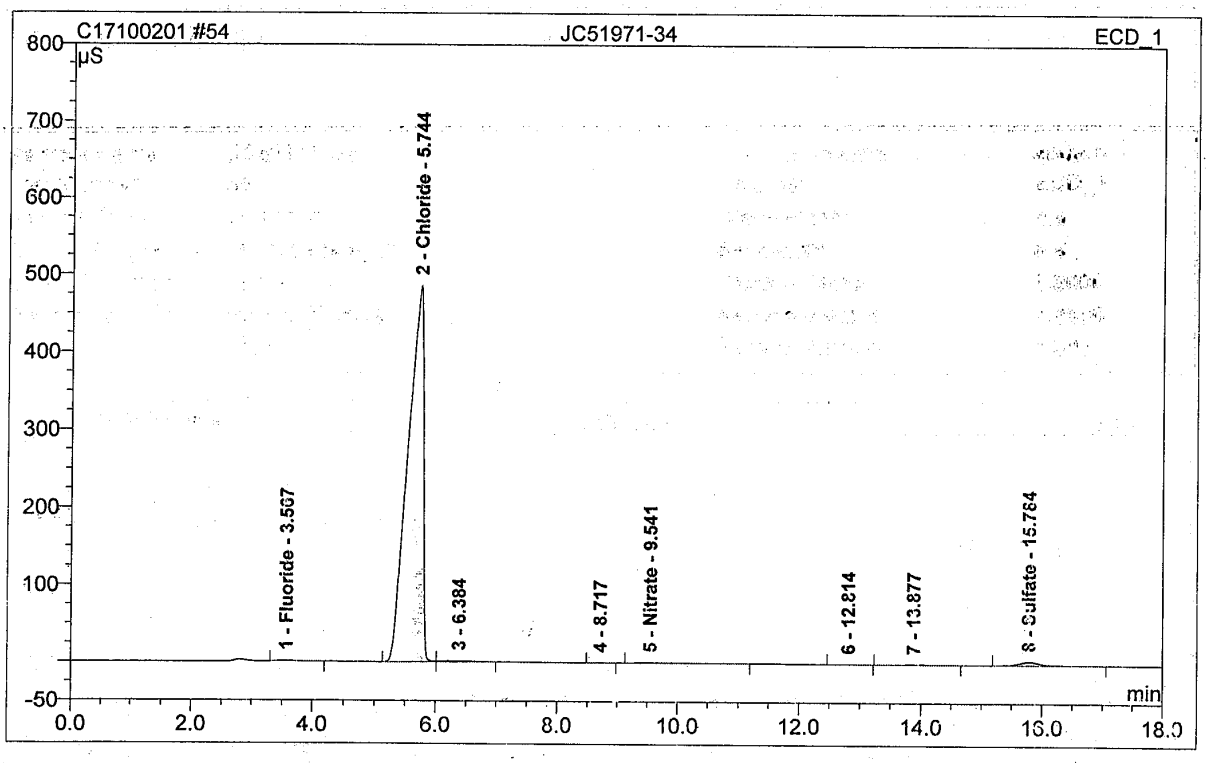
Sample Name:	**JC52030-7**	*Injection Volume:*	**4000.0**
Vial Number:	**47**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 6:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	5.39	Chloride	0.429	0.072	85.41	0.361	BMB
2	13.83	n.a.	0.024	0.012	14.59	n.a.	BMB
Total:			0.452	0.084	100.00	0.361	

54 JC51971-34

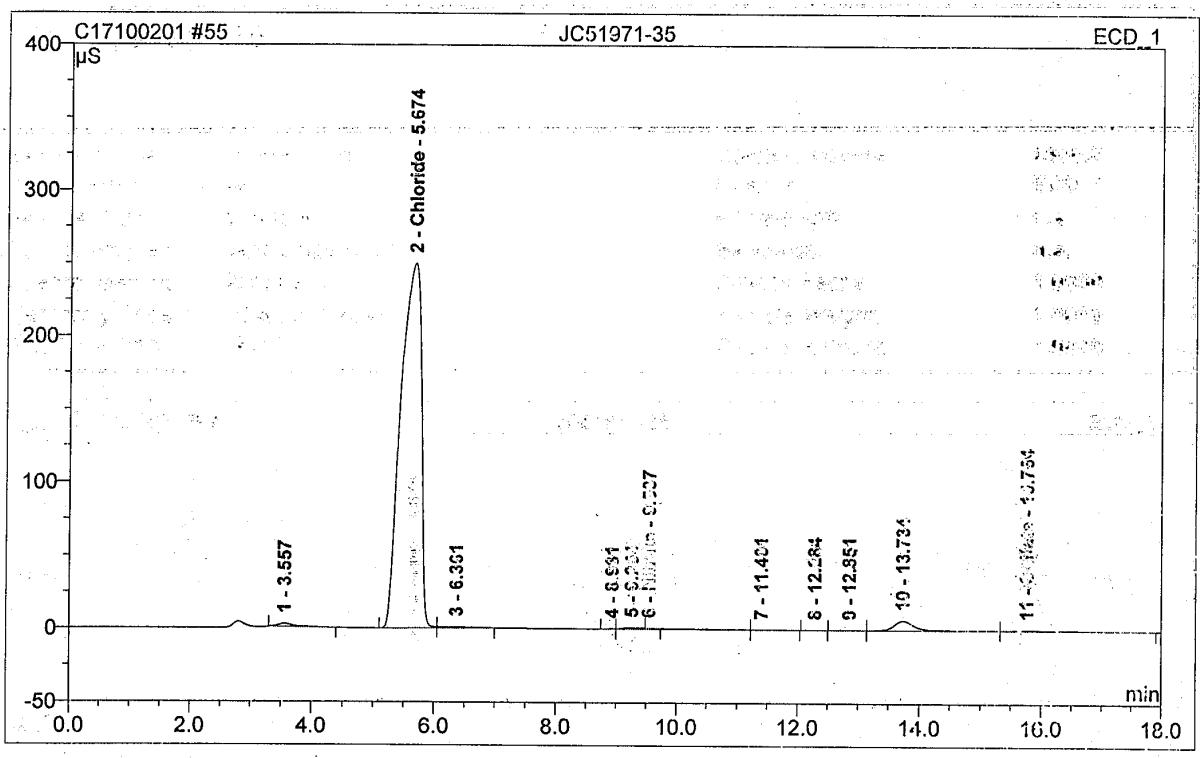
Sample Name:	**JC51971-34**	*Injection Volume:*	**4800.0**
Vial Number:	**48**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 6:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.57	Fluoride	0.800	0.251	0.17	0.876	BMB
2	5.74	Chloride	485.930	142.658	97.86	714.393	BM
3	6.38	n.a.	0.919	0.582	0.40	n.a.	MB
4	8.72	n.a.	0.325	0.054	0.04	n.a.	BMB
5	9.54	Nitrate	0.664	0.557	0.38	1.306	BMB
6	12.81	n.a.	0.026	0.009	0.01	n.a.	BMB
7	13.88	n.a.	0.044	0.025	0.02	n.a.	BMB
8	15.78	Sulfate	4.417	1.646	1.13	12.911	BMB
Total:			493.124	145.782	100.00	729.486	

55 JC51971-35

Sample Name:	**JC51971-35**	*Injection Volume:*	**4000.0**
Vial Number:	**49**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 6:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.56	n.a.	2.166	0.654	0.64	n.a.	BMB
2	5.67	Chloride	249.661	97.059	95.04	433.043	BM
3	6.36	n.a.	0.675	0.123	0.41	n.a.	MB
4	8.93	n.a.	0.413	0.041	0.04	n.a.	BM
5	9.25	n.a.	0.963	0.932	0.91	n.a.	M
6	9.54	Nitrate	0.047	0.003	0.01	0.019	Rd
7	11.40	n.a.	0.056	0.031	0.03	n.a.	MB
8	12.28	n.a.	0.010	0.002	0.00	n.a.	BMB
9	12.85	n.a.	0.042	0.015	0.02	n.a.	BM
10	13.73	n.a.	6.614	2.631	2.58	n.a.	M
11	15.76	Sulfate	0.625	0.333	0.33	2.610	MB

anionssystem3/Integration

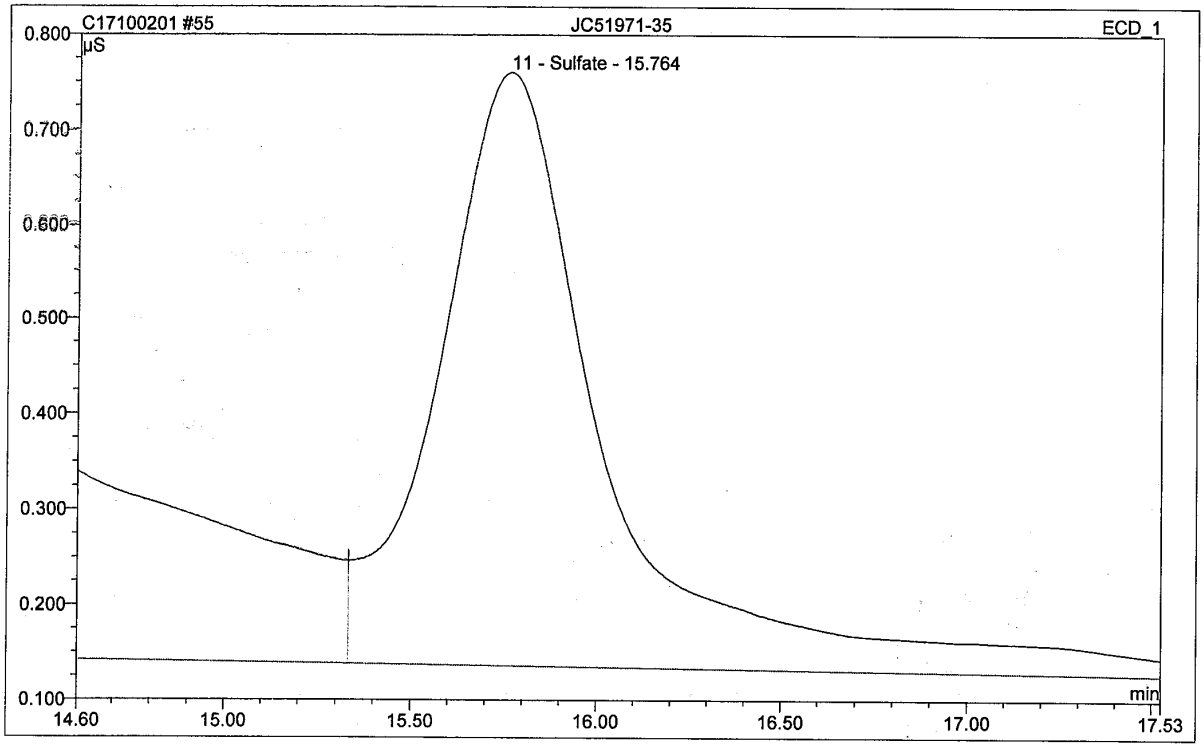
Chromeleon (c) Dionex 1996-20
Version 6.80 SR11 Build 3161 (13

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

Total:		261.277	102.129	100.00	488.675

55 JC51971-35

Sample Name:	**JC51971-35**	*Injection Volume:*	**4800.0**
Vial Number:	**49**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 6:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.56	n.a.	2.166	0.654	0.64	n.a.	BMB
2	5.67	Chloride	249.661	97.059	95.04	486.046	BM
3	6.36	n.a.	0.675	0.423	0.41	n.a.	MB
4	8.93	n.a.	0.413	0.041	0.04	n.a.	BM
5	9.25	n.a.	0.968	0.932	0.91	n.a.	M
6	9.54	Nitrate	0.047	0.008	0.01	0.019	Rd
7	11.40	n.a.	0.056	0.031	0.03	n.a.	MB
8	12.28	n.a.	0.010	0.002	0.00	n.a.	BMB
9	12.85	n.a.	0.042	0.015	0.02	n.a.	BM
10	13.73	n.a.	6.614	2.631	2.58	n.a.	M
11	15.76	Sulfate	0.625	0.333	0.33	2.610	MB

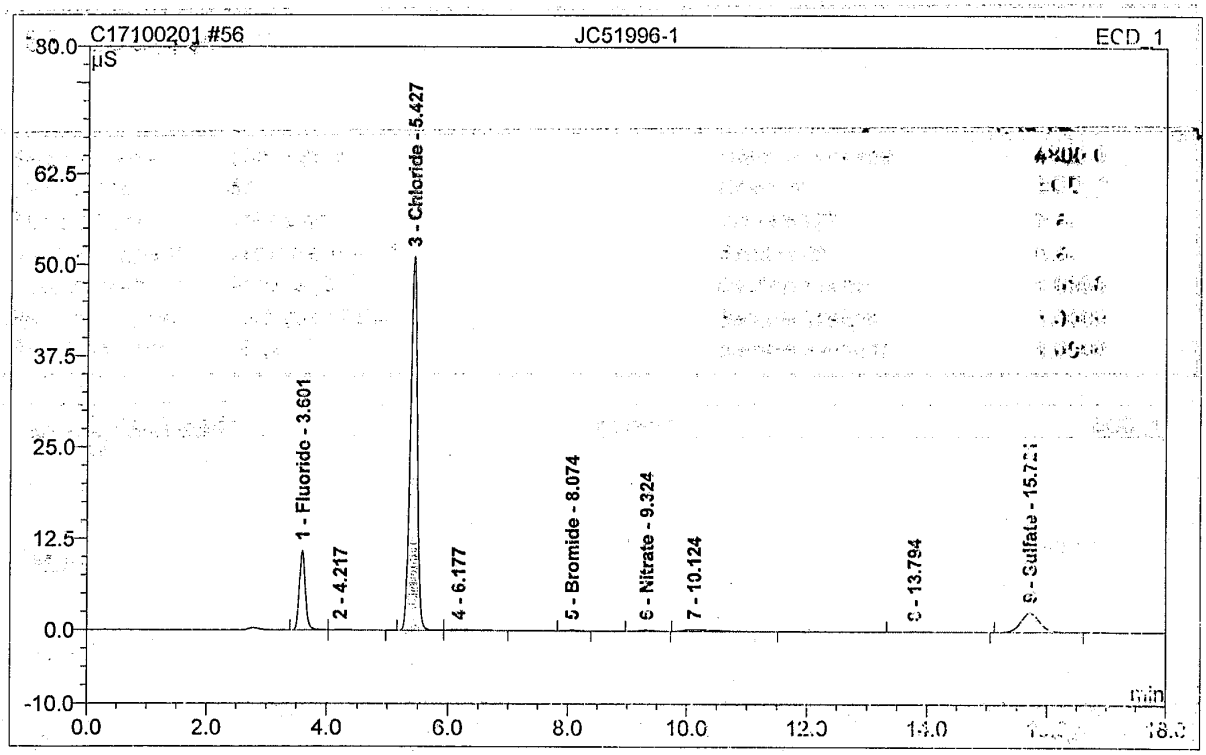
anionssystem3/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR11 Build 3161 (184582)

9.2

56 JC51996-1

Sample Name:	**JC51996-1**	*Injection Volume:*	[illegible]
Vial Number:	**50**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 7:04**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**

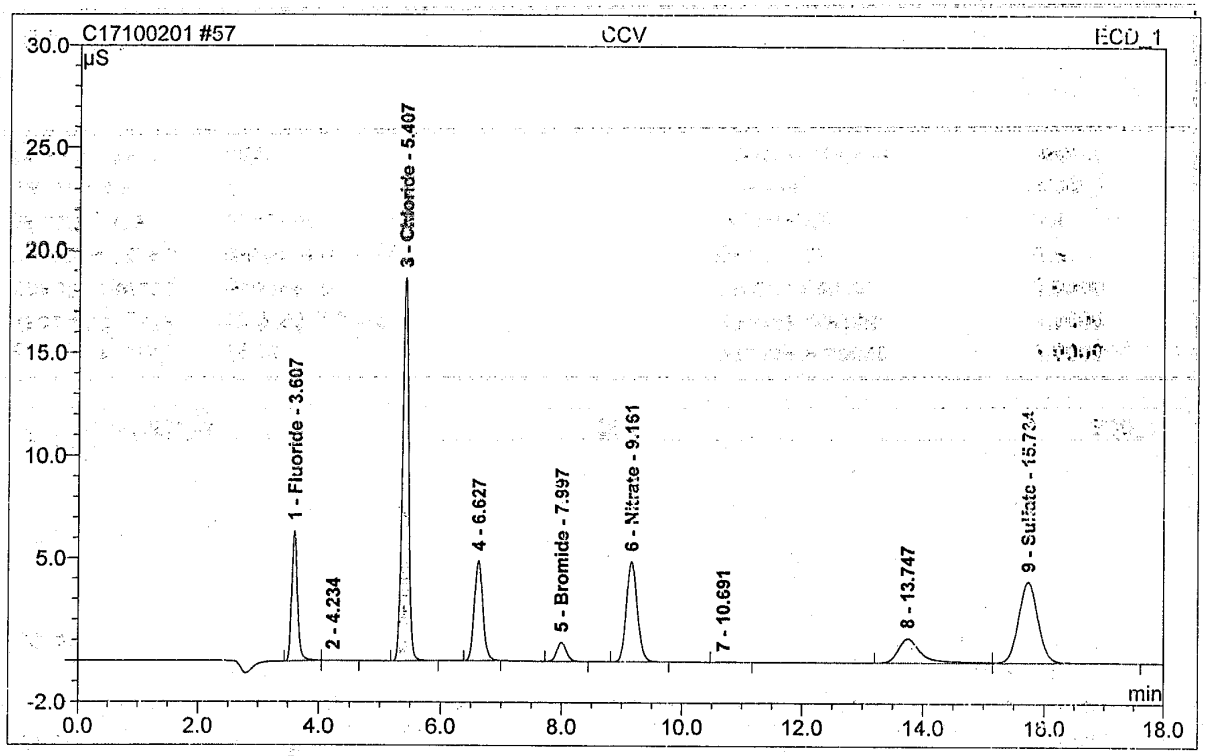


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	10.873	1.261	13.42	4.411	BM
2	4.22	n.a.	0.050	0.024	0.25	n.a.	MB
3	5.43	Chloride	51.186	6.861	72.99	34.357	BM
4	6.18	n.a.	0.078	0.046	0.49	n.a.	MB
5	8.07	Bromide	0.096	0.018	0.19	0.261	BMB
6	9.32	Nitrate	0.145	0.035	0.37	0.082	BMB
7	10.12	n.a.	0.232	0.147	1.56	n.a.	BMB
8	13.79	n.a.	0.053	0.031	0.33	n.a.	BMB
9	15.72	Sulfate	2.315	0.973	10.30	7.657	BMB
Total:			65.332	9.399	100.00	46.768	

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201 Page 69-69

57 CCV

Sample Name:	**CCV**	*Injection Volume:*	**4800.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 7:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.61	Fluoride	6.349	0.685	9.82	2.397	BMB
2	4.23	n.a.	0.005	0.002	0.02	n.a.	BMB
3	5.41	Chloride	18.665	2.245	32.17	11.243	BMB
4	6.63	n.a.	4.871	0.796	11.41	n.a.	BMB
5	8.00	Bromide	0.925	0.171	2.45	2.551	BMB
6	9.16	Nitrate	4.896	1.039	14.88	2.433	BMB
7	10.69	n.a.	0.014	0.004	0.06	n.a.	BMB
8	13.75	n.a.	1.183	0.531	7.61	n.a.	BM
9	15.73	Sulfate	3.973	1.506	21.58	11.810	MB
Total:			40.881	6.980	100.00	30.433	

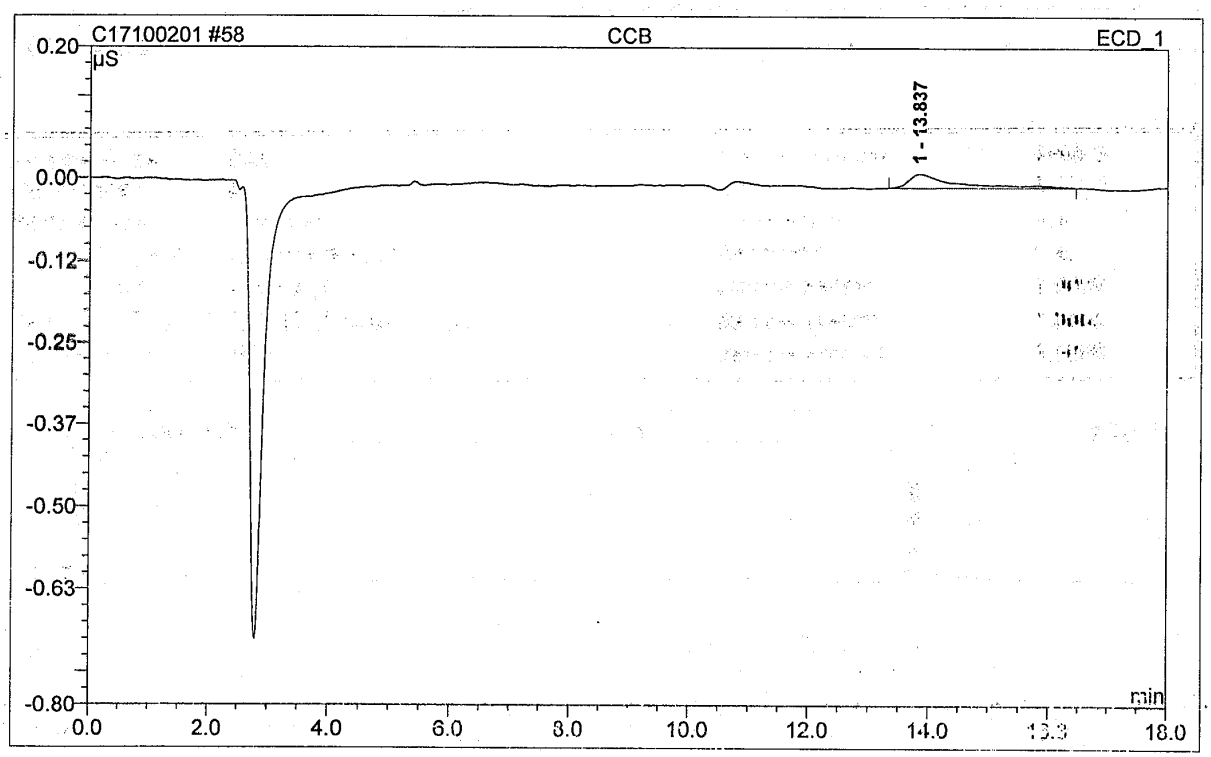
anionssystem3/Integration

Chromeleon (c) Dionex 1996-20
Version 6.80 SR11 Build 3161 (

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

58 CCB

Sample Name:	**CCB**	*Injection Volume:*	**4800.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 7:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**

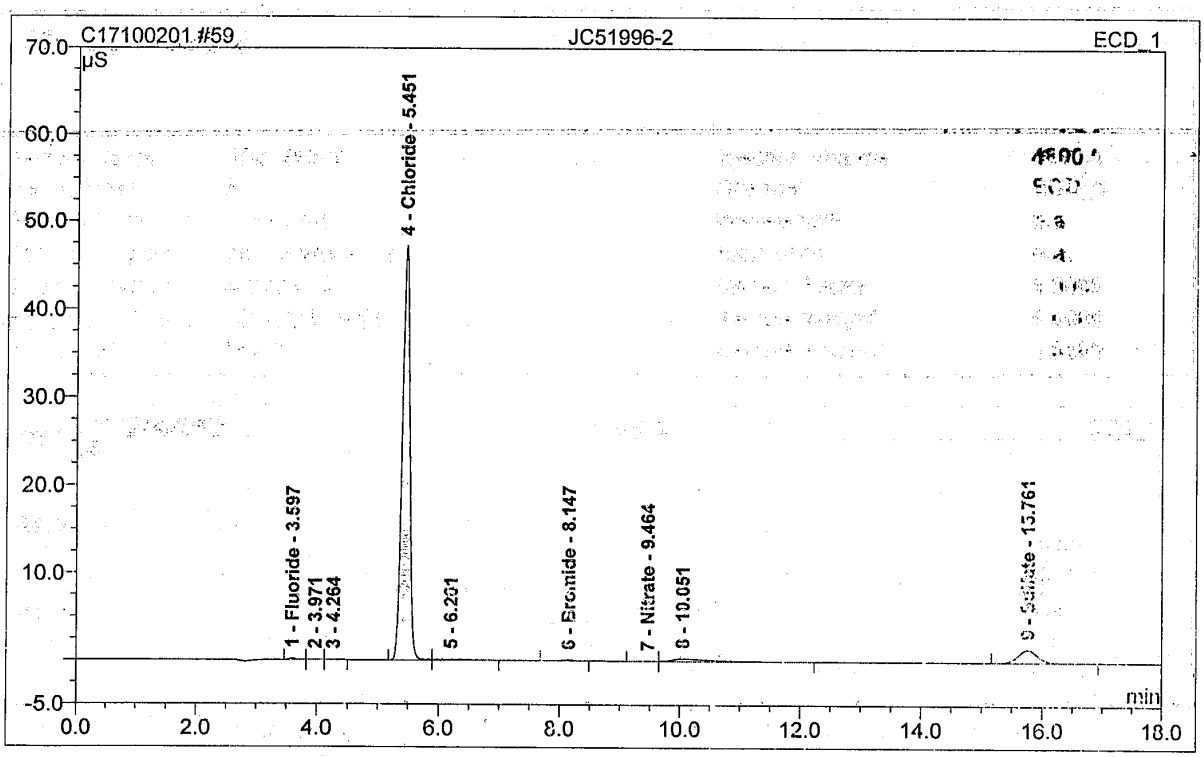


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.84	n.a.	0.021	0.020	100.00	n.a.	BMB
Total:			0.021	0.020	100.00	0.000	

anionssystem3/Integration

59 JC51996-2

Sample Name:	**JC51996-2**	*Injection Volume:*	
Vial Number:	**3**	*Channel:*	
Sample Type:	**unknown**	*Wavelength:*	
Control Program:	**carbonate 4_17**	*Bandwidth:*	
Quantif. Method:	**Anions_C**	*Dilution Factor:*	
Recording Time:	**10/3/2017 8:07**	*Sample Weight:*	
Run Time (min):	**18.00**	*Sample Amount:*	



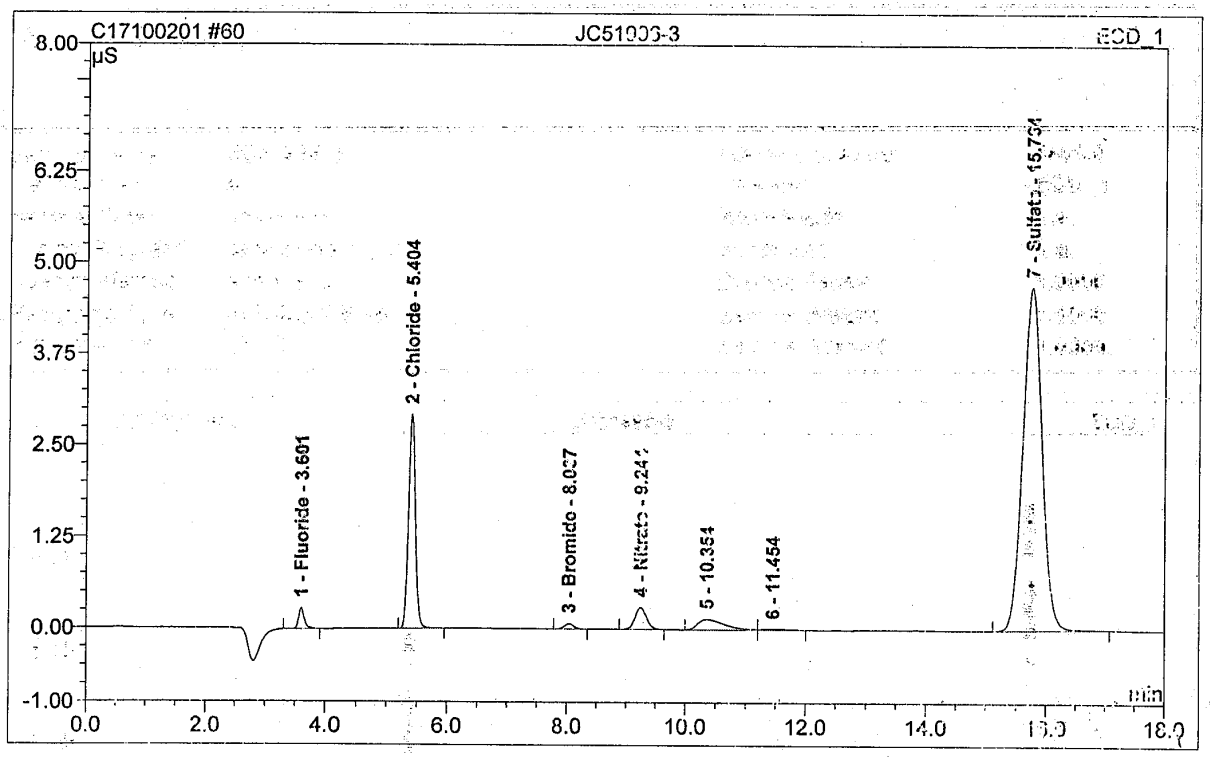
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	0.153	0.017	0.23	0.031	BMB
2	3.97	n.a.	0.025	0.004	0.05	n.a.	bMb
3	4.26	n.a.	0.020	0.003	0.04	n.a.	bMB
4	5.45	Chloride	47.195	6.801	88.49	34.056	BM
5	6.20	n.a.	0.085	0.054	0.70	n.a.	MB
6	8.15	Bromide	0.099	0.019	0.25	0.285	BMB
7	9.46	Nitrate	0.012	0.004	0.05	0.000	BM
8	10.05	n.a.	0.239	0.209	2.72	n.a.	MB
9	15.76	Sulfate	1.500	0.574	7.47	4.591	BMB
Total:			49.389	7.685	100.00	38.912	

anionssystem3/Integration

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

60 JC51996-3

Sample Name:	**JC51996-3**	*Injection Volume:*	**4300.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 8:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



No.	Rel.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.60	Fluoride	0.204	0.032	1.36	0.130	BMB
2	5.40	Chloride	2.923	0.384	16.52	1.922	BMB
3	8.04	Bromide	0.073	0.013	0.53	0.200	BMB
4	9.24	Nitrate	0.207	0.067	2.89	0.157	BMB
5	10.35	n.a.	0.142	0.072	3.09	n.a.	BM
6	11.45	n.a.	0.008	0.004	0.18	n.a.	MB
7	15.76	Sulfate	4.703	1.752	75.39	13.737	BMB
Total:			8.433	2.323	100.00	16.126	

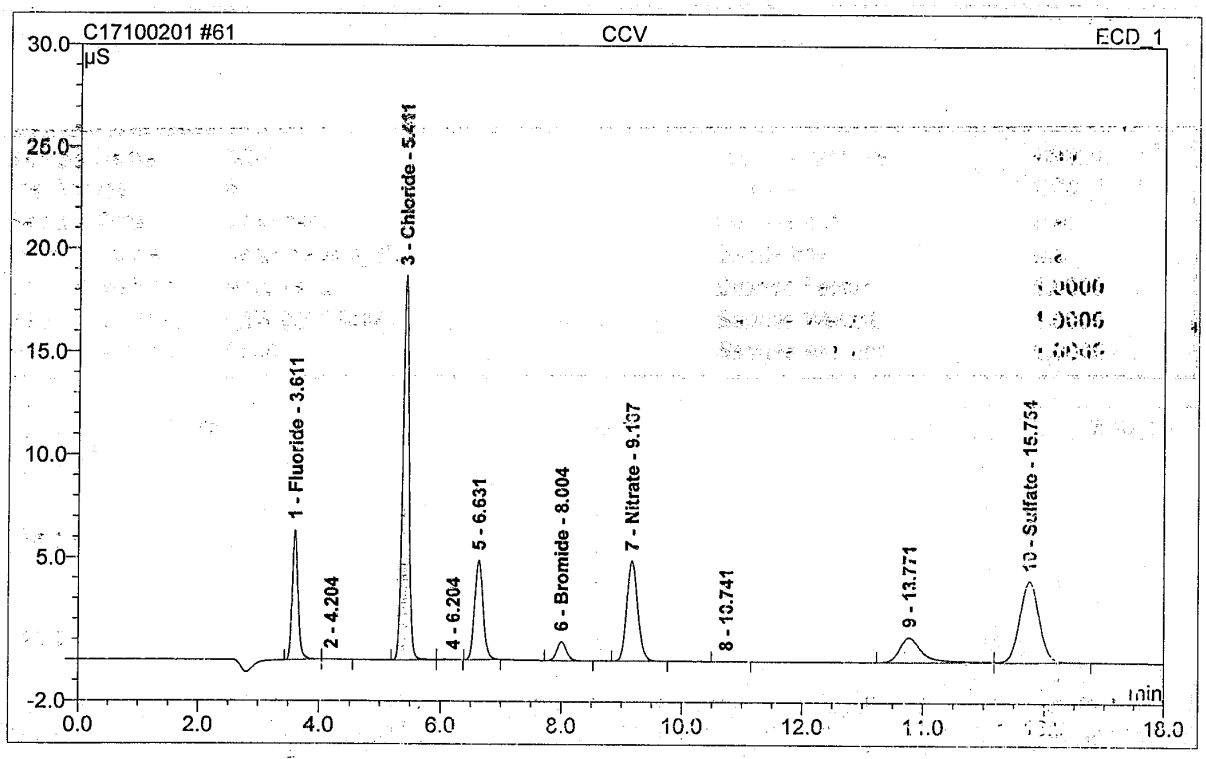
anionssystem3/Integration

Chromeleon (c) Dionex 1996-2
Version 6.80 SR1 [D] Build 3161 (18

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201 Page 67
10/3/2017 10:29 AM

61 CCV

Sample Name:	**CCV**	*Injection Volume:*	**4800.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**carbonate 4_17**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions_C**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/3/2017 8:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.00**	*Sample Amount:*	**1.0000**



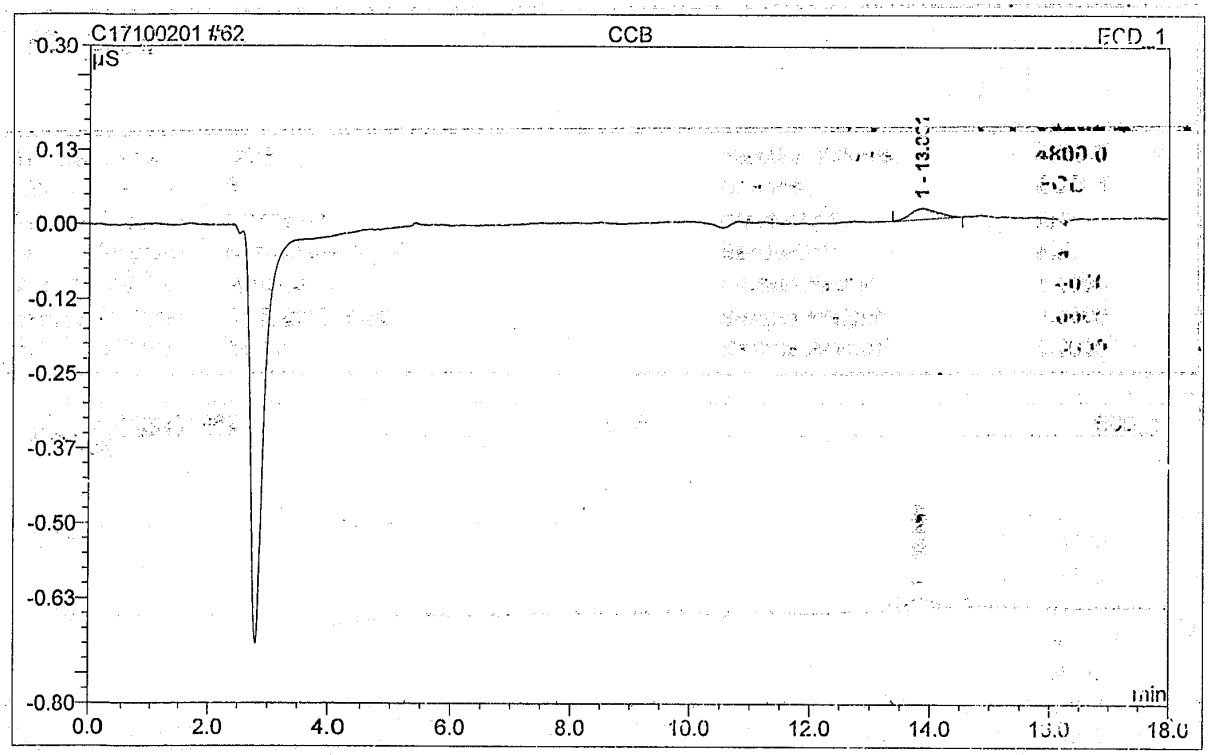
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.61	Fluoride	6.368	0.683	9.87	2.403	BMb
2	4.20	n.a.	0.006	0.001	0.02	n.a.	bMB
3	5.41	Chloride	18.684	2.250	32.26	11.269	BM
4	6.20	n.a.	0.010	0.003	0.05	n.a.	MB
5	6.63	n.a.	4.874	0.794	11.39	n.a.	BMB
6	8.00	Bromide	0.928	0.172	2.47	2.365	BMB
7	9.17	Nitrate	4.908	1.040	14.91	2.436	BMB
8	10.74	n.a.	0.012	0.004	0.06	n.a.	BMB
9	13.77	n.a.	1.202	0.535	7.66	n.a.	BM
10	15.75	Sulfate	3.971	1.487	21.32	11.663	MB
Total:			40.664	6.973	100.00		

anionssystem3/Integration

Operator:Chemistry Timebase:ICS2000 Sequence:C17100201

62 CCB

Sample Name:	**CCB**	*Injection Volume:*	
Vial Number:	**6**	*Channel:*	ECD_1
Sample Type:	**unknown**	*Wavelength:*	n.a.
Control Program:	**carbonate 4_17**	*Bandwidth:*	n.a.
Quantif. Method:	**Anions_C**	*Dilution Factor:*	1.0000
Recording Time:	**10/3/2017 9:10**	*Sample Weight:*	
Run Time (min):	**18.00**	*Sample Amount:*	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.86	n.a.	0.019	0.010	100.00	n.a.	
Total:			0.019	0.010	100.00	0.000	

anionssystem3/Integration

Chromeleon (c) Dionex 1998-2
Version 6.80 SR11 Build 3161 (1

LABORATORY REVIEW SIGNATURE FORM
(To be stored with the raw data)

File ID: E100517W1.NO32 Date Analyzed: 10/05/17 Methods: EPA 353.2 M/LACHAT, EPA 353.2/LACHAT
Analyst: BM Run ID: GN70496

The following analyst(s) have reviewd this run and attest that, to the best of their knowledge, this documentation is complete and correct:

Analyst: BM Date 10/5/17

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

The following supervisor or their designee has reviewed this run and attests that, to the best of their knowledge, this documentation is complete and correct:

Supervisor (or designee): _____ Date 10/5/17

Author: chemistry GN70496 Date : 10/5/2017 e100517w1. NO32

Original Run Filename: OM_10-5-2017_08-56-36AM.OMN Created: 10/5/2017 8:56:36 AM
Original Run Author's Signature: [chemistry]
Current Run Filename: OM_10-5-2017_08-56-36AM.OMN Last Modified: 10/5/2017 11:22:01 AM
Current Run Author's Signature: [chemistry]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 NO32 (mg/L)	Detection Time	MDF	%REC
STDA	1	S1	5.00	10/5/2017@8:57:26 AM		
STDB	1	S2	2.50	10/5/2017@8:58:34 AM		
STDC	1	S3	1.00	10/5/2017@8:59:41 AM		
STDD	1	S4	0.500	10/5/2017@9:00:49 AM		
STDE	1	S5	0.200	10/5/2017@9:01:57 AM		
STDF	1	S6	0.100	10/5/2017@9:03:04 AM		
STDG	1	S7	0.00	10/5/2017@9:04:10 AM		
EFFCHK	1	1	2.03	10/5/2017@9:05:18 AM		101.5%
Known Conc:			2.00			
Calibration:			Table/Fig. : 1			
ICV	1	2	2.04	10/5/2017@9:06:26 AM		102%
Known Conc:			2.00			
ICB	1	3	-0.0597	10/5/2017@9:07:34 AM		
Known Conc:			0.00			
CCV	1	S9	2.72	10/5/2017@9:08:41 AM		108.8%
Known Conc:			2.50			
CCB	1	S10	-0.0637	10/5/2017@9:09:49 AM		
Known Conc:			0.00			
GP8249-MB1	1	4	-0.0390	10/5/2017@9:10:57 AM		
GP8249-B1	1	5	2.12	10/5/2017@9:12:05 AM		106%
GP8249-S1	1	6	2.48	10/5/2017@9:13:12 AM		
GP8249-S2	1	7	1.13	10/5/2017@9:14:20 AM		
GP8249-D1	1	8	1.42	10/5/2017@9:15:27 AM		
JC51764-1	1	9	0.363	10/5/2017@9:16:34 AM		
JC51764-2	1	10	1.44	10/5/2017@9:17:41 AM		
JC51764-3	1	11	0.313	10/5/2017@9:18:48 AM		
JC51764-4	1	12	4.27	10/5/2017@9:19:55 AM		
JC51790-12	1	13	0.457	10/5/2017@9:21:02 AM		
CCV	1	S9	2.74	10/5/2017@9:22:09 AM		109.6%
Known Conc:			2.50			
CCB	1	S10	-0.0620	10/5/2017@9:23:17 AM		
Known Conc:			0.00			
JC51790-13	1	14	1.82	10/5/2017@9:24:24 AM		
JC51790-14	1	15	6.39e-3	10/5/2017@9:25:31 AM		
JC51790-15	1	16	-0.0294	10/5/2017@9:26:38 AM		
JC51790-16	1	17	-0.0264	10/5/2017@9:27:46 AM		
JC51790-17	1	18	-0.0500	10/5/2017@9:28:54 AM		
JC51790-18	1	19	1.19	10/5/2017@9:30:02 AM		
JC51807-1	1	20	-3.19e-3	10/5/2017@9:31:10 AM		
JC51807-7	1	21	6.68e-3	10/5/2017@9:32:17 AM		
JC51859-2	1	22	-0.0293	10/5/2017@9:33:25 AM		
JC51859-4	1	23	-0.0121	10/5/2017@9:34:32 AM		
CCV	1	S9	2.71	10/5/2017@9:35:40 AM		108.4%
Known Conc:			2.50			
CCB	1	S10	-0.0596	10/5/2017@9:36:47 AM		
Known Conc:			0.00			
JC51859-5	1	24	-5.31e-3	10/5/2017@9:37:54 AM		
JC51861-1	1	25	0.137	10/5/2017@9:39:02 AM		
JC51861-2	1	26	-0.0225	10/5/2017@9:40:09 AM		
JC51881-1	1	27	-3.37e-3	10/5/2017@9:41:15 AM		
JC51881-3	1	28	-0.0177	10/5/2017@9:42:22 AM		
GP8250-MB1	1	29	0.0507	10/5/2017@9:43:30 AM		
GP8250-B1	1	30	2.16	10/5/2017@9:44:36 AM		108%
GP8250-S1 (2)	1	31	6.16	10/5/2017@9:45:44 AM		} over range, Lee verun.
GP8250-S2	1	32	6.04	10/5/2017@9:46:52 AM		
GP8250-D1	1	33	5.42	10/5/2017@9:48:00 AM		
CCV	1	S9	2.72	10/5/2017@9:49:07 AM		108.8%
Known Conc:			2.50			
CCB	1	S10	-0.0582	10/5/2017@9:50:14 AM		
Known Conc:			0.00			

Author: chemistry

Date : 10/5/2017

JC51886-19	1	34	2.13	10/5/2017@9:51:22 AM	
JC51886-20	1	35	0.0554	10/5/2017@9:52:30 AM	
JC51891-1 (a)	1	36	8.97	10/5/2017@9:53:38 AM	} Over range, See rerun.
JC51891-2	1	37	7.50	10/5/2017@9:54:45 AM	
JC51891-3	1	38	5.60	10/5/2017@9:55:52 AM	
JC51896-1	1	39	1.22	10/5/2017@9:57:00 AM	
JC51896-2	1	40	-0.0380	10/5/2017@9:58:07 AM	
JC51915-1	1	41	0.199	10/5/2017@9:59:14 AM	
JC51916-1	1	42	0.100	10/5/2017@10:00:20 AM	
JC51917-1	1	43	1.17	10/5/2017@10:01:27 AM	
CCV	1	S9	2.72	10/5/2017@10:02:35 AM	108.8%
	Known Conc:		2.50		
CCB	1	S10	-0.0625	10/5/2017@10:03:42 AM	
	Known Conc:		0.00		
JC51941-6	1	44	1.39	10/5/2017@10:04:49 AM	
JC51942-1	1	45	-0.0672	10/5/2017@10:05:56 AM	
JC51942-2	1	46	-0.0371	10/5/2017@10:07:03 AM	
JC51942-3	1	47	-0.0498	10/5/2017@10:08:12 AM	
JC51942-4	1	48	0.723	10/5/2017@10:09:20 AM	
JC51947-1	1	49	1.39	10/5/2017@10:10:27 AM	
JC51947-2 (2)	1	50	5.50	10/5/2017@10:11:35 AM	over range, See rerun.
JC52004-2	1	51	-0.0507	10/5/2017@10:12:43 AM	
JC51952-6	1	52	-0.0445	10/5/2017@10:13:50 AM	
JC51952-7	1	53	0.0711	10/5/2017@10:14:57 AM	
CCV	1	S9	2.73	10/5/2017@10:16:04 AM	109.2%
	Known Conc:		2.50		
CCB	1	S10	-0.0665	10/5/2017@10:17:12 AM	
	Known Conc:		0.00		
GP8251-MB1	1	54	-0.0452	10/5/2017@10:18:19 AM	
GP8251-B1	1	55	2.09	10/5/2017@10:19:26 AM	104.5%
GP8251-S1	1	56	1.05	10/5/2017@10:20:34 AM	
GP8251-S2	1	57	1.03	10/5/2017@10:21:40 AM	
GP8251-D1	1	58	-0.0604	10/5/2017@10:22:47 AM	
JC51956-1	1	59	0.0341	10/5/2017@10:23:54 AM	
JC51956-2	1	60	-0.0475	10/5/2017@10:25:01 AM	
JC51956-3	1	61	-0.0168	10/5/2017@10:26:09 AM	
JC51970-1	1	62	-8.38e-3	10/5/2017@10:27:17 AM	
JC51970-2	1	63	0.539	10/5/2017@10:28:25 AM	
CCV	1	S9	2.71	10/5/2017@10:29:32 AM	108.4%
	Known Conc:		2.50		
CCB	1	S10	-0.0585	10/5/2017@10:30:40 AM	
	Known Conc:		0.00		
JC51970-3	1	64	1.86	10/5/2017@10:31:48 AM	
JC51971-34	1	65	-0.0255	10/5/2017@10:32:55 AM	
JC51971-35	1	66	4.64e-3	10/5/2017@10:34:03 AM	
JC51983-1	1	67	-0.0743	10/5/2017@10:35:11 AM	
JC51996-1	1	68	0.0542	10/5/2017@10:36:18 AM	
JC51996-2	1	69	-0.0288	10/5/2017@10:37:25 AM	
JC51996-3	1	70	0.107	10/5/2017@10:38:32 AM	
JC52003-1	1	71	-0.0311	10/5/2017@10:39:39 AM	
JC52003-2	1	72	-0.0350	10/5/2017@10:40:46 AM	
JC52003-3	1	73	-0.0316	10/5/2017@10:41:53 AM	
CCV	1	S9	2.73	10/5/2017@10:43:00 AM	109.2%
	Known Conc:		2.50		
CCB	1	S10	-0.0614	10/5/2017@10:44:08 AM	
	Known Conc:		0.00		
JC52003-4	1	74	-0.0510	10/5/2017@10:45:15 AM	
GP8237-MB1	1	75	1.87e-3	10/5/2017@10:46:21 AM	
GP8237-B1	1	76	1.02	10/5/2017@10:47:29 AM	102%
GP8237-S1	1	77	1.05	10/5/2017@10:48:37 AM	
GP8237-D1	1	78	0.0614	10/5/2017@10:49:46 AM	
JC51989-1	1	79	-0.0124	10/5/2017@10:50:53 AM	
JC36252-3	1	80	0.160	10/5/2017@10:52:01 AM	
JC51322-10 (2)	1	81	6.41	10/5/2017@10:53:09 AM	over range, See rerun.
STDGconf	1	S7	-0.0928	10/5/2017@10:54:16 AM	
STDCconf	1	S3	1.09	10/5/2017@10:55:23 AM	
CCV	1	S9	2.72	10/5/2017@10:56:30 AM	108.8%
	Known Conc:		2.50		

Author: chemistry

Date : 10/5/2017

CCB	1	S10	-0.0645	10/5/2017@10:57:38 AM	
	Known Conc:		0.00		
STDBconf	1	S2	2.73	10/5/2017@10:58:45 AM	
STDAconf	1	S1	5.02	10/5/2017@10:59:52 AM	
GP8250-S1	1	82	2.34	10/5/2017@11:00:59 AM	3.00
GP8250-S2	1	83	2.36	10/5/2017@11:02:06 AM	3.00
GP8250-D1	1	84	2.10	10/5/2017@11:03:14 AM	3.00
JC51891-1	1	85	3.16	10/5/2017@11:04:20 AM	5.00
JC51891-1 (7)	1	86	1.53	10/5/2017@11:05:28 AM	10.00
JC51891-2	1	87	3.34	10/5/2017@11:06:35 AM	3.00
JC51891-3	1	88	3.15	10/5/2017@11:07:42 AM	2.00
JC51947-2	1	89	3.23	10/5/2017@11:08:48 AM	2.00
CCV	1	S9	2.73	10/5/2017@11:09:56 AM	
	Known Conc:		2.50		
CCB	1	S10	-0.0649	10/5/2017@11:11:03 AM	
	Known Conc:		0.00		
JC51322-10	1	90	2.52	10/5/2017@11:12:10 AM	3.00
JC51891-2 (7)	1	1	1.94	10/5/2017@11:15:22 AM	6.00
CCV	1	S9	2.72	10/5/2017@11:18:32 AM	
	Known Conc:		2.50		
CCB	1	S10	-0.0649	10/5/2017@11:19:40 AM	
	Known Conc:		0.00		

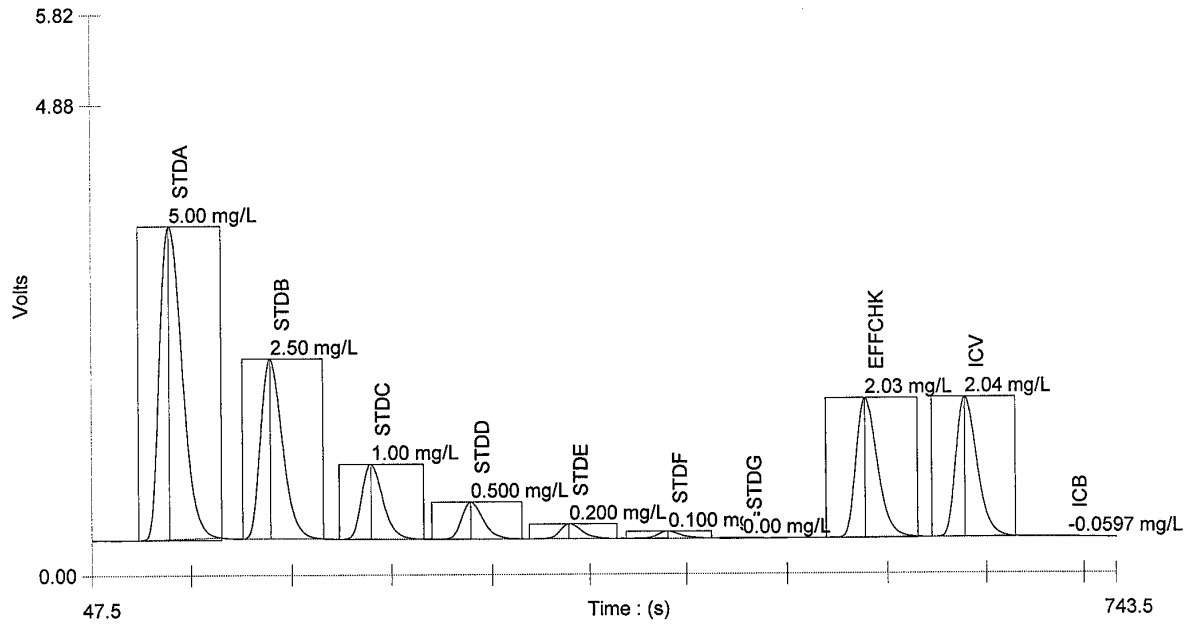
for confirmation only.

109.2-1

for confirmation only.

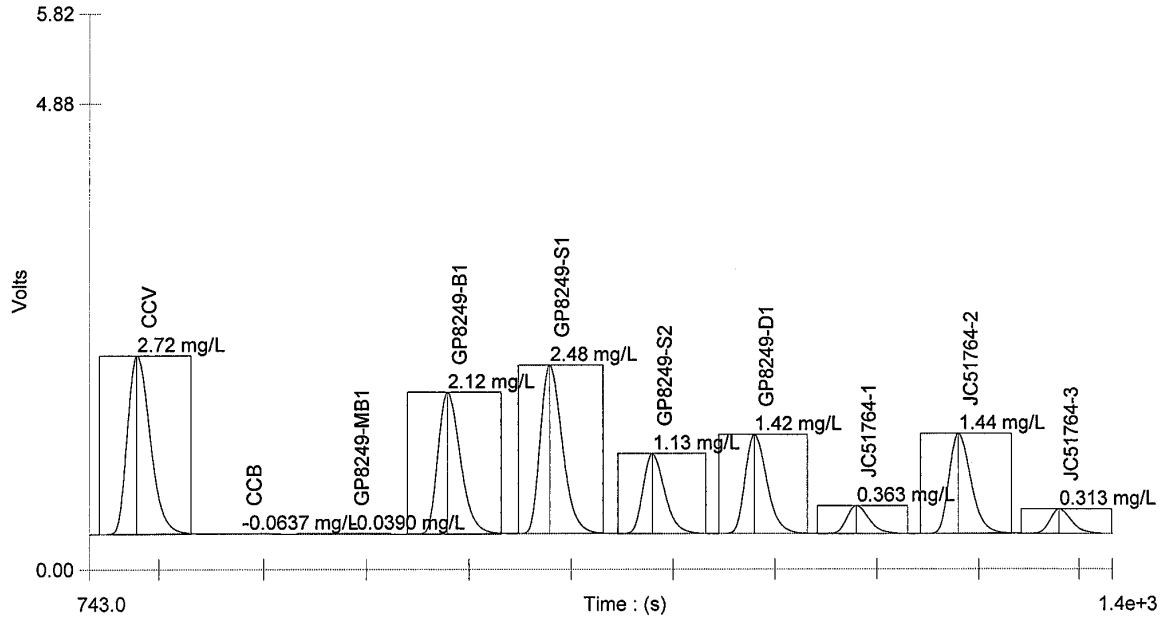
109.8-1

Channel 1 - Set: 1 / 13

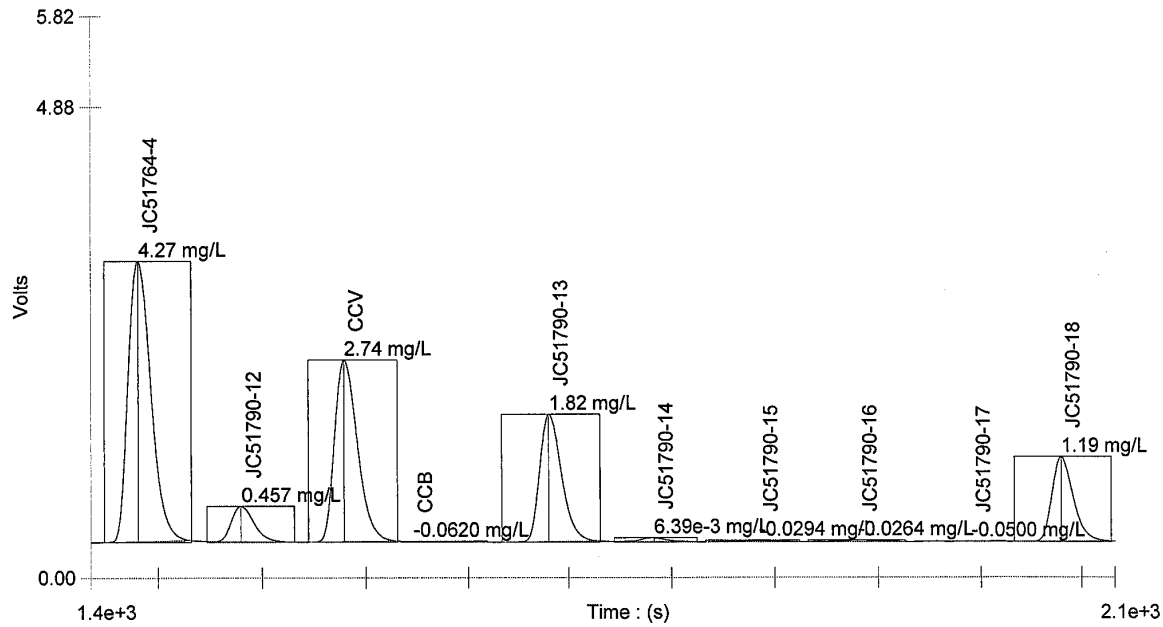


Author: chemistry Date : 10/5/2017

Channel 1 - Set: 2 / 13

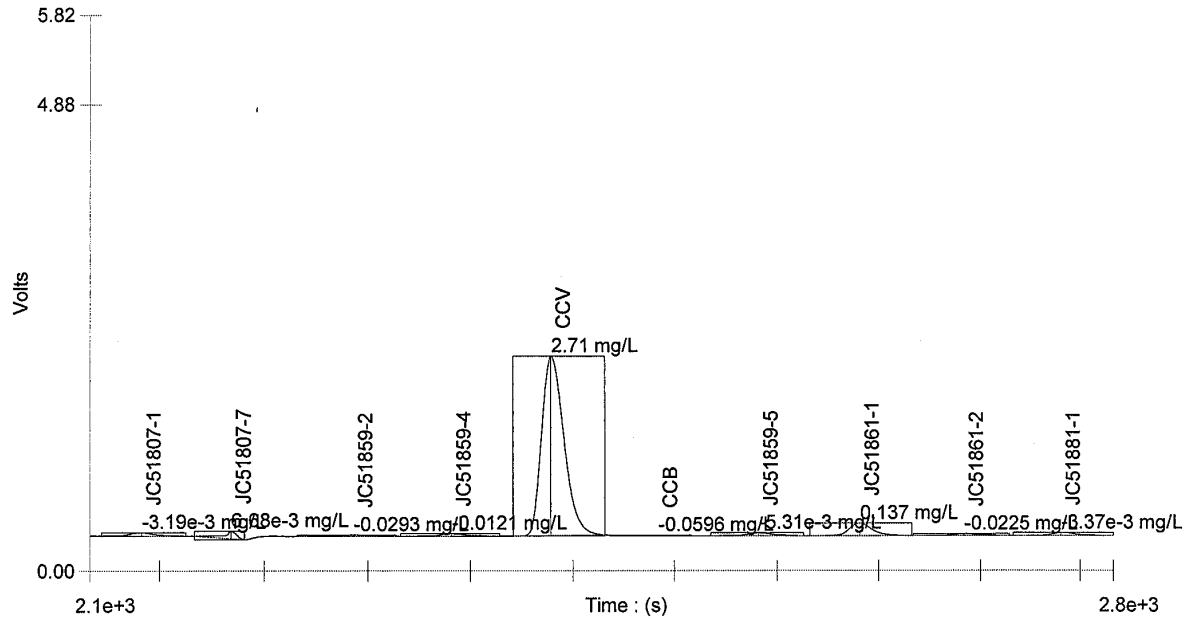


Channel 1 - Set: 3 / 13

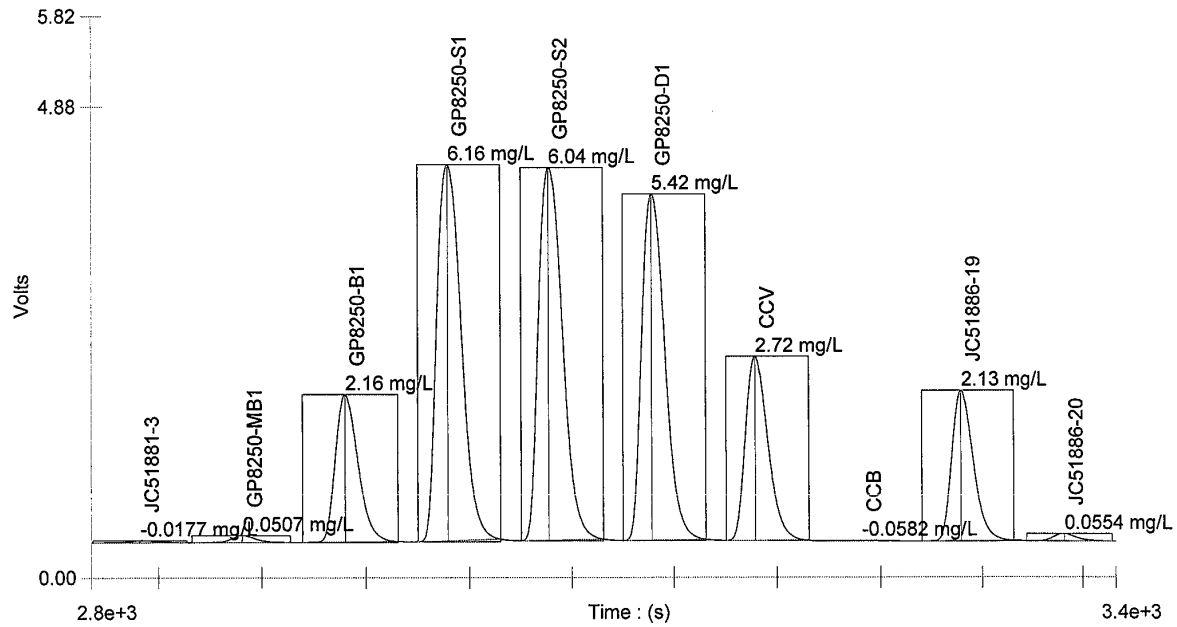


Author: chemistry Date : 10/5/2017

Channel 1 - Set: 4 / 13



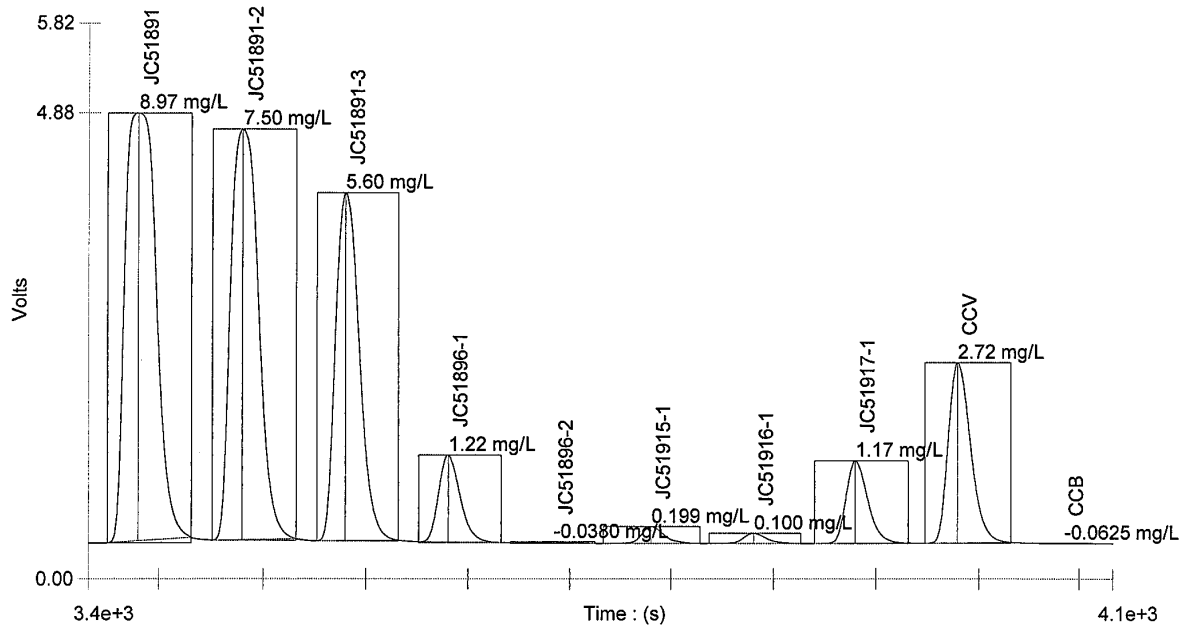
Channel 1 - Set: 5 / 13



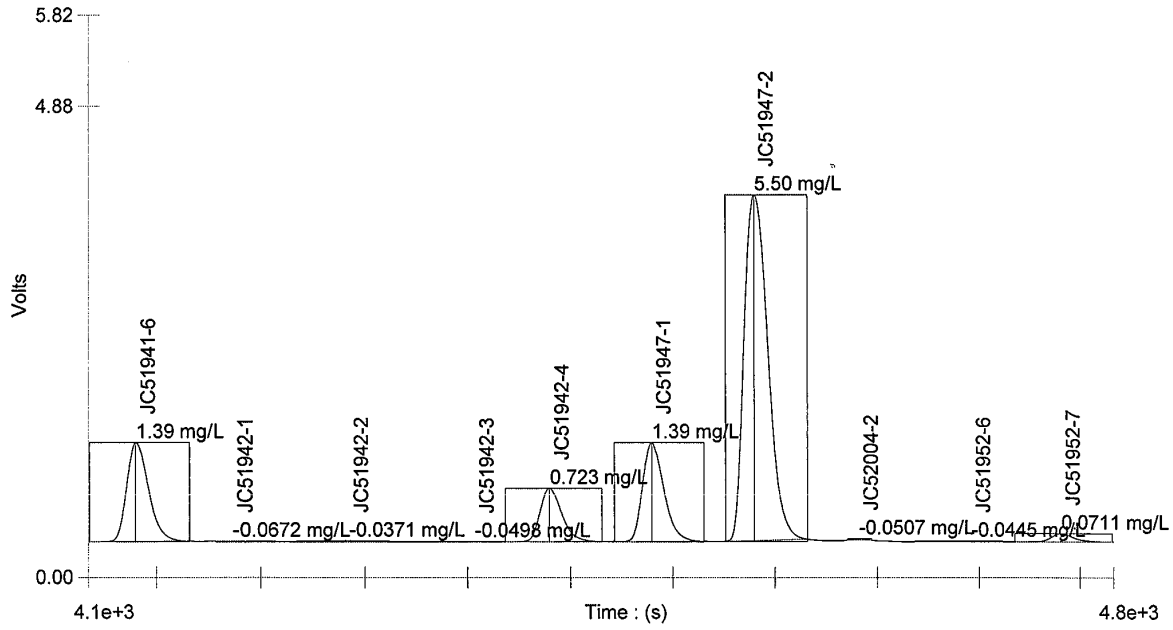
Author: chemistry

Date : 10/5/2017

Channel 1 - Set: 6 / 13



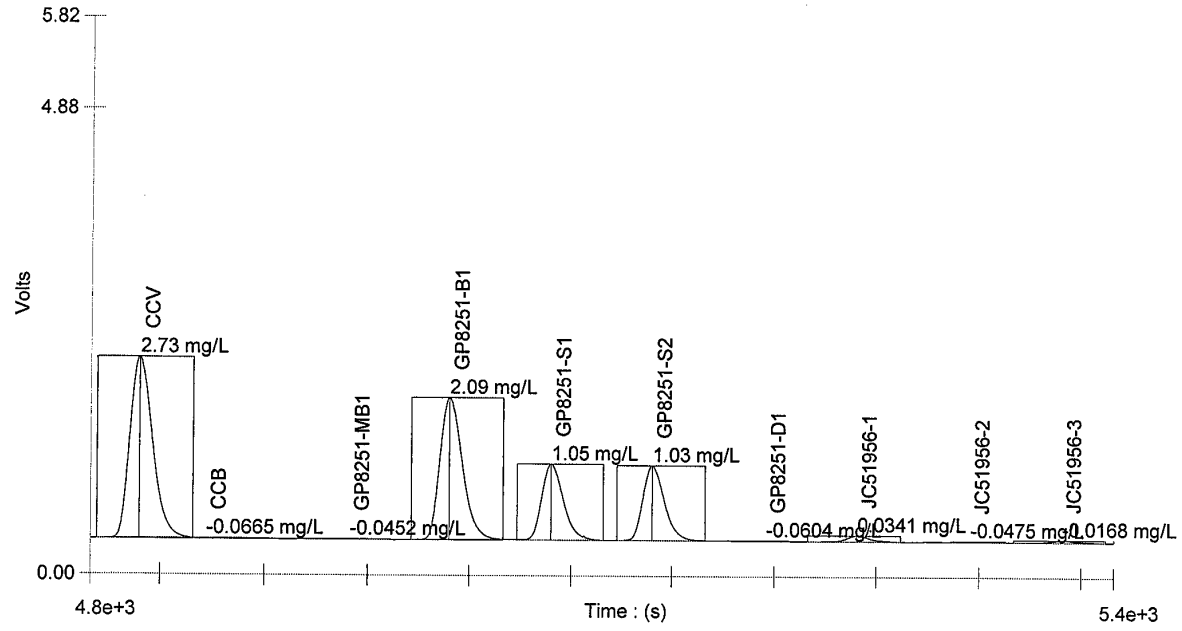
Channel 1 - Set: 7 / 13



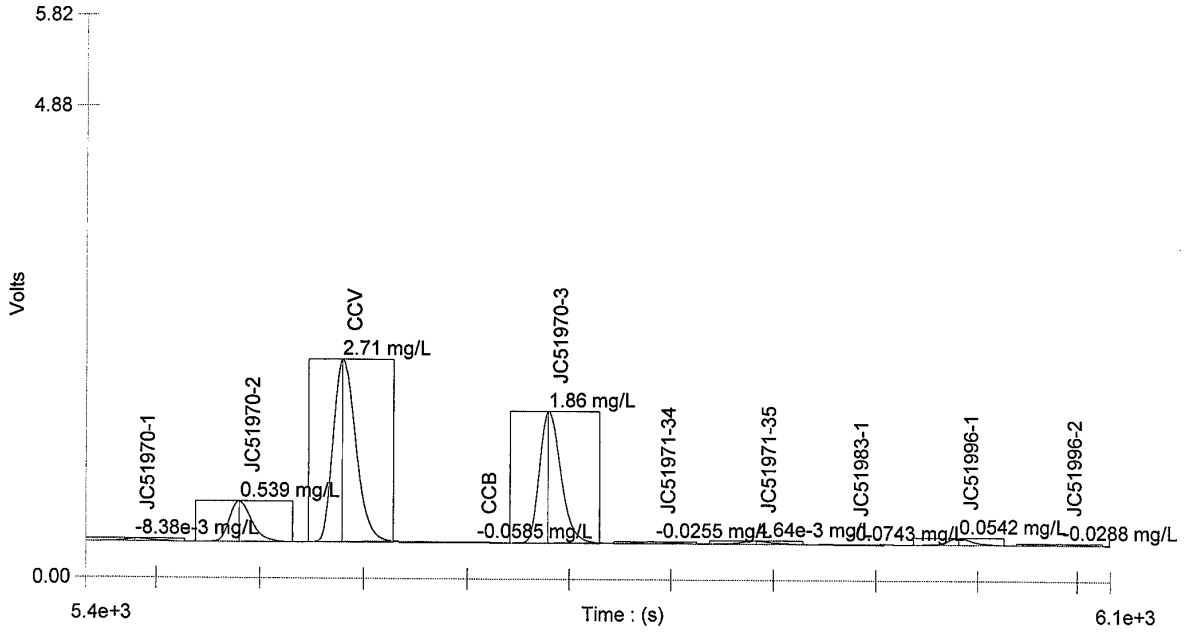
Author: chemistry

Date : 10/5/2017

Channel 1 - Set: 8 / 13

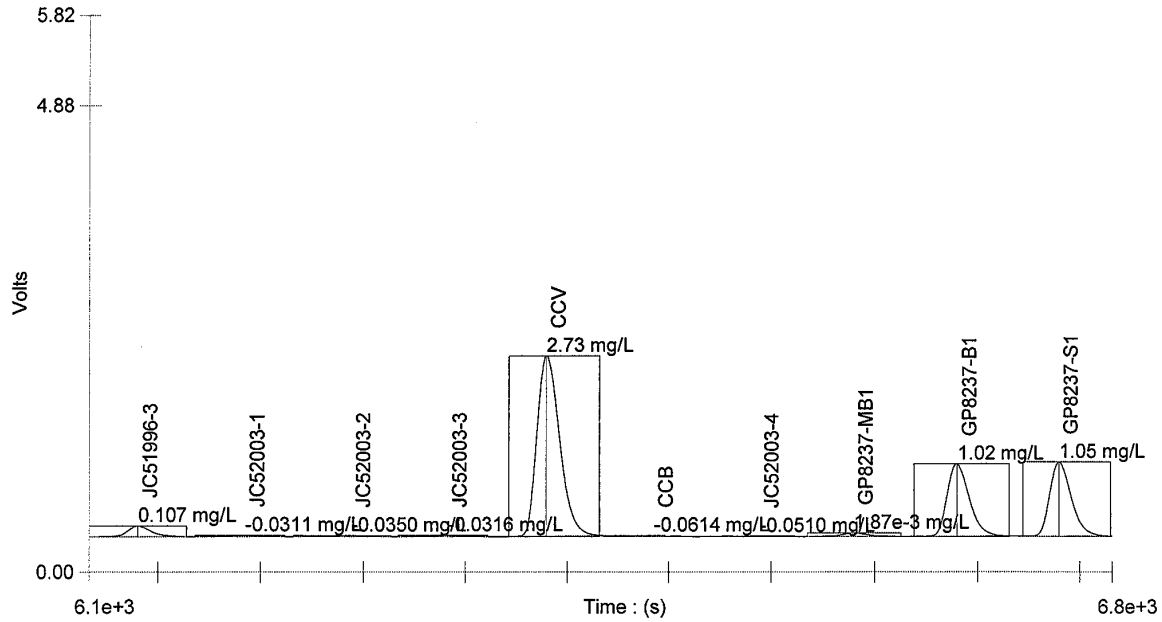


Channel 1 - Set: 9 / 13

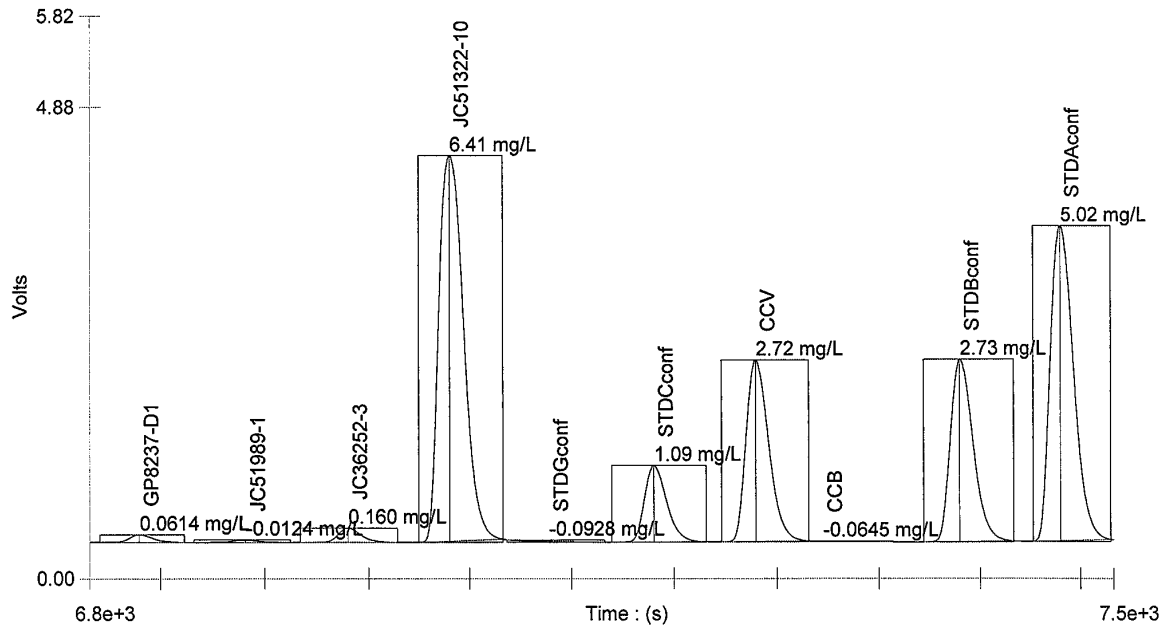


Author: chemistry Date : 10/5/2017

Channel 1 - Set: 10 / 13



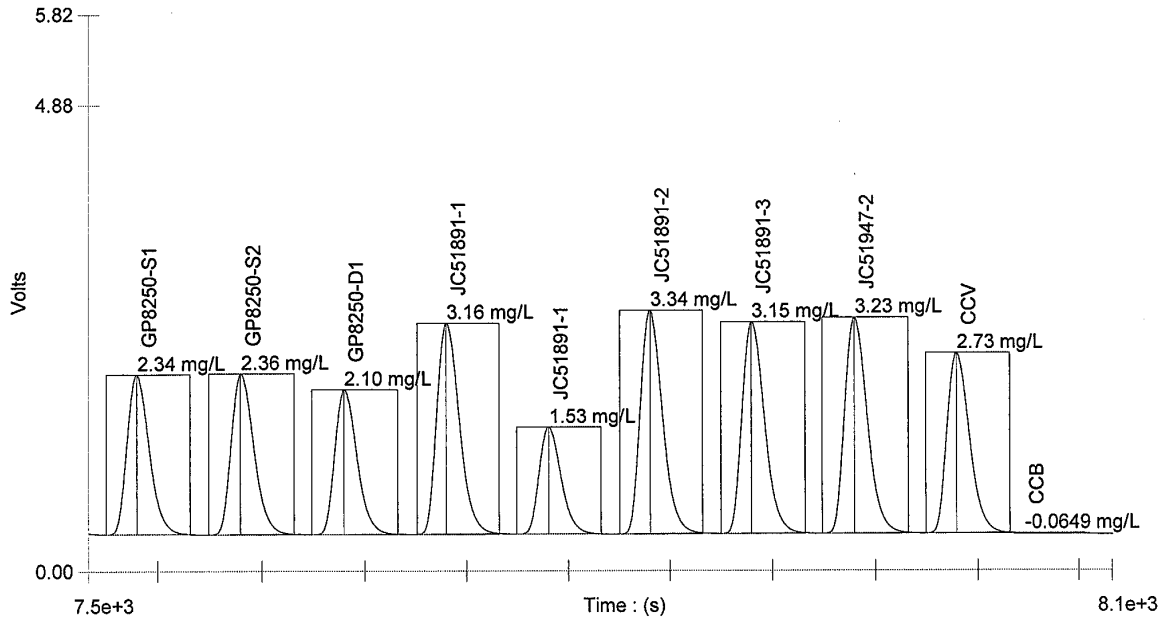
Channel 1 - Set: 11 / 13



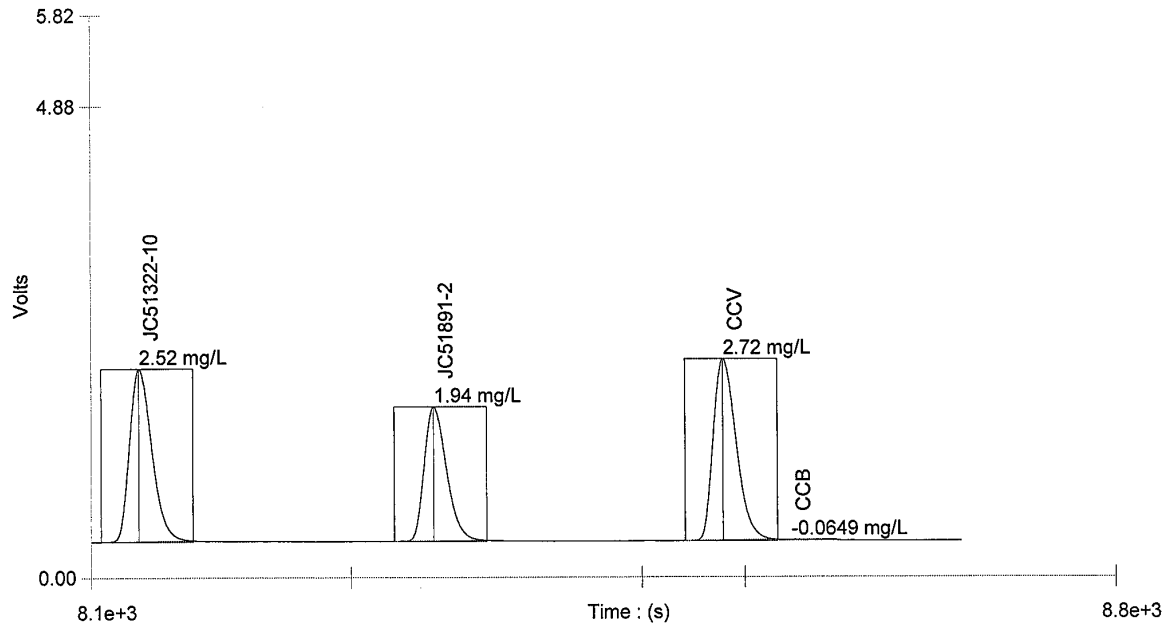
Author: chemistry

Date : 10/5/2017

Channel 1 - Set: 12 / 13



Channel 1 - Set: 13 / 13



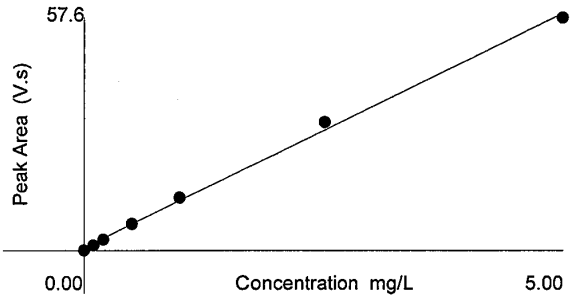
Author: chemistry

Date : 10/5/2017

Table : 1 (NO32)

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	5.00	1	57.6	3.26	0.0	1.9	4.90	10/5/2017	8:57:26 AM
2	2.50	1	31.7	1.88	0.0	-6.6	2.66	10/5/2017	8:58:34 AM
3	1.00	1	13.1	0.785	0.0	-5.8	1.06	10/5/2017	8:59:41 AM
4	0.500	1	6.56	0.390	0.0	-0.3	0.504	10/5/2017	9:00:49 AM
5	0.200	1	2.71	0.158	0.0	11.7	0.172	10/5/2017	9:01:57 AM
6	0.100	1	1.35	0.0760	0.0	29.3	0.0547	10/5/2017	9:03:04 AM
7	0.00	1	0.0754	5.36e-3			-0.0550	10/5/2017	9:04:10 AM

Figure : 1 (NO32)



Area = 11.6 * Conc + 0.750
Conc = 0.0861 * Area - 0.0615
Correlation Coefficient (r) = 0.99882

Weighting : None

SGS ACCUTEST

Analyst: GO

Product: NO32 Soil

Pipette ID: 42

Prep Date: 10-4-17

Balance ID: B-43

Batch ID: GP8237

GN70496

Sample Prep Log

Sample ID	Initial Sample Amount	Final Volume
MB	0.96g	20mL DI H20
BSP	0.95g	
MSI-JC51989-1	0.96g	
Dup - 989-1	1.00g	
989-1	0.95g	
JC36252-3	0.97g	

Reviewer: _____

Date: _____

Form: GN166-04
Revised: 10/27/16

9.3

9

ACCUTEST

Analyst BM Product NO32 Autopipette # 42

Date 10/5/17 Batch ID GN70496 Class A Grad. Cyl.

Sample Dilution Prep Log

Sample ID	Dilution	Initial Volume	Final Volume	Comments
GP8250-S1	1:3	1 mL	3 mL	
GP8250-S2	1:3	1 mL	3 mL	
GP8250-D1	1:3	1 mL	3 mL	
JC51891-1	1:5	1 mL	5 mL	
↓	1:10	1 mL	10 mL	
JC51891-2	1:3	1 mL	3 mL	
JC51891-3	1:2	1 mL	2 mL	
JC51947-2	1:2	2 mL	4 mL	
JC51322-10	1:3	1 mL	3 mL	
JC51891-2	1:6	1 mL	6 mL	
		mL	mL	
		mL	mL	
		mL	mL	
		mL	mL	
		mL	mL	
		mL	mL	
		mL	mL	
		mL	mL	
		mL	mL	
		mL	mL	
		mL	mL	
		mL	mL	
		mL	mL	
		mL	mL	

QC Reviewer: _____ Date: _____

Form: GN165-01
Rev. Date: 2/25/03

GN70496

SGS New Jersey ACCUTEST

SGS Accutest Internal Chain

Track Bottle

Thu Oct 5 09:09:46 EDT 2017

Internal Chain of Custody for User: Beatrice Marcelino (BEATRICE) Print Labels **zebra** Print Labels **zebra3**

Most recent transactions only.

Click the "Back" button to return.

Bottle	Transfer FROM	Transfer TO	Date/Time	Reason	Prep Batch	Seq
JC51281-1.10	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51365-1.5	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51373-1.6	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092906
JC51373-2.12	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51373-3.12	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51373-4.12	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51420-1.5	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51420-2.5	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51420-3.5	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51420-4.5	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51420-5.5	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51420-6.5	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51420-7.5	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51420-8.5	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51420-9.5	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51420-10.5	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51420-11.5	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51420-12.5	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51420-13.5	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51420-14.5	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51420-15.5	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51420-16.5	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51431-1.2	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51431-2.1	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51764-1.1	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51764-2.1	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758

JC51764-3.1	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51764-4.1	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51790-12.2	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51790-13.2	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51790-14.2	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51790-15.4	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51790-16.2	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51790-17.2	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51790-18.2	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51807-1.3	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51807-7.2	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51859-2.7	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51859-4.7	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51859-5.7	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51861-1.1	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51861-2.1	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51881-1.3	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51881-3.3	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51886-19.4	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51886-20.4	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51891-1.2	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51891-2.2	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51891-3.2	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51896-1.2	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51896-2.2	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51915-1.3	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51916-1.3	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51917-1.3	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51941-6.3	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51942-1.3	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51942-2.3	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51942-3.3	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51942-4.3	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51947-1.3	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51947-2.3	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758

JC51952-6.5	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51952-7.4	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51956-1.3	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51956-2.3	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51956-3.2	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51970-1.4	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51970-2.4	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51970-3.4	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51971-34.4	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51971-35.4	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51975-8.3	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51975-10.3	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51975-11.3	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51975-12.3	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51975-13.3	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC51983-1.13	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51989-1.1	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51996-1.7	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51996-2.13	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC51996-3.6	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC52003-1.3	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC52003-2.7	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC52003-3.3	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC52003-4.3	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC52004-2.4	STAGE	Beatrice Marcelino	10/05/17 07:09	Retrieve from Storage		3093758
JC52004-4.7	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC52004-6.1	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907
JC52066-5.2	STAGE	Beatrice Marcelino	10/04/17 09:51	Retrieve from Storage		3092907

89 bottles found; 89 transactions found.

* All Samples are pH adjusted between 5-9 using 1:1 NH4OH *

SGS ACCUTEST

LOD and LOQ Scheduling

LOD Sample ID:

Product:		**Matrix:**	
LOD Concentration:		**Units:**	
LOD Prep:			
Manufacturer/Lot:		**Expiration Date:**	
GN ID:		**Analysis Date:**	
Result/Units:		**Recovery:**	
Within range of 50 to 150%? **			

LOQ (RL) Sample ID: JC36252-3

Product:	NO32	**Matrix:**	SOIL
LOQ Concentration:	20	**Units:**	MG/KG
LOQ Prep:	4mL OF 10ppm NO32 STD FILLED UP TO 200mL DI H2O		
	10ppm = 10mL OF 100ppm NO32 STD FILLED UP TO 100mL DI H2O		
Manufacturer/Lot:	GNE9-52345-NO32	**Expiration Date:**	10-28-17
GN ID:	GN70496	**Analysis Date:**	10/5/17
Result/Units:	0.160	**Recovery:**	80%
Within range of 70 to 130%? **	YES		

* if outside of range, notify supervisory team immediately to reschedule

Analyst: BM Date: 10/5/17

QC Review: Date:

Form: GN271-01
Rev. Date: 09/13/11

SGS ACCUTEST JC51891

SGS ACCUTEST

Analyst: BM

Product: NO32

Pipette ID: 42

Prep Date: 10/5/17

Balance ID: N/A

Batch ID: GN70496

Sample Prep Log

Sample ID	Initial Sample / Spike Amount	Final Volume
GP82149 - B1	2ml of 100ppm NO32 STD	100 ml of Carrier
GP8250 - B1	↓	↓
GP8251 - B1	↓	↓
GP82149 - S1	0.5 ml of 100ppm NO32 STD	50 ml of JC51764-2
↓ -S2	↓	JC51861-2
GP8250 - S1		JC51891-3
↓ -S2		JC51947-2
GP8251 - S1		JC51956-2
↓ -S2	↓	JC52003-2

Reviewer: _____

Date: _____

Form: GN166-04
Revised: 10/27/16

ACCUTEST

GN70496

Reagent Information Log - Nitrate Lachat Autoanalyzer

Reagent	Reagent # or Manufacturer/Lot	Expiration Date
Nitrate Stock Solution	GNE9-52318-NO32	3/26/2018
Ammonium Chloride Buffer Solution	GNE9-52320-NO3	3/26/2018
Sulfanilamide Color Reagent	GNE9-52175-NO3	10/8/2017
1:1 NH4OH	GNE4-50620-NO3	10/17/2017
Carrier Solution	GNE5-51042-NO3	11/23/2017
	GNE6-51447-NO3	12/30/2017
1000 ppm Nitrite Solution	GNE9-52317-NO32	3/26/2018
Nitrate External Stock Solution	GNE9-52319-NO32	3/26/2018

Reason codes for data corrections: 1-reviewer error correction: 2-transcription error; 3-computer error; 4-analyst error

Form: GN087A-43
Rev. Date: 7/19/06

LABORATORY REVIEW SIGNATURE FORM
(To be stored with the raw data)

File ID: E71009W1.TXT Date Analyzed: 10/09/17 Methods: SM5310 B-11
Analyst: CD Run ID: GN70666

The following analyst(s) have reviewd this run and attest that, to the best of their knowledge, this documentation is complete and correct:

Analyst: CZD Date 10/10/17

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

The following supervisor or their designee has reviewed this run and attests that, to the best of their knowledge, this documentation is complete and correct:

Supervisor (or designee): _____ Date 10/10/17

SGS Accutest Instrument Runlog
Inorganics Analyses

Preliminary Analytical QC Report
Oct 09 2017, 02:13 pm

File ID: E71009W1.TXT
Analyst: CD
Parameters: Total Organic Carbon

Date Analyzed: 10/09/17
Run ID: GN70666

Methods: SM5310 B-11

Time	Sample Description	Dilution Factor	PS Recov	Comments
07:19	ZZZZZZ	1		
08:24	GN70666-CRI1	1		
08:36	GN70666-HSTD1	1		
08:47	GN70666-ICV1	1		
08:57	GN70666-ICB1	1		
09:09	GN70666-CCV1	1		
09:19	GN70666-CCB1	1		
09:30	ZZZZZZ	1		
09:41	GP8345-MB1	1		
09:54	GP8345-B1	1		
10:40	JC52589-1	1		average of 3 injections
10:52	JC52584-1	1		
11:03	JC52688-1	1		average of 3 injections
11:15	GP8345-S1	1		
11:26	GP8345-MSD1	1		
11:36	JC52411-1	1		
11:47	JC52411-2	1		
11:59	GN70666-CCVA1	1		
12:12	GN70666-CCB2	1		
12:21	JC52411-3	1		
12:32	JC52411-4	1		
12:43	JC52411-5	1		
12:54	JC52411-6	1		
13:05	JC52411-7	1		
13:18	GN70666-CCV2	1		
13:30	GN70666-CCB3	1		
13:39	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

LABORATORY REVIEW SIGNATURE FORM
(To be stored with the raw data)

File ID: E71009W1.TXT
Analyst: CD

Date Analyzed: 10/09/17
Run ID: GN70666

Methods: SM5310 B-11

The following analyst(s) have reviewd this run and attest that, to the best of their knowledge, this documentation is complete and correct:

Analyst: CZD Date 10/9/17

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

The following supervisor or their designee has reviewed this run and attests that, to the best of their knowledge, this documentation is complete and correct:

Supervisor (or designee): _____ Date 10/9/17

C:\TOC-L\Data\e71009w1.toc.tlx

	Type	Sample Nam	Sample ID	Origin	Manual Diluti	Result	Comment	Status
1	Unknown	WASHCONF		TOCAQ.met	1.000	NPOC:0.2964mg/L		Completed
2	Unknown	CRI		TOCAQ.met	1.000	NPOC:1.248mg/L		Completed
3	Unknown	HSTD		TOCAQ.met	1.000	NPOC:47.45mg/L		Completed
4	Unknown	ICV		TOCAQ.met	1.000	NPOC:19.22mg/L		Completed
5	Unknown	ICB		TOCAQ.met	1.000	NPOC:0.2865mg/L		Completed
6	Unknown	CCV		TOCAQ.met	1.000	NPOC:23.58mg/L		Completed
7	Unknown	CCB		TOCAQ.met	1.000	NPOC:0.4027mg/L		Completed
8	Unknown	SPARGERC		TOCAQ.met	1.000	NPOC:0.2320mg/L		Completed
9	Unknown	GP8345-MB	TOC	TOCAQ.met	1.000	NPOC:0.2372mg/L		Completed
10	Unknown	GP8345-B1		TOCAQ.met	1.000	NPOC:9.937mg/L		Completed
11	Unknown	JC52589-1 (A)		TOCAQ.met	1.000	NPOC:0.9432mg/L	average 3	Completed
12	Unknown	JC52584-1		TOCAQ.met	1.000	NPOC:9.385mg/L		Completed
13	Unknown	JC52688-1		TOCAQ.met	1.000	NPOC:1.258mg/L	average 3	Completed
14	Unknown	GP8345-S1	JC52688-1	TOCAQ.met	1.000	NPOC:11.22mg/L		Completed
15	Unknown	GP8345-MS	JC52688-1	TOCAQ.met	1.000	NPOC:11.31mg/L		Completed
16	Unknown	JC52411-1		TOCAQ.met	1.000	NPOC:2.276mg/L		Completed
17	Unknown	JC52411-2		TOCAQ.met	1.000	NPOC:1.738mg/L		Completed
18	Unknown	CCVA		TOCAQ.met	1.000	NPOC:47.46mg/L		Completed
19	Unknown	CCB		TOCAQ.met	1.000	NPOC:0.5154mg/L		Completed
20	Unknown	JC52411-3 (A)		TOCAQ.met	1.000	NPOC:1.441mg/L		Completed
21	Unknown	JC52411-4		TOCAQ.met	1.000	NPOC:1.245mg/L		Completed
22	Unknown	JC52411-5		TOCAQ.met	1.000	NPOC:2.857mg/L		Completed
23	Unknown	JC52411-6		TOCAQ.met	1.000	NPOC:2.796mg/L		Completed
24	Unknown	JC52411-7		TOCAQ.met	1.000	NPOC:3.138mg/L		Completed
25	Unknown	CCV		TOCAQ.met	1.000	NPOC:23.52mg/L		Completed
26	Unknown	CCB		TOCAQ.met	1.000	NPOC:0.3184mg/L		Completed
27	Unknown	SPARGERC		TOCAQ.met	1.000	NPOC:0.2474mg/L		Completed

e71009w1.toC
CZD 10/9/17

9.4 9

C:\TOC-L\Data\e71009w2.toc.tlx

	Type	Sample Nam	Sample ID	Origin	Manual Diluti	Result	Comment	Status
1	Unknown	GP8297-MB	TOC	TOCAQ.met	1.000	NPOC:0.3510mg/L		Completed
2	Unknown	GP8297-B2		TOCAQ.met	1.000	NPOC:9.917mg/L		Completed
3	Unknown	FA48089-2		TOCAQ.met	10.00	NPOC:188.6mg/L		Completed
4	Unknown	GP8297-S1	FA48089-2	TOCAQ.met	20.00	NPOC:473.7mg/L		Completed
5	Unknown	GP8297-MS	FA48089-2	TOCAQ.met	20.00	NPOC:479.6mg/L		Completed
6	Unknown	FA48089-3		TOCAQ.met	10.00	NPOC:255.7mg/L		Completed
7	Unknown	FA48089-6		TOCAQ.met	10.00	NPOC:262.6mg/L		Completed
8	Unknown	CCVA		TOCAQ.met	1.000	NPOC:47.05mg/L		Completed
9	Unknown	CCB		TOCAQ.met	1.000	NPOC:0.3253mg/L		Completed
10	Unknown	GP8282-MB	DOC	TOCAQ.met	1.000	NPOC:0.2325mg/L		Completed
11	Unknown	GP8282-B1		TOCAQ.met	1.000	NPOC:9.919mg/L		Completed
12	Unknown	JC51891-1F		TOCAQ.met	1.000	NPOC:1.503mg/L	average3	Completed
13	Unknown	JC51891-2F		TOCAQ.met	1.000	NPOC:1.407mg/L		Completed
14	Unknown	JC51891-3F		TOCAQ.met	1.000	NPOC:1.417mg/L		Completed
15	Unknown	JC51896-1F		TOCAQ.met	1.000	NPOC:8.321mg/L	average3	Completed
16	Unknown	GP8282-S1	JC51896-1F	TOCAQ.met	1.000	NPOC:18.80mg/L		Completed
17	Unknown	GP8282-MS	JC51896-1F	TOCAQ.met	1.000	NPOC:18.04mg/L		Completed
18	Unknown	JC51896-2F		TOCAQ.met	1.000	NPOC:2.216mg/L		Completed
19	Unknown	JC51896-3F		TOCAQ.met	1.000	NPOC:10.56mg/L		Completed
20	Unknown	CCV		TOCAQ.met	1.000	NPOC:23.32mg/L		Completed
21	Unknown	CCB		TOCAQ.met	1.000	NPOC:0.3830mg/L		Completed
22	Unknown	GP8283-MB	DOC	TOCAQ.met	1.000	NPOC:0.4021mg/L		Completed
23	Unknown	GP8283-B1		TOCAQ.met	1.000	NPOC:9.762mg/L		Completed
24	Unknown	JC52411-1F		TOCAQ.met	1.000	NPOC:1.553mg/L	average3	Completed
25	Unknown	JC52411-2F		TOCAQ.met	1.000	NPOC:1.570mg/L		Completed
26	Unknown	JC52411-3F		TOCAQ.met	1.000	NPOC:1.365mg/L		Completed
27	Unknown	GP8283-S1	JC52411-3F	TOCAQ.met	1.000	NPOC:11.45mg/L		Completed
28	Unknown	GP8283-MS	JC52411-3F	TOCAQ.met	1.000	NPOC:11.74mg/L		Completed
29	Unknown	JC52411-4F		TOCAQ.met	1.000	NPOC:1.647mg/L	average3	Completed
30	Unknown	JC52411-5F		TOCAQ.met	1.000	NPOC:3.058mg/L		Completed
31	Unknown	JC52411-6F		TOCAQ.met	1.000	NPOC:3.132mg/L		Completed
32	Unknown	CCVA		TOCAQ.met	1.000	NPOC:45.89mg/L	average3	Completed
33	Unknown	CCB		TOCAQ.met	1.000	NPOC:0.3353mg/L		Completed
34	Unknown	JC52411-7F		TOCAQ.met	1.000	NPOC:3.090mg/L		Completed
35	Unknown	GP8348-MB	TOC	TOCAQ.met	1.000	NPOC:0.2575mg/L		Completed
36	Unknown	GP8348-B1		TOCAQ.met	1.000	NPOC:9.718mg/L	average3	Completed
37	Unknown	JC52422-1		TOCAQ.met	1.000	NPOC:5.499mg/L		Completed
38	Unknown	JC52422-2		TOCAQ.met	1.000	NPOC:192.1mg/L	1:10	Completed
39	Unknown	JC52422-3		TOCAQ.met	1.000	NPOC:6.234mg/L		Completed
40	Unknown	JC52422-5		TOCAQ.met	1.000	NPOC:140.8mg/L	1:10	Completed
41	Unknown	JC52422-6		TOCAQ.met	1.000	NPOC:54.44mg/L	1:2	Completed
42	Unknown	JC52422-7		TOCAQ.met	1.000	NPOC:534.4mg/L	1:20	Completed
43	Unknown	JC52422-9		TOCAQ.met	1.000	NPOC:19.17mg/L		Completed
44	Unknown	CCV		TOCAQ.met	1.000	NPOC:23.77mg/L		Completed
45	Unknown	CCB		TOCAQ.met	1.000	NPOC:0.3759mg/L		Completed
46	Unknown	JC52633-1		TOCAQ.met	1.000	NPOC:77.49mg/L	1:3	Completed
47	Unknown	JC52633-2		TOCAQ.met	1.000	NPOC:15.95mg/L		Completed
48	Unknown	GP8348-S1	JC52633-2	TOCAQ.met	1.000	NPOC:24.96mg/L		Completed
49	Unknown	GP8348-MS	JC52633-2	TOCAQ.met	1.000	NPOC:24.48mg/L	average3	Completed
50	Unknown	JC52633-4		TOCAQ.met	1.000	NPOC:1.194mg/L		Completed
51	Unknown	CCVA		TOCAQ.met	1.000	NPOC:46.14mg/L	average3	Completed

10/10/2017 6:26:03 AM GN70666 e71009w2.toC 1/4

C:\TOC-L\Data\e71009w2.toc.tlx

	Type	Sample Nam	Sample ID	Origin	Manual Diluti	Result	Comment	Status
52	Unknown	CCB		TOCAQ.met	1.000	NPOC:0.3368mg/L		Completed
53	Unknown	SPARGERC		TOCAQ.met	1.000	NPOC:0.2122mg/L		Completed

GN70666 e71009w2.toc
CCD 10/10/17

9.4

9

ACCUTEST LABORATORIES

GN Batch ID: GN70666
Date: 10/9/17

Test: **Total Organic Carbon**

Product: **TOC or DOC**

Method: **SM5310 B, C, or D-11, SW846 9060M**

Note: Refer to raw data and LIMS for information not shown below.

Autosampler Position #	Sample ID	pH	Diluton Factor	Bottle #	Comments
1	WASHCONF	<2			
2	CRI				
3	HSTD				
4	ICV				
5	ICB				
6	CCV				
7	CCB				
8	SPARGERCHK				
9	GP8345 MBI	TOC			
10	GP8345 BI				
11	JC52589-1			1	
12	JC52584-1			4	
13	JC52688-1			1	
14	GP8345 SI			1	JC52688-1
15	GP8345 MSDI			1	JC52688-1
16	JC52411-1			11	
17	JC52411-2			11	
18	CCVA				
19	CCB				
20	JC52411-3			11	
21	JC52411-4			11	
22	JC52411-5			11	
23	JC52411-6			11	
24	JC52411-7			11	
25	CCV				
26	CCB				
27	SPARGERCHK	✓			

Analyst: CZD Date: 10/9/17 QCReviewer: _____ Date: _____

Comments: BSP: 100ul of 1000ppm KHP → 50mL of DI H_2O TV= 10 mg/L

MS/MSD: 50ul of 1000ppm KHP → 5mL of sample TV= 10 mg/L

ICV: 5mL of 100ppm sucrose → 25mL of DI H_2O TV=20 mg/L

Form: GN054-02

Rev. Date: 06/25/13

ACCUTEST LABORATORIES

GN Batch ID: GN70666
Date: 10/19/17

Test: **Total Organic Carbon**

Product: **TOC or DOC**

Method: **SM5310 B, C, or D-11, SW846 9060M**

Note: Refer to raw data and LIMS for information not shown below.

Autosampler Position #	Sample ID	pH	Diluton Factor	Bottle #	Comments
28	GP8297-MB2	TOC <2			
29	GP8297-B2				
30	FA48089-2		1:10	3	
31	GP8297-S1		1:20	3	FA48089-2
32	GP8297-MSD1		1:20	3	FA48089-2
33	FA48089-3		1:10	1	
34	FA48089-6		1:10	2	
35	CCVA				
36	CCB				
37	GP8282-MB1	DOC			
38	GP8282-B1				
39	JC51891-1F			4	
40	JC51891-2F			3	
41	JC51891-3F			3	
42	JC51896-1F			6	
43	GP8282-S1			6	JC51896-1F
44	GP8282-MSD1			6	JC51896-1F
45	JC51896-2F			6	
46	JC51896-3F			7	
47	CCV				
48	CCB				
49	GP8283-MB1	DOC			
50	GP8283-B1				
51	JC52411-1F			12	
52	JC52411-2F			12	
53	JC52411-3F			12	
54	GP8283-S1	↓		12	JC52411-3F

Analyst: CLO Date: 10/19/17 QCReviewer: _____ Date: _____

Comments: _____

Form: GN054-02
Rev. Date: 06/25/13

ACCUTEST LABORATORIES

GN Batch ID: GN70666
Date: 10/9/17

Test: **Total Organic Carbon**

Product: **TOC or DOC**

Method: **SM5310 B, C, or D-11, SW846 9060M**

Note: Refer to raw data and LIMS for information not shown below.

Autosampler Position #	Sample ID	pH	Diluton Factor	Bottle #	Comments
55	GP8283-MSD1	<2		12	JC52411-3F
56	JC52411-4F			12	
57	JC52411-5F			12	
58	JC52411-6F			12	
59	CCVA				
60	CCB				
61	JC52411-7F			12	
62	GP8348 MB1	TOC			
63	GP8348 B1				
64	JC52422-1			1	
65	JC52422-2			1	
66	JC52422-3			4	
67	JC52422-5			10	
68	JC52422-6			10	
69	JC52422-7			10	
70	JC52422-9			10	
71	CCV				
72	CCB				
1	JC52633-1			2	
2	JC52633-2			1	
3	GP8348 S1			1	JC52633-2
4	GP8348 MSD1			1	JC52633-2
5	JC52633-4			1	
6	CCVA				
7	CCB				
8	SPARGERCHK				

Analyst: CAO Date: 10/9/17 QCReviewer: _____ Date: _____

Comments:

Form: GN054-02
Rev. Date: 06/25/13

SGS

Analyst: CLD Product: TOC

Date: 10/9/17 Batch ID: GN70666

Auto-pipette ID: Class A

Sample Dilution Prep Log

Sample ID	Dilution	Initial Volume	Final Volume	pH	Comments
FA48089-2	1:10	5	50	4.2	
GP8297-S1	1:20	1	20		FA48089-2
GP8297-MSD1	1:20	1	20		↓
FA48089-3	1:10	5	50		
FA48089-6	1:10	5	50	↓	

Form: GN165-04

Rev Date: 3/28/17 Reviewer:_____ Date:_____

GN70666

Reagent Information Log - TOC/DOC - Water

Reagent	Reagent # or Manufacturer/Lot	Exp. Date
Potassium Hydrogen Phthlate (KHP), Stock Solution 1000 mg/L	GNE10-52410-TOC	1/3/18
Carbonate/Bicarbonate Stock Solution	GNE10-52408-TOC	1/3/18
Sparger Check Solution	GNE10-52409-TOC	10/31/17
CCV Solution	GNE10-52421-TOC	10/31/17
CCVA Solution (50PPM)	GNE10-52422-TOC	10/31/17
Sucrose Solution	GNE10-52412-TOC	10/31/17
Spiking Solution	GNE10-52410-TOC	1/3/18
HCL	JT Baker 0000174344	9/28/22
PH Hydron Paper	hydrion lot#216315	6/15/18

All standards and stocks were made as described in the SOP for this method (circle one): Y or N
If no (N), see attached page for standards prep.

Form: GN087A-67
Rev. Date:11/9/15

ACCUTEST.

Balance: B-39
Pipet : Class A

GENERAL CHEMISTRY STANDARD PREPARATION LOG

Product: TOC

(GN) or GP Number: GN70666

Intermediate Standard Description	Stock used to prepare standard	Stock concentration	Stock volume or weight used with units	Balance or Autopipet ID (*)	Diluent	Final Volume	Final Conc. of Intermediate (mg/l)	Expiration Date	Analyst	Date
GNE10-52410-TOC	acros A0376652	KHP	2.125g	B-39	DI H_2O	1000 mL	1000ppm	1/3/18	CZD	10/3/17
GNE10-52411-TOC	GNE10-52410-TOC	1000ppm	20mL	A	↓	200mL	100ppm	↓	↓	↓
GNE10-52412-TOC	fisher 166358	sucrose	0.0474g	B-39	↓	↓	↓	↓	↓	↓

Standard Description	Intermediate or Stock used to prepare standard	Intermediate or Stock concentration	Intermediate or Stock volume used in ml	Balance or Autopipet ID (*)	Diluent	Final Volume	Final Conc. of Standard (mg/l)	Expiration Date	Analyst	Date
KHP STDs										
GNE10-52413-TOC	GNE10-52411-TOC	100ppm	1.0	A	DI H_2O	100mL	1.0	10/31/17	CZD	10/3/17
GNE10-52414-TOC	↓	↓	2.0	↓	↓	↓	2.0	↓	↓	↓
GNE10-52415-TOC			5.0				5.0			
GNE10-52416-TOC			10.0				10.0			
GNE10-52417-TOC			20.0				20.0			
GNE10-52418-TOC			30.0				30.0			
GNE10-52419-TOC	↓	↓	50.0	↓	↓	↓	50.0	↓	↓	↓
KHP STDs										
GNE10-52420-TOC	fisher 126086	KHP	0.2125g	B-39	DI H_2O	1000mL	100ppm	10/31/17	CZD	10/3/17
GNE10-52421-TOC	GNE10-52420TOC	1000ppm	50 mL	A	↓	200mL	25ppm	↓	↓	↓
GNE10-52422-TOC	↓	↓	100mL	↓	↓	↓	50ppm	↓	↓	↓

* If Class A glass pipets are used, enter an A. For balances or autopipets, then enter the appropriate Accutest ID number.

Form: GN121-01
Rev. Date: 1/13/09

TOC-Control L Report

e71003w1.toc.tlx

Instr.Information

Instrument Options	TOC/ASI/Sparge Kit/
Catalyst	Regular Sensitivity

Cal. Curve

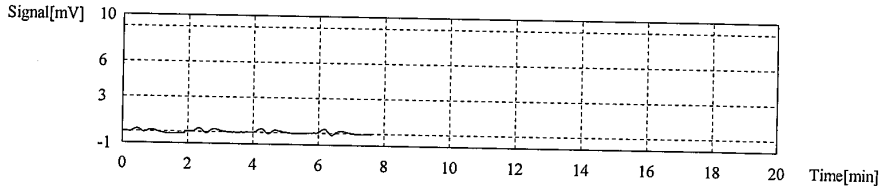
Sample Name:	Untitled
Sample ID:	Untitled
Cal. Curve:	e71003w1.2017_10_03_10_20_45.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.7597	100uL	1.000	*******		10/3/2017 10:25:56 AM
2	0.7546	100uL	1.000	*******		10/3/2017 10:28:11 AM
3	0.7859	100uL	1.000	*******		10/3/2017 10:30:26 AM
4	0.7243	100uL	1.000	*******		10/3/2017 10:32:40 AM

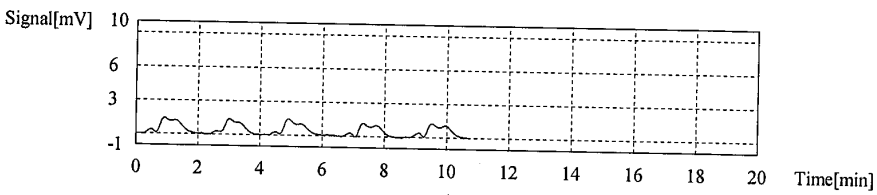
Acid Add.	0.000%
Sp. Time	600.0sec
Mean Area	0.7561



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	6.129	100uL	1.000	*******		10/3/2017 10:37:33 AM
2	5.185	100uL	1.000	*******	E	10/3/2017 10:39:47 AM
3	5.864	100uL	1.000	*******		10/3/2017 10:42:29 AM
4	5.370	100uL	1.000	*******		10/3/2017 10:45:02 AM
5	6.038	100uL	1.000	*******		10/3/2017 10:47:32 AM

Acid Add.	0.000%
Sp. Time	600.0sec
Mean Area	5.850



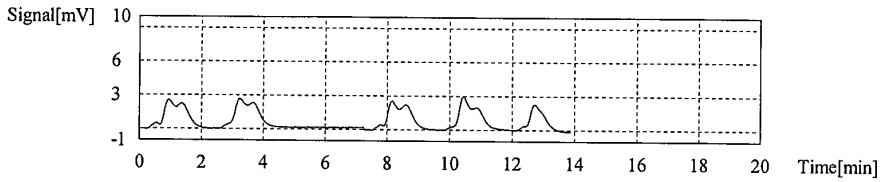
Conc: 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	12.66	100uL	1.000	*******		10/3/2017 10:52:23 AM
2	13.75	100uL	1.000	*******		10/3/2017 10:57:37 AM
3	12.43	100uL	1.000	*******		10/3/2017 11:00:18 AM
4	11.89	100uL	1.000	*******		10/3/2017 11:02:55 AM
5	7.677	100uL	1.000	*******	E	10/3/2017 11:05:16 AM

TOC-Control L Report

e71003w1.toc.tlx

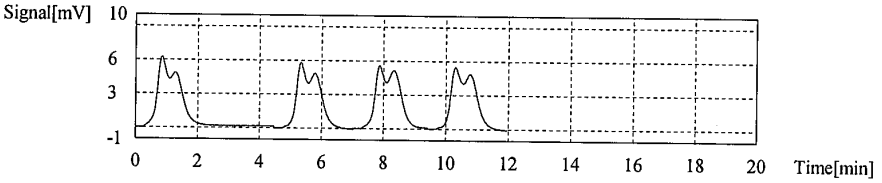
Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 12.68



Conc: 5.000mg/L

No.	Area	Inj. Vol	Aut. Dil.	Rem.	Ex.	Date / Time
1	29.12	100uL	1.000	*******		10/3/2017 11:12:13 AM
2	27.62	100uL	1.000	*******		10/3/2017 11:15:07 AM
3	28.06	100uL	1.000	*******		10/3/2017 11:17:52 AM
4	27.95	100uL	1.000	*******		10/3/2017 11:20:45 AM

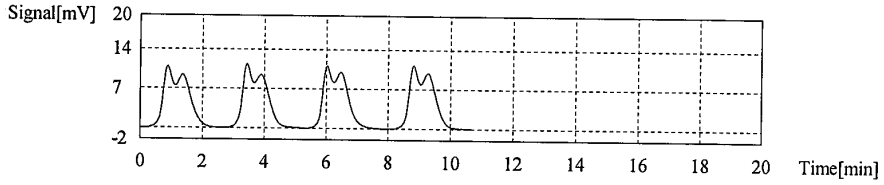
Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 28.19



Conc: 10.00mg/L

No.	Area	Inj. Vol	Aut. Dil.	Rem.	Ex.	Date / Time
1	55.47	100uL	1.000	*******		10/3/2017 11:26:02 AM
2	54.99	100uL	1.000	*******		10/3/2017 11:28:58 AM
3	55.24	100uL	1.000	*******		10/3/2017 11:32:06 AM
4	55.85	100uL	1.000	*******		10/3/2017 11:35:12 AM

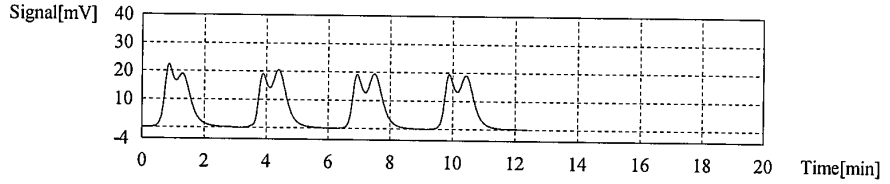
Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 55.39



Conc: 20.00mg/L

No.	Area	Inj. Vol	Aut. Dil.	Rem.	Ex.	Date / Time
1	108.9	100uL	1.000	*******		10/3/2017 11:40:53 AM
2	110.8	100uL	1.000	*******		10/3/2017 11:44:21 AM
3	110.4	100uL	1.000	*******		10/3/2017 11:47:39 AM
4	108.8	100uL	1.000	*******		10/3/2017 11:51:21 AM

Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 109.7



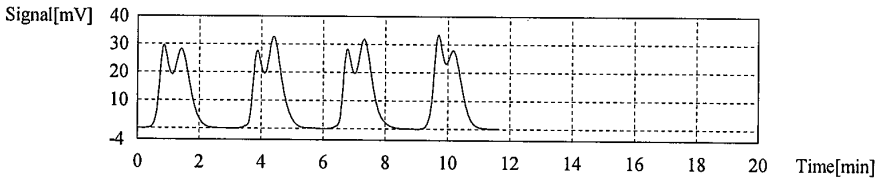
Conc: 30.00mg/L

TOC-Control L Report

e71003w1.toc.tlx

No.	Area	Inj. Vol	Aut. Dil.	Rem.	Ex.	Date / Time
1	166.8	100uL	1.000	*******		10/3/2017 11:57:01 AM
2	168.3	100uL	1.000	*******		10/3/2017 12:00:17 PM
3	167.7	100uL	1.000	*******		10/3/2017 12:03:35 PM
4	166.8	100uL	1.000	*******		10/3/2017 12:06:46 PM

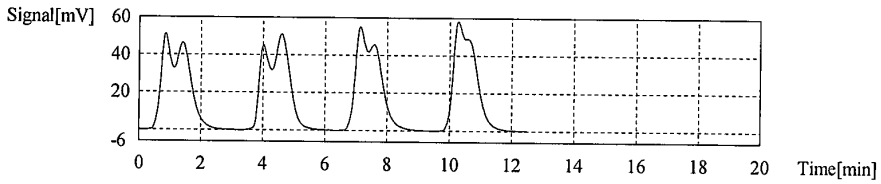
Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 167.4



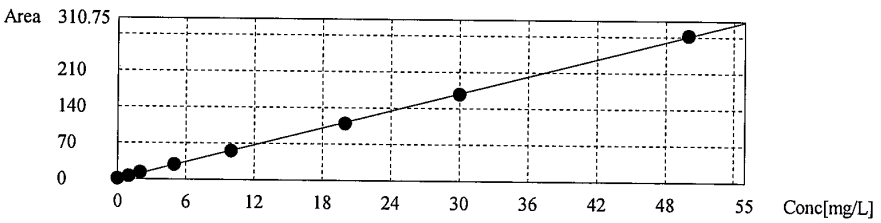
Conc: 50.00mg/L

No.	Area	Inj. Vol	Aut. Dil.	Rem.	Ex.	Date / Time
1	284.2	100uL	1.000	*******		10/3/2017 12:12:35 PM
2	282.7	100uL	1.000	*******		10/3/2017 12:16:03 PM
3	283.4	100uL	1.000	*******		10/3/2017 12:19:33 PM
4	279.7	100uL	1.000	*******		10/3/2017 12:23:00 PM

Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 282.5



Slope: 5.616
Intercept -0.02209
r^2 0.9998
r 0.9999
Zero Shift No



TOC-Control L Report

e71009w1.toc.tlx

Instr.Information

Instrument Options: TOC/ASI/Sparge Kit/
Catalyst: Regular Sensitivity

Sample

Sample Name: WASHCONF
Sample ID:
Origin: TOCAQ.met
Status: Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2964mg/L

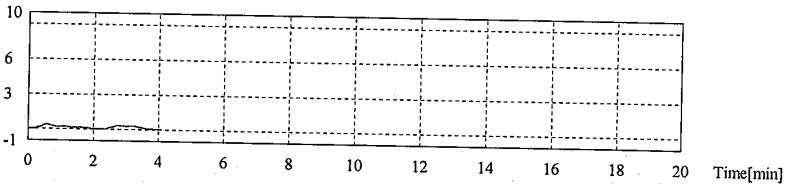
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.708	0.3081mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 7:19:14 AM
2	1.577	0.2847mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 7:21:20 AM

Mean Conc. 0.2964mg/L
CV Conc 5.56%

Signal[mV]



Sample

Sample Name: CRI
Sample ID:
Origin: TOCAQ.met
Status: Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.248mg/L

1. Det

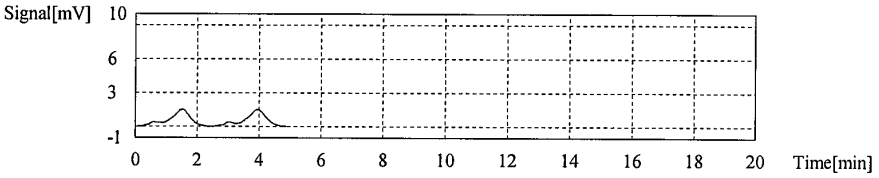
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.042	1.258mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:24:14 AM
2	6.930	1.238mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:26:52 AM

TOC-Control L Report

e71009w1.toc.tlx

Mean Conc. 1.248mg/L
CV Conc 1.13%



Sample

Sample Name: HSTD
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

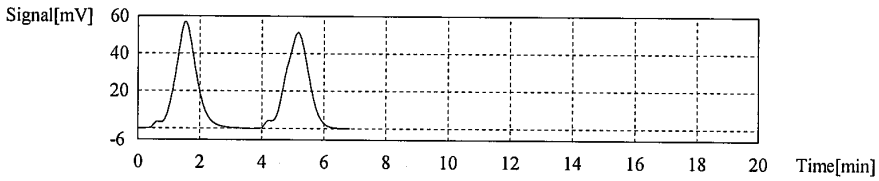
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:47.45mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	266.6	47.48mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:36:33 AM
2	266.3	47.42mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:40:04 AM

Mean Conc. 47.45mg/L
CV Conc 0.08%



Sample

Sample Name: ICV
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.22mg/L

1. Det

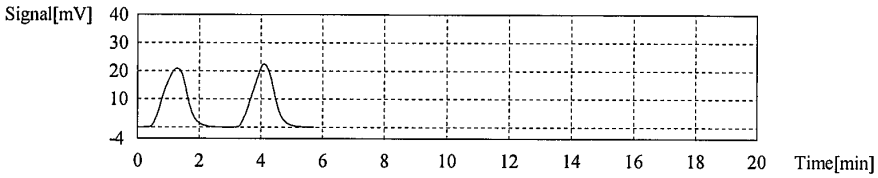
Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	107.9	19.22mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:47:00 AM
2	107.9	19.22mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:50:02 AM

TOC-Control L Report

e71009w1.toc.tlx

Mean Conc. 19.22mg/L
CV Conc 0.00%



Sample

Sample Name: ICB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

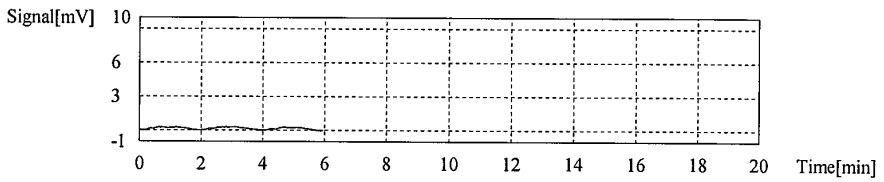
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2865mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.544	0.2789mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:57:13 AM
2	1.887	0.3399mg/L	100uL	1.000	E	e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:59:24 AM
3	1.630	0.2942mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:01:36 AM

Mean Conc. 0.2865mg/L
CV Conc 3.78%



Sample

Sample Name: CCV
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.58mg/L

1. Det

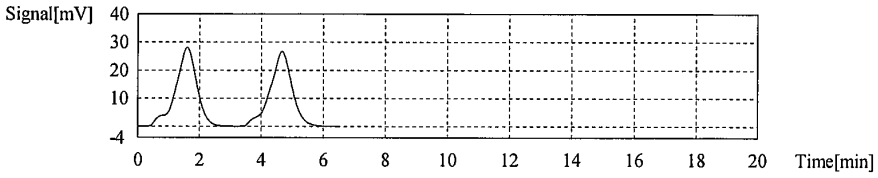
Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	132.4	23.58mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:09:31 AM
2	132.4	23.58mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:13:10 AM

TOC-Control L Report

e71009w1.toc.tlx

Mean Conc. 23.58mg/L
CV Conc 0.00%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

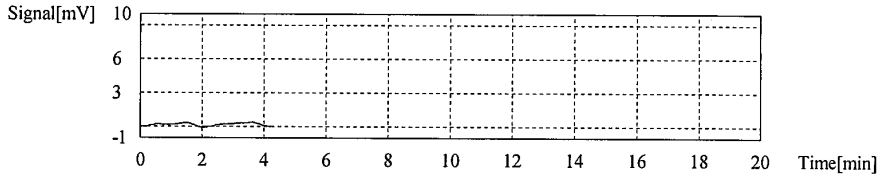
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4027mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.281	0.4101mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:19:45 AM
2	2.198	0.3953mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:22:10 AM

Mean Conc. 0.4027mg/L
CV Conc 2.60%



Sample

Sample Name: SPARGERCHK
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2320mg/L

1. Det

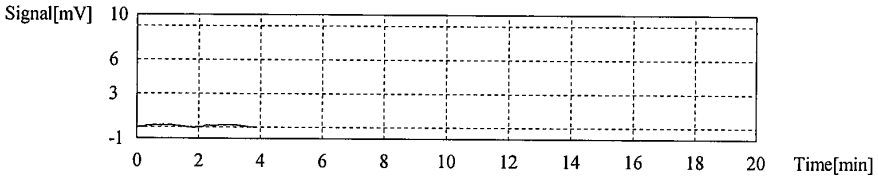
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.286	0.2329mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:30:40 AM
2	1.276	0.2311mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:32:50 AM

TOC-Control L Report

e71009w1.toc.tlx

Mean Conc. 0.2320mg/L
CV Conc 0.54%



Sample

Sample Name: GP8345-MB1
Sample ID: TOC
Origin: TOCAQ.met
Status Completed
Chk. Result

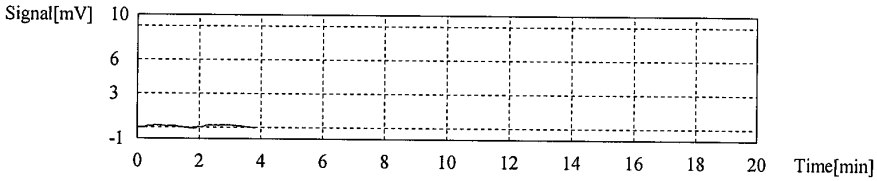
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2372mg/L

1. Det

Anal.: NPOC

No.	Area	Conc	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.269	0.2299mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:41:50 AM
2	1.351	0.2445mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:43:59 AM

Mean Conc. 0.2372mg/L
CV Conc 4.35%



Sample

Sample Name: GP8345-B1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.937mg/L

1. Det

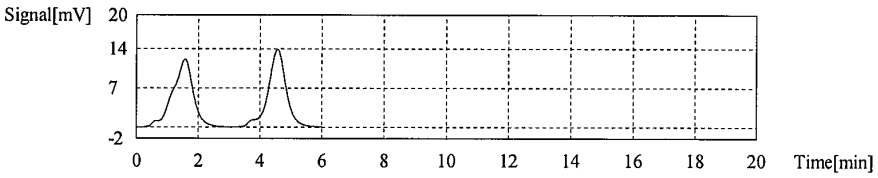
Anal.: NPOC

No.	Area	Conc	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	55.80	9.940mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:54:10 AM
2	55.77	9.935mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:57:16 AM

TOC-Control L Report

e71009wl.toc.tlx

Mean Conc. 9.937mg/L
CV Conc 0.04%



Sample

Sample Name: JC52589-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

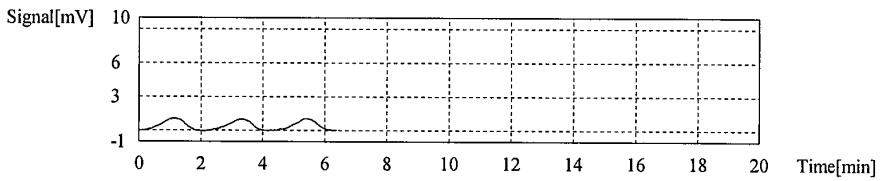
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.9432mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.600	1.001mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 10:40:45 AM
2	5.174	0.9253mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 10:43:07 AM
3	5.051	0.9034mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 10:45:27 AM

Mean Conc. 0.9432mg/L
CV Conc 5.44%



Sample

Sample Name: JC52584-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.385mg/L

1. Det

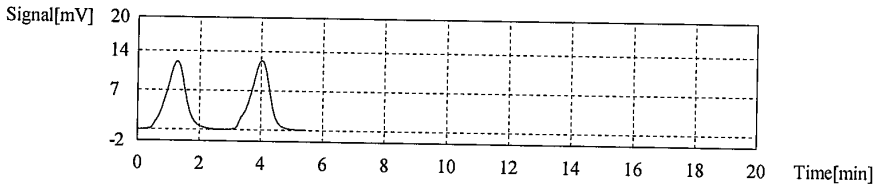
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	52.72	9.392mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 10:52:34 AM
2	52.64	9.377mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 10:55:26 AM

TOC-Control L Report

e71009w1.toc.tlx

Mean Conc. 9.385mg/L
CV Conc 0.11%



Sample

Sample Name: JC52688-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

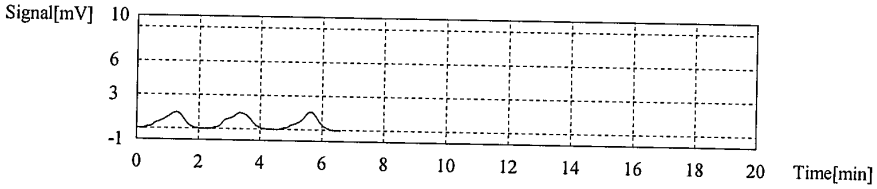
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.258mg/L

1. Det

Anal.: NPOC

No.	Area	Conc	Inj. Vol	Auto Dil	Ex	Cal. Curve	Date/Time
1	6.881	1.229mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:03:09 AM
2	7.460	1.332mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:05:38 AM
3	6.786	1.212mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:08:00 AM

Mean Conc. 1.258mg/L
CV Conc 5.16%



Sample

Sample Name: GP8345-S1
Sample ID: JC52688-1
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.22mg/L

1. Det

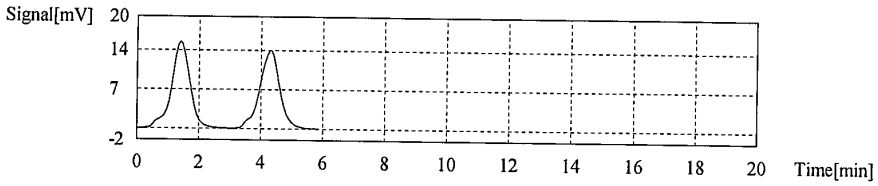
Anal.: NPOC

No.	Area	Conc	Inj. Vol	Auto Dil	Ex	Cal. Curve	Date/Time
1	63.67	11.34mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:15:02 AM
2	62.26	11.09mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:18:03 AM

TOC-Control L Report

e71009w1.toc.tlx

Mean Conc. 11.22mg/L
CV Conc 1.58%



Sample

Sample Name: GP8345-MSD1
Sample ID: JC52688-1
Origin: TOCAQ.met
Status Completed
Chk. Result

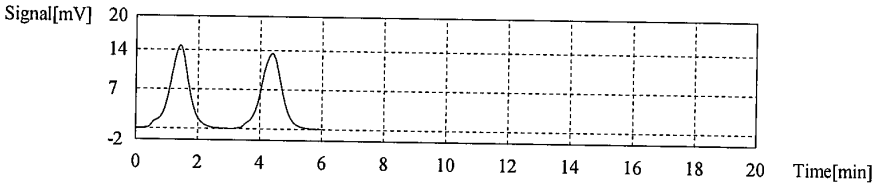
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.31mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Act. Dil.	Ex.	Cal. Curve	Date / Time
1	63.62	11.33mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:26:13 AM
2	63.39	11.29mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:29:25 AM

Mean Conc. 11.31mg/L
CV Conc 0.26%



Sample

Sample Name: JC52411-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.276mg/L

1. Det

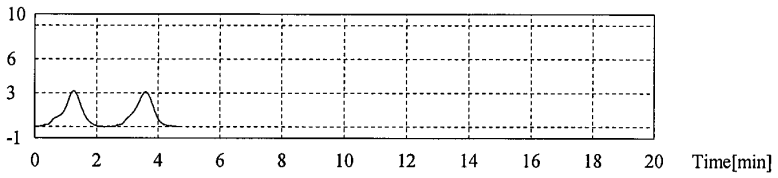
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Act. Dil.	Ex.	Cal. Curve	Date / Time
1	12.73	2.271mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:36:48 AM
2	12.79	2.281mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:39:16 AM

TOC-Control L Report

e71009w1.toc.tlx

Mean Conc. 2.276mg/L
CV Conc 0.33%



Sample

Sample Name: JC52411-2
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

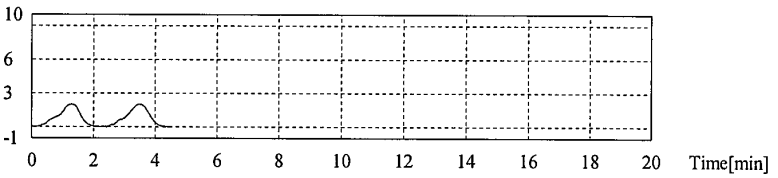
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.738mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.741	1.739mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:47:49 AM
2	9.733	1.737mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:50:17 AM

Mean Conc. 1.738mg/L
CV Conc 0.06%



Sample

Sample Name: CCVA
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:47.46mg/L

1. Det

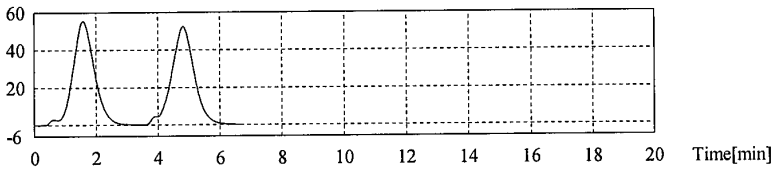
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	266.1	47.39mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:59:59 AM
2	266.9	47.53mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 12:03:40 PM

TOC-Control L Report

e71009w1.toc.tlx

Mean Conc. 47.46mg/L
CV Conc 0.21%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

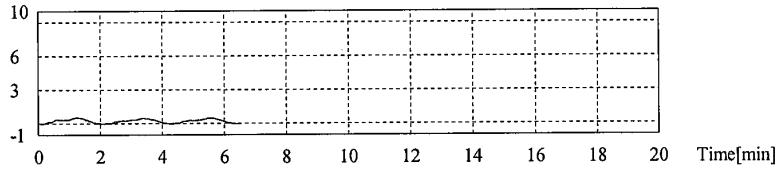
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5154mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	3.194	0.5727mg/L	100uL	1.000	E	e71003w1.2017_10_03_10_20_45.cal	10/9/2017 12:10:03 PM
2	2.860	0.5132mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 12:12:25 PM
3	2.885	0.5177mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 12:14:47 PM

Mean Conc. 0.5154mg/L
CV Conc 0.61%



Sample

Sample Name: JC52411-3
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.441mg/L

1. Det

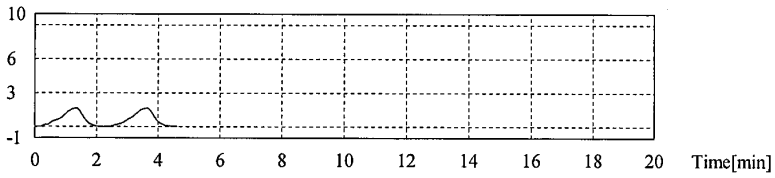
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	8.066	1.440mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 12:21:19 PM
2	8.076	1.442mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 12:23:54 PM

TOC-Control L Report

e71009w1.toc.tlx

Mean Conc. 1.441mg/L
CV Conc 0.09%



Sample

Sample Name: JC52411-4
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

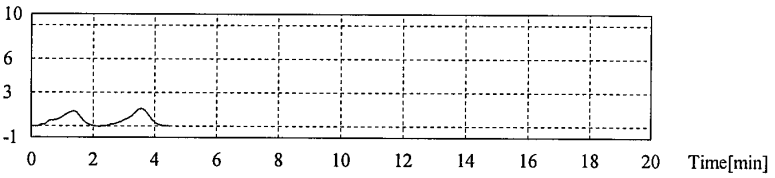
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.245mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Auto Dil.	Ex	Cal. Curve	Date/Time
1	6.862	1.226mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 12:32:27 PM
2	7.079	1.264mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 12:34:54 PM

Mean Conc. 1.245mg/L
CV Conc 2.19%



Sample

Sample Name: JC52411-5
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.857mg/L

1. Det

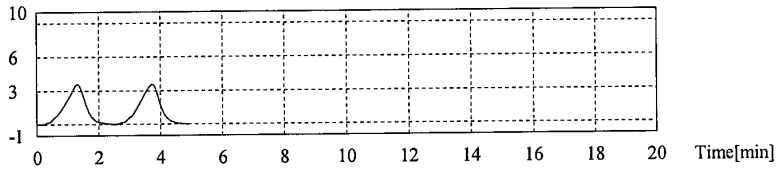
Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Auto Dil.	Ex	Cal. Curve	Date/Time
1	15.95	2.844mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 12:43:46 PM
2	16.09	2.869mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 12:46:26 PM

TOC-Control L Report

e71009w1.toc.tlx

Mean Conc. 2.857mg/L
CV Conc 0.62%



Sample

Sample Name: JC52411-6
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

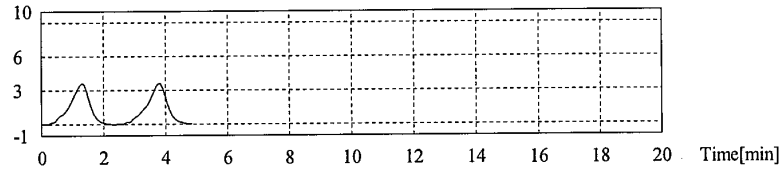
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.796mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.69	2.798mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 12:54:57 PM
2	15.67	2.794mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 12:57:32 PM

Mean Conc. 2.796mg/L
CV Conc 0.09%



Sample

Sample Name: JC52411-7
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.138mg/L

1. Det

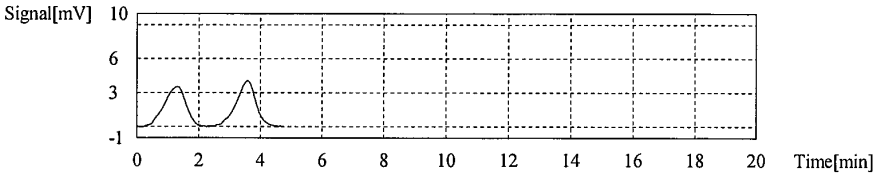
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.43	3.108mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 1:05:57 PM
2	17.77	3.168mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 1:08:35 PM

TOC-Control L Report

e71009w1.toc.tlx

Mean Conc. 3.138mg/L
CV Conc 1.36%



Sample

Sample Name: CCV
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

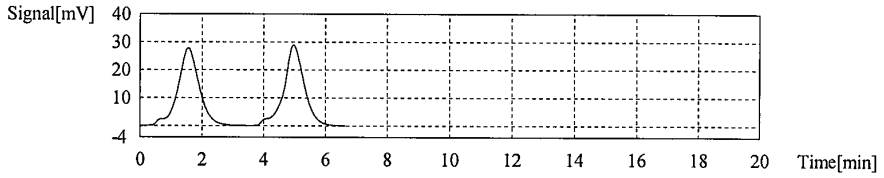
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.52mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	132.0	23.51mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 1:18:14 PM
2	132.1	23.53mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 1:21:42 PM

Mean Conc. 23.52mg/L
CV Conc 0.05%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3184mg/L

1. Det

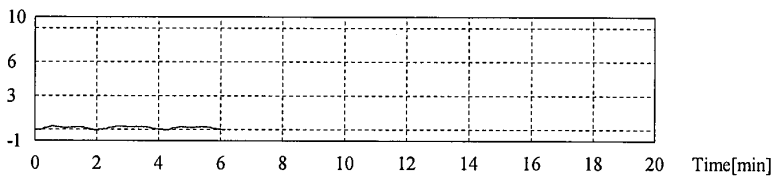
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	2.027	0.3649mg/L	100uL	1.000	E	e71003w1.2017_10_03_10_20_45.cal	10/9/2017 1:28:04 PM
2	1.850	0.3334mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 1:30:22 PM
3	1.682	0.3034mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 1:32:33 PM

TOC-Control L Report

e71009w1.toc.tlx

Mean Conc. 0.3184mg/L
CV Conc 6.64%



Sample

Sample Name: SPARGERCHK
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

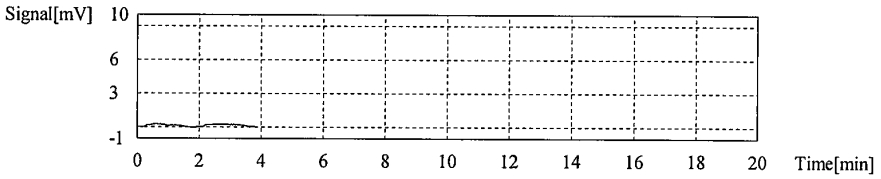
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2474mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	EX	Cal. Curve	Date / Time
1	1.408	0.2547mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 1:39:02 PM
2	1.326	0.2401mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 1:41:12 PM

Mean Conc. 0.2474mg/L
CV Conc 4.17%



TOC-Control L Report

e71009w2.toc.tlx

Instr.Information

Instrument Options: TOC/ASI/Sparge Kit/
Catalyst: Regular Sensitivity

Sample

Sample Name: GP8297-MB2
Sample ID: TOC
Origin: TOCAQ.met
Status: Completed
Chk. Result

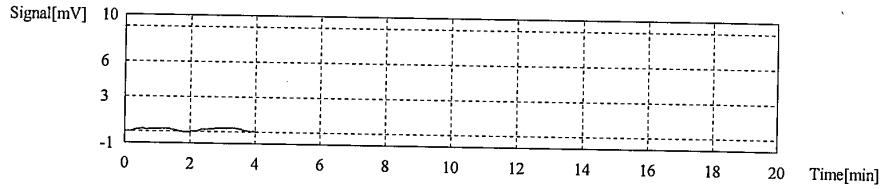
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3510mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	1.918	0.3455mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 2:34:33 PM
2	1.980	0.3565mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 2:36:48 PM

Mean Conc. 0.3510mg/L
CV Conc 2.22%



Sample

Sample Name: GP8297-B2
Sample ID:
Origin: TOCAQ.met
Status: Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.917mg/L

1. Det

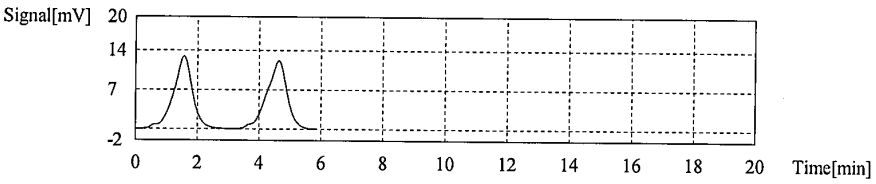
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	55.72	9.926mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 2:46:46 PM
2	55.62	9.908mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 2:49:45 PM

TOC-Control L Report

e71009w2.toc.tlx

Mean Conc. 9.917mg/L
CV Conc 0.13%



Sample

Sample Name: FA48089-2
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

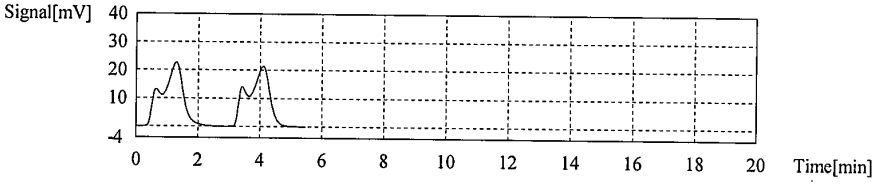
Type	Anal	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:188.6mg/L

1. Det

Anal.: NPOC

No	Area	Conc	Inj Vol	Aut Dil	Ex	Cal. Curve	Date / Time
1	107.6	191.6mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 2:57:39 PM
2	104.2	185.6mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 3:00:30 PM

Mean Conc. 188.6mg/L
CV Conc 2.27%



Sample

Sample Name: GP8297-S1
Sample ID: FA48089-2
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal	Manual Dilution	Result
Unknown	NPOC	20.00	NPOC:473.7mg/L

1. Det

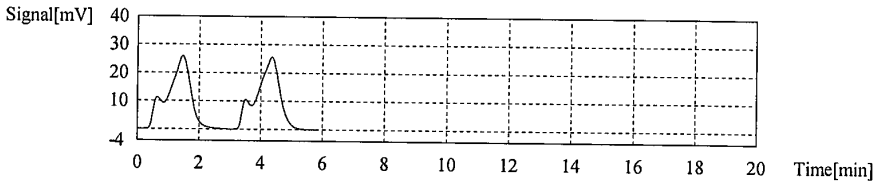
Anal.: NPOC

No	Area	Conc	Inj Vol	Aut Dil	Ex	Cal. Curve	Date / Time
1	133.0	473.7mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 3:17:42 PM
2	133.0	473.7mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 3:20:48 PM

TOC-Control L Report

e71009w2.toc.tlx

Mean Conc. 473.7mg/L
CV Conc 0.00%



Sample

Sample Name: GP8297-MSD1
Sample ID: FA48089-2
Origin: TOCAQ.met
Status Completed
Chk. Result

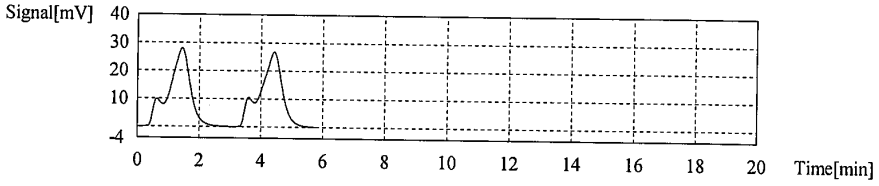
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	20.00	NPOC:479.6mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	135.0	480.9mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 3:28:56 PM
2	134.3	478.4mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 3:32:00 PM

Mean Conc. 479.6mg/L
CV Conc 0.37%



Sample

Sample Name: FA48089-3
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:255.7mg/L

1. Det

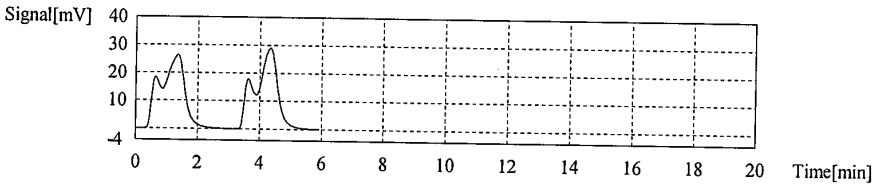
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	143.4	255.4mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 3:51:54 PM
2	143.8	256.1mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 3:55:00 PM

TOC-Control L Report

e71009w2.toc.tlx

Mean Conc. 255.7mg/L
CV Conc 0.20%



Sample

Sample Name: FA48089-6
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

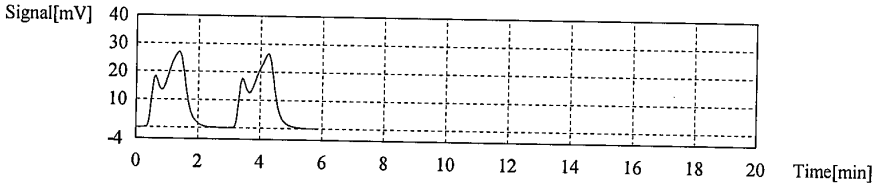
Type	Anal	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:262.6mg/L

1. Det

Anal.: NPOC

No.	Area	Conc	Inj. Vol	Auto Dil	Ex	Cal. Curve	Date / Time
1	147.0	261.8mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 4:02:53 PM
2	147.9	263.4mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 4:06:04 PM

Mean Conc. 262.6mg/L
CV Conc 0.43%



Sample

Sample Name: CCVA
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:47.05mg/L

1. Det

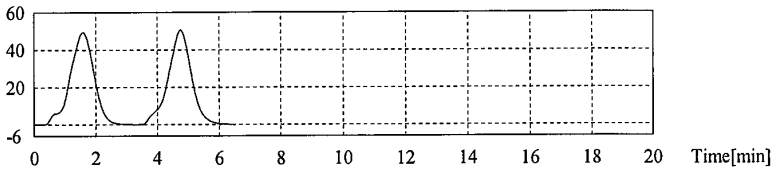
Anal.: NPOC

No.	Area	Conc	Inj. Vol	Auto Dil	Ex	Cal. Curve	Date / Time
1	264.4	47.09mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 4:14:24 PM
2	264.0	47.01mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 4:17:59 PM

TOC-Control L Report

e71009w2.toc.tix

Mean Conc. 47.05mg/L
CV Conc 0.11%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

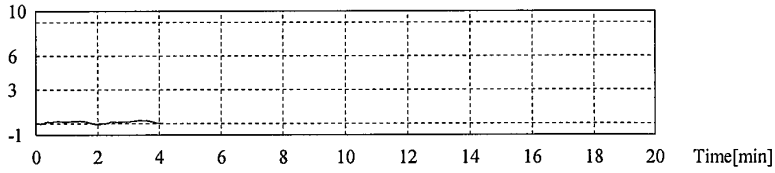
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3253mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	1.844	0.3323mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 4:24:30 PM
2	1.766	0.3184mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 4:26:46 PM

Mean Conc. 0.3253mg/L
CV Conc 3.02%



Sample

Sample Name: GP8282-MB1
Sample ID: DOC
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2325mg/L

1. Det

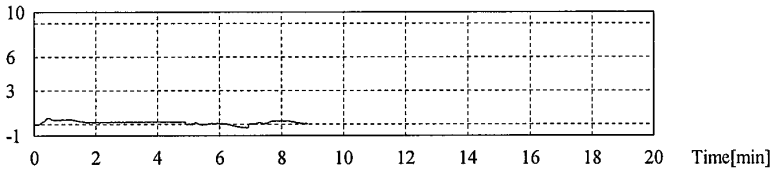
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	4.429	0.7926mg/L	100uL	1.000	E	e71003w1.2017_10_03_10_20_45.cal	10/9/2017 4:38:29 PM
2	1.088	0.1977mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 4:40:46 PM
3	1.479	0.2673mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 4:42:55 PM

TOC-Control L Report

e71009w2.toc.tlx

Mean Conc. 0.2325mg/L
CV Conc 21.18%



Sample

Sample Name: GP8282-B1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

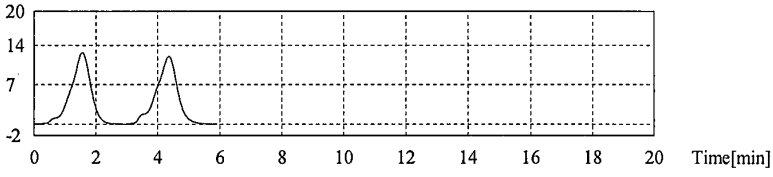
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.919mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	55.23	9.839mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 4:48:35 PM
2	56.13	9.999mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 4:51:51 PM

Mean Conc. 9.919mg/L
CV Conc 1.14%



Sample

Sample Name: JC51891-1F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.503mg/L

1. Det

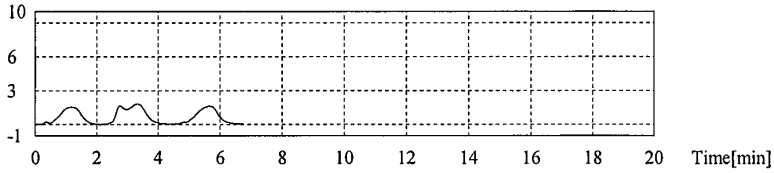
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.292	1.302mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 4:59:05 PM
2	10.49	1.872mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 5:01:39 PM
3	7.474	1.335mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 5:04:08 PM

TOC-Control L Report

e71009w2.toc.tlx

Mean Conc. 1.503mg/L
CV Conc 21.28%



Sample

Sample Name: JC51891-2F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

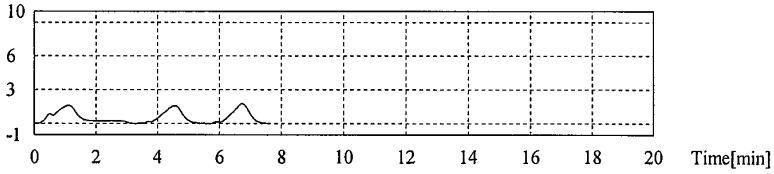
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.407mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.995	1.784mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 5:11:26 PM
2	6.847	1.223mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 5:13:50 PM
3	6.802	1.215mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 5:16:05 PM

Mean Conc. 1.407mg/L
CV Conc 23.16%



Sample

Sample Name: JC51891-3F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.417mg/L

1. Det

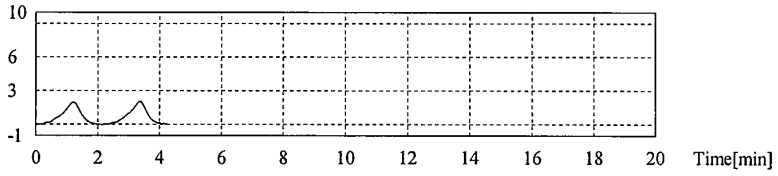
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.103	1.447mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 5:21:26 PM
2	7.764	1.386mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 5:23:46 PM

TOC-Control L Report

e71009w2.toc.tlx

Mean Conc. 1.417mg/L
CV Conc 3.01%



Sample

Sample Name: JC51896-1F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

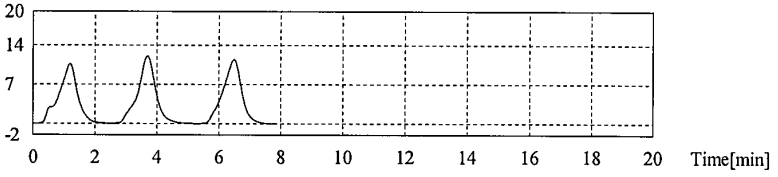
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.321mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	44.18	7.871mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 5:32:50 PM
2	47.93	8.539mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 5:35:49 PM
3	48.01	8.553mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 5:38:37 PM

Mean Conc. 8.321mg/L
CV Conc 4.68%



Sample

Sample Name: GP8282-S1
Sample ID: JC51896-1F
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:18.80mg/L

1. Det

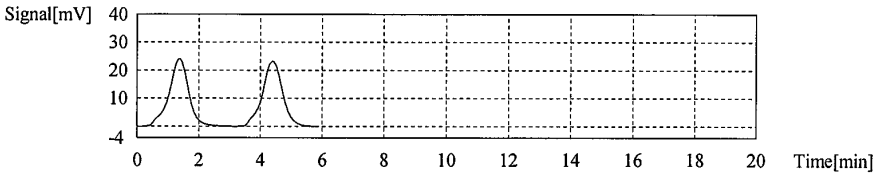
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	105.7	18.83mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 5:44:41 PM
2	105.4	18.77mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 5:47:41 PM

TOC-Control L Report

e71009w2.toc.tlx

Mean Conc. 18.80mg/L
CV Conc 0.20%



Sample

Sample Name: GP8282-MSD1
Sample ID: JC51896-1F
Origin: TOCAQ.met
Status Completed
Chk. Result

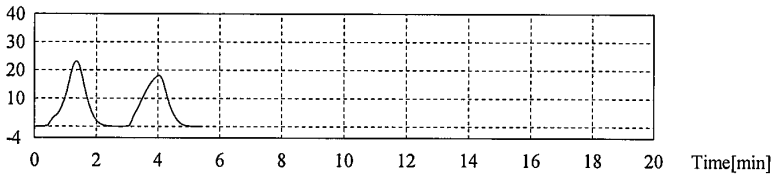
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:18.04mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	103.2	18.38mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 5:55:27 PM
2	99.32	17.69mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 5:58:24 PM

Mean Conc. 18.04mg/L
CV Conc 2.71%



Sample

Sample Name: JC51896-2F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.216mg/L

1. Det

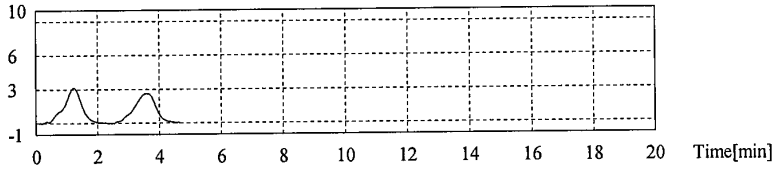
Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	12.23	2.182mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 6:06:16 PM
2	12.61	2.249mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 6:08:47 PM

TOC-Control L Report

e71009w2.toc.tlx

Mean Conc. 2.216mg/L
CV Conc 2.16%



Sample

Sample Name: JC51896-3F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

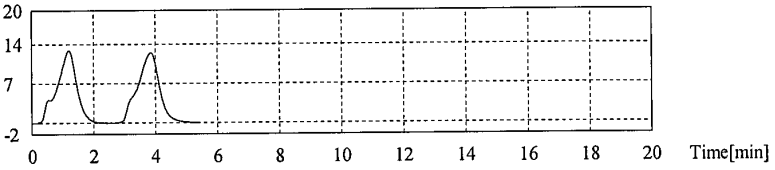
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.56mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	57.77	10.29mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 6:17:40 PM
2	60.77	10.83mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 6:20:39 PM

Mean Conc. 10.56mg/L
CV Conc 3.58%



Sample

Sample Name: CCV
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.32mg/L

1. Det

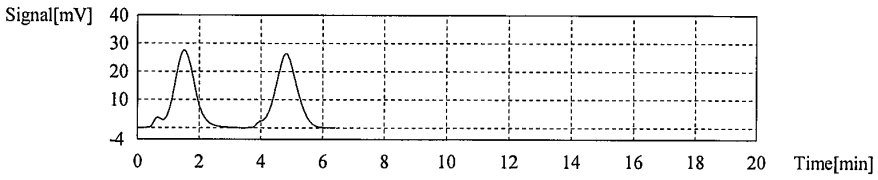
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	132.1	23.53mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 6:29:36 PM
2	129.8	23.12mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 6:32:56 PM

TOC-Control L Report

e71009w2.toc.tlx

Mean Conc. 23.32mg/L
CV Conc 1.24%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

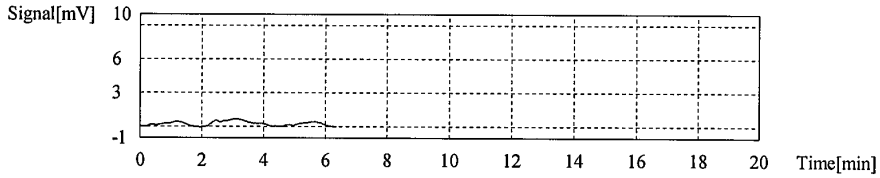
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3830mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	2.323	0.4176mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 6:39:27 PM
2	4.852	0.8679mg/L	100uL	1.000	E	e71003w1.2017_10_03_10_20_45.cal	10/9/2017 6:42:07 PM
3	1.935	0.3485mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 6:44:15 PM

Mean Conc. 0.3830mg/L
CV Conc 12.75%



Sample

Sample Name: GP8283-MB1
Sample ID: DOC
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4021mg/L

1. Det

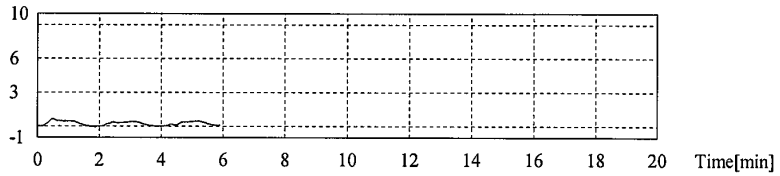
Anal.: NPOC

TOC-Control L Report

e71009w2.toc.tlx

No.	Area	Conc.	Inj.Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.335	0.5978mg/L	100uL	1.000	E	e71003w1.2017_10_03_10_20_45.cal	10/9/2017 6:50:33 PM
2	2.440	0.4384mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 6:52:50 PM
3	2.032	0.3658mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 6:54:57 PM

Mean Conc. 0.4021mg/L
CV Conc 12.78%



Sample

Sample Name: GP8283-B1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

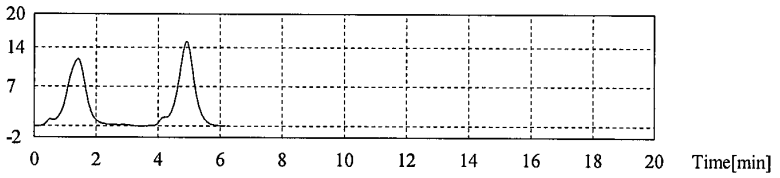
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.762mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj.Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.57	9.543mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 7:03:15 PM
2	56.03	9.981mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 7:06:11 PM

Mean Conc. 9.762mg/L
CV Conc 3.17%



Sample

Sample Name: JC52411-1F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.553mg/L

1. Det

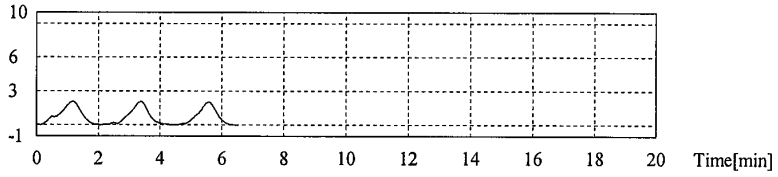
Anal.: NPOC

TOC-Control L Report

e71009w2.toc.tlx

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.581	1.710mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 7:13:05 PM
2	8.212	1.466mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 7:15:33 PM
3	8.302	1.482mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 7:17:54 PM

Mean Conc. 1.553mg/L
CV Conc 8.78%



Sample

Sample Name: JC52411-2F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

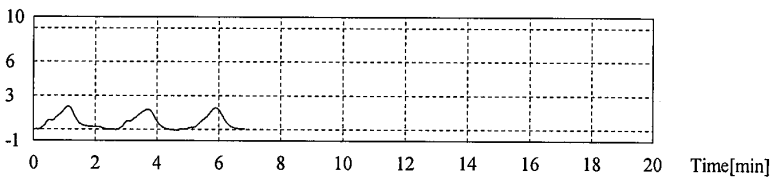
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.570mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.748	1.740mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 7:24:39 PM
2	8.964	1.600mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 7:27:01 PM
3	7.676	1.371mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 7:29:23 PM

Mean Conc. 1.570mg/L
CV Conc 11.86%



Sample

Sample Name: JC52411-3F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.365mg/L

1. Det

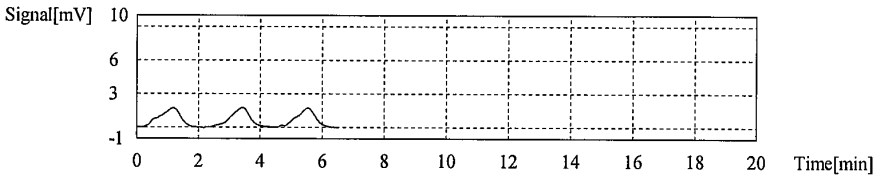
TOC-Control L Report

e71009w2.toc.tlx

Anal.: NPOC

No	Area	Conc.	Inj. Vol	Aut. Dil.	Ex	Cal. Curve	Date / Time
1	8.304	1.483mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 7:35:30 PM
2	7.305	1.305mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 7:37:54 PM
3	7.323	1.308mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 7:40:11 PM

Mean Conc. 1.365mg/L
CV Conc 7.46%



Sample

Sample Name: GP8283-S1
Sample ID: JC52411-3F
Origin: TOCAQ.met
Status Completed
Chk. Result

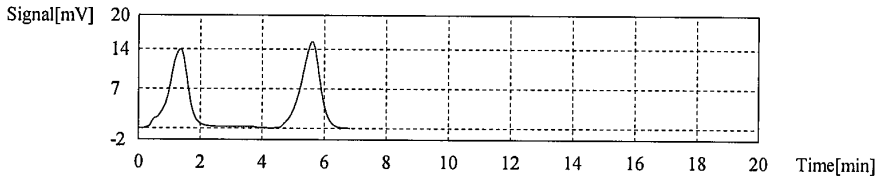
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.45mg/L

1. Det

Anal.: NPOC

No	Area	Conc.	Inj. Vol	Aut. Dil.	Ex	Cal. Curve	Date / Time
1	63.02	11.23mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 7:48:36 PM
2	65.59	11.68mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 7:51:33 PM

Mean Conc. 11.45mg/L
CV Conc 2.83%



Sample

Sample Name: GP8283-MSD1
Sample ID: JC52411-3F
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.74mg/L

1. Det

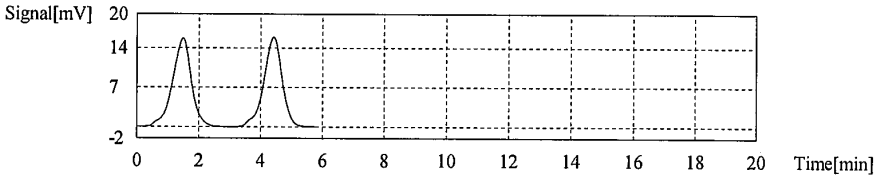
TOC-Control L Report

e71009w2.toc.tlx

Anal.: NPOC

No.	Area	Conc.	Inj Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	66.28	11.81mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:08:52 PM
2	65.57	11.68mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:11:52 PM

Mean Conc. 11.74mg/L
CV Conc 0.76%



Sample

Sample Name: JC52411-4F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

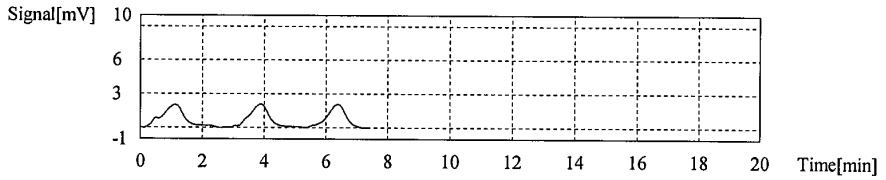
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.647mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.40	1.856mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:19:45 PM
2	8.759	1.564mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:22:28 PM
3	8.527	1.522mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:24:50 PM

Mean Conc. 1.647mg/L
CV Conc 11.04%



Sample

Sample Name: JC52411-5F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.058mg/L

1. Det

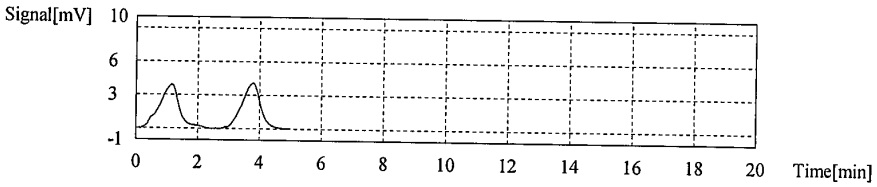
TOC-Control L Report

e71009w2.toc.tlx

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date/ Time
1	17.21	3.068mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:30:47 PM
2	17.09	3.047mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:33:24 PM

Mean Conc. 3.058mg/L
CV Conc 0.49%



Sample

Sample Name: JC52411-6F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

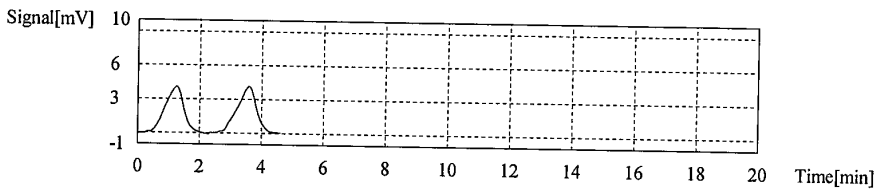
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.132mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date/ Time
1	17.53	3.125mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:41:45 PM
2	17.60	3.138mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:44:17 PM

Mean Conc. 3.132mg/L
CV Conc 0.28%



Sample

Sample Name: CCVA
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:45.89mg/L

1. Det

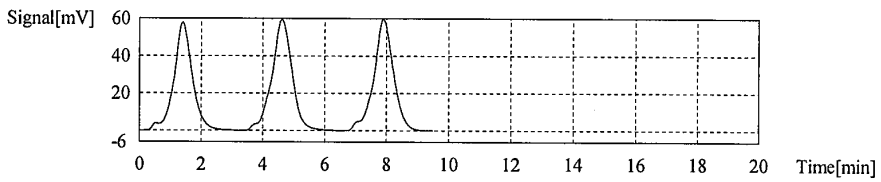
TOC-Control L Report

e71009w2.toc.tlx

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. DI	Ex.	Cal. Curve	Date / Time
1	239.1	42.58mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:53:41 PM
2	268.4	47.80mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 8:57:15 PM
3	265.6	47.30mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:00:37 PM

Mean Conc. 45.89mg/L
CV Conc 6.27%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

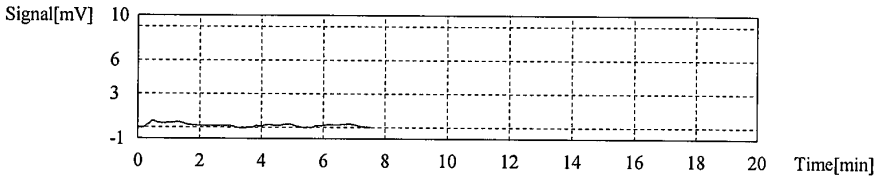
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3353mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. DI	Ex.	Cal. Curve	Date / Time
1	5.550	0.9922mg/L	100uL	1.000	E	e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:06:57 PM
2	1.718	0.3099mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:09:05 PM
3	2.004	0.3608mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:11:22 PM

Mean Conc. 0.3353mg/L
CV Conc 10.74%



Sample

Sample Name: JC52411-7F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.090mg/L

TOC-Control L Report

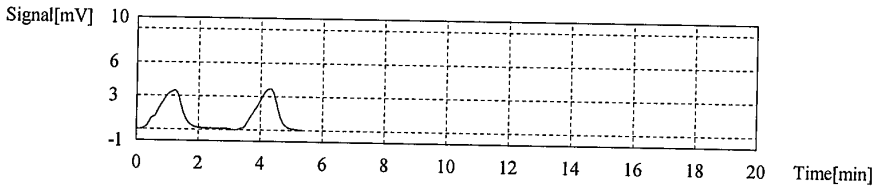
e71009w2.toc.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.50	3.120mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:17:42 PM
2	17.16	3.060mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:20:10 PM

Mean Conc. 3.090mg/L
CV Conc 1.39%



Sample

Sample Name: GP8348-MB1
Sample ID: TOC
Origin: TOCAQ.met
Status Completed
Chk. Result

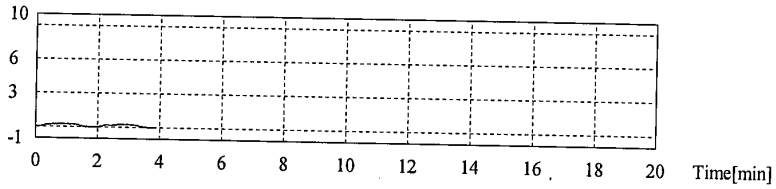
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2575mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.431	0.2588mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:27:44 PM
2	1.417	0.2563mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:29:49 PM

Mean Conc. 0.2575mg/L
CV Conc 0.68%



Sample

Sample Name: GP8348-B1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.718mg/L

TOC-Control L Report

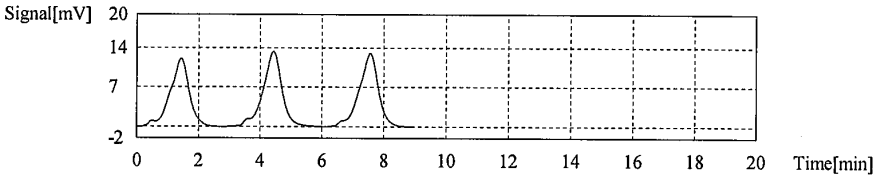
e71009w2.toc.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.86	9.239mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:39:57 PM
2	55.96	9.969mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:43:17 PM
3	55.83	9.946mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:46:21 PM

Mean Conc. 9.718mg/L
CV Conc 4.27%



Sample

Sample Name: JC52422-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

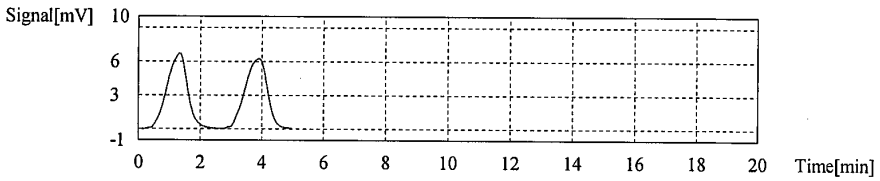
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.499mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	30.74	5.478mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:51:46 PM
2	30.98	5.521mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 9:54:20 PM

Mean Conc. 5.499mg/L
CV Conc 0.55%



Sample

Sample Name: JC52422-2
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:192.1mg/L

TOC-Control L Report

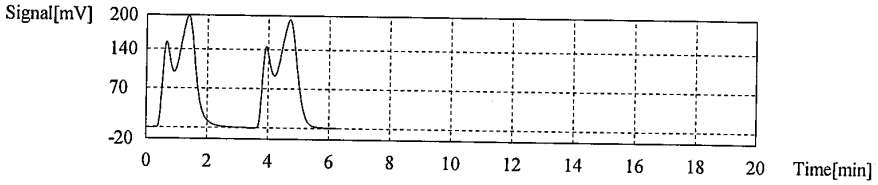
e71009w2.toc.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	1082	192.7mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 10:03:41 PM
2	1075	191.4mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 10:07:07 PM

Mean Conc. 192.1mg/L
CV Conc 0.46%



Sample

Sample Name: JC52422-3
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

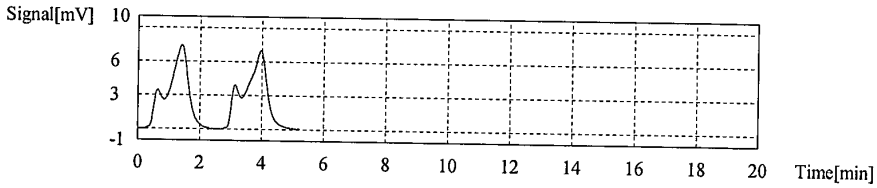
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.234mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date / Time
1	34.77	6.195mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 10:14:05 PM
2	35.20	6.272mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 10:16:59 PM

Mean Conc. 6.234mg/L
CV Conc 0.87%



Sample

Sample Name: JC52422-5
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:140.8mg/L

TOC-Control L Report

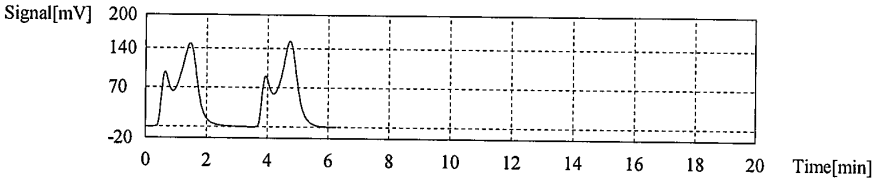
e71009w2.toc.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	806.5	143.6mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 10:26:05 PM
2	774.7	138.0mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 10:29:18 PM

Mean Conc. 140.8mg/L
CV Conc 2.84%



Sample

Sample Name: JC52422-6
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

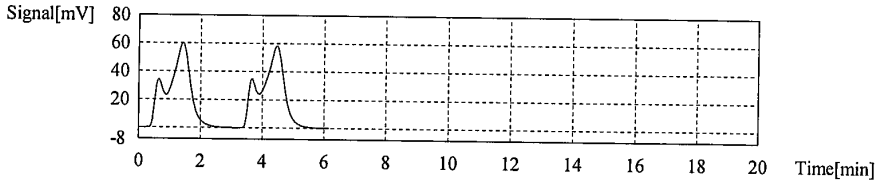
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:54.44mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	305.5	54.40mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 10:36:57 PM
2	305.9	54.48mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 10:40:21 PM

Mean Conc. 54.44mg/L
CV Conc 0.09%



Sample

Sample Name: JC52422-7
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:534.4mg/L

TOC-Control L Report

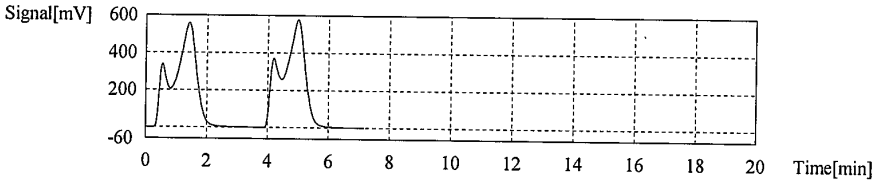
e71009w2.toc.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2944	524.2mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 10:48:40 PM
2	3058	544.5mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 10:52:49 PM

Mean Conc. 534.4mg/L
CV Conc 2.69%



Sample

Sample Name: JC52422-9
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

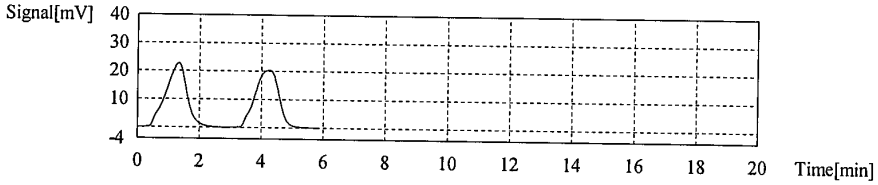
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.17mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	107.5	19.15mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 10:59:14 PM
2	107.8	19.20mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:02:20 PM

Mean Conc. 19.17mg/L
CV Conc 0.20%



Sample

Sample Name: CCV
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.77mg/L

TOC-Control L Report

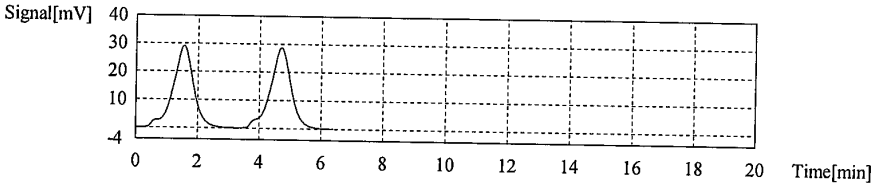
e71009w2.toc.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Auto Dil.	Ex	Cal. Curve	Date / Time
1	133.1	23.70mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:10:40 PM
2	133.8	23.83mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:14:08 PM

Mean Conc. 23.77mg/L
CV Conc 0.37%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

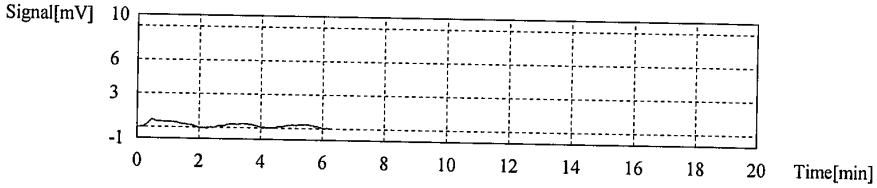
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3759mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Auto Dil.	Ex	Cal. Curve	Date / Time
1	4.324	0.7739mg/L	100uL	1.000	E	e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:20:57 PM
2	2.105	0.3788mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:23:07 PM
3	2.073	0.3731mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:25:21 PM

Mean Conc. 0.3759mg/L
CV Conc 1.07%



Sample

Sample Name: JC52633-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:77.49mg/L

TOC-Control L Report

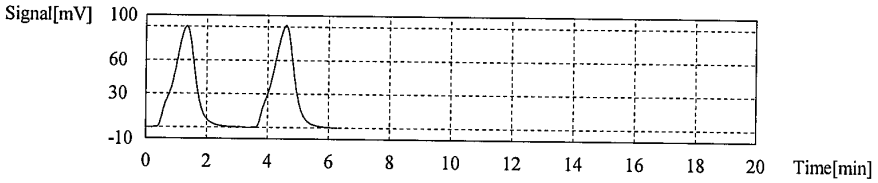
e71009w2.toc.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	432.6	77.04mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:42:32 PM
2	437.7	77.94mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:45:50 PM

Mean Conc. 77.49mg/L
CV Conc 0.83%



Sample

Sample Name: JC52633-2
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

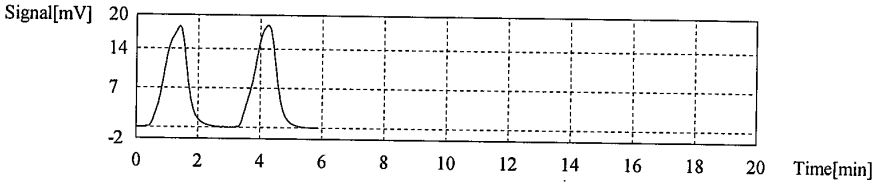
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.95mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	89.46	15.93mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:53:20 PM
2	89.63	15.96mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/9/2017 11:56:23 PM

Mean Conc. 15.95mg/L
CV Conc 0.13%



Sample

Sample Name: GP8348-S1
Sample ID: JC52633-2
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.96mg/L

TOC-Control L Report

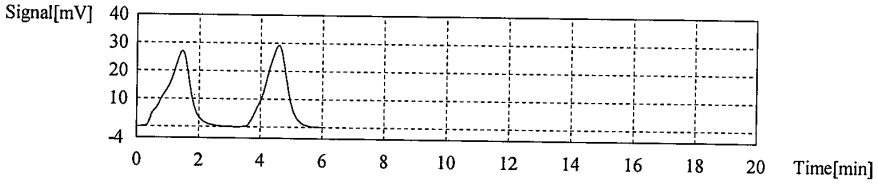
e71009w2.toc.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	138.9	24.74mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/10/2017 12:04:43 AM
2	141.4	25.18mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/10/2017 12:07:51 AM

Mean Conc. 24.96mg/L
CV Conc 1.26%



Sample

Sample Name: GP8348-MSD1
Sample ID: JC52633-2
Origin: TOCAQ.met
Status Completed
Chk. Result

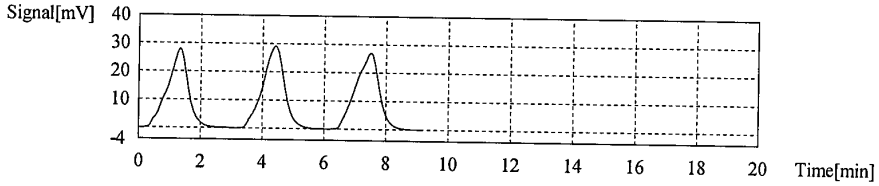
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.48mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	127.4	22.69mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/10/2017 12:15:44 AM
2	142.7	25.41mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/10/2017 12:19:02 AM
3	142.2	25.33mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/10/2017 12:22:18 AM

Mean Conc. 24.48mg/L
CV Conc 6.32%



Sample

Sample Name: JC52633-4
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.194mg/L

TOC-Control L Report

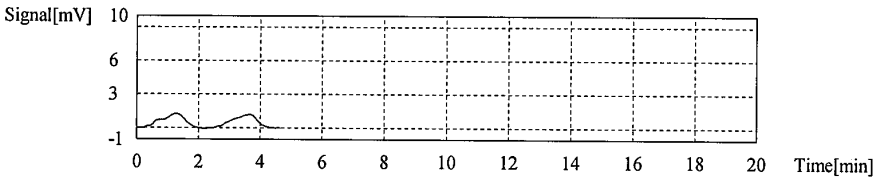
e71009w2.toc.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	EX	Cal. Curve	Date / Time
1	6.755	1.207mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/10/2017 12:27:26 AM
2	6.607	1.180mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/10/2017 12:30:01 AM

Mean Conc. 1.194mg/L
CV Conc 1.56%



Sample

Sample Name: CCVA
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

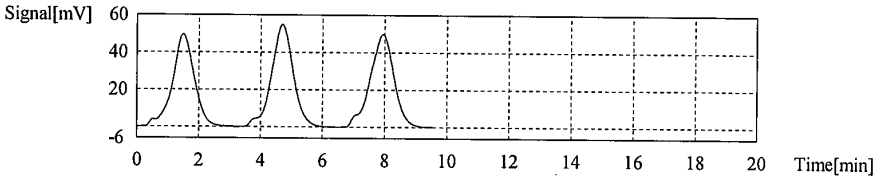
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:46.14mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	EX	Cal. Curve	Date / Time
1	241.7	43.04mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/10/2017 12:39:25 AM
2	269.7	48.03mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/10/2017 12:42:57 AM
3	265.9	47.35mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/10/2017 12:46:23 AM

Mean Conc. 46.14mg/L
CV Conc 5.86%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3368mg/L

TOC-Control L Report

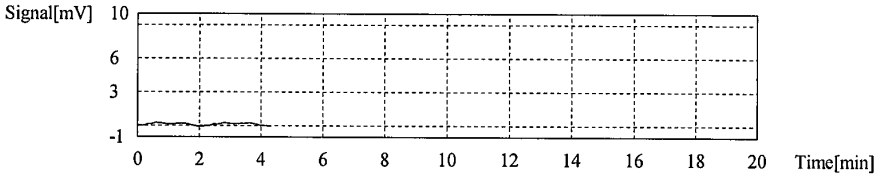
e71009w2.toc.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.821	0.3282mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/10/2017 12:51:21 AM
2	1.918	0.3455mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/10/2017 12:53:47 AM

Mean Conc. 0.3368mg/L
CV Conc 3.63%



Sample

Sample Name: SPARGERCHK
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2122mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.740	0.4918mg/L	100uL	1.000	E	e71003w1.2017_10_03_10_20_45.cal	10/10/2017 1:02:23 AM
2	1.195	0.2167mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/10/2017 1:04:32 AM
3	1.144	0.2076mg/L	100uL	1.000		e71003w1.2017_10_03_10_20_45.cal	10/10/2017 1:06:43 AM

Mean Conc. 0.2122mg/L
CV Conc 3.03%