Pelton, Jason M (DEC)

From: Hannon, ED [US] (AS) <Edward.Hannon@ngc.com>
Sent: Thursday, August 09, 2018 12:06 PM
To: Pelton, Jason M (DEC); Hesler, Donald (DEC); Karpinski, Steven (HEALTH)
Cc: jbalmat@hsweng.com; Scharf, Steven (DEC)
Subject: OU3 ONCT Supplemental HEE Investigation Results
Attachments: Supplemental Report 2018.08.06.pdf

Jason / Don / Steve

Attached please find the Technical Memorandum prepared by Environmental Management & Global Innovations, Inc. (EMAGIN) on behalf of Northrop Grumman Systems Corporation (Northrop Grumman). The memo contains details and sampling results for the supplemental groundwater investigation conducted onsite and offsite in the vicinity of the NG OU3 ONCT groundwater.

The off-site portion of this investigation was delayed to satisfy the request of the local residents in and around North 5th Street which caused Northrop Grumman to reschedule drilling and sampling for the spring of 2018.

This Technical Memo follows the *Interim Phase 1 Technical Memorandum* (Interim Memo), dated April 2, 2018, which summarized work conducted from October to December 2017 (Attachment 1) and describes drilling and sampling of vertical profile borings (VPBs) and installing and sampling of monitoring wells to further evaluate the results of previous groundwater sampling in the deep aquifer (which primarily related to toluene). The sampling locations, depths, and procedures used were in accordance with the *Work Plan for Supplemental Groundwater Characterization, Bethpage Park Groundwater Containment System* (Work Plan; EMAGIN, 2016), which was approved by New York State Department of Environmental Conservation (NYSDEC) on May 16, 2017.

Pursuant to the May 2014 OU3 Consent Order, a hydraulic effectiveness evaluation was conducted (ERM, 2015), which recommended further evaluation of reported toluene in deep groundwater at the Park boundary and slightly downgradient. The supplemental groundwater investigation reported in this technical memo verified the absence of toluene and other VOCs above groundwater quality criteria at those locations.

As indicated in the NYSDEC-approved Work Plan, additional sampling beyond the work described in this report is conditioned on finding elevated toluene levels in deep groundwater in the wells installed at the Park boundary (MW-300 and MW-301) and/or the downgradient location (MW-207A-1R and MW-207B-1R). The results reported herein do not indicate the presence of toluene, other VOCs, or 1,4-dioxane above the applicable groundwater quality criteria in deep groundwater samples and, moreover, support the conclusions in the hydraulic effectiveness report regarding the effectiveness of the OU3 BPGWCS. Accordingly, the hydraulic effectiveness evaluation has been completed, and results indicate that no further investigation is recommended.

Please contact me if you have any questions or require additional information.

Thank You
Edward J. Hannon
Director ESHM
Northrop Grumman

August 6, 2018

Messrs. Jason Pelton and Don Hesler
Division of Environmental Remediation
Remedial Bureau D, Section B
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233

Re: Technical Memorandum
OU3 Hydraulic Effectiveness Evaluation - Supplemental Groundwater Characterization
Bethpage, New York

Electronic transmission only. Hard copy available upon request.

Dear Messrs. Pelton and Hesler:

Environmental Management & Global Innovations, Inc. (EMAGIN) prepared this Technical Memorandum (Technical Memo) on behalf of Northrop Grumman Systems Corporation (Northrop Grumman) to provide the results of its groundwater investigation in the vicinity of Bethpage Community Park (Park) in Bethpage, New York (**Figure 1**). This Technical Memo follows the *Interim Phase 1 Technical Memorandum* (Interim Memo), dated April 2, 2018, which summarized work conducted from October to December 2017 (**Attachment 1**). The data provided in the Interim Memo has been incorporated in this document.

This Technical Memo describes drilling and sampling of vertical profile borings (VPBs) and installing and sampling of monitoring wells to further evaluate the results of previous groundwater sampling in the deep aquifer (which primarily related to toluene). The sampling locations, depths, and procedures used were in accordance with the *Work Plan for Supplemental Groundwater Characterization, Bethpage Park Groundwater Containment System* (Work Plan; EMAGIN, 2016), which was approved by New York State Department of Environmental Conservation (NYSDEC) on May 16, 2017.

1. BACKGROUND

Pursuant to the May 2014 Operable Unit 3 (OU3) Consent Order, Northrop Grumman conducted a hydraulic effectiveness evaluation to confirm that the Bethpage Park Groundwater Containment System (BPGWCS) was controlling migration of volatile organic compounds (VOCs) in groundwater at the Park. The work was conducted in accordance with the *Bethpage Park Containment System Pre-Design Hydraulic Effectiveness Evaluation Work Plan* (Arcadis, 2014). The investigation findings were reported in the *Hydraulic Effectiveness Evaluation Report* (ERM, 2015), which:

- Concluded that the BPGWCS is effectively controlling VOCs in groundwater to an approximate depth of 175 feet below land surface (ft bls);
- Described potential data gaps related to the reported presence of toluene above the State groundwater quality standard (5 micrograms per liter (µg/L)) deeper than 175 ft bls; and

- Recommended consideration of supplemental characterization in the deeper portion of the Magothy Aquifer to evaluate the presence of toluene and, if found to be present, to further investigate the source(s) and extent of the toluene.

In its March 18, 2016 approval of the Hydraulic Effectiveness Report, the NYSDEC agreed that the BPGWCS is containing the OU3 groundwater plume source and that selected additional testing is warranted in the deeper portion of the Magothy Aquifer.

2. OBJECTIVES

The objectives of the supplemental groundwater investigation are:

- To assess toluene in deep groundwater (i.e., depths greater than 150 ft bls) at the southern boundary of the Park and, if confirmed, determine if there are sources of toluene in the former ball field area of the Park and upgradient of the Park; and

- To assess toluene in deep groundwater (i.e., depths greater than 150 ft bls) downgradient of the Park and, if confirmed, define the western and vertical extent of that toluene.

3. SCOPE OF WORK

Field work and sampling were conducted in accordance with: the Work Plan; *DER-10 / Technical Guidance for Site Investigation and Remediation* (NYSDEC, 2010); the *Site-Specific Health and Safety Plan* (Arcadis, 2016); and the *Site-Specific Health and Safety Plan Worksheet* (EMAGIN, 2018).

VPB and Monitoring Well Installation – MW-300 and MW-301

VPB drilling and the associated monitoring well installation protocols for MW-300 and MW-301 are described in the Interim Memo (**Attachment 1**) and summarized below. VPB-300 and VPB-301 were drilled and monitoring wells MW-300 and MW-301 installed in the borings at the same general locations as the two VPBs that were installed during the previous hydraulic effectiveness evaluation (also identified as VPB-300 and VPB-301) on the southern boundary of the Park (**Figure 2**). The work was conducted in October and November 2017.

As described in the Work Plan, toluene was detected during the 2015 hydraulic effectiveness evaluation at elevated concentrations in deep VPB samples (e.g., 130 µg/L at 360 ft bls in VP-300 and 87 µg/L at 280 ft bls in VP-301). During the current investigation, VPB sampling was used to reassess the vertical distribution of VOCs over those same depth intervals and to fine-tune the vertical placement of the monitoring well screens. The 2017 screening results for VPB-300 and VPB-301 are summarized in **Tables 1** and **2**, respectively. All VOC screening results in both VPBs were less than the applicable New York Water Quality Standards (Class GA) for Groundwater (6NYCRR Part 703). The maximum toluene concentration detected in any VPB sample was 2.5 µg/L in VPB-300 at 375 ft bls. Following evaluation of the VPB results, the monitoring well screens were placed as generally defined in the Work Plan at the depths of the highest previously reported toluene concentrations in the deep aquifer (353-363 ft bls for MW-300 versus 355-365 ft bls in the Work Plan and 275-285 ft bls for MW-301, the same as in the Work Plan). Well construction logs and well development details are provided in **Attachment 2**. The monitoring wells were surveyed on May 24, 2018 by a professional surveyor for location, top-of-casing elevation, and ground surface elevation. The survey report is included as **Attachment 3**.

Monitoring Well Installation – MW-207A-1R and MW-207B-1R

The Work Plan called for Northrop Grumman to attempt to rehabilitate and resample two existing monitoring wells downgradient of the Park (MW-207A-1 and MW-207B-1) and if the rehabilitation was unsuccessful, to install and sample two new wells at the same general location and with similar screened intervals as the original wells.

The two existing wells at this location could not be rehabilitated, so replacement monitoring wells MW-207A-1R and MW-207B-1R were installed in May 2018 (**Figure 2**). The well screens for MW-207A-1R and MW-207B-1R were placed at 120-130 ft bls and 210-220 ft bls, respectively. Those screen intervals are the same as the two original wells, the depths of which are consistent with elevated toluene concentrations previously reported in the VPB borings associated with the wells. Well construction logs and well development details are provided in **Attachment 2**. The monitoring wells were surveyed on May 24, 2018 by a professional surveyor for location, top-of-casing elevation, and ground surface elevation. The survey report is included as **Attachment 3**.

Monitoring Well Sampling and Analysis

Groundwater sampling was conducted in accordance with the protocols in the Work Plan on December 21, 2017 in wells MW-300 and MW-301 and on May 31, 2018 in wells MW-207A-1R and MW-207B-1R. Prior to sample collection, depth to water was measured relative to the top of casing. A non-dedicated bladder pump was used to purge and sample each well. Field sampling forms are provided in **Attachment 4.**

Groundwater samples were analyzed for VOCs by EPA Method 8260C. In addition, as part of a NYSDEC request for 1,4-dioxane sampling in 2018, samples from MW-207A-1R and MW-207B-1R were analyzed for 1,4-dioxane by EPA Method 8270D SIM. Laboratory reports for VOCs and 1,4-dioxane are provided in **Attachment 5.**

Monitoring Well Abandonment

As described above, rehabilitation of existing wells MW-207A-1 and MW-207B-1 was unsuccessful, so the wells were abandoned. A monitoring well decommissioning and replacement plan was submitted to NYSDEC on September 26, 2017, which NYSDEC approved in an October 5, 2017 letter. The monitoring wells were grouted in-place on May 10 and 14, 2018, in accordance with the *CP-43 Groundwater Monitoring Well Decommissioning Policy* (NYSDEC, 2009). **Attachment 6** includes the NYSDEC-required State Well Decommissioning Record and the driller's daily log documenting the abandonment procedures.

Community Air Monitoring

Community air monitoring was performed during field activities for VOCs and particulates pursuant to a community air monitoring plan (CAMP). The air monitoring results are provided in **Attachment 7**. The monitoring data indicate no exceedances of action levels in the CAMP, with the exception of two exceedances of the VOC response level of 5 parts per million (ppm) on October 13, 2017 and May 7, 2018; however, those readings occurred when no field activities were being conducted and appeared to be related to initial equipment activation and/or calibration.

Decontamination and Management of Investigation Derived Waste (IDW)

Plastic sheeting was placed under the drill rig and over the work area during well installation activities. IDW soil produced during VPB and monitoring well installation was collected, containerized in 55-gallon drums and roll-off containers, and securely stored at Northrop Grumman's McKay Field property (**Figure 2**) before being characterized and disposed at a permitted off-site facility. A decontamination pad constructed at McKay Field was used for equipment decontamination. Liquid IDW (development water and decontamination fluids) was stored in a holding tank on the Northrop Grumman Plant 14 property prior to

characterization and was later discharged (under Nassau County Department of Public Works [NCDPW] discharge permit) to the sanitary sewer. IDW laboratory data, the NCDPW discharge permits, and discharge data summary letters to NCDPW are included in **Attachment 8**.

4. GROUNDWATER DATA EVALUATION

Groundwater analytical data were reviewed and validated in accordance with *DER-10 / Technical Guidance for Site Investigation and Remediation* (NYSDEC, 2010) and *Northrop Grumman Systems Corporation Quality Assurance Project Plan, Operable Units 2 and 3* (Arcadis, 2016). The data were found to be acceptable for use. A data usability summary report (DUSR) is provided as **Attachment 9**.

A summary of parameters detected in the monitoring wells is provided in **Table 3**. VOC concentrations were below the applicable Class GA Groundwater Standards in all groundwater samples. Notably, the maximum toluene concentration (0.39 J µg/L in MW-207B-1R) was substantially below the 5 ug/L groundwater standard. The 1,4-dioxane results for MW-207A-1R (0.64 µg/L) and MW-207B-1R (1.3 µg/L) were below the New York State Department of Health limit of 50 µg/L for Unspecified Organic Contaminants under regulation 10NYCRR Part 5, Subpart 5-1.

5. CONCLUSIONS

Pursuant to the May 2014 OU3 Consent Order, a hydraulic effectiveness evaluation was conducted (ERM, 2015), which recommended further evaluation of reported toluene in deep groundwater at the Park boundary and slightly downgradient. The supplemental groundwater investigation reported in this technical memo verified the absence of toluene and other VOCs above groundwater quality criteria at those locations. As indicated in the NYSDEC-approved Work Plan, additional sampling beyond the work described in this report is conditioned on finding elevated toluene levels in deep groundwater in the wells installed at the Park boundary (MW-300 and MW-301) and/or the downgradient location (MW-207A-1R and MW-207B-1R). The results reported herein do not indicate the presence of toluene, other VOCs, or 1,4-dioxane above the applicable groundwater quality criteria in deep groundwater samples and, moreover, support the conclusions in the hydraulic effectiveness report regarding the effectiveness of the BPGWCS. Accordingly, the hydraulic effectiveness evaluation is complete, and no further investigation is recommended.

6. REFERENCES

Arcadis 2014, Bethpage Park Containment System Pre-Design Hydraulic Effectiveness Evaluation Work Plan, May 1, 2014.

Arcadis 2016, Site-Specific Health and Safety Plan, May, 2016.

Arcadis 2016, Northrop Grumman Systems Corporation Quality Assurance Project Plan, Operable Units 2 and 3, June 2016.

EMAGIN 2016, Work Plan for Supplemental Groundwater Characterization, Bethpage Park Groundwater Containment System, September 30, 2016.

EMAGIN 2018, Interim Phase 1 Technical Memorandum, OU3 Hydraulic Effectiveness Evaluation – Supplemental Groundwater Characterization, April 2, 2018.

ERM 2015, Bethpage Park Groundwater Containment System Hydraulic Effectiveness Evaluation Report, July 2015.

Northrop Grumman 2017, Well Decommissioning Plan – OU3 (Former Grumman Settling Ponds) Work Plan for Supplemental Groundwater Characterization Bethpage Park Groundwater Containment System, September 26, 2017.

NYSDEC 2009, CP-43 Groundwater Monitoring Well Decommissioning Policy, November 2009.

NYSDEC 2010, Technical Guidance for Site Investigation and Remediation / DER-10, May 3, 2010.

NYSDEC 2017, OU3 (Former Grumman Settling Ponds) Work Plan for Supplemental Groundwater Characterization Bethpage Park Groundwater Containment System Approval Letter, May 16, 2017.

NYSDEC 2017, OU3 (Former Grumman Settling Ponds) Plan for Monitoring Well Decommissioning and Replacement Approval Letter, October 5, 2017.

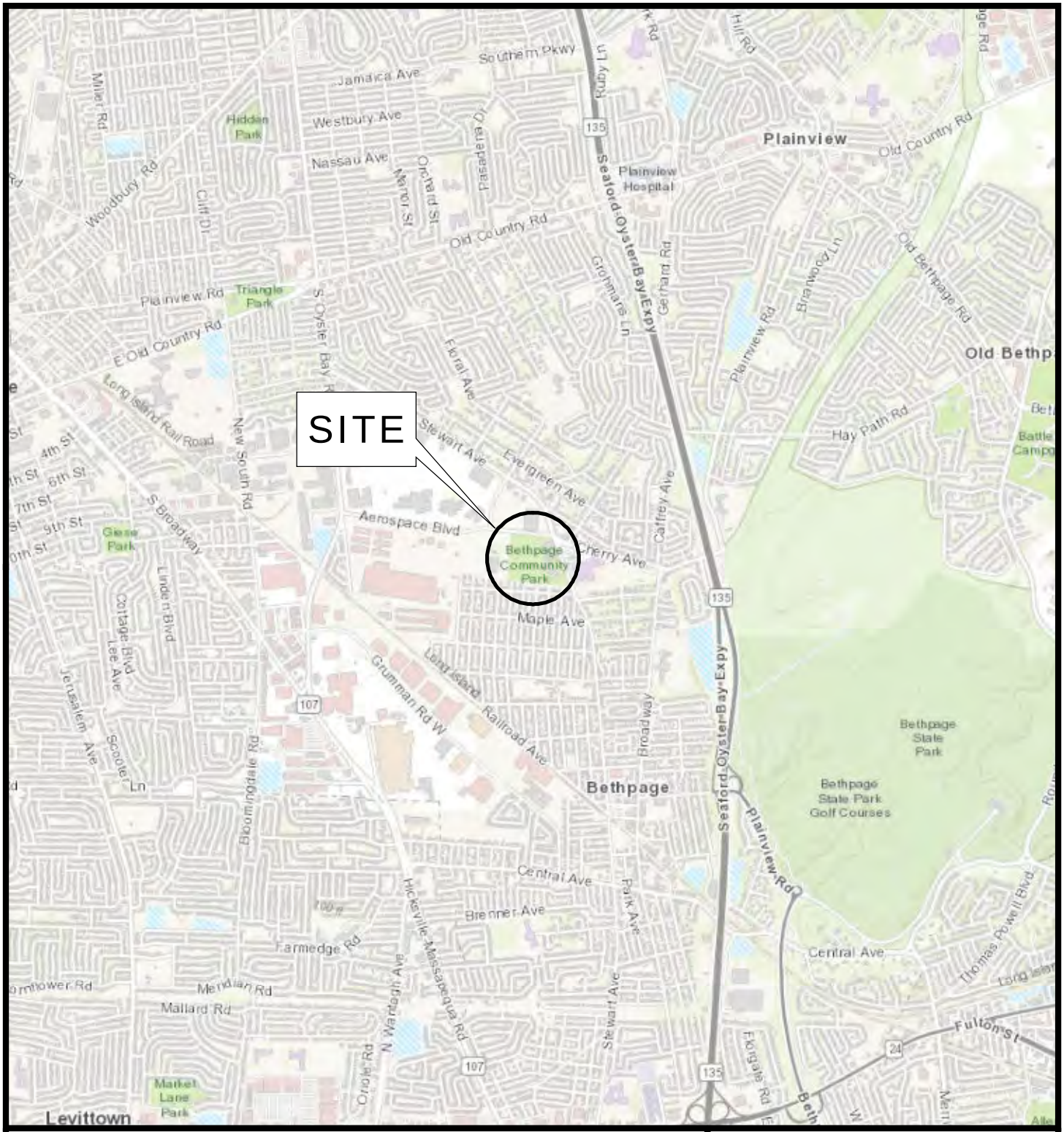
Sincerely,
Environmental Management and Global Innovations, Inc.

Douglas A. Smolensky, PG
Principal Hydrogeologist

cc: Ed Hannon
Joel Balmat

Attachments:

Figures
Tables
Attachment 1 – Interim Phase I Technical Memorandum (Text, Tables, and Figures Only)
Attachment 2 - Monitoring Well Construction Logs
Attachment 3 – Monitoring Well Survey
Attachment 4 – Groundwater Sampling Field Forms
Attachment 5 – Laboratory Reports
Attachment 6 - Monitoring Well Abandonment
Attachment 7 – Community Air Monitoring Plan Data
Attachment 8 – IDW and Nassau County Sanitary Sewer Discharge Approval
Attachment 9 – Data Usability Summary Report

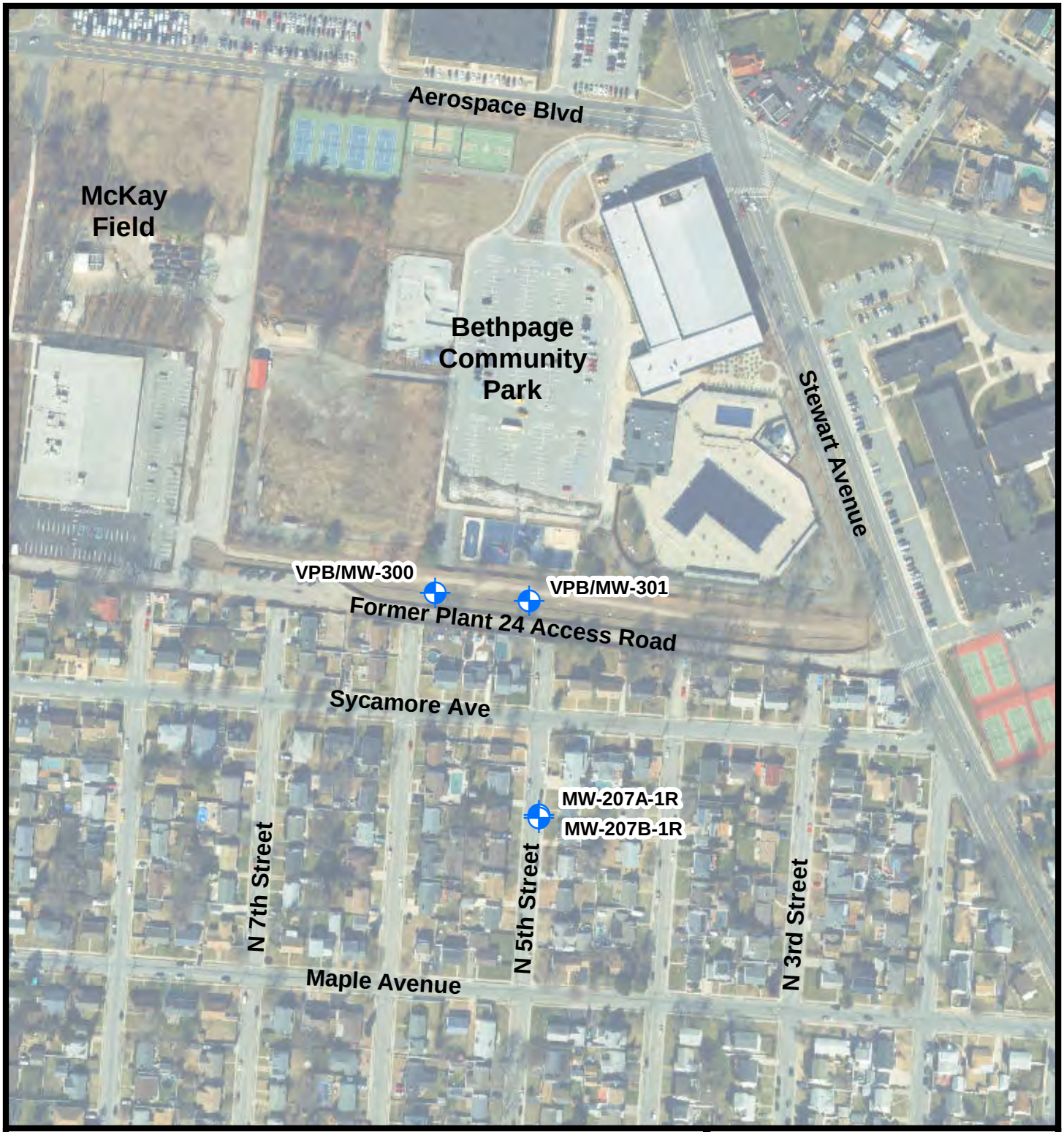


OU3 HYDRAULIC EFFECTIVENESS EVALUATION SUPPLEMENTAL GROUNDWATER CHARACTERIZATION
FORMER GRUMMAN FACILITY
BETHPAGE, NASSAU COUNTY, NY

FIGURE 1
SITE LOCATION MAP
JULY 2018

EMAGIN
Creative Environmental Solutions

O:\Projects\7AS301_Bethpage\GIS_Projects\2018\Supplemental Groundwater Characterization\1AS301101_Site_Location_Map (rev1 KCB).mxd|User: KBadgley



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Feet

Legend

Monitoring Well

OU3 HYDRAULIC EFFECTIVENESS EVALUATION SUPPLEMENTAL GROUNDWATER CHARACTERIZATION
FORMER GRUMMAN FACILITY
BETHPAGE, NASSAU COUNTY, NY

FIGURE 2
MONITORING WELL LOCATIONS
JULY 2018

EMAGIN
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O:\Projects\7AS301_Bethpage\GIS_Projects\2018\Supplemental Groundwater Characterization\1AS301101 MW Locations (rev1 KCB).mxd|User: KBadgley

Table 1. Summary of VOC Detections in VPB Samples - MW-300
Supplemental Groundwater Characterization Report

Sample Depth (ft bls)	6NYCRR Part 703 Class GA GW Standards	VPB-300 (335)	VPB-300 (345)	VPB-300 (355)	VPB-300 (365)	VPB-300 (375)	VPB-300 (385)	VPB-300 (398)	VPB-300 (405)
Date Sampled:		10/11/2017	10/12/2017	10/12/2017	10/12/2017	10/13/2017	10/13/2017	10/17/2017	10/17/2017
Volatiles (EPA Method 8260C) (ug/L)									
Acetone	-	**18.3**	**67.5**	**28.8**	**20.3**	**44.8**	**5.8 J**	**21**	**9.9 J**
Carbon disulfide	60	ND (0.23)	ND (0.23)	ND (0.23)	**0.29 J**	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)
Chloroform	7	ND (0.29)	ND (0.29)	**0.44 J**	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.29)	**0.39 J**
1,1-Dichloroethane	5	ND (0.21)	**0.65 J**	**4.4**	**2.6**	**0.40 J**	**0.70 J**	**0.66 J**	**2.1**
1,1-Dichloroethene	5	ND (0.47)	ND (0.47)	**1.5**	**0.79 J**	ND (0.47)	ND (0.47)	ND (0.47)	**0.79 J**
Methyl Tert Butyl Ether	10	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	**0.31 J**	**0.26 J**
Tetrachloroethene	5	ND (0.50)	ND (0.50)	**1.7**	**1.6**	**1.5**	**4.7**	ND (0.50)	**1**
Toluene	5	**2.3**	**1.9**	**1.1**	**1.1**	**2.5**	**0.51 J**	**0.41 J**	**0.35 J**
1,1,1-Trichloroethane	5	ND (0.25)	ND (0.25)	**0.45 J**	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
Trichloroethene	5	ND (0.27)	ND (0.27)	**2.5**	**2.3**	**2**	**4.8**	**0.42 J**	**1.5**

Notes:

VOCs - volatile organic compounds

Bold - detected

ND - non detect (laboratory detection limit)

J - estimated value

ug/L - micrograms per liter

ft bls - feet below land surface

Table 2. Summary of VOC Detections in VPB Samples - MW-301
Supplemental Groundwater Characterization Report

Sample ID (ft bls)	6NYCRR Part 703 Class GA GW Standards	VPB-301 (255)	VPB-301 (265)	VPB-301 (275)	VPB-301 (285)	VPB-301 (295)	VPB-301 (305)
Date Sampled:		11/7/2017	11/7/2017	11/8/2017	11/8/2017	11/8/2017	11/9/2017
Volatiles (EPA Method 8260C) (ug/L)							
Acetone	-	ND (5.0)	**19.7**	ND (5.0)	**9.2 J**	**12.3**	**17.2**
Carbon disulfide	60	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	**0.33 J**	ND (0.23)
Chloroform	7	**0.33 J**	ND (0.29)	**0.30 J**	ND (0.29)	ND (0.29)	ND (0.29)
1,1-Dichloroethane	5	**0.23 J**	ND (0.21)	**0.48 J**	**1.1**	**0.75 J**	ND (0.21)
1,1-Dichloroethene	5	ND (0.47)	ND (0.47)	ND (0.47)	**0.49 J**	ND (0.47)	ND (0.47)
Tetrachloroethene	5	**0.97 J**	ND (0.50)	**0.73 J**	**1.1**	**0.56 J**	ND (0.50)
Toluene	5	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	**0.30 J**	ND (0.25)
Trichloroethene	5	ND (0.27)	ND (0.27)	**0.51 J**	**1.1**	**0.56 J**	ND (0.27)

Notes:

VOCs - volatile organic compounds

Bold - detected

ND - non detect (laboratory detection limit)

J - estimated value

ug/L - micrograms per liter

ft bls - feet below land surface

Sample ID:	6NYCRR Part 703 Class GA GW Standards*	MW-300	MW-301	MW-207A-1R	MW-207B-1R
Date Sampled:		12/21/2017	12/21/2017	5/31/2018	5/31/2018
Screened Interval:		353-363 ft bls	275-285 ft bls	120-130 ft bls	210-220 ft bls
Volatiles (EPA Method 8260C) (ug/L)					
Bromoform	-	ND (0.42)	ND (0.42)	ND (0.42)	**0.65 J**
Chloroform	7	**0.41 J**	**0.39 J**	ND (0.29)	ND (0.29)
Dibromochloromethane	-	ND (0.16)	ND (0.16)	ND (0.16)	**0.46 J**
1,1-Dichloroethane	5	**4.2**	**2.1**	ND (0.21)	ND (0.21)
1,1-Dichloroethene	5	**1.2**	**1.1**	ND (0.47)	ND (0.47)
Freon 113	5	ND (1.2)	ND (1.2)	ND (1.2)	**1.3 J**
Tetrachloroethene	5	**1**	**1.2**	ND (0.50)	ND (0.50)
1,1,1-Trichloroethane	5	**0.41 J**	**0.38 J**	ND (0.25)	ND (0.25)
Toluene	5	ND (0.25)	ND (0.25)	ND (0.25)	**0.39 J**
Trichloroethene	5	ND (0.27)	ND (0.27)	ND (0.27)	**1.1**
Semi-Volatiles (EPA Method 8270D SIM) (ug/L)					
1,4-Dioxane	50	NA	NA	**0.64**	**1.3**

Notes:

VOCs - volatile organic compounds

Bold - detected

ND - non detect (laboratory detection limit)

J - estimated value

ug/L - micrograms per liter

ft bls - feet below land surface

NA - Not applicable

* - 1,4-dioxane is regulated under New York State Department of Health Unspecified Organic Contaminants, 10NYCRR Part 5, Subpart 5-1

Attachment 1
Interim Phase I Technical Memorandum

April 2, 2018

Messrs. Jason Pelton and Don Hesler
Division of Environmental Remediation
Remedial Bureau D, Section B
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233

Re: Interim Phase 1 Technical Memorandum
OU3 Hydraulic Effectiveness Evaluation - Supplemental Groundwater Characterization
Bethpage, NY

Electronic transmission only. Hard copy available upon request.

Dear Messrs. Pelton and Hesler:

Environmental Management & Global Innovations, Inc. (EMAGIN) prepared this Interim Phase 1 Technical Memorandum (Interim Memo) on behalf of Northrop Grumman Systems Corporation (Northrop Grumman) to provide interim results of its groundwater investigation in the vicinity of Bethpage Community Park (Park) in Bethpage, New York (**Figure 1**). This Interim Memo describes drilling and sampling of vertical profile borings (VPBs) and installing and sampling of monitoring wells to assess previous groundwater sampling results (primarily toluene) in the deep aquifer. The sampling locations, depths, and procedures used were in accordance with the *Work Plan for Supplemental Groundwater Characterization, Bethpage Park Groundwater Containment System* (Work Plan; EMAGIN, 2016), which was approved by New York State Department of Environmental Conservation (NYSDEC) on May 16, 2017.

BACKGROUND

Phase 1 activities in the Work Plan consist of installing and sampling four monitoring wells in the Park vicinity (**Figure 2**):

- Two monitoring wells (MW-300 and MW-301) to assess deep groundwater impacts at the southern boundary of the Park. This Interim Memo discusses well installation, sampling procedures, and sampling results for MW-300 and MW-301.

- Two monitoring wells (MW-207A-1 and MW-207B-1) to assess deep groundwater impacts downgradient of the Park. The two existing wells in this location could not be rehabilitated and therefore require replacement, which was unavoidably delayed until spring 2018. The well installation and sampling results for MW-207A-1 and MW-207B-1 will be included in a Phase 1 Technical Memo to be submitted to NYSDEC in the third quarter of 2018.

SCOPE OF WORK

All field work and sampling activities were conducted in accordance with the Work Plan, NYSDEC's *Technical Guidance for Site Investigation and Remediation (DER-10) Community Air Monitoring Plan (CAMP)*, and the *Site-Specific Health and Safety Plan* (HASP; Arcadis, 2016).

Drilling of VPBs and Monitoring Wells

VPB-300 and VPB-301 were drilled and MW-300 and MW-301 installed near the locations of two previously drilled VPBs (also named VPB-300 and VPB-301) at the southern boundary of the Park. The purpose of these VPBs and wells is to evaluate potential deep toluene impacts near the former ball field area (**Figure 2**). The VPB and monitoring well locations were adjusted slightly from the locations proposed in the Work Plan (within 50 feet) to allow for equipment access.

Ground penetrating radar was used to locate and mark subsurface utilities prior to any drilling activities. In addition, each drilling location was cleared by hand-augering the borehole to 5 feet below land surface (ft bls). VPBs were advanced by mud rotary drilling and groundwater samples were collected at 10-foot intervals using a HydroPunch tool from 335 to 405 feet ft bls for VPB-300 and from 255 to 305 ft bls for VPB-301. VPB samples were analyzed at a fixed laboratory for volatile organic compounds (VOCs) by EPA Method 8260C. A 24-hour analytical turn-around time was used to allow for rapid determinations regarding the need to drill deeper. The Work Plan indicated that VPB sampling would be terminated in VPB-300 at 385 ft bls; however, due to presence of tetrachloroethene and trichloroethene in screening samples at that depth that were just below the 5 micrograms per liter (µg/L) groundwater standard, the boring was continued to 405 ft bls. Two additional VOC samples were collected in the boring, which showed substantially reduced concentrations of those two parameters.

VPB screening results were used to evaluate the vertical distribution of VOCs in the boreholes and thereby fine-tune the vertical placement of the monitoring well screens installed in the borings. Screening results for VPB-300 are summarized in **Table 1** and screening results for VPB-301 are summarized in **Table 2**. All VOC screening results in both VPBs were less than the applicable New York Water Quality Standards (Class GA) for Groundwater (6NYCRR Part 703). Accordingly, there was no need to change the screened intervals for the monitoring wells installed in the boreholes from those proposed in the Work Plan (353-363 ft bls for MW-300 versus 355-365 ft bls in the Work Plan and 275-285 ft bls for MW-301, the same as the Work Plan). Following installation, the monitoring wells were developed using a combination of submersible pump/surging in addition to air lift. **Attachment 1** provides the well construction logs with well development details.

Monitoring Wells Sampling and Laboratory Results

Groundwater samples were collected from MW-300 and MW-301 on December 21, 2017. Prior to sample collection, depth to water was measured relative to the top of casing. A non-dedicated bladder pump was used to purge and sample each well. Well sampling was conducted in accordance with the Work Plan. Monitoring well sampling results are summarized in **Table 3.** All laboratory results were less than the applicable New York Water Quality Standards (Class GA) for Groundwater (6NYCRR Part 703).

Field sampling forms are provided in **Attachment 2** and laboratory reports are provided in **Attachment 3**. Data were reviewed and validated in accordance with *DER-10 / Technical Guidance for Site Investigation and Remediation, May 3, 2010* (DER-10) and *Northrop Grumman Systems Corporation Quality Assurance Project Plan, Operable Units 2 and 3, June 2016* (QAPP). The data were found to be acceptable for use. A data usability summary report (DUSR) is provided as **Attachment 4**. CAMP data will be provided in the final Phase 1 Technical Memo at the conclusion of the Phase 1 investigation. The monitoring wells will be surveyed by a professional surveyor for location, top-of-casing elevation, and ground surface elevation, and the survey data provided in the final memo.

Decontamination and Management of Investigation Derived Waste (IDW)

A decontamination pad was constructed at McKay Field for equipment decontamination. Plastic sheeting was placed under the drill rig and work area during well installation activities. IDW soil produced during VPB and monitoring well installation was collected, containerized in 55-gallon drums and roll-off containers, and temporarily stored at McKay Field before being characterized and disposed at a permitted off-site facility. Liquid IDW (development water and decontamination fluids) was stored in a holding tank on the Northrop Grumman facility prior to characterization and was discharged to the sanitary sewer. IDW laboratory data are included in **Attachment 3**. The Nassau County Department of Public Works discharge permit is provided in **Attachment 5**.

Please contact us should you require additional information.

Sincerely,
Environmental Management and Global Innovations, Inc.

Douglas A. Smolensky, PG
Principal Hydrogeologist

cc: Ed Hannon
Joel Balmat

Attachments:

Figures
Tables
Attachment 1 – Monitoring Well Construction Logs
Attachment 2 – Groundwater Sampling Field Forms
Attachment 3 – Laboratory Reports
Attachment 4 – Data Usability Summary Report
Attachment 5 – Nassau County Sanitary Sewer Discharge Approval

Table 1. Summary of VOC Detections in VPB Samples - MW-300
Interim Phase 1 Technical Memorandum - Supplemental Groundwater Characterization

Sample Depth (ft bls)	6NYCRR Part 703 Class GA GW Standards	VPB-300 (335)	VPB-300 (345)	VPB-300 (355)	VPB-300 (365)	VPB-300 (375)	VPB-300 (385)	VPB-300 (398)	VPB-300 (405)
Date Sampled:		10/11/2017	10/12/2017	10/12/2017	10/12/2017	10/13/2017	10/13/2017	10/17/2017	10/17/2017
Volatiles (SW846 8260C) (ug/L)									
Acetone	-	**18.3**	**67.5**	**28.8**	**20.3**	**44.8**	**5.8 J**	**21**	**9.9 J**
Carbon disulfide	60	ND (0.23)	ND (0.23)	ND (0.23)	**0.29 J**	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)
Chloroform	7	ND (0.29)	ND (0.29)	**0.44 J**	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.29)	**0.39 J**
1,1-Dichloroethane	5	ND (0.21)	**0.65 J**	**4.4**	**2.6**	**0.40 J**	**0.70 J**	**0.66 J**	**2.1**
1,1-Dichloroethene	5	ND (0.47)	ND (0.47)	**1.5**	**0.79 J**	ND (0.47)	ND (0.47)	ND (0.47)	**0.79 J**
Methyl Tert Butyl Ether	10	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	**0.31 J**	**0.26 J**
Tetrachloroethene	5	ND (0.50)	ND (0.50)	**1.7**	**1.6**	**1.5**	**4.7**	ND (0.50)	**1**
Toluene	5	**2.3**	**1.9**	**1.1**	**1.1**	**2.5**	**0.51 J**	**0.41 J**	**0.35 J**
1,1,1-Trichloroethane	5	ND (0.25)	ND (0.25)	**0.45 J**	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
Trichloroethene	5	ND (0.27)	ND (0.27)	**2.5**	**2.3**	**2**	**4.8**	**0.42 J**	**1.5**

Notes:

VOCs - Volatile Organic Compounds
Bold - detected
ND - non detect (laboratory detection limit)
Shaded - exceeds groundwater standard
J - estimated value
ug/L - Micrograms per liter
ft bls - feet below land surface

Table 2. Summary of VOC Detections in VPB Samples - MW-301
Interim Phase 1 Technical Memorandum - Supplemental Groundwater Characterization

Sample ID (ft bls)	6NYCRR Part 703 Class GA GW Standards	VPB-301 (255)	VPB-301 (265)	VPB-301 (275)	VPB-301 (285)	VPB-301 (295)	VPB-301 (305)
Date Sampled:		11/7/2017	11/7/2017	11/8/2017	11/8/2017	11/8/2017	11/9/2017
Volatiles (SW846 8260C) (ug/L)							
Acetone	-	ND (5.0)	**19.7**	ND (5.0)	**9.2 J**	**12.3**	**17.2**
Carbon disulfide	60	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	**0.33 J**	ND (0.23)
Chloroform	7	**0.33 J**	ND (0.29)	**0.30 J**	ND (0.29)	ND (0.29)	ND (0.29)
1,1-Dichloroethane	5	**0.23 J**	ND (0.21)	**0.48 J**	**1.1**	**0.75 J**	ND (0.21)
1,1-Dichloroethene	5	ND (0.47)	ND (0.47)	ND (0.47)	**0.49 J**	ND (0.47)	ND (0.47)
Tetrachloroethene	5	**0.97 J**	ND (0.50)	**0.73 J**	**1.1**	**0.56 J**	ND (0.50)
Toluene	5	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	**0.30 J**	ND (0.25)
Trichloroethene	5	ND (0.27)	ND (0.27)	**0.51 J**	**1.1**	**0.56 J**	ND (0.27)

Notes:

VOCs - Volatile Organic Compounds

Bold - detected

ND - non detect (laboratory detection limit)

Shaded - exceeds groundwater standard

J - estimated value

ug/L - Micrograms per liter

ft bls - feet below land surface

Table 3. Summary of VOC Detections in Monitoring Well Samples
Interim Phase 1 Technical Memorandum - Supplemental Groundwater Characterization

Sample ID:	6NYCRR Part 703 Class GA GW Standards	MW-300	MW-301	DUP	TB 12/21/17	EB 12/21/17
Date Sampled:		12/21/2017	12/21/2017	12/21/2017	12/21/2017	12/21/2017
Volatiles (SW846 8260C) (ug/L)						
Chloroform	7	**0.41 J**	**0.39 J**	**0.44 J**	ND (0.29)	ND (0.29)
1,1-Dichloroethane	5	**4.2**	**2.1**	**4.2**	ND (0.21)	ND (0.21)
1,1-Dichloroethene	5	**1.2**	**1.1**	**1.2**	ND (0.47)	ND (0.47)
Tetrachloroethene	5	**1**	**1.2**	**1.1**	ND (0.50)	ND (0.50)
1,1,1-Trichloroethane	5	**0.41 J**	**0.38 J**	**0.42 J**	ND (0.25)	ND (0.25)
Trichloroethene	5	**3.2**	**1.7**	**3**	ND (0.27)	ND (0.27)

Notes:

VOCs - Volatile Organic Compounds

Bold - detected

ND - non detect (laboratory detection limit)

Shaded - exceeds groundwater standard

J - estimated value

ug/L - micrograms per liter

ft bls - feet below land surface

DUP - duplicate sample

TB - trip blank

EB - equipment blank

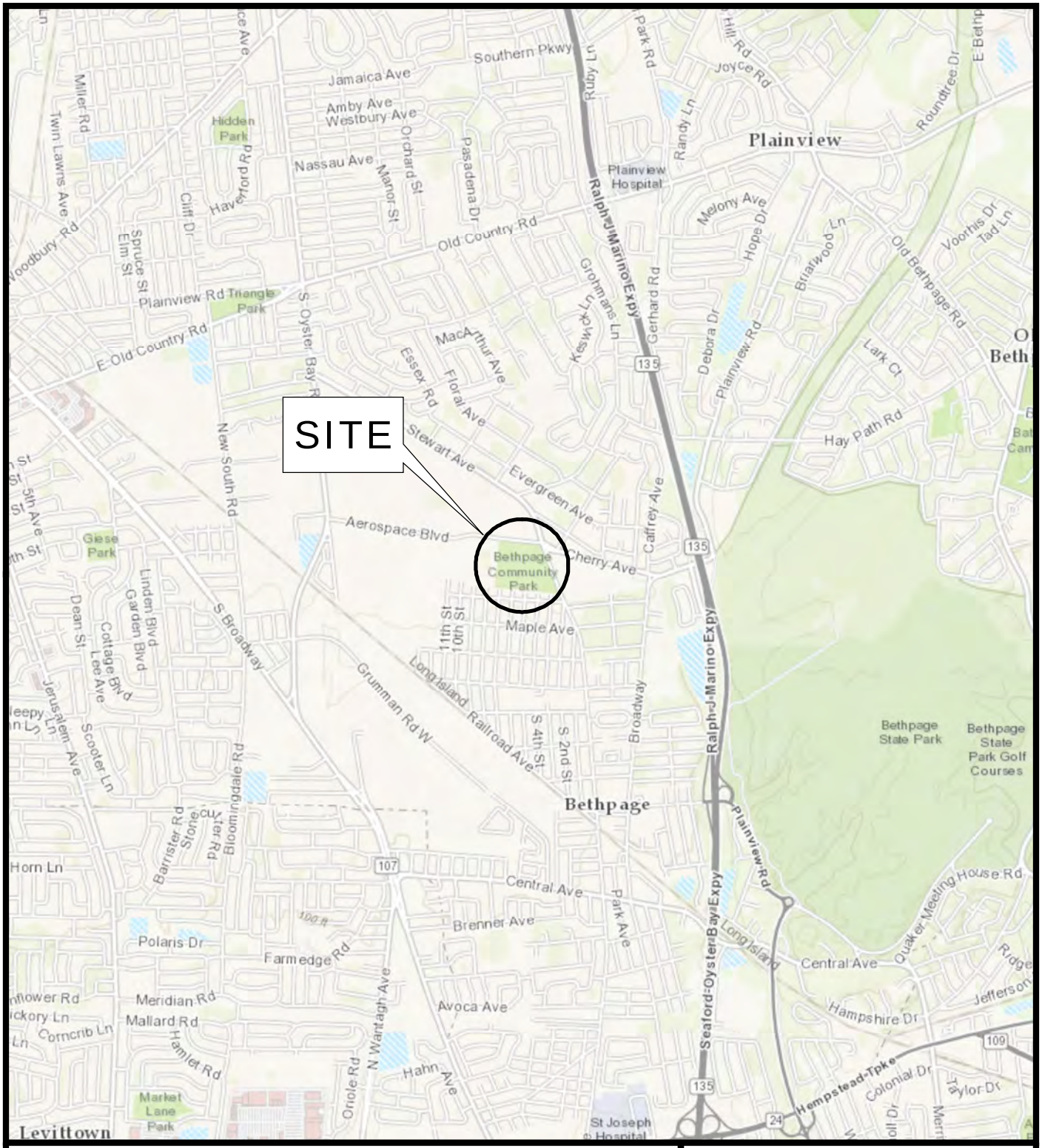


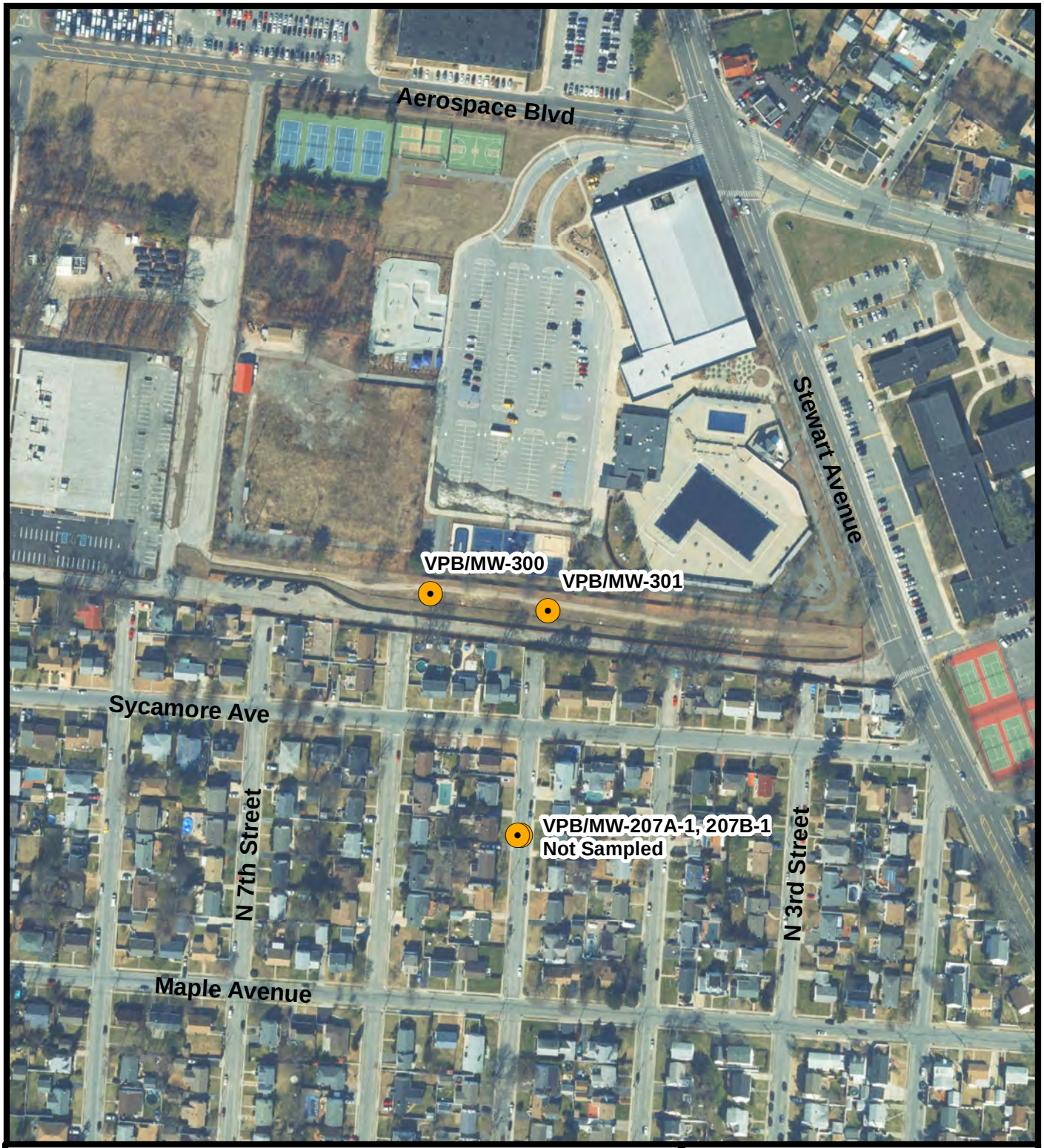
FIGURE 1
SITE LOCATION MAP

SUPPLEMENTAL GROUNDWATER CHARACTERIZATION

FORMER GRUMMAN FACILITY
BETHPAGE, NASSAU COUNTY, NY
MARCH 2018

EMAGIN
Creative Environmental Solutions

O:\Projects\7AS301_Bethpage\GIS_Projects\2017\1AS3011101 Site Location Map.mxd|User: rcn



0 125 250

Feet

Legend

VPB / Monitoring Well

VPB = Vertical Profile Boring

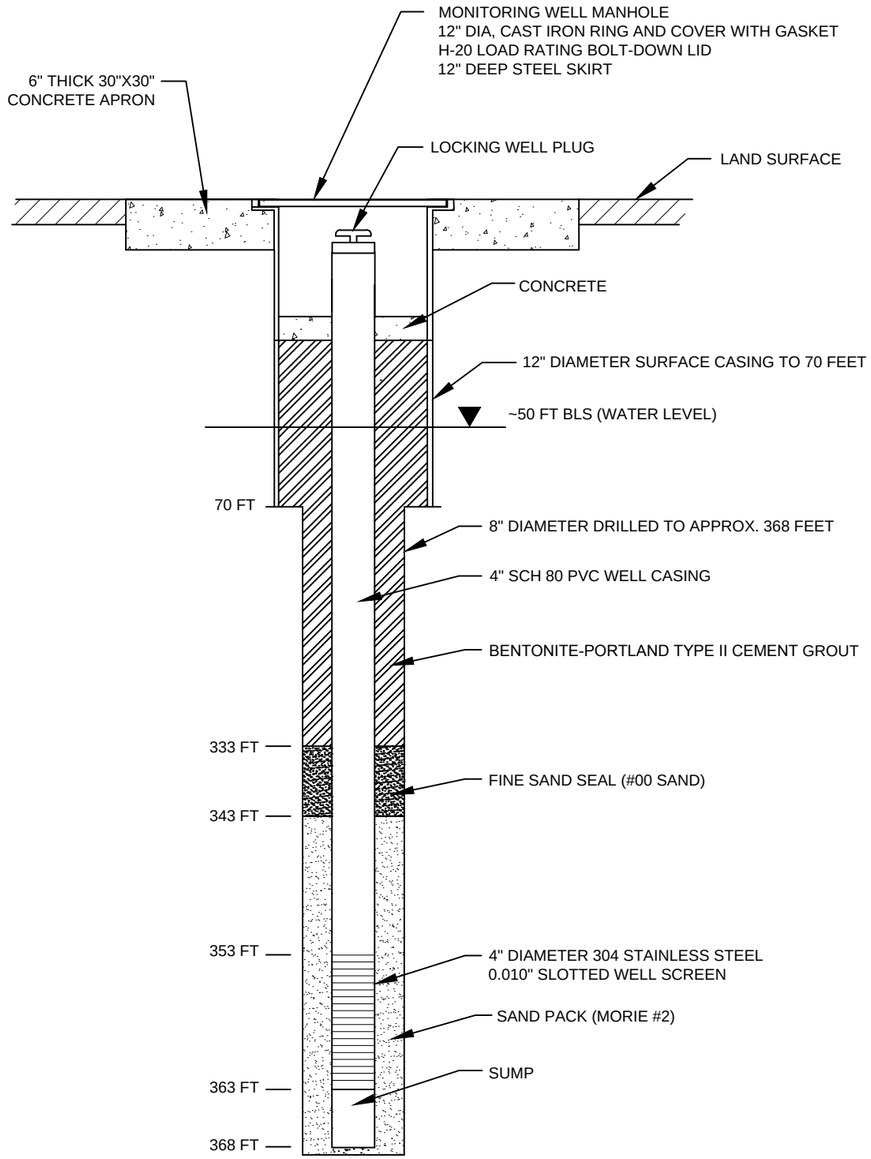
FIGURE 2
VPB / MONITORING WELL LOCATIONS
SUPPLEMENTAL GROUNDWATER CHARACTERIZATION

FORMER GRUMMAN FACILITY
BETHPAGE, NASSAU COUNTY, NY
MARCH 2018

EMAGIN
Creative Environmental Solutions

O:\Projects\7AS301_Bethpage\GIS_Projects\2017\1AS301101 Proposed VPB and MW Locations2.mxd|User: ffortes

Attachment 2
Monitoring Well Construction Logs



PROJECT#: 1AS301101.063 **WELL:** MW-300

TOWN/CITY: BETHPAGE

COUNTY: NASSAU

STATE: NY

INSTALLATION DATE(S): 10/28/2017 TO 11/17/2017

DRILLING METHOD: MUD ROTARY

DRILLING CONTRACTOR: SGS

DRILLING FLUID: POTABLE WATER - MUD / QUICK GEL

DEVELOPMENT TECHNIQUE(S) AND DATE(S) :
SUBMERSIBLE PUMP
DEVELOPED ON 11/16/17
START: 13:08 - CLOUDY-LIGHT GRAY
END: 15:30 - MOSTLY CLEAR VERY LIGHT GRAY
APPROX. 1000 GALLONS
GALLONS PER MINUTE: 7.0

AIRLIFT
ADDITIONAL DEVELOPMENT ON 11/17/17
APPROX. 120 GALLONS
GALLONS PER MINUTE: 7.0

SUBMERSIBLE PUMP
DEVELOPED ON 5/14/18
START: 10:03 - CLOUDY-LIGHT BROWN
END: 11:50 - CLEAR VERY
APPROX. 750 GALLONS
GALLONS PER MINUTE: 7.0

STATIC DEPTH TO WATER: APPROX. 50' FEET BELOW M.P

PUMPING DURATION: APPROX. 150 MINUTES

WELL PURPOSE: MONITORING WELL

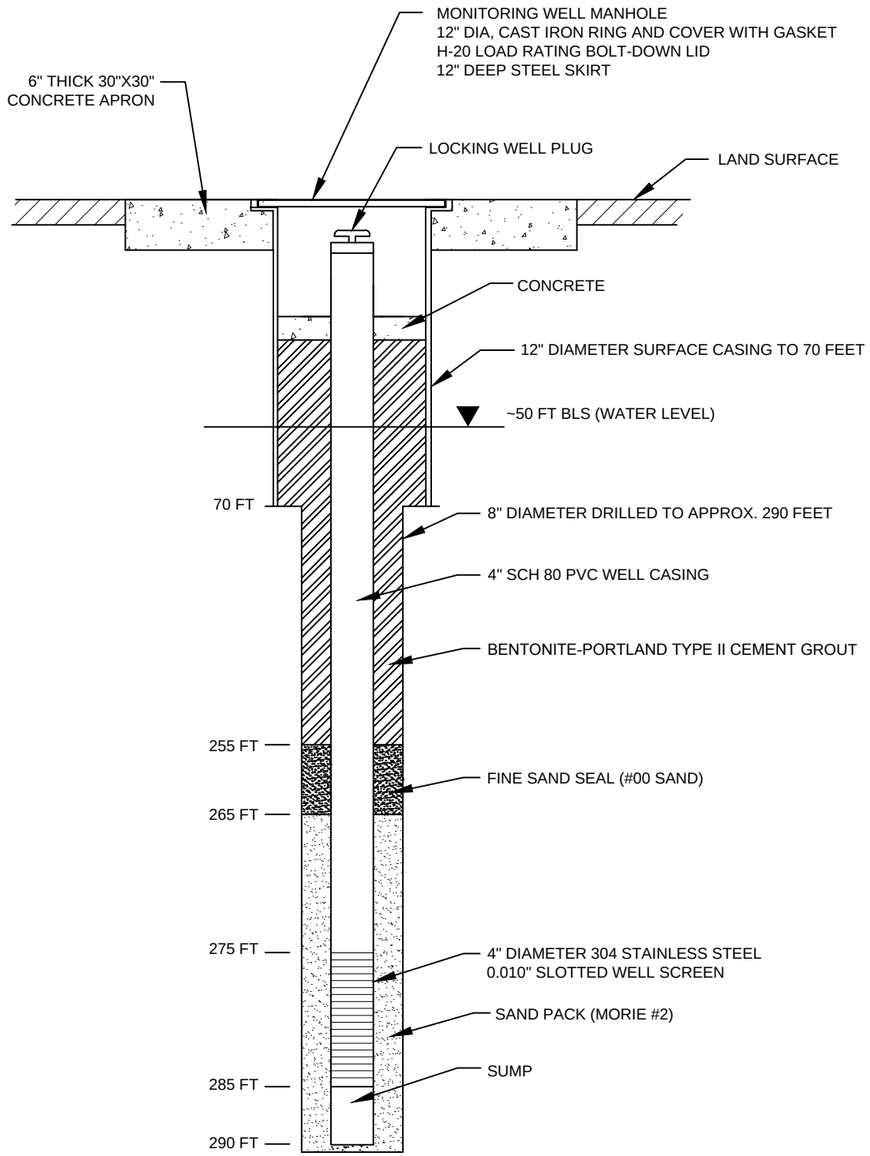
PREPARED BY: CMT (EMAGIN)

FORMER GRUMMAN FACILITY

BETHPAGE, NASSAU COUNTY, NY

WELL CONSTRUCTION LOG
MW-300

EMAGIN



PROJECT#: 1AS301101.063 **WELL:** MW-301

TOWN/CITY: BETHPAGE

COUNTY: NASSAU

STATE: NY

INSTALLATION DATE(S): 10/03/2017 TO 10/27/2017

DRILLING METHOD: MUD ROTARY

DRILLING CONTRACTOR: SGS

DRILLING FLUID: POTABLE WATER - MUD / QUICK GEL

DEVELOPMENT TECHNIQUE(S) AND DATE(S) :
SUBMERSIBLE PUMP
DEVELOPED ON 11/17/17
START: 10:45 - CLOUDY- GRAY
END: 12:30 - MOSTLY CLEAR VERY LIGHT GRAY
APPROX. 820 GALLONS
GALLONS PER MINUTE: 7.8

SUBMERSIBLE PUMP
DEVELOPED ON 5/17/18
START: 14:20 - MOSTLY CLEAR
END: 16:20 - CLEAR
APPROX. 750 GALLONS
GALLONS PER MINUTE: 6.25

STATIC DEPTH TO WATER: APPROX. 50' FEET BELOW M.P

PUMPING DURATION: APPROX. 105 MINUTES

WELL PURPOSE: MONITORING WELL

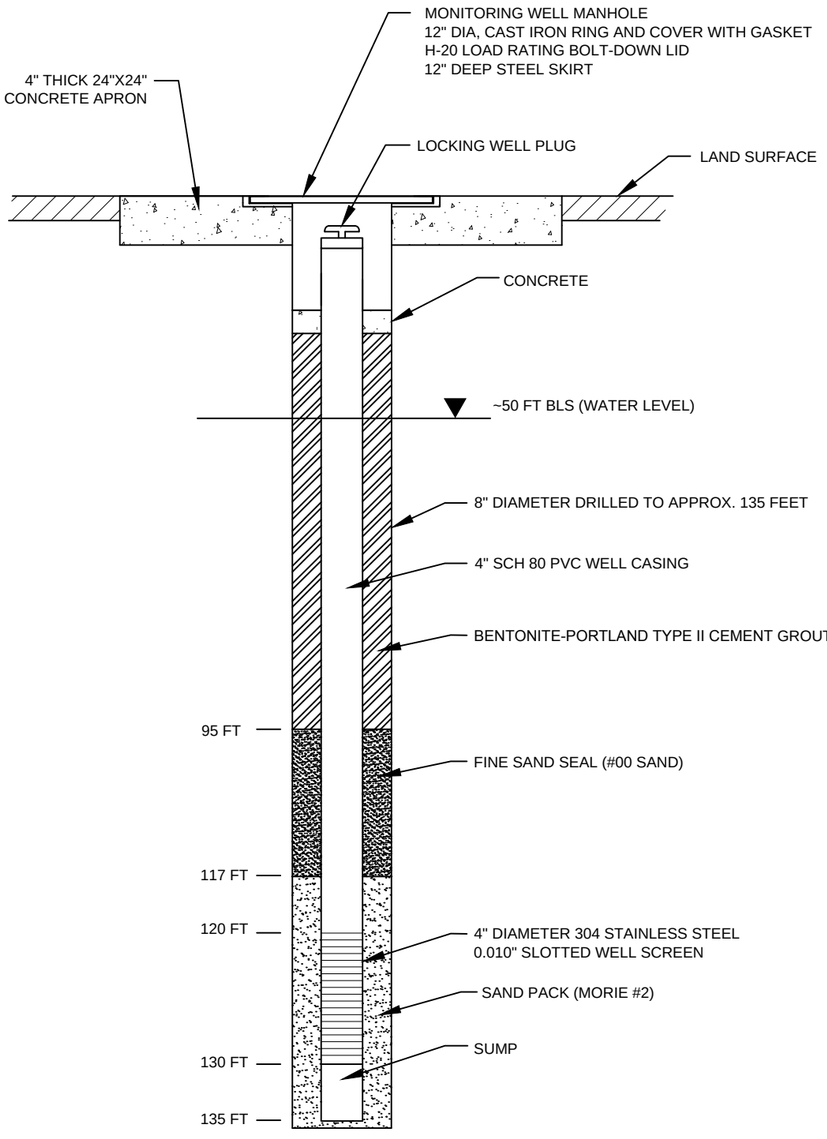
PREPARED BY: CMT (EMAGIN)

FORMER GRUMMAN FACILITY

BETHPAGE, NASSAU COUNTY, NY

WELL CONSTRUCTION LOG
MW-301

EMAGIN



PROJECT#: 1AS301101.063 **WELL: MW-207A-1R**

TOWN/CITY: BETHPAGE

COUNTY: NASSAU

STATE: NY

INSTALLATION DATE(S): 05/07/2018 TO 05/10/2018

DRILLING METHOD: MUD ROTARY

DRILLING CONTRACTOR: SGS

DRILLING FLUID: POTABLE WATER - MUD / QUICK GEL

DEVELOPMENT TECHNIQUE(S) AND DATE(S) :
SUBMERSIBLE PUMP
DEVELOPED ON 05/21/2018
START: 13:10 - CLOUDY - BROWN - TURBID
END: 15:30 - MOSTLY CLEAR - NO COLOR
APPROX. 850 GALLONS
GALLONS PER MINUTE: 6.1

STATIC DEPTH TO WATER: APPROX. 50' FEET BELOW M.P

PUMPING DURATION: APPROX. 140 MINUTES

WELL PURPOSE: MONITORING WELL

PREPARED BY: CMT (EMAGIN)

FORMER GRUMMAN FACILITY

BETHPAGE, NASSAU COUNTY, NY

WELL CONSTRUCTION LOG
MW-207A-1R

EMAGIN

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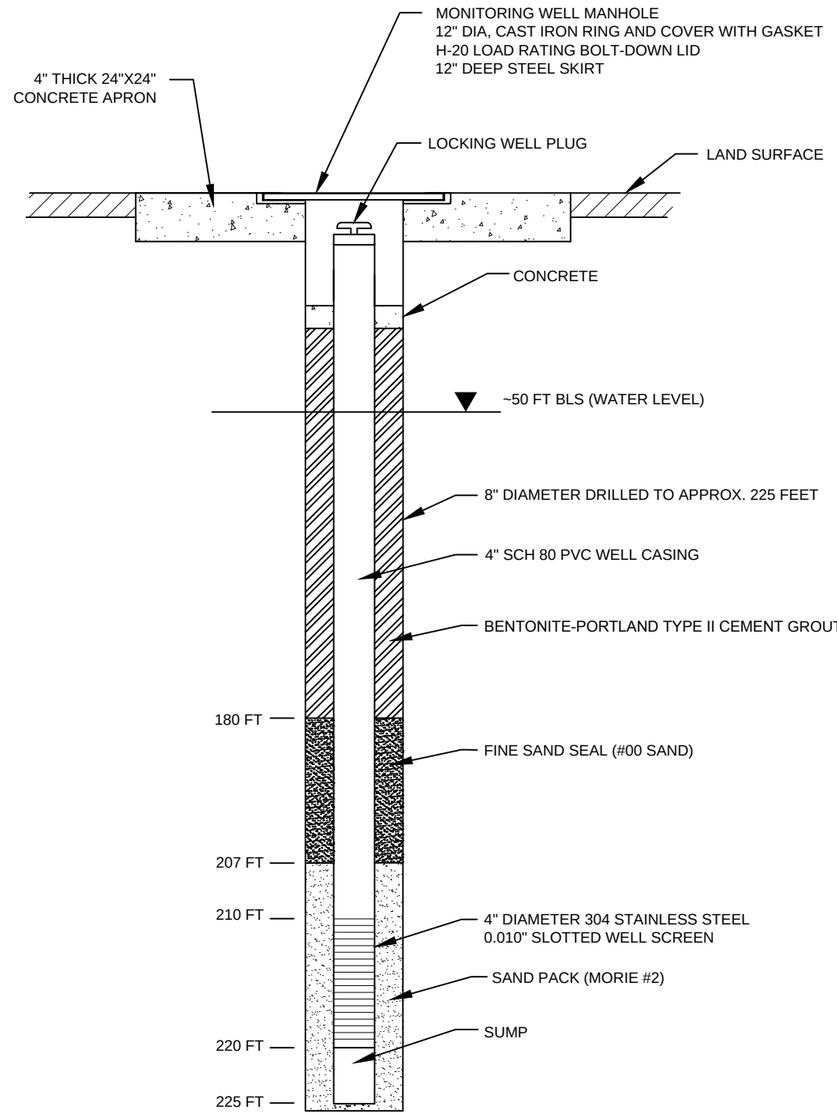

PROJECT#: 1AS301101.063 **WELL: MW-207B-1R**

TOWN/CITY: BETHPAGE

COUNTY: NASSAU

STATE: NY

INSTALLATION DATE(S): 05/14/2018 TO 05/18/2018

DRILLING METHOD: MUD ROTARY

DRILLING CONTRACTOR: SGS

DRILLING FLUID: POTABLE WATER - MUD / QUICK GEL

DEVELOPMENT TECHNIQUE(S) AND DATE(S) :
SUBMERSIBLE PUMP
DEVELOPED ON 05/21/2018
START: 9:20 - CLOUDY - BROWN - TURBID
END: 11:35 - MOSTLY CLEAR - NO COLOR
APPROX. 780 GALLONS
GALLONS PER MINUTE: 5.8

STATIC DEPTH TO WATER: APPROX. 50' FEET BELOW M.P

PUMPING DURATION: APPROX. 135 MINUTES

WELL PURPOSE: MONITORING WELL

PREPARED BY: CMT (EMAGIN)

FORMER GRUMMAN FACILITY

BETHPAGE, NASSAU COUNTY, NY

WELL CONSTRUCTION LOG
MW-207B-1R

EMAGIN

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Attachment 3
Monitoring Well Survey

NOTES: THIS PROPERTY DESIGNATED:
SECTION 46, BLOCK "G", PART OF LOT NO. 92 &
SECTION 46, BLOCK 78, W/S/O LOT NOS. 48 & 50
ON THE LAND & TAX MAP OF THE COUNTY OF NASSAU.

HORIZONTAL DATUM: U.S. STATE PLANE NAD 1983
NEW YORK LONG ISLAND ZONE 3104
VERTICAL DATUM: NAVD 1988

MEASURING PONTS ARE THE NORTH SIDE OF THE 4" PVC MONITORING WELLS.

ABSTRACT OF TITLE AND EASEMENTS FOR SUBJECT PARCEL AND ADJOINING PARCELS NOT PROVIDED FOR THE PREPARATION OF THIS SURVEY. ABSENCE OF EASEMENTS DOES NOT DENY THE EXISTENCE OF SAME.

PROJECT NO. 171206

SURVEYED: MAY 24, 2018

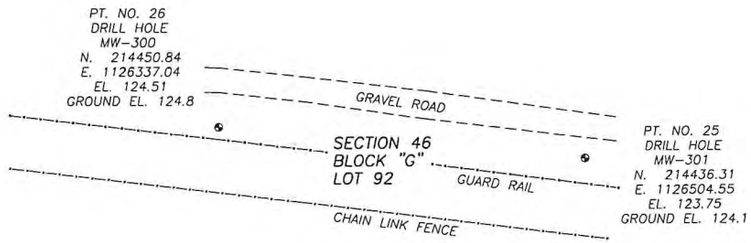
I HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR LICENSED TO PRACTICE IN THE STATE OF NEW YORK, AND THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY UNDER MY IMMEDIATE SUPERVISION. I FURTHER DECLARE, TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF, THAT THIS PLAN IS A CORRECT AND ACCURATE REPRESENTATION OF CONDITIONS EXISITING AS OF THIS DATE HEREON.

THE INFORMATION SHOWN ON THIS DOCUMENT IS FOR A SPECIFIC PURPOSE AND USE AND THEREFORE IS NOT INTENDED TO GUIDE THE ERECTION OF FENCES, RETAINING WALLS, POOLS, PATIOS, PLANTING AREAS, ADDITION TO BUILDINGS AND ANY OTHER CONSTRUCTION.

UNAUTHORIZED ALTERATION OR ADDITION TO THIS SURVEY IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW. COPIES OF THIS SURVEY MAP NOT BEARING THE LAND SURVEYOR'S INKED SEAL OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID TRUE COPY.

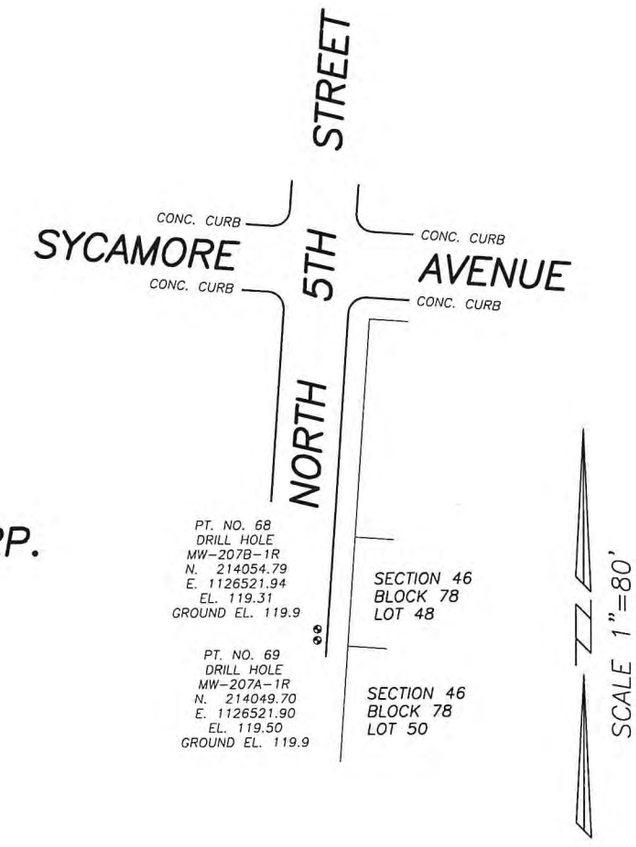
CERTIFICATIONS INDICATED HEREON SHALL RUN ONLY TO THE PERSON FOR WHOM THE SURVEY IS PREPARED AND ON HIS BEHALF, TO THE TITLE COMPANY, GOVERNMENTAL AGENCY AND LENDING INSTITUTION LISTED HEREON AND TO THE ASSIGNEES OF THE LENDING INSTITUTION. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.

DONALD G. DEKENIPP L.S., P.C.
PROFESSIONAL LAND SURVEYOR
222 GREENE AVENUE
SAYVILLE, N.Y. 11782
(631) 589-5350
(631) 589-4292 (FAX)



MAP OF
MONITORING WELLS
FOR
NORTHROP GRUMMAN SYSTEMS CORP.
SITUATED AT
BETHPAGE
TOWN OF OYSTER BAY
NASSAU COUNTY, NEW YORK

GUARANTEED ONLY TO:
EMAGIN



Attachment 4
Groundwater Sampling Field Forms

ARCADIS | Design & Consultancy for natural and built assets

GROUNDWATER SAMPLING LOG

Page 1 of 2

Project No. NY001496.35LS.STRA5 Well ID MW-301 Date 12-21-17

Project Name/Location NG OU2 Q4 Groundwater Sampling, Bethpage NY Weather Sunny 39°F

Measuring Pt. Description TOC | Screen Setting (ft-bmp) 275-285 | Casing Diameter (in.) 4" | Well Material ✓ PVC ___ SS

Static Water Level (ft-bmp) 59.59 | Total Depth (ft-bmp) 290 | Water Column/ Gallons in Well

MP Elevation | Pump Intake (ft-bmp) | Purge Method: non dedicated Centrifugal Submersible Other bladder | Sample Method Low Flow

Pump On/Off 1320 / 1555 Volumes Purged

Sample Time: Label MW-301 Start 1340 End 1555 | Replicate/ Code No. MS/MSD | Sampled by Carissa Koski

PID Reading 1.7 ppm | Packer Pressure (psi)

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons/Liters Purged	pH	Cond. (mMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
1325	0	580	59.65	—	7.59	0.199		11.34	9.08	67.2	colorless	none
1330	5	550		2.9	7.01	0.201		8.41	13.31	31.9	↓	↓
1335	10	520		5.6	6.97	0.203	2.31	6.13	13.27	0.6	↓	↓
1340	15	500	59.79	8.2	6.90	0.231	2389AV	5.08	13.92	-11.0	cloudy tan	none
1345	20	300		10.7	8.50	0.393		1.87	14.65	-38.7	↓	↓
1350	25	440		12.8	8.54	0.360		1.62	14.42	-42.5	↓	↓
1355	30	460		14.4	8.40	0.329	1077AV	1.42	14.28	-44.3	starting to clear up	
1400	35	440	59.71	16.7	8.28	0.314		1.10	13.79	-57.1	cloudy tan	↓
1405	40			18.9	8.39	0.316	77	1.02	13.93	-65.7	↓	↓
1410	45	440		21.5	8.49	0.320		0.97	13.71	-74.4	↓	↓
1415	50		59.75	23.8	8.61	0.325	66	0.90	13.80	-77.5	↓	↓
1420	55			26.1	9.02	0.343	57	0.72	13.81	-87.4	↓	↓
1425	60	440		28.4	9.22	0.345	122	0.68	13.59	-89.6	↓	↓
1430	65		59.75	30.7	9.27	0.346	101.0	0.66	13.34	-93.9	↓	↓
1435	70	440		33.0	9.31	0.346		0.64	13.28	-97.4	↓	↓
1440	75			35.3	9.32	0.341		0.62	13.39	-98.1	↓	↓

Constituents Sampled	Container	Number	Preservative
VOCs 8260c	40ml vial	9	HCl

Remarks

10' x 0.65 = 6.5 gal / ~25 liters

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50 (= 0.65); 6" = 1.47

10 ft screen
~25 liter purge

Well Information

Well Location:

Condition of Well: Good

Well Completion: (Flush Mount) / Stick Up

Well Locked at Arrival: Yes / (No)

Well Locked at Departure: Yes / (No)

Key Number To Well:

ARCADIS Design & Consultancy for natural and built assets

GROUNDWATER SAMPLING LOG

Project No. NY001496.35LS.STRAS Well ID MW-301 Date 12-21-2017

Project Name/Location NG DU2 Q4 Groundwater Sampling Bethpage NY Weather Sleeping 39°F

Measuring Pt. Description TOC Screen Setting (ft-bmp) 275-285 Casing Diameter (in.) 4" Well Material ___PVC ___SS

Static Water Level (ft-bmp) 59.59 Total Depth (ft-bmp) 290 Water Column/ Gallons in Well

MP Elevation Pump Intake (ft-bmp) Purge Method: Non dedicated/ Centrifugal / Submersible / Other Bladder pump Sample Method Low flow 1 WSV

Pump On/Off 1320/1555 Volumes Purged

Sample Time: Label MW-301 Replicate/ Code No. MS/MSD Sampled by C. Klosky Albina Radzevicius

Start 1540

End 1555

PID Reading 1.7 ppm Packer Pressure (psi)

Time	Minutes Elapsed	Rate ~~(gpm)~~ (mL/min)	Depth to Water (ft)	~~Gallons~~ Liters Purged	pH	Cond. ~~(mMhos)~~ (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1445	80		59.75		9.34	0.347		0.61	13.50	-99.4	cloudy tan	none
1450	85	440			9.35	0.348	95.7	0.59	13.12	-100.1	Tan	None
1455	90				9.38	0.349		0.60	13.26	-101.0		
1500	95		59.75		9.40	0.349	80.9	0.55	13.40	-101.4		
1505	100				9.41	0.350		0.53	13.42	-102.8		
1510	105	440			9.42	0.350	78.3	0.52	13.40	-104.5	Tan	None
1515	110		59.75		9.43	0.351		0.50	13.18	-109.7		
1520	115				9.44	0.351	68.8	0.49	13.10	-111.2		
1525	120	440			9.43	0.351	50.8	0.49	12.88	-112.3	colorless	None
1530	125		59.75		9.43	0.351	44.2	0.51	12.84	-118.4		
1535	130				9.44	0.351	48.7	0.49	12.82	-122.2		

Constituents Sampled	Container	Number	Preservative
VOCs 8260	40 ml Vial	9	HCl

Remarks

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65 (circled); 6" = 1.47

Well Information

Well Location: Well Locked at Arrival: Yes / (No)

Condition of Well: Good Well Locked at Departure: Yes / (No)

Well Completion: (Flush Mount) / Stick Up Key Number To Well:

DUP

ARCADIS Design & Consultancy for natural and built assets

GROUNDWATER SAMPLING LOG

Project No. NY001496.36LS.STRAT Well ID MW-300 Date 12-21-17

Project Name/Location Northrop Grumman 4th Qtr 2017. Weather Sunny 39°F

Measuring Pt. Description TOC Screen Setting (ft-bmp) 353-363 Casing Diameter (in.) 4 Well Material ✓ PVC ___ SS

Static Water Level (ft-bmp) 60.53 Total Depth (ft-bmp) 368 Water Column/ Gallons in Well

MP Elevation ___ Pump Intake (ft-bmp) ___ Purge Method: non dedicated ___ Centrifugal ___ Submersible ___ Other bladder Sample Method low flow

Pump On/Off 13:20 / 16:30 Volumes Purged ___

Sample Time: Label MW-300 Replicate/ Code No. DUP Start 1620 End 1630 Sampled by Albina Radzepagic

PID Reading 0.9 ppm Packer Pressure (psi) NM

Time	Minutes Elapsed	Rate ~~(gpm)~~ (mL/min)	Depth to Water (ft)	~~Gallons~~ Liters Purged	pH	Cond. ~~(mMhos)~~ (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
13:25	0	500			7.38	0.241	194	13.89	9.13	172.6	Brown	None
13:30	5		60.75		6.84	0.240		7.52	12.02	178.4		
13:35	10	600		5	6.78	0.245	820 AV	4.98	12.56	179.8	Brown	None
13:40	15	550		7.75	6.74	0.247		3.94	12.66	182.8	Brown	None
13:45	20	350	60.65		6.73	0.254		2.74	12.36	185.7	Brown	None
13:50	25			11.25	6.74	0.258	1200 AV	2.38	11.98	185.9		
13:55	30	470			6.75	0.258		2.11	12.26	183.5	Brown	None
14:00	35		60.65		6.74	0.258		2.04	12.30	183.1		
14:05	40	470			6.70	0.256	1000 AV	1.91	12.38	182.9	Brown	None
14:10	45				6.66	0.254		1.53	12.46	182.2		
14:15	50		60.70		6.67	0.253		1.24	12.49	181.8		
14:20	55	470			6.67	0.252		1.16	12.53	181.3	Brown	None
14:25	60		60.65		6.66	0.253		1.09	12.45	181.8		
14:30	65				6.64	0.251		0.82	11.88	182.4	Brown	
14:35	70		60.69		6.61	0.251	839 AV	0.81	11.98	183.0	~~cloudy~~	none
14:40	75			34.75	6.62	0.251		0.82	12.31	181.9		

Constituents Sampled	Container	Number	Preservative
VOCs 8260a	40ml Vial	3	HCl

Remarks

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location: Accell Rd. Behind Bethpage Community Park Well Locked at Arrival: Yes / (No)

Condition of Well: Good Well Locked at Departure: Yes / (No)

Well Completion: (Flush Mount) / Stick Up Key Number To Well:

ARCADIS Design & Consultancy for natural and built assets

GROUNDWATER SAMPLING LOG

Project No. NY001496.36LS.STARS | Well ID MW-300 | Date 12-21-2017

Project Name/Location Northrop Grumman 4th Quarter 2017 | Weather Sunny 39.0°F

Measuring Pt. Description TOC | Screen Setting (ft-bmp) 353-363 | Casing Diameter (in.) 4 | Well Material X PVC ___ SS

Static Water Level (ft-bmp) 60.53 | Total Depth (ft-bmp) 368 | Water Column/ Gallons in Well

MP Elevation | Pump Intake (ft-bmp) | Purge Method: Peristaltic / Centrifugal / Submersible / Other Bladder | Sample Method Low Flow

Pump On/Off 1520 / 1630 | Volumes Purged

Sample Time: Label MW-300 | Start 1620 | End 1630 | Replicate/ Code No. DUP | Sampled by Alkana Ridzeruzic

Packer Pressure (psi) NM

PID Reading 0.9 ppm

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (umhos/cm) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
1445	80	470	60.64		6.62	0.251	746 AV	0.79	12.35	181.3	Brown	none
1450	85				6.61	0.250		0.78	12.09	181.7		
1455	90		60.65		6.60	0.250		0.63	12.06	180.9	Brown	none
1500	95				6.60	0.250		0.79	12.27	180.5		
1505	100		60.65		6.60	0.250	689 AV	0.80	12.20	180.0	Brown	none
1510	105				6.60	0.250		0.83	12.46	179.0		
1515	110		60.65		6.61	0.252		0.80	12.25	178.7	Brown	none
1520	115				6.60	0.251		0.81	12.21	178.7		
1525	120		60.64		6.60	0.250		0.72	12.17	178.4	Brown	none
1530	125				6.57	0.250	689 AV	0.80	11.35	179.4		
1535	130		60.65		6.57	0.250		0.76	11.42	178.0	Brown	none
1540	135				6.57	0.249		0.74	11.71	177.7		
1545	140		60.65		6.56	0.248		0.60	11.69	177.2	Brown	none
1550	145			67.65	6.55	0.248		0.83	11.84	176.8		

Constituents Sampled	Container	Number	Preservative
See page 1	See page 1		

Remarks

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Well Information

Well Location: See page 1 | Well Locked at Arrival: Yes / No

Condition of Well: See page 1 | Well Locked at Departure: Yes / No

Well Completion: Flush Mount / Stick Up | Key Number To Well:

ARCADIS Design & Consultancy for natural and built assets

GROUNDWATER SAMPLING LOG

Project No. NY001496.36LS.STARS Well ID MW-300 Date 12/21/17

Project Name/Location Northrop Grumman QY TW17 Weather 39°F Sunny

Measuring Pt. Description TOC Screen Setting (ft-bmp) 353-363 Casing Diameter (in.) 4 Well Material X PVC ___ SS

Static Water Level (ft-bmp) 60.53 Total Depth (ft-bmp) 368 Water Column/ Gallons in Well

MP Elevation ___ Pump Intake (ft-bmp) ___ Purge Method: Non-dedicated Centrifugal Submersible Other Bladder Sample Method Low Flow

Pump On/Off 1320/1630 Volumes Purged ___

Sample Time: Label MW-300 Start 1620 End 1630 Replicate/ Code No. DUP Sampled by Alberto Rodriguez

PID Reading 0.9 ppm Packer Pressure (psi) NM

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (mMhos) (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
1555	150	496	60.64		6.54	0.248	636AU	0.81	11.72	176.3	Brown	none
1600	155				6.00	0.248		3.06	11.50	176.1		
1605	160		60.65		6.54	0.248		0.84	11.55	178.6	Brown	none
1610	165				6.51	0.247	624AU	0.82	11.49	177.8		
1615	170		60.65		6.52	0.247		0.90	11.53	177.5	Brown	none
							620 AU @ sampling point					

Constituents Sampled	Container	Number	Preservative
See Page 1	See Page 1		

Remarks

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location: See Page 1

Condition of Well:

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Key Number To Well:

ARCADIS

INSTRUMENT CALIBRATION FORM

Project: Northrop Grumman 4th Qtr 2017
Project No.: NY001496.2375.NAVE2
Site Location: Bethpage, NY
Date: 12-21-17
Time: 1030
Prepared by: C. Koski

[Y] Model YSI 600XL Serial 07F100579	[X] Model LaMotte 2020WE Serial 3983-5113	[ ] Model Serial	[ ] Model Serial
[Y] Model YSI 600XL Serial 17698	[ ] Model Serial	[ ] Model Serial	[ ] Model Serial
[X] PID Model Mini Rae 3000 Serial 592-002005	[ ] Model Serial	[ ] Model Serial	[ ] Rental Model Serial

Check appropriate box for equipment calibrated. If two similar items are calibrated, please note two checks under calibration successful

Parameter PID (ppmv)	Value	Calibration Successful
(Zero)	0.0	✓
(Span)	100.0	✓

Parameter D.O.	Calibration Successful
(100% Saturated Air)	✓ ✓
Barometer Adjustment	
Elevation Adjustment	

ph (si Units)	Value	Calibration Successful
(4.00)	4.00	✓ ✓
(7.00)	7.00	✓ ✓
10.00		

* ORP (Mv)	Calibration Successful
(Hydroquinone (240) (Black))	✓ ✓
Zobel Solution (237) (yellow)	
Temperature Based Chart Calibration	
* Adjusted	

Conductivity (umhos)	Value	Calibration Successful
84 umhos		
(~~1413~~ uhmos)	1.413	✓ ✓
Other		

*** No adjustment on some meters just a probe check, others are adjustable**

Turbidity (NTU)	Value	Calibration Successful
1.0 NTU	0.88	✓
10 NTU	9.89	✓
40 NTU		
Other		

Document Control Number:TGM - IN4001496.3SLS.STRAS
TGM + project number plus date as follows: xxxxxxxx.xxxx.xxxxx - dd/mm/year

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TAILGATE HEALTH & SAFETY MEETING FORM

This form documents the tailgate meeting conducted in accordance with the Project HASP. Personnel who perform work operations on-site during the day are required to attend this meeting and to acknowledge their attendance, at least daily.

Project Name: 116 Old Q4 Groundwater Sampling		**Project Location:** Bethpage NY	
Date: 12/21/2017 **Time:** 800	**Conducted by:** Albina Redzepagic	**Signature/Title:**	Environmental Specialist
Client:	**Client Contact:**	**Subcontractor companies:**	

TRACKing the Tailgate Meeting

Think through the Tasks (list the tasks for the day):

1 Mobilize Van/calibrate
2 Discharge Vans/drums
3 Get ice/Equipment blank
4 Mobilize @ wells/pump
5 Collect samples
6 demob/store equipment

Other Hazardous Activities - Check the box if there are any other Arcadis, Client or other party activities that may pose hazards to Arcadis operations ☐ If there are none, write "None" here: None

If yes, describe them here:

How will they be controlled?

Prework Authorization - check activities to be conducted that require permit issuance or completion of a checklist or similar before work begins:

	Doc #		Doc #		Doc #
☑ Not applicable		☐ Working at Height		☐ Confined Space	
☐ Energy Isolation (LOTO)		☐ Excavation/Trenching		☐ Hot Work	
☐ Mechanical Lifting Ops		☐ Overhead & Buried Utilities		☐ Other permit	

Discuss following questions (for some review previous day's/past activities) **Check if yes:**

☐ Incidents from day before to review?	☐ Lessons learned from the day before?	☑ Topics from Corp H&S to cover?
☐ Any corrective actions from yesterday?	☐ Will any work deviate from plan?	☐ Any Stop Work Interventions yesterday?
☐ JSAs or procedures are available?	☐ Field teams to "dirty" JSAs, as needed?	☐ If deviations, notify PM & client
☑ Staff has appropriate PPE?	☑ Staff knows Emergency Plan (EAP)?	☑ All equipment checked & OK?
		☑ Staff knows gathering points?

Comments:

Recognize the hazards (check all those that are discussed) (Examples are provided) and **A**ssess the Risks (Low, Medium, High - circle risk level) - Provide an overall assessment of hazards to be encountered today and briefly list them under the hazard category.

☑ Gravity (i.e. ladder, scaffold, trips) (L M H) in/out of van	☐ Motion (i.e., traffic, moving water) (L M H)	☑ Mechanical (i.e., augers, motors) (L M H) pinch points
☑ Electrical (i.e., utilities, lightning) (L M H) Generator	☑ Pressure (i.e. gas cylinders, wells) (L M H) Compressor	☐ Environment (i.e., heat, cold, ice) (L M H)
☑ Chemical (i.e., fuel, acid, paint) (L M H) preservatives	☐ Biological (i.e., ticks, poison ivy) (L M H)	☐ Radiation (i.e., alpha, sun, laser) (L M H)
☑ Sound (i.e., machinery, generators) (L M H) compressor	☐ Personal (i.e. alone, night, not fit) (L M H)	☑ Driving (i.e. car, ATV, boat, dozer) (L M H) Van

Continue TRACK Process on Page 2

TAILGATE HEALTH & SAFETY MEETING FORM - Pg. 2

Control the hazards (Check all and discuss those methods to control the hazards that will be implemented for the day): Review the HASP, applicable JSAs, and other control processes. Discuss and document any additional control processes.

- [x] **STOP WORK AUTHORITY** (Must be addressed in every Tailgate meeting - *(See statements below)*
- [x] Elimination
- [x] Engineering controls
- [x] General PPE Usage
- [ ] Personal Hygiene
- [ ] Emergency Action Plan (EAP)
- [ ] JSA to be developed/used ***(specify)***
- [x] Substitution
- [x] Administrative controls
- [ ] Hearing Conservation
- [ ] Exposure Guidelines
- [ ] Fall Protection
- [ ] TIP conducted ***(specify job/JSA)***
- [x] Isolation
- [ ] Monitoring
- [ ] Respiratory Protection
- [x] Decon Procedures
- [x] Work Zones/Site Control
- [ ] Traffic Control
- [ ] Other ***(specify)***

Signature and Certification Section - Site Staff and Visitors

Name/Company/Signature	Initial & Sign in Time	Initial & Sign out Time	I have read and understand the HASP
Albina Radzevgic / Arcadis	800 AR		
Carissa Kosicki / Arcadis	800 CK		Yes
Anna Dwenger / Arcadis	1200 AD		Yes

Important Information and Numbers

All site staff should arrive fit for work. If not, they should report to the supervisor any restrictions or concerns.

In the event of an injury, employees will call WorkCare at 1.800.455.6155 and then notify the field supervisor who will then notify the Project or Task Manager.

In the event of a motor vehicle accident, employees will notify the field supervisor who will then notify the Project or Task Manager.

In the event of a utility strike or other damage to property of a client or 3rd party, employees will immediately notify the field supervisor, who will then immediately notify the Project or Task Manager.

Visitor Name/Co - not involved in work

In	Out
In	Out
In	Out
In	Out

I will STOP the job any time anyone is concerned or uncertain about health & safety or if anyone identifies a hazard or additional mitigation not recorded in the site, project, job or task hazard assessment.

I will be alert to any changes in personnel, conditions at the work site or hazards not covered by the original hazard assessments.

If it is necessary to **STOP THE JOB,** I will perform **TRACK**; and then amend the hazard assessments or the HASP as needed.

I will not assist a subcontractor or other party with their work unless it is absolutely necessary and then only after I have done TRACK and I have thoroughly controlled the hazard.

Post Daily Activities Review - Review at end of day or before next day's work (Check those applicable and explain):

- [ ] Lessons learned and best practices learned today:
- [ ] Incidents that occurred today:
- [ ] Any Stop Work interventions today?
- [ ] Corrective/Preventive Actions needed for future work:
- [ ] Any other H&S issues:

Keep H&S 1st in all things

WorkCare - 1.800.455.6155

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Groundwater Sampling Log

Page 1 of 2

Project No. NY001496.30NC.PMQC Well ID MW-207A-1R Date 5/31/18

Project Name/Location EMAGIN - Bethpage Deep Park Investigation Weather Clouds - 70s

Measuring Pt Description TOC (top of well riser) Screen Interval (ft-bmp) 120-130 Casing Diameter (in.) 4 Well Material ✓ PVC ___ SS

Static Water Level (ft-bmp) 53.53 Total Depth* (ft-bmp) 135 Water Column/ Gallons in Well

MP Elevation ___ Pump Intake** (ft-bmp) 125 Purge Method: Non Dedicated Peristaltic Submersible Bladder pump Other Geotech Portable Bladder pump 1.66" Sample Method Low Flow

Pump On/Off 1240 Volume Purged (gal) ___

Sample Time: Label MW-207A-1R Start 1405 End ___ Replicate/ Code No. MS/MSD Sampled by Dylan Corbett

PID: 0.0 ppm

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Volume Purged (Liters)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
1255	0	500			7.13	0.349	193	8.97	20.50	171.3	gray/yellow	None
1300	5	↓			7.13	0.350		8.89	20.33	171.6	↓	
1305	10	↓	53.90		7.64	0.381	Over range	6.28	18.97	149.7	Tan/Yellow	
1310	15	↓		10	7.53	0.358		6.09	18.58	155.9		
1315	20	450			7.43	0.357	196	4.39	18.44	158.7		
1320	25		53.92		7.41	0.356		4.22	18.37	160.2		
1325	30				7.40	0.355		3.92	18.40	161.7	↓	
1330	35	↓			7.41	0.354	91.8	3.62	18.39	162.4	clear	
1335	40	450	53.96		7.42	0.353		3.46	18.37	162.9		
1340	45				7.43	0.352	91.3	3.30	18.53	163.1		
1345	50				7.44	0.351		3.19	18.61	163.4		
1350	55	450	53.96		7.45	0.351	69.3	3.07	18.69	163.6	clear	
1355	60	450			7.45	0.350	56.4	2.93	18.74	163.5	↓	
1400	65	↓	53.97		7.49	0.349		2.95	18.75	164.1	clear	
1405	70	450	53.97		7.46	0.348	48.6	2.91	18.63	164.5	clear	
1410	75											

Sampled

Constituents Sampled

(SGS) VOC 8260C

(Eurofins) 1,4 Dioxane 8270D SIM

Container

voa vial - 40ml

1 Lit Amber

Number

3

6

Preservative

HCL

None

Remarks:

New 1/2" ID polyethylene tubing installed, new QED tubing weight, & QED remote Inlet screen installed. Rate lowered prior to sampling

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

* Bottom of well measured at 12 9/16" to top of well riser

** Pump Intake in screen zone.

Well Information

Well Location: 260 N. 5th St, Bethpage

Condition of Well: good

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Key Number To Well:

Well ID on well cap.

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Groundwater Sampling Log

Page 1 of 1

Project No. NY001496.30NC.PM0QC Well ID MW-207B-1R Date 5/31/18

Project Name/Location EMAGIN - Bethpage Deep Park Investigation Weather Clouds 70°

Measuring Pt. Description Top of well Riser TOC Screen Interval (ft-bmp) 210-220 Casing Diameter (in.) 4 Well Material ✓ PVC ___ SS

Static Water Level (ft-bmp) 53.41 Total Depth* (ft-bmp) 225 Water Column/ Gallons in Well /

MP Elevation ___ Pump Intake (ft-bmp) 215 Purge Method: Non Dedicated Peristaltic Submersible Bladder Other Geotech Portable Bladder Pump 1.66" Sample Method Low Flow

Pump On/Off 1240 Volume Purged (gal) / Sampled by Pat Prezorski

Sample Time: Label MW-207B-1R Start 1400 End 1425 Replicate/ Code No. ~~REP053118DCT~~ DUP-1

PID: 0.0 ppm

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft) bmp	Volume Purged (Liters)	pH (SU)	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
1255	0				8.22	0.156		2.78	19.45	175.2	colorless	NONE
1300	5	320		1.6	7.78	0.176		2.59	19.41	184.5		
1305	10	480	53.49		7.14	0.211		2.08	18.47	195.8	tan	NONE
1310	15	480			6.95	0.220	1129 NTU	1.76	18.19	200.9	tan	NONE
1315	20	480	53.49		6.91	0.213	117 NTU	1.92	17.97	197.3		
1320	25	480			6.77	0.212	103 NTU	1.20	18.00	193.2	Light tan	NONE
1325	30	480	53.45		6.77	0.215		1.24	17.94	190.7		
1330	35	480			6.76	0.213	79.5	1.08	17.95	189.8	cloudy	NONE
1335	40	480	53.45		6.74	0.210		1.16	18.06	188.9		
1340	45	480			6.71	0.208	52.6	1.14	18.23	187.9	colorless	NONE
1345	50	480	53.45		6.69	0.207		0.86	18.31	187.9	↓	↓
1350	55	480			6.70	0.206	47.0	0.99	18.35	187.1		
1355	60	480	53.43	28	6.70	0.207		0.90	18.39	186.5	colorless	NONE

Constituents Sampled	Container	Number	Preservative
(SGS) VOC 8260C	4x ml Voa Vial	3	HCL
(catahdin) 1,4 Dioxane 8270D SIM	1 Liter Amber glass	2	NONE

Remarks:
New 1/2" ID polyethylene tubing Installed. New QED tubing weight & QED remote Inlet Screen installed.

Bottom of well measured at 226' 9" to top of well Riser.

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well has 5' sump
Rate lowered prior to sampling

Well Information

Well Location: 260 N. 5th St; Bethpage
Condition of Well: good
Well Completion: Flush Mount / Stick Up
Well Locked at Arrival: Yes / No
Well Locked at Departure: Yes / No
Key Number To Well:

Well ID on well cap.

(Turbidity 33.7 NTU At sample time at wellhead)

ARCADIS

INSTRUMENT CALIBRATION FORM

Project: NY001496.30NC.PMOQC
Project No.: EMAGIN well sampling
Site Location: Bethpage, NY
Date: 5/31/18
Time: 0900
Prepared by: Dylan Corbett

☐ YSI 650 MDS #13D102073
☑ YSI 650 MDS #10J101789
☐
☐
☐
☑ La Motte 2026 #19301 Turbidity meter we
☐ Model Serial
☐ Model Serial
☐
☑ PID Mini RAE3000 #18475
☐ pH Cond Temp Model Oakton 300 Series
☐ Rental Model Serial

Check appropriate box for equipment calibrated. If two similar items are calibrated, please note two checks under calibration successful

Parameter PID (ppmv)	Value	Calibration Successful
Zero	0.0	✓
Span	100	✓

ph (si Units)	Value	Calibration Successful
4.00	4.0	✓ ✓
7.00	7.0	✓ ✓
10.00		

Conductivity (umhos)	Value	Calibration Successful
84 umhos		
1413 uhmos	1.413	✓ ✓
Other		

Turbidity (NTU)	Value	Calibration Successful
1.0 NTU	1.18	ok
10 NTU	10.13	ok
40 NTU		
Other		

Parameter D.O.		Calibration Successful
100% Saturated Air	100%	✓ ✓
Barometer Adjustment		
Elevation Adjustment		

* ORP (Mv)		Calibration Successful
Hydroquinone (240) ~~(Black)~~ yellow	240 mV ✓	✓ ✓
Zobel Solution (237) (yellow)		
Temperature Based Chart Calibration		
* Adjusted		

*** No adjustment on some meters just a probe check, others are adjustable**

Control Number: TSM- NY001496.3 ONC. PMOQC

TSM + project number plus date as follows: xxxxxxxx.xxxx.xxxxx - dd/mm/year

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TAILGATE HEALTH & SAFETY MEETING FORM

Project Name: EMAGIN Well Sampling			**Project Location:** Bethpage, NY
Date: 5/31/18	**Time:** 0800	**Conducted by:** D. Corbett	**Signature/Title:**

Issues or concerns from previous day's activities:

None

Task anticipated to be performed today:

☐ Additional permits/checklists attached GW Sampling

USE TRACK! Evaluate the hazards (h) for the tasks being performed today and rank as Low (L), Medium (M) or High (H). Use relevant JSAs, FHSHB, permit or other work standard to communicate controls (c) to be used to eliminate or mitigate identified hazards.

☑ Gravity (i.e., ladder, scaffold, trips) (L M H) h: Slips, Trips c: Clear Area	☑ Motion (i.e., traffic, moving water) (L M H) h: Site traffic c: JCP	☐ Mechanical (i.e., augers, motors) (L M H) h: c:
☐ Electrical (i.e., utilities, lightning) (L M H) h: N/A c:	☐ Pressure (i.e., gas cyl., wells) (L M H) h: c:	☐ Environment (i.e., heat, cold, ice) (L M H) h: Heat c: Hydrate
☑ Chemical (i.e., fuel, acid, paint) (L M H) h: COCs, preservatives c: PPE	☐ Biological (i.e., ticks, poison ivy) (L M H) h: c:	☐ Radiation (i.e., alpha, sun, laser) (L M H) h: c:
☐ Sound (i.e., machinery) (L M H) h: Compressor c: PPE	☐ Personal (i.e. alone, night) (L M H) h: c:	☐ Driving (i.e. car, ATV, boat, dozer) (L M H) h: Field vehicle c: Spotters

Comments:

☐ Refer to the attached Hazard Analysis Sheet(s) or JSA

Signature and Certification: I have read and understand the project specific HASP for this project.

Printed Name/Signature/Company	Sign In Time	Sign Out Time
Dylan Corbett / Dyl / Geo / Arcadis	0730	1540
Pat Prozeski / [illegible] / Arcadis	0900	1800

I will STOP the job any time anyone is concerned or uncertain about health & safety or if anyone identifies a hazard or additional mitigation not recorded in the site, project, job or task hazard assessment.

I will be alert to any changes in personnel, conditions at the work site or hazards not covered by the original hazard assessments.

If it is necessary to STOP THE JOB, I will perform TRACK; and then amend the hazard assessments or the HASP as needed.

I will not assist a subcontractor or other party with their work unless it is absolutely necessary and then only after I have done TRACK and I have thoroughly controlled the hazard.

All site staff should arrive fit for work. If not, they should report to the supervisor any restrictions or concerns.

In the event of an injury, employees will call **WorkCare at 1.800.455.6155** and then notify the field supervisor.

Utility strike, motor vehicle accident or 3rd party property damage - field supervisor will immediately notify the Project or Task Manager

Attachment 5
Laboratory Reports

e-Hardcopy 2.0
Automated Report

Technical Report for

HSW Engineering

Long Island GW Sampling, Long Island, NJ

SGS Accutest Job Number: JC52997

Sampling Dates: 10/11/17 - 10/12/17

Report to:

RPoff@HSWEng.com
DSmolensky@Emagin-Inc.com

ATTN: Distribution3

Total number of pages in report: **45**

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)

Sections: 1 2 3 4 5 6

Table of Contents

Sample Summary

HSW Engineering

Job No: JC52997

Long Island GW Sampling, Long Island, NJ

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC52997-1	10/11/17	16:05	CMT	10/12/17	AQ	Ground Water	MW-300(HP335)
JC52997-2	10/12/17	11:45	CMT	10/12/17	AQ	Ground Water	MW-300(HP345)
JC52997-3	10/12/17	14:45	CMT	10/12/17	AQ	Ground Water	MW-300(HP355)

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	HSW Engineering	**Job No**	JC52997
Site:	Long Island GW Sampling, Long Island, NJ	**Report Date**	10/17/2017 4:38:28 P

On 10/12/2017, 3 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 2.1 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of JC52997 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:** V2C6815

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC52709-6DUP, JC52709-8MS were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

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: JC52997
Account: HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ
Collected: 10/11/17 thru 10/12/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC52997-1	**MW-300(HP335)**					
Acetone		18.3	10	5.0	ug/l	SW846 8260C
Toluene		2.3	1.0	0.25	ug/l	SW846 8260C
JC52997-2	**MW-300(HP345)**					
Acetone		67.5	10	5.0	ug/l	SW846 8260C
1,1-Dichloroethane		0.65 J	1.0	0.21	ug/l	SW846 8260C
Toluene		1.9	1.0	0.25	ug/l	SW846 8260C
JC52997-3	**MW-300(HP355)**					
Acetone		28.8	10	5.0	ug/l	SW846 8260C
Chloroform		0.44 J	1.0	0.29	ug/l	SW846 8260C
1,1-Dichloroethane		4.4	1.0	0.21	ug/l	SW846 8260C
1,1-Dichloroethene		1.5	1.0	0.47	ug/l	SW846 8260C
Tetrachloroethene		1.7	1.0	0.50	ug/l	SW846 8260C
Toluene		1.1	1.0	0.25	ug/l	SW846 8260C
1,1,1-Trichloroethane		0.45 J	1.0	0.25	ug/l	SW846 8260C
Trichloroethene		2.5	1.0	0.27	ug/l	SW846 8260C

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-300(HP335)		
Lab Sample ID:	JC52997-1	**Date Sampled:**	10/11/17
Matrix:	AQ - Ground Water	**Date Received:**	10/12/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C153839.D	1	10/13/17 11:20	HT	n/a	n/a	V2C6815
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	18.3	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	
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	

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:	MW-300(HP335)		
Lab Sample ID:	JC52997-1	**Date Sampled:**	10/11/17
Matrix:	AQ - Ground Water	**Date Received:**	10/12/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	ND	1.0	0.50	ug/l	
108-88-3	Toluene	2.3	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		80-120%
17060-07-0	1,2-Dichloroethane-D4	93%		81-124%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	101%		80-120%

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: MW-300(HP345)
Lab Sample ID: JC52997-2
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Long Island GW Sampling, Long Island, NJ

Date Sampled: 10/12/17
Date Received: 10/12/17
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C153841.D	1	10/13/17 12:17	HT	n/a	n/a	V2C6815
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	67.5	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	0.65	1.0	0.21	ug/l	J
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	
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	

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:	MW-300(HP345)		
Lab Sample ID:	JC52997-2	**Date Sampled:**	10/12/17
Matrix:	AQ - Ground Water	**Date Received:**	10/12/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	ND	1.0	0.50	ug/l	
108-88-3	Toluene	1.9	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%
17060-07-0	1,2-Dichloroethane-D4	103%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	95%		80-120%

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:	MW-300(HP355)		
Lab Sample ID:	JC52997-3	**Date Sampled:**	10/12/17
Matrix:	AQ - Ground Water	**Date Received:**	10/12/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C153840.D	1	10/13/17 11:48	HT	n/a	n/a	V2C6815
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	28.8	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	0.44	1.0	0.29	ug/l	J
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	4.4	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	1.5	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	
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	

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: MW-300(HP355)
Lab Sample ID: JC52997-3
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Long Island GW Sampling, Long Island, NJ

Date Sampled: 10/12/17
Date Received: 10/12/17
Percent Solids: n/a

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	1.7	1.0	0.50	ug/l	
108-88-3	Toluene	1.1	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	0.45	1.0	0.25	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	2.5	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%
17060-07-0	1,2-Dichloroethane-D4	102%		81-124%
2037-26-5	Toluene-D8	94%		80-120%
460-00-4	4-Bromofluorobenzene	94%		80-120%

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

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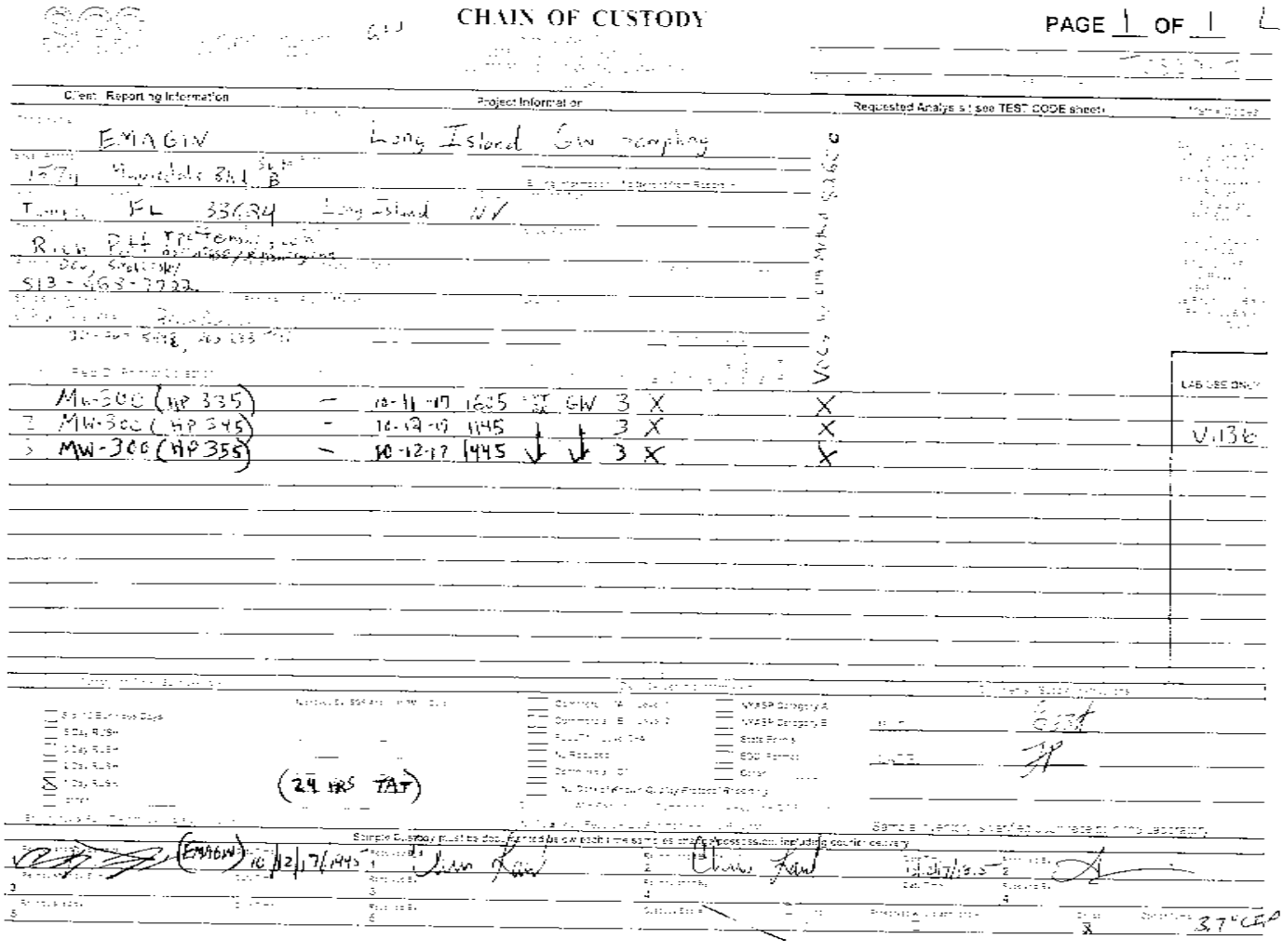
Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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



CHAIN OF CUSTODY

PAGE 1 OF 1

Client / Reporting Information

EMAGIN

Project Information

Long Island GW sampling

Requested Analysis (see TEST CODE sheet)

MW-300 (HP 335)	—	10-11-17	1625	ET	GW	3	X	X
MW-300 (HP 345)	—	10-12-17	1145	↓	↓	3	X	X
MW-300 (HP 355)	—	10-12-17	1445	↓	↓	3	X	X

LAB USE ONLY

V1136

(24 HRS TAT)

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

(EMAGIN) 10/12/17/1945

37°C/P

5.1

5

SGS Accutest Sample Receipt Summary

Job Number: JC52997 **Client:** Emagin **Project:** Long Island GW Sampling

Date / Time Received: 10/12/2017 6:15:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.7);

Cooler Temps (Corrected) °C: Cooler 1: (2.1);

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 -1 & -2 3 of 3 VOC vials rec'd with 50% sediment. We will not screens samples.

SM089-02
Rev. Date 12/1/16

Responded to by: CSR: N/A

Response Date: Response Date: 10/12/2017

Response:

Response: Proceed with analysis

Internal Sample Tracking Chronicle

HSW Engineering

Job No: JC52997

Long Island GW Sampling, Long Island, NJ

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC52997-1	Collected: 11-OCT-17 16:05 By: CMT		Received: 12-OCT-17 By: AS			
MW-300(HP335)						
JC52997-1	SW846 8260C	13-OCT-17 11:20	HT			V8260TCL20
JC52997-2	Collected: 12-OCT-17 11:45 By: CMT		Received: 12-OCT-17 By: AS			
MW-300(HP345)						
JC52997-2	SW846 8260C	13-OCT-17 12:17	HT			V8260TCL20
JC52997-3	Collected: 12-OCT-17 14:45 By: CMT		Received: 12-OCT-17 By: AS			
MW-300(HP355)						
JC52997-3	SW846 8260C	13-OCT-17 11:48	HT			V8260TCL20

SGS Accutest Internal Chain of Custody

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ
Received: 10/12/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC52997-1.3	Secured Storage	Hueanh Tran	10/13/17 11:09	Retrieve from Storage
JC52997-1.3	Hueanh Tran	GCMS2C	10/13/17 11:09	Load on Instrument
JC52997-1.3	GCMS2C	Hueanh Tran	10/16/17 10:02	Unload from Instrument
JC52997-1.3	Hueanh Tran	Secured Storage	10/16/17 10:02	Return to Storage
JC52997-2.3	Secured Storage	Hueanh Tran	10/13/17 11:09	Retrieve from Storage
JC52997-2.3	Hueanh Tran	GCMS2C	10/13/17 11:09	Load on Instrument
JC52997-2.3	GCMS2C	Hueanh Tran	10/16/17 10:02	Unload from Instrument
JC52997-2.3	Hueanh Tran	Secured Storage	10/16/17 10:02	Return to Storage
JC52997-3.1	Secured Storage	Gabriela Alvarez	10/17/17 15:47	Retrieve from Storage
JC52997-3.1	Gabriela Alvarez	GCMSU	10/17/17 15:47	Load on Instrument
JC52997-3.2	Secured Storage	Hueanh Tran	10/13/17 11:09	Retrieve from Storage
JC52997-3.2	Hueanh Tran	GCMS2C	10/13/17 11:09	Load on Instrument
JC52997-3.2	GCMS2C	Hueanh Tran	10/16/17 10:02	Unload from Instrument
JC52997-3.2	Hueanh Tran	Secured Storage	10/16/17 10:02	Return to Storage

MS Volatiles

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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: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C6815-MB	2C153836.D	1	10/13/17	HT	n/a	n/a	V2C6815

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

JC52997-1, JC52997-2, JC52997-3

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	
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	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	

Method Blank Summary

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C6815-MB	2C153836.D	1	10/13/17	HT	n/a	n/a	V2C6815

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

JC52997-1, JC52997-2, JC52997-3

CAS No.	Compound	Result	RL	MDL	Units	Q
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	104%	80-120%
17060-07-0	1,2-Dichloroethane-D4	103%	81-124%
2037-26-5	Toluene-D8	95%	80-120%
460-00-4	4-Bromofluorobenzene	93%	80-120%

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

Blank Spike Summary

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C6815-BS	2C153837.D	1	10/13/17	HT	n/a	n/a	V2C6815

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

JC52997-1, JC52997-2, JC52997-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	191	96	42-150
71-43-2	Benzene	50	47.9	96	80-120
74-97-5	Bromochloromethane	50	51.5	103	84-121
75-27-4	Bromodichloromethane	50	48.5	97	83-120
75-25-2	Bromoform	50	43.5	87	76-129
74-83-9	Bromomethane	50	48.0	96	57-138
78-93-3	2-Butanone (MEK)	200	199	100	64-137
75-15-0	Carbon disulfide	50	49.8	100	64-137
56-23-5	Carbon tetrachloride	50	48.1	96	75-135
108-90-7	Chlorobenzene	50	48.5	97	84-117
75-00-3	Chloroethane	50	53.6	107	63-132
67-66-3	Chloroform	50	46.5	93	80-119
74-87-3	Chloromethane	50	50.4	101	46-136
110-82-7	Cyclohexane	50	47.7	95	64-137
96-12-8	1,2-Dibromo-3-chloropropane	50	46.5	93	72-127
124-48-1	Dibromochloromethane	50	46.1	92	80-123
106-93-4	1,2-Dibromoethane	50	49.1	98	84-117
95-50-1	1,2-Dichlorobenzene	50	49.1	98	84-119
541-73-1	1,3-Dichlorobenzene	50	48.4	97	81-117
106-46-7	1,4-Dichlorobenzene	50	48.5	97	82-117
75-71-8	Dichlorodifluoromethane	50	54.7	109	36-149
75-34-3	1,1-Dichloroethane	50	49.8	100	79-120
107-06-2	1,2-Dichloroethane	50	46.9	94	78-126
75-35-4	1,1-Dichloroethene	50	46.4	93	69-126
156-59-2	cis-1,2-Dichloroethene	50	50.8	102	80-120
156-60-5	trans-1,2-Dichloroethene	50	47.7	95	76-120
78-87-5	1,2-Dichloropropane	50	48.9	98	82-121
10061-01-5	cis-1,3-Dichloropropene	50	48.3	97	83-120
10061-02-6	trans-1,3-Dichloropropene	50	46.6	93	82-121
100-41-4	Ethylbenzene	50	47.2	94	80-120
76-13-1	Freon 113	50	52.2	104	62-182
591-78-6	2-Hexanone	200	189	95	65-132
98-82-8	Isopropylbenzene	50	47.9	96	83-120
79-20-9	Methyl Acetate	50	57.9	116	67-129
108-87-2	Methylcyclohexane	50	52.5	105	71-134
1634-04-4	Methyl Tert Butyl Ether	50	47.9	96	80-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C6815-BS	2C153837.D	1	10/13/17	HT	n/a	n/a	V2C6815

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

JC52997-1, JC52997-2, JC52997-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	192	96	71-131
75-09-2	Methylene chloride	50	46.0	92	77-120
100-42-5	Styrene	50	48.4	97	82-122
79-34-5	1,1,2,2-Tetrachloroethane	50	46.9	94	76-119
127-18-4	Tetrachloroethene	50	52.6	105	70-131
108-88-3	Toluene	50	48.9	98	80-120
87-61-6	1,2,3-Trichlorobenzene	50	49.9	100	76-134
120-82-1	1,2,4-Trichlorobenzene	50	51.8	104	79-132
71-55-6	1,1,1-Trichloroethane	50	49.0	98	81-128
79-00-5	1,1,2-Trichloroethane	50	48.0	96	83-118
79-01-6	Trichloroethene	50	49.9	100	80-120
75-69-4	Trichlorofluoromethane	50	52.8	106	64-136
75-01-4	Vinyl chloride	50	54.3	109	51-135
	m,p-Xylene	100	97.7	98	80-120
95-47-6	o-Xylene	50	48.7	97	80-120
1330-20-7	Xylene (total)	150	146	97	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	80-120%
17060-07-0	1,2-Dichloroethane-D4	95%	81-124%
2037-26-5	Toluene-D8	95%	80-120%
460-00-4	4-Bromofluorobenzene	99%	80-120%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC52709-8MS	2C153850.D	1	10/13/17	HT	n/a	n/a	V2C6815
JC52709-8	2C153843.D	1	10/13/17	HT	n/a	n/a	V2C6815

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

JC52997-1, JC52997-2, JC52997-3

CAS No.	Compound	JC52709-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
67-64-1	Acetone	ND		200	177	89	34-149
71-43-2	Benzene	ND		50	45.7	91	54-136
74-97-5	Bromochloromethane	ND		50	48.8	98	79-124
75-27-4	Bromodichloromethane	ND		50	45.7	91	79-124
75-25-2	Bromoform	ND		50	41.4	83	71-130
74-83-9	Bromomethane	ND		50	46.3	93	53-142
78-93-3	2-Butanone (MEK)	ND		200	182	91	54-142
75-15-0	Carbon disulfide	ND		50	50.3	101	59-145
56-23-5	Carbon tetrachloride	ND		50	47.7	95	70-143
108-90-7	Chlorobenzene	ND		50	47.3	95	78-123
75-00-3	Chloroethane	ND		50	51.6	103	57-141
67-66-3	Chloroform	ND		50	44.1	88	76-123
74-87-3	Chloromethane	ND		50	45.7	91	43-141
110-82-7	Cyclohexane	ND		50	49.3	99	51-155
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	44.5	89	66-130
124-48-1	Dibromochloromethane	ND		50	43.9	88	76-125
106-93-4	1,2-Dibromoethane	ND		50	47.3	95	78-119
95-50-1	1,2-Dichlorobenzene	ND		50	48.5	97	77-123
541-73-1	1,3-Dichlorobenzene	ND		50	48.1	96	76-122
106-46-7	1,4-Dichlorobenzene	ND		50	47.6	95	76-122
75-71-8	Dichlorodifluoromethane	ND		50	51.8	104	31-159
75-34-3	1,1-Dichloroethane	ND		50	47.0	94	73-126
107-06-2	1,2-Dichloroethane	ND		50	42.9	86	72-131
75-35-4	1,1-Dichloroethene	ND		50	47.7	95	63-136
156-59-2	cis-1,2-Dichloroethene	ND		50	49.0	98	60-136
156-60-5	trans-1,2-Dichloroethene	ND		50	47.2	94	70-126
78-87-5	1,2-Dichloropropane	ND		50	45.6	91	78-124
10061-01-5	cis-1,3-Dichloropropene	ND		50	45.3	91	79-123
10061-02-6	trans-1,3-Dichloropropene	ND		50	43.8	88	77-123
100-41-4	Ethylbenzene	ND		50	46.6	93	51-140
76-13-1	Freon 113	ND		50	53.3	107	60-192
591-78-6	2-Hexanone	ND		200	175	88	56-139
98-82-8	Isopropylbenzene	ND		50	48.6	97	75-129
79-20-9	Methyl Acetate	ND		50	50.5	101	55-131
108-87-2	Methylcyclohexane	ND		50	54.0	108	57-155
1634-04-4	Methyl Tert Butyl Ether	ND		50	46.5	93	72-123

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC52709-8MS	2C153850.D	1	10/13/17	HT	n/a	n/a	V2C6815
JC52709-8	2C153843.D	1	10/13/17	HT	n/a	n/a	V2C6815

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

JC52997-1, JC52997-2, JC52997-3

CAS No.	Compound	JC52709-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		200	174	87	66-136
75-09-2	Methylene chloride	ND		50	44.0	88	73-125
100-42-5	Styrene	ND		50	46.8	94	75-129
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	44.1	88	71-122
127-18-4	Tetrachloroethene	ND		50	54.6	109	61-139
108-88-3	Toluene	ND		50	48.3	97	60-135
87-61-6	1,2,3-Trichlorobenzene	ND		50	50.6	101	70-138
120-82-1	1,2,4-Trichlorobenzene	ND		50	52.7	105	72-137
71-55-6	1,1,1-Trichloroethane	ND		50	49.3	99	74-138
79-00-5	1,1,2-Trichloroethane	ND		50	46.0	92	78-121
79-01-6	Trichloroethene	ND		50	49.0	98	62-141
75-69-4	Trichlorofluoromethane	ND		50	52.3	105	57-149
75-01-4	Vinyl chloride	ND		50	54.4	109	43-146
	m,p-Xylene	ND		100	95.4	95	50-144
95-47-6	o-Xylene	ND		50	48.1	96	63-134
1330-20-7	Xylene (total)	ND		150	143	95	56-139

CAS No.	Surrogate Recoveries	MS	JC52709-8	Limits
1868-53-7	Dibromofluoromethane	99%	103%	80-120%
17060-07-0	1,2-Dichloroethane-D4	92%	102%	81-124%
2037-26-5	Toluene-D8	96%	94%	80-120%
460-00-4	4-Bromofluorobenzene	99%	96%	80-120%

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC52709-6DUP	2C153852.D	1	10/13/17	HT	n/a	n/a	V2C6815
JC52709-6	2C153842.D	1	10/13/17	HT	n/a	n/a	V2C6815

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

JC52997-1, JC52997-2, JC52997-3

CAS No.	Compound	JC52709-6 ug/l	Q	DUP ug/l	Q	RPD	Limits
67-64-1	Acetone	ND		ND		nc	20
71-43-2	Benzene	ND		ND		nc	20
74-97-5	Bromochloromethane	ND		ND		nc	20
75-27-4	Bromodichloromethane	ND		ND		nc	20
75-25-2	Bromoform	ND		ND		nc	20
74-83-9	Bromomethane	ND		ND		nc	20
78-93-3	2-Butanone (MEK)	ND		ND		nc	20
75-15-0	Carbon disulfide	ND		ND		nc	20
56-23-5	Carbon tetrachloride	ND		ND		nc	20
108-90-7	Chlorobenzene	ND		ND		nc	20
75-00-3	Chloroethane	ND		ND		nc	20
67-66-3	Chloroform	ND		ND		nc	20
74-87-3	Chloromethane	ND		ND		nc	20
110-82-7	Cyclohexane	ND		ND		nc	20
96-12-8	1,2-Dibromo-3-chloropropane	ND		ND		nc	20
124-48-1	Dibromochloromethane	ND		ND		nc	20
106-93-4	1,2-Dibromoethane	ND		ND		nc	20
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	20
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	20
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	20
75-71-8	Dichlorodifluoromethane	ND		ND		nc	20
75-34-3	1,1-Dichloroethane	ND		ND		nc	20
107-06-2	1,2-Dichloroethane	ND		ND		nc	20
75-35-4	1,1-Dichloroethene	ND		ND		nc	20
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	20
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	20
78-87-5	1,2-Dichloropropane	ND		ND		nc	20
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	20
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	20
100-41-4	Ethylbenzene	ND		ND		nc	20
76-13-1	Freon 113	ND		ND		nc	20
591-78-6	2-Hexanone	ND		ND		nc	20
98-82-8	Isopropylbenzene	ND		ND		nc	20
79-20-9	Methyl Acetate	ND		ND		nc	20
108-87-2	Methylcyclohexane	ND		ND		nc	20
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	20

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC52709-6DUP	2C153852.D	1	10/13/17	HT	n/a	n/a	V2C6815
JC52709-6	2C153842.D	1	10/13/17	HT	n/a	n/a	V2C6815

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

JC52997-1, JC52997-2, JC52997-3

CAS No.	Compound	JC52709-6 ug/l	Q	DUP ug/l	Q	RPD	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		ND		nc	20
75-09-2	Methylene chloride	ND		ND		nc	20
100-42-5	Styrene	ND		ND		nc	20
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	20
127-18-4	Tetrachloroethene	ND		ND		nc	20
108-88-3	Toluene	ND		ND		nc	20
87-61-6	1,2,3-Trichlorobenzene	ND		ND		nc	20
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	20
71-55-6	1,1,1-Trichloroethane	0.91	J	0.88	J	3	20
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	20
79-01-6	Trichloroethene	ND		ND		nc	20
75-69-4	Trichlorofluoromethane	ND		ND		nc	20
75-01-4	Vinyl chloride	ND		ND		nc	20
	m,p-Xylene	ND		ND		nc	20
95-47-6	o-Xylene	ND		ND		nc	20
1330-20-7	Xylene (total)	ND		ND		nc	20

CAS No.	Surrogate Recoveries	DUP	JC52709-6	Limits
1868-53-7	Dibromofluoromethane	99%	103%	80-120%
17060-07-0	1,2-Dichloroethane-D4	98%	102%	81-124%
2037-26-5	Toluene-D8	94%	94%	80-120%
460-00-4	4-Bromofluorobenzene	96%	94%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample:	V2C6777-BFB	**Injection Date:**	09/19/17
Lab File ID:	2C152927.D	**Injection Time:**	17:57
Instrument ID:	GCMS2C		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	21034	19.3		Pass
75	30.0 - 60.0% of mass 95	51810	47.5		Pass
95	Base peak, 100% relative abundance	109138	100.0		Pass
96	5.0 - 9.0% of mass 95	7186	6.58		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	99306	91.0		Pass
175	5.0 - 9.0% of mass 174	7779	7.13	(7.83) [a]	Pass
176	95.0 - 101.0% of mass 174	96664	88.6	(97.3) [a]	Pass
177	5.0 - 9.0% of mass 176	6345	5.81	(6.56) [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
V2C6777-IC6777	2C152928.D	09/19/17	18:29	00:32	Initial cal 2
V2C6777-IC6777	2C152929.D	09/19/17	18:59	01:02	Initial cal 0.2
V2C6777-IC6777	2C152930.D	09/19/17	19:28	01:31	Initial cal 0.5
V2C6777-IC6777	2C152931.D	09/19/17	19:56	01:59	Initial cal 1
V2C6777-IC6777	2C152932.D	09/19/17	20:25	02:28	Initial cal 5
V2C6777-IC6777	2C152933.D	09/19/17	20:55	02:58	Initial cal 10
V2C6777-IC6777	2C152934.D	09/19/17	21:23	03:26	Initial cal 20
V2C6777-ICC6777	2C152935.D	09/19/17	21:52	03:55	Initial cal 50
V2C6777-IC6777	2C152936.D	09/19/17	22:21	04:24	Initial cal 100
V2C6777-IC6777	2C152937.D	09/19/17	22:50	04:53	Initial cal 200
V2C6777-ICV6777	2C152940.D	09/20/17	00:18	06:21	Initial cal verification 50
V2C6777-ICV6777	2C152941.D	09/20/17	00:47	06:50	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V2C6815-BFB
Lab File ID: 2C153835A.D
Instrument ID: GCMS2C
Injection Date: 10/13/17
Injection Time: 08:43

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	16353	19.0		Pass
75	30.0 - 60.0% of mass 95	40573	47.1		Pass
95	Base peak, 100% relative abundance	86186	100.0		Pass
96	5.0 - 9.0% of mass 95	5632	6.53		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	77056	89.4		Pass
175	5.0 - 9.0% of mass 174	6047	7.02	(7.85) [a]	Pass
176	95.0 - 101.0% of mass 174	75144	87.2	(97.5) [a]	Pass
177	5.0 - 9.0% of mass 176	4982	5.78	(6.63) [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
V2C6815-CC6777	2C153835.D	10/13/17	08:43	00:00	Continuing cal 20
V2C6815-MB	2C153836.D	10/13/17	09:52	01:09	Method Blank
V2C6815-BS	2C153837.D	10/13/17	10:20	01:37	Blank Spike
JC52997-1	2C153839.D	10/13/17	11:20	02:37	MW-300(HP335)
JC52997-3	2C153840.D	10/13/17	11:48	03:05	MW-300(HP355)
JC52997-2	2C153841.D	10/13/17	12:17	03:34	MW-300(HP345)
JC52709-6	2C153842.D	10/13/17	12:46	04:03	(used for QC only; not part of job JC52997)
JC52709-8	2C153843.D	10/13/17	13:16	04:33	(used for QC only; not part of job JC52997)
ZZZZZZ	2C153844.D	10/13/17	13:45	05:02	(unrelated sample)
ZZZZZZ	2C153845.D	10/13/17	14:14	05:31	(unrelated sample)
ZZZZZZ	2C153847.D	10/13/17	15:11	06:28	(unrelated sample)
ZZZZZZ	2C153848.D	10/13/17	15:40	06:57	(unrelated sample)
ZZZZZZ	2C153849.D	10/13/17	16:09	07:26	(unrelated sample)
JC52709-8MS	2C153850.D	10/13/17	16:38	07:55	Matrix Spike
JC52709-6DUP	2C153852.D	10/13/17	17:35	08:52	Duplicate
ZZZZZZ	2C153853.D	10/13/17	18:04	09:21	(unrelated sample)
ZZZZZZ	2C153854.D	10/13/17	18:32	09:49	(unrelated sample)
ZZZZZZ	2C153855.D	10/13/17	19:01	10:18	(unrelated sample)
ZZZZZZ	2C153856.D	10/13/17	19:30	10:47	(unrelated sample)
ZZZZZZ	2C153857.D	10/13/17	19:58	11:15	(unrelated sample)

Internal Standard Area Summary

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Check Std:	V2C6815-CC6777	**Injection Date:**	10/13/17
Lab File ID:	2C153835.D	**Injection Time:**	08:43
Instrument ID:	GCMS2C	**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	200280	8.19	226812	10.63	344775	11.56	301555	14.56	174842	16.71
Upper Limit [a]	400560	8.69	453624	11.13	689550	12.06	603110	15.06	349684	17.21
Lower Limit [b]	100140	7.69	113406	10.13	172388	11.06	150778	14.06	87421	16.21

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2C6815-MB	228403	8.19	225356	10.63	340266	11.56	294499	14.56	171310	16.71
V2C6815-BS	196412	8.20	232624	10.63	347122	11.56	307987	14.56	174507	16.71
JC52997-1	427125[c]	8.17	362682	10.62	530478	11.56	452261	14.56	233265	16.71
JC52997-3	210145	8.19	237187	10.63	361203	11.56	318095	14.56	188391	16.71
JC52997-2	216559	8.19	245524	10.63	366235	11.56	320438	14.56	187532	16.71
JC52709-6	204701	8.19	225722	10.63	345777	11.56	307961	14.56	182328	16.71
JC52709-8	206141	8.19	239448	10.63	360783	11.56	319960	14.56	182512	16.71
ZZZZZZ	206971	8.19	228585	10.63	347742	11.56	308293	14.56	181759	16.71
ZZZZZZ	204149	8.20	224750	10.63	342240	11.56	302262	14.56	181405	16.71
ZZZZZZ	204042	8.19	228880	10.63	346323	11.56	304879	14.56	179645	16.71
ZZZZZZ	200394	8.19	227827	10.63	346926	11.56	305422	14.56	181214	16.71
ZZZZZZ	208641	8.19	228450	10.63	340311	11.56	329452	14.56	183496	16.71
JC52709-8MS	219272	8.19	249443	10.63	373143	11.56	319748	14.56	181264	16.71
JC52709-6DUP	228505	8.20	261527	10.63	390276	11.56	339747	14.56	203517	16.71
ZZZZZZ	226152	8.20	253937	10.63	375766	11.56	334279	14.56	198997	16.71
ZZZZZZ	218645	8.19	241224	10.63	362876	11.56	318899	14.56	187924	16.71
ZZZZZZ	217800	8.19	237576	10.63	355666	11.56	319420	14.56	187085	16.71
ZZZZZZ	216848	8.19	234612	10.63	354996	11.56	317606	14.56	187863	16.71
ZZZZZZ	216929	8.20	233027	10.63	351868	11.56	318969	14.56	188902	16.71

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.
(c) Outside the QC criteria but no associated target compounds reported under this internal standard.

Surrogate Recovery Summary

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

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
JC52997-1	2C153839.D	92	93	96	101
JC52997-2	2C153841.D	102	103	95	95
JC52997-3	2C153840.D	102	102	94	94
JC52709-6DUP	2C153852.D	99	98	94	96
JC52709-8MS	2C153850.D	99	92	96	99
V2C6815-BS	2C153837.D	101	95	95	99
V2C6815-MB	2C153836.D	104	103	95	93

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: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V2C6777-ICC6777
Lab FileID: 2C152935.D

Response Factor Report Instrument #1

Method : C:\MSDCHEM\1\METHODS\M2C6777.M (RTE Integrator)
Title : SW846 8260C, Column ZB624 60mX0.25mmX1.4um
Last Update : Wed Sep 20 08:59:16 2017
Response via : Initial Calibration

Calibration Files
1 =2C152931.D 2 =2C152928.D 100 =2C152936.D 50 =2C152935.D
20 =2C152934.D 200 =2C152937.D 5 =2C152932.D 10 =2C152933.D
0.5 =2C152930.D 0.2 =2C152929.D = =

Compound	1	2	100	50	20	200	5	10	0.5	0.2	Avg	%RSD
1) I Tert Butyl Alcohol-d9	ISTD											
2) ethanol											0.000#	-1.00
3) tertiary butyl alcohol	1.784	1.659	1.340	1.387	1.380	1.347	1.500	1.394			1.474	11.12
4) 1,4-dioxane	0.138	0.141	0.113	0.114	0.114	0.114	0.119	0.122			0.122	9.15
5) I pentafluorobenzene	ISTD											
6) chlorodifluoromethane	0.863	1.066	0.900	0.938	0.858	0.863	0.952	0.852	0.723		0.890	10.43
7) dichlorodifluoromethane	0.801	0.964	0.979	1.014	0.991	0.950	1.014	0.965			0.960	7.11
8) chloromethane	1.183	1.440	1.119	1.174	1.165	1.118	1.213	1.143	1.381	1.560	1.250	12.36
9) vinyl chloride	0.985	1.247	1.130	1.161	1.128	1.109	1.166	1.068	1.101	1.072	1.117	6.26
10) 1,3-butadiene	0.731	0.699	0.713	0.660	0.676	0.716	0.670				0.695	3.83
11) bromomethane	0.734	0.848	0.606	0.655	0.652	0.697	0.635	0.813	0.886		0.725	13.95
12) chloroethane	0.508	0.650	0.541	0.557	0.552	0.507	0.588	0.540	0.523		0.552	8.07
13) trichlorofluoromethane	0.939	1.205	1.119	1.145	1.129	1.088	1.203	1.090	0.983		1.100	8.19
14) vinyl bromide	0.525	0.675	0.597	0.608	0.591	0.603	0.603	0.577	0.523		0.589	7.75
15) ethyl ether	0.307	0.365	0.318	0.324	0.302	0.303	0.354	0.315			0.323	7.30
16) 2-chloropropane	1.493	1.641	1.187	1.240	1.178	1.136	1.277	1.228	1.393		1.308	12.84
17) acrolein	0.164	0.171	0.146	0.161	0.140	0.139					0.154	8.72
18) freon 113	0.467	0.612	0.506	0.529	0.508	0.486	0.562	0.512			0.523	8.72
19) 1,1-dichloroethene	0.640	0.752	0.571	0.609	0.586	0.551	0.665	0.602	0.527	0.773	0.628	13.00
20) acetone	0.053	0.072	0.076	0.073	0.069	0.076	0.071				0.070	11.01
21) iodomethane	1.165	1.489	1.191	1.230	1.164	1.174	1.259	1.161	0.932	1.087	1.185	11.76
22) acetonitrile	0.121	0.126	0.120	0.118	0.136	0.118					0.123	5.67
23) carbon disulfide												

```
      2.392 2.982 2.323 2.460 2.376 2.237 2.549 2.351 1.985 2.521  2.417   10.53
24)  methylene chloride
      0.798 0.933 0.666 0.700 0.682 0.644 0.778 0.688 0.841        0.748   12.88
25)  methyl acetate
                0.550 0.544 0.477 0.539 0.444 0.493              0.508    8.52
26)  methyl tert butyl ether
      2.071 2.459 1.882 1.991 1.895 1.805 2.097 1.901 1.709        1.979   10.99
27)  trans-1,2-dichloroethene
      0.652 0.764 0.568 0.595 0.588 0.535 0.634 0.603 0.530 0.735  0.620   12.64
28)  hexane******This compound did not meet initial calibration criteria.
      0.353 0.439 0.416 0.415 0.407 0.382 0.448 0.419 0.301        0.398   11.56
29)  di-isopropyl ether
      2.341 2.777 2.102 2.247 2.176 2.011 2.408 2.186 2.029 2.426  2.270   10.12
30)  1,1-dichloroethane
      1.134 1.368 1.037 1.103 1.088 0.980 1.230 1.109 0.979 1.058  1.109   10.60
31)  chloroprene
      0.881 1.019 0.917 0.938 0.905 0.861 0.979 0.911 0.656        0.896   11.40
32)  acrylonitrile
                0.284 0.294 0.271 0.277 0.254 0.260              0.273    5.48
33)  vinyl acetate
                0.096 0.100 0.090 0.094       0.077              0.091    9.68
34)  ethyl tert-butyl ether
      2.171 2.583 2.113 2.208 2.092 2.036 2.250 2.097 1.773 1.655  2.098   12.12
35)  2-butanone
            0.064 0.082 0.084 0.079 0.079 0.082 0.081              0.079    8.30
36)  ethyl acetate
                0.099 0.126 0.129 0.093 0.139 0.120              0.118   15.30
37)  2,2-dichloropropane
      1.079 1.272 0.873 0.947 0.944 0.831 1.075 0.971 0.950 1.214  1.016   14.05
38)  cis-1,2-dichloroethene
      0.680 0.780 0.614 0.645 0.643 0.581 0.720 0.660 0.540 0.550  0.641   11.67
39)  propionitrile
            0.130 0.120 0.126 0.122 0.116 0.130 0.124              0.124    4.16
40)  bromochloromethane
      0.323 0.380 0.314 0.324 0.317 0.301 0.345 0.326 0.246        0.319   11.15
41)  tetrahydrofuran
                0.251 0.267 0.251 0.242 0.320 0.286              0.270   10.90
42)  chloroform
      1.175 1.295 0.994 1.051 1.027 0.941 1.154 1.066 1.084 1.354  1.114   11.78
43)  t-butyl formate ******This compound did not meet initial calibration criteria.
            0.596 0.464 0.487 0.469 0.456 0.517 0.477              0.495    9.83
44)  dibromofluoromethane (s)
      0.512 0.523 0.521 0.518 0.516 0.531 0.517 0.513 0.508 0.509  0.517    1.36
45)  methacrylonitrile
                0.275 0.277 0.254 0.271 0.249 0.240              0.261    5.92
46)  1,1,1-trichloroethane
      0.957 1.182 0.965 0.996 0.950 0.937 1.052 0.967 0.779 0.936  0.972   10.39
47)  Cyclohexane
      0.855 1.144 0.920 0.956 0.936 0.886 1.010 0.943 0.789 0.744  0.918   12.25
48)  1,1-dichloropropene
      0.759 0.879 0.758 0.783 0.763 0.713 0.848 0.791 0.662 0.688  0.764    8.73
49)  carbon tetrachloride
      0.818 1.047 0.799 0.842 0.827 0.772 0.930 0.864 0.785 0.807  0.849    9.74
50)  isobutyl alcohol
                0.024 0.025 0.027 0.025 0.033 0.026              0.027   12.55

51) I   1,4-difluorobenzene   ----------------ISTD---------------------
52)  1,2-dichloroethane-d4 (s)
      0.412 0.414 0.381 0.388 0.416 0.369 0.413 0.413 0.406 0.403  0.401    4.13
53)  n-butyl alcohol
```

```
      0.023 0.027 0.018 0.018 0.019 0.018 0.019 0.018              0.020   15.62
54)  tert-amyl alcohol
                0.023 0.025 0.027 0.024 0.033 0.031              0.027   14.18
55)  iso-octane
      1.386 1.743 1.557 1.601 1.559 1.456 1.646 1.575 1.322 1.009  1.485   13.99
56)  benzene
      1.588 1.746 1.365 1.442 1.463 1.278 1.643 1.511 1.411 1.659  1.511    9.71
57)  tert-amyl methyl ether
      0.296 0.371 0.261 0.272 0.271 0.252 0.310 0.282 0.249        0.285   13.33
58)  heptane
      0.250 0.300 0.296 0.293 0.296 0.269 0.316 0.299              0.290    7.10
59)  isopropyl acetate
                0.077 0.078 0.074 0.076 0.074 0.072              0.075    3.04
60)  1,2-dichloroethane
      0.571 0.600 0.446 0.472 0.481 0.410 0.559 0.511 0.430 0.438  0.492   13.39
61)  ethyl acrylate
                0.485 0.487 0.442 0.470 0.431 0.426              0.457    5.94
62)  trichloroethene
      0.366 0.418 0.357 0.373 0.364 0.331 0.403 0.369 0.316        0.366    8.56
63)  2-nitropropane
                0.165 0.175 0.172 0.156 0.188 0.178              0.172    6.48
64)  2-chloroethyl vinyl ether
      0.235 0.210 0.234 0.243 0.235 0.220 0.255 0.236 0.191        0.229    8.33
65)  methyl methacrylate
            0.085 0.095 0.093 0.089 0.091 0.090 0.091              0.091    3.48
66)  1,2-dichloropropane
      0.415 0.465 0.366 0.391 0.387 0.339 0.441 0.410 0.352 0.339  0.391   10.96
67)  dibromomethane
      0.258 0.300 0.240 0.251 0.246 0.230 0.283 0.255 0.205 0.203  0.247   12.32
68)  methylcyclohexane
      0.686 0.854 0.745 0.762 0.751 0.701 0.803 0.746 0.578 0.561  0.719   12.74
69)  bromodichloromethane
      0.552 0.614 0.503 0.520 0.509 0.479 0.564 0.523 0.458 0.453  0.517    9.60
70)  epichlorohydrin
            0.058 0.051 0.052 0.049 0.051 0.055 0.051              0.052    5.99
71)  cis-1,3-dichloropropene
      0.647 0.685 0.614 0.638 0.611 0.585 0.665 0.623 0.532        0.622    7.30
72)  4-methyl-2-pentanone
      0.195 0.211 0.165 0.176 0.176 0.159 0.193 0.179 0.181        0.182    8.84
73)  3-methyl-1-butanol
            0.046 0.027 0.030 0.033 0.026 0.037 0.032              0.033   21.51
            ----- Linear regression -----  Coefficient =  0.9967
              Response Ratio = 0.02067 + 0.02631 *A


74) I   chlorobenzene-d5      ----------------ISTD---------------------
75)  toluene-d8 (s)
      1.347 1.330 1.345 1.341 1.330 1.328 1.340 1.338 1.330 1.333  1.336    0.51
76)  toluene
      0.982 1.050 0.945 0.979 0.938 0.871 1.022 0.967 0.786 0.901  0.944    8.11
77)  ethyl methacrylate
      0.436 0.552 0.533 0.540 0.500 0.497 0.520 0.512              0.511    7.06
78)  trans-1,3-dichloropropene
      0.648 0.691 0.605 0.637 0.605 0.549 0.673 0.623 0.547        0.620    8.00
79)  1,1,2-trichloroethane
      0.332 0.365 0.313 0.324 0.318 0.288 0.350 0.316 0.314        0.324    6.94
80)  2-hexanone
      0.199 0.203 0.175 0.192 0.189 0.161 0.196 0.189 0.183        0.187    6.83
81)  tetrachloroethene
      0.347 0.377 0.323 0.341 0.341 0.292 0.388 0.355 0.296 0.303  0.336    9.79
```

Initial Calibration Summary

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V2C6777-ICC6777
Lab FileID: 2C152935.D

82) 1,3-dichloropropane
0.660 0.687 0.545 0.578 0.582 0.493 0.664 0.607 0.531 0.594 11.13
83) butyl acetate
0.299 0.277 0.286 0.271 0.263 0.284 0.271 0.279 4.28
84) 3,3-dimethyl-1-butanol
0.117 0.068 0.075 0.081 0.063 0.089 0.079 0.082 21.63
----- Linear regression ----- Coefficient = 0.9959
Response Ratio = 0.02538 + 0.06546 *A

85) dibromochloromethane
0.491 0.498 0.443 0.462 0.437 0.420 0.487 0.447 0.439 0.458 6.02
86) 1,2-dibromoethane
0.406 0.467 0.410 0.421 0.399 0.383 0.451 0.408 0.353 0.411 8.20
87) n-butyl ether
1.791 1.925 1.777 1.861 1.809 1.635 1.885 1.811 1.486 1.776 7.65
88) chlorobenzene
1.131 1.182 1.018 1.049 1.024 0.961 1.111 1.037 0.988 0.921 1.042 7.67
89) 1,1,1,2-tetrachloroethane
0.463 0.508 0.398 0.418 0.416 0.370 0.464 0.425 0.410 0.383 0.426 9.83
90) ethylbenzene
1.744 1.959 1.657 1.749 1.734 1.513 1.881 1.770 1.556 1.727 1.729 7.71
91) m,p-xylene
0.661 0.729 0.651 0.674 0.665 0.605 0.717 0.672 0.561 0.580 0.652 8.40
92) o-xylene
0.722 0.789 0.699 0.729 0.714 0.649 0.775 0.720 0.644 0.583 0.702 8.87
93) styrene
1.137 1.222 1.118 1.169 1.144 1.032 1.203 1.149 1.003 1.131 6.38
94) butyl acrylate
0.925 0.912 0.869 0.903 0.858 0.828 0.904 0.854 0.895 0.883 3.65
95) bromoform
0.390 0.407 0.367 0.378 0.354 0.353 0.377 0.357 0.396 0.375 5.20
96) isopropylbenzene
1.902 2.142 1.852 1.967 1.937 1.695 2.034 1.960 1.581 1.693 1.876 9.23
97) cis-1,4-dichloro-2-butene
0.231 0.251 0.210 0.216 0.212 0.202 0.227 0.204 0.242 0.222 7.78

98) I 1,4-dichlorobenzene-d ----------ISTD----------
99) 4-bromofluorobenzene (s)
0.844 0.823 0.902 0.891 0.863 0.923 0.850 0.858 0.841 0.850 0.864 3.58
100) bromobenzene
0.923 0.970 0.814 0.846 0.839 0.762 0.905 0.857 0.813 0.714 0.844 8.96
101) 1,1,2,2-tetrachloroethane
1.259 1.239 1.010 1.058 1.025 0.950 1.108 1.030 1.424 0.992 1.110 13.55
102) trans-1,4-dichloro-2-butene
0.131 0.156 0.133 0.140 0.133 0.127 0.133 0.128 0.135 6.86
103) 1,2,3-trichloropropane
0.267 0.267 0.230 0.241 0.238 0.218 0.260 0.246 0.246 7.27
104) n-propylbenzene
3.652 4.086 3.511 3.700 3.704 3.192 4.060 3.840 3.222 3.383 3.635 8.61
105) 2-chlorotoluene
0.757 0.880 0.727 0.759 0.744 0.690 0.815 0.768 0.643 0.649 0.743 9.69
106) 4-chlorotoluene
2.412 2.620 2.260 2.341 2.270 2.127 2.474 2.307 2.335 2.207 2.335 6.00
107) 1,3,5-trimethylbenzene
2.789 3.033 2.532 2.696 2.776 2.305 2.960 2.758 2.577 2.564 2.699 7.94
108) tert-butylbenzene
2.144 2.427 2.447 2.528 2.424 2.249 2.467 2.388 2.113 2.191 2.338 6.38
109) 1,2,4-trimethylbenzene
2.785 3.150 2.735 2.886 2.865 2.505 3.040 2.913 2.454 2.237 2.757 10.21
110) sec-butylbenzene

Initial Calibration Summary

Job Number: JC52997
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Project: Long Island GW Sampling, Long Island, NJ

Sample: V2C6777-ICC6777
Lab FileID: 2C152935.D

```
       3.453 4.023 3.759 3.930 3.803 3.405 3.957 3.872 3.189 3.512  3.690    7.61
111)  1,3-dichlorobenzene
       1.805 1.954 1.661 1.736 1.721 1.536 1.880 1.718 1.821 1.426  1.726    9.09
112)  p-isopropyltoluene
       2.936 3.353 3.107 3.249 3.171 2.821 3.277 3.190 2.705 2.844  3.065    7.25
113)  1,4-dichlorobenzene
       1.877 1.945 1.651 1.721 1.685 1.540 1.837 1.689 1.782 1.413  1.714    9.26
114)  1,2-dichlorobenzene
       1.945 2.146 1.720 1.826 1.788 1.577 1.943 1.788 1.958 1.463  1.815   10.93
115)  n-butylbenzene
       1.540 1.853 1.641 1.738 1.717 1.489 1.792 1.740 1.486 1.437  1.643    8.87
116)  1,2-dibromo-3-chloropropane
             0.356 0.244 0.257 0.250 0.230 0.267 0.251              0.265   15.78
117)  1,3,5-trichlorobenzene
       1.716 1.987 1.609 1.733 1.677 1.429 1.726 1.657              1.692    9.17
118)  Nitrobenzene
             0.105 0.100 0.104 0.096 0.101 0.098 0.097              0.100    3.26
119)  1,2,4-trichlorobenzene
       1.406 1.724 1.470 1.559 1.489 1.297 1.496 1.441              1.485    8.29
120)  2-ethylhexyl acrylate
             1.305 1.475 1.373 1.144 1.457 1.039 1.075              1.267   14.26
121)  hexachlorobutadiene
       0.774 0.952 0.788 0.833 0.814 0.701 0.848 0.831              0.818    8.74
122)  naphthalene
       3.624 4.094 3.497 3.695 3.519 3.150 3.472 3.403              3.557    7.61
123)  1,2,3-trichlorobenzene
       1.394 1.632 1.374 1.453 1.377 1.229 1.369 1.348              1.397    8.16
124)  hexachloroethane
       0.593 0.621 0.665 0.674 0.627 0.621 0.634 0.619              0.632    4.13
125)  2-methylnaphthalene
             1.970 2.165 2.159 1.930 1.986 1.667 1.767              1.949    9.50
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M2C6777.M         Wed Sep 20 09:02:24 2017   RPT1
```

Initial Calibration Verification

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V2C6777-ICV6777
Lab FileID: 2C152940.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2C152940.D Vial: 14
Acq On : 20 Sep 2017 12:18 am Operator: HUEANHT
Sample : icv6777-50 Inst : Instrument #1
Misc : MS19861,V2C6777,w,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2C6777.M (RTE Integrator)
Title : SW846 8260C, Column ZB624 60mX0.25mmX1.4um
Last Update : Wed Sep 20 08:59:16 2017
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	104	0.00	8.19
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.474	1.404	4.7	105	0.00	8.32
4		1,4-dioxane	0.122	0.111	9.0	101	0.00	12.27
5	I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	10.63
6		chlorodifluoromethane	0.890	0.951	-6.9	107	0.00	4.31
7		dichlorodifluoromethane	0.960	1.042	-8.5	108	0.00	4.30
8		chloromethane	1.250	1.156	7.5	104	0.00	4.69
9		vinyl chloride	1.117	1.148	-2.8	104	0.00	4.98
10		1,3-butadiene	0.695	0.889	-27.9	131	0.00	5.02
11		bromomethane	0.725	0.624	13.9	100	0.00	5.71
12		chloroethane	0.552	0.552	0.0	104	0.00	5.90
13		trichlorofluoromethane	1.100	1.103	-0.3	101	0.00	6.45
14		vinyl bromide	0.589	0.715	-21.4	124	0.00	6.32
15		ethyl ether	0.323	0.335	-3.7	109	0.00	6.92
16		2-chloropropane	1.308	1.234	5.7	105	0.00	7.14
17		acrolein	0.154	0.177	-14.9	109	0.00	7.21
18		freon 113	0.523	0.670	-28.1	133	0.00	7.37
19		1,1-dichloroethene	0.628	0.605	3.7	105	0.00	7.40
20		acetone	0.070	0.064	8.6	89	0.00	7.46
21		iodomethane	1.185	1.276	-7.7	109	0.00	7.71
22		acetonitrile	0.123	0.239	-94.3#	200	0.00	8.00
23		carbon disulfide	2.417	2.577	-6.6	110	0.00	7.86
24		methylene chloride	0.748	0.714	4.5	107	0.00	8.22
25		methyl acetate	0.508	0.502	1.2	97	0.00	7.99
26		methyl tert butyl ether	1.979	2.002	-1.2	106	0.00	8.59
27		trans-1,2-dichloroethene	0.620	0.590	4.8	104	0.00	8.64
28		hexane	0.398	0.271	31.9#	69	0.00	8.98
29		di-isopropyl ether	2.270	2.256	0.6	106	0.00	9.26
30		1,1-dichloroethane	1.109	1.134	-2.3	108	0.00	9.27
31		chloroprene	0.896	1.002	-11.8	113	0.00	9.39
32		acrylonitrile	0.273	0.300	-9.9	107	0.00	8.60
33		vinyl acetate	0.091	0.106	-16.5	111	-0.01	9.27
34		ethyl tert-butyl ether	2.098	2.204	-5.1	105	0.00	9.77
35		2-butanone	0.079	0.079	0.0	99	0.00	10.04
36		ethyl acetate	0.118	0.111	5.9	93	0.00	10.06
37		2,2-dichloropropane	1.016	0.954	6.1	106	0.00	10.07
38		cis-1,2-dichloroethene	0.641	0.674	-5.1	110	0.00	10.07
39		propionitrile	0.124	0.114	8.1	96	0.00	10.14
40		bromochloromethane	0.319	0.327	-2.5	106	0.00	10.40
41		tetrahydrofuran	0.270	0.261	3.3	103	0.00	10.45

Initial Calibration Verification

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V2C6777-ICV6777
Lab FileID: 2C152940.D

42		chloroform	1.114	1.079	3.1	108	0.00	10.47
43		t-butyl formate	0.495	0.299	39.6#	65	0.00	10.50
44	S	dibromofluoromethane (s)	0.517	0.517	0.0	105	0.00	10.68
45		methacrylonitrile	0.261	0.274	-5.0	104	0.00	10.34
46		1,1,1-trichloroethane	0.972	1.012	-4.1	107	0.00	10.73
47		Cyclohexane	0.918	1.025	-11.7	113	0.00	10.81
48		1,1-dichloropropene	0.764	0.799	-4.6	107	0.00	10.92
49		carbon tetrachloride	0.849	0.852	-0.4	107	0.00	10.95
50		isobutyl alcohol	0.027	0.025	7.4	102	0.00	10.94
51	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	11.57
52	S	1,2-dichloroethane-d4 (s)	0.401	0.388	3.2	104	0.00	11.11
53		n-butyl alcohol	0.020	0.018	10.0	101	0.00	11.69
54		tert-amyl alcohol	0.027	0.024	11.1	100	0.00	11.06
55		iso-octane	1.485	1.603	-7.9	105	0.00	11.20
56		benzene	1.511	1.481	2.0	107	0.00	11.19
57		tert-amyl methyl ether	0.285	0.277	2.8	106	0.00	11.23
58		heptane	0.290	0.317	-9.3	113	0.00	11.37
59		isopropyl acetate	0.075	0.079	-5.3	106	0.00	11.12
60		1,2-dichloroethane	0.492	0.492	0.0	109	0.00	11.21
61		ethyl acrylate	0.457	0.486	-6.3	104	0.00	11.91
62		trichloroethene	0.366	0.385	-5.2	108	0.00	11.90
63		2-nitropropane	0.172	0.170	1.2	102	0.00	12.64
64		2-chloroethyl vinyl ether	0.229	0.231	-0.9	100	0.00	12.66
65		methyl methacrylate	0.091	0.096	-5.5	108	0.00	12.17
66		1,2-dichloropropane	0.391	0.401	-2.6	107	0.00	12.15
67		dibromomethane	0.247	0.255	-3.2	106	0.00	12.31
68		methylcyclohexane	0.719	0.685	4.7	94	0.00	12.11
69		bromodichloromethane	0.517	0.543	-5.0	109	0.00	12.43
70		epichlorohydrin	0.052	0.052	0.0	106	0.00	12.78
71		cis-1,3-dichloropropene	0.622	0.653	-5.0	107	0.00	12.87
72		4-methyl-2-pentanone	0.182	0.178	2.2	106	0.00	12.95

			True	Calc.	% Drift			
73		3-methyl-1-butanol	1000.000	1000.881	-0.1	96	0.00	12.97

			AvgRF	CCRF	% Dev			
74	I	chlorobenzene-d5	1.000	1.000	0.0	105	0.00	14.56
75	S	toluene-d8 (s)	1.336	1.345	-0.7	106	0.00	13.15
76		toluene	0.944	0.993	-5.2	107	0.00	13.21
77		ethyl methacrylate	0.511	0.533	-4.3	104	0.00	13.39
78		trans-1,3-dichloropropene	0.620	0.654	-5.5	108	0.00	13.40
79		1,1,2-trichloroethane	0.324	0.333	-2.8	108	0.00	13.60
80		2-hexanone	0.187	0.179	4.3	98	0.00	13.75
81		tetrachloroethene	0.336	0.359	-6.8	111	0.00	13.76
82		1,3-dichloropropane	0.594	0.596	-0.3	109	0.00	13.77
83		butyl acetate	0.279	0.287	-2.9	105	0.00	13.82

			True	Calc.	% Drift			
84		3,3-dimethyl-1-butanol	500.000	516.813	-3.4	99	0.00	13.91

			AvgRF	CCRF	% Dev			
85		dibromochloromethane	0.458	0.473	-3.3	108	0.00	14.02
86		1,2-dibromoethane	0.411	0.428	-4.1	107	0.00	14.16
87		n-butyl ether	1.776	1.802	-1.5	102	0.00	14.50
88		chlorobenzene	1.042	1.071	-2.8	107	0.00	14.59
89		1,1,1,2-tetrachloroethane	0.426	0.427	-0.2	107	0.00	14.65
90		ethylbenzene	1.729	1.755	-1.5	106	0.00	14.63
91		m,p-xylene	0.652	0.678	-4.0	106	0.00	14.73

Initial Calibration Verification

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Project: Long Island GW Sampling, Long Island, NJ

Sample: V2C6777-ICV6777
Lab FileID: 2C152940.D

92		o-xylene	0.702	0.726	-3.4	105	0.00	15.12
93		styrene	1.131	1.162	-2.7	105	0.00	15.13
94		butyl acrylate	0.883	0.891	-0.9	104	0.00	14.95
95		bromoform	0.375	0.377	-0.5	105	0.00	15.38
96		isopropylbenzene	1.876	1.945	-3.7	104	0.00	15.44
97		cis-1,4-dichloro-2-butene	0.222	0.206	7.2	100	0.00	15.50
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	16.71
99	S	4-bromofluorobenzene (s)	0.864	0.902	-4.4	105	0.00	15.63
100		bromobenzene	0.844	0.864	-2.4	106	0.00	15.81
101		1,1,2,2-tetrachloroethane	1.110	1.073	3.3	105	0.00	15.72
102		trans-1,4-dichloro-2-bute	0.135	0.151	-11.9	112	0.00	15.76
103		1,2,3-trichloropropane	0.246	0.242	1.6	104	0.00	15.79
104		n-propylbenzene	3.635	3.709	-2.0	104	0.00	15.81
105		2-chlorotoluene	0.743	0.769	-3.5	105	0.00	15.96
106		4-chlorotoluene	2.335	2.355	-0.9	105	0.00	16.05
107		1,3,5-trimethylbenzene	2.699	2.674	0.9	103	0.00	15.96
108		tert-butylbenzene	2.338	2.573	-10.1	106	0.00	16.28
109		1,2,4-trimethylbenzene	2.757	2.916	-5.8	105	0.00	16.32
110		sec-butylbenzene	3.690	3.882	-5.2	103	0.00	16.47
111		1,3-dichlorobenzene	1.726	1.768	-2.4	106	0.00	16.66
112		p-isopropyltoluene	3.065	3.300	-7.7	106	0.00	16.58
113		1,4-dichlorobenzene	1.714	1.748	-2.0	106	0.00	16.74
114		1,2-dichlorobenzene	1.815	1.843	-1.5	105	0.00	17.11
115		n-butylbenzene	1.643	1.740	-5.9	104	0.00	16.98
116		1,2-dibromo-3-chloropropa	0.265	0.250	5.7	101	0.00	17.86
117		1,3,5-trichlorobenzene	1.692	1.788	-5.7	107	0.00	18.05
118		Nitrobenzene	0.100	0.103	-3.0	103	0.00	18.07
119		1,2,4-trichlorobenzene	1.485	1.553	-4.6	104	0.00	18.70
120		2-ethylhexyl acrylate	1.267	1.514	-19.5	115	0.00	18.65
121		hexachlorobutadiene	0.818	0.824	-0.7	103	0.00	18.81
122		naphthalene	3.557	3.618	-1.7	102	0.00	18.98
123		1,2,3-trichlorobenzene	1.397	1.435	-2.7	103	0.00	19.23
124		hexachloroethane	0.632	0.683	-8.1	105	0.00	17.37
125		2-methylnaphthalene	1.949	1.985	-1.8	96	0.00	20.12

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

2C152935.D M2C6777.M Wed Sep 20 09:02:11 2017 RPT1

Initial Calibration Verification

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V2C6777-ICV6777
Lab FileID: 2C152941.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2C152941.D Vial: 15
Acq On : 20 Sep 2017 12:47 am Operator: HUEANHT
Sample : icv6777-50 Inst : Instrument #1
Misc : MS19861,V2C6777,w,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2C6777.M (RTE Integrator)
Title : SW846 8260C, Column ZB624 60mX0.25mmX1.4um
Last Update : Wed Sep 20 08:59:16 2017
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	119	0.00	8.19
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	119	0.00	10.64
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		1,3-butadiene		----------NA----------				
11		bromomethane		----------NA----------				
12		chloroethane		----------NA----------				
13		trichlorofluoromethane		----------NA----------				
14		vinyl bromide		----------NA----------				
15		ethyl ether		----------NA----------				
16		2-chloropropane		----------NA----------				
17		acrolein		----------NA----------				
18		freon 113		----------NA----------				
19		1,1-dichloroethene		----------NA----------				
20		acetone		----------NA----------				
21		iodomethane		----------NA----------				
22		acetonitrile	0.123	0.119	3.3	112	-0.04	7.96
23		carbon disulfide		----------NA----------				
24		methylene chloride		----------NA----------				
25		methyl acetate		----------NA----------				
26		methyl tert butyl ether		----------NA----------				
27		trans-1,2-dichloroethene		----------NA----------				
28		hexane		----------NA----------				
29		di-isopropyl ether		----------NA----------				
30		1,1-dichloroethane		----------NA----------				
31		chloroprene		----------NA----------				
32		acrylonitrile		----------NA----------				
33		vinyl acetate		----------NA----------				
34		ethyl tert-butyl ether		----------NA----------				
35		2-butanone		----------NA----------				
36		ethyl acetate		----------NA----------				
37		2,2-dichloropropane		----------NA----------				
38		cis-1,2-dichloroethene		----------NA----------				
39		propionitrile		----------NA----------				
40		bromochloromethane		----------NA----------				
41		tetrahydrofuran		----------NA----------				

Initial Calibration Verification

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V2C6777-ICV6777
Lab FileID: 2C152941.D

42		chloroform			----------NA----------				
43		t-butyl formate			----------NA----------				
44	S	dibromofluoromethane (s)	0.517	0.505	2.3	116	0.00	10.68	
45		methacrylonitrile			----------NA----------				
46		1,1,1-trichloroethane			----------NA----------				
47		Cyclohexane			----------NA----------				
48		1,1-dichloropropene			----------NA----------				
49		carbon tetrachloride			----------NA----------				
50		isobutyl alcohol			----------NA----------				
51	I	1,4-difluorobenzene	1.000	1.000	0.0	115	0.00	11.57	
52	S	1,2-dichloroethane-d4 (s)	0.401	0.409	-2.0	121	0.00	11.12	
53		n-butyl alcohol			----------NA----------				
54		tert-amyl alcohol			----------NA----------				
55		iso-octane			----------NA----------				
56		benzene			----------NA----------				
57		tert-amyl methyl ether			----------NA----------				
58		heptane			----------NA----------				
59		isopropyl acetate			----------NA----------				
60		1,2-dichloroethane			----------NA----------				
61		ethyl acrylate			----------NA----------				
62		trichloroethene			----------NA----------				
63		2-nitropropane			----------NA----------				
64		2-chloroethyl vinyl ether			----------NA----------				
65		methyl methacrylate			----------NA----------				
66		1,2-dichloropropane			----------NA----------				
67		dibromomethane			----------NA----------				
68		methylcyclohexane			----------NA----------				
69		bromodichloromethane			----------NA----------				
70		epichlorohydrin			----------NA----------				
71		cis-1,3-dichloropropene			----------NA----------				
72		4-methyl-2-pentanone			----------NA----------				
		----------	True	Calc.	% Drift	----------			
73		3-methyl-1-butanol			----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------			
74	I	chlorobenzene-d5	1.000	1.000	0.0	116	0.00	14.56	
75	S	toluene-d8 (s)	1.336	1.336	0.0	115	0.00	13.15	
76		toluene			----------NA----------				
77		ethyl methacrylate			----------NA----------				
78		trans-1,3-dichloropropene			----------NA----------				
79		1,1,2-trichloroethane			----------NA----------				
80		2-hexanone			----------NA----------				
81		tetrachloroethene			----------NA----------				
82		1,3-dichloropropane			----------NA----------				
83		butyl acetate			----------NA----------				
		----------	True	Calc.	% Drift	----------			
84		3,3-dimethyl-1-butanol			----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------			
85		dibromochloromethane			----------NA----------				
86		1,2-dibromoethane			----------NA----------				
87		n-butyl ether			----------NA----------				
88		chlorobenzene			----------NA----------				
89		1,1,1,2-tetrachloroethane			----------NA----------				
90		ethylbenzene			----------NA----------				
91		m,p-xylene			----------NA----------				

Initial Calibration Verification

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V2C6777-ICV6777
Lab FileID: 2C152941.D

92		o-xylene			----------NA----------			
93		styrene			----------NA----------			
94		butyl acrylate			----------NA----------			
95		bromoform			----------NA----------			
96		isopropylbenzene			----------NA----------			
97		cis-1,4-dichloro-2-butene			----------NA----------			
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	118	0.00	16.72
99	S	4-bromofluorobenzene (s)	0.864	0.866	-0.2	115	0.00	15.63
100		bromobenzene			----------NA----------			
101		1,1,2,2-tetrachloroethane			----------NA----------			
102		trans-1,4-dichloro-2-bute			----------NA----------			
103		1,2,3-trichloropropane			----------NA----------			
104		n-propylbenzene			----------NA----------			
105		2-chlorotoluene			----------NA----------			
106		4-chlorotoluene			----------NA----------			
107		1,3,5-trimethylbenzene			----------NA----------			
108		tert-butylbenzene			----------NA----------			
109		1,2,4-trimethylbenzene			----------NA----------			
110		sec-butylbenzene			----------NA----------			
111		1,3-dichlorobenzene			----------NA----------			
112		p-isopropyltoluene			----------NA----------			
113		1,4-dichlorobenzene			----------NA----------			
114		1,2-dichlorobenzene			----------NA----------			
115		n-butylbenzene			----------NA----------			
116		1,2-dibromo-3-chloropropa			----------NA----------			
117		1,3,5-trichlorobenzene			----------NA----------			
118		Nitrobenzene			----------NA----------			
119		1,2,4-trichlorobenzene			----------NA----------			
120		2-ethylhexyl acrylate			----------NA----------			
121		hexachlorobutadiene			----------NA----------			
122		naphthalene			----------NA----------			
123		1,2,3-trichlorobenzene			----------NA----------			
124		hexachloroethane			----------NA----------			
125		2-methylnaphthalene			----------NA----------			

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

2C152935.D M2C6777.M Wed Sep 20 09:18:16 2017 RPT1

Continuing Calibration Summary

Job Number: JC52997
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V2C6815-CC6777
Lab FileID: 2C153835.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2C153835.D Vial: 2
Acq On : 13 Oct 2017 8:43 am Operator: HUEANHT
Sample : CC6777-20 Inst : Instrument #1
Misc : MS20827,V2C6815,w,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2C6777.M (RTE Integrator)
Title : SW846 8260C, Column ZB624 60mX0.25mmX1.4um
Last Update : Fri Oct 13 12:52:49 2017
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	88	0.00	8.19
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.474	1.437	2.5	91	0.02	8.33
4		1,4-dioxane	0.122	0.109	10.7	84	0.00	12.27
5	I	pentafluorobenzene	1.000	1.000	0.0	88	0.00	10.63
6		chlorodifluoromethane	0.890	0.829	6.9	85	0.00	4.32
7		dichlorodifluoromethane	0.960	0.921	4.1	82	0.02	4.31
8		chloromethane	1.250	1.199	4.1	90	0.00	4.69
9		vinyl chloride	1.117	1.122	-0.4	87	0.00	4.99
10		1,3-butadiene	0.695	0.907	-30.5#	120	0.00	5.01
11		bromomethane	0.725	0.683	5.8	92	0.00	5.72
12		chloroethane	0.552	0.574	-4.0	91	0.00	5.91
13		trichlorofluoromethane	1.100	1.096	0.4	85	0.01	6.47
14		vinyl bromide	0.589	1.139	-93.4#	169	0.00	6.32
15		ethyl ether	0.323	0.337	-4.3	98	0.00	6.91
16		2-chloropropane	1.308	1.091	16.6	81	0.00	7.13
17		acrolein	0.154	0.145	5.8	87	0.00	7.22
18		freon 113	0.523	0.491	6.1	85	0.00	7.37
19		1,1-dichloroethene	0.628	0.554	11.8	83	0.00	7.40
20		acetone	0.070	0.072	-2.9	87	0.00	7.46
21		iodomethane	1.185	1.117	5.7	84	-0.01	7.71
22		acetonitrile	0.123	0.149	-21.1#	109	-0.03	7.97
23		carbon disulfide	2.417	2.214	8.4	82	0.00	7.86
24		methylene chloride	0.748	0.694	7.2	89	-0.01	8.21
25		methyl acetate	0.508	0.569	-12.0	105	0.00	8.00
26		methyl tert butyl ether	1.979	1.907	3.6	88	0.00	8.59
27		trans-1,2-dichloroethene	0.620	0.602	2.9	90	0.00	8.64
28		hexane	0.398	0.374	6.0	81	0.00	8.98
29		di-isopropyl ether	2.270	2.148	5.4	87	0.00	9.26
30		1,1-dichloroethane	1.109	1.136	-2.4	92	0.00	9.27
31		chloroprene	0.896	0.836	6.7	81	0.00	9.39
32		acrylonitrile	0.273	0.313	-14.7	101	0.01	8.61
33		vinyl acetate	0.091	0.080	12.1	78	0.00	9.28
34		ethyl tert-butyl ether	2.098	2.014	4.0	84	0.00	9.77
35		2-butanone	0.079	0.080	-1.3	90	0.00	10.04
36		ethyl acetate	0.118	0.120	-1.7	81	0.00	10.07
37		2,2-dichloropropane	1.016	0.948	6.7	88	0.00	10.07
38		cis-1,2-dichloroethene	0.641	0.668	-4.2	91	0.00	10.07
39		propionitrile	0.124	0.137	-10.5	99	0.00	10.14
40		bromochloromethane	0.319	0.347	-8.8	96	0.00	10.40
41		tetrahydrofuran	0.270	0.265	1.9	93	0.00	10.45

Continuing Calibration Summary

Job Number: JC52997 **Sample:** V2C6815-CC6777
Account: HSWFLTAM HSW Engineering **Lab FileID:** 2C153835.D
Project: Long Island GW Sampling, Long Island, NJ

42		chloroform	1.114	1.072	3.8	92	0.00	10.47
43		t-butyl formate	0.495	0.164	66.9#	31#	0.00	10.51
44	S	dibromofluoromethane (s)	0.517	0.526	-1.7	89	0.00	10.68
45		methacrylonitrile	0.261	0.264	-1.1	91	0.00	10.34
46		1,1,1-trichloroethane	0.972	0.941	3.2	87	0.00	10.73
47		Cyclohexane	0.918	0.913	0.5	86	0.00	10.81
48		1,1-dichloropropene	0.764	0.725	5.1	83	0.00	10.92
49		carbon tetrachloride	0.849	0.812	4.4	86	0.00	10.95
50		isobutyl alcohol	0.027	0.027	0.0	87	0.00	10.94
51	I	1,4-difluorobenzene	1.000	1.000	0.0	87	0.00	11.56
52	S	1,2-dichloroethane-d4 (s)	0.401	0.391	2.5	82	0.00	11.11
53		n-butyl alcohol	0.020	0.019	5.0	89	0.00	11.69
54		tert-amyl alcohol	0.027	0.029	-7.4	94	0.00	11.06
55		iso-octane	1.485	1.501	-1.1	84	0.00	11.19
56		benzene	1.511	1.486	1.7	88	0.00	11.19
57		tert-amyl methyl ether	0.285	0.279	2.1	90	0.00	11.23
58		heptane	0.290	0.263	9.3	77	0.00	11.37
59		isopropyl acetate	0.075	0.077	-2.7	91	0.00	11.12
60		1,2-dichloroethane	0.492	0.496	-0.8	90	0.00	11.20
61		ethyl acrylate	0.457	0.459	-0.4	90	0.00	11.91
62		trichloroethene	0.366	0.365	0.3	87	0.00	11.90
63		2-nitropropane	0.172	0.149	13.4	75	-0.01	12.63
64		2-chloroethyl vinyl ether	0.229	0.173	24.5#	64	0.00	12.66
65		methyl methacrylate	0.091	0.092	-1.1	89	0.00	12.17
66		1,2-dichloropropane	0.391	0.400	-2.3	90	0.00	12.15
67		dibromomethane	0.247	0.264	-6.9	93	0.00	12.31
68		methylcyclohexane	0.719	0.676	6.0	78	0.00	12.11
69		bromodichloromethane	0.517	0.514	0.6	88	0.00	12.43
70		epichlorohydrin	0.052	0.050	3.8	89	0.00	12.78
71		cis-1,3-dichloropropene	0.622	0.594	4.5	85	0.00	12.87
72		4-methyl-2-pentanone	0.182	0.184	-1.1	91	0.00	12.95
			True	Calc.	% Drift			
73		3-methyl-1-butanol	400.000	467.764	-16.9	89	0.00	12.97
			AvgRF	CCRF	% Dev			
74	I	chlorobenzene-d5	1.000	1.000	0.0	87	0.00	14.56
75	S	toluene-d8 (s)	1.336	1.280	4.2	84	0.00	13.14
76		toluene	0.944	0.927	1.8	86	0.00	13.21
77		ethyl methacrylate	0.511	0.487	4.7	85	0.00	13.39
78		trans-1,3-dichloropropene	0.620	0.594	4.2	86	0.00	13.39
79		1,1,2-trichloroethane	0.324	0.327	-0.9	90	0.00	13.60
80		2-hexanone	0.187	0.195	-4.3	90	0.00	13.75
81		tetrachloroethene	0.336	0.371	-10.4	95	0.00	13.76
82		1,3-dichloropropane	0.594	0.605	-1.9	91	0.00	13.76
83		butyl acetate	0.279	0.284	-1.8	91	0.00	13.82
			True	Calc.	% Drift			
84		3,3-dimethyl-1-butanol	200.000	217.386	-8.7	84	0.00	13.91
			AvgRF	CCRF	% Dev			
85		dibromochloromethane	0.458	0.433	5.5	86	0.00	14.02
86		1,2-dibromoethane	0.411	0.428	-4.1	94	0.00	14.16
87		n-butyl ether	1.776	1.633	8.1	79	0.00	14.49
88		chlorobenzene	1.042	1.028	1.3	88	0.00	14.59
89		1,1,1,2-tetrachloroethane	0.426	0.424	0.5	89	0.00	14.64
90		ethylbenzene	1.729	1.670	3.4	84	0.00	14.63
91		m,p-xylene	0.652	0.645	1.1	85	0.00	14.73

Continuing Calibration Summary

Job Number: JC52997 **Sample:** V2C6815-CC6777
Account: HSWFLTAM HSW Engineering **Lab FileID:** 2C153835.D
Project: Long Island GW Sampling, Long Island, NJ

92		o-xylene	0.702	0.690	1.7	84	0.00	15.12
93		styrene	1.131	1.130	0.1	86	0.00	15.13
94		butyl acrylate	0.883	0.760	13.9	77	0.00	14.95
95		bromoform	0.375	0.330	12.0	81	0.00	15.38
96		isopropylbenzene	1.876	1.800	4.1	81	0.00	15.44
97		cis-1,4-dichloro-2-butene	0.222	0.096	56.8#	39#	0.00	15.50
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	85	0.00	16.71
99	S	4-bromofluorobenzene (s)	0.864	0.832	3.7	82	0.00	15.63
100		bromobenzene	0.844	0.896	-6.2	91	0.00	15.81
101		1,1,2,2-tetrachloroethane	1.110	1.081	2.6	90	0.00	15.71
102		trans-1,4-dichloro-2-bute	0.135	0.069	48.9#	44#	0.00	15.76
103		1,2,3-trichloropropane	0.246	0.257	-4.5	92	0.00	15.79
104		n-propylbenzene	3.635	3.601	0.9	83	0.00	15.81
105		2-chlorotoluene	0.743	0.768	-3.4	88	0.00	15.96
106		4-chlorotoluene	2.335	2.257	3.3	85	0.00	16.05
107		1,3,5-trimethylbenzene	2.699	2.673	1.0	82	0.00	15.95
108		tert-butylbenzene	2.338	2.272	2.8	80	0.00	16.28
109		1,2,4-trimethylbenzene	2.757	2.808	-1.8	84	0.00	16.32
110		sec-butylbenzene	3.690	3.593	2.6	81	0.00	16.48
111		1,3-dichlorobenzene	1.726	1.777	-3.0	88	0.00	16.66
112		p-isopropyltoluene	3.065	2.997	2.2	81	0.00	16.59
113		1,4-dichlorobenzene	1.714	1.741	-1.6	88	0.00	16.73
114		1,2-dichlorobenzene	1.815	1.843	-1.5	88	0.00	17.10
115		n-butylbenzene	1.643	1.643	0.0	82	0.00	16.97
116		1,2-dibromo-3-chloropropa	0.265	0.251	5.3	86	0.00	17.86
117		1,3,5-trichlorobenzene	1.692	1.750	-3.4	89	0.00	18.05
118		Nitrobenzene	0.100	0.053	47.0#	47#	0.00	18.08
119		1,2,4-trichlorobenzene	1.485	1.510	-1.7	87	0.00	18.69
120		2-ethylhexyl acrylate	1.267	0.235	81.5#	18#	0.00	18.65
121		hexachlorobutadiene	0.818	0.839	-2.6	88	0.00	18.81
122		naphthalene	3.557	3.339	6.1	81	0.00	18.98
123		1,2,3-trichlorobenzene	1.397	1.392	0.4	86	0.00	19.22
124		hexachloroethane	0.632	0.502	20.6#	68	0.00	17.37
125		2-methylnaphthalene	1.949	1.083	44.4#	48#	0.00	20.12

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2C152934.D M2C6777.M Fri Oct 13 17:30:11 2017 RPT1

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Automated Report

Technical Report for

HSW Engineering

Long Island GW Sampling, Long Island, NJ

SGS Accutest Job Number: JC53103

Sampling Dates: 10/12/17 - 10/13/17

Report to:

RPoff@HSWEng.com
DSmolensky@Emagin-Inc.com

ATTN: Distribution3

Total number of pages in report: **48**

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)

Sections: 1 2 3 4 5 6

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Sample Summary

HSW Engineering

Job No: JC53103

Long Island GW Sampling, Long Island, NJ

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC53103-1	10/12/17	16:45	CT/BR	10/13/17	AQ	Ground Water	MW-300 (HP 365)
JC53103-2	10/13/17	10:30	CT/BR	10/13/17	AQ	Ground Water	MW-300 (HP 375)
JC53103-3	10/13/17	13:15	CT/BR	10/13/17	AQ	Ground Water	MW-300 (HP 385)
JC53103-4	10/13/17	00:00	CT/BR	10/13/17	AQ	Ground Water	DUPLICATE-1

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	HSW Engineering	**Job No**	JC53103
Site:	Long Island GW Sampling, Long Island, NJ	**Report Date**	10/16/2017 1:07:55 P

On 10/13/2017, 4 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 2.2 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of JC53103 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.

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** V4D3592

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC52556-1MS, JC52556-5DUP, JC52556-1MS were used as the QC samples indicated.
- Matrix Spike Recovery(s) for 1,1-Dichloroethane, 1,2-Dichloroethane, 1,2-Dichloropropane, Bromodichloromethane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene are outside control limits.
- JC53103-4: Sample transfered to another vial before analysis due to high level of sediment.
- JC53103-3: Sample transfered to another vial before analysis due to high level of sediment.
- JC53103-2: Sample transfered to another vial before analysis due to high level of sediment.

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: JC53103
Account: HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ
Collected: 10/12/17 thru 10/13/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC53103-1	**MW-300 (HP 365)**					
Acetone		20.3	10	5.0	ug/l	SW846 8260C
Benzene		0.28 J	0.50	0.17	ug/l	SW846 8260C
Carbon disulfide		0.29 J	2.0	0.23	ug/l	SW846 8260C
1,1-Dichloroethane		2.6	1.0	0.21	ug/l	SW846 8260C
1,1-Dichloroethene		0.79 J	1.0	0.47	ug/l	SW846 8260C
Tetrachloroethene		1.6	1.0	0.50	ug/l	SW846 8260C
Toluene		1.1	1.0	0.25	ug/l	SW846 8260C
Trichloroethene		2.3	1.0	0.27	ug/l	SW846 8260C
JC53103-2	**MW-300 (HP 375)**					
Acetone [a]		44.8	10	5.0	ug/l	SW846 8260C
1,1-Dichloroethane [a]		0.40 J	1.0	0.21	ug/l	SW846 8260C
Tetrachloroethene [a]		1.5	1.0	0.50	ug/l	SW846 8260C
Toluene [a]		2.5	1.0	0.25	ug/l	SW846 8260C
Trichloroethene [a]		2.0	1.0	0.27	ug/l	SW846 8260C
JC53103-3	**MW-300 (HP 385)**					
Acetone [a]		5.8 J	10	5.0	ug/l	SW846 8260C
1,1-Dichloroethane [a]		0.70 J	1.0	0.21	ug/l	SW846 8260C
Tetrachloroethene [a]		4.7	1.0	0.50	ug/l	SW846 8260C
Toluene [a]		0.51 J	1.0	0.25	ug/l	SW846 8260C
Trichloroethene [a]		4.8	1.0	0.27	ug/l	SW846 8260C
JC53103-4	**DUPLICATE-1**					
Acetone [a]		54.4	10	5.0	ug/l	SW846 8260C
1,1-Dichloroethane [a]		0.39 J	1.0	0.21	ug/l	SW846 8260C
Tetrachloroethene [a]		1.5	1.0	0.50	ug/l	SW846 8260C
Toluene [a]		2.6	1.0	0.25	ug/l	SW846 8260C
Trichloroethene [a]		2.1	1.0	0.27	ug/l	SW846 8260C

(a) Sample transfered to another vial before analysis due to high level of sediment.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-300 (HP 365)		
Lab Sample ID:	JC53103-1	**Date Sampled:**	10/12/17
Matrix:	AQ - Ground Water	**Date Received:**	10/13/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D83220.D	1	10/14/17 13:38	JP	n/a	n/a	V4D3592
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	20.3	10	5.0	ug/l	
71-43-2	Benzene	0.28	0.50	0.17	ug/l	J
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	0.29	2.0	0.23	ug/l	J
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	2.6	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	0.79	1.0	0.47	ug/l	J
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	
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	

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:	MW-300 (HP 365)		
Lab Sample ID:	JC53103-1	**Date Sampled:**	10/12/17
Matrix:	AQ - Ground Water	**Date Received:**	10/13/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	1.6	1.0	0.50	ug/l	
108-88-3	Toluene	1.1	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	2.3	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-120%
17060-07-0	1,2-Dichloroethane-D4	111%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

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:	MW-300 (HP 375)		
Lab Sample ID:	JC53103-2	**Date Sampled:**	10/13/17
Matrix:	AQ - Ground Water	**Date Received:**	10/13/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4D83221.D	1	10/14/17 14:06	JP	n/a	n/a	V4D3592
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	44.8	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	0.40	1.0	0.21	ug/l	J
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	
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	

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:	MW-300 (HP 375)		
Lab Sample ID:	JC53103-2	**Date Sampled:**	10/13/17
Matrix:	AQ - Ground Water	**Date Received:**	10/13/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	1.5	1.0	0.50	ug/l	
108-88-3	Toluene	2.5	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	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	100%		80-120%
17060-07-0	1,2-Dichloroethane-D4	111%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

(a) Sample transfered to another vial before analysis due to high level of sediment.

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: MW-300 (HP 385)
Lab Sample ID: JC53103-3
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Long Island GW Sampling, Long Island, NJ

Date Sampled: 10/13/17
Date Received: 10/13/17
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4D83222.D	1	10/14/17 14:34	JP	n/a	n/a	V4D3592
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	5.8	10	5.0	ug/l	J
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	0.70	1.0	0.21	ug/l	J
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	
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	

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:	MW-300 (HP 385)		
Lab Sample ID:	JC53103-3	**Date Sampled:**	10/13/17
Matrix:	AQ - Ground Water	**Date Received:**	10/13/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	4.7	1.0	0.50	ug/l	
108-88-3	Toluene	0.51	1.0	0.25	ug/l	J
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	4.8	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-120%
17060-07-0	1,2-Dichloroethane-D4	112%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

(a) Sample transfered to another vial before analysis due to high level of sediment.

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: DUPLICATE-1
Lab Sample ID: JC53103-4
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Long Island GW Sampling, Long Island, NJ

Date Sampled: 10/13/17
Date Received: 10/13/17
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4D83223.D	1	10/14/17 15:01	JP	n/a	n/a	V4D3592
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	54.4	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	0.39	1.0	0.21	ug/l	J
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	
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	

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:	DUPLICATE-1		
Lab Sample ID:	JC53103-4	**Date Sampled:**	10/13/17
Matrix:	AQ - Ground Water	**Date Received:**	10/13/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	1.5	1.0	0.50	ug/l	
108-88-3	Toluene	2.6	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	2.1	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-120%
17060-07-0	1,2-Dichloroethane-D4	115%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	101%		80-120%

(a) Sample transfered to another vial before analysis due to high level of sediment.

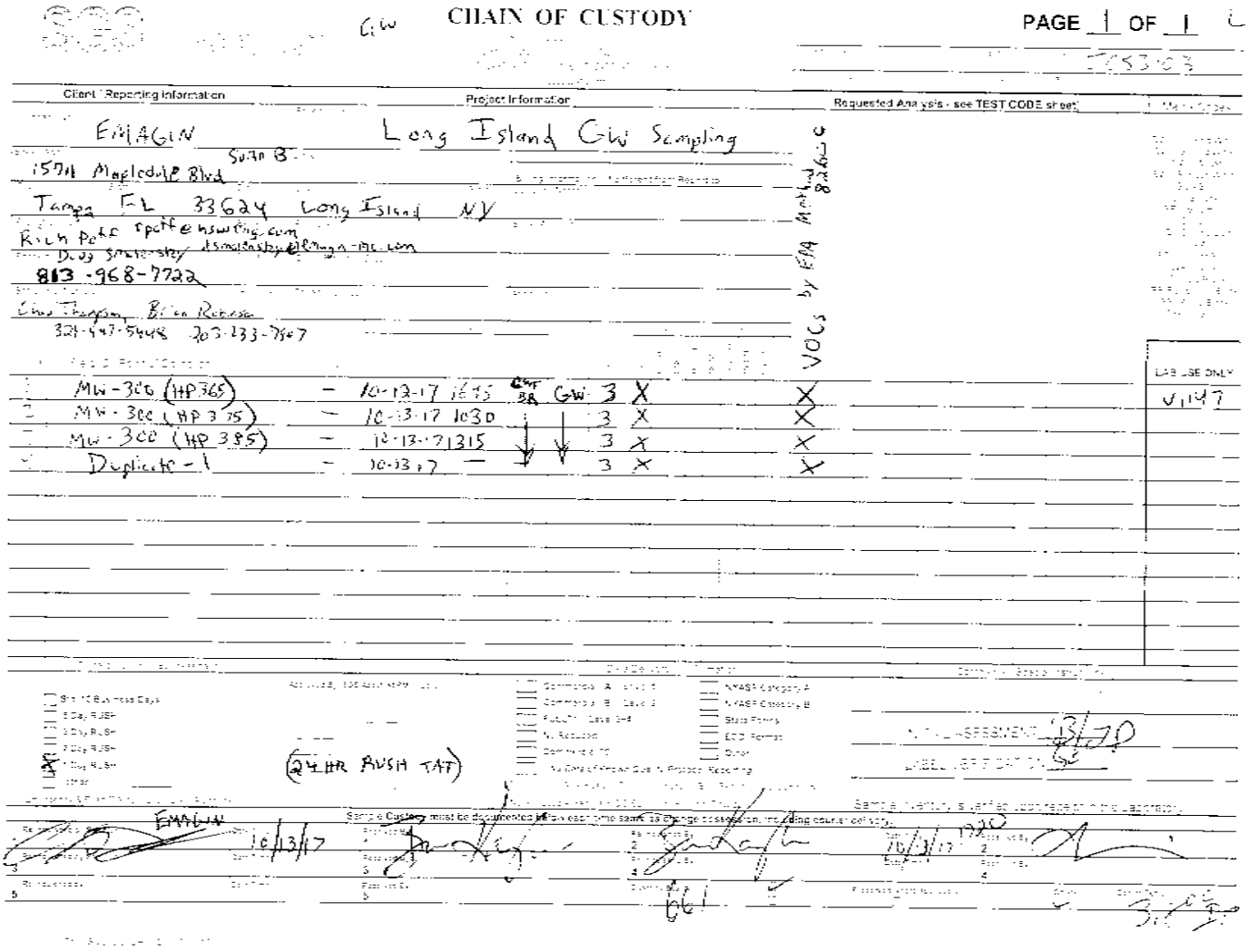
ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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



CHAIN OF CUSTODY

PAGE 1 OF 1

JC53103

Client / Reporting Information

EMAGIN

1571A Mapleleaf Blvd Suite B

Tampa FL 33624

Rich Petit rpetit@nswfirm.com

Doug Sanderson dsanderson@emagin-inc.com

813-968-7722

Project Information

Long Island GW Sampling

Requested Analysis - see TEST CODE sheet

VOCs by EPA Method 8260C

1	MW-300 (HP365)	–	10-13-17 1245	GW	3	X	X
2	MW-300 (HP375)	–	10-13-17 1030	GW	3	X	X
3	MW-300 (HP385)	–	10-13-17 1315	GW	3	X	X
4	Duplicate-1	–	10-13-17	GW	3	X	X

LAB USE ONLY

V1147

(24HR RUSH TAT)

EMAGIN 10/13/17

SGS Accutest Sample Receipt Summary

Job Number: JC53103 **Client:** EMAGIN **Project:** Long Island GW Sampling

Date / Time Received: 10/13/2017 5:20:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.8);

Cooler Temps (Corrected) °C: Cooler 1: (2.2);

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 -2 & -4 3 of 3 VOC vials rec'd with 50% sediment. We will not screen sample.

SM089-02
Rev. Date 12/1/16

Responded to by: CSR: N/A

Response Date: Response Date: 10/13/2017

Response:

Response: Proceed with analysis

JC53103: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

HSW Engineering

Job No: JC53103

Long Island GW Sampling, Long Island, NJ

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC53103-1	Collected: 12-OCT-17 16:45 By: CT/BR		Received: 13-OCT-17 By: AS			
MW-300 (HP 365)						
JC53103-1	SW846 8260C	14-OCT-17 13:38	JP			V8260TCL20
JC53103-2	Collected: 13-OCT-17 10:30 By: CT/BR		Received: 13-OCT-17 By: AS			
MW-300 (HP 375)						
JC53103-2	SW846 8260C	14-OCT-17 14:06	JP			V8260TCL20
JC53103-3	Collected: 13-OCT-17 13:15 By: CT/BR		Received: 13-OCT-17 By: AS			
MW-300 (HP 385)						
JC53103-3	SW846 8260C	14-OCT-17 14:34	JP			V8260TCL20
JC53103-4	Collected: 13-OCT-17 00:00 By: CT/BR		Received: 13-OCT-17 By: AS			
DUPLICATE-1						
JC53103-4	SW846 8260C	14-OCT-17 15:01	JP			V8260TCL20

SGS Accutest Internal Chain of Custody

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ
Received: 10/13/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC53103-1.1	Secured Storage	Payal Rana	10/14/17 13:24	Retrieve from Storage
JC53103-1.1	Payal Rana	GCMS4D	10/14/17 13:24	Load on Instrument
JC53103-1.1	GCMS4D	Jessica Potts	10/16/17 11:19	Unload from Instrument
JC53103-1.1	Jessica Potts	Secured Storage	10/16/17 11:19	Return to Storage
JC53103-2.1	Secured Storage	Payal Rana	10/14/17 13:24	Retrieve from Storage
JC53103-2.1	Payal Rana	GCMS4D	10/14/17 13:24	Load on Instrument
JC53103-2.1	GCMS4D	Jessica Potts	10/16/17 11:19	Unload from Instrument
JC53103-2.1	Jessica Potts	Secured Storage	10/16/17 11:19	Return to Storage
JC53103-3.1	Secured Storage	Payal Rana	10/14/17 13:24	Retrieve from Storage
JC53103-3.1	Payal Rana	GCMS4D	10/14/17 13:24	Load on Instrument
JC53103-3.1	GCMS4D	Jessica Potts	10/16/17 11:19	Unload from Instrument
JC53103-3.1	Jessica Potts	Secured Storage	10/16/17 11:19	Return to Storage
JC53103-4.1	Secured Storage	Payal Rana	10/14/17 13:24	Retrieve from Storage
JC53103-4.1	Payal Rana	GCMS4D	10/14/17 13:24	Load on Instrument
JC53103-4.1	GCMS4D	Jessica Potts	10/16/17 11:19	Unload from Instrument
JC53103-4.1	Jessica Potts	Secured Storage	10/16/17 11:19	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: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D3592-MB	4D83217.D	1	10/14/17	JP	n/a	n/a	V4D3592

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

JC53103-1, JC53103-2, JC53103-3, JC53103-4

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	
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	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	

Method Blank Summary

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D3592-MB	4D83217.D	1	10/14/17	JP	n/a	n/a	V4D3592

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

JC53103-1, JC53103-2, JC53103-3, JC53103-4

CAS No.	Compound	Result	RL	MDL	Units	Q
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	89%	80-120%
17060-07-0	1,2-Dichloroethane-D4	100%	81-124%
2037-26-5	Toluene-D8	98%	80-120%
460-00-4	4-Bromofluorobenzene	95%	80-120%

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

Blank Spike Summary

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D3592-BS	4D83218.D	1	10/14/17	JP	n/a	n/a	V4D3592

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

JC53103-1, JC53103-2, JC53103-3, JC53103-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	256	128	42-150
71-43-2	Benzene	50	52.8	106	80-120
74-97-5	Bromochloromethane	50	52.3	105	84-121
75-27-4	Bromodichloromethane	50	58.4	117	83-120
75-25-2	Bromoform	50	50.9	102	76-129
74-83-9	Bromomethane	50	51.4	103	57-138
78-93-3	2-Butanone (MEK)	200	238	119	64-137
75-15-0	Carbon disulfide	50	57.0	114	64-137
56-23-5	Carbon tetrachloride	50	58.5	117	75-135
108-90-7	Chlorobenzene	50	51.4	103	84-117
75-00-3	Chloroethane	50	52.4	105	63-132
67-66-3	Chloroform	50	53.5	107	80-119
74-87-3	Chloromethane	50	53.7	107	46-136
110-82-7	Cyclohexane	50	42.8	86	64-137
96-12-8	1,2-Dibromo-3-chloropropane	50	56.4	113	72-127
124-48-1	Dibromochloromethane	50	53.8	108	80-123
106-93-4	1,2-Dibromoethane	50	52.1	104	84-117
95-50-1	1,2-Dichlorobenzene	50	51.5	103	84-119
541-73-1	1,3-Dichlorobenzene	50	51.0	102	81-117
106-46-7	1,4-Dichlorobenzene	50	51.1	102	82-117
75-71-8	Dichlorodifluoromethane	50	52.7	105	36-149
75-34-3	1,1-Dichloroethane	50	55.8	112	79-120
107-06-2	1,2-Dichloroethane	50	61.3	123	78-126
75-35-4	1,1-Dichloroethene	50	55.0	110	69-126
156-59-2	cis-1,2-Dichloroethene	50	51.4	103	80-120
156-60-5	trans-1,2-Dichloroethene	50	51.8	104	76-120
78-87-5	1,2-Dichloropropane	50	56.3	113	82-121
10061-01-5	cis-1,3-Dichloropropene	50	56.4	113	83-120
10061-02-6	trans-1,3-Dichloropropene	50	55.8	112	82-121
100-41-4	Ethylbenzene	50	53.8	108	80-120
76-13-1	Freon 113	50	57.2	114	62-182
591-78-6	2-Hexanone	200	233	117	65-132
98-82-8	Isopropylbenzene	50	53.3	107	83-120
79-20-9	Methyl Acetate	50	57.2	114	67-129
108-87-2	Methylcyclohexane	50	54.4	109	71-134
1634-04-4	Methyl Tert Butyl Ether	50	55.3	111	80-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D3592-BS	4D83218.D	1	10/14/17	JP	n/a	n/a	V4D3592

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

JC53103-1, JC53103-2, JC53103-3, JC53103-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	224	112	71-131
75-09-2	Methylene chloride	50	51.8	104	77-120
100-42-5	Styrene	50	53.4	107	82-122
79-34-5	1,1,2,2-Tetrachloroethane	50	50.0	100	76-119
127-18-4	Tetrachloroethene	50	51.8	104	70-131
108-88-3	Toluene	50	51.6	103	80-120
87-61-6	1,2,3-Trichlorobenzene	50	58.0	116	76-134
120-82-1	1,2,4-Trichlorobenzene	50	59.7	119	79-132
71-55-6	1,1,1-Trichloroethane	50	57.5	115	81-128
79-00-5	1,1,2-Trichloroethane	50	52.8	106	83-118
79-01-6	Trichloroethene	50	53.4	107	80-120
75-69-4	Trichlorofluoromethane	50	55.8	112	64-136
75-01-4	Vinyl chloride	50	50.7	101	51-135
	m,p-Xylene	100	104	104	80-120
95-47-6	o-Xylene	50	53.0	106	80-120
1330-20-7	Xylene (total)	150	157	105	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	94%	80-120%
17060-07-0	1,2-Dichloroethane-D4	104%	81-124%
2037-26-5	Toluene-D8	90%	80-120%
460-00-4	4-Bromofluorobenzene	91%	80-120%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC52556-1MS	4D83228.D	1	10/14/17	JP	n/a	n/a	V4D3592
JC52556-1	4D83224.D	1	10/14/17	JP	n/a	n/a	V4D3592

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

JC53103-1, JC53103-2, JC53103-3, JC53103-4

CAS No.	Compound	JC52556-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
67-64-1	Acetone	ND		200	193	97	34-149
71-43-2	Benzene	ND		50	60.1	120	54-136
74-97-5	Bromochloromethane	ND		50	57.0	114	79-124
75-27-4	Bromodichloromethane	ND		50	65.3	131* [a]	79-124
75-25-2	Bromoform	ND		50	56.0	112	71-130
74-83-9	Bromomethane	ND		50	59.7	119	53-142
78-93-3	2-Butanone (MEK)	ND		200	220	110	54-142
75-15-0	Carbon disulfide	ND		50	67.8	136	59-145
56-23-5	Carbon tetrachloride	ND		50	69.6	139	70-143
108-90-7	Chlorobenzene	ND		50	58.8	118	78-123
75-00-3	Chloroethane	ND		50	62.2	124	57-141
67-66-3	Chloroform	ND		50	61.0	122	76-123
74-87-3	Chloromethane	ND		50	64.3	129	43-141
110-82-7	Cyclohexane	ND		50	50.1	100	51-155
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	63.6	127	66-130
124-48-1	Dibromochloromethane	ND		50	59.6	119	76-125
106-93-4	1,2-Dibromoethane	ND		50	57.2	114	78-119
95-50-1	1,2-Dichlorobenzene	ND		50	59.0	118	77-123
541-73-1	1,3-Dichlorobenzene	ND		50	58.7	117	76-122
106-46-7	1,4-Dichlorobenzene	ND		50	58.7	117	76-122
75-71-8	Dichlorodifluoromethane	ND		50	64.7	129	31-159
75-34-3	1,1-Dichloroethane	ND		50	63.9	128* [a]	73-126
107-06-2	1,2-Dichloroethane	ND		50	67.5	135* [a]	72-131
75-35-4	1,1-Dichloroethene	ND		50	65.4	131	63-136
156-59-2	cis-1,2-Dichloroethene	ND		50	58.5	117	60-136
156-60-5	trans-1,2-Dichloroethene	ND		50	59.9	120	70-126
78-87-5	1,2-Dichloropropane	ND		50	62.3	125* [a]	78-124
10061-01-5	cis-1,3-Dichloropropene	ND		50	62.8	126* [a]	79-123
10061-02-6	trans-1,3-Dichloropropene	ND		50	61.8	124* [a]	77-123
100-41-4	Ethylbenzene	ND		50	62.0	124	51-140
76-13-1	Freon 113	ND		50	68.3	137	60-192
591-78-6	2-Hexanone	ND		200	236	118	56-139
98-82-8	Isopropylbenzene	ND		50	61.7	123	75-129
79-20-9	Methyl Acetate	ND		50	60.5	121	55-131
108-87-2	Methylcyclohexane	ND		50	65.0	130	57-155
1634-04-4	Methyl Tert Butyl Ether	ND		50	60.8	122	72-123

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC52556-1MS	4D83228.D	1	10/14/17	JP	n/a	n/a	V4D3592
JC52556-1	4D83224.D	1	10/14/17	JP	n/a	n/a	V4D3592

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

JC53103-1, JC53103-2, JC53103-3, JC53103-4

CAS No.	Compound	JC52556-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		200	247	124	66-136
75-09-2	Methylene chloride	ND		50	57.8	116	73-125
100-42-5	Styrene	ND		50	60.6	121	75-129
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	55.9	112	71-122
127-18-4	Tetrachloroethene	ND		50	60.3	121	61-139
108-88-3	Toluene	ND		50	59.4	119	60-135
87-61-6	1,2,3-Trichlorobenzene	ND		50	65.1	130	70-138
120-82-1	1,2,4-Trichlorobenzene	ND		50	67.7	135	72-137
71-55-6	1,1,1-Trichloroethane	ND		50	67.7	135	74-138
79-00-5	1,1,2-Trichloroethane	ND		50	58.7	117	78-121
79-01-6	Trichloroethene	ND		50	60.6	121	62-141
75-69-4	Trichlorofluoromethane	ND		50	67.1	134	57-149
75-01-4	Vinyl chloride	ND		50	61.8	124	43-146
	m,p-Xylene	ND		100	120	120	50-144
95-47-6	o-Xylene	ND		50	60.3	121	63-134
1330-20-7	Xylene (total)	ND		150	181	121	56-139

CAS No.	Surrogate Recoveries	MS	JC52556-1	Limits
1868-53-7	Dibromofluoromethane	99%	93%	80-120%
17060-07-0	1,2-Dichloroethane-D4	111%	107%	81-124%
2037-26-5	Toluene-D8	96%	106%	80-120%
460-00-4	4-Bromofluorobenzene	98%	102%	80-120%

(a) Outside in house control limits.

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC52556-5DUP	4D83230.D	1	10/14/17	JP	n/a	n/a	V4D3592
JC52556-5	4D83225.D	1	10/14/17	JP	n/a	n/a	V4D3592

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

JC53103-1, JC53103-2, JC53103-3, JC53103-4

CAS No.	Compound	JC52556-5 ug/l	Q	DUP ug/l	Q	RPD	Limits
67-64-1	Acetone	ND		ND		nc	20
71-43-2	Benzene	ND		ND		nc	20
74-97-5	Bromochloromethane	ND		ND		nc	20
75-27-4	Bromodichloromethane	ND		ND		nc	20
75-25-2	Bromoform	ND		ND		nc	20
74-83-9	Bromomethane	ND		ND		nc	20
78-93-3	2-Butanone (MEK)	ND		ND		nc	20
75-15-0	Carbon disulfide	ND		ND		nc	20
56-23-5	Carbon tetrachloride	ND		ND		nc	20
108-90-7	Chlorobenzene	ND		ND		nc	20
75-00-3	Chloroethane	ND		ND		nc	20
67-66-3	Chloroform	ND		ND		nc	20
74-87-3	Chloromethane	ND		ND		nc	20
110-82-7	Cyclohexane	ND		ND		nc	20
96-12-8	1,2-Dibromo-3-chloropropane	ND		ND		nc	20
124-48-1	Dibromochloromethane	ND		ND		nc	20
106-93-4	1,2-Dibromoethane	ND		ND		nc	20
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	20
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	20
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	20
75-71-8	Dichlorodifluoromethane	ND		ND		nc	20
75-34-3	1,1-Dichloroethane	ND		ND		nc	20
107-06-2	1,2-Dichloroethane	ND		ND		nc	20
75-35-4	1,1-Dichloroethene	ND		ND		nc	20
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	20
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	20
78-87-5	1,2-Dichloropropane	ND		ND		nc	20
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	20
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	20
100-41-4	Ethylbenzene	ND		ND		nc	20
76-13-1	Freon 113	ND		ND		nc	20
591-78-6	2-Hexanone	ND		ND		nc	20
98-82-8	Isopropylbenzene	ND		ND		nc	20
79-20-9	Methyl Acetate	ND		ND		nc	20
108-87-2	Methylcyclohexane	ND		ND		nc	20
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	20

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC52556-5DUP	4D83230.D	1	10/14/17	JP	n/a	n/a	V4D3592
JC52556-5	4D83225.D	1	10/14/17	JP	n/a	n/a	V4D3592

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

JC53103-1, JC53103-2, JC53103-3, JC53103-4

CAS No.	Compound	JC52556-5 ug/l	Q	DUP ug/l	Q	RPD	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		ND		nc	20
75-09-2	Methylene chloride	ND		ND		nc	20
100-42-5	Styrene	ND		ND		nc	20
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	20
127-18-4	Tetrachloroethene	ND		ND		nc	20
108-88-3	Toluene	ND		ND		nc	20
87-61-6	1,2,3-Trichlorobenzene	ND		ND		nc	20
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	20
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	20
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	20
79-01-6	Trichloroethene	ND		ND		nc	20
75-69-4	Trichlorofluoromethane	ND		ND		nc	20
75-01-4	Vinyl chloride	ND		ND		nc	20
	m,p-Xylene	ND		ND		nc	20
95-47-6	o-Xylene	ND		ND		nc	20
1330-20-7	Xylene (total)	ND		ND		nc	20

CAS No.	Surrogate Recoveries	DUP	JC52556-5	Limits
1868-53-7	Dibromofluoromethane	99%	101%	80-120%
17060-07-0	1,2-Dichloroethane-D4	112%	115%	81-124%
2037-26-5	Toluene-D8	101%	100%	80-120%
460-00-4	4-Bromofluorobenzene	100%	101%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V4D3564-BFB
Lab File ID: 4D82596.D
Instrument ID: GCMS4D
Injection Date: 09/26/17
Injection Time: 18:49

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	25853	17.0		Pass
75	30.0 - 60.0% of mass 95	67979	44.7		Pass
95	Base peak, 100% relative abundance	151936	100.0		Pass
96	5.0 - 9.0% of mass 95	9944	6.54		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	128013	84.3		Pass
175	5.0 - 9.0% of mass 174	9870	6.50	(7.71) [a]	Pass
176	95.0 - 101.0% of mass 174	124536	82.0	(97.3) [a]	Pass
177	5.0 - 9.0% of mass 176	8452	5.56	(6.79) [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
V4D3564-IC3564	4D82598.D	09/26/17	22:35	03:46	Initial cal 0.5
V4D3564-IC3564	4D82599.D	09/26/17	23:02	04:13	Initial cal 1
V4D3564-IC3564	4D82600.D	09/26/17	23:30	04:41	Initial cal 2
V4D3564-IC3564	4D82601.D	09/26/17	23:58	05:09	Initial cal 5
V4D3564-IC3564	4D82602.D	09/27/17	00:26	05:37	Initial cal 10
V4D3564-IC3564	4D82603.D	09/27/17	00:54	06:05	Initial cal 20
V4D3564-ICC3564	4D82604.D	09/27/17	01:22	06:33	Initial cal 50
V4D3564-IC3564	4D82605.D	09/27/17	01:50	07:01	Initial cal 100
V4D3564-IC3564	4D82606.D	09/27/17	02:18	07:29	Initial cal 200
V4D3564-ICV3564	4D82609.D	09/27/17	03:42	08:53	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample:	V4D3565-BFB	**Injection Date:**	09/27/17
Lab File ID:	4D82612.D	**Injection Time:**	12:33
Instrument ID:	GCMS4D		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	29232	16.6		Pass
75	30.0 - 60.0% of mass 95	78373	44.5		Pass
95	Base peak, 100% relative abundance	176149	100.0		Pass
96	5.0 - 9.0% of mass 95	11813	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	151659	86.1		Pass
175	5.0 - 9.0% of mass 174	11660	6.62	(7.69) [a]	Pass
176	95.0 - 101.0% of mass 174	146880	83.4	(96.8) [a]	Pass
177	5.0 - 9.0% of mass 176	9783	5.55	(6.66) [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
V4D3565-ICV3564	4D82613.D	09/27/17	13:05	00:32	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample:	V4D3592-BFB	**Injection Date:**	10/14/17
Lab File ID:	4D83213A.D	**Injection Time:**	09:38
Instrument ID:	GCMS4D		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	17460	19.8		Pass
75	30.0 - 60.0% of mass 95	43013	48.9		Pass
95	Base peak, 100% relative abundance	88024	100.0		Pass
96	5.0 - 9.0% of mass 95	5753	6.54		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	75051	85.3		Pass
175	5.0 - 9.0% of mass 174	5979	6.79	(7.97) [a]	Pass
176	95.0 - 101.0% of mass 174	73280	83.3	(97.6) [a]	Pass
177	5.0 - 9.0% of mass 176	4760	5.41	(6.50) [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
V4D3592-CC3564	4D83213.D	10/14/17	09:38	00:00	Continuing cal 20
V4D3592-MB	4D83217.D	10/14/17	12:14	02:36	Method Blank
V4D3592-BS	4D83218.D	10/14/17	12:41	03:03	Blank Spike
JC53103-1	4D83220.D	10/14/17	13:38	04:00	MW-300 (HP 365)
JC53103-2	4D83221.D	10/14/17	14:06	04:28	MW-300 (HP 375)
JC53103-3	4D83222.D	10/14/17	14:34	04:56	MW-300 (HP 385)
JC53103-4	4D83223.D	10/14/17	15:01	05:23	DUPLICATE-1
JC52556-1	4D83224.D	10/14/17	15:51	06:13	(used for QC only; not part of job JC53103)
JC52556-5	4D83225.D	10/14/17	16:18	06:40	(used for QC only; not part of job JC53103)
JC52556-1MS	4D83228.D	10/14/17	17:42	08:04	Matrix Spike
JC52556-5DUP	4D83230.D	10/14/17	18:38	09:00	Duplicate

Internal Standard Area Summary

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Check Std:	V4D3592-CC3564	**Injection Date:**	10/14/17
Lab File ID:	4D83213.D	**Injection Time:**	09:38
Instrument ID:	GCMS4D	**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	144697	7.54	235248	10.09	355445	11.04	301592	14.19	160871	16.57
Upper Limit [a]	289394	8.04	470496	10.59	710890	11.54	603184	14.69	321742	17.07
Lower Limit [b]	72349	7.04	117624	9.59	177723	10.54	150796	13.69	80436	16.07

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V4D3592-MB	195895	7.54	309835	10.09	454712	11.03	355501	14.19	175489	16.57
V4D3592-BS	133096	7.54	212789	10.09	317462	11.04	274947	14.19	145461	16.57
JC53103-1	151402	7.54	229835	10.09	351518	11.03	285569	14.19	147619	16.57
JC53103-2 [c]	156721	7.54	256726	10.09	388319	11.04	318937	14.19	164853	16.57
JC53103-3 [c]	138027	7.54	211173	10.09	320727	11.04	260554	14.19	134380	16.57
JC53103-4 [c]	139693	7.54	219994	10.09	331466	11.04	274832	14.19	137643	16.57
JC52556-1	171914	7.54	271491	10.09	389387	11.03	295941	14.19	143316	16.57
JC52556-5	128439	7.54	200244	10.09	304514	11.04	247200	14.19	126434	16.57
JC52556-1MS	130221	7.54	199037	10.09	298204	11.04	256142	14.19	133873	16.57
JC52556-5DUP	141216	7.54	219658	10.09	329454	11.04	266513	14.19	138758	16.57

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.
(c) Sample transfered to another vial before analysis due to high level of sediment.

Surrogate Recovery Summary

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

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
JC53103-1	4D83220.D	100	111	99	99
JC53103-2	4D83221.D	100	111	99	100
JC53103-3	4D83222.D	100	112	99	99
JC53103-4	4D83223.D	99	115	99	101
JC52556-1MS	4D83228.D	99	111	96	98
JC52556-5DUP	4D83230.D	99	112	101	100
V4D3592-BS	4D83218.D	94	104	90	91
V4D3592-MB	4D83217.D	89	100	98	95

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: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V4D3564-ICC3564
Lab FileID: 4D82604.D

Response Factor Report MS4D

Method : C:\MSDCHEM\1\METHODS\M4D3564.M (RTE Integrator)
Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Wed Sep 27 12:07:44 2017
Response via : Initial Calibration

Calibration Files
1 =4D82599.D 0.5 =4D82598.D 100 =4D82605.D 50 =4D82604.D
20 =4D82603.D 200 =4D82606.D 5 =4D82601.D 2 =4D82600.D
10 =4D82602.D =

Compound	1	0.5	100	50	20	200	5	2	10	Avg	%RSD
1) tert butyl alcohol-d9 ----------ISTD----------											
2) tertiary butyl alcohol	1.370	1.465	1.472	1.441	1.439	1.320	1.401	1.432		1.417	3.62
3) Ethanol	0.120	0.116	0.116	0.109	0.108	0.091	0.111	0.107		0.110	8.02
4) 1,4-dioxane	0.085	0.085	0.097	0.095	0.098	0.079	0.088	0.093		0.090	7.54
5) I pentafluorobenzene ----------ISTD----------											
6) chlorodifluoromethane		0.554	0.528	0.460	0.499	0.397	0.340	0.435		0.459	16.40
7) dichlorodifluoromethane	0.659	0.914	0.895	0.808	0.808	0.720	0.668	0.801		0.784	12.18
8) chloromethane	0.785	0.800	1.013	0.984	0.882	0.932	0.780	0.760	0.885	0.869	10.76
9) vinyl chloride	0.773	1.015	0.979	0.862	0.910	0.780	0.745	0.864		0.866	11.36
10) 1,3-butadiene										0.000#	-1.00
11) bromomethane	0.587	0.521	0.663	0.691	0.637	0.550	0.574	0.562	0.653	0.604	9.66
12) chloroethane	0.398	0.350	0.517	0.514	0.470	0.443	0.424	0.421	0.478	0.446	12.26
13) trichlorofluoromethane	0.888	0.753	1.119	1.118	1.021	1.001	0.923	0.860	1.031	0.968	12.61
14) vinyl bromide******This compound did not meet initial calibration criteria.	0.542	0.454	0.690	0.682	0.613	0.628	0.540	0.518	0.615	0.587	13.38
15) ethyl ether	0.237	0.240	0.337	0.343	0.324	0.319	0.283	0.275	0.317	0.297	13.48
16) acrolein		0.155	0.158	0.147	0.149	0.126	0.112	0.150		0.143	11.81
17) freon 113	0.296	0.272	0.418	0.425	0.398	0.377	0.369	0.350	0.392	0.366	14.34
18) 1,1-dichloroethene	0.388	0.424	0.530	0.553	0.511	0.495	0.478	0.448	0.504	0.481	10.94
19) acetone	0.054	0.056	0.068	0.074	0.068	0.062	0.062	0.065	0.071	0.064	10.46
20) acetonitrile	0.075	0.076	0.090	0.095	0.090	0.086	0.081	0.084	0.092	0.085	8.40
21) iodomethane	0.782	0.885	1.064	1.097	1.032	1.007	0.938	0.937	1.038	0.976	10.20
22) carbon disulfide	1.563	1.818	1.923	2.023	1.909	1.801	1.754	1.726	1.915	1.826	7.44
23) methylene chloride											

```
          0.528 0.636 0.634 0.664 0.629 0.605 0.589 0.590 0.639   0.613    6.60
24)  methyl acetate
          0.421       0.572 0.607 0.576 0.537 0.526 0.518 0.598   0.544   10.95
25)  methyl tert butyl ether
          1.389 1.532 1.777 1.855 1.764 1.678 1.595 1.607 1.755   1.661    8.75
26)  trans-1,2-dichloroethene
          0.455 0.578 0.579 0.606 0.579 0.551 0.555 0.534 0.579   0.557    7.87
27)  di-isopropyl ether
          1.573 1.810 1.950 2.049 1.986 1.852 1.840 1.825 2.018   1.878    7.72
28)  2-butanone
          0.060 0.055 0.083 0.087 0.082 0.079 0.073 0.076 0.084   0.075   14.76
29)  1,1-dichloroethane
          0.867 0.976 1.091 1.142 1.099 1.039 1.022 1.005 1.096   1.038    8.00
30)  chloroprene
          0.625 0.662 0.832 0.873 0.827 0.777 0.757 0.732 0.813   0.766   10.70
31)  acrylonitrile
          0.146       0.258 0.272 0.250 0.252 0.225 0.213 0.252   0.233   17.11
32)  hexane
          0.311 0.320 0.410 0.421 0.406 0.370 0.378 0.362 0.392   0.374   10.30
33)  vinyl acetate
                      0.107 0.113 0.103 0.105 0.082       0.103   0.102   10.14
34)  ethyl tert-butyl ether
          1.471 1.669 1.936 1.996 1.910 1.835 1.748 1.767 1.932   1.807    9.10
35)  ethyl acetate
                      0.098 0.105 0.100 0.092 0.088 0.092 0.112   0.098    8.33
36)  2,2-dichloropropane
          0.691 0.779 0.800 0.840 0.826 0.732 0.784 0.784 0.837   0.786    6.25
37)  cis-1,2-dichloroethene
          0.542 0.570 0.655 0.672 0.655 0.622 0.614 0.634 0.664   0.625    7.09
38)  methyl acrylate
                      0.110 0.113 0.105 0.107 0.090 0.078 0.106   0.101   12.27
39)  propionitrile
          0.089 0.093 0.110 0.116 0.111 0.105 0.102 0.103 0.116   0.105    9.04
40)  bromochloromethane
          0.251 0.281 0.338 0.351 0.338 0.330 0.313 0.308 0.345   0.317   10.45
41)  tetrahydrofuran
                      0.097 0.099 0.095 0.094 0.084 0.086 0.095   0.093    6.27
42)  chloroform
          0.597 0.759 0.697 0.722 0.704 0.664 0.666 0.678 0.716   0.689    6.63
43)  t-butyl formate******This compound did not meet initial calibration criteria.
          0.152       0.227 0.229 0.220 0.219 0.198 0.193 0.224   0.208   12.52
44)  dibromofluoromethane (s)
          0.577 0.579 0.568 0.574 0.575 0.573 0.581 0.578 0.577   0.576    0.63
45)  methacrylonitrile
          0.206 0.203 0.296 0.307 0.295 0.286 0.268 0.265 0.297   0.269   14.50
46)  1,1,1-trichloroethane
          0.724 0.771 0.905 0.932 0.904 0.853 0.829 0.807 0.880   0.845    8.12
47)  cyclohexane
          0.611       0.827 0.824 0.799 0.794 0.746 0.754 0.824   0.772    9.38
48)  1,1-dichloropropene
          0.644 0.685 0.807 0.824 0.804 0.765 0.759 0.735 0.801   0.758    8.02
49)  iso-butyl alcohol
          0.036       0.035 0.035 0.033 0.033 0.029 0.034 0.036   0.034#   6.49
50)  carbon tetrachloride
          0.624 0.677 0.810 0.833 0.812 0.765 0.755 0.728 0.798   0.756    9.14
51)  tert amyl alcohol
          0.032       0.030 0.031 0.030 0.029 0.027 0.029 0.031   0.030#   5.18

52) I   1,4-difluorobenzene   ----------------ISTD--------------------
53)  1,2-dichloroethane-d4 (s)
```

```
          0.404 0.409 0.407 0.398 0.402 0.383 0.414 0.410 0.405   0.404    2.21
54)  n-butyl alcohol
          0.014 0.013 0.013 0.014 0.013 0.013 0.011 0.012 0.013   0.013#   7.81
55)  2,2,4-trimethylpentane
          1.181 1.275 1.479 1.457 1.451 1.288 1.407 1.348 1.416   1.367    7.38
56)  benzene
          1.217 1.404 1.520 1.499 1.497 1.400 1.426 1.389 1.495   1.427    6.56
57)  tert-amyl methyl ether
          0.193 0.238 0.278 0.277 0.267 0.257 0.249 0.242 0.270   0.252   10.53
58)  heptane
          0.235 0.246 0.299 0.298 0.298 0.270 0.287 0.277 0.290   0.278    8.36
59)  isopropyl acetate
                    0.090 0.088 0.087 0.084 0.076 0.074 0.086   0.084    7.50
60)  1,2-dichloroethane
          0.423 0.462 0.538 0.534 0.534 0.493 0.502 0.496 0.535   0.502    7.84
61)  trichloroethene
          0.273 0.324 0.363 0.385 0.369 0.364 0.347 0.342 0.367   0.348    9.56
62)  ethyl acrylate
          0.409       0.538 0.585 0.562 0.547 0.492 0.484 0.560   0.522   10.95
63)  2-nitropropane
          0.079       0.092 0.106 0.101 0.099 0.092 0.093 0.103   0.096    8.96
64)  2-chloroethyl vinyl ether
                    0.214 0.247 0.240 0.224 0.213 0.207 0.238   0.226    6.83
65)  methyl methacrylate
                    0.097 0.107 0.104 0.103 0.091 0.084 0.100   0.098    8.25
66)  1,2-dichloropropane
          0.327 0.348 0.391 0.426 0.418 0.399 0.386 0.389 0.413   0.389    8.36
67)  dibromomethane
          0.228 0.246 0.258 0.290 0.285 0.272 0.262 0.264 0.286   0.266    7.57
68)  methylcyclohexane
          0.506 0.541 0.621 0.686 0.668 0.625 0.619 0.593 0.641   0.611    9.40
69)  bromodichloromethane
          0.421 0.466 0.483 0.545 0.531 0.511 0.490 0.487 0.529   0.496    7.73
70)  epichlorohydrin
          0.032       0.039 0.044 0.042 0.042 0.037 0.038 0.043   0.040#   9.70
71)  cis-1,3-dichloropropene
          0.488 0.551 0.577 0.659 0.637 0.624 0.585 0.579 0.634   0.593    8.88
72)  4-methyl-2-pentanone
          0.142 0.151 0.150 0.177 0.172 0.159 0.156 0.162 0.174   0.160    7.46
73)  3-methyl-1-butanol
          0.021 0.021 0.019 0.023 0.021 0.021 0.018 0.020 0.021   0.021#   6.44

74) I   chlorobenzene-d5      ----------------ISTD--------------------
75)  toluene-d8 (s)
          1.358 1.362 1.350 1.337 1.349 1.316 1.356 1.378 1.358   1.352    1.27
76)  toluene
          0.772 0.875 0.972 0.978 0.967 0.900 0.904 0.891 0.970   0.914    7.32
77)  trans-1,3-dichloropropene
          0.542 0.574 0.678 0.681 0.680 0.633 0.615 0.620 0.672   0.633    7.95
78)  ethyl methacrylate
          0.426 0.458 0.612 0.613 0.600 0.571 0.520 0.529 0.601   0.548   12.67
79)  1,1,2-trichloroethane
          0.274 0.326 0.364 0.373 0.369 0.345 0.339 0.343 0.370   0.345    9.10
80)  tetrachloroethene
          0.272 0.288 0.336 0.338 0.334 0.309 0.313 0.315 0.333   0.315    7.28
81)  1,3-dichloropropane
          0.526 0.581 0.647 0.663 0.657 0.607 0.596 0.632 0.671   0.620    7.61
82)  2-hexanone
          0.170 0.168 0.194 0.202 0.197 0.179 0.178 0.187 0.203   0.186    7.20
83)  butyl acetate
```

```
           0.274 0.267 0.319 0.326 0.322 0.300 0.290 0.293 0.324   0.302    7.39
 84)  3,3-dimethyl-1-butanol
           0.052 0.051 0.052 0.052 0.049 0.050 0.041 0.047 0.049   0.049#   7.36
 85)  dibromochloromethane
           0.405 0.446 0.514 0.520 0.514 0.487 0.463 0.465 0.519   0.481    8.29
 86)  1,2-dibromoethane
           0.378 0.406 0.467 0.477 0.473 0.448 0.431 0.435 0.482   0.444    7.95
 87)  n-butyl ether
           1.381 1.486 1.779 1.816 1.779 1.641 1.612 1.633 1.767   1.655    8.94
 88)  chlorobenzene
           0.913 0.999 1.106 1.124 1.111 1.048 1.043 1.054 1.121   1.058    6.54
 89)  1,1,1,2-tetrachloroethane
           0.343 0.356 0.431 0.435 0.427 0.407 0.392 0.399 0.428   0.402    8.35
 90)  ethylbenzene
           1.489 1.641 1.848 1.876 1.830 1.726 1.717 1.711 1.856   1.744    7.19
 91)  m,p-xylene
           0.538 0.618 0.685 0.695 0.695 0.641 0.640 0.636 0.698   0.650    8.00
 92)  o-xylene
           0.545 0.581 0.693 0.703 0.697 0.652 0.641 0.646 0.696   0.650    8.55
 93)  styrene
           0.916 1.016 1.198 1.209 1.186 1.129 1.074 1.068 1.180   1.109    8.92
 94)  bromoform
           0.327 0.347 0.398 0.405 0.393 0.385 0.346 0.355 0.398   0.373    7.78
 95)  butyl acrylate
           0.698 0.646 0.952 0.955 0.939 0.913 0.789 0.794 0.926   0.846   13.89
 96)  isopropylbenzene
           1.405 1.583 1.836 1.870 1.835 1.736 1.664 1.657 1.816   1.711    8.83
 97)  cis-1,4-dichloro-2-butene
                     0.217 0.223 0.210 0.213 0.174 0.181 0.206   0.203    9.11

 98) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
 99)  4-bromofluorobenzene (s)
           0.998 1.010 1.002 0.990 0.983 0.994 0.988 0.992 0.981   0.993    0.92
100)  bromobenzene
           0.768 0.889 0.970 0.978 0.952 0.933 0.883 0.882 0.948   0.911    7.14
101)  1,1,2,2-tetrachloroethane
           1.186 1.181 1.252 1.290 1.261 1.210 1.154 1.199 1.274   1.223    3.87
102)  trans-1,4-dichloro-2-butene
           0.193       0.292 0.291 0.278 0.282 0.248 0.226 0.274   0.260   13.58
103)  1,2,3-trichloropropane
           0.239 0.232 0.282 0.287 0.281 0.273 0.254 0.257 0.289   0.266    7.93
104)  n-propylbenzene
           3.378 3.776 4.337 4.397 4.319 4.070 4.015 3.934 4.281   4.057    8.13
105)  2-chlorotoluene
           0.691 0.807 0.876 0.882 0.858 0.835 0.804 0.787 0.862   0.822    7.26
106)  4-chlorotoluene
           2.125 2.391 2.603 2.635 2.573 2.467 2.405 2.440 2.600   2.471    6.44
107)  1,3,5-trimethylbenzene
           2.290 2.513 2.994 3.025 2.932 2.771 2.671 2.633 2.898   2.747    8.90
108)  tert-butylbenzene
           0.389 0.416 0.549 0.547 0.528 0.514 0.477 0.468 0.506   0.488   11.53
109)  1,2,4-trimethylbenzene
           2.368 2.605 3.091 3.116 3.017 2.888 2.784 2.709 3.007   2.843    8.78
110)  sec-butylbenzene
           3.035 3.381 4.034 4.110 3.980 3.722 3.661 3.516 3.934   3.708    9.50
111)  1,3-dichlorobenzene
           1.477 1.682 1.779 1.789 1.754 1.679 1.654 1.637 1.785   1.693    5.93
112)  p-isopropyltoluene
           2.354 2.627 3.253 3.304 3.147 2.997 2.897 2.772 3.110   2.940   10.60
113)  1,4-dichlorobenzene
```

Initial Calibration Summary

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V4D3564-ICC3564
Lab FileID: 4D82604.D

```
           1.539 1.685 1.804 1.812 1.758 1.721 1.635 1.656 1.784   1.710    5.29
114)  benzyl chloride
           1.873 1.880 2.155 2.209 2.100 2.069 1.927 1.921 2.130   2.029    6.36
115)  1,2-dichlorobenzene
           1.499 1.521 1.790 1.802 1.757 1.699 1.607 1.624 1.795   1.677    7.08
116)  n-butylbenzene
           1.266 1.335 1.798 1.827 1.733 1.660 1.573 1.475 1.710   1.597   12.56
117)  1,2-dibromo-3-chloropropane
           0.192       0.239 0.243 0.230 0.225 0.207 0.197 0.227   0.220    8.62
118)  1,3,5-trichlorobenzene
           1.102 1.177 1.514 1.554 1.470 1.356 1.285 1.237 1.439   1.348   11.71
119)  2-ethylhexyl acrylate
                       0.737 0.659 0.367 0.751             0.204   0.543   45.06
            ----- Linear regression -----  Coefficient =  0.9984
              Response Ratio = -0.02633 + 0.78696 *A

120)  1,2,4-trichlorobenzene
           0.866 0.858 1.385 1.426 1.300 1.238 1.064 0.945 1.234   1.146   19.11
121)  hexachlorobutadiene
           0.496 0.576 0.687 0.721 0.686 0.596 0.609 0.579 0.653   0.623   11.32
122)  naphthalene
                       3.305 3.384 3.099 2.995 2.370       2.943   3.016   11.94
123)  1,2,3-trichlorobenzene
           0.773       1.251 1.291 1.205 1.125 0.953 0.861 1.144   1.075   17.71
124)  hexachloroethane
           0.432 0.470 0.631 0.627 0.589 0.589 0.534 0.511 0.575   0.551   12.58
125)  2-methylnaphthalene
                       1.481 1.502 1.106 1.439             0.843   1.274   22.76
            ----- Linear regression -----  Coefficient =  0.9977
              Response Ratio = -0.06329 + 1.50842 *A

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

          M4D3564.M         Wed Sep 27 12:13:16 2017   RPT1
```

Initial Calibration Verification

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V4D3564-ICV3564
Lab FileID: 4D82609.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\4D82609.D Vial: 17
Acq On : 27 Sep 2017 3:42 am Operator: oyinadei
Sample : icv3564-50 Inst : MS4D
Misc : MS20204,V4D3564,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D3564.M (RTE Integrator)
Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Wed Sep 27 12:07:44 2017
Response via : Multiple Level Calibration

Min. RRF : 0.050 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		tert butyl alcohol-d9	1.000	1.000	0.0	84	0.01	7.55
2	M	tertiary butyl alcohol	1.417	1.463	-3.2	84	0.01	7.68
3		Ethanol	0.110	0.115	-4.5	84	0.01	6.10
4	M	1,4-dioxane	0.090	0.103	-14.4	89	0.00	11.74
5	I	pentafluorobenzene	1.000	1.000	0.0	86	0.00	10.10
6	M	chlorodifluoromethane	0.459	0.579	-26.1	95	0.00	3.82
7	M	dichlorodifluoromethane	0.784	0.898	-14.5	87	0.00	3.81
8	M	chloromethane	0.869	1.003	-15.4	88	0.00	4.16
9	M	vinyl chloride	0.866	0.959	-10.7	85	0.00	4.44
10		1,3-butadiene		----------NA----------				
11	M	bromomethane	0.604	0.657	-8.8	82	0.00	5.14
12	M	chloroethane	0.446	0.500	-12.1	84	0.00	5.34
13	M	trichlorofluoromethane	0.968	1.026	-6.0	79	0.00	5.88
14		vinyl bromide	0.587	0.980	-67.0#	124	0.00	5.73
15	M	ethyl ether	0.297	0.358	-20.5	90	0.00	6.36
16	M	acrolein	0.143	0.164	-14.7	89	0.00	6.56
17		freon 113	0.366	0.540	-47.5#	110	0.00	6.83
18	M	1,1-dichloroethene	0.481	0.550	-14.3	86	0.00	6.80
19	M	acetone	0.064	0.065	-1.6	76	0.00	6.81
20	M	acetonitrile	0.085	0.085	0.0	77	0.00	7.26
21	M	iodomethane	0.976	1.123	-15.1	88	0.00	7.07
22	M	carbon disulfide	1.826	2.161	-18.3	92	0.00	7.22
23	M	methylene chloride	0.613	0.680	-10.9	88	0.00	7.58
24	M	methyl acetate	0.544	0.548	-0.7	78	0.00	7.38
25	M	methyl tert butyl ether	1.661	1.897	-14.2	89	0.00	8.04
26	M	trans-1,2-dichloroethene	0.557	0.616	-10.6	88	0.00	8.05
27	M	di-isopropyl ether	1.878	2.062	-9.8	87	0.00	8.75
28	M	2-butanone	0.075	0.085	-13.3	84	0.00	9.44
29	M	1,1-dichloroethane	1.038	1.172	-12.9	89	0.00	8.67
30	M	chloroprene	0.766	0.891	-16.3	88	0.00	8.81
31	M	acrylonitrile	0.233	0.273	-17.2	87	0.00	7.92
32		hexane	0.374	0.333	11.0	68	0.00	8.48
33	M	vinyl acetate	0.102	0.120	-17.6	92	0.00	8.69
34	M	ethyl tert-butyl ether	1.807	2.006	-11.0	87	0.00	9.26
35	M	ethyl acetate	0.098	0.106	-8.2	87	0.00	9.51
36	M	2,2-dichloropropane	0.786	0.829	-5.5	85	0.00	9.51
37	M	cis-1,2-dichloroethene	0.625	0.705	-12.8	91	0.00	9.47
38		methyl acrylate	0.101	0.115	-13.9	89	0.00	9.57
39	M	propionitrile	0.105	0.108	-2.9	81	0.00	9.50
40	M	bromochloromethane	0.317	0.354	-11.7	87	0.00	9.79
41	M	tetrahydrofuran	0.093	0.104	-11.8	91	0.00	9.86

Initial Calibration Verification

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V4D3564-ICV3564
Lab FileID: 4D82609.D

42	M	chloroform	0.689	0.737	-7.0	88	0.00	9.87
43	M	t-butyl formate	0.208	0.358	-72.1#	135	0.00	9.96
44	S	dibromofluoromethane (s)	0.576	0.573	0.5	86	0.00	10.08
45	M	methacrylonitrile	0.269	0.306	-13.8	86	0.00	9.73
46	M	1,1,1-trichloroethane	0.845	0.937	-10.9	87	0.00	10.18
47		cyclohexane	0.772	0.849	-10.0	89	0.00	10.29
48		1,1-dichloropropene	0.758	0.852	-12.4	89	0.00	10.38
49		iso-butyl alcohol	0.034	0.036#	-5.9	90	0.00	10.35
50		carbon tetrachloride	0.756	0.847	-12.0	88	0.00	10.41
51		tert amyl alcohol	0.030	0.031#	-3.3	87	0.00	10.51
52	I	1,4-difluorobenzene	1.000	1.000	0.0	86	0.00	11.04
53	S	1,2-dichloroethane-d4 (s)	0.404	0.386	4.5	84	0.00	10.52
54	M	n-butyl alcohol	0.013	0.014#	-7.7	90	0.00	11.14
55		2,2,4-trimethylpentane	1.367	1.522	-11.3	90	0.00	10.74
56	M	benzene	1.427	1.569	-10.0	90	0.00	10.64
57	M	tert-amyl methyl ether	0.252	0.282	-11.9	88	0.00	10.73
58	M	heptane	0.278	0.335	-20.5	98	0.00	10.92
59	M	isopropyl acetate	0.084	0.090	-7.1	89	0.00	10.61
60	M	1,2-dichloroethane	0.502	0.558	-11.2	90	0.00	10.62
61	M	trichloroethene	0.348	0.400	-14.9	90	0.00	11.39
62		ethyl acrylate	0.522	0.596	-14.2	88	0.00	11.41
63	M	2-nitropropane	0.096	0.104	-8.3	85	0.00	12.12
64	M	2-chloroethyl vinyl ether	0.226	0.289	-27.9	101	0.00	12.18
65	M	methyl methacrylate	0.098	0.111	-13.3	90	0.00	11.68
66	M	1,2-dichloropropane	0.389	0.446	-14.7	91	0.00	11.63
67	M	dibromomethane	0.266	0.297	-11.7	89	0.00	11.77
68	M	methylcyclohexane	0.611	0.647	-5.9	82	0.00	11.66
69	M	bromodichloromethane	0.496	0.563	-13.5	89	0.00	11.91
70		epichlorohydrin	0.040	0.046#	-15.0	90	0.00	12.27
71	M	cis-1,3-dichloropropene	0.593	0.677	-14.2	89	0.00	12.39
72	M	4-methyl-2-pentanone	0.160	0.181	-13.1	88	0.00	12.50
73	M	3-methyl-1-butanol	0.021	0.022#	-4.8	84	0.00	12.51
74	I	chlorobenzene-d5	1.000	1.000	0.0	85	0.00	14.19
75	S	toluene-d8 (s)	1.352	1.347	0.4	86	0.00	12.70
76		toluene	0.914	1.016	-11.2	89	0.00	12.78
77		trans-1,3-dichloropropene	0.633	0.705	-11.4	88	0.00	12.94
78		ethyl methacrylate	0.548	0.611	-11.5	85	0.00	12.98
79		1,1,2-trichloroethane	0.345	0.390	-13.0	89	0.00	13.14
80	M	tetrachloroethene	0.315	0.361	-14.6	91	0.00	13.36
81	M	1,3-dichloropropane	0.620	0.677	-9.2	87	0.00	13.33
82		2-hexanone	0.186	0.201	-8.1	85	0.00	13.35
83	M	butyl acetate	0.302	0.340	-12.6	89	0.00	13.45
84	M	3,3-dimethyl-1-butanol	0.049	0.053	-8.2	86	0.00	13.51
85	M	dibromochloromethane	0.481	0.550	-14.3	90	0.00	13.58
86	M	1,2-dibromoethane	0.444	0.502	-13.1	90	0.00	13.73
87		n-butyl ether	1.655	1.799	-8.7	85	0.00	14.21
88	M	chlorobenzene	1.058	1.170	-10.6	89	0.00	14.22
89	M	1,1,1,2-tetrachloroethane	0.402	0.447	-11.2	88	0.00	14.28
90	M	ethylbenzene	1.744	1.904	-9.2	87	0.00	14.30
91	M	m,p-xylene	0.650	0.723	-11.2	89	0.00	14.41
92	M	o-xylene	0.650	0.725	-11.5	88	0.00	14.83
93	M	styrene	1.109	1.252	-12.9	88	0.00	14.83
94	M	bromoform	0.373	0.417	-11.8	88	0.00	15.06
95		butyl acrylate	0.846	0.983	-16.2	88	0.00	14.66
96		isopropylbenzene	1.711	1.896	-10.8	87	0.00	15.19
97		cis-1,4-dichloro-2-butene	0.203	0.211	-3.9	81	0.00	15.22
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	85	0.00	16.57

Initial Calibration Verification

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V4D3564-ICV3564
Lab FileID: 4D82609.D

99	S	4-bromofluorobenzene (s)	0.993	0.991	0.2	85	0.00	15.37
100	M	bromobenzene	0.911	1.022	-12.2	89	0.00	15.56
101	M	1,1,2,2-tetrachloroethane	1.223	1.342	-9.7	88	0.00	15.45
102	M	trans-1,4-dichloro-2-bute	0.260	0.317	-21.9	93	0.00	15.50
103	M	1,2,3-trichloropropane	0.266	0.297	-11.7	88	0.00	15.52
104	M	n-propylbenzene	4.057	4.537	-11.8	88	0.00	15.61
105	M	2-chlorotoluene	0.822	0.926	-12.7	89	0.00	15.74
106	M	4-chlorotoluene	2.471	2.682	-8.5	86	0.00	15.84
107	M	1,3,5-trimethylbenzene	2.747	3.096	-12.7	87	0.00	15.77
108	M	tert-butylbenzene	0.488	0.578	-18.4	90	0.00	16.13
109	M	1,2,4-trimethylbenzene	2.843	3.242	-14.0	88	0.00	16.17
110	M	sec-butylbenzene	3.708	4.145	-11.8	86	0.00	16.36
111	M	1,3-dichlorobenzene	1.693	1.892	-11.8	90	0.00	16.52
112	M	p-isopropyltoluene	2.940	3.423	-16.4	88	0.00	16.48
113	M	1,4-dichlorobenzene	1.710	1.908	-11.6	89	0.00	16.60
114		benzyl chloride	2.029	1.842	9.2	71	0.00	16.71
115	M	1,2-dichlorobenzene	1.677	1.878	-12.0	89	0.00	17.00
116	M	n-butylbenzene	1.597	1.883	-17.9	88	0.00	16.91
117	M	1,2-dibromo-3-chloropropa	0.220	0.249	-13.2	87	0.00	17.80
118		1,3,5-trichlorobenzene	1.348	1.674	-24.2	92	0.00	18.04
		----------	True	Calc.	% Drift	----------		
119		2-ethylhexyl acrylate	10.000	12.091	-20.9	106	0.00	18.74
		----------	AvgRF	CCRF	% Dev	----------		
120	M	1,2,4-trichlorobenzene	1.146	1.473	-28.5	88	0.00	18.71
121	M	hexachlorobutadiene	0.623	0.737	-18.3	87	0.00	18.87
122	M	naphthalene	3.016	3.476	-15.3	87	0.00	19.00
123	M	1,2,3-trichlorobenzene	1.075	1.350	-25.6	89	0.00	19.26
124	m	hexachloroethane	0.551	0.646	-17.2	87	0.00	17.31
		----------	True	Calc.	% Drift	----------		
125		2-methylnaphthalene	25.000	25.795	-3.2	81	0.00	20.24

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4D82604.D M4D3564.M Wed Sep 27 12:13:31 2017 RPT1

Initial Calibration Verification

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V4D3565-ICV3564
Lab FileID: 4D82613.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\4D82613.D Vial: 2
Acq On : 27 Sep 2017 1:05 pm Operator: jessicap
Sample : icv3564-50 Inst : MS4D
Misc : MS20204,V4D3565,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D3564.M (RTE Integrator)
Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Wed Sep 27 12:07:44 2017
Response via : Multiple Level Calibration

Min. RRF : 0.050 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		tert butyl alcohol-d9	1.000	1.000	0.0	91	0.01	7.55
2	M	tertiary butyl alcohol		----------NA----------				
3		Ethanol		----------NA----------				
4	M	1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	92	0.00	10.09
6	M	chlorodifluoromethane		----------NA----------				
7	M	dichlorodifluoromethane		----------NA----------				
8	M	chloromethane		----------NA----------				
9	M	vinyl chloride		----------NA----------				
10		1,3-butadiene		----------NA----------				
11	M	bromomethane		----------NA----------				
12	M	chloroethane		----------NA----------				
13	M	trichlorofluoromethane		----------NA----------				
14		vinyl bromide		----------NA----------				
15	M	ethyl ether		----------NA----------				
16	M	acrolein		----------NA----------				
17		freon 113	0.366	0.452	-23.5	98	0.00	6.83
18	M	1,1-dichloroethene		----------NA----------				
19	M	acetone		----------NA----------				
20	M	acetonitrile		----------NA----------				
21	M	iodomethane		----------NA----------				
22	M	carbon disulfide		----------NA----------				
23	M	methylene chloride		----------NA----------				
24	M	methyl acetate		----------NA----------				
25	M	methyl tert butyl ether		----------NA----------				
26	M	trans-1,2-dichloroethene		----------NA----------				
27	M	di-isopropyl ether		----------NA----------				
28	M	2-butanone		----------NA----------				
29	M	1,1-dichloroethane		----------NA----------				
30	M	chloroprene		----------NA----------				
31	M	acrylonitrile		----------NA----------				
32		hexane		----------NA----------				
33	M	vinyl acetate		----------NA----------				
34	M	ethyl tert-butyl ether		----------NA----------				
35	M	ethyl acetate		----------NA----------				
36	M	2,2-dichloropropane		----------NA----------				
37	M	cis-1,2-dichloroethene		----------NA----------				
38		methyl acrylate		----------NA----------				
39	M	propionitrile		----------NA----------				
40	M	bromochloromethane		----------NA----------				
41	M	tetrahydrofuran		----------NA----------				

Initial Calibration Verification

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V4D3565-ICV3564
Lab FileID: 4D82613.D

42	M	chloroform		----------NA----------				
43	M	t-butyl formate		----------NA----------				
44	S	dibromofluoromethane (s)	0.576	0.585	-1.6	93	0.00	10.08
45	M	methacrylonitrile		----------NA----------				
46	M	1,1,1-trichloroethane		----------NA----------				
47		cyclohexane		----------NA----------				
48		1,1-dichloropropene		----------NA----------				
49		iso-butyl alcohol		----------NA----------				
50		carbon tetrachloride		----------NA----------				
51		tert amyl alcohol		----------NA----------				
52	I	1,4-difluorobenzene	1.000	1.000	0.0	93	0.00	11.04
53	S	1,2-dichloroethane-d4 (s)	0.404	0.408	-1.0	96	0.00	10.52
54	M	n-butyl alcohol		----------NA----------				
55		2,2,4-trimethylpentane		----------NA----------				
56	M	benzene		----------NA----------				
57	M	tert-amyl methyl ether		----------NA----------				
58	M	heptane		----------NA----------				
59	M	isopropyl acetate		----------NA----------				
60	M	1,2-dichloroethane		----------NA----------				
61	M	trichloroethene		----------NA----------				
62		ethyl acrylate		----------NA----------				
63	M	2-nitropropane		----------NA----------				
64	M	2-chloroethyl vinyl ether		----------NA----------				
65	M	methyl methacrylate		----------NA----------				
66	M	1,2-dichloropropane		----------NA----------				
67	M	dibromomethane		----------NA----------				
68	M	methylcyclohexane		----------NA----------				
69	M	bromodichloromethane		----------NA----------				
70		epichlorohydrin		----------NA----------				
71	M	cis-1,3-dichloropropene		----------NA----------				
72	M	4-methyl-2-pentanone		----------NA----------				
73	M	3-methyl-1-butanol		----------NA----------				
74	I	chlorobenzene-d5	1.000	1.000	0.0	90	0.00	14.19
75	S	toluene-d8 (s)	1.352	1.364	-0.9	92	0.00	12.70
76		toluene		----------NA----------				
77		trans-1,3-dichloropropene		----------NA----------				
78		ethyl methacrylate		----------NA----------				
79		1,1,2-trichloroethane		----------NA----------				
80	M	tetrachloroethene		----------NA----------				
81	M	1,3-dichloropropane		----------NA----------				
82		2-hexanone		----------NA----------				
83	M	butyl acetate		----------NA----------				
84	M	3,3-dimethyl-1-butanol		----------NA----------				
85	M	dibromochloromethane		----------NA----------				
86	M	1,2-dibromoethane		----------NA----------				
87		n-butyl ether		----------NA----------				
88	M	chlorobenzene		----------NA----------				
89	M	1,1,1,2-tetrachloroethane		----------NA----------				
90	M	ethylbenzene		----------NA----------				
91	M	m,p-xylene		----------NA----------				
92	M	o-xylene		----------NA----------				
93	M	styrene		----------NA----------				
94	M	bromoform		----------NA----------				
95		butyl acrylate		----------NA----------				
96		isopropylbenzene		----------NA----------				
97		cis-1,4-dichloro-2-butene		----------NA----------				
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	88	0.00	16.57

Initial Calibration Verification

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V4D3565-ICV3564
Lab FileID: 4D82613.D

99	S	4-bromofluorobenzene (s)	0.993	1.002	-0.9	89	0.00	15.37	
100	M	bromobenzene		----------NA----------					
101	M	1,1,2,2-tetrachloroethane		----------NA----------					
102	M	trans-1,4-dichloro-2-bute		----------NA----------					
103	M	1,2,3-trichloropropane		----------NA----------					
104	M	n-propylbenzene		----------NA----------					
105	M	2-chlorotoluene		----------NA----------					
106	M	4-chlorotoluene		----------NA----------					
107	M	1,3,5-trimethylbenzene		----------NA----------					
108	M	tert-butylbenzene		----------NA----------					
109	M	1,2,4-trimethylbenzene		----------NA----------					
110	M	sec-butylbenzene		----------NA----------					
111	M	1,3-dichlorobenzene		----------NA----------					
112	M	p-isopropyltoluene		----------NA----------					
113	M	1,4-dichlorobenzene		----------NA----------					
114		benzyl chloride		----------NA----------					
115	M	1,2-dichlorobenzene		----------NA----------					
116	M	n-butylbenzene		----------NA----------					
117	M	1,2-dibromo-3-chloropropa		----------NA----------					
118		1,3,5-trichlorobenzene		----------NA----------					
		----------	True	Calc.	% Drift	----------			
119		2-ethylhexyl acrylate		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
120	M	1,2,4-trichlorobenzene		----------NA----------					
121	M	hexachlorobutadiene		----------NA----------					
122	M	naphthalene		----------NA----------					
123	M	1,2,3-trichlorobenzene		----------NA----------					
124	m	hexachloroethane		----------NA----------					
		----------	True	Calc.	% Drift	----------			
125		2-methylnaphthalene		----------NA----------					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4D82604.D M4D3564.M Wed Sep 27 14:58:06 2017 RPT1

Continuing Calibration Summary

Job Number: JC53103
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: V4D3592-CC3564
Lab FileID: 4D83213.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\4D\v4d3592\4d83213.d Vial: 2
Acq On : 14 Oct 2017 9:38 am Operator: jessicap
Sample : cc3564-20 Inst : MS4D
Misc : MS21108,V4D3592,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D3564.M (RTE Integrator)
Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Wed Sep 27 12:07:44 2017
Response via : Multiple Level Calibration

Min. RRF : 0.050 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		tert butyl alcohol-d9	1.000	1.000	0.0	79	0.00	7.54
2	M	tertiary butyl alcohol	1.417	1.495	-5.5	82	0.00	7.68
3		Ethanol	0.110	0.124	-12.7	90	0.00	6.09
4	M	1,4-dioxane	0.090	0.102	-13.3	85	0.00	11.74
5	I	pentafluorobenzene	1.000	1.000	0.0	78	0.00	10.09
6	M	chlorodifluoromethane	0.459	0.664	-44.7#	113	0.00	3.81
7	M	dichlorodifluoromethane	0.784	0.802	-2.3	77	0.00	3.80
8	M	chloromethane	0.869	0.913	-5.1	81	0.00	4.15
9	M	vinyl chloride	0.866	0.854	1.4	77	-0.01	4.43
10		1,3-butadiene		----------NA----------				
11	M	bromomethane	0.604	0.608	-0.7	74	0.00	5.13
12	M	chloroethane	0.446	0.462	-3.6	77	0.00	5.34
13	M	trichlorofluoromethane	0.968	1.045	-8.0	80	0.00	5.88
14		vinyl bromide	0.587	0.613	-4.4	78	0.00	5.73
15	M	ethyl ether	0.297	0.314	-5.7	75	0.00	6.35
16	M	acrolein	0.143	0.114	20.3#	61	0.00	6.56
17		freon 113	0.366	0.410	-12.0	80	0.00	6.83
18	M	1,1-dichloroethene	0.481	0.524	-8.9	80	0.00	6.80
19	M	acetone	0.064	0.060	6.3	68	0.00	6.81
20	M	acetonitrile	0.085	0.098	-15.3	86	0.00	7.26
21	M	iodomethane	0.976	1.057	-8.3	80	0.00	7.07
22	M	carbon disulfide	1.826	2.053	-12.4	84	0.00	7.22
23	M	methylene chloride	0.613	0.614	-0.2	76	0.00	7.58
24	M	methyl acetate	0.544	0.619	-13.8	84	0.00	7.38
25	M	methyl tert butyl ether	1.661	1.781	-7.2	79	0.00	8.03
26	M	trans-1,2-dichloroethene	0.557	0.566	-1.6	76	0.00	8.04
27	M	di-isopropyl ether	1.878	2.174	-15.8	85	0.00	8.75
28	M	2-butanone	0.075	0.078	-4.0	74	0.00	9.43
29	M	1,1-dichloroethane	1.038	1.141	-9.9	81	0.00	8.66
30	M	chloroprene	0.766	0.903	-17.9	85	0.00	8.81
31	M	acrylonitrile	0.233	0.245	-5.2	76	0.00	7.92
32		hexane	0.374	0.446	-19.3	86	0.00	8.48
33	M	vinyl acetate	0.102	0.096	5.9	73	0.00	8.68
34	M	ethyl tert-butyl ether	1.807	1.986	-9.9	81	0.00	9.25
35	M	ethyl acetate	0.098	0.104	-6.1	81	0.00	9.51
36	M	2,2-dichloropropane	0.786	0.934	-18.8	88	0.00	9.51
37	M	cis-1,2-dichloroethene	0.625	0.629	-0.6	75	0.00	9.47
38		methyl acrylate	0.101	0.099	2.0	73	0.00	9.57
39	M	propionitrile	0.105	0.111	-5.7	79	0.00	9.49
40	M	bromochloromethane	0.317	0.323	-1.9	75	0.00	9.79
41	M	tetrahydrofuran	0.093	0.090	3.2	74	0.00	9.86

Continuing Calibration Summary

Job Number: JC53103 **Sample:** V4D3592-CC3564
Account: HSWFLTAM HSW Engineering **Lab FileID:** 4D83213.D
Project: Long Island GW Sampling, Long Island, NJ

42	M	chloroform	0.689	0.735	-6.7	81	0.00	9.87
43	M	t-butyl formate	0.208	0.166	20.2#	59	0.00	9.96
44	S	dibromofluoromethane (s)	0.576	0.538	6.6	73	0.00	10.08
45	M	methacrylonitrile	0.269	0.276	-2.6	73	0.00	9.73
46	M	1,1,1-trichloroethane	0.845	0.951	-12.5	82	0.00	10.18
47		cyclohexane	0.772	0.665	13.9	65	0.00	10.29
48		1,1-dichloropropene	0.758	0.832	-9.8	81	0.00	10.38
49		iso-butyl alcohol	0.034	0.037#	-8.8	86	0.00	10.35
50		carbon tetrachloride	0.756	0.864	-14.3	83	0.00	10.41
51		tert amyl alcohol	0.030	0.032#	-6.7	84	0.00	10.51
52	I	1,4-difluorobenzene	1.000	1.000	0.0	79	0.00	11.04
53	S	1,2-dichloroethane-d4 (s)	0.404	0.418	-3.5	82	0.00	10.52
54	M	n-butyl alcohol	0.013	0.014#	-7.7	84	0.00	11.14
55		2,2,4-trimethylpentane	1.367	1.520	-11.2	83	0.00	10.74
56	M	benzene	1.427	1.480	-3.7	78	0.00	10.64
57	M	tert-amyl methyl ether	0.252	0.271	-7.5	80	0.00	10.73
58	M	heptane	0.278	0.308	-10.8	82	0.00	10.92
59	M	isopropyl acetate	0.084	0.080	4.8	73	0.00	10.60
60	M	1,2-dichloroethane	0.502	0.593	-18.1	88	0.00	10.62
61	M	trichloroethene	0.348	0.357	-2.6	77	0.00	11.38
62		ethyl acrylate	0.522	0.567	-8.6	80	0.00	11.40
63	M	2-nitropropane	0.096	0.113	-17.7	89	0.00	12.12
64	M	2-chloroethyl vinyl ether	0.226	0.238	-5.3	78	0.00	12.18
65	M	methyl methacrylate	0.098	0.097	1.0	74	0.00	11.68
66	M	1,2-dichloropropane	0.389	0.422	-8.5	80	0.00	11.63
67	M	dibromomethane	0.266	0.287	-7.9	80	0.00	11.77
68	M	methylcyclohexane	0.611	0.643	-5.2	76	0.00	11.66
69	M	bromodichloromethane	0.496	0.551	-11.1	82	0.00	11.91
70		epichlorohydrin	0.040	0.044#	-10.0	82	0.00	12.26
71	M	cis-1,3-dichloropropene	0.593	0.640	-7.9	79	0.00	12.38
72	M	4-methyl-2-pentanone	0.160	0.176	-10.0	81	0.00	12.50
73	M	3-methyl-1-butanol	0.021	0.023#	-9.5	85	0.00	12.51
74	I	chlorobenzene-d5	1.000	1.000	0.0	81	0.00	14.19
75	S	toluene-d8 (s)	1.352	1.227	9.2	74	0.00	12.70
76		toluene	0.914	0.940	-2.8	79	0.00	12.78
77		trans-1,3-dichloropropene	0.633	0.669	-5.7	80	0.00	12.93
78		ethyl methacrylate	0.548	0.587	-7.1	79	0.00	12.98
79		1,1,2-trichloroethane	0.345	0.360	-4.3	79	0.00	13.14
80	M	tetrachloroethene	0.315	0.330	-4.8	80	0.00	13.36
81	M	1,3-dichloropropane	0.620	0.652	-5.2	80	0.00	13.33
82		2-hexanone	0.186	0.195	-4.8	80	0.00	13.35
83	M	butyl acetate	0.302	0.323	-7.0	81	0.00	13.45
84	M	3,3-dimethyl-1-butanol	0.049	0.049#	0.0	79	0.00	13.51
85	M	dibromochloromethane	0.481	0.496	-3.1	78	0.00	13.58
86	M	1,2-dibromoethane	0.444	0.457	-2.9	78	0.00	13.73
87		n-butyl ether	1.655	1.837	-11.0	84	0.00	14.21
88	M	chlorobenzene	1.058	1.076	-1.7	78	0.00	14.22
89	M	1,1,1,2-tetrachloroethane	0.402	0.426	-6.0	81	0.00	14.28
90	M	ethylbenzene	1.744	1.849	-6.0	82	0.00	14.30
91	M	m,p-xylene	0.650	0.675	-3.8	78	0.00	14.41
92	M	o-xylene	0.650	0.677	-4.2	79	0.00	14.83
93	M	styrene	1.109	1.144	-3.2	78	0.00	14.83
94	M	bromoform	0.373	0.351	5.9	72	0.00	15.05
95		butyl acrylate	0.846	0.949	-12.2	82	0.00	14.66
96		isopropylbenzene	1.711	1.792	-4.7	79	0.00	15.19
97		cis-1,4-dichloro-2-butene	0.203	0.160	21.2#	62	0.00	15.21
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	82	0.00	16.57

Continuing Calibration Summary

Job Number: JC53103 **Sample:** V4D3592-CC3564
Account: HSWFLTAM HSW Engineering **Lab FileID:** 4D83213.D
Project: Long Island GW Sampling, Long Island, NJ

99	S	4-bromofluorobenzene (s)	0.993	0.905	8.9	76	0.00	15.37
100	M	bromobenzene	0.911	0.910	0.1	79	0.00	15.56
101	M	1,1,2,2-tetrachloroethane	1.223	1.180	3.5	77	0.00	15.45
102	M	trans-1,4-dichloro-2-bute	0.260	0.219	15.8	65	0.00	15.50
103	M	1,2,3-trichloropropane	0.266	0.273	-2.6	80	0.00	15.52
104	M	n-propylbenzene	4.057	4.232	-4.3	81	0.00	15.61
105	M	2-chlorotoluene	0.822	0.828	-0.7	80	0.00	15.74
106	M	4-chlorotoluene	2.471	2.571	-4.0	82	0.00	15.84
107	M	1,3,5-trimethylbenzene	2.747	2.888	-5.1	81	0.00	15.77
108	M	tert-butylbenzene	0.488	0.499	-2.3	78	0.00	16.13
109	M	1,2,4-trimethylbenzene	2.843	2.980	-4.8	81	0.00	16.17
110	M	sec-butylbenzene	3.708	3.859	-4.1	80	0.00	16.35
111	M	1,3-dichlorobenzene	1.693	1.691	0.1	79	0.00	16.51
112	M	p-isopropyltoluene	2.940	3.081	-4.8	81	0.00	16.48
113	M	1,4-dichlorobenzene	1.710	1.692	1.1	79	0.00	16.59
114		benzyl chloride	2.029	2.185	-7.7	86	0.00	16.71
115	M	1,2-dichlorobenzene	1.677	1.670	0.4	78	0.00	17.00
116	M	n-butylbenzene	1.597	1.730	-8.3	82	0.00	16.91
117	M	1,2-dibromo-3-chloropropa	0.220	0.226	-2.7	81	0.00	17.79
118		1,3,5-trichlorobenzene	1.348	1.406	-4.3	79	0.00	18.04
		----------	True	Calc.	% Drift	----------		
119		2-ethylhexyl acrylate	4.000	3.492	12.7	80	0.00	18.74
		----------	AvgRF	CCRF	% Dev	----------		
120	M	1,2,4-trichlorobenzene	1.146	1.220	-6.5	77	0.00	18.71
121	M	hexachlorobutadiene	0.623	0.672	-7.9	81	0.00	18.87
122	M	naphthalene	3.016	2.845	5.7	76	0.00	19.00
123	M	1,2,3-trichlorobenzene	1.075	1.115	-3.7	76	0.00	19.26
124	m	hexachloroethane	0.551	0.574	-4.2	80	0.00	17.31
		----------	True	Calc.	% Drift	----------		
125		2-methylnaphthalene	10.000	9.267	7.3	81	0.00	20.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4D82603.D M4D3564.M Mon Oct 16 10:05:01 2017 11

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Automated Report

Technical Report for

HSW Engineering

Long Island GW Sampling, Long Island, NJ

1AS301101.063

SGS Accutest Job Number: JC53316

Sampling Date: 10/17/17

Report to:

HSW Engineering
15711 Mapledale Boulevard Suite B
Tampa, FL 33624
RPoff@HSWEng.com; DSmolensky@Emagin-Inc.com

ATTN: Rich Poff

Total number of pages in report: **128**

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)

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Sample Summary

HSW Engineering

Job No: JC53316

Long Island GW Sampling, Long Island, NJ
Project No: 1AS301101.063

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC53316-1	10/17/17	10:30	CMT	10/17/17	AQ	Ground Water	MW-300(HP-398)
JC53316-2	10/17/17	12:50	CMT	10/17/17	AQ	Ground Water	MW-300(HP-405)

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	HSW Engineering	**Job No**	JC53316
Site:	Long Island GW Sampling, Long Island, NJ	**Report Date**	10/20/2017 12:47:38 P

On 10/17/2017, 2 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 1.7 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of JC53316 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:** VA8994

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC52876-1MS, JC52876-2DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

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: JC53316
Account: HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ
Collected: 10/17/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC53316-1	**MW-300(HP-398)**					
Acetone		21.0	10	5.0	ug/l	SW846 8260C
1,1-Dichloroethane		0.66 J	1.0	0.21	ug/l	SW846 8260C
Methyl Tert Butyl Ether		0.31 J	1.0	0.25	ug/l	SW846 8260C
Toluene		0.41 J	1.0	0.25	ug/l	SW846 8260C
Trichloroethene		0.42 J	1.0	0.27	ug/l	SW846 8260C
JC53316-2	**MW-300(HP-405)**					
Acetone		9.9 J	10	5.0	ug/l	SW846 8260C
Chloroform		0.39 J	1.0	0.29	ug/l	SW846 8260C
1,1-Dichloroethane		2.1	1.0	0.21	ug/l	SW846 8260C
1,1-Dichloroethene		0.79 J	1.0	0.47	ug/l	SW846 8260C
Methyl Tert Butyl Ether		0.26 J	1.0	0.25	ug/l	SW846 8260C
Tetrachloroethene		1.0	1.0	0.50	ug/l	SW846 8260C
Toluene		0.35 J	1.0	0.25	ug/l	SW846 8260C
Trichloroethene		1.5	1.0	0.27	ug/l	SW846 8260C

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID: MW-300(HP-398)
Lab Sample ID: JC53316-1
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Long Island GW Sampling, Long Island, NJ

Date Sampled: 10/17/17
Date Received: 10/17/17
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A237117.D	1	10/18/17 12:43	GA	n/a	n/a	VA8994
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	21.0	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	0.66	1.0	0.21	ug/l	J
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	
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	

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:	MW-300(HP-398)		
Lab Sample ID:	JC53316-1	**Date Sampled:**	10/17/17
Matrix:	AQ - Ground Water	**Date Received:**	10/17/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	0.31	1.0	0.25	ug/l	J
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	0.41	1.0	0.25	ug/l	J
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	0.42	1.0	0.27	ug/l	J
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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-120%
17060-07-0	1,2-Dichloroethane-D4	100%		81-124%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	101%		80-120%

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

SGS Accutest

Report of Analysis

Client Sample ID: MW-300(HP-405)
Lab Sample ID: JC53316-2
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Long Island GW Sampling, Long Island, NJ

Date Sampled: 10/17/17
Date Received: 10/17/17
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A237118.D	1	10/18/17 13:13	GA	n/a	n/a	VA8994
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	9.9	10	5.0	ug/l	J
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	0.39	1.0	0.29	ug/l	J
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	2.1	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	0.79	1.0	0.47	ug/l	J
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	
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	

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:	MW-300(HP-405)		
Lab Sample ID:	JC53316-2	**Date Sampled:**	10/17/17
Matrix:	AQ - Ground Water	**Date Received:**	10/17/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	0.26	1.0	0.25	ug/l	J
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	1.0	1.0	0.50	ug/l	
108-88-3	Toluene	0.35	1.0	0.25	ug/l	J
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	1.5	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		80-120%
17060-07-0	1,2-Dichloroethane-D4	101%		81-124%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	101%		80-120%

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

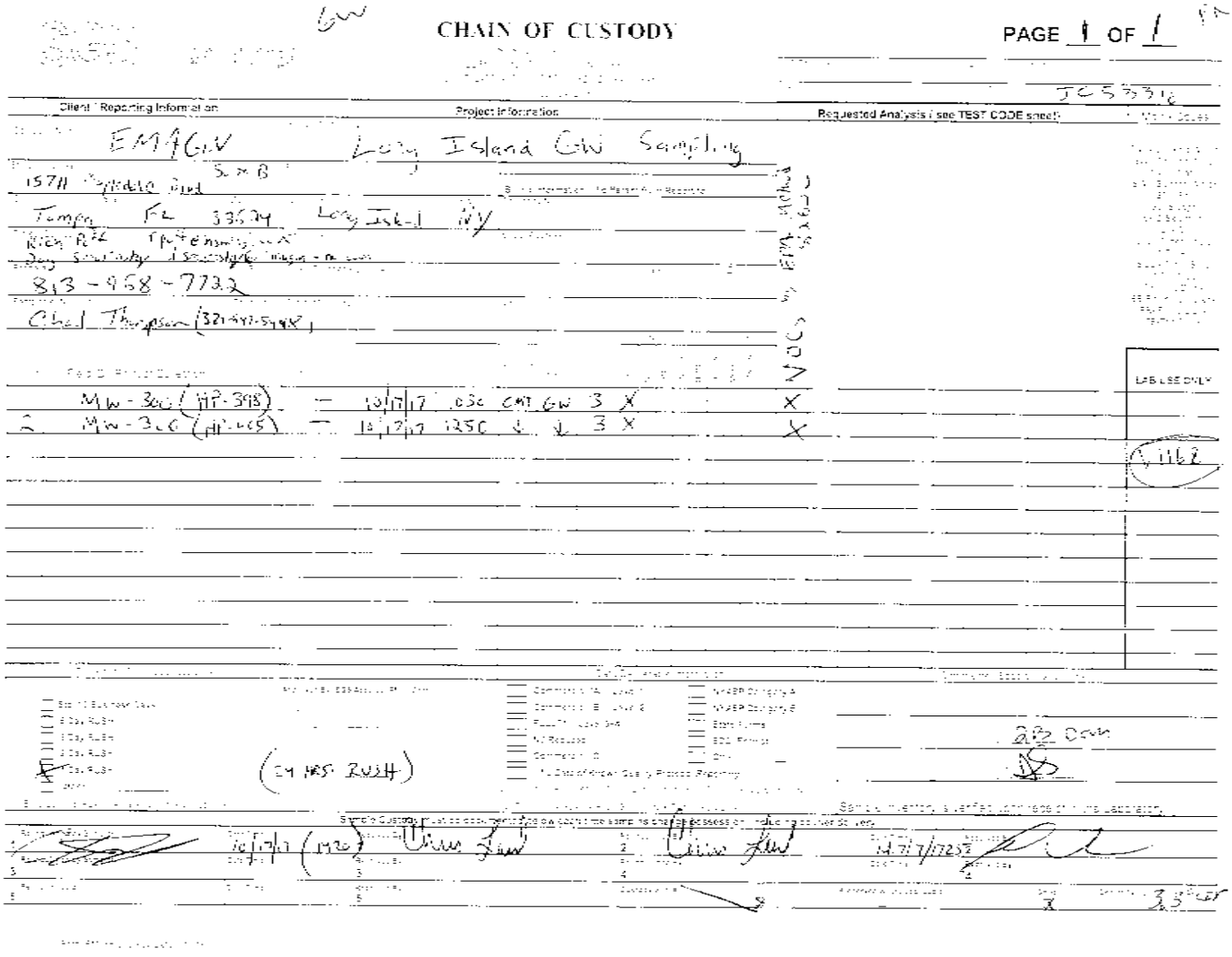
5

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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



CHAIN OF CUSTODY

PAGE 1 OF 1

JC53316

Client / Reporting Information

EMPGW

15711 Pendola Blvd

Tampa FL 33624

Rick Rile

813-968-7732

Chad Thompson (321-441-5948)

Project Information

Long Island GW Sampling

5 x B

Long Isl. NY

Requested Analysis (see TEST CODE sheet)

1	MW-306 (MP-398)		10/17/17	0830	GW	3	X
2	MW-306 (MP-405)		10/17/17	1250	↓	3	X

LAB USE ONLY

5.1162

(24 HRS RUSH)

2.2 Cool

Relinquished by: 10/17/17 (1920)

Received by:

Relinquished by:

Received by: 10/17/17 1725

SGS Accutest Sample Receipt Summary

Job Number: JC53316 **Client:** Emagin **Project:** Long Island GW Sampling

Date / Time Received: 10/17/2017 5:25:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.3);

Cooler Temps (Corrected) °C: Cooler 1: (1.7);

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 -1 Received all voas vials filled with 65% soil
-2 Received all voa vials filled with 85% soil

SM089-02
Rev. Date 12/1/16

5.1
5

JC53316: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

HSW Engineering

Job No: JC53316

Long Island GW Sampling, Long Island, NJ
Project No: 1AS301101.063

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC53316-1	Collected: 17-OCT-17 10:30 By: CMT		Received: 17-OCT-17 By: DG			
MW-300(HP-398)						
JC53316-1	SW846 8260C	18-OCT-17 12:43	GA			V8260TCL20
JC53316-2	Collected: 17-OCT-17 12:50 By: CMT		Received: 17-OCT-17 By: DG			
MW-300(HP-405)						
JC53316-2	SW846 8260C	18-OCT-17 13:13	GA			V8260TCL20

SGS Accutest Internal Chain of Custody

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ
Received: 10/17/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC53316-1.1	Secured Storage	Gabriela Alvarez	10/18/17 14:39	Retrieve from Storage
JC53316-1.1	Gabriela Alvarez	GCMSA	10/18/17 14:39	Load on Instrument
JC53316-1.1	GCMSA	Gabriela Alvarez	10/19/17 11:06	Unload from Instrument
JC53316-1.1	Gabriela Alvarez	Secured Storage	10/19/17 11:06	Return to Storage
JC53316-2.2	Secured Storage	Gabriela Alvarez	10/18/17 14:39	Retrieve from Storage
JC53316-2.2	Gabriela Alvarez	GCMSA	10/18/17 14:39	Load on Instrument
JC53316-2.2	GCMSA	Gabriela Alvarez	10/19/17 11:06	Unload from Instrument
JC53316-2.2	Gabriela Alvarez	Secured Storage	10/19/17 11:06	Return to Storage

MS Volatiles

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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: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA8994-MB	A237110.D	1	10/18/17	GA	n/a	n/a	VA8994

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

JC53316-1, JC53316-2

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	
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	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	

Method Blank Summary

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA8994-MB	A237110.D	1	10/18/17	GA	n/a	n/a	VA8994

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

JC53316-1, JC53316-2

CAS No.	Compound	Result	RL	MDL	Units	Q
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	103%	80-120%
17060-07-0	1,2-Dichloroethane-D4	102%	81-124%
2037-26-5	Toluene-D8	98%	80-120%
460-00-4	4-Bromofluorobenzene	99%	80-120%

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

Blank Spike Summary

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA8994-BS	A237111.D	1	10/18/17	GA	n/a	n/a	VA8994

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

JC53316-1, JC53316-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	184	92	42-150
71-43-2	Benzene	50	48.7	97	80-120
74-97-5	Bromochloromethane	50	48.0	96	84-121
75-27-4	Bromodichloromethane	50	50.4	101	83-120
75-25-2	Bromoform	50	42.2	84	76-129
74-83-9	Bromomethane	50	54.2	108	57-138
78-93-3	2-Butanone (MEK)	200	199	100	64-137
75-15-0	Carbon disulfide	50	44.7	89	64-137
56-23-5	Carbon tetrachloride	50	51.0	102	75-135
108-90-7	Chlorobenzene	50	47.0	94	84-117
75-00-3	Chloroethane	50	54.2	108	63-132
67-66-3	Chloroform	50	48.5	97	80-119
74-87-3	Chloromethane	50	51.4	103	46-136
110-82-7	Cyclohexane	50	48.9	98	64-137
96-12-8	1,2-Dibromo-3-chloropropane	50	45.2	90	72-127
124-48-1	Dibromochloromethane	50	47.5	95	80-123
106-93-4	1,2-Dibromoethane	50	48.5	97	84-117
95-50-1	1,2-Dichlorobenzene	50	47.8	96	84-119
541-73-1	1,3-Dichlorobenzene	50	48.5	97	81-117
106-46-7	1,4-Dichlorobenzene	50	46.5	93	82-117
75-71-8	Dichlorodifluoromethane	50	55.1	110	36-149
75-34-3	1,1-Dichloroethane	50	50.2	100	79-120
107-06-2	1,2-Dichloroethane	50	48.6	97	78-126
75-35-4	1,1-Dichloroethene	50	47.2	94	69-126
156-59-2	cis-1,2-Dichloroethene	50	49.1	98	80-120
156-60-5	trans-1,2-Dichloroethene	50	48.1	96	76-120
78-87-5	1,2-Dichloropropane	50	50.0	100	82-121
10061-01-5	cis-1,3-Dichloropropene	50	52.8	106	83-120
10061-02-6	trans-1,3-Dichloropropene	50	48.9	98	82-121
100-41-4	Ethylbenzene	50	48.1	96	80-120
76-13-1	Freon 113	50	45.8	92	62-182
591-78-6	2-Hexanone	200	191	96	65-132
98-82-8	Isopropylbenzene	50	49.1	98	83-120
79-20-9	Methyl Acetate	50	50.3	101	67-129
108-87-2	Methylcyclohexane	50	48.8	98	71-134
1634-04-4	Methyl Tert Butyl Ether	50	49.5	99	80-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA8994-BS	A237111.D	1	10/18/17	GA	n/a	n/a	VA8994

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

JC53316-1, JC53316-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	209	105	71-131
75-09-2	Methylene chloride	50	48.3	97	77-120
100-42-5	Styrene	50	48.9	98	82-122
79-34-5	1,1,2,2-Tetrachloroethane	50	51.7	103	76-119
127-18-4	Tetrachloroethene	50	46.0	92	70-131
108-88-3	Toluene	50	47.0	94	80-120
87-61-6	1,2,3-Trichlorobenzene	50	47.4	95	76-134
120-82-1	1,2,4-Trichlorobenzene	50	46.3	93	79-132
71-55-6	1,1,1-Trichloroethane	50	50.4	101	81-128
79-00-5	1,1,2-Trichloroethane	50	49.0	98	83-118
79-01-6	Trichloroethene	50	48.2	96	80-120
75-69-4	Trichlorofluoromethane	50	52.6	105	64-136
75-01-4	Vinyl chloride	50	53.2	106	51-135
	m,p-Xylene	100	97.5	98	80-120
95-47-6	o-Xylene	50	49.1	98	80-120
1330-20-7	Xylene (total)	150	147	98	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	80-120%
17060-07-0	1,2-Dichloroethane-D4	99%	81-124%
2037-26-5	Toluene-D8	95%	80-120%
460-00-4	4-Bromofluorobenzene	100%	80-120%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC52876-1MS	A237126.D	1	10/18/17	GA	n/a	n/a	VA8994
JC52876-1	A237121.D	1	10/18/17	GA	n/a	n/a	VA8994

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

JC53316-1, JC53316-2

CAS No.	Compound	JC52876-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
67-64-1	Acetone	ND		200	171	86	34-149
71-43-2	Benzene	ND		50	49.3	99	54-136
74-97-5	Bromochloromethane	ND		50	48.4	97	79-124
75-27-4	Bromodichloromethane	ND		50	50.9	102	79-124
75-25-2	Bromoform	ND		50	46.1	92	71-130
74-83-9	Bromomethane	ND		50	53.8	108	53-142
78-93-3	2-Butanone (MEK)	ND		200	190	95	54-142
75-15-0	Carbon disulfide	ND		50	45.6	91	59-145
56-23-5	Carbon tetrachloride	ND		50	53.2	106	70-143
108-90-7	Chlorobenzene	ND		50	48.6	97	78-123
75-00-3	Chloroethane	ND		50	54.2	108	57-141
67-66-3	Chloroform	ND		50	49.4	99	76-123
74-87-3	Chloromethane	ND		50	50.2	100	43-141
110-82-7	Cyclohexane	ND		50	58.6	117	51-155
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	46.2	92	66-130
124-48-1	Dibromochloromethane	ND		50	48.8	98	76-125
106-93-4	1,2-Dibromoethane	ND		50	48.7	97	78-119
95-50-1	1,2-Dichlorobenzene	ND		50	48.8	98	77-123
541-73-1	1,3-Dichlorobenzene	ND		50	49.0	98	76-122
106-46-7	1,4-Dichlorobenzene	ND		50	47.7	95	76-122
75-71-8	Dichlorodifluoromethane	ND		50	48.6	97	31-159
75-34-3	1,1-Dichloroethane	ND		50	51.7	103	73-126
107-06-2	1,2-Dichloroethane	ND		50	48.2	96	72-131
75-35-4	1,1-Dichloroethene	ND		50	48.9	98	63-136
156-59-2	cis-1,2-Dichloroethene	63.7		50	111	95	60-136
156-60-5	trans-1,2-Dichloroethene	ND		50	48.4	97	70-126
78-87-5	1,2-Dichloropropane	ND		50	50.5	101	78-124
10061-01-5	cis-1,3-Dichloropropene	ND		50	53.3	107	79-123
10061-02-6	trans-1,3-Dichloropropene	ND		50	48.9	98	77-123
100-41-4	Ethylbenzene	ND		50	50.0	100	51-140
76-13-1	Freon 113	ND		50	51.5	103	60-192
591-78-6	2-Hexanone	ND		200	192	96	56-139
98-82-8	Isopropylbenzene	ND		50	51.6	103	75-129
79-20-9	Methyl Acetate	ND		50	44.8	90	55-131
108-87-2	Methylcyclohexane	ND		50	53.0	106	57-155
1634-04-4	Methyl Tert Butyl Ether	ND		50	49.0	98	72-123

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC52876-1MS	A237126.D	1	10/18/17	GA	n/a	n/a	VA8994
JC52876-1	A237121.D	1	10/18/17	GA	n/a	n/a	VA8994

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

JC53316-1, JC53316-2

CAS No.	Compound	JC52876-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		200	211	106	66-136
75-09-2	Methylene chloride	ND		50	47.5	95	73-125
100-42-5	Styrene	ND		50	50.6	101	75-129
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	51.4	103	71-122
127-18-4	Tetrachloroethene	ND		50	47.8	96	61-139
108-88-3	Toluene	ND		50	48.7	97	60-135
87-61-6	1,2,3-Trichlorobenzene	ND		50	47.0	94	70-138
120-82-1	1,2,4-Trichlorobenzene	ND		50	46.7	93	72-137
71-55-6	1,1,1-Trichloroethane	ND		50	53.0	106	74-138
79-00-5	1,1,2-Trichloroethane	ND		50	48.8	98	78-121
79-01-6	Trichloroethene	27.4		50	78.4	102	62-141
75-69-4	Trichlorofluoromethane	ND		50	51.7	103	57-149
75-01-4	Vinyl chloride	2.7		50	55.7	106	43-146
	m,p-Xylene	ND		100	102	102	50-144
95-47-6	o-Xylene	ND		50	50.6	101	63-134
1330-20-7	Xylene (total)	ND		150	153	102	56-139

CAS No.	Surrogate Recoveries	MS	JC52876-1	Limits
1868-53-7	Dibromofluoromethane	102%	102%	80-120%
17060-07-0	1,2-Dichloroethane-D4	102%	100%	81-124%
2037-26-5	Toluene-D8	96%	97%	80-120%
460-00-4	4-Bromofluorobenzene	99%	101%	80-120%

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC52876-2DUP	A237128.D	1	10/18/17	GA	n/a	n/a	VA8994
JC52876-2	A237122.D	1	10/18/17	GA	n/a	n/a	VA8994

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

JC53316-1, JC53316-2

CAS No.	Compound	JC52876-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
67-64-1	Acetone	ND		ND		nc	20
71-43-2	Benzene	ND		ND		nc	20
74-97-5	Bromochloromethane	ND		ND		nc	20
75-27-4	Bromodichloromethane	ND		ND		nc	20
75-25-2	Bromoform	ND		ND		nc	20
74-83-9	Bromomethane	ND		ND		nc	20
78-93-3	2-Butanone (MEK)	ND		ND		nc	20
75-15-0	Carbon disulfide	ND		ND		nc	20
56-23-5	Carbon tetrachloride	ND		ND		nc	20
108-90-7	Chlorobenzene	ND		ND		nc	20
75-00-3	Chloroethane	ND		ND		nc	20
67-66-3	Chloroform	ND		ND		nc	20
74-87-3	Chloromethane	ND		ND		nc	20
110-82-7	Cyclohexane	ND		ND		nc	20
96-12-8	1,2-Dibromo-3-chloropropane	ND		ND		nc	20
124-48-1	Dibromochloromethane	ND		ND		nc	20
106-93-4	1,2-Dibromoethane	ND		ND		nc	20
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	20
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	20
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	20
75-71-8	Dichlorodifluoromethane	ND		ND		nc	20
75-34-3	1,1-Dichloroethane	ND		ND		nc	20
107-06-2	1,2-Dichloroethane	ND		ND		nc	20
75-35-4	1,1-Dichloroethene	ND		ND		nc	20
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	20
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	20
78-87-5	1,2-Dichloropropane	ND		ND		nc	20
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	20
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	20
100-41-4	Ethylbenzene	ND		ND		nc	20
76-13-1	Freon 113	ND		ND		nc	20
591-78-6	2-Hexanone	ND		ND		nc	20
98-82-8	Isopropylbenzene	ND		ND		nc	20
79-20-9	Methyl Acetate	ND		ND		nc	20
108-87-2	Methylcyclohexane	ND		ND		nc	20
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	20

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC52876-2DUP	A237128.D	1	10/18/17	GA	n/a	n/a	VA8994
JC52876-2	A237122.D	1	10/18/17	GA	n/a	n/a	VA8994

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

JC53316-1, JC53316-2

CAS No.	Compound	JC52876-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		ND		nc	20
75-09-2	Methylene chloride	ND		ND		nc	20
100-42-5	Styrene	ND		ND		nc	20
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	20
127-18-4	Tetrachloroethene	ND		ND		nc	20
108-88-3	Toluene	ND		ND		nc	20
87-61-6	1,2,3-Trichlorobenzene	ND		ND		nc	20
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	20
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	20
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	20
79-01-6	Trichloroethene	ND		ND		nc	20
75-69-4	Trichlorofluoromethane	ND		ND		nc	20
75-01-4	Vinyl chloride	ND		ND		nc	20
	m,p-Xylene	ND		ND		nc	20
95-47-6	o-Xylene	ND		ND		nc	20
1330-20-7	Xylene (total)	ND		ND		nc	20

CAS No.	Surrogate Recoveries	DUP	JC52876-2	Limits
1868-53-7	Dibromofluoromethane	103%	104%	80-120%
17060-07-0	1,2-Dichloroethane-D4	102%	104%	81-124%
2037-26-5	Toluene-D8	98%	97%	80-120%
460-00-4	4-Bromofluorobenzene	98%	98%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: VA8958-BFB
Lab File ID: A236265.D
Instrument ID: GCMSA
Injection Date: 09/22/17
Injection Time: 21:44

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.95 - 40.0% of mass 95	18229	19.0		Pass
75	30.0 - 60.0% of mass 95	45637	47.6		Pass
95	Base peak, 100% relative abundance	95805	100.0		Pass
96	5.0 - 9.0% of mass 95	6546	6.83		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	83069	86.7		Pass
175	5.0 - 9.0% of mass 174	7038	7.35	(8.47) [a]	Pass
176	95.0 - 101.0% of mass 174	82181	85.8	(98.9) [a]	Pass
177	5.0 - 9.0% of mass 176	5518	5.76	(6.71) [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
VA8958-IC8958	A236266.D	09/22/17	22:31	00:47	Initial cal 0.2
VA8958-IC8958	A236267.D	09/22/17	22:59	01:15	Initial cal 0.5
VA8958-IC8958	A236268.D	09/22/17	23:29	01:45	Initial cal 1
VA8958-IC8958	A236269.D	09/22/17	23:58	02:14	Initial cal 2
VA8958-IC8958	A236270.D	09/23/17	00:27	02:43	Initial cal 5
VA8958-IC8958	A236271.D	09/23/17	00:57	03:13	Initial cal 10
VA8958-IC8958	A236272.D	09/23/17	01:26	03:42	Initial cal 20
VA8958-ICC8958	A236273.D	09/23/17	01:55	04:11	Initial cal 50
VA8958-IC8958	A236274.D	09/23/17	02:25	04:41	Initial cal 100
VA8958-IC8958	A236275.D	09/23/17	02:54	05:10	Initial cal 200
VA8958-ICV8958	A236278.D	09/23/17	04:22	06:38	Initial cal verification 50
VA8958-ICV8958	A236279.D	09/23/17	04:51	07:07	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: VA8994-BFB
Lab File ID: A237108.D
Instrument ID: GCMSA
Injection Date: 10/18/17
Injection Time: 07:58

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.95 - 40.0% of mass 95	23315	19.4		Pass
75	30.0 - 60.0% of mass 95	57845	48.2		Pass
95	Base peak, 100% relative abundance	119928	100.0		Pass
96	5.0 - 9.0% of mass 95	7950	6.63		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	102589	85.5		Pass
175	5.0 - 9.0% of mass 174	8417	7.02	(8.20) [a]	Pass
176	95.0 - 101.0% of mass 174	100816	84.1	(98.3) [a]	Pass
177	5.0 - 9.0% of mass 176	6597	5.50	(6.54) [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
VA8994-CC8958	A237108.D	10/18/17	07:58	00:00	Continuing cal 20
VA8994-MB	A237110.D	10/18/17	09:19	01:21	Method Blank
VA8994-BS	A237111.D	10/18/17	09:48	01:50	Blank Spike
ZZZZZZ	A237113.D	10/18/17	10:46	02:48	(unrelated sample)
ZZZZZZ	A237114.D	10/18/17	11:15	03:17	(unrelated sample)
ZZZZZZ	A237115.D	10/18/17	11:43	03:45	(unrelated sample)
JC53316-1	A237117.D	10/18/17	12:43	04:45	MW-300(HP-398)
JC53316-2	A237118.D	10/18/17	13:13	05:15	MW-300(HP-405)
ZZZZZZ	A237119.D	10/18/17	13:44	05:46	(unrelated sample)
ZZZZZZ	A237120.D	10/18/17	14:16	06:18	(unrelated sample)
JC52876-1	A237121.D	10/18/17	16:17	08:19	(used for QC only; not part of job JC53316)
JC52876-2	A237122.D	10/18/17	16:56	08:58	(used for QC only; not part of job JC53316)
ZZZZZZ	A237123.D	10/18/17	17:25	09:27	(unrelated sample)
ZZZZZZ	A237125.D	10/18/17	18:23	10:25	(unrelated sample)
JC52876-1MS	A237126.D	10/18/17	18:52	10:54	Matrix Spike
JC52876-2DUP	A237128.D	10/18/17	19:50	11:52	Duplicate

Instrument Performance Check (BFB)

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: VA8995-BFB
Lab File ID: A237131.D
Instrument ID: GCMSA
Injection Date: 10/18/17
Injection Time: 21:17

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.95 - 40.0% of mass 95	24890	20.5		Pass
75	30.0 - 60.0% of mass 95	59949	49.3		Pass
95	Base peak, 100% relative abundance	121549	100.0		Pass
96	5.0 - 9.0% of mass 95	8574	7.05		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	102322	84.2		Pass
175	5.0 - 9.0% of mass 174	7992	6.58	(7.81) [a]	Pass
176	95.0 - 101.0% of mass 174	98829	81.3	(96.6) [a]	Pass
177	5.0 - 9.0% of mass 176	7050	5.80	(7.13) [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
VA8995-IC8958	A237134.D	10/18/17	22:43	01:26	Initial cal 1
VA8995-IC8958	A237135.D	10/18/17	23:12	01:55	Initial cal 2
VA8995-IC8958	A237136.D	10/18/17	23:41	02:24	Initial cal 5
VA8995-IC8958	A237137.D	10/19/17	00:10	02:53	Initial cal 10
VA8995-IC8958	A237138.D	10/19/17	00:39	03:22	Initial cal 20
VA8995-IC8958	A237139.D	10/19/17	01:08	03:51	Initial cal 50
VA8995-IC8958	A237140.D	10/19/17	01:37	04:20	Initial cal 100
VA8995-IC8958	A237141.D	10/19/17	02:06	04:49	Initial cal 200
VA8995-ICV8958	A237144.D	10/19/17	03:34	06:17	Initial cal verification 50

Internal Standard Area Summary

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Check Std:	VA8994-CC8958	**Injection Date:**	10/18/17
Lab File ID:	A237108.D	**Injection Time:**	07:58
Instrument ID:	GCMSA	**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	592178	7.81	328795	10.18	507792	11.11	451574	14.51	270197	17.11
Upper Limit [a]	1184356	8.31	657590	10.68	1015584	11.61	903148	15.01	540394	17.61
Lower Limit [b]	296089	7.31	164398	9.68	253896	10.61	225787	14.01	135099	16.61

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VA8994-MB	554633	7.81	318873	10.18	482084	11.12	414538	14.51	251527	17.11
VA8994-BS	593941	7.82	339109	10.18	535546	11.12	486381	14.51	279105	17.11
ZZZZZZ	604927	7.87	343478	10.18	523045	11.12	448367	14.51	269760	17.11
ZZZZZZ	613165	7.84	336620	10.18	520376	11.12	464838	14.51	286443	17.11
ZZZZZZ	631390	7.81	367655	10.18	550598	11.12	485885	14.51	298253	17.11
JC53316-1	799232	7.81	380217	10.18	569354	11.12	460702	14.51	261383	17.11
JC53316-2	658363	7.83	386384	10.18	584686	11.12	474386	14.51	272134	17.11
ZZZZZZ	632609	7.82	381396	10.18	581260	11.12	473093	14.51	265968	17.11
ZZZZZZ	669747	7.82	392729	10.18	600238	11.12	496360	14.51	273437	17.11
JC52876-1	668250	7.81	372046	10.18	572419	11.11	488684	14.51	289463	17.11
JC52876-2	615543	7.84	365650	10.18	555738	11.12	484591	14.51	295733	17.11
ZZZZZZ	651383	7.83	372163	10.18	566396	11.12	487353	14.51	298489	17.11
ZZZZZZ	617838	7.83	352153	10.18	544796	11.12	473780	14.51	292904	17.11
JC52876-1MS	638713	7.82	357800	10.18	568485	11.12	523226	14.51	307744	17.11
JC52876-2DUP	624188	7.82	348982	10.18	532919	11.12	453740	14.51	273389	17.11

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: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

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
JC53316-1	A237117.D	100	100	98	101
JC53316-2	A237118.D	101	101	98	101
JC52876-1MS	A237126.D	102	102	96	99
JC52876-2DUP	A237128.D	103	102	98	98
VA8994-BS	A237111.D	101	99	95	100
VA8994-MB	A237110.D	103	102	98	99

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: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: VA8958-ICC8958
Lab FileID: A236273.D

Response Factor Report MSA

Method : C:\msdchem\1\METHODS\MA8958.m (RTE Integrator)
Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
Last Update : Thu Oct 19 09:28:57 2017
Response via : Initial Calibration

Calibration Files
5 =A236270.D 2 =A236269.D 20 =A236272.D 50 =A236273.D
100 =A236274.D 1 =A236268.D 200 =A236275.D 0.5 =A236267.D
10 =A236271.D 0.2 =A236266.D = =

Compound	5	2	20	50	100	1	200	0.5	10	0.2	Avg	%RSD
1) I Tert Butyl Alcohol-d9	----------ISTD----------											
2) ethanol											0.000#	-1.00
3) tertiary butyl alcohol	0.984	0.809	1.005	0.984	0.984		0.927		0.984		0.954	7.18
4) 1,4-dioxane	0.049	0.035	0.054	0.055	0.057		0.053		0.052		0.051	14.70
5) I pentafluorobenzene	----------ISTD----------											
6) chlorodifluoromethane	0.808	0.585	0.915	0.987	0.906	0.716	0.911		0.899		0.841	15.67
7) dichlorodifluoromethane	0.930	0.702	1.030	1.041	0.943	0.841	0.932		0.999		0.927	12.05
8) chloromethane	0.992	0.781	1.096	1.082	1.259	0.912			0.991		1.016	14.86
9) vinyl chloride	1.112	0.866	1.115	1.128	1.088	1.059	1.069		1.113		1.069	7.98
10) 1,3-butadiene	0.555		0.577	0.578	0.599		0.593		0.563		0.578	2.91
11) bromomethane	0.641	0.559	0.652	0.633	0.581	0.620	0.569	0.555	0.649		0.607	6.64
12) chloroethane	0.528	0.428	0.537	0.507	0.472	0.512	0.448		0.516		0.493	8.00
13) vinyl bromide	*This compound does not meet initial calibration criteria*											
	0.567	0.479	0.605	0.595	0.599	0.538	0.602		0.578		0.570	7.58
14) trichlorofluoromethane	1.002	0.794	1.050	1.034	1.010	0.858	1.005		1.044		0.975	9.76
15) ethyl ether	0.275	0.208	0.292	0.280	0.273	0.232	0.256	0.239	0.291		0.261	11.16
16) acrolein	0.153	0.124	0.170	0.165	0.162		0.159		0.161		0.156	9.80
17) freon 113	0.459	0.347	0.476	0.464	0.460	0.415	0.464		0.472		0.445	9.78
18) 1,1-dichloroethene	0.509	0.376	0.523	0.476	0.488	0.450	0.480	0.413	0.485		0.467	10.01
19) acetone	0.097	0.074	0.095	0.096	0.086	0.083	0.080		0.098		0.089	9.94
20) acetonitrile	0.142	0.122	0.145	0.146	0.138		0.135		0.139		0.138	5.92
21) iodomethane	1.010	0.795	1.035	0.989	0.992	0.868	0.993	0.856	1.012	0.848	0.940	9.29
22) carbon disulfide	1.926	1.635	1.937	1.854	1.858	1.897	1.824	2.161	1.924		1.891	7.24

Initial Calibration Summary

Job Number: JC53316 **Sample:** VA8958-ICC8958
Account: HSWFLTAM HSW Engineering **Lab FileID:** A236273.D
Project: Long Island GW Sampling, Long Island, NJ

23) methylene chloride
0.565 0.463 0.588 0.548 0.545 0.527 0.528 0.580 0.583 0.547 7.14
24) methyl acetate
0.663 0.518 0.696 0.683 0.645 0.652 0.627 0.601 0.688 0.641 8.62
25) methyl tert butyl ether
1.743 1.388 1.823 1.759 1.705 1.622 1.681 1.630 1.780 1.681 7.64
26) trans-1,2-dichloroethene
0.505 0.422 0.510 0.490 0.488 0.497 0.469 0.482 0.502 0.485 5.51
27) hexane
0.684 0.469 0.716 0.700 0.674 0.591 0.653 0.545 0.702 0.637 13.22
28) di-isopropyl ether
1.902 1.527 1.991 1.913 1.824 1.747 1.775 1.811 1.932 1.441 1.786 9.93
29) ethyl tert-butyl ether
1.747 1.425 1.840 1.820 1.753 1.615 1.725 1.628 1.792 1.705 7.65
30) 2-butanone
0.089 0.073 0.092 0.093 0.091 0.085 0.093 0.094 0.089 7.62
31) 1,1-dichloroethane
0.957 0.822 0.988 0.951 0.909 0.851 0.869 0.935 0.982 0.918 6.45
32) chloroprene
0.795 0.569 0.831 0.812 0.785 0.655 0.755 0.732 0.798 0.748 11.39
33) acrylonitrile
0.327 0.231 0.335 0.327 0.316 0.286 0.307 0.333 0.308 11.34
34) vinyl acetate
0.081 0.096 0.097 0.098 0.099 0.099 0.095 7.43
35) ethyl acetate
0.112 0.114 0.119 0.119 0.122 0.118 0.117 3.07
36) 2,2-dichloropropane
0.828 0.701 0.858 0.827 0.790 0.754 0.782 0.736 0.840 0.791 6.67
37) cis-1,2-dichloroethene
0.564 0.461 0.591 0.556 0.537 0.546 0.521 0.539 0.560 0.500 0.537 6.79
38) methyl acrylate
0.075 0.092 0.094 0.097 0.102 0.082 0.090 11.30
39) propionitrile
0.141 0.118 0.147 0.148 0.141 0.138 0.140 0.129 0.147 0.139 7.07
40) bromochloromethane
0.275 0.258 0.284 0.289 0.276 0.268 0.274 0.287 0.276 3.72
41) tetrahydrofuran
0.290 0.232 0.323 0.326 0.311 0.288 0.309 0.319 0.300 10.25
42) chloroform
0.927 0.762 0.929 0.891 0.856 0.943 0.830 0.901 0.927 0.909 0.887 6.37
43) tert-butyl formate
0.285 0.290 0.297 0.284 0.281 0.286 0.287 1.96
44) dibromofluoromethane (s)
0.576 0.574 0.573 0.572 0.561 0.570 0.556 0.572 0.571 0.549 0.567 1.58
45) methacrylonitrile
0.266 0.205 0.276 0.280 0.273 0.208 0.277 0.266 0.256 12.18
46) cyclohexane
0.788 0.664 0.888 0.865 0.842 0.627 0.846 0.841 0.795 12.22
47) 1,1,1-trichloroethane
0.864 0.682 0.909 0.883 0.836 0.812 0.829 0.694 0.893 0.822 10.01
48) iso-butyl alcohol
0.047 0.049 0.057 0.057 0.058 0.048 0.049 0.052 9.35
49) 1,1-dichloropropene
0.651 0.516 0.692 0.694 0.683 0.584 0.676 0.582 0.681 0.640 9.95
50) carbon tetrachloride
0.766 0.560 0.796 0.786 0.758 0.682 0.751 0.608 0.784 0.721 11.83
51) tert-amyl alcohol
0.077 0.058 0.081 0.086 0.082 0.079 0.079 0.077 11.97

52) I 1,4-difluorobenzene ----------ISTD----------

Initial Calibration Summary

Job Number: JC53316 **Sample:** VA8958-ICC8958
Account: HSWFLTAM HSW Engineering **Lab FileID:** A236273.D
Project: Long Island GW Sampling, Long Island, NJ

53) 1,2-dichloroethane-d4 (s)
0.453 0.464 0.449 0.439 0.427 0.461 0.413 0.459 0.456 0.450 0.447 3.63
54) benzene
1.292 1.042 1.312 1.290 1.223 1.247 1.166 1.224 1.316 1.108 1.222 7.50
55) iso-octane
1.337 0.960 1.463 1.455 1.478 1.205 1.434 1.077 1.393 1.311 14.35
56) tert-amyl methyl ether
1.155 0.977 1.202 1.161 1.108 1.071 1.067 1.079 1.196 1.113 6.55
57) heptane
0.239 0.176 0.259 0.255 0.248 0.195 0.238 0.250 0.233 13.09
58) isopropyl acetate
0.072 0.086 0.088 0.082 0.081 0.084 0.082 6.52
59) 1,2-dichloroethane
0.445 0.381 0.470 0.453 0.429 0.434 0.406 0.458 0.466 0.438 6.66
60) n-butyl alcohol
0.021 0.017 0.023 0.024 0.023 0.018 0.021 0.022 0.021 12.09
61) ethyl acrylate
0.403 0.339 0.439 0.466 0.440 0.334 0.440 0.435 0.412 12.02
62) trichloroethene
0.307 0.260 0.312 0.302 0.296 0.278 0.290 0.293 0.316 0.295 5.96
63) 2-nitropropane
0.147 0.134 0.157 0.161 0.154 0.147 0.158 0.151 6.14
64) methylcyclohexane
0.695 0.527 0.723 0.701 0.683 0.616 0.647 0.548 0.717 0.651 11.16
65) 2-chloroethyl vinyl ether
0.166 0.139 0.177 0.185 0.175 0.153 0.172 0.148 0.180 0.166 9.57
66) methyl methacrylate
0.073 0.087 0.091 0.089 0.091 0.086 0.086 7.56
67) 1,2-dichloropropane
0.338 0.262 0.348 0.341 0.328 0.319 0.318 0.312 0.340 0.323 8.01
68) dibromomethane
0.215 0.195 0.213 0.208 0.203 0.179 0.201 0.213 0.211 0.204 5.61
69) bromodichloromethane
0.401 0.339 0.420 0.422 0.404 0.365 0.396 0.347 0.417 0.390 8.19
70) epichlorohydrin
0.048 0.040 0.051 0.052 0.049 0.045 0.048 0.049 0.048 8.28
71) cis-1,3-dichloropropene
0.443 0.347 0.467 0.488 0.470 0.409 0.472 0.365 0.464 0.393 0.432 11.54
72) 4-methyl-2-pentanone
0.195 0.165 0.206 0.210 0.193 0.178 0.184 0.186 0.207 0.192 7.76
73) 3-methyl-1-butanol
0.037 0.030 0.042 0.042 0.039 0.033 0.036 0.041 0.038 11.86

74) I chlorobenzene-d5 ----------ISTD----------
75) toluene-d8 (s)
1.419 1.397 1.402 1.365 1.410 1.401 1.354 1.400 1.400 1.391 1.394 1.42
76) toluene
0.818 0.619 0.833 0.802 0.808 0.793 0.757 0.839 0.814 0.689 0.777 9.08
77) trans-1,3-dichloropropene
0.458 0.374 0.476 0.471 0.466 0.436 0.445 0.370 0.457 0.439 9.09
78) ethyl methacrylate
0.472 0.375 0.506 0.492 0.476 0.405 0.448 0.393 0.479 0.449 10.45
79) 1,1,2-trichloroethane
0.260 0.204 0.257 0.254 0.250 0.225 0.241 0.230 0.257 0.242 7.85
80) 2-hexanone
0.207 0.174 0.208 0.202 0.190 0.191 0.176 0.194 0.216 0.195 7.33
81) tetrachloroethene
0.339 0.298 0.364 0.350 0.355 0.359 0.343 0.323 0.362 0.344 6.28
82) 1,3-dichloropropane
0.486 0.381 0.495 0.495 0.486 0.453 0.461 0.457 0.497 0.468 7.88

Initial Calibration Summary

Job Number: JC53316 **Sample:** VA8958-ICC8958
Account: HSWFLTAM HSW Engineering **Lab FileID:** A236273.D
Project: Long Island GW Sampling, Long Island, NJ

83) butyl acetate
0.306 0.251 0.314 0.296 0.283 0.276 0.267 0.294 0.308 0.288 7.18
84) 3,3-dimethyl-1-butanol
0.102 0.082 0.117 0.110 0.110 0.088 0.097 0.113 0.108 0.103 11.70
85) dibromochloromethane
0.336 0.287 0.364 0.357 0.351 0.323 0.341 0.319 0.351 0.235 0.326 11.97
86) 1,2-dibromoethane
0.315 0.270 0.328 0.323 0.310 0.273 0.297 0.304 0.322 0.305 6.91
87) n-butyl ether
1.656 1.300 1.679 1.649 1.563 1.360 1.405 1.468 1.676 1.529 9.71
88) chlorobenzene
0.847 0.699 0.880 0.868 0.854 0.775 0.829 0.786 0.871 1.008 0.842 9.62
89) 1,1,1,2-tetrachloroethane
0.406 0.349 0.432 0.416 0.412 0.408 0.388 0.479 0.419 0.319 0.403 10.88
90) ethylbenzene
1.581 1.262 1.603 1.572 1.505 1.466 1.407 1.378 1.581 1.444 1.480 7.46
91) m,p-xylene
0.586 0.454 0.604 0.595 0.584 0.567 0.561 0.564 0.584 0.531 0.563 7.72
92) o-xylene
0.641 0.517 0.669 0.655 0.650 0.633 0.619 0.626 0.659 0.525 0.619 8.72
93) styrene
0.950 0.724 0.986 0.952 0.936 0.870 0.898 0.902 0.945 0.772 0.894 9.42
94) butyl acrylate
0.743 0.608 0.803 0.768 0.713 0.707 0.659 0.678 0.788 0.719 8.86
95) bromoform
0.270 0.228 0.286 0.279 0.272 0.239 0.261 0.256 0.282 0.264 7.52
96) isopropylbenzene
1.750 1.411 1.863 1.813 1.786 1.634 1.641 1.536 1.818 1.414 1.666 10.03
97) cis-1,4-dichloro-2-butene
0.182 0.146 0.186 0.183 0.176 0.148 0.165 0.169 0.169 9.18

98) I 1,4-dichlorobenzene-d ----------ISTD----------
99) 4-bromofluorobenzene (s)
0.844 0.846 0.841 0.851 0.856 0.834 0.835 0.836 0.846 0.850 0.844 0.88
100) bromobenzene
0.651 0.529 0.676 0.678 0.668 0.598 0.664 0.579 0.652 0.617 0.631 7.81
101) 1,1,2,2-tetrachloroethane
0.940 0.794 0.948 0.953 0.918 0.859 0.864 0.910 0.944 0.742 0.887 8.12
102) trans-1,4-dichloro-2-butene
0.231 0.248 0.236 0.223 0.202 0.249 0.231 7.53
103) 1,2,3-trichloropropane
0.241 0.201 0.244 0.246 0.230 0.202 0.221 0.276 0.244 0.234 10.07
104) n-propylbenzene
3.259 2.575 3.380 3.377 3.312 3.005 3.072 2.998 3.360 2.978 3.132 8.20
105) 2-chlorotoluene
0.668 0.523 0.690 0.708 0.713 0.595 0.702 0.636 0.691 0.658 9.69
106) 4-chlorotoluene
1.795 1.488 1.850 1.840 1.803 1.701 1.747 1.783 1.843 1.761 6.42
107) 1,3,5-trimethylbenzene
2.422 1.864 2.607 2.657 2.659 2.091 2.576 2.164 2.548 2.056 2.364 12.40
108) tert-butylbenzene
1.895 1.371 2.209 2.252 2.367 1.606 2.312 1.686 2.053 1.972 17.88
109) 1,2,4-trimethylbenzene
2.462 1.843 2.604 2.653 2.651 2.133 2.558 2.167 2.594 2.339 2.400 11.40
110) sec-butylbenzene
3.168 2.323 3.545 3.530 3.655 2.644 3.411 3.006 3.396 2.664 3.134 14.57
111) 1,3-dichlorobenzene
1.240 1.061 1.304 1.293 1.288 1.249 1.257 1.347 1.307 1.261 6.51
112) p-isopropyltoluene
2.634 2.025 2.940 2.976 3.009 2.255 2.876 2.277 2.857 2.650 13.99

Initial Calibration Summary

Job Number: JC53316 **Sample:** VA8958-ICC8958
Account: HSWFLTAM HSW Engineering **Lab FileID:** A236273.D
Project: Long Island GW Sampling, Long Island, NJ

```
113)  1,4-dichlorobenzene
       1.316 1.177 1.338 1.315 1.291 1.387 1.267 1.421 1.330        1.316    5.30
114)  1,2-dichlorobenzene
       1.403 1.177 1.421 1.387 1.385 1.384 1.344 1.323 1.407 1.300  1.353    5.38
115)  n-butylbenzene
       1.480 1.101 1.551 1.555 1.549 1.351 1.527 1.353 1.546 1.461  1.447   10.00
116)  1,2-dibromo-3-chloropropane
       0.296 0.225 0.316 0.310 0.307 0.311 0.295       0.301        0.295    9.91
117)  1,3,5-trichlorobenzene
       1.433 1.169 1.495 1.439 1.468 1.401 1.406 1.436 1.453        1.411    6.75
118)  2-ethylhexyl acrylate
                   0.925 0.957 1.062       1.080       0.766        0.958   13.17
119)  1,2,4-trichlorobenzene
       1.329 1.121 1.423 1.347 1.400 1.307 1.331 1.610 1.381        1.361    9.37
120)  hexachlorobutadiene
       0.567 0.480 0.663 0.649 0.713 0.519 0.704 0.624 0.624        0.616   12.97
121)  naphthalene
       3.828 3.140 4.255 4.042 4.036 3.817 3.613 4.238 4.185        3.906    9.19
122)  1,2,3-trichlorobenzene
       1.335 1.096 1.448 1.406 1.444 1.351 1.337 1.421 1.396        1.359    7.93
123)  hexachloroethane
       0.443 0.335 0.544 0.556 0.611       0.620       0.500        0.516   19.50
124)  2-methylnaphthalene
       1.994       2.656 2.673 2.842       2.604       2.464        2.539   11.55

125)     pentafluorobenzene(a) ----------------ISTD---------------------
126)  freon 142b
       0.875       0.983 1.051 1.018       1.066       1.007        1.000    6.84
127)  allyl chloride
       0.308 0.248 0.310 0.324 0.321 0.268 0.328       0.326        0.304    9.84
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MA8958.m          Thu Oct 19 15:49:21 2017   RPT1
```

Initial Calibration Verification

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: VA8958-ICV8958
Lab FileID: A236278.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\A236278.D Vial: 14
Acq On : 23 Sep 2017 4:22 am Operator: ChelseaS
Sample : icv8958-50 Inst : MSA
Misc : MS20266,VA8958,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MA8958.m (RTE Integrator)
Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
Last Update : Mon Sep 25 08:55:37 2017
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	105	0.00	7.82
2		ethanol		----------NA----------				
3	M	tertiary butyl alcohol	0.954	0.941	1.4	100	0.00	7.94
4		1,4-dioxane	0.051	0.056	-9.8	106	0.00	11.86
5	I	pentafluorobenzene	1.000	1.000	0.0	106	0.00	10.18
6	M	chlorodifluoromethane	0.841	0.699	16.9	75	0.00	4.20
7	M	dichlorodifluoromethane	0.927	0.991	-6.9	101	0.01	4.20
8	M	chloromethane	1.016	0.941	7.4	92	0.00	4.54
9	M	vinyl chloride	1.069	1.010	5.5	95	0.00	4.84
10		1,3-butadiene	0.578	0.668	-15.6	123	0.00	4.86
11	M	bromomethane	0.607	0.566	6.8	95	0.00	5.52
12	M	chloroethane	0.493	0.465	5.7	97	0.00	5.69
13		vinyl bromide	0.570	0.903	-58.4#	161	0.00	6.09
14	M	trichlorofluoromethane	0.975	0.924	5.2	95	0.00	6.24
15	M	ethyl ether	0.261	0.269	-3.1	102	0.00	6.67
16	M	acrolein	0.156	0.170	-9.0	110	0.00	6.91
17		freon 113	0.445	0.532	-19.6	121	0.00	7.11
18	M	1,1-dichloroethene	0.467	0.435	6.9	97	0.00	7.11
19	M	acetone	0.089	0.079	11.2	88	0.00	7.15
20	M	acetonitrile	0.138	0.060	56.5#	44#	0.00	7.60
21	M	iodomethane	0.940	0.926	1.5	99	0.00	7.39
22	M	carbon disulfide	1.891	1.737	8.1	99	0.00	7.53
23	M	methylene chloride	0.547	0.534	2.4	103	0.00	7.85
24	M	methyl acetate	0.641	0.587	8.4	91	0.00	7.66
25	M	methyl tert butyl ether	1.681	1.712	-1.8	104	0.00	8.25
26	M	trans-1,2-dichloroethene	0.485	0.473	2.5	102	0.00	8.27
27		hexane	0.637	0.492	22.8	75	0.00	8.63
28	M	di-isopropyl ether	1.786	1.804	-1.0	100	0.00	8.89
29	M	ethyl tert-butyl ether	1.705	1.730	-1.5	101	0.00	9.37
30	M	2-butanone	0.089	0.089	0.0	101	0.00	9.59
31	M	1,1-dichloroethane	0.918	0.909	1.0	101	0.00	8.86
32	M	chloroprene	0.748	0.772	-3.2	101	0.00	8.98
33	M	acrylonitrile	0.308	0.329	-6.8	107	0.00	8.20
34	M	vinyl acetate	0.095	0.099	-4.2	108	0.00	8.85
35	M	ethyl acetate	0.117	0.115	1.7	103	0.00	9.63
36	M	2,2-dichloropropane	0.791	0.767	3.0	98	0.00	9.65
37	M	cis-1,2-dichloroethene	0.537	0.539	-0.4	103	0.00	9.62
38		methyl acrylate	0.090	0.092	-2.2	104	0.00	9.71
39	M	propionitrile	0.139	0.130	6.5	93	0.00	9.68
40	M	bromochloromethane	0.276	0.272	1.4	100	0.00	9.94
41	M	tetrahydrofuran	0.300	0.318	-6.0	104	0.00	9.99

Initial Calibration Verification

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: VA8958-ICV8958
Lab FileID: A236278.D

42	M	chloroform	0.887	0.852	3.9	101	0.00	10.00
43		tert-butyl formate	0.287	0.327	-13.9	117	0.00	10.07
44	S	dibromofluoromethane (s)	0.567	0.563	0.7	104	0.00	10.20
45	M	methacrylonitrile	0.256	0.265	-3.5	101	0.00	9.88
46		cyclohexane	0.795	0.811	-2.0	99	0.00	10.38
47	M	1,1,1-trichloroethane	0.822	0.823	-0.1	99	0.00	10.29
48		iso-butyl alcohol	0.052	0.054	-3.8	100	0.00	10.44
49		1,1-dichloropropene	0.640	0.645	-0.8	99	0.00	10.47
50		carbon tetrachloride	0.721	0.734	-1.8	99	0.00	10.50
51		tert-amyl alcohol	0.077	0.080	-3.9	98	0.00	10.60
52	I	1,4-difluorobenzene	1.000	1.000	0.0	106	0.00	11.12
53	S	1,2-dichloroethane-d4 (s)	0.447	0.423	5.4	102	0.00	10.64
54	M	benzene	1.222	1.221	0.1	100	0.00	10.74
55	M	iso-octane	1.311	1.356	-3.4	99	0.00	10.78
56		tert-amyl methyl ether	1.113	1.106	0.6	101	0.00	10.80
57	M	heptane	0.233	0.250	-7.3	104	0.00	10.95
58	M	isopropyl acetate	0.082	0.083	-1.2	101	0.00	10.67
59	M	1,2-dichloroethane	0.438	0.434	0.9	102	0.00	10.73
60		n-butyl alcohol	0.021	0.023	-9.5	102	0.00	11.22
61		ethyl acrylate	0.412	0.440	-6.8	100	0.00	11.47
62	M	trichloroethene	0.295	0.295	0.0	104	0.00	11.47
63	M	2-nitropropane	0.151	0.155	-2.6	102	0.00	12.27
64	m	methylcyclohexane	0.651	0.612	6.0	93	0.00	11.74
65	M	2-chloroethyl vinyl ether	0.166	0.197	-18.7	113	0.00	12.30
66	M	methyl methacrylate	0.086	0.091	-5.8	106	0.00	11.76
67	M	1,2-dichloropropane	0.323	0.336	-4.0	104	0.00	11.75
68	M	dibromomethane	0.204	0.203	0.5	104	0.00	11.89
69	M	bromodichloromethane	0.390	0.405	-3.8	102	0.00	12.03
70		epichlorohydrin	0.048	0.051	-6.2	104	0.00	12.42
71	M	cis-1,3-dichloropropene	0.432	0.465	-7.6	101	0.00	12.53
72	M	4-methyl-2-pentanone	0.192	0.202	-5.2	102	0.00	12.65
73	M	3-methyl-1-butanol	0.038	0.039	-2.6	97	0.00	12.65
74	I	chlorobenzene-d5	1.000	1.000	0.0	106	0.00	14.51
75	S	toluene-d8 (s)	1.394	1.364	2.2	106	0.00	12.86
76		toluene	0.777	0.771	0.8	102	0.00	12.94
77		trans-1,3-dichloropropene	0.439	0.456	-3.9	102	0.00	13.13
78		ethyl methacrylate	0.449	0.459	-2.2	99	0.00	13.15
79		1,1,2-trichloroethane	0.242	0.253	-4.5	105	0.00	13.36
80		2-hexanone	0.195	0.192	1.5	100	0.00	13.57
81	M	tetrachloroethene	0.344	0.353	-2.6	107	0.00	13.58
82	M	1,3-dichloropropane	0.468	0.477	-1.9	102	0.00	13.57
83	M	butyl acetate	0.288	0.295	-2.4	105	0.00	13.66
84		3,3-dimethyl-1-butanol	0.103	0.103	0.0	99	0.00	13.75
85	M	dibromochloromethane	0.326	0.353	-8.3	104	0.00	13.85
86	M	1,2-dibromoethane	0.305	0.315	-3.3	103	0.00	14.02
87	M	n-butyl ether	1.529	1.521	0.5	97	0.00	14.49
88	M	chlorobenzene	0.842	0.845	-0.4	103	0.00	14.54
89	M	1,1,1,2-tetrachloroethane	0.403	0.405	-0.5	103	0.00	14.61
90	M	ethylbenzene	1.480	1.493	-0.9	100	0.00	14.62
91	M	m,p-xylene	0.563	0.578	-2.7	103	0.00	14.74
92	M	o-xylene	0.619	0.629	-1.6	101	0.00	15.21
93	M	styrene	0.894	0.929	-3.9	103	0.00	15.21
94		butyl acrylate	0.719	0.739	-2.8	102	0.00	15.01
95	M	bromoform	0.264	0.279	-5.7	106	0.00	15.48
96		isopropylbenzene	1.666	1.721	-3.3	100	0.00	15.60
97		cis-1,4-dichloro-2-butene	0.169	0.168	0.6	97	0.00	15.65
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	105	0.00	17.11

Initial Calibration Verification

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: VA8958-ICV8958
Lab FileID: A236278.D

99	S	4-bromofluorobenzene (s)	0.844	0.853	-1.1	105	0.00	15.80
100	M	bromobenzene	0.631	0.668	-5.9	103	0.00	16.02
101	M	1,1,2,2-tetrachloroethane	0.887	0.933	-5.2	102	0.00	15.90
102	M	trans-1,4-dichloro-2-bute	0.231	0.240	-3.9	106	0.00	15.96
103	M	1,2,3-trichloropropane	0.234	0.245	-4.7	104	0.00	15.99
104	M	n-propylbenzene	3.132	3.255	-3.9	101	0.00	16.06
105	M	2-chlorotoluene	0.658	0.690	-4.9	102	0.00	16.21
106	M	4-chlorotoluene	1.761	1.790	-1.6	102	0.00	16.32
107	M	1,3,5-trimethylbenzene	2.364	2.545	-7.7	100	0.00	16.22
108	M	tert-butylbenzene	1.972	2.223	-12.7	103	0.00	16.62
109	M	1,2,4-trimethylbenzene	2.400	2.566	-6.9	101	0.00	16.66
110	M	sec-butylbenzene	3.134	3.446	-10.0	102	0.00	16.86
111	M	1,3-dichlorobenzene	1.261	1.307	-3.6	106	0.00	17.05
112	M	p-isopropyltoluene	2.650	2.929	-10.5	103	0.00	17.00
113	M	1,4-dichlorobenzene	1.316	1.302	1.1	104	0.00	17.14
114	M	1,2-dichlorobenzene	1.353	1.399	-3.4	106	0.00	17.58
115	M	n-butylbenzene	1.447	1.507	-4.1	101	0.00	17.46
116	M	1,2-dibromo-3-chloropropa	0.295	0.307	-4.1	103	0.00	18.42
117	M	1,3,5-trichlorobenzene	1.411	1.487	-5.4	108	0.00	18.64
118		2-ethylhexyl acrylate	0.958	1.022	-6.7	112	0.00	19.35
119	M	1,2,4-trichlorobenzene	1.361	1.363	-0.1	106	0.00	19.37
120	M	hexachlorobutadiene	0.616	0.644	-4.5	104	0.00	19.52
121	M	naphthalene	3.906	4.009	-2.6	104	0.00	19.69
122	M	1,2,3-trichlorobenzene	1.359	1.397	-2.8	104	0.00	19.96
123	M	hexachloroethane	0.516	0.551	-6.8	104	0.00	17.89
124		2-methylnaphthalene	2.539	2.500	1.5	98	0.00	20.97

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

A236273.D MA8958.m Mon Sep 25 09:01:54 2017 RPT1

Initial Calibration Verification

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: VA8958-ICV8958
Lab FileID: A236279.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\A236279.D Vial: 15
Acq On : 23 Sep 2017 4:51 am Operator: ChelseaS
Sample : icv8958-50 Inst : MSA
Misc : MS20266,VA8958,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MA8958.m (RTE Integrator)
Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
Last Update : Mon Sep 25 08:55:37 2017
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	102	0.00	7.82
2		ethanol		----------NA----------				
3	M	tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	103	0.00	10.18
6	M	chlorodifluoromethane		----------NA----------				
7	M	dichlorodifluoromethane		----------NA----------				
8	M	chloromethane		----------NA----------				
9	M	vinyl chloride		----------NA----------				
10		1,3-butadiene		----------NA----------				
11	M	bromomethane		----------NA----------				
12	M	chloroethane		----------NA----------				
13		vinyl bromide		----------NA----------				
14	M	trichlorofluoromethane		----------NA----------				
15	M	ethyl ether		----------NA----------				
16	M	acrolein		----------NA----------				
17		freon 113		----------NA----------				
18	M	1,1-dichloroethene		----------NA----------				
19	M	acetone		----------NA----------				
20	M	acetonitrile	0.138	0.148	-7.2	105	0.00	7.60
21	M	iodomethane		----------NA----------				
22	M	carbon disulfide		----------NA----------				
23	M	methylene chloride		----------NA----------				
24	M	methyl acetate		----------NA----------				
25	M	methyl tert butyl ether		----------NA----------				
26	M	trans-1,2-dichloroethene		----------NA----------				
27		hexane		----------NA----------				
28	M	di-isopropyl ether		----------NA----------				
29	M	ethyl tert-butyl ether		----------NA----------				
30	M	2-butanone		----------NA----------				
31	M	1,1-dichloroethane		----------NA----------				
32	M	chloroprene		----------NA----------				
33	M	acrylonitrile		----------NA----------				
34	M	vinyl acetate		----------NA----------				
35	M	ethyl acetate		----------NA----------				
36	M	2,2-dichloropropane		----------NA----------				
37	M	cis-1,2-dichloroethene		----------NA----------				
38		methyl acrylate		----------NA----------				
39	M	propionitrile		----------NA----------				
40	M	bromochloromethane		----------NA----------				
41	M	tetrahydrofuran		----------NA----------				

Initial Calibration Verification

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: VA8958-ICV8958
Lab FileID: A236279.D

42	M	chloroform		----------NA----------				
43		tert-butyl formate		----------NA----------				
44	S	dibromofluoromethane (s)	0.567	0.561	1.1	101	0.00	10.20
45	M	methacrylonitrile		----------NA----------				
46		cyclohexane		----------NA----------				
47	M	1,1,1-trichloroethane		----------NA----------				
48		iso-butyl alcohol		----------NA----------				
49		1,1-dichloropropene		----------NA----------				
50		carbon tetrachloride		----------NA----------				
51		tert-amyl alcohol		----------NA----------				
52	I	1,4-difluorobenzene	1.000	1.000	0.0	98	0.00	11.12
53	S	1,2-dichloroethane-d4 (s)	0.447	0.434	2.9	97	0.00	10.64
54	M	benzene		----------NA----------				
55	M	iso-octane		----------NA----------				
56		tert-amyl methyl ether		----------NA----------				
57	M	heptane		----------NA----------				
58	M	isopropyl acetate		----------NA----------				
59	M	1,2-dichloroethane		----------NA----------				
60		n-butyl alcohol		----------NA----------				
61		ethyl acrylate		----------NA----------				
62	M	trichloroethene		----------NA----------				
63	M	2-nitropropane		----------NA----------				
64	m	methylcyclohexane		----------NA----------				
65	M	2-chloroethyl vinyl ether		----------NA----------				
66	M	methyl methacrylate		----------NA----------				
67	M	1,2-dichloropropane		----------NA----------				
68	M	dibromomethane		----------NA----------				
69	M	bromodichloromethane		----------NA----------				
70		epichlorohydrin		----------NA----------				
71	M	cis-1,3-dichloropropene		----------NA----------				
72	M	4-methyl-2-pentanone		----------NA----------				
73	M	3-methyl-1-butanol		----------NA----------				
74	I	chlorobenzene-d5	1.000	1.000	0.0	94	0.00	14.51
75	S	toluene-d8 (s)	1.394	1.365	2.1	94	0.00	12.86
76		toluene		----------NA----------				
77		trans-1,3-dichloropropene		----------NA----------				
78		ethyl methacrylate		----------NA----------				
79		1,1,2-trichloroethane		----------NA----------				
80		2-hexanone		----------NA----------				
81	M	tetrachloroethene		----------NA----------				
82	M	1,3-dichloropropane		----------NA----------				
83	M	butyl acetate		----------NA----------				
84		3,3-dimethyl-1-butanol		----------NA----------				
85	M	dibromochloromethane		----------NA----------				
86	M	1,2-dibromoethane		----------NA----------				
87	M	n-butyl ether		----------NA----------				
88	M	chlorobenzene		----------NA----------				
89	M	1,1,1,2-tetrachloroethane		----------NA----------				
90	M	ethylbenzene		----------NA----------				
91	M	m,p-xylene		----------NA----------				
92	M	o-xylene		----------NA----------				
93	M	styrene		----------NA----------				
94		butyl acrylate		----------NA----------				
95	M	bromoform		----------NA----------				
96		isopropylbenzene		----------NA----------				
97		cis-1,4-dichloro-2-butene		----------NA----------				
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	99	0.00	17.12

Initial Calibration Verification

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: VA8958-ICV8958
Lab FileID: A236279.D

99	S	4-bromofluorobenzene (s)	0.844	0.836	0.9	97	0.00	15.80
100	M	bromobenzene		----------NA----------				
101	M	1,1,2,2-tetrachloroethane		----------NA----------				
102	M	trans-1,4-dichloro-2-bute		----------NA----------				
103	M	1,2,3-trichloropropane		----------NA----------				
104	M	n-propylbenzene		----------NA----------				
105	M	2-chlorotoluene		----------NA----------				
106	M	4-chlorotoluene		----------NA----------				
107	M	1,3,5-trimethylbenzene		----------NA----------				
108	M	tert-butylbenzene		----------NA----------				
109	M	1,2,4-trimethylbenzene		----------NA----------				
110	M	sec-butylbenzene		----------NA----------				
111	M	1,3-dichlorobenzene		----------NA----------				
112	M	p-isopropyltoluene		----------NA----------				
113	M	1,4-dichlorobenzene		----------NA----------				
114	M	1,2-dichlorobenzene		----------NA----------				
115	M	n-butylbenzene		----------NA----------				
116	M	1,2-dibromo-3-chloropropa		----------NA----------				
117	M	1,3,5-trichlorobenzene		----------NA----------				
118		2-ethylhexyl acrylate		----------NA----------				
119	M	1,2,4-trichlorobenzene		----------NA----------				
120	M	hexachlorobutadiene		----------NA----------				
121	M	naphthalene		----------NA----------				
122	M	1,2,3-trichlorobenzene		----------NA----------				
123	M	hexachloroethane		----------NA----------				
124		2-methylnaphthalene		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
A236273.D MA8958.m Mon Sep 25 09:01:55 2017 RPT1

Continuing Calibration Summary

Job Number: JC53316
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NJ

Sample: VA8994-CC8958
Lab FileID: A237108.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\A\va8994part\a237108.d Vial: 3
Acq On : 18 Oct 2017 7:58 am Operator: Gabriela
Sample : cc8958-20 Inst : MSA
Misc : MS21013,VA8994,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MA8958.M (RTE Integrator)
Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
Last Update : Mon Sep 25 16:17:38 2017
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	125	0.00	7.81
2		ethanol		----------NA----------				
3	M	tertiary butyl alcohol	0.954	0.990	-3.8	123	-0.01	7.92
4		1,4-dioxane	0.051	0.051	0.0	118	0.00	11.86
5	I	pentafluorobenzene	1.000	1.000	0.0	120	0.00	10.18
6	M	chlorodifluoromethane	0.841	0.958	-13.9	126	0.00	4.20
7	M	dichlorodifluoromethane	0.927	1.059	-14.2	123	0.00	4.18
8	M	chloromethane	1.016	1.146	-12.8	125	-0.01	4.52
9	M	vinyl chloride	1.069	1.155	-8.0	124	0.00	4.84
10		1,3-butadiene	0.578	1.133	-96.0#	236#	0.00	4.87
11	M	bromomethane	0.607	0.701	-15.5	129	0.00	5.52
12	M	chloroethane	0.493	0.556	-12.8	124	0.00	5.70
13		vinyl bromide	0.570	0.666	-16.8	132	0.00	6.10
14	M	trichlorofluoromethane	0.975	0.969	0.6	111	0.00	6.25
15	M	ethyl ether	0.261	0.299	-14.6	123	0.00	6.67
16	M	acrolein	0.156	0.164	-5.1	116	0.00	6.91
17		freon 113	0.445	0.435	2.2	110	0.00	7.11
18	M	1,1-dichloroethene	0.467	0.469	-0.4	107	0.00	7.11
19	M	acetone	0.089	0.089	0.0	112	0.00	7.15
20	M	acetonitrile	0.138	0.158	-14.5	130	0.00	7.62
21	M	iodomethane	0.940	0.969	-3.1	112	0.00	7.39
22	M	carbon disulfide	1.891	1.834	3.0	114	0.00	7.53
23	M	methylene chloride	0.547	0.574	-4.9	117	0.00	7.86
24	M	methyl acetate	0.641	0.744	-16.1	128	0.00	7.66
25	M	methyl tert butyl ether	1.681	1.835	-9.2	121	-0.01	8.24
26	M	trans-1,2-dichloroethene	0.485	0.500	-3.1	118	0.00	8.26
27		hexane	0.637	0.655	-2.8	110	0.00	8.63
28	M	di-isopropyl ether	1.786	1.972	-10.4	119	0.00	8.88
29	M	ethyl tert-butyl ether	1.705	1.798	-5.5	117	0.00	9.36
30	M	2-butanone	0.089	0.095	-6.7	124	0.00	9.58
31	M	1,1-dichloroethane	0.918	1.006	-9.6	122	0.00	8.86
32	M	chloroprene	0.748	0.788	-5.3	114	0.00	8.99
33	M	acrylonitrile	0.308	0.348	-13.0	125	0.00	8.20
34	M	vinyl acetate	0.095	0.097	-2.1	121	0.00	8.86
35	M	ethyl acetate	0.117	0.123	-5.1	129	0.00	9.61
36	M	2,2-dichloropropane	0.791	0.893	-12.9	125	0.00	9.65
37	M	cis-1,2-dichloroethene	0.537	0.593	-10.4	120	0.00	9.62
38		methyl acrylate	0.090	0.098	-8.9	128	0.00	9.70
39	M	propionitrile	0.139	0.153	-10.1	125	0.00	9.68
40	M	bromochloromethane	0.276	0.290	-5.1	122	0.00	9.94
41	M	tetrahydrofuran	0.300	0.318	-6.0	118	0.00	9.99

Continuing Calibration Summary

Job Number: JC53316 **Sample:** VA8994-CC8958
Account: HSWFLTAM HSW Engineering **Lab FileID:** A237108.D
Project: Long Island GW Sampling, Long Island, NJ

42	M	chloroform	0.887	0.940	-6.0	121	0.00	10.00
43		tert-butyl formate	0.287	0.142	50.5#	59	0.00	10.07
44	S	dibromofluoromethane (s)	0.567	0.581	-2.5	122	0.00	10.20
45	M	methacrylonitrile	0.256	0.290	-13.3	126	0.00	9.87
46		cyclohexane	0.795	0.833	-4.8	112	0.00	10.38
47	M	1,1,1-trichloroethane	0.822	0.864	-5.1	114	0.00	10.29
48		iso-butyl alcohol	0.052	0.053	-1.9	112	0.00	10.45
49		1,1-dichloropropene	0.640	0.679	-6.1	118	0.00	10.47
50		carbon tetrachloride	0.721	0.759	-5.3	114	0.00	10.50
51		tert-amyl alcohol	0.077	0.082	-6.5	121	0.00	10.60
52	I	1,4-difluorobenzene	1.000	1.000	0.0	124	0.00	11.11
53	S	1,2-dichloroethane-d4 (s)	0.447	0.456	-2.0	126	0.00	10.64
54	M	benzene	1.222	1.292	-5.7	122	0.00	10.74
55	M	iso-octane	1.311	1.231	6.1	105	0.00	10.78
56		tert-amyl methyl ether	1.113	1.151	-3.4	119	0.00	10.80
57	M	heptane	0.233	0.236	-1.3	113	0.00	10.95
58	M	isopropyl acetate	0.082	0.087	-6.1	126	0.00	10.67
59	M	1,2-dichloroethane	0.438	0.475	-8.4	126	0.00	10.73
60		n-butyl alcohol	0.021	0.024	-14.3	126	0.00	11.21
61		ethyl acrylate	0.412	0.454	-10.2	128	0.00	11.48
62	M	trichloroethene	0.295	0.301	-2.0	120	0.00	11.47
63	M	2-nitropropane	0.151	0.150	0.7	118	0.00	12.26
64	m	methylcyclohexane	0.651	0.643	1.2	110	0.00	11.73
65	M	2-chloroethyl vinyl ether	0.166	0.120	27.7#	85	0.00	12.30
66	M	methyl methacrylate	0.086	0.090	-4.7	129	0.00	11.76
67	M	1,2-dichloropropane	0.323	0.348	-7.7	124	0.00	11.74
68	M	dibromomethane	0.204	0.219	-7.4	128	0.00	11.89
69	M	bromodichloromethane	0.390	0.428	-9.7	127	0.00	12.03
70		epichlorohydrin	0.048	0.053	-10.4	130	0.00	12.41
71	M	cis-1,3-dichloropropene	0.432	0.468	-8.3	124	0.00	12.53
72	M	4-methyl-2-pentanone	0.192	0.225	-17.2	136	0.00	12.65
73	M	3-methyl-1-butanol	0.038	0.043	-13.2	128	0.00	12.64
74	I	chlorobenzene-d5	1.000	1.000	0.0	133	0.00	14.51
75	S	toluene-d8 (s)	1.394	1.359	2.5	128	0.00	12.86
76		toluene	0.777	0.789	-1.5	126	0.00	12.93
77		trans-1,3-dichloropropene	0.439	0.447	-1.8	124	0.00	13.13
78		ethyl methacrylate	0.449	0.489	-8.9	128	0.00	13.14
79		1,1,2-trichloroethane	0.242	0.263	-8.7	135	0.00	13.36
80		2-hexanone	0.195	0.213	-9.2	135	0.00	13.57
81	M	tetrachloroethene	0.344	0.324	5.8	118	0.00	13.57
82	M	1,3-dichloropropane	0.468	0.503	-7.5	135	0.00	13.56
83	M	butyl acetate	0.288	0.312	-8.3	132	0.00	13.66
84		3,3-dimethyl-1-butanol	0.103	0.107	-3.9	122	0.00	13.75
85	M	dibromochloromethane	0.326	0.341	-4.6	124	0.00	13.84
86	M	1,2-dibromoethane	0.305	0.322	-5.6	130	0.00	14.02
87	M	n-butyl ether	1.529	1.613	-5.5	127	0.00	14.48
88	M	chlorobenzene	0.842	0.856	-1.7	129	0.00	14.55
89	M	1,1,1,2-tetrachloroethane	0.403	0.399	1.0	122	0.00	14.61
90	M	ethylbenzene	1.480	1.548	-4.6	128	0.00	14.62
91	M	m,p-xylene	0.563	0.584	-3.7	128	0.00	14.74
92	M	o-xylene	0.619	0.651	-5.2	129	0.00	15.20
93	M	styrene	0.894	0.935	-4.6	126	0.00	15.21
94		butyl acrylate	0.719	0.780	-8.5	129	0.00	15.01
95	M	bromoform	0.264	0.253	4.2	117	0.00	15.48
96		isopropylbenzene	1.666	1.728	-3.7	123	0.00	15.59
97		cis-1,4-dichloro-2-butene	0.169	0.083	50.9#	59	0.00	15.64
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	131	0.00	17.11

Continuing Calibration Summary

Job Number: JC53316 **Sample:** VA8994-CC8958
Account: HSWFLTAM HSW Engineering **Lab FileID:** A237108.D
Project: Long Island GW Sampling, Long Island, NJ

99	S	4-bromofluorobenzene (s)	0.844	0.833	1.3	130	0.00	15.80
100	M	bromobenzene	0.631	0.657	-4.1	127	0.00	16.03
101	M	1,1,2,2-tetrachloroethane	0.887	0.995	-12.2	137	0.00	15.90
102	M	trans-1,4-dichloro-2-bute	0.231	0.127	45.0#	67	0.00	15.95
103	M	1,2,3-trichloropropane	0.234	0.246	-5.1	132	0.00	15.99
104	M	n-propylbenzene	3.132	3.287	-4.9	127	0.00	16.05
105	M	2-chlorotoluene	0.658	0.655	0.5	124	0.00	16.20
106	M	4-chlorotoluene	1.761	1.828	-3.8	129	0.00	16.32
107	M	1,3,5-trimethylbenzene	2.364	2.501	-5.8	126	0.00	16.22
108	M	tert-butylbenzene	1.972	2.000	-1.4	119	0.00	16.62
109	M	1,2,4-trimethylbenzene	2.400	2.574	-7.2	129	0.00	16.66
110	M	sec-butylbenzene	3.134	3.282	-4.7	121	0.00	16.86
111	M	1,3-dichlorobenzene	1.261	1.282	-1.7	129	0.00	17.05
112	M	p-isopropyltoluene	2.650	2.738	-3.3	122	0.00	16.99
113	M	1,4-dichlorobenzene	1.316	1.327	-0.8	130	0.00	17.14
114	M	1,2-dichlorobenzene	1.353	1.403	-3.7	129	0.00	17.58
115	M	n-butylbenzene	1.447	1.428	1.3	121	0.00	17.45
116	M	1,2-dibromo-3-chloropropa	0.295	0.288	2.4	120	0.00	18.42
117	M	1,3,5-trichlorobenzene	1.411	1.375	2.6	121	0.00	18.64
118		2-ethylhexyl acrylate	0.958	0.770	19.6	109	0.00	19.35
119	M	1,2,4-trichlorobenzene	1.361	1.312	3.6	121	0.00	19.36
120	M	hexachlorobutadiene	0.616	0.575	6.7	114	0.00	19.51
121	M	naphthalene	3.906	3.933	-0.7	121	0.00	19.68
122	M	1,2,3-trichlorobenzene	1.359	1.307	3.8	118	0.00	19.95
123	M	hexachloroethane	0.516	0.491	4.8	118	0.00	17.88
124		2-methylnaphthalene	2.539	2.234	12.0	110	0.00	20.97

(#) = Out of Range SPCC's out = 0 CCC's out = 0
A236272.D MA8958.M Wed Oct 18 12:29:11 2017 11

MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A237117.D
Acq On : 18 Oct 2017 12:43 pm
Operator : Gabriela
Sample : jc53316-1
Misc : MS21269,VA8994,5,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 18 14:43:15 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.M
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 16:17:38 2017
Response via : Initial Calibration

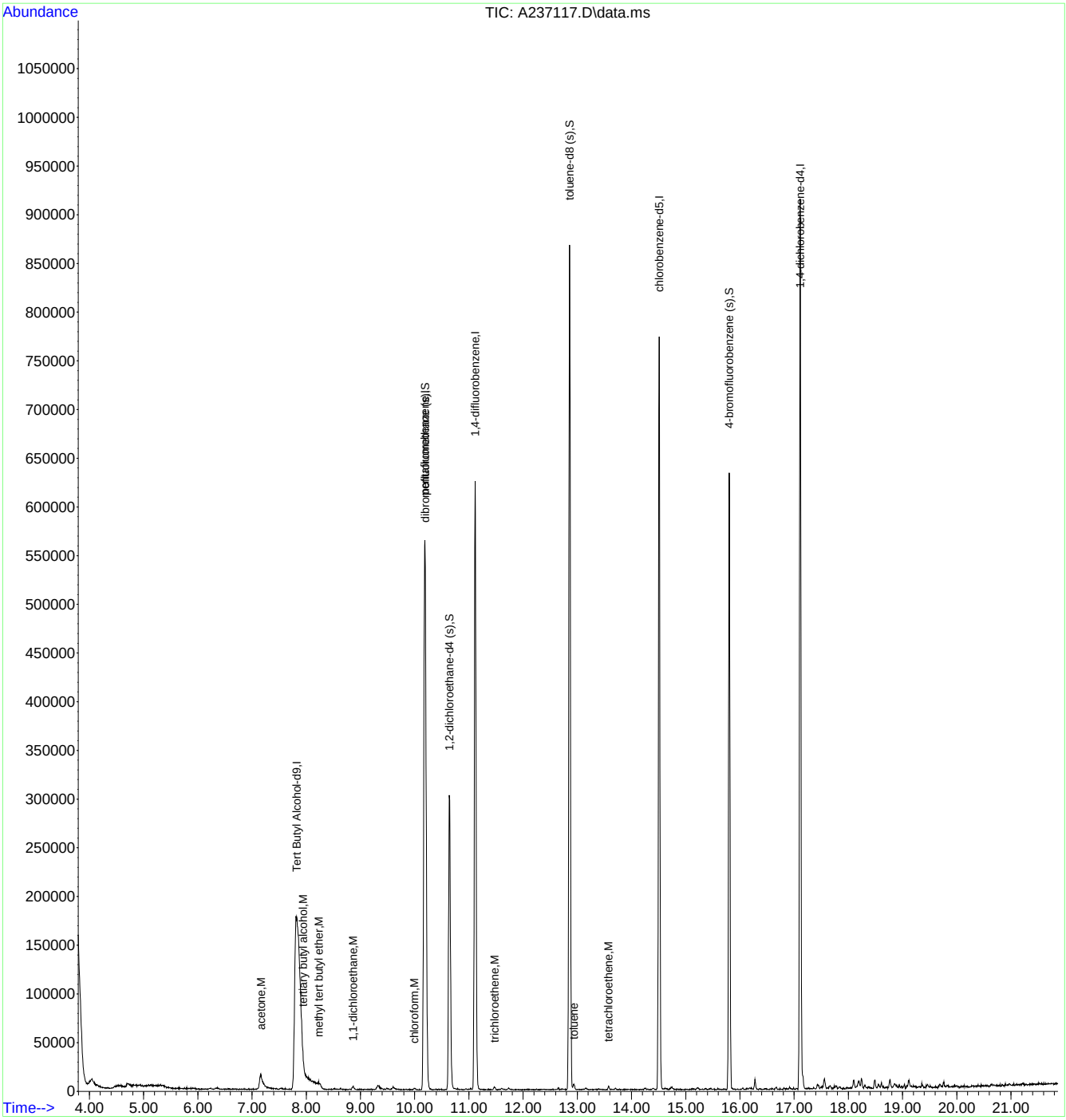
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.815	65	799232	500.00	ug/L		0.00
5) pentafluorobenzene	10.184	168	380217	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.115	114	569354	50.00	ug/L		0.00
74) chlorobenzene-d5	14.510	117	460702	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.109	152	261383	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.200	113	216619	50.21	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.42%				
53) 1,2-dichloroethane-d4 (s)	10.639	65	255535	50.20	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.40%				
75) toluene-d8 (s)	12.857	98	630817	49.12	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.24%				
99) 4-bromofluorobenzene (s)	15.801	95	222895	50.52	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.04%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.946	59	10943	7.18	ug/L		92
19) acetone	7.166	58	14127	20.97	ug/L		90
25) methyl tert butyl ether	8.228	73	3954	0.31	ug/L		79
31) 1,1-dichloroethane	8.866	63	4576	0.66	ug/L		95
42) chloroform	9.991	83	1398	0.21	ug/L		87
62) trichloroethene	11.471	95	1397	0.42	ug/L		86
76) toluene	12.935	92	2939	0.41	ug/L	#	82
81) tetrachloroethene	13.579	166	1333	0.42	ug/L	#	63

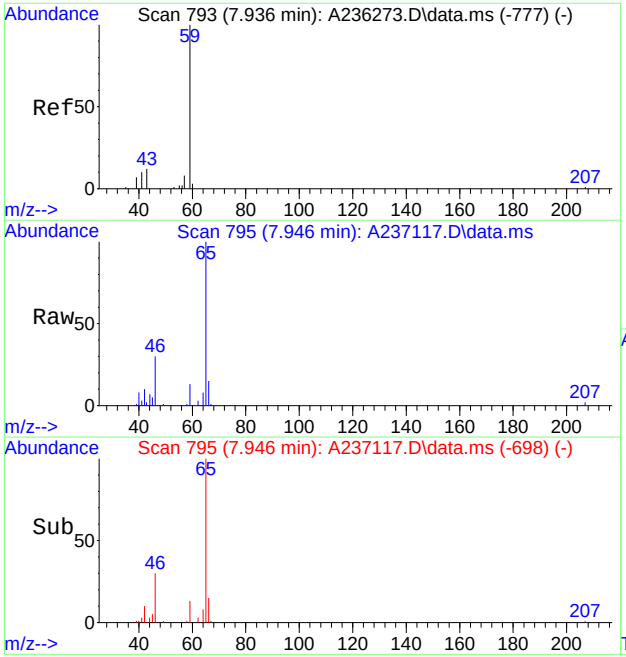
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A237117.D
Acq On : 18 Oct 2017 12:43 pm
Operator : Gabriela
Sample : jc53316-1
Misc : MS21269,VA8994,5,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 18 14:43:15 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.M
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 16:17:38 2017
Response via : Initial Calibration

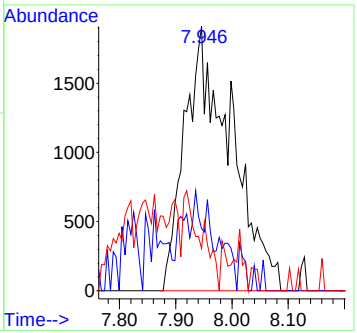


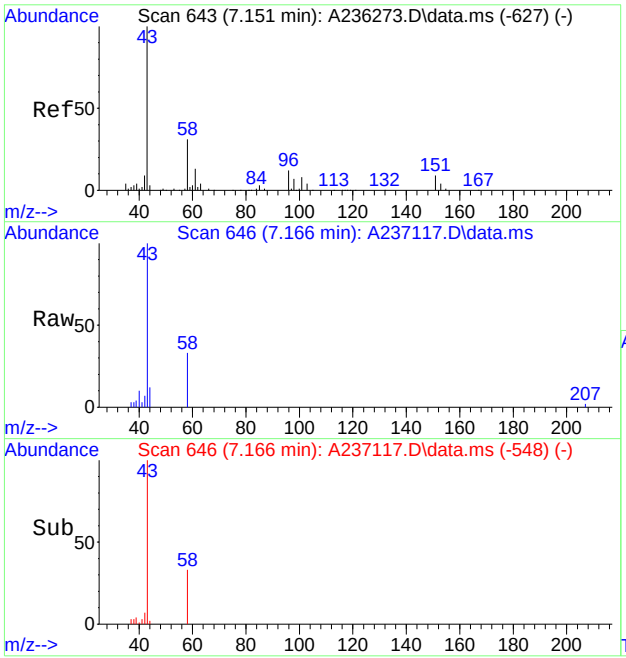


#3
tertiary butyl alcohol
Concen: 7.18 ug/L
RT: 7.946 min Scan# 795
Delta R.T. 0.010 min
Lab File: A237117.D
Acq: 18 Oct 2017 12:43 pm

Tgt Ion: 59 Resp: 10943

Ion	Ratio	Lower	Upper
59	100		
41	23.5	0.0	59.8
43	16.0	0.0	45.5

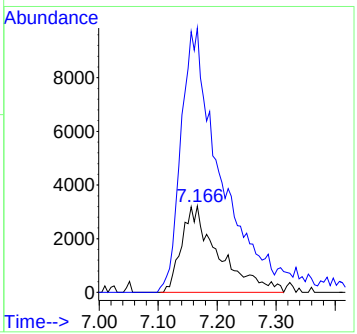


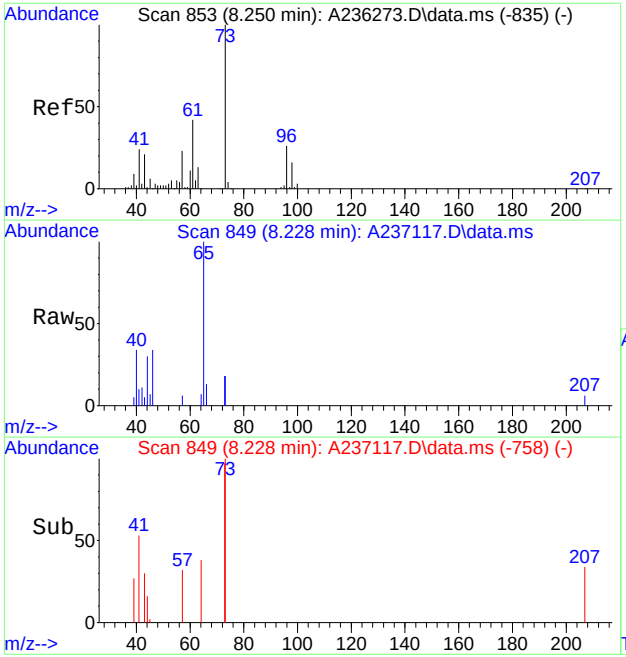


#19
acetone
Concen: 20.97 ug/L
RT: 7.166 min Scan# 646
Delta R.T. 0.015 min
Lab File: A237117.D
Acq: 18 Oct 2017 12:43 pm

Tgt Ion: 58 Resp: 14127

Ion	Ratio	Lower	Upper
58	100		
43	306.3	297.6	357.6

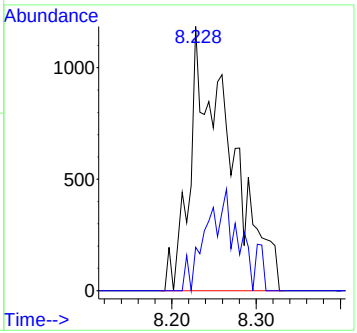


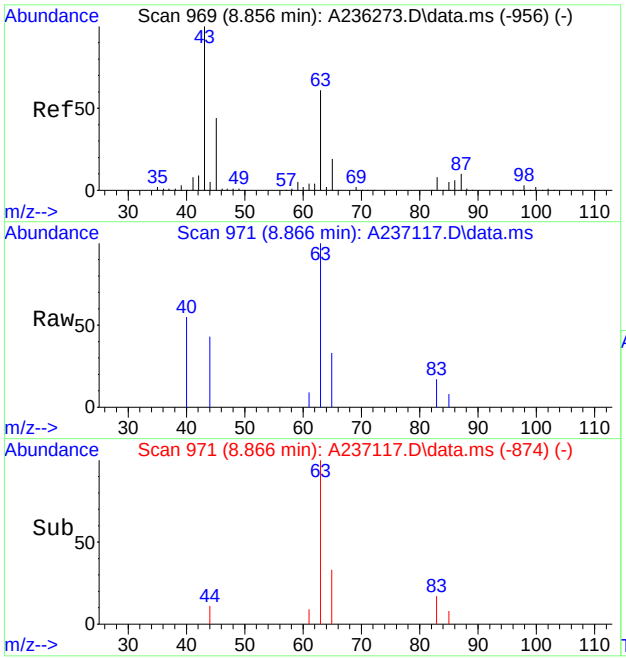


#25
methyl tert butyl ether
Concen: 0.31 ug/L
RT: 8.228 min Scan# 849
Delta R.T. -0.022 min
Lab File: A237117.D
Acq: 18 Oct 2017 12:43 pm

Tgt Ion: 73 Resp: 3954

Ion	Ratio	Lower	Upper
73	100		
57	13.6	0.0	54.2

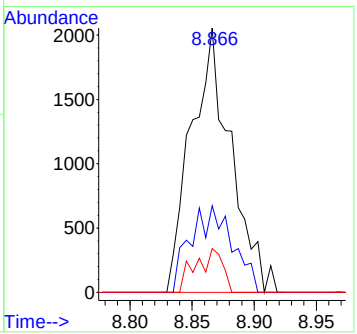


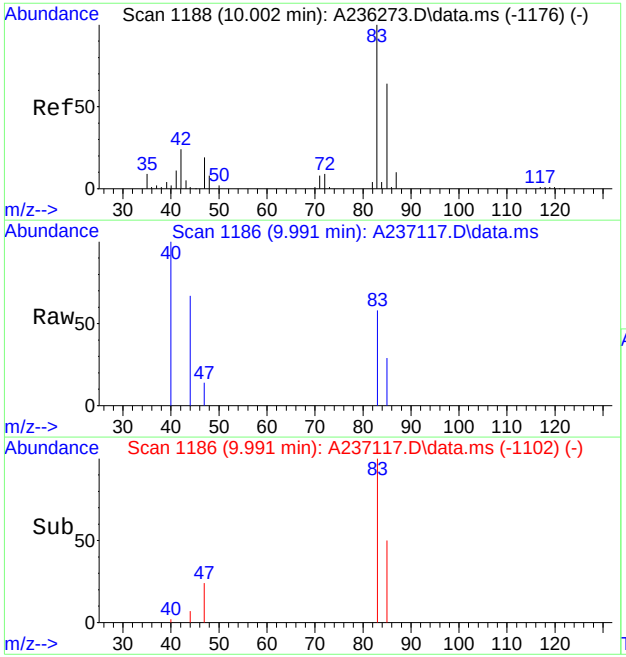


#31
1,1-dichloroethane
Concen: 0.66 ug/L
RT: 8.866 min Scan# 971
Delta R.T. 0.010 min
Lab File: A237117.D
Acq: 18 Oct 2017 12:43 pm

Tgt Ion: 63 Resp: 4576

Ion	Ratio	Lower	Upper
63	100		
65	32.7	1.2	61.2
83	16.5	0.0	42.3

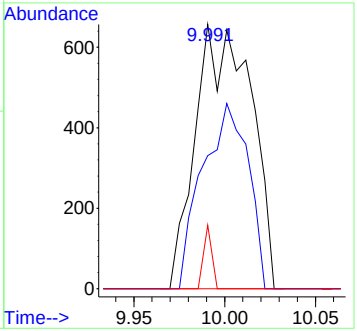


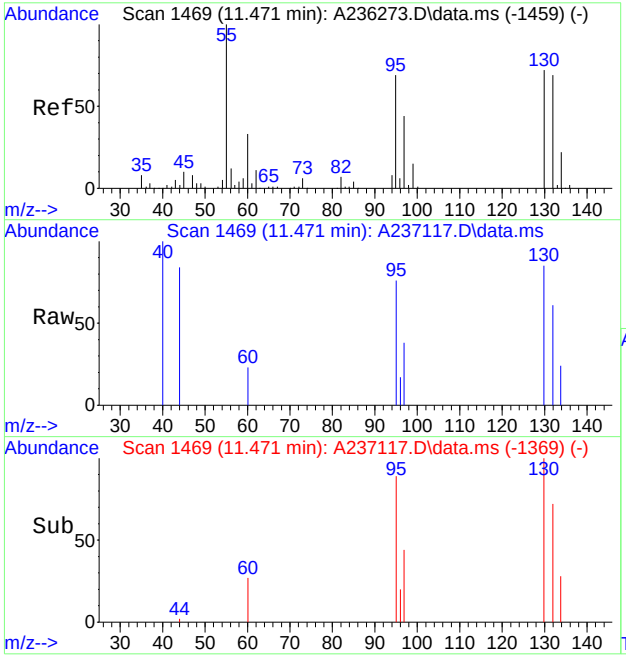


#42
chloroform
Concen: 0.21 ug/L
RT: 9.991 min Scan# 1186
Delta R.T. -0.011 min
Lab File: A237117.D
Acq: 18 Oct 2017 12:43 pm

Tgt Ion: 83 Resp: 1398

Ion	Ratio	Lower	Upper
83	100		
85	50.4	34.1	94.1
47	24.0	0.0	54.7

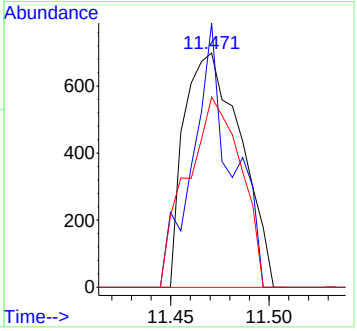


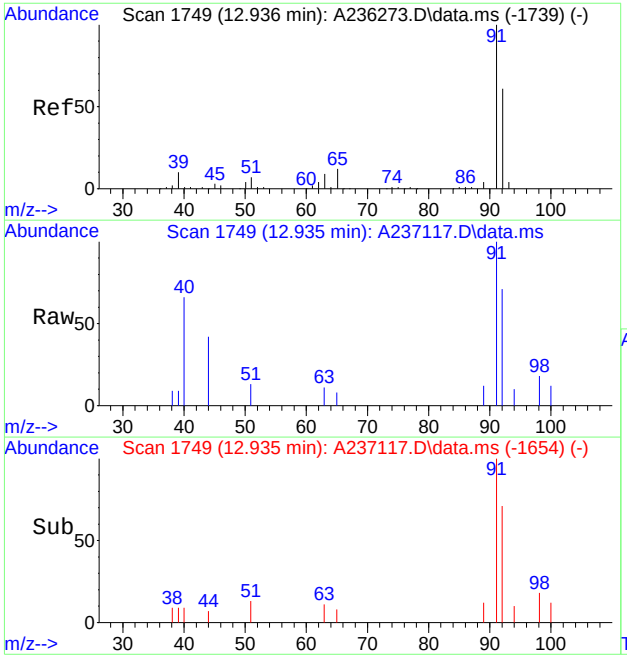


#62
trichloroethene
Concen: 0.42 ug/L
RT: 11.471 min Scan# 1469
Delta R.T. -0.001 min
Lab File: A237117.D
Acq: 18 Oct 2017 12:43 pm

Tgt Ion: 95 Resp: 1397

Ion	Ratio	Lower	Upper
95	100		
130	112.9	73.4	133.4
132	81.2	69.4	129.4

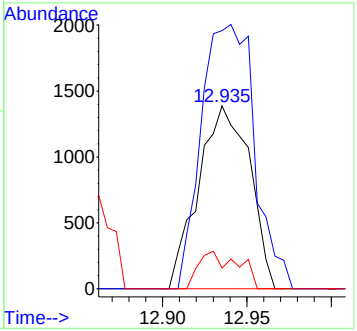


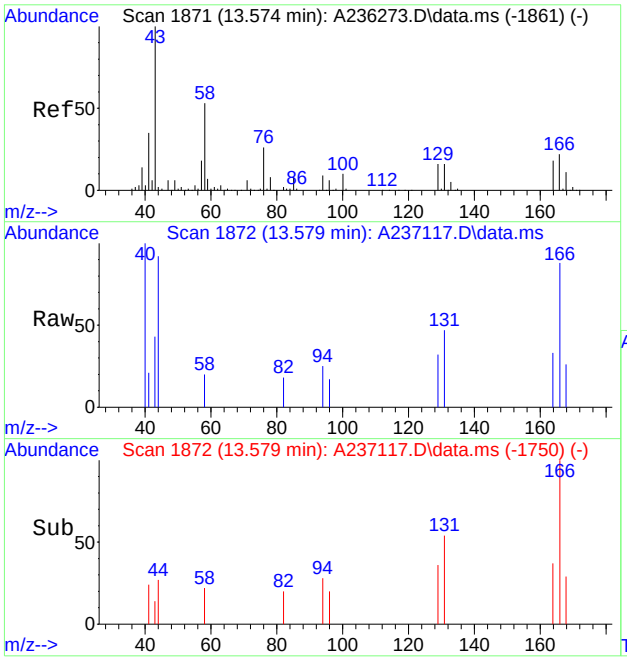


#76
toluene
Concen: 0.41 ug/L
RT: 12.935 min Scan# 1749
Delta R.T. -0.001 min
Lab File: A237117.D
Acq: 18 Oct 2017 12:43 pm

Tgt Ion: 92 Resp: 2939

Ion	Ratio	Lower	Upper
92	100		
91	141.2	144.7	184.7#
65	11.3	0.0	40.0

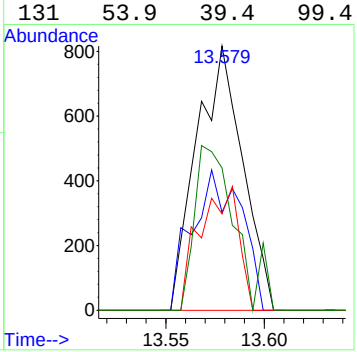




#81
tetrachloroethene
Concen: 0.42 ug/L
RT: 13.579 min Scan# 1872
Delta R.T. 0.005 min
Lab File: A237117.D
Acq: 18 Oct 2017 12:43 pm

Tgt Ion:166 Resp: 1333

Ion	Ratio	Lower	Upper
166	100		
164	37.1	49.6	109.6#
129	36.5	39.6	99.6#
131	53.9	39.4	99.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A237118.D
Acq On : 18 Oct 2017 1:13 pm
Operator : Gabriela
Sample : jc53316-2
Misc : MS21269,VA8994,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 18 14:44:35 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 16:17:38 2017
Response via : Initial Calibration

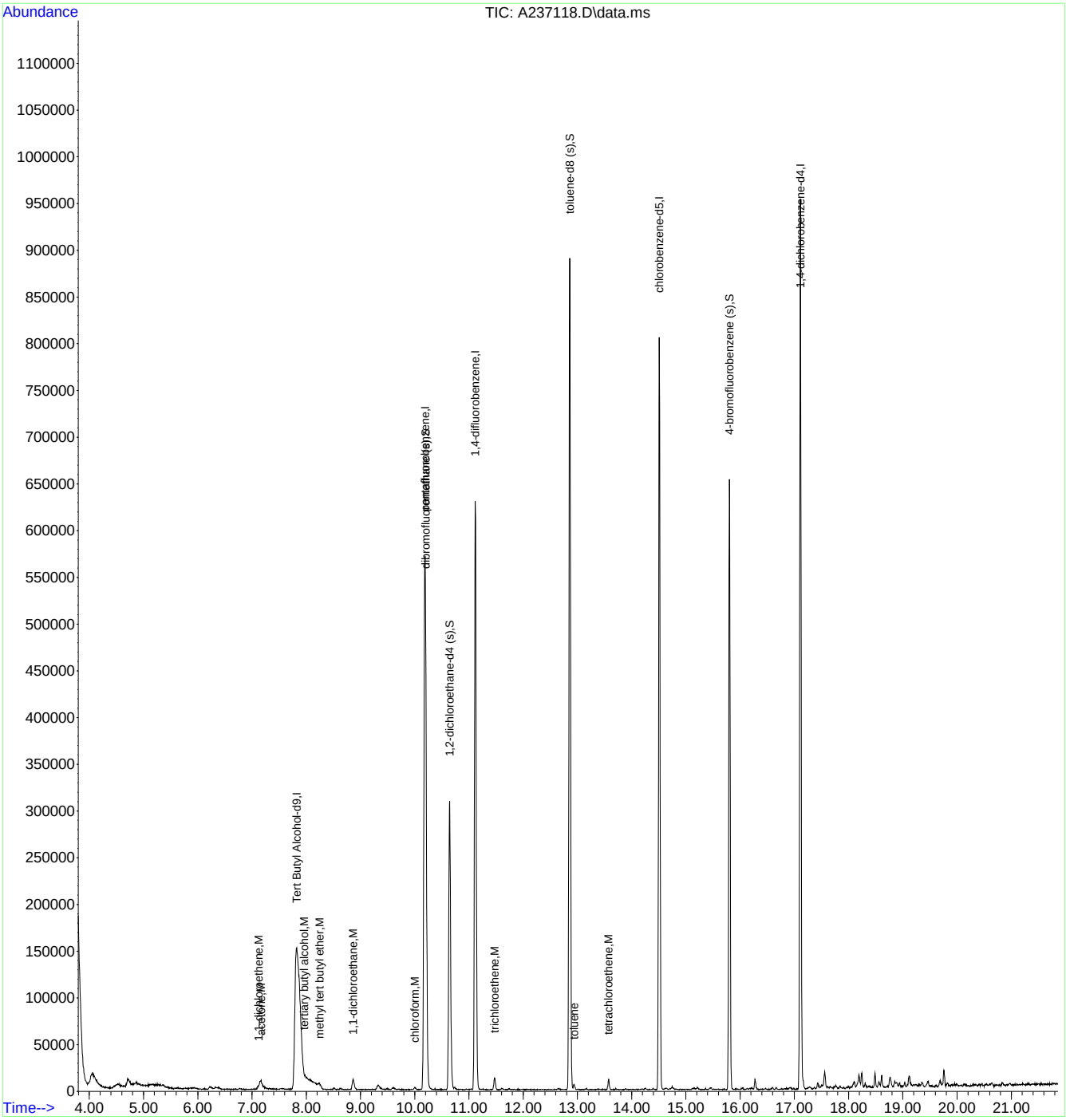
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.826	65	658363	500.00	ug/L	0.01
5) pentafluorobenzene	10.184	168	386384	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.115	114	584686	50.00	ug/L	0.00
74) chlorobenzene-d5	14.510	117	474386	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.109	152	272134	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.205	113	221174	50.45	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.90%			
53) 1,2-dichloroethane-d4 (s)	10.639	65	262997	50.31	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.62%			
75) toluene-d8 (s)	12.857	98	648906	49.07	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.14%			
99) 4-bromofluorobenzene (s)	15.802	95	231184	50.33	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.66%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	7.967	59	9778	7.78	ug/L	82
18) 1,1-dichloroethene	7.120	96	2842	0.79	ug/L #	49
19) acetone	7.172	58	6790	9.92	ug/L #	60
25) methyl tert butyl ether	8.244	73	3418	0.26	ug/L	75
31) 1,1-dichloroethane	8.861	63	14892	2.10	ug/L	94
42) chloroform	10.001	83	2706	0.39	ug/L	91
62) trichloroethene	11.466	95	5178	1.50	ug/L	78
76) toluene	12.941	92	2602	0.35	ug/L	92
81) tetrachloroethene	13.574	166	3407	1.04	ug/L	87

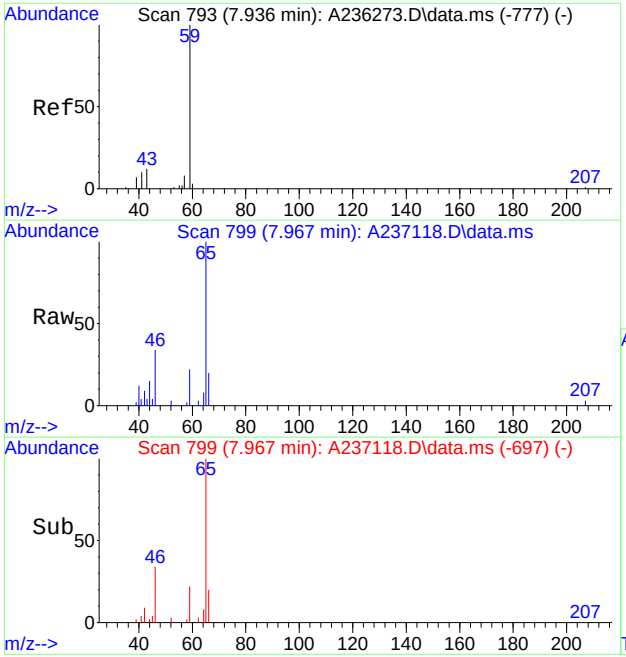
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A237118.D
Acq On : 18 Oct 2017 1:13 pm
Operator : Gabriela
Sample : jc53316-2
Misc : MS21269,VA8994,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 18 14:44:35 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 16:17:38 2017
Response via : Initial Calibration

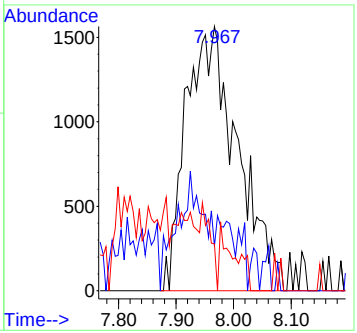


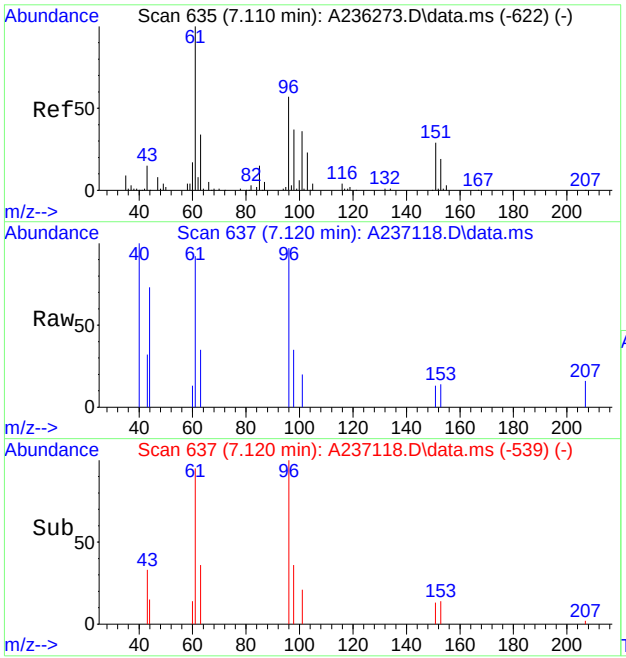


#3
tertiary butyl alcohol
Concen: 7.78 ug/L
RT: 7.967 min Scan# 799
Delta R.T. 0.031 min
Lab File: A237118.D
Acq: 18 Oct 2017 1:13 pm

Tgt Ion: 59 Resp: 9778

Ion	Ratio	Lower	Upper
59	100		
41	16.9	0.0	59.8
43	17.7	0.0	45.5

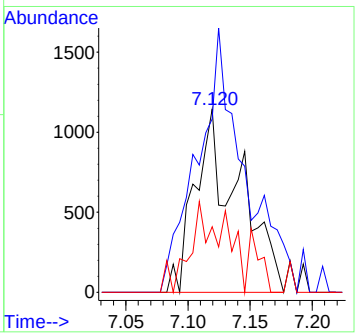


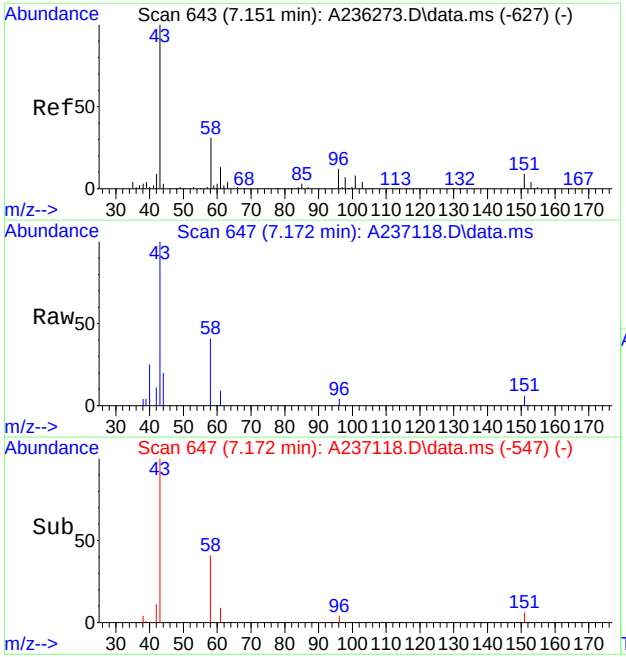


#18
1,1-dichloroethene
Concen: 0.79 ug/L
RT: 7.120 min Scan# 637
Delta R.T. 0.010 min
Lab File: A237118.D
Acq: 18 Oct 2017 1:13 pm

Tgt Ion: 96 Resp: 2842

Ion	Ratio	Lower	Upper
96	100		
61	94.6	144.0	204.0#
63	35.7	28.8	88.8

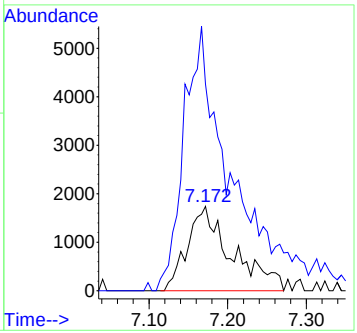


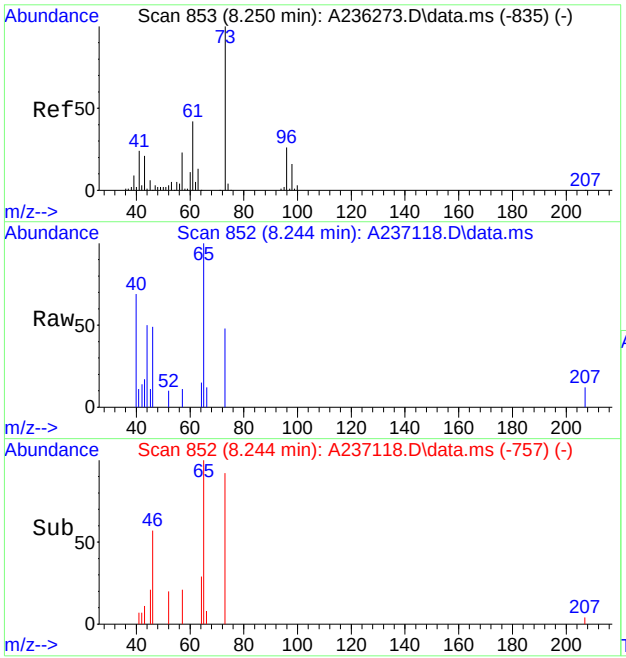


#19
acetone
Concen: 9.92 ug/L
RT: 7.172 min Scan# 647
Delta R.T. 0.020 min
Lab File: A237118.D
Acq: 18 Oct 2017 1:13 pm

Tgt Ion: 58 Resp: 6790

Ion	Ratio	Lower	Upper
58	100		
43	244.7	297.6	357.6#

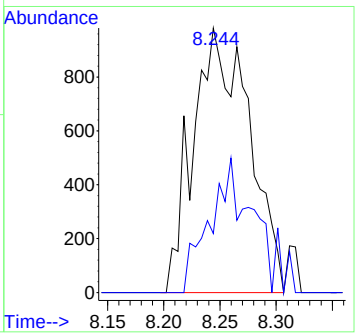


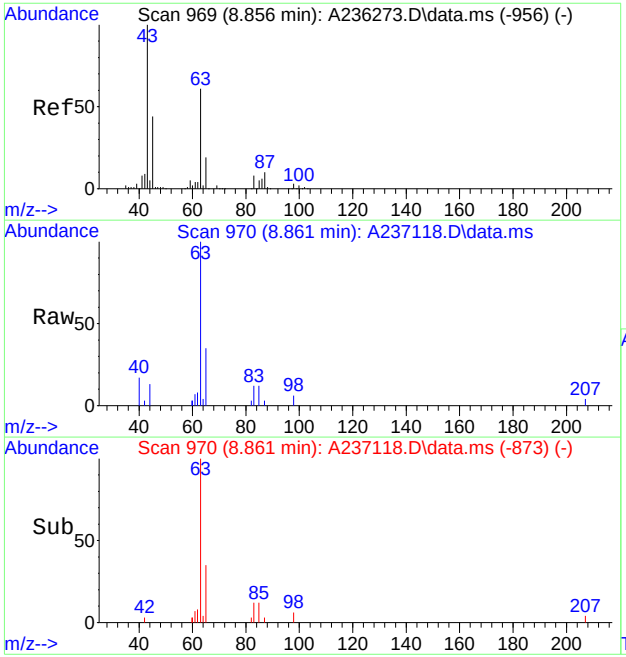


#25
methyl tert butyl ether
Concen: 0.26 ug/L
RT: 8.244 min Scan# 852
Delta R.T. -0.006 min
Lab File: A237118.D
Acq: 18 Oct 2017 1:13 pm

Tgt Ion: 73 Resp: 3418

Ion	Ratio	Lower	Upper
73	100		
57	36.8	0.0	54.2

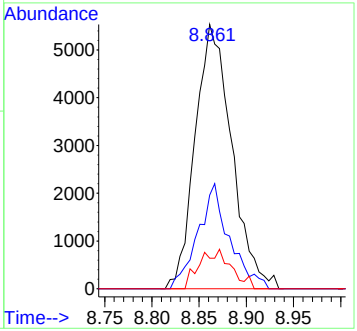


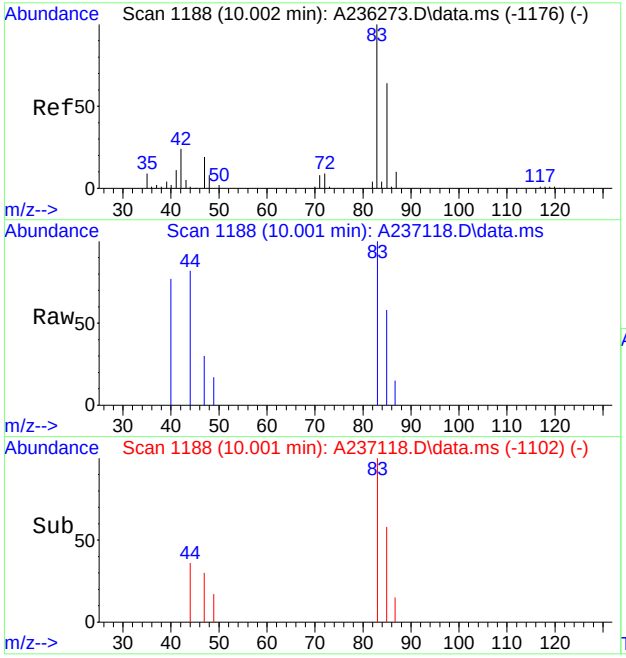


#31
1,1-dichloroethane
Concen: 2.10 ug/L
RT: 8.861 min Scan# 970
Delta R.T. 0.005 min
Lab File: A237118.D
Acq: 18 Oct 2017 1:13 pm

Tgt Ion: 63 Resp: 14892

Ion	Ratio	Lower	Upper
63	100		
65	35.4	1.2	61.2
83	11.6	0.0	42.3

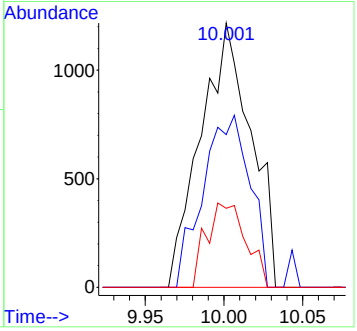


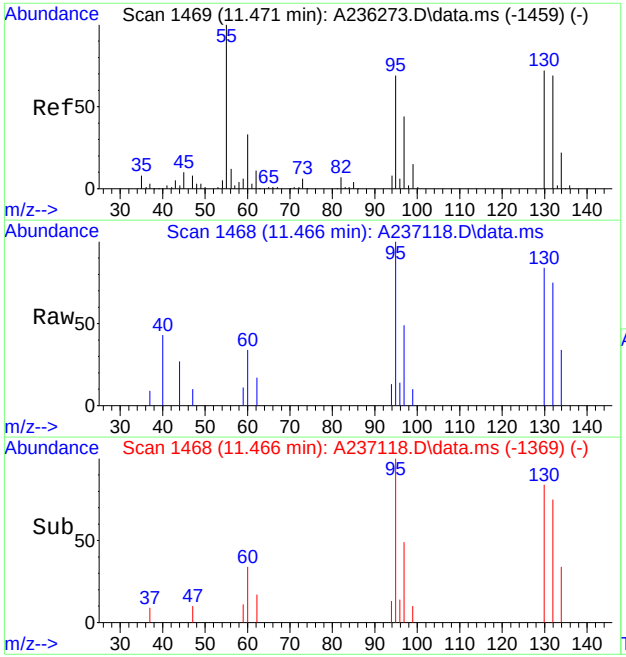


#42
chloroform
Concen: 0.39 ug/L
RT: 10.001 min Scan# 1188
Delta R.T. -0.000 min
Lab File: A237118.D
Acq: 18 Oct 2017 1:13 pm

Tgt Ion: 83 Resp: 2706

Ion	Ratio	Lower	Upper
83	100		
85	57.8	34.1	94.1
47	29.9	0.0	54.7

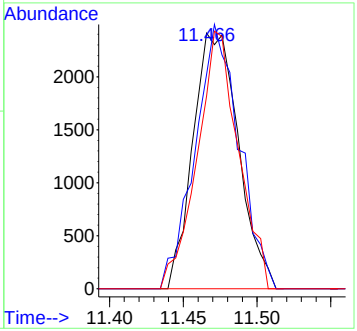


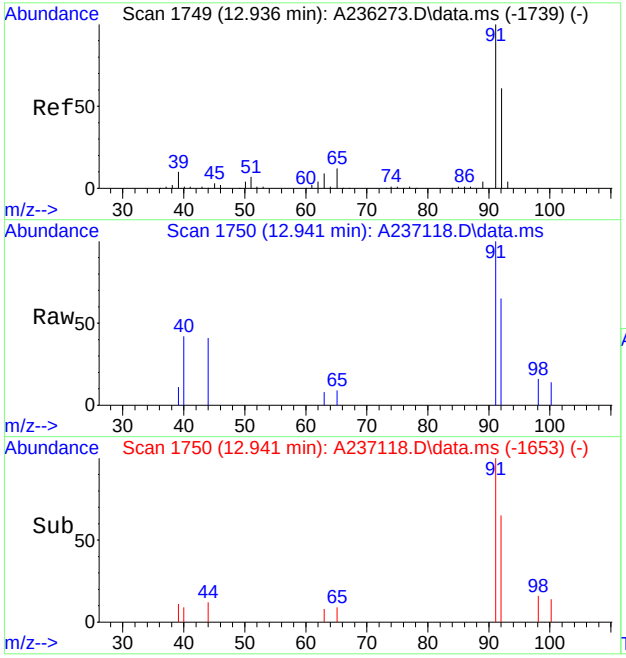


#62
trichloroethene
Concen: 1.50 ug/L
RT: 11.466 min Scan# 1468
Delta R.T. -0.006 min
Lab File: A237118.D
Acq: 18 Oct 2017 1:13 pm

Tgt Ion: 95 Resp: 5178

Ion	Ratio	Lower	Upper
95	100		
130	83.9	73.4	133.4
132	75.4	69.4	129.4

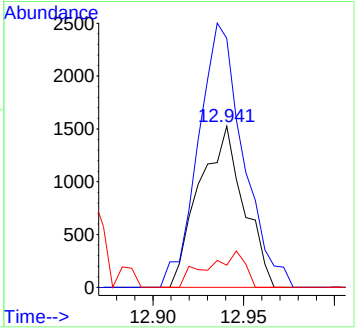


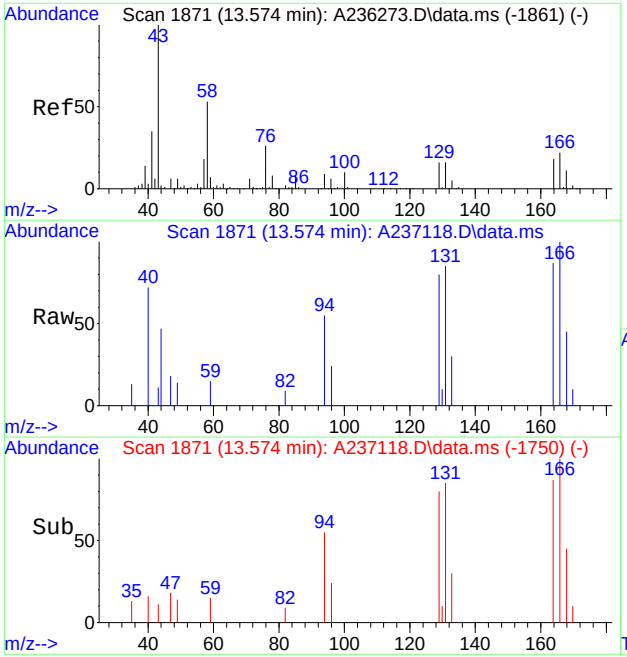


#76
toluene
Concen: 0.35 ug/L
RT: 12.941 min Scan# 1750
Delta R.T. 0.005 min
Lab File: A237118.D
Acq: 18 Oct 2017 1:13 pm

Tgt Ion: 92 Resp: 2602

Ion	Ratio	Lower	Upper
92	100		
91	154.4	144.7	184.7
65	13.8	0.0	40.0

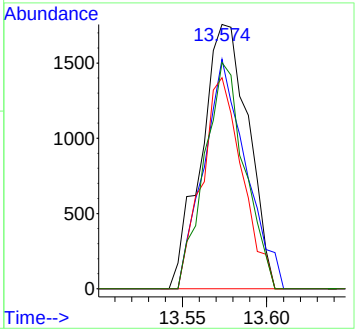




#81
tetrachloroethene
Concen: 1.04 ug/L
RT: 13.574 min Scan# 1871
Delta R.T. -0.000 min
Lab File: A237118.D
Acq: 18 Oct 2017 1:13 pm

Tgt Ion:166 Resp: 3407

Ion	Ratio	Lower	Upper
166	100		
164	86.8	49.6	109.6
129	79.9	39.6	99.6
131	85.5	39.4	99.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\A\va8994part\
Data File : a237110.d
Acq On : 18 Oct 2017 9:19 am
Operator : Gabriela
Sample : mb
Misc : MS20887,VA8994,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 18 12:29:48 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 16:17:38 2017
Response via : Initial Calibration

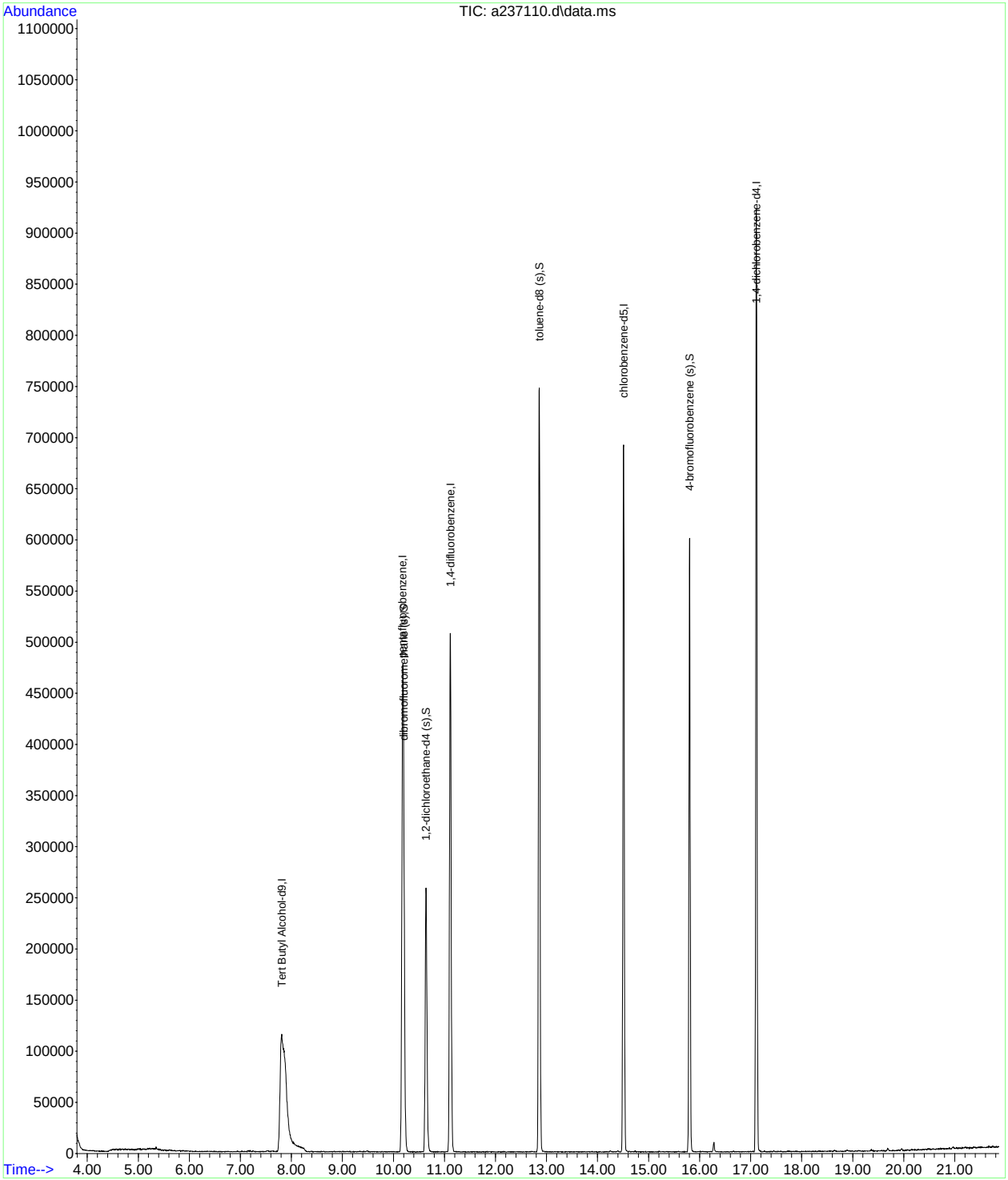
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.812	65	554633	500.00	ug/L	0.00
5) pentafluorobenzene	10.176	168	318873	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.118	114	482084	50.00	ug/L	0.00
74) chlorobenzene-d5	14.512	117	414538	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.112	152	251527	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.203	113	185495	51.27	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.54%			
53) 1,2-dichloroethane-d4 (s)	10.637	65	220297	51.11	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.22%			
75) toluene-d8 (s)	12.859	98	564164	48.82	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.64%			
99) 4-bromofluorobenzene (s)	15.804	95	209370	49.32	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.64%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\A\va8994part\
Data File : a237110.d
Acq On : 18 Oct 2017 9:19 am
Operator : Gabriela
Sample : mb
Misc : MS20887,VA8994,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 18 12:29:48 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 16:17:38 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\A\va8994part\
Data File : a237111.d
Acq On : 18 Oct 2017 9:48 am
Operator : Gabriela
Sample : bs
Misc : MS21013,VA8994,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 18 12:30:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.M
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 16:17:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.816	65	593941	500.00	ug/L		0.00
5) pentafluorobenzene	10.180	168	339109	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.116	114	535546	50.00	ug/L		0.00
74) chlorobenzene-d5	14.510	117	486381	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.110	152	279105	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.201	113	195146	50.72	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.44%				
53) 1,2-dichloroethane-d4 (s)	10.640	65	237705	49.64	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.28%				
75) toluene-d8 (s)	12.858	98	646556	47.69	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.38%				
99) 4-bromofluorobenzene (s)	15.802	95	234877	49.86	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.72%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.936	59	273874	241.69	ug/L		95
4) 1,4-dioxane	11.859	88	74963	1242.90	ug/L		98
6) chlorodifluoromethane	4.202	51	275390	48.29	ug/L		99
7) dichlorodifluoromethane	4.181	85	346692	55.14	ug/L		98
8) chloromethane	4.542	50	354455	51.44	ug/L		93
9) vinyl chloride	4.840	62	385393	53.17	ug/L		100
11) bromomethane	5.520	94	222911	54.19	ug/L		95
12) chloroethane	5.708	64	181240	54.16	ug/L		94
13) vinyl bromide	6.100	106	226387	58.53	ug/L		99
14) trichlorofluoromethane	6.252	101	347773	52.61	ug/L		94
15) ethyl ether	6.665	74	91618	51.78	ug/L		97
16) acrolein	6.906	56	48976	46.19	ug/L		98
17) freon 113	7.125	151	138053	45.79	ug/L		96
18) 1,1-dichloroethene	7.104	96	149454	47.21	ug/L		97
19) acetone	7.146	58	110570	184.07	ug/L		98
20) acetonitrile	7.606	41	467886	499.96	ug/L		98
21) iodomethane	7.392	142	298009	46.76	ug/L		95
22) carbon disulfide	7.528	76	573791	44.75	ug/L		98
23) methylene chloride	7.852	84	179227	48.27	ug/L		99
24) methyl acetate	7.654	43	218614	50.25	ug/L		98
25) methyl tert butyl ether	8.245	73	564644	49.52	ug/L		99
26) trans-1,2-dichloroethene	8.265	96	158179	48.07	ug/L		98
27) hexane	8.626	57	220506	51.03	ug/L		99
28) di-isopropyl ether	8.883	45	611679	50.49	ug/L		99
29) ethyl tert-butyl ether	9.364	59	569290	49.23	ug/L		98
30) 2-butanone	9.589	72	119610	198.55	ug/L	#	87
31) 1,1-dichloroethane	8.856	63	312397	50.16	ug/L		99
32) chloroprene	8.982	53	255979	50.45	ug/L		97
33) acrylonitrile	8.192	53	104566	50.09	ug/L		98
34) vinyl acetate	8.856	86	31747	49.45	ug/L	#	74
35) ethyl acetate	9.620	45	39631	49.86	ug/L	#	83
36) 2,2-dichloropropane	9.646	77	287337	53.59	ug/L		99
37) cis-1,2-dichloroethene	9.620	96	178893	49.08	ug/L		96
38) methyl acrylate	9.693	85	30993	50.59	ug/L	#	74
39) propionitrile	9.678	54	469866	498.98	ug/L		92
40) bromochloromethane	9.934	128	89999	48.00	ug/L		95
41) tetrahydrofuran	9.986	42	96518	47.49	ug/L		96
42) chloroform	9.997	83	292134	48.54	ug/L		98
43) tert-butyl formate	10.075	59	41909	21.52	ug/L		96
45) methacrylonitrile	9.876	67	92519	53.22	ug/L		91
46) cyclohexane	10.384	84	263880	48.93	ug/L		98
47) 1,1,1-trichloroethane	10.290	97	281355	50.44	ug/L		98
48) iso-butyl alcohol	10.441	43	161682	456.52	ug/L		98
49) 1,1-dichloropropene	10.467	75	224143	51.63	ug/L		99
50) carbon tetrachloride	10.504	117	249275	50.96	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\A\va8994part\
Data File : a237111.d
Acq On : 18 Oct 2017 9:48 am
Operator : Gabriela
Sample : bs
Misc : MS21013,VA8994,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 18 12:30:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.M
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 16:17:38 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
51)	tert-amyl alcohol	10.598	73	129137	245.87	ug/L		97
54)	benzene	10.739	78	637845	48.74	ug/L		99
55)	iso-octane	10.781	57	710985	50.62	ug/L		100
56)	tert-amyl methyl ether	10.792	73	559584	46.95	ug/L		97
57)	heptane	10.949	71	129958	52.17	ug/L		97
58)	isopropyl acetate	10.666	87	42468	48.35	ug/L		99
59)	1,2-dichloroethane	10.734	62	228079	48.62	ug/L		99
60)	n-butyl alcohol	11.215	56	580414	2564.45	ug/L		97
61)	ethyl acrylate	11.472	55	227720	51.61	ug/L		98
62)	trichloroethene	11.472	95	152032	48.16	ug/L		94
63)	2-nitropropane	12.267	41	68142	42.08	ug/L		91
64)	methylcyclohexane	11.733	83	340222	48.80	ug/L		99
65)	2-chloroethyl vinyl ether	12.298	63	175409	98.55	ug/L		98
66)	methyl methacrylate	11.754	100	44345	48.09	ug/L	#	74
67)	1,2-dichloropropane	11.743	63	172792	49.98	ug/L		98
68)	dibromomethane	11.890	93	106722	48.78	ug/L		96
69)	bromodichloromethane	12.026	83	210777	50.43	ug/L		100
70)	epichlorohydrin	12.413	57	129784	253.80	ug/L		99
71)	cis-1,3-dichloropropene	12.528	75	244305	52.82	ug/L		99
72)	4-methyl-2-pentanone	12.648	58	429427	208.90	ug/L		93
73)	3-methyl-1-butanol	12.643	55	412902	1027.24	ug/L		98
76)	toluene	12.936	92	355172	46.99	ug/L		99
77)	trans-1,3-dichloropropene	13.124	75	208846	48.86	ug/L		98
78)	ethyl methacrylate	13.145	69	217436	49.73	ug/L		98
79)	1,1,2-trichloroethane	13.360	83	115369	49.01	ug/L		98
80)	2-hexanone	13.569	58	363302	191.21	ug/L		96
81)	tetrachloroethene	13.574	166	153697	45.97	ug/L		97
82)	1,3-dichloropropane	13.564	76	223691	49.14	ug/L		98
83)	butyl acetate	13.658	56	131716	46.97	ug/L		98
84)	3,3-dimethyl-1-butanol	13.747	57	461517	461.18	ug/L		99
85)	dibromochloromethane	13.846	129	150951	47.53	ug/L		99
86)	1,2-dibromoethane	14.019	107	143631	48.49	ug/L		98
87)	n-butyl ether	14.484	57	728978	49.03	ug/L		100
88)	chlorobenzene	14.547	112	384879	47.00	ug/L		97
89)	1,1,1,2-tetrachloroethane	14.610	131	181614	46.33	ug/L		97
90)	ethylbenzene	14.620	91	693077	48.14	ug/L		99
91)	m,p-xylene	14.740	106	533996	97.51	ug/L		99
92)	o-xylene	15.206	106	295821	49.09	ug/L		98
93)	styrene	15.211	104	424718	48.86	ug/L		99
94)	butyl acrylate	15.007	55	329159	47.08	ug/L		98
95)	bromoform	15.478	173	108214	42.19	ug/L		96
96)	isopropylbenzene	15.593	105	795328	49.06	ug/L		99
97)	cis-1,4-dichloro-2-butene	15.640	75	42422	25.73	ug/L		99
100)	bromobenzene	16.022	156	170381	48.36	ug/L		98
101)	1,1,2,2-tetrachloroethane	15.901	83	256083	51.71	ug/L		97
102)	trans-1,4-dichloro-2-b...	15.954	53	40251	31.15	ug/L		96
103)	1,2,3-trichloropropane	15.985	110	65160	49.91	ug/L		98
104)	n-propylbenzene	16.053	91	891041	50.97	ug/L		100
105)	2-chlorotoluene	16.205	126	182127	49.55	ug/L		95
106)	4-chlorotoluene	16.315	91	486179	49.46	ug/L		99
107)	1,3,5-trimethylbenzene	16.220	105	687595	52.10	ug/L		99
108)	tert-butylbenzene	16.618	119	587680	53.38	ug/L		96
109)	1,2,4-trimethylbenzene	16.660	105	690616	51.54	ug/L		99
110)	sec-butylbenzene	16.859	105	927002	52.99	ug/L		99
111)	1,3-dichlorobenzene	17.047	146	340966	48.45	ug/L		98
112)	p-isopropyltoluene	16.995	119	764974	51.71	ug/L		99
113)	1,4-dichlorobenzene	17.141	146	341197	46.46	ug/L		98
114)	1,2-dichlorobenzene	17.575	146	361159	47.81	ug/L		99
115)	n-butylbenzene	17.450	92	394626	48.84	ug/L		97
116)	1,2-dibromo-3-chloropr...	18.417	157	74432	45.17	ug/L		94
117)	1,3,5-trichlorobenzene	18.642	180	375116	47.62	ug/L		100
118)	2-ethylhexyl acrylate	19.353	70	45374	8.49	ug/L		97
119)	1,2,4-trichlorobenzene	19.364	180	351491	46.27	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\A\va8994part\
Data File : a237111.d
Acq On : 18 Oct 2017 9:48 am
Operator : Gabriela
Sample : bs
Misc : MS21013,VA8994,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 18 12:30:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.M
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 16:17:38 2017
Response via : Initial Calibration

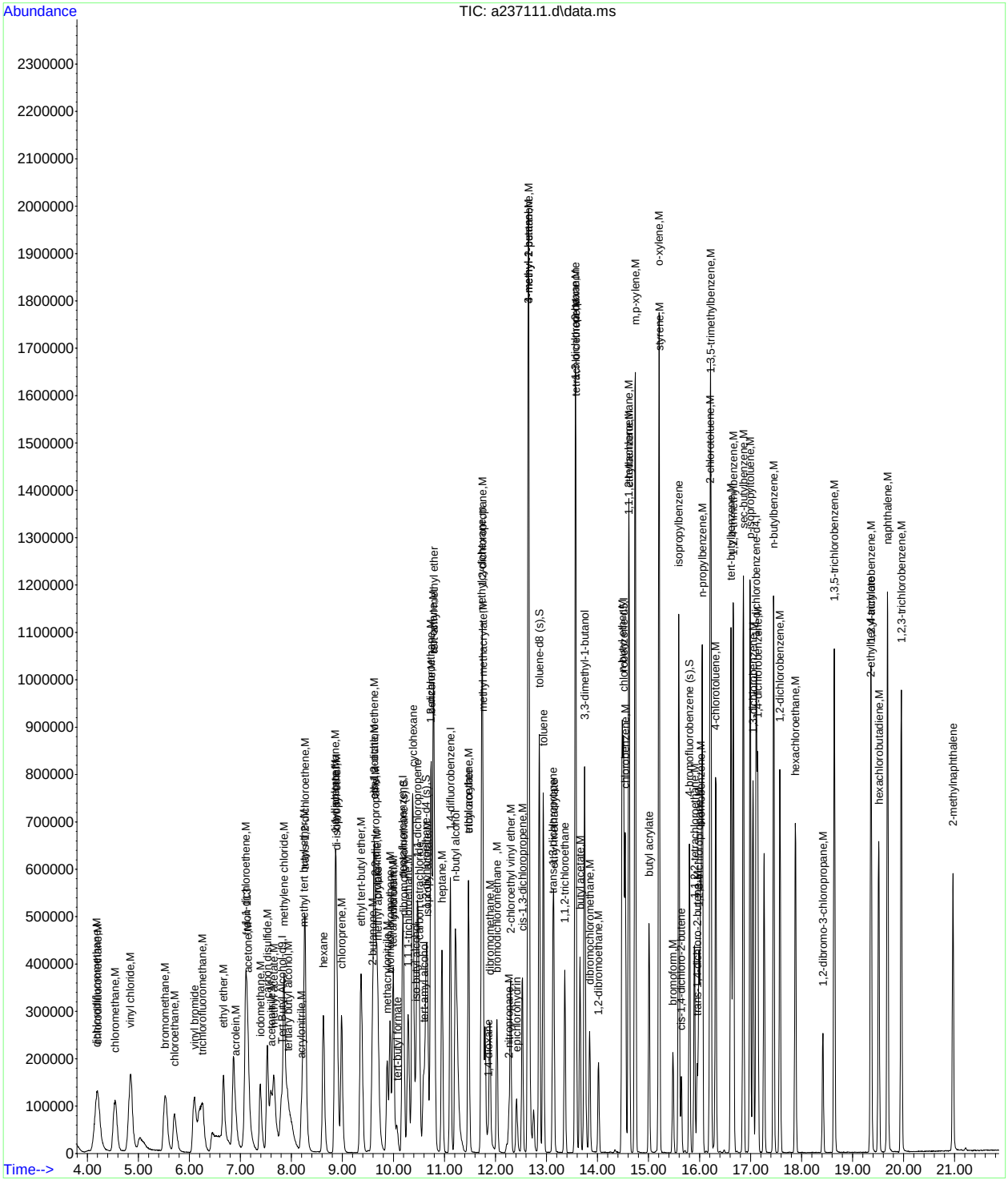
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
120) hexachlorobutadiene	19.515	225	170092	49.47	ug/L	97
121) naphthalene	19.683	128	1047945	48.06	ug/L	99
122) 1,2,3-trichlorobenzene	19.955	180	359956	47.44	ug/L	98
123) hexachloroethane	17.878	201	143781	49.96	ug/L	98
124) 2-methylnaphthalene	20.969	142	319440	22.54	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\A\va8994part\
Data File : a237111.d
Acq On : 18 Oct 2017 9:48 am
Operator : Gabriela
Sample : bs
Misc : MS21013,VA8994,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 18 12:30:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.M
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 16:17:38 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\A core\va8994\
Data File : a237126.d
Acq On : 18 Oct 2017 6:52 pm
Operator : Gabriela
Sample : jc52876-1ms
Misc : MS21095,VA8994,5,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 19 20:37:43 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 09:28:57 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.819	65	638713	500.00	ug/L	# 0.00
5) pentafluorobenzene	10.178	168	357800	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.119	114	568485	50.00	ug/L	0.00
74) chlorobenzene-d5	14.508	117	523226	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.113	152	307744	50.00	ug/L	0.00
125) pentafluorobenzene(a)	10.178	168	357800	50.00	ug/L	#-0.02
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.204	113	207295	51.06	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.12%			
53) 1,2-dichloroethane-d4 (s)	10.643	65	258428	50.84	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.68%			
75) toluene-d8 (s)	12.861	98	698185	47.87	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.74%			
99) 4-bromofluorobenzene (s)	15.800	95	256984	49.48	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.96%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	7.934	59	299393	245.69	ug/L	96
4) 1,4-dioxane	11.862	88	75703	1167.19	ug/L	99
6) chlorodifluoromethane	4.205	51	304650	50.63	ug/L	98
7) dichlorodifluoromethane	4.194	85	322530	48.61	ug/L	95
8) chloromethane	4.545	50	365349	50.25	ug/L	92
9) vinyl chloride	4.843	62	425951	55.69	ug/L	98
10) 1,3-butadiene	4.858	54	53840	13.03	ug/L	94
11) bromomethane	5.538	94	233327	53.76	ug/L	95
12) chloroethane	5.706	64	191320	54.18	ug/L	98
13) vinyl bromide	6.093	106	301274	73.82	ug/L	99
14) trichlorofluoromethane	6.244	101	360377	51.67	ug/L	97
15) ethyl ether	6.673	74	92342	49.47	ug/L	99
16) acrolein	6.909	56	54000	48.27	ug/L	96
17) freon 113	7.123	151	163901	51.52	ug/L	96
18) 1,1-dichloroethene	7.113	96	163194	48.85	ug/L	96
19) acetone	7.154	58	108421	171.06	ug/L	95
20) acetonitrile	7.599	41	450763	456.50	ug/L	98
21) iodomethane	7.390	142	316427	47.06	ug/L	97
22) carbon disulfide	7.531	76	617228	45.62	ug/L	98
23) methylene chloride	7.861	84	185987	47.48	ug/L	98
24) methyl acetate	7.662	43	205551	44.78	ug/L	98
25) methyl tert butyl ether	8.248	73	588875	48.95	ug/L	98
26) trans-1,2-dichloroethene	8.274	96	168200	48.44	ug/L	97
27) hexane	8.629	57	257774	56.54	ug/L	99
28) di-isopropyl ether	8.880	45	644232	50.40	ug/L	95
29) ethyl tert-butyl ether	9.367	59	602173	49.35	ug/L	99
30) 2-butanone	9.586	72	120523	189.62	ug/L #	79
31) 1,1-dichloroethane	8.860	63	339581	51.68	ug/L	98
32) chloroprene	8.985	53	283831	53.02	ug/L	96
33) acrylonitrile	8.200	53	103568	47.02	ug/L	96
34) vinyl acetate	8.860	86	30517	45.05	ug/L #	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\A core\va8994\
Data File : a237126.d
Acq On : 18 Oct 2017 6:52 pm
Operator : Gabriela
Sample : jc52876-1ms
Misc : MS21095,VA8994,5,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 19 20:37:43 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 09:28:57 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35) ethyl acetate	9.623	45	38153	45.50	ug/L	#	82
36) 2,2-dichloropropane	9.649	77	315389	55.75	ug/L		98
37) cis-1,2-dichloroethene	9.623	96	426760	110.96	ug/L		94
38) methyl acrylate	9.696	85	30891	47.79	ug/L	#	84
39) propionitrile	9.681	54	474735	477.82	ug/L		97
40) bromochloromethane	9.937	128	95712	48.38	ug/L		99
41) tetrahydrofuran	9.994	42	94116	43.89	ug/L		95
42) chloroform	10.000	83	314029	49.45	ug/L		99
43) tert-butyl formate	10.062	59	5394	2.63	ug/L	#	53
45) methacrylonitrile	9.874	67	91391	49.82	ug/L		88
46) cyclohexane	10.376	84	333680	58.64	ug/L		93
47) 1,1,1-trichloroethane	10.293	97	311739	52.97	ug/L		97
48) iso-butyl alcohol	10.376	43	414304	1108.70	ug/L	#	1
49) 1,1-dichloropropene	10.470	75	243020	53.06	ug/L		99
50) carbon tetrachloride	10.502	117	274479	53.18	ug/L		99
51) tert-amyl alcohol	10.596	73	147794	266.69	ug/L		97
54) benzene	10.737	78	684700	49.28	ug/L		99
55) iso-octane	10.784	57	822553	55.17	ug/L		99
56) tert-amyl methyl ether	10.795	73	584638	46.21	ug/L		98
57) heptane	10.957	71	153679	58.12	ug/L		96
58) isopropyl acetate	10.669	87	43086	46.21	ug/L		96
59) 1,2-dichloroethane	10.732	62	240264	48.25	ug/L		99
60) n-butyl alcohol	11.213	56	604321	2515.37	ug/L		97
61) ethyl acrylate	11.475	55	241010	51.45	ug/L		95
62) trichloroethene	11.469	95	262789	78.43	ug/L		95
63) 2-nitropropane	12.264	41	63994	37.23	ug/L		86
64) methylcyclohexane	11.731	83	391873	52.96	ug/L		99
65) 2-chloroethyl vinyl ether	12.411	63	3274	1.73	ug/L		75
66) methyl methacrylate	11.752	100	47806	48.84	ug/L	#	65
67) 1,2-dichloropropane	11.747	63	185495	50.55	ug/L		97
68) dibromomethane	11.893	93	111995	48.22	ug/L		97
69) bromodichloromethane	12.029	83	225607	50.85	ug/L		99
70) epichlorohydrin	12.411	57	95401	175.75	ug/L		99
71) cis-1,3-dichloropropene	12.526	75	261575	53.28	ug/L		100
72) 4-methyl-2-pentanone	12.646	58	460890	211.22	ug/L		94
73) 3-methyl-1-butanol	12.646	55	447720	1049.33	ug/L		100
76) toluene	12.939	92	395631	48.66	ug/L		97
77) trans-1,3-dichloropropene	13.127	75	224782	48.89	ug/L		99
78) ethyl methacrylate	13.143	69	234095	49.77	ug/L		98
79) 1,1,2-trichloroethane	13.363	83	123584	48.80	ug/L		96
80) 2-hexanone	13.567	58	392188	191.88	ug/L		97
81) tetrachloroethene	13.577	166	171856	47.78	ug/L		97
82) 1,3-dichloropropane	13.561	76	238674	48.74	ug/L		99
83) butyl acetate	13.656	56	139207	46.15	ug/L		98
84) 3,3-dimethyl-1-butanol	13.744	57	519953	482.99	ug/L		99
85) dibromochloromethane	13.844	129	166617	48.77	ug/L		99
86) 1,2-dibromoethane	14.016	107	155133	48.68	ug/L		98
87) n-butyl ether	14.482	57	813801	50.88	ug/L		100
88) chlorobenzene	14.545	112	427863	48.57	ug/L		99
89) 1,1,1,2-tetrachloroethane	14.613	131	200338	47.51	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\A core\va8994\
Data File : a237126.d
Acq On : 18 Oct 2017 6:52 pm
Operator : Gabriela
Sample : jc52876-1ms
Misc : MS21095,VA8994,5,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 19 20:37:43 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 09:28:57 2017
Response via : Initial Calibration

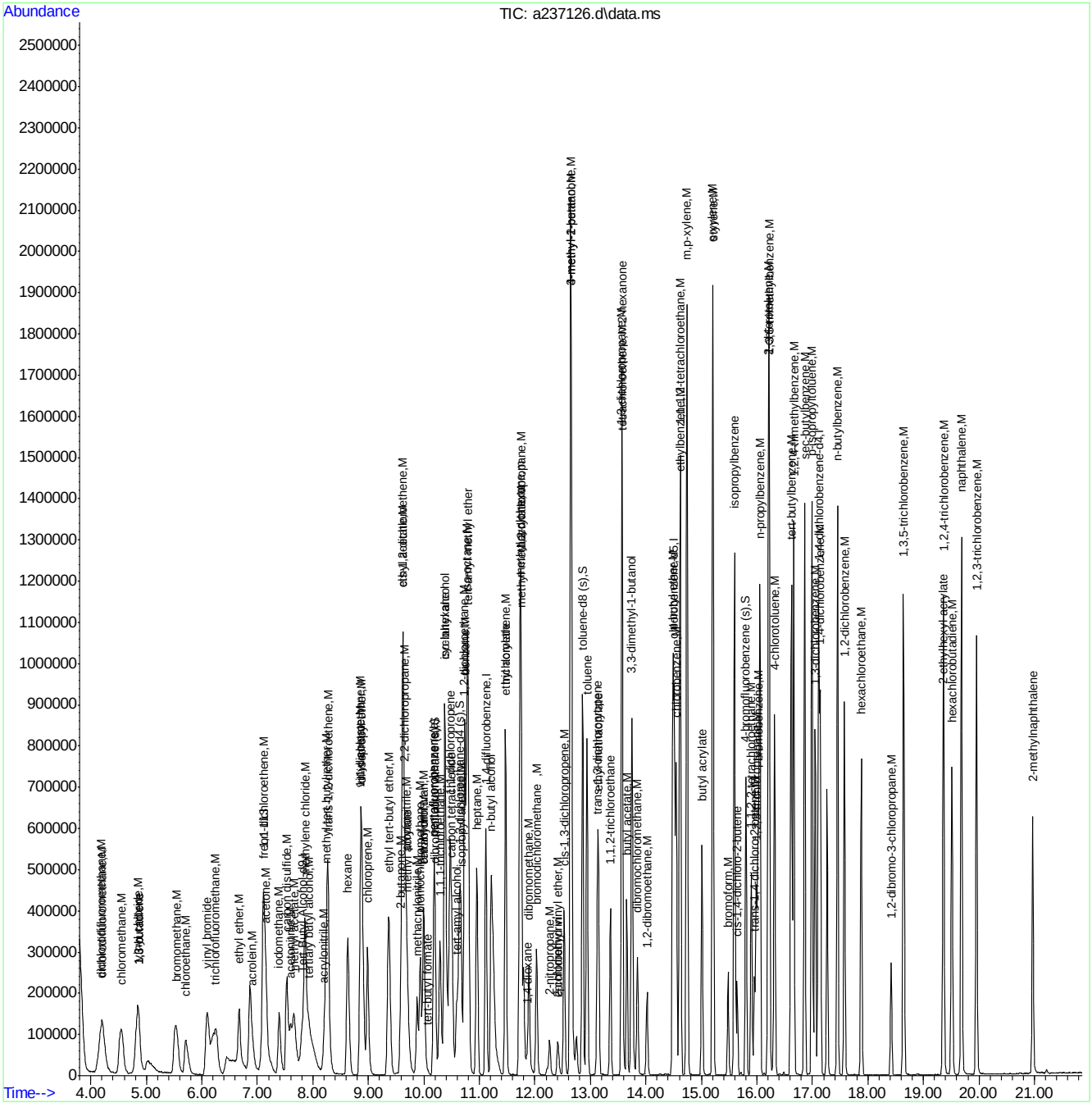
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90)	ethylbenzene	14.623	91	774717	50.03	ug/L	99
91)	m,p-xylene	14.738	106	602982	102.35	ug/L	100
92)	o-xylene	15.204	106	328271	50.64	ug/L	99
93)	styrene	15.209	104	472789	50.57	ug/L	99
94)	butyl acrylate	15.010	55	367031	48.80	ug/L	96
95)	bromoform	15.481	173	127216	46.11	ug/L	94
96)	isopropylbenzene	15.596	105	899481	51.58	ug/L	98
97)	cis-1,4-dichloro-2-butene	15.643	75	60503	34.11	ug/L	95
100)	bromobenzene	16.025	156	192023	49.43	ug/L	99
101)	1,1,2,2-tetrachloroethane	15.899	83	280930	51.44	ug/L	100
102)	trans-1,4-dichloro-2-b...	15.957	53	49895	35.02	ug/L	89
103)	1,2,3-trichloropropane	15.988	110	69795	48.49	ug/L	99
104)	n-propylbenzene	16.051	91	1017062	52.77	ug/L	100
105)	2-chlorotoluene	16.208	126	206517	50.96	ug/L	95
106)	4-chlorotoluene	16.318	91	547473	50.51	ug/L	99
107)	1,3,5-trimethylbenzene	16.224	105	773847	53.18	ug/L	98
108)	tert-butylbenzene	16.621	119	650535	53.59	ug/L	98
109)	1,2,4-trimethylbenzene	16.663	105	778362	52.68	ug/L	100
110)	sec-butylbenzene	16.862	105	1054943	54.69	ug/L	99
111)	1,3-dichlorobenzene	17.050	146	380158	48.99	ug/L	99
112)	p-isopropyltoluene	16.992	119	868151	53.23	ug/L	99
113)	1,4-dichlorobenzene	17.139	146	386461	47.72	ug/L	99
114)	1,2-dichlorobenzene	17.578	146	406590	48.82	ug/L	100
115)	n-butylbenzene	17.453	92	455854	51.17	ug/L	98
116)	1,2-dibromo-3-chloropr...	18.420	157	84001	46.23	ug/L	97
117)	1,3,5-trichlorobenzene	18.645	180	417342	48.05	ug/L	99
118)	2-ethylhexyl acrylate	19.351	70	51567	8.75	ug/L	97
119)	1,2,4-trichlorobenzene	19.362	180	391545	46.74	ug/L	99
120)	hexachlorobutadiene	19.513	225	193092	50.94	ug/L	96
121)	naphthalene	19.686	128	1133341	47.14	ug/L	99
122)	1,2,3-trichlorobenzene	19.958	180	392867	46.96	ug/L	98
123)	hexachloroethane	17.881	201	161044	50.75	ug/L	98
124)	2-methylnaphthalene	20.973	142	349475	22.36	ug/L	99
127)	1,3-butadiene	4.858	54	53840	10.49	ug/L	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\A core\va8994\
Data File : a237126.d
Acq On : 18 Oct 2017 6:52 pm
Operator : Gabriela
Sample : jc52876-1ms
Misc : MS21095,VA8994,5,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 19 20:37:43 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 09:28:57 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\A core\va8994\
Data File : a237128.d
Acq On : 18 Oct 2017 7:50 pm
Operator : Gabriela
Sample : jc52876-2dup
Misc : MS21095,VA8994,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 19 20:28:28 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 09:28:57 2017
Response via : Initial Calibration

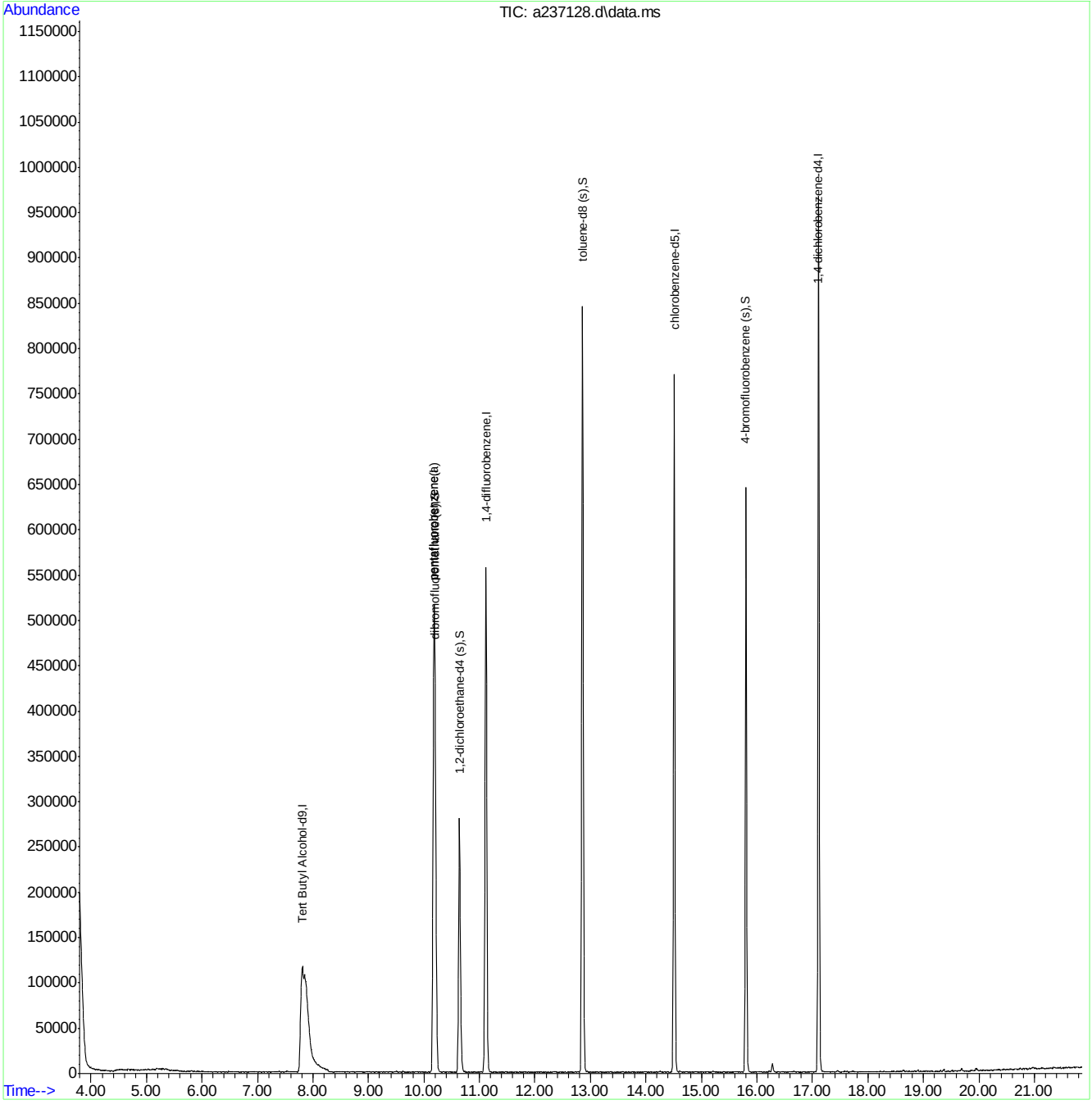
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.815	65	624188	500.00	ug/L	0.00
5) pentafluorobenzene	10.179	168	348982	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.115	114	532919	50.00	ug/L	0.00
74) chlorobenzene-d5	14.510	117	453740	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.109	152	273389	50.00	ug/L	0.00
125) pentafluorobenzene(a)	10.179	168	348982	50.00	ug/L	#-0.02
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.200	113	203283	51.34	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.68%			
53) 1,2-dichloroethane-d4 (s)	10.639	65	244036	51.22	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.44%			
75) toluene-d8 (s)	12.857	98	620853	49.08	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.16%			
99) 4-bromofluorobenzene (s)	15.802	95	226546	49.10	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.20%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\A core\va8994\
Data File : a237128.d
Acq On : 18 Oct 2017 7:50 pm
Operator : Gabriela
Sample : jc52876-2dup
Misc : MS21095,VA8994,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

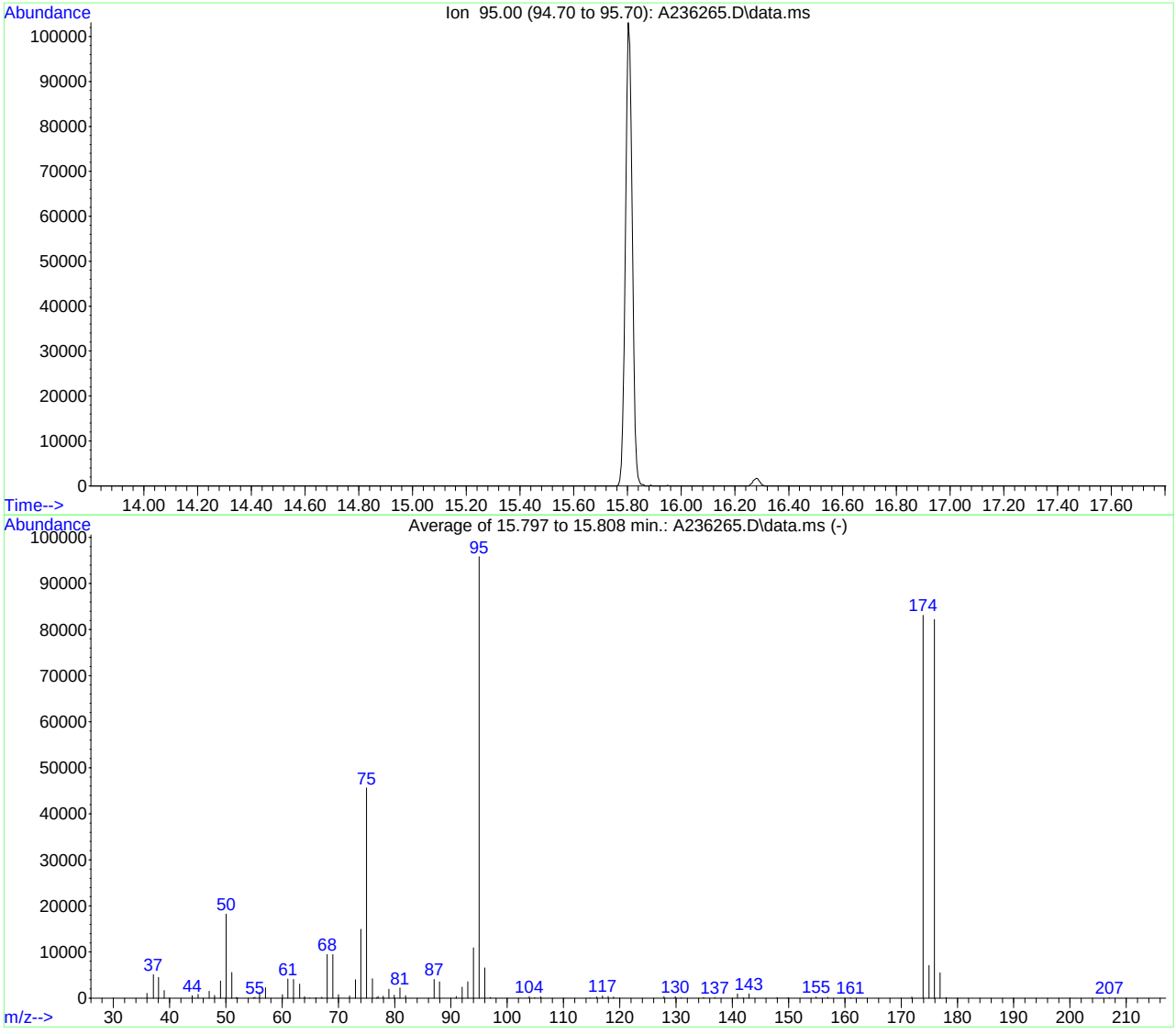
Quant Time: Oct 19 20:28:28 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 09:28:57 2017
Response via : Initial Calibration



SW-846 Method 8260

Data File : C:\msdchem\1\DATA\A236265.D Vial: 1
Acq On : 22 Sep 2017 9:44 pm Operator: ChelseaS
Sample : bfb Inst : MSA
Misc : MS20266,VA8958,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MA8958.m (RTE Integrator)
Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um



AutoFind: Scans 2296, 2297, 2298; Background Corrected with Scan 2287

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.0	18229	PASS
75	95	30	60	47.6	45637	PASS
95	95	100	100	100.0	95805	PASS
96	95	5	9	6.8	6546	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	86.7	83069	PASS
175	174	5	9	8.5	7038	PASS
176	174	95	101	98.9	82181	PASS
177	176	5	9	6.7	5518	PASS

A236265.D MA8958.m Mon Sep 25 07:57:32 2017 RPT1

Average of 15.797 to 15.808 min.: A236265.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	1014	51.85	143	64.90	54	76.80	141
37.10	5108	52.10	59	66.00	60	77.05	373
38.05	4523	54.90	79	67.05	214	77.95	414
39.05	1634	55.15	198	68.00	9490	78.95	1944
44.00	522	56.00	1284	69.00	9471	79.95	635
45.05	839	57.05	2270	70.00	728	80.95	2207
47.05	1462	60.05	783	72.00	491	81.95	519
48.00	574	61.00	4185	73.05	3993	87.00	4049
49.05	3733	62.00	4039	74.00	14940	87.95	3553
50.05	18229	63.10	3070	75.00	45637	90.95	350
51.05	5577	64.00	302	76.05	4192	92.00	2369

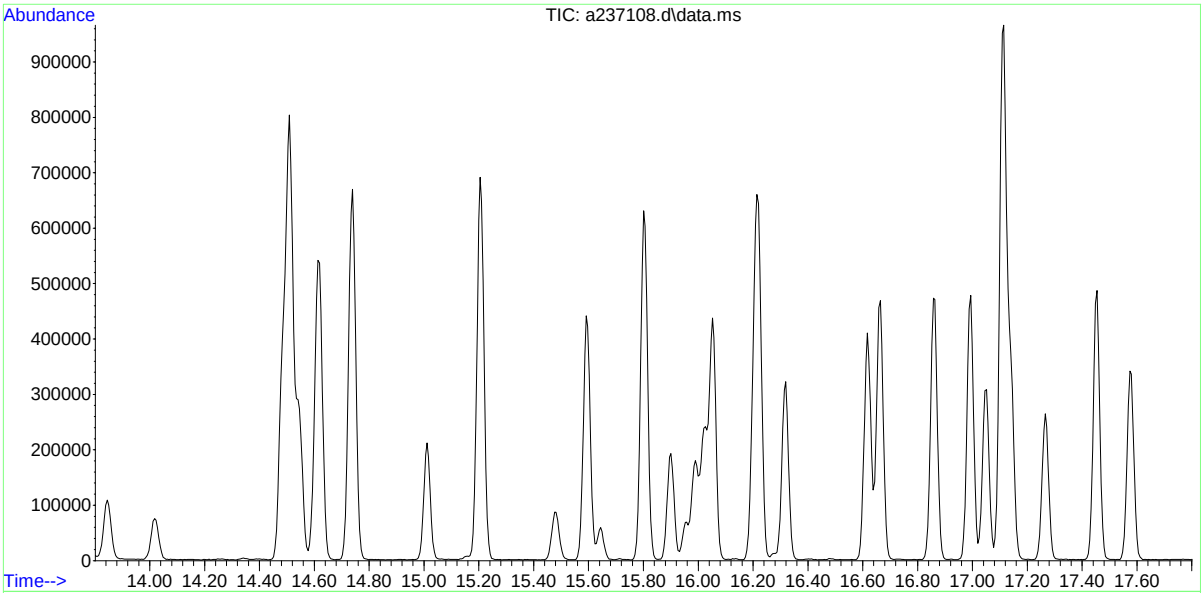
Average of 15.797 to 15.808 min.: A236265.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.00	3551	117.95	372	149.90	64		
94.00	10888	118.90	275	154.90	244		
95.00	95805	127.85	290	156.95	198		
96.00	6546	129.85	331	161.00	52		
97.00	126	130.90	52	171.90	281		
103.90	333	134.90	121	173.90	83069		
104.85	113	136.90	171	174.95	7038		
105.95	286	140.90	918	175.90	82181		
114.70	57	141.90	53	176.90	5518		
115.90	259	142.95	924	177.95	137		
116.95	469	147.95	156	207.00	56		

SW-846 Method 8260

Data File : C:\msdchem\1\data\A\va8994part\a237108.d Vial: 3
Acq On : 18 Oct 2017 7:58 am Operator: Gabriela
Sample : bfb Inst : MSA
Misc : MS21013,VA8994,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MA8958.M (RTE Integrator)
Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um



AutoFind: Scans 2296, 2297, 2298; Background Corrected with Scan 2287

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	23315	PASS
75	95	30	60	48.2	57845	PASS
95	95	100	100	100.0	119928	PASS
96	95	5	9	6.6	7950	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	85.5	102589	PASS
175	174	5	9	8.2	8417	PASS
176	174	95	101	98.3	100816	PASS
177	176	5	9	6.5	6597	PASS

a237108.d MA8958.M Wed Oct 18 12:28:07 2017 11

Average of 15.796 to 15.806 min.: a237108.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	1194	50.00	23315	64.00	472	76.95	627
37.10	6276	51.05	7043	65.05	230	78.00	608
38.05	5465	52.05	413	66.95	296	78.90	2579
39.05	2147	55.05	346	68.00	12072	79.95	828
39.95	52	56.05	1667	69.00	12228	80.90	2739
43.10	55	57.00	3250	69.95	895	81.95	633
44.00	657	58.10	54	72.05	568	85.95	158
45.05	1136	60.05	1068	73.00	5088	87.00	5371
47.00	1792	61.00	5671	74.00	19461	88.00	5199
48.00	776	62.05	5605	75.00	57845	90.80	80
49.05	5186	63.05	3747	76.05	4944	90.95	236

Average of 15.796 to 15.806 min.: a237108.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.00	3252	113.10	54	135.00	57	155.00	244
93.00	5026	114.90	150	136.90	198	156.95	260
94.00	13230	115.95	393	140.90	1097	158.80	60
95.00	119928	116.90	631	141.80	75	160.95	135
96.00	7950	117.95	389	142.20	60	171.00	57
97.00	268	118.95	462	142.95	1096	171.60	102
103.90	492	127.95	409	143.90	60	171.95	395
104.90	125	128.95	116	144.80	79	173.90	102589
105.95	445	129.90	558	145.85	143	174.95	8417
106.90	53	130.90	52	147.90	287	175.90	100816
111.90	52	134.80	50	149.80	104	176.90	6597

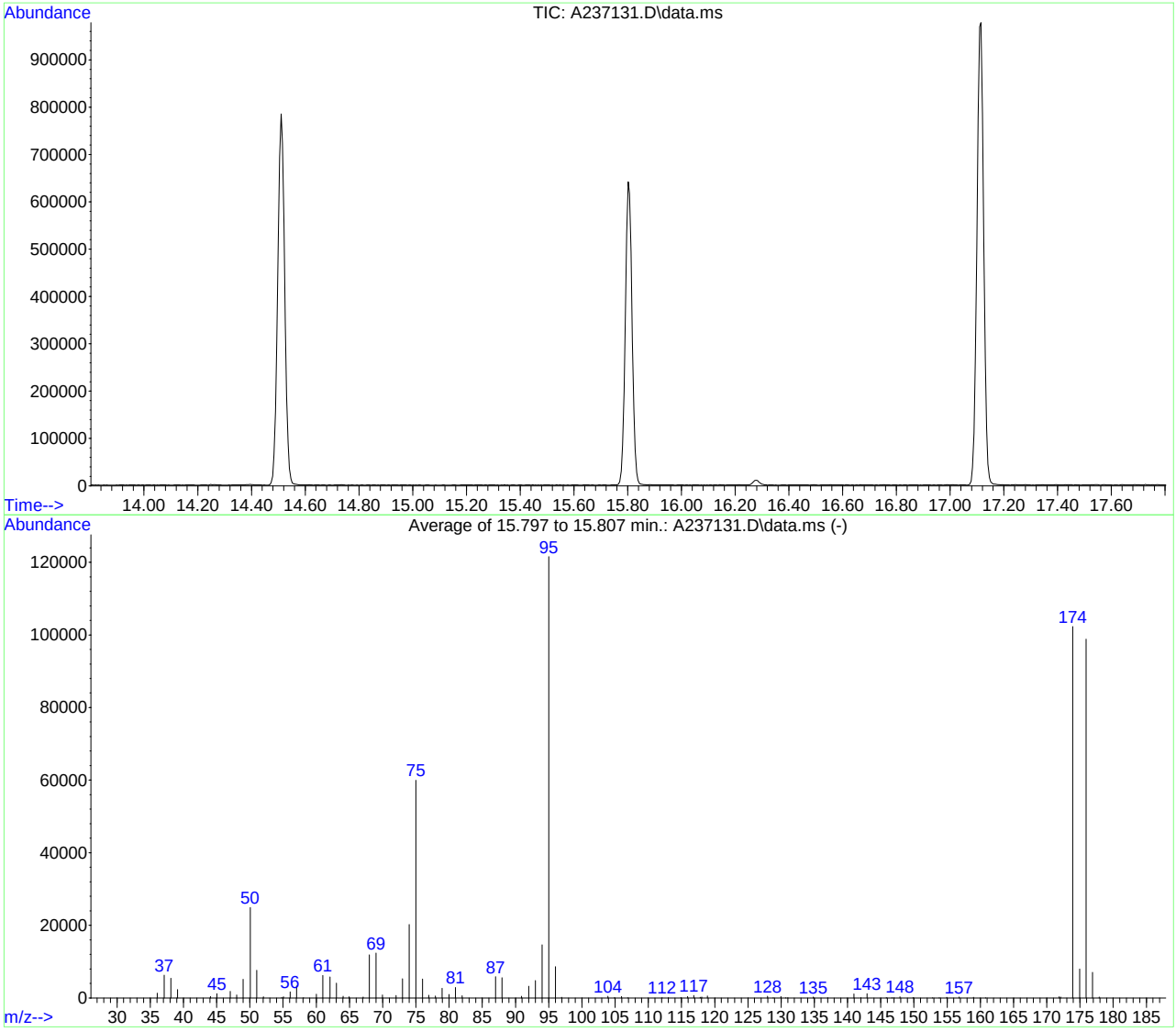
Average of 15.796 to 15.806 min.: a237108.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
177.90	232						

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\A237131.D Vial: 1
Acq On : 18 Oct 2017 9:17 pm Operator: Gabriela
Sample : bfb Inst : MSA
Misc : MS21095,VA8958,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\MA8958.m (RTE Integrator)
Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um



AutoFind: Scans 2296, 2297, 2298; Background Corrected with Scan 2287

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.5	24890	PASS
75	95	30	60	49.3	59949	PASS
95	95	100	100	100.0	121549	PASS
96	95	5	9	7.1	8574	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	84.2	102322	PASS
175	174	5	9	7.8	7992	PASS
176	174	95	101	96.6	98829	PASS
177	176	5	9	7.1	7050	PASS

A237131.D MA8958.m Thu Oct 19 15:52:03 2017 RPT1

Average of 15.797 to 15.807 min.: A237131.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	1301	52.05	346	64.95	330	77.95	534
37.10	6293	54.80	85	67.05	287	78.95	2653
38.10	5413	55.05	301	68.00	11860	80.00	936
39.10	2306	56.05	1650	69.00	12354	80.95	2843
44.05	388	57.05	3289	69.95	826	81.95	618
45.05	1157	58.10	55	72.00	663	87.00	5823
47.05	1779	60.00	1009	73.00	5264	87.95	5560
48.00	831	61.00	6226	74.00	20226	90.90	445
49.00	5163	62.05	5745	75.00	59949	92.00	3262
50.05	24890	63.05	4099	76.00	5213	93.00	4798
51.05	7609	64.05	463	76.95	725	94.00	14626

Average of 15.797 to 15.807 min.: A237131.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	121549	116.85	666	140.95	1131	156.80	276
96.00	8574	117.80	145	142.00	59	158.95	213
96.95	150	118.05	262	142.95	1174	160.80	50
103.90	476	118.90	566	145.85	143	171.85	347
104.90	51	127.95	450	146.70	56	172.10	239
105.95	402	128.80	51	147.00	74	173.90	102322
106.90	53	129.95	391	147.90	333	174.95	7992
112.10	68	130.70	56	149.85	110	175.90	98829
113.00	58	131.00	70	152.80	61	176.90	7050
114.90	132	134.85	238	153.80	57	177.90	232
115.90	365	137.00	70	154.95	169		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236266.D
Acq On : 22 Sep 2017 10:31 pm
Operator : ChelseaS
Sample : ic8958-0.2
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 25 08:35:58 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:23:40 2017
Response via : Initial Calibration

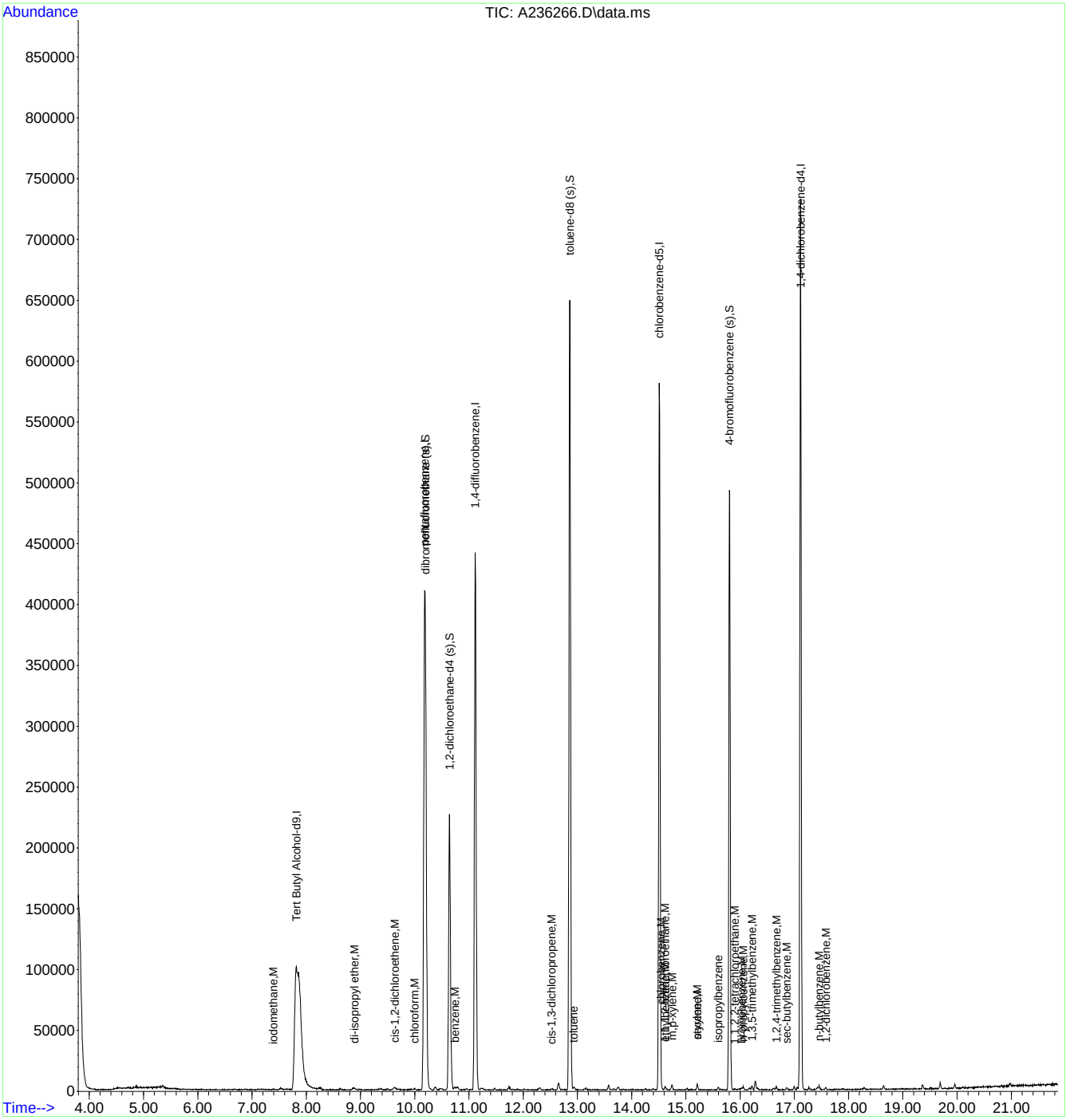
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.820	65	470150	500.00	ug/L		0.00
5) pentafluorobenzene	10.179	168	290669	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.115	114	415636	50.00	ug/L		0.00
74) chlorobenzene-d5	14.510	117	346681	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.114	152	209611	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.200	113	159633	47.99	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 95.98%				
53) 1,2-dichloroethane-d4 (s)	10.639	65	187022	51.23	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 102.46%				
75) toluene-d8 (s)	12.857	98	482191	50.95	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 101.90%				
99) 4-bromofluorobenzene (s)	15.802	95	178206	49.94	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.88%				
Target Compounds							Qvalue
21) iodomethane	7.386	142	986	0.17	ug/L	#	46
28) di-isopropyl ether	8.893	45	1675	0.15	ug/L	#	50
37) cis-1,2-dichloroethene	9.630	96	581	0.18	ug/L	#	22
42) chloroform	9.996	83	1057	0.20	ug/L		84
54) benzene	10.734	78	1842	0.17	ug/L		95
71) cis-1,3-dichloropropene	12.522	75	653	0.16	ug/L	#	76
76) toluene	12.930	92	955	0.17	ug/L	#	62
88) chlorobenzene	14.546	112	1398	0.23	ug/L		88
89) 1,1,1,2-tetrachloroethane	14.609	131	443	0.15	ug/L		91
90) ethylbenzene	14.620	91	2002	0.18	ug/L		90
91) m,p-xylene	14.740	106	1474	0.36	ug/L	#	69
92) o-xylene	15.211	106	728	0.16	ug/L	#	63
93) styrene	15.211	104	1071	0.16	ug/L		87
96) isopropylbenzene	15.598	105	1961	0.16	ug/L		86
100) bromobenzene	16.026	156	517	0.18	ug/L	#	61
101) 1,1,2,2-tetrachloroethane	15.896	83	622	0.16	ug/L		69
104) n-propylbenzene	16.058	91	2497	0.18	ug/L		83
107) 1,3,5-trimethylbenzene	16.225	105	1724	0.15	ug/L		87
109) 1,2,4-trimethylbenzene	16.670	105	1961	0.18	ug/L		90
110) sec-butylbenzene	16.853	105	2234	0.15	ug/L		79
114) 1,2-dichlorobenzene	17.580	146	1090	0.19	ug/L		88
115) n-butylbenzene	17.454	92	1225	0.19	ug/L	#	64

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236266.D
Acq On : 22 Sep 2017 10:31 pm
Operator : ChelseaS
Sample : ic8958-0.2
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 25 08:35:58 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:23:40 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236267.D
Acq On : 22 Sep 2017 10:59 pm
Operator : ChelseaS
Sample : ic8958-0.5
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 25 08:31:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:23:40 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.854	65	484700	500.00	ug/L		0.04
5) pentafluorobenzene	10.182	168	296429	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.118	114	422462	50.00	ug/L		0.00
74) chlorobenzene-d5	14.512	117	346556	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.117	152	215091	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.203	113	169446	49.95	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.90%				
53) 1,2-dichloroethane-d4 (s)	10.647	65	193856	52.24	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 104.48%				
75) toluene-d8 (s)	12.860	98	485210	51.28	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 102.56%				
99) 4-bromofluorobenzene (s)	15.804	95	179837	49.11	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 98.22%				
Target Compounds							Qvalue
11) bromomethane	5.501	94	1645	0.44	ug/L		84
15) ethyl ether	6.667	74	709	0.43	ug/L	#	67
18) 1,1-dichloroethene	7.112	96	1223	0.43	ug/L	#	66
21) iodomethane	7.405	142	2536	0.43	ug/L		74
22) carbon disulfide	7.546	76	6406	0.58	ug/L		96
23) methylene chloride	7.870	84	1720	0.53	ug/L		87
24) methyl acetate	7.671	43	1781	0.44	ug/L	#	65
25) methyl tert butyl ether	8.262	73	4833	0.46	ug/L		74
26) trans-1,2-dichloroethene	8.273	96	1428	0.49	ug/L	#	52
27) hexane	8.634	57	1617	0.39	ug/L	#	90
28) di-isopropyl ether	8.879	45	5367	0.47	ug/L		99
29) ethyl tert-butyl ether	9.382	59	4826	0.45	ug/L		83
31) 1,1-dichloroethane	8.869	63	2773	0.49	ug/L		89
32) chloroprene	8.984	53	2169	0.45	ug/L		69
36) 2,2-dichloropropane	9.648	77	2182	0.45	ug/L		96
37) cis-1,2-dichloroethene	9.627	96	1599	0.49	ug/L	#	78
39) propionitrile	9.706	54	3826	4.37	ug/L		74
42) chloroform	9.999	83	2671	0.51	ug/L		97
47) 1,1,1-trichloroethane	10.281	97	2058	0.39	ug/L		79
49) 1,1-dichloropropene	10.485	75	1726	0.42	ug/L	#	63
50) carbon tetrachloride	10.511	117	1801	0.39	ug/L		84
54) benzene	10.747	78	5170	0.47	ug/L		90
55) iso-octane	10.788	57	4551	0.37	ug/L		97
56) tert-amyl methyl ether	10.794	73	4559	0.46	ug/L		93
59) 1,2-dichloroethane	10.731	62	1936	0.51	ug/L		75
62) trichloroethene	11.468	95	1237	0.49	ug/L		80
64) methylcyclohexane	11.740	83	2316	0.39	ug/L		98
65) 2-chloroethyl vinyl ether	12.300	63	3134	2.00	ug/L		87
67) 1,2-dichloropropane	11.751	63	1317	0.46	ug/L		97
68) dibromomethane	11.892	93	898	0.51	ug/L	#	74
69) bromodichloromethane	12.044	83	1468	0.41	ug/L	#	56
71) cis-1,3-dichloropropene	12.530	75	1541	0.37	ug/L		91
72) 4-methyl-2-pentanone	12.650	58	3149	1.77	ug/L		91
76) toluene	12.938	92	2906	0.52	ug/L	#	78
77) trans-1,3-dichloropropene	13.126	75	1283	0.39	ug/L	#	69
78) ethyl methacrylate	13.158	69	1362	0.40	ug/L	#	67
79) 1,1,2-trichloroethane	13.351	83	797	0.45	ug/L	#	66
80) 2-hexanone	13.576	58	2690	1.92	ug/L	#	68
81) tetrachloroethene	13.571	166	1119	0.46	ug/L		96
82) 1,3-dichloropropane	13.571	76	1583	0.46	ug/L		81
83) butyl acetate	13.660	56	1018	0.50	ug/L	#	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236267.D
Acq On : 22 Sep 2017 10:59 pm
Operator : ChelseaS
Sample : ic8958-0.5
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 25 08:31:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:23:40 2017
Response via : Initial Calibration

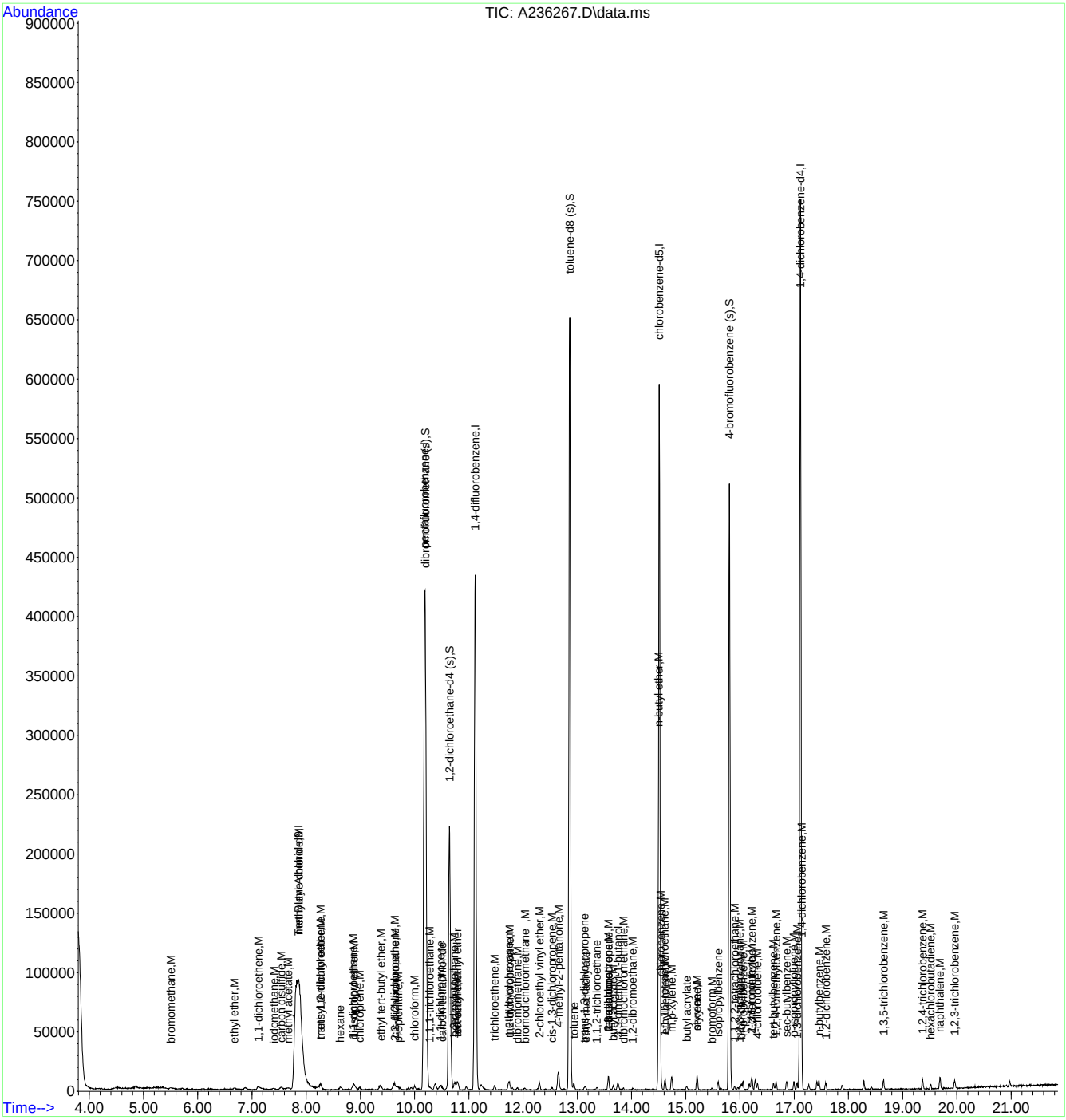
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
84) 3,3-dimethyl-1-butanol	13.749	57	3905	5.10 ug/L	95
85) dibromochloromethane	13.848	129	1107	0.45 ug/L	76
86) 1,2-dibromoethane	14.026	107	1052	0.47 ug/L	96
87) n-butyl ether	14.491	57	5089	0.45 ug/L #	23
88) chlorobenzene	14.544	112	2724	0.45 ug/L	96
89) 1,1,1,2-tetrachloroethane	14.606	131	1661	0.58 ug/L	82
90) ethylbenzene	14.622	91	4777	0.44 ug/L	94
91) m,p-xylene	14.742	106	3907	0.95 ug/L	85
92) o-xylene	15.208	106	2168	0.48 ug/L	89
93) styrene	15.213	104	3126	0.47 ug/L	85
94) butyl acrylate	15.020	55	2351	0.44 ug/L	92
95) bromoform	15.485	173	886	0.46 ug/L	75
96) isopropylbenzene	15.600	105	5324	0.42 ug/L	99
100) bromobenzene	16.019	156	1245	0.43 ug/L	86
101) 1,1,2,2-tetrachloroethane	15.903	83	1957	0.48 ug/L	73
103) 1,2,3-trichloropropane	15.987	110	593	0.56 ug/L #	53
104) n-propylbenzene	16.055	91	6448	0.44 ug/L	97
105) 2-chlorotoluene	16.207	126	1367	0.45 ug/L #	54
106) 4-chlorotoluene	16.322	91	3836	0.48 ug/L	93
107) 1,3,5-trimethylbenzene	16.223	105	4654	0.41 ug/L	90
108) tert-butylbenzene	16.620	119	3626	0.37 ug/L	97
109) 1,2,4-trimethylbenzene	16.662	105	4661	0.41 ug/L	91
110) sec-butylbenzene	16.861	105	6466	0.43 ug/L	89
111) 1,3-dichlorobenzene	17.049	146	2898	0.52 ug/L	97
112) p-isopropyltoluene	16.991	119	4898	0.38 ug/L	97
113) 1,4-dichlorobenzene	17.143	146	3056	0.54 ug/L	96
114) 1,2-dichlorobenzene	17.588	146	2846	0.48 ug/L	94
115) n-butylbenzene	17.457	92	2911	0.44 ug/L	97
117) 1,3,5-trichlorobenzene	18.649	180	3089	0.50 ug/L	94
119) 1,2,4-trichlorobenzene	19.366	180	3462	0.60 ug/L	93
120) hexachlorobutadiene	19.512	225	1343	0.48 ug/L	82
121) naphthalene	19.690	128	9116	0.52 ug/L	92
122) 1,2,3-trichlorobenzene	19.962	180	3057	0.51 ug/L	79

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236267.D
Acq On : 22 Sep 2017 10:59 pm
Operator : ChelseaS
Sample : ic8958-0.5
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 25 08:31:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:23:40 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236268.D
Acq On : 22 Sep 2017 11:29 pm
Operator : ChelseaS
Sample : ic8958-1
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 25 09:06:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:23:40 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.843	65	465532	500.00	ug/L		0.03
5) pentafluorobenzene	10.181	168	277500	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.118	114	396388	50.00	ug/L		0.00
74) chlorobenzene-d5	14.512	117	330038	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.111	152	205937	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.202	113	158047	49.77	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.54%				
53) 1,2-dichloroethane-d4 (s)	10.642	65	182571	52.44	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 104.88%				
75) toluene-d8 (s)	12.859	98	462368	51.31	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 102.62%				
99) 4-bromofluorobenzene (s)	15.804	95	171753	48.99	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 97.98%				
Target Compounds							Qvalue
6) chlorodifluoromethane	4.203	51	3976	0.73	ug/L		75
7) dichlorodifluoromethane	4.182	85	4665	0.81	ug/L		92
8) chloromethane	4.512	50	5062	0.84	ug/L		85
9) vinyl chloride	4.831	62	5880	0.94	ug/L		94
11) bromomethane	5.527	94	3443	0.98	ug/L		71
12) chloroethane	5.710	64	2840	1.01	ug/L		67
13) vinyl bromide	6.102	106	2986	0.90	ug/L	#	89
14) trichlorofluoromethane	6.243	101	4761	0.83	ug/L		91
15) ethyl ether	6.682	74	1289	0.83	ug/L	#	55
17) freon 113	7.122	151	2304	0.89	ug/L	#	41
18) 1,1-dichloroethene	7.116	96	2500	0.95	ug/L		84
19) acetone	7.174	58	1847	3.48	ug/L	#	77
21) iodomethane	7.409	142	4820	0.88	ug/L		84
22) carbon disulfide	7.524	76	10528	1.02	ug/L		94
23) methylene chloride	7.859	84	2927	0.96	ug/L		85
24) methyl acetate	7.671	43	3617	0.95	ug/L	#	74
25) methyl tert butyl ether	8.257	73	9004	0.92	ug/L		82
26) trans-1,2-dichloroethene	8.278	96	2759	1.01	ug/L		96
27) hexane	8.628	57	3279	0.84	ug/L		86
28) di-isopropyl ether	8.884	45	9695	0.91	ug/L		82
29) ethyl tert-butyl ether	9.360	59	8966	0.89	ug/L		88
30) 2-butanone	9.596	72	1897	3.67	ug/L	#	66
31) 1,1-dichloroethane	8.863	63	4723	0.90	ug/L		96
32) chloroprene	8.989	53	3637	0.81	ug/L		92
33) acrylonitrile	8.210	53	1590	0.88	ug/L		88
36) 2,2-dichloropropane	9.648	77	4185	0.91	ug/L		84
37) cis-1,2-dichloroethene	9.627	96	3029	0.98	ug/L	#	68
39) propionitrile	9.679	54	7665	9.35	ug/L	#	58
40) bromochloromethane	9.936	128	1490	0.93	ug/L	#	79
41) tetrahydrofuran	10.004	42	1598	0.88	ug/L	#	52
42) chloroform	10.004	83	5233	1.06	ug/L		92
45) methacrylonitrile	9.883	67	1155	0.74	ug/L	#	39
46) cyclohexane	10.375	84	3479	0.72	ug/L	#	82
47) 1,1,1-trichloroethane	10.286	97	4508	0.92	ug/L		94
49) 1,1-dichloropropene	10.479	75	3242	0.84	ug/L		85
50) carbon tetrachloride	10.500	117	3786	0.87	ug/L		92
54) benzene	10.741	78	9885	0.97	ug/L		99
55) iso-octane	10.778	57	9553	0.83	ug/L		94
56) tert-amyl methyl ether	10.793	73	8487	0.92	ug/L		91
57) heptane	10.955	71	1549	0.77	ug/L		84
59) 1,2-dichloroethane	10.741	62	3437	0.96	ug/L		87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236268.D
Acq On : 22 Sep 2017 11:29 pm
Operator : ChelseaS
Sample : ic8958-1
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 25 09:06:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:23:40 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
60) n-butyl alcohol	11.233	56	7252	38.46	ug/L		90
61) ethyl acrylate	11.473	55	2649	0.72	ug/L		87
62) trichloroethene	11.473	95	2205	0.92	ug/L		88
64) methylcyclohexane	11.735	83	4881	0.88	ug/L		96
65) 2-chloroethyl vinyl ether	12.300	63	6068	4.13	ug/L		95
67) 1,2-dichloropropane	11.745	63	2531	0.94	ug/L		91
68) dibromomethane	11.892	93	1422	0.86	ug/L		88
69) bromodichloromethane	12.028	83	2891	0.86	ug/L		86
70) epichlorohydrin	12.420	57	1772	4.27	ug/L	#	70
71) cis-1,3-dichloropropene	12.524	75	3243	0.84	ug/L		78
72) 4-methyl-2-pentanone	12.650	58	5653	3.39	ug/L		95
73) 3-methyl-1-butanol	12.645	55	5244	15.59	ug/L		98
76) toluene	12.943	92	5236	0.99	ug/L		94
77) trans-1,3-dichloropropene	13.131	75	2879	0.93	ug/L		93
78) ethyl methacrylate	13.152	69	2674	0.82	ug/L		91
79) 1,1,2-trichloroethane	13.361	83	1482	0.89	ug/L	#	80
80) 2-hexanone	13.570	58	5033	3.78	ug/L		94
81) tetrachloroethene	13.576	166	2369	1.02	ug/L		84
82) 1,3-dichloropropane	13.565	76	2991	0.92	ug/L		98
83) butyl acetate	13.665	56	1823	0.93	ug/L		97
84) 3,3-dimethyl-1-butanol	13.743	57	5783	7.94	ug/L		94
85) dibromochloromethane	13.842	129	2132	0.91	ug/L	#	72
86) 1,2-dibromoethane	14.020	107	1802	0.84	ug/L		98
87) n-butyl ether	14.486	57	8975	0.82	ug/L	#	83
88) chlorobenzene	14.548	112	5118	0.89	ug/L		95
89) 1,1,1,2-tetrachloroethane	14.616	131	2693	0.98	ug/L		86
90) ethylbenzene	14.622	91	9678	0.93	ug/L		93
91) m,p-xylene	14.742	106	7481	1.91	ug/L		97
92) o-xylene	15.207	106	4181	0.97	ug/L		87
93) styrene	15.213	104	5740	0.91	ug/L		93
94) butyl acrylate	15.014	55	4668	0.92	ug/L		91
95) bromoform	15.479	173	1580	0.86	ug/L		82
96) isopropylbenzene	15.600	105	10783	0.90	ug/L		95
97) cis-1,4-dichloro-2-butene	15.647	75	978	0.81	ug/L	#	82
100) bromobenzene	16.023	156	2465	0.88	ug/L		92
101) 1,1,2,2-tetrachloroethane	15.903	83	3537	0.90	ug/L		84
103) 1,2,3-trichloropropane	15.992	110	832	0.82	ug/L		78
104) n-propylbenzene	16.055	91	12376	0.89	ug/L		99
105) 2-chlorotoluene	16.206	126	2450	0.84	ug/L		90
106) 4-chlorotoluene	16.322	91	7005	0.92	ug/L		91
107) 1,3,5-trimethylbenzene	16.222	105	8613	0.79	ug/L		98
108) tert-butylbenzene	16.620	119	6616	0.71	ug/L		98
109) 1,2,4-trimethylbenzene	16.661	105	8784	0.80	ug/L		95
110) sec-butylbenzene	16.860	105	10891	0.75	ug/L		92
111) 1,3-dichlorobenzene	17.048	146	5145	0.97	ug/L		96
112) p-isopropyltoluene	16.991	119	9289	0.76	ug/L		98
113) 1,4-dichlorobenzene	17.143	146	5711	1.05	ug/L		99
114) 1,2-dichlorobenzene	17.582	146	5699	1.00	ug/L		96
115) n-butylbenzene	17.451	92	5563	0.87	ug/L		94
116) 1,2-dibromo-3-chloropr...	18.419	157	1281	1.00	ug/L		79
117) 1,3,5-trichlorobenzene	18.644	180	5771	0.97	ug/L		96
119) 1,2,4-trichlorobenzene	19.360	180	5383	0.97	ug/L		86
120) hexachlorobutadiene	19.517	225	2137	0.80	ug/L		87
121) naphthalene	19.684	128	15723	0.94	ug/L		96
122) 1,2,3-trichlorobenzene	19.956	180	5565	0.96	ug/L		91
123) hexachloroethane	17.880	201	1630	0.71	ug/L		91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236268.D
Acq On : 22 Sep 2017 11:29 pm
Operator : ChelseaS
Sample : ic8958-1
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 25 09:06:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:23:40 2017
Response via : Initial Calibration

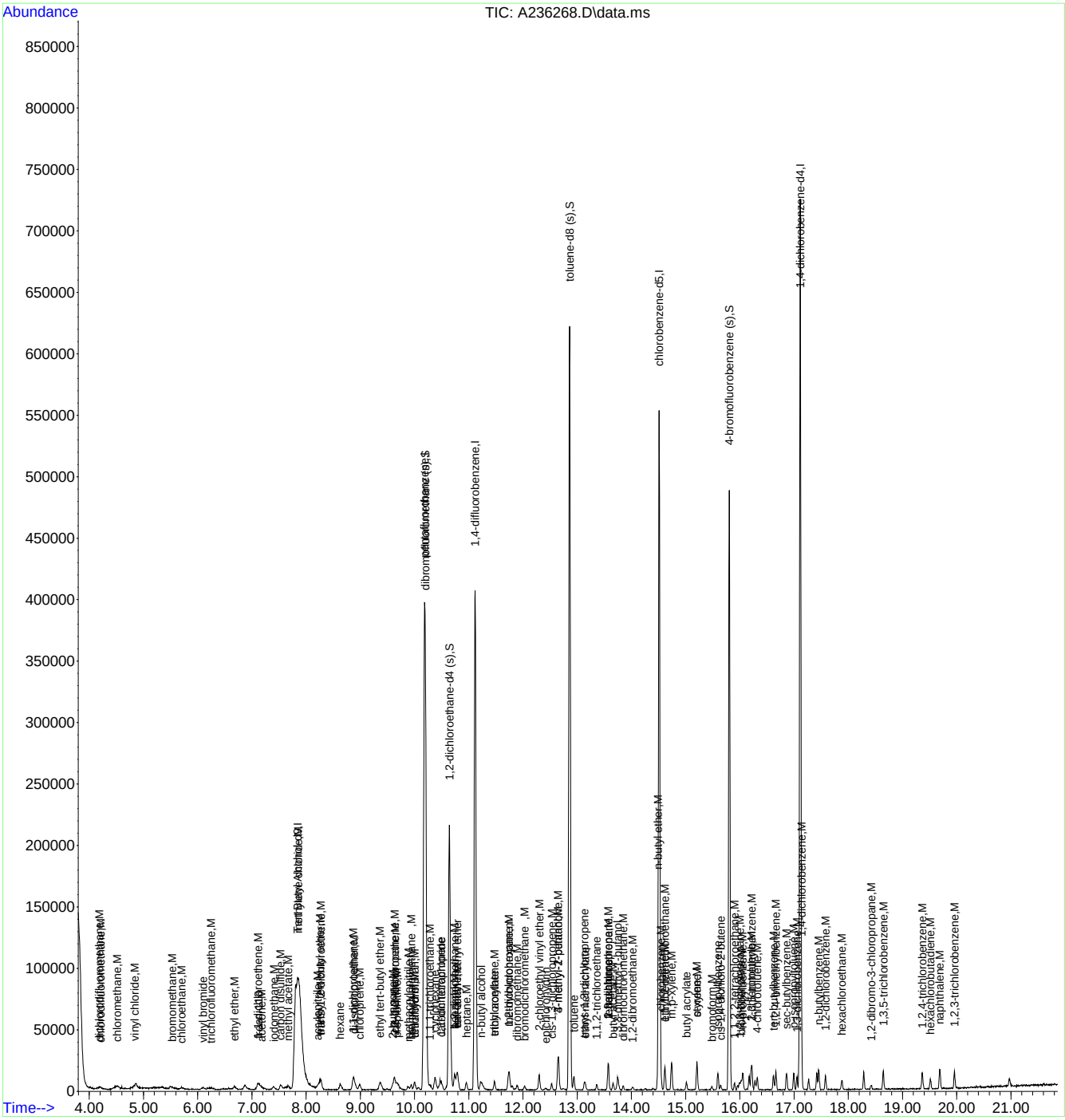
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236268.D
Acq On : 22 Sep 2017 11:29 pm
Operator : ChelseaS
Sample : ic8958-1
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 25 09:06:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:23:40 2017
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 09/27/17 13:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236269.D
Acq On : 22 Sep 2017 11:58 pm
Operator : ChelseaS
Sample : ic8958-2
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 25 09:06:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.873	65	461063	500.00	ug/L		0.06
5) pentafluorobenzene	10.184	168	281638	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.115	114	398275	50.00	ug/L		0.00
74) chlorobenzene-d5	14.510	117	331411	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.114	152	203662	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.205	113	161666	50.16	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.32%				
53) 1,2-dichloroethane-d4 (s)	10.645	65	184863	52.84	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 105.68%				
75) toluene-d8 (s)	12.857	98	463045	51.18	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 102.36%				
99) 4-bromofluorobenzene (s)	15.807	95	172216	49.67	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.34%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	8.003	59	7457	8.22	ug/L		96
4) 1,4-dioxane	11.868	88	1605	31.63	ug/L		95
6) chlorodifluoromethane	4.206	51	6588	1.18	ug/L		79
7) dichlorodifluoromethane	4.180	85	7904	1.35	ug/L		83
8) chloromethane	4.525	50	8797	1.44	ug/L		90
9) vinyl chloride	4.850	62	9758	1.54	ug/L		96
11) bromomethane	5.514	94	6297	1.77	ug/L		75
12) chloroethane	5.723	64	4824	1.69	ug/L		87
13) vinyl bromide	6.089	106	5396	1.61	ug/L		94
14) trichlorofluoromethane	6.220	101	8943	1.54	ug/L		78
15) ethyl ether	6.691	74	2341	1.48	ug/L	#	31
16) acrolein	6.942	56	1394	1.50	ug/L		70
17) freon 113	7.114	151	3913	1.50	ug/L	#	96
18) 1,1-dichloroethene	7.120	96	4238	1.58	ug/L	#	69
19) acetone	7.167	58	3347	6.22	ug/L	#	70
20) acetonitrile	7.632	41	13718	16.73	ug/L		88
21) iodomethane	7.397	142	8956	1.61	ug/L		99
22) carbon disulfide	7.533	76	18418	1.76	ug/L		91
23) methylene chloride	7.857	84	5216	1.69	ug/L		82
24) methyl acetate	7.684	43	5839	1.52	ug/L	#	91
25) methyl tert butyl ether	8.244	73	15637	1.58	ug/L		98
26) trans-1,2-dichloroethene	8.275	96	4758	1.72	ug/L		84
27) hexane	8.642	57	5289	1.34	ug/L		89
28) di-isopropyl ether	8.877	45	17203	1.60	ug/L	#	72
29) ethyl tert-butyl ether	9.363	59	16048	1.57	ug/L		89
30) 2-butanone	9.588	72	3312	6.31	ug/L	#	70
31) 1,1-dichloroethane	8.866	63	9262	1.73	ug/L		95
32) chloroprene	8.987	53	6409	1.40	ug/L		96
33) acrylonitrile	8.213	53	2603	1.41	ug/L		91
36) 2,2-dichloropropane	9.651	77	7892	1.70	ug/L		93
37) cis-1,2-dichloroethene	9.620	96	5198	1.66	ug/L		84
39) propionitrile	9.682	54	13268	15.95	ug/L		80
40) bromochloromethane	9.944	128	2905	1.79	ug/L	#	76
41) tetrahydrofuran	9.991	42	2615	1.42	ug/L		80
42) chloroform	9.996	83	8579	1.71	ug/L		82
45) methacrylonitrile	9.892	67	2305	1.46	ug/L	#	64
46) cyclohexane	10.383	84	7477	1.53	ug/L	#	82
47) 1,1,1-trichloroethane	10.284	97	7683	1.54	ug/L		94
48) iso-butyl alcohol	10.456	43	5566	17.24	ug/L		86
49) 1,1-dichloropropene	10.467	75	5815	1.49	ug/L		91
50) carbon tetrachloride	10.509	117	6314	1.43	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236269.D
Acq On : 22 Sep 2017 11:58 pm
Operator : ChelseaS
Sample : ic8958-2
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 25 09:06:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
51) tert-amyl alcohol	10.618	73	3240	6.66	ug/L	#	70
54) benzene	10.739	78	16603	1.62	ug/L		97
55) iso-octane	10.791	57	15298	1.32	ug/L		92
56) tert-amyl methyl ether	10.796	73	15561	1.68	ug/L		93
57) heptane	10.958	71	2796	1.37	ug/L		93
59) 1,2-dichloroethane	10.734	62	6075	1.68	ug/L		96
60) n-butyl alcohol	11.220	56	13172	69.53	ug/L		97
61) ethyl acrylate	11.476	55	5400	1.46	ug/L		87
62) trichloroethene	11.471	95	4135	1.72	ug/L	#	72
63) 2-nitropropane	12.271	41	2139	1.66	ug/L		91
64) methylcyclohexane	11.743	83	8399	1.50	ug/L		97
65) 2-chloroethyl vinyl ether	12.297	63	11044	7.49	ug/L		97
67) 1,2-dichloropropane	11.748	63	4175	1.54	ug/L		91
68) dibromomethane	11.889	93	3099	1.87	ug/L		76
69) bromodichloromethane	12.031	83	5393	1.60	ug/L		85
70) epichlorohydrin	12.418	57	3162	7.59	ug/L		87
71) cis-1,3-dichloropropene	12.527	75	5530	1.42	ug/L		94
72) 4-methyl-2-pentanone	12.653	58	10542	6.29	ug/L		97
73) 3-methyl-1-butanol	12.653	55	9433	27.92	ug/L		96
76) toluene	12.941	92	8210	1.54	ug/L		97
77) trans-1,3-dichloropropene	13.129	75	4964	1.59	ug/L		96
78) ethyl methacrylate	13.150	69	4974	1.53	ug/L		84
79) 1,1,2-trichloroethane	13.370	83	2705	1.61	ug/L	#	77
80) 2-hexanone	13.568	58	9211	6.89	ug/L		99
81) tetrachloroethene	13.579	166	3949	1.70	ug/L		78
82) 1,3-dichloropropane	13.563	76	5054	1.54	ug/L		97
83) butyl acetate	13.657	56	3333	1.70	ug/L		91
84) 3,3-dimethyl-1-butanol	13.751	57	10815	14.78	ug/L		96
85) dibromochloromethane	13.851	129	3811	1.61	ug/L		93
86) 1,2-dibromoethane	14.023	107	3580	1.67	ug/L		84
87) n-butyl ether	14.484	57	17236	1.58	ug/L		92
88) chlorobenzene	14.546	112	9262	1.61	ug/L		83
89) 1,1,1,2-tetrachloroethane	14.614	131	4628	1.68	ug/L		99
90) ethylbenzene	14.625	91	16724	1.60	ug/L		99
91) m,p-xylene	14.740	106	12034	3.05	ug/L		97
92) o-xylene	15.205	106	6860	1.58	ug/L		93
93) styrene	15.216	104	9598	1.52	ug/L		96
94) butyl acrylate	15.012	55	8062	1.58	ug/L		96
95) bromoform	15.483	173	3020	1.64	ug/L		90
96) isopropylbenzene	15.598	105	18709	1.56	ug/L		97
97) cis-1,4-dichloro-2-butene	15.650	75	1932	1.60	ug/L		88
100) bromobenzene	16.026	156	4309	1.56	ug/L		83
101) 1,1,2,2-tetrachloroethane	15.901	83	6471	1.67	ug/L		84
103) 1,2,3-trichloropropane	15.995	110	1638	1.63	ug/L		73
104) n-propylbenzene	16.053	91	20976	1.52	ug/L		100
105) 2-chlorotoluene	16.209	126	4257m	1.48	ug/L		
106) 4-chlorotoluene	16.314	91	12125	1.62	ug/L		97
107) 1,3,5-trimethylbenzene	16.225	105	15188	1.40	ug/L		96
108) tert-butylbenzene	16.617	119	11167	1.22	ug/L		94
109) 1,2,4-trimethylbenzene	16.665	105	15018	1.39	ug/L		92
110) sec-butylbenzene	16.863	105	18924	1.32	ug/L		99
111) 1,3-dichlorobenzene	17.057	146	8640	1.64	ug/L		95
112) p-isopropyltoluene	16.994	119	16493	1.36	ug/L		97
113) 1,4-dichlorobenzene	17.140	146	9587	1.79	ug/L		94
114) 1,2-dichlorobenzene	17.575	146	9592	1.70	ug/L		89
115) n-butylbenzene	17.449	92	8966	1.42	ug/L		96
116) 1,2-dibromo-3-chloropr...	18.422	157	1834	1.45	ug/L		81
117) 1,3,5-trichlorobenzene	18.647	180	9523	1.62	ug/L		89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236269.D
Acq On : 22 Sep 2017 11:58 pm
Operator : ChelseaS
Sample : ic8958-2
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 25 09:06:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration

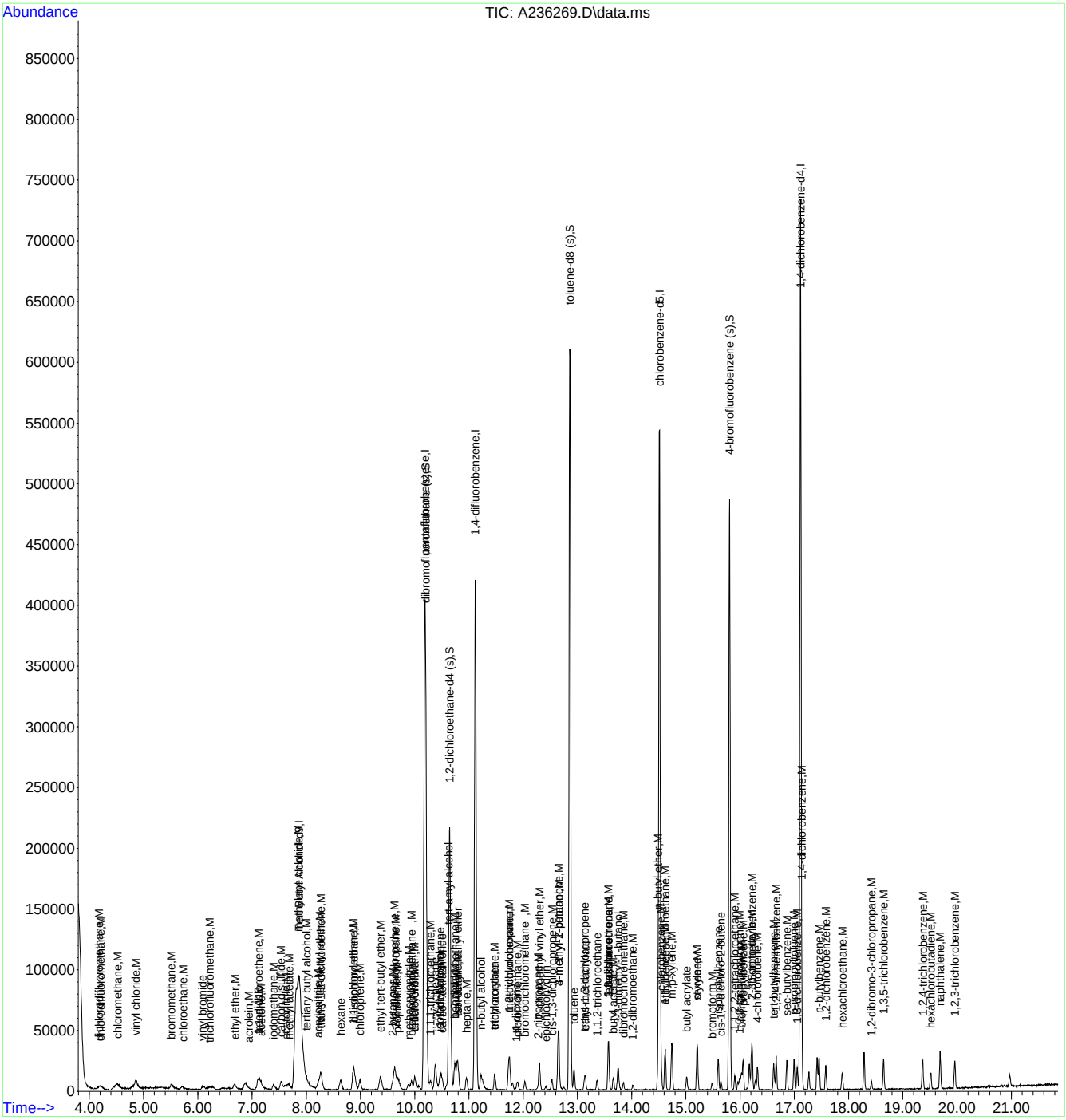
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) 1,2,4-trichlorobenzene	19.369	180	9133	1.66	ug/L	93
120) hexachlorobutadiene	19.515	225	3907	1.48	ug/L	90
121) naphthalene	19.688	128	25581	1.55	ug/L	98
122) 1,2,3-trichlorobenzene	19.959	180	8926	1.56	ug/L	91
123) hexachloroethane	17.883	201	2728	1.20	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236269.D
Acq On : 22 Sep 2017 11:58 pm
Operator : ChelseaS
Sample : ic8958-2
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 25 09:06:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: VA8958-IC8958
Lab FileID: A236269.D
Injection Time: 09/22/17 23:58

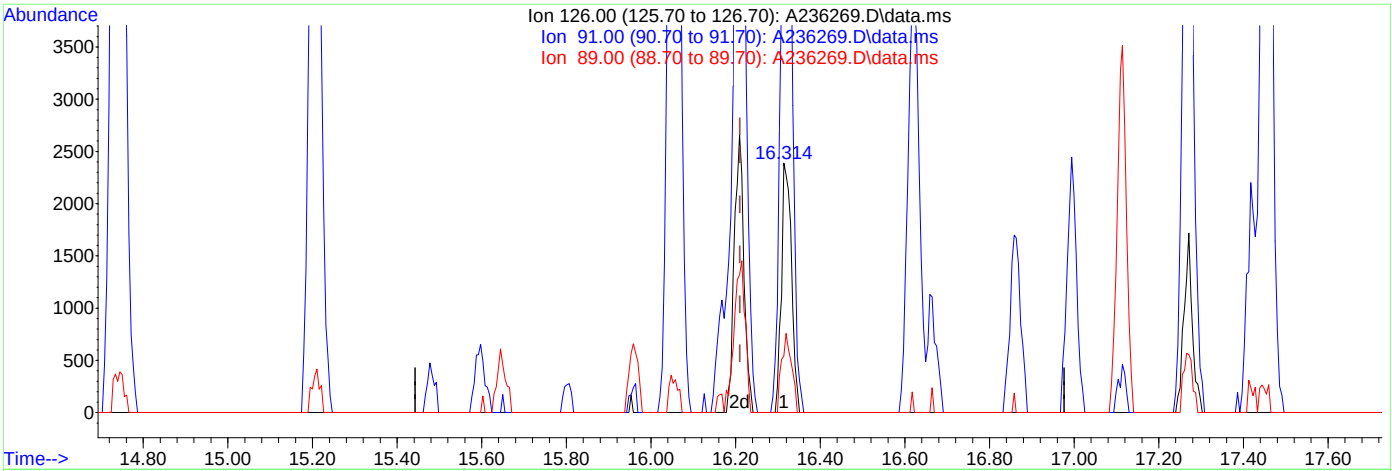
Method: SW846 8260C
Analyst approved: 09/25/17 09:10 Ying Li
Supervisor approved: 09/27/17 13:27 Kanya Veerawat

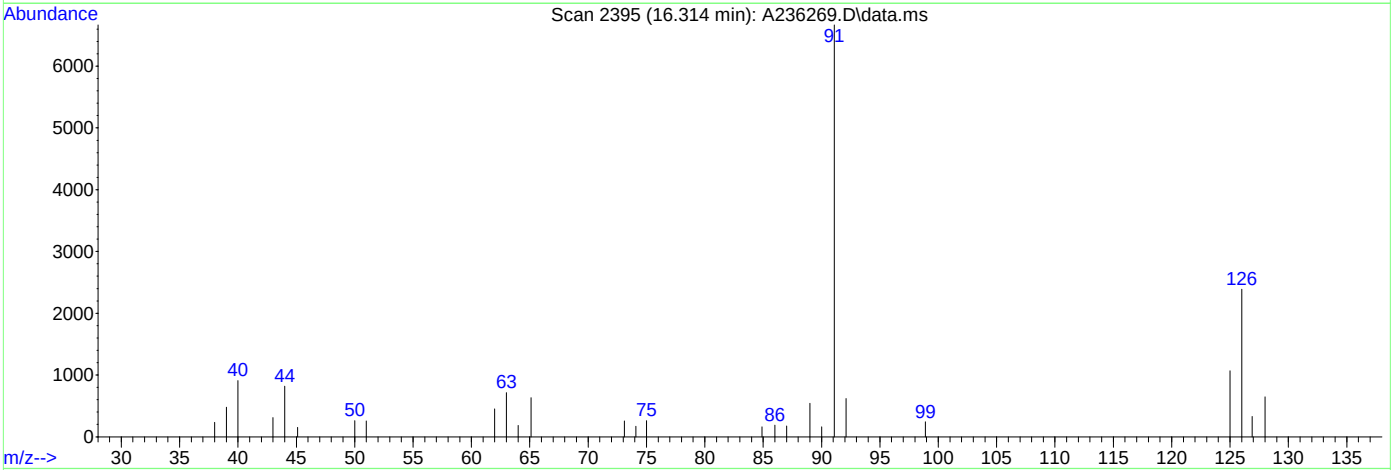
Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Chlorotoluene	95-49-8		16.21	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : A236269.D
Acq On : 22 Sep 2017 11:58 pm
Operator : ChelseaS
Sample : ic8958-2
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 25 08:19:09 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration





TIC: A236269.D\data.ms

(105) 2-chlorotoluene (M)

16.314min (+0.104) 1.35ug/L

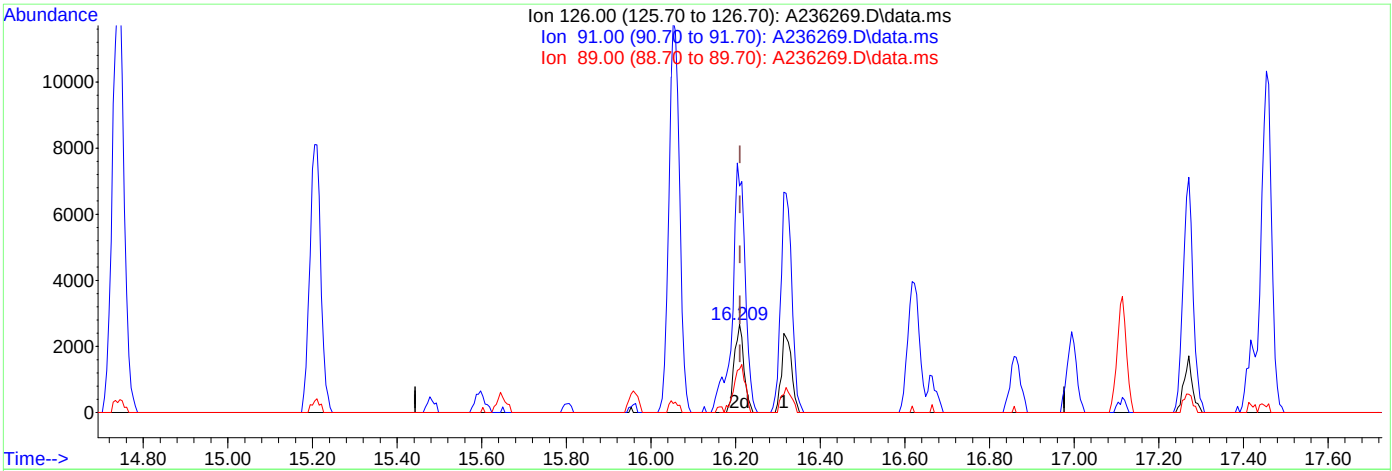
response 3898

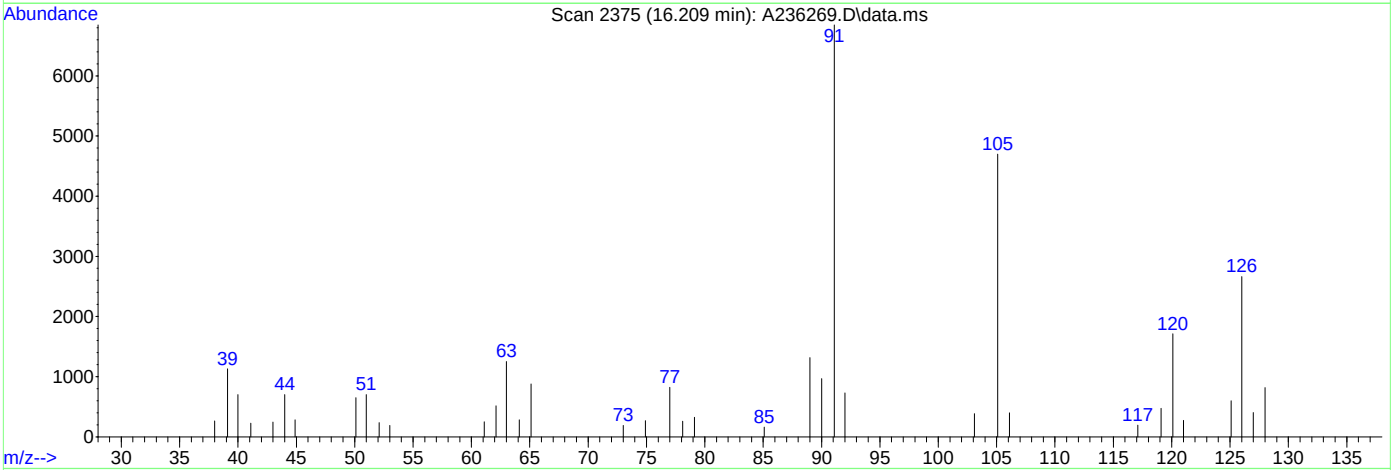
Ion	Exp%	Act%
126.00	100	100
91.00	290.80	272.59
89.00	52.50	22.76
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : A236269.D
Acq On : 22 Sep 2017 11:58 pm
Operator : ChelseaS
Sample : ic8958-2
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 25 09:06:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration





TIC: A236269.D\data.ms

(105) 2-chlorotoluene (M)

16.209min (-0.000) 1.48ug/L m

response 4257

Ion	Exp%	Act%
126.00	100	100
91.00	290.80	257.35#
89.00	52.50	49.53
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236270.D
Acq On : 23 Sep 2017 12:27 am
Operator : ChelseaS
Sample : ic8958-5
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 25 09:07:05 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.816	65	454270	500.00	ug/L		0.00
5) pentafluorobenzene	10.185	168	276641	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.116	114	405843	50.00	ug/L		0.00
74) chlorobenzene-d5	14.510	117	329896	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.115	152	205707	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.201	113	159310	50.33	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.66%				
53) 1,2-dichloroethane-d4 (s)	10.645	65	183731	51.54	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.08%				
75) toluene-d8 (s)	12.858	98	468191	51.98	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 103.96%				
99) 4-bromofluorobenzene (s)	15.802	95	173700	49.60	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.20%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.931	59	22359	25.01	ug/L		94
4) 1,4-dioxane	11.885	88	5616	112.32	ug/L		96
6) chlorodifluoromethane	4.217	51	22350	4.09	ug/L		93
7) dichlorodifluoromethane	4.212	85	25730	4.47	ug/L		97
8) chloromethane	4.521	50	27437	4.58	ug/L		95
9) vinyl chloride	4.840	62	30756	4.93	ug/L		97
10) 1,3-butadiene	4.866	54	15359	4.80	ug/L		95
11) bromomethane	5.509	94	17730	5.07	ug/L		97
12) chloroethane	5.713	64	14598	5.20	ug/L		91
13) vinyl bromide	6.100	106	15679	4.76	ug/L		98
14) trichlorofluoromethane	6.257	101	27726	4.85	ug/L		95
15) ethyl ether	6.676	74	7621	4.92	ug/L		93
16) acrolein	6.921	56	4234	4.65	ug/L		95
17) freon 113	7.115	151	12689	4.94	ug/L		97
18) 1,1-dichloroethene	7.120	96	14094	5.35	ug/L	#	76
19) acetone	7.162	58	10690	20.22	ug/L		93
20) acetonitrile	7.606	41	39279	48.77	ug/L		97
21) iodomethane	7.397	142	27931	5.11	ug/L		99
22) carbon disulfide	7.533	76	53281	5.19	ug/L		98
23) methylene chloride	7.863	84	15622	5.16	ug/L		91
24) methyl acetate	7.669	43	18341	4.85	ug/L		95
25) methyl tert butyl ether	8.250	73	48210	4.95	ug/L		97
26) trans-1,2-dichloroethene	8.276	96	13976	5.15	ug/L		89
27) hexane	8.637	57	18913	4.89	ug/L		97
28) di-isopropyl ether	8.888	45	52616	4.97	ug/L		97
29) ethyl tert-butyl ether	9.369	59	48318	4.80	ug/L		94
30) 2-butanone	9.599	72	9835	19.08	ug/L	#	65
31) 1,1-dichloroethane	8.862	63	26466	5.03	ug/L		100
32) chloroprene	8.992	53	22002	4.90	ug/L		99
33) acrylonitrile	8.203	53	9058	5.01	ug/L		94
34) vinyl acetate	8.862	86	2227	4.15	ug/L	#	40
35) ethyl acetate	9.631	45	3097	4.72	ug/L	#	70
36) 2,2-dichloropropane	9.651	77	22904	5.01	ug/L		94
37) cis-1,2-dichloroethene	9.625	96	15594	5.07	ug/L		96
38) methyl acrylate	9.714	85	2062	3.95	ug/L	#	26
39) propionitrile	9.678	54	39066	47.80	ug/L		72
40) bromochloromethane	9.939	128	7599	4.76	ug/L	#	80
41) tetrahydrofuran	9.991	42	8016	4.45	ug/L		95
42) chloroform	9.997	83	25640	5.20	ug/L		97
43) tert-butyl formate	10.065	59	7888	4.81	ug/L		98
45) methacrylonitrile	9.887	67	7366	4.76	ug/L		86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236270.D
Acq On : 23 Sep 2017 12:27 am
Operator : ChelseaS
Sample : ic8958-5
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 25 09:07:05 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cyclohexane	10.378	84	21809	4.55	ug/L	#	87
47) 1,1,1-trichloroethane	10.295	97	23904	4.89	ug/L		98
48) iso-butyl alcohol	10.452	43	13016	41.04	ug/L		95
49) 1,1-dichloropropene	10.478	75	18005	4.69	ug/L		96
50) carbon tetrachloride	10.504	117	21182	4.87	ug/L		99
51) tert-amyl alcohol	10.603	73	10691	22.38	ug/L		96
54) benzene	10.739	78	52427	5.01	ug/L		97
55) iso-octane	10.781	57	54263	4.60	ug/L		98
56) tert-amyl methyl ether	10.797	73	46876	4.97	ug/L		96
57) heptane	10.954	71	9705	4.68	ug/L		94
58) isopropyl acetate	10.666	87	2940	4.13	ug/L	#	77
59) 1,2-dichloroethane	10.734	62	18059	4.92	ug/L		97
60) n-butyl alcohol	11.220	56	42323	219.23	ug/L		97
61) ethyl acrylate	11.477	55	16357	4.33	ug/L		94
62) trichloroethene	11.472	95	12454	5.08	ug/L		97
63) 2-nitropropane	12.261	41	5971	4.56	ug/L	#	64
64) methylcyclohexane	11.733	83	28194	4.96	ug/L		99
65) 2-chloroethyl vinyl ether	12.298	63	33764	22.47	ug/L		95
66) methyl methacrylate	11.759	100	2982	4.06	ug/L	#	86
67) 1,2-dichloropropane	11.754	63	13702	4.95	ug/L		98
68) dibromomethane	11.890	93	8744	5.18	ug/L		83
69) bromodichloromethane	12.031	83	16279	4.75	ug/L		92
70) epichlorohydrin	12.418	57	9645	22.71	ug/L		92
71) cis-1,3-dichloropropene	12.533	75	17989	4.55	ug/L		98
72) 4-methyl-2-pentanone	12.648	58	31728	18.58	ug/L		95
73) 3-methyl-1-butanol	12.643	55	30416	88.34	ug/L		98
76) toluene	12.941	92	26979	5.10	ug/L		99
77) trans-1,3-dichloropropene	13.124	75	15111	4.86	ug/L		96
78) ethyl methacrylate	13.145	69	15569	4.80	ug/L		96
79) 1,1,2-trichloroethane	13.360	83	8585	5.13	ug/L	#	85
80) 2-hexanone	13.569	58	27300	20.50	ug/L	#	86
81) tetrachloroethene	13.574	166	11192	4.84	ug/L		90
82) 1,3-dichloropropane	13.564	76	16040	4.91	ug/L		94
83) butyl acetate	13.663	56	10090	5.16	ug/L		94
84) 3,3-dimethyl-1-butanol	13.747	57	33490	45.99	ug/L		97
85) dibromochloromethane	13.846	129	11095	4.72	ug/L		99
86) 1,2-dibromoethane	14.019	107	10386	4.87	ug/L		93
87) n-butyl ether	14.484	57	54646	5.02	ug/L		93
88) chlorobenzene	14.547	112	27951	4.88	ug/L		98
89) 1,1,1,2-tetrachloroethane	14.615	131	13395	4.88	ug/L		93
90) ethylbenzene	14.620	91	52142	5.03	ug/L		99
91) m,p-xylene	14.746	106	38660	9.85	ug/L		94
92) o-xylene	15.206	106	21141	4.89	ug/L		98
93) styrene	15.211	104	31326	4.99	ug/L		99
94) butyl acrylate	15.012	55	24503	4.83	ug/L		91
95) bromoform	15.483	173	8918	4.85	ug/L		91
96) isopropylbenzene	15.593	105	57723	4.83	ug/L		97
97) cis-1,4-dichloro-2-butene	15.650	75	6019	5.00	ug/L		92
100) bromobenzene	16.027	156	13388	4.80	ug/L		86
101) 1,1,2,2-tetrachloroethane	15.901	83	19339	4.93	ug/L		99
102) trans-1,4-dichloro-2-b...	15.954	53	4753	4.90	ug/L		93
103) 1,2,3-trichloropropane	15.996	110	4961	4.90	ug/L		97
104) n-propylbenzene	16.058	91	67037	4.82	ug/L		100
105) 2-chlorotoluene	16.210	126	13750	4.72	ug/L		98
106) 4-chlorotoluene	16.320	91	36920	4.88	ug/L		96
107) 1,3,5-trimethylbenzene	16.226	105	49812	4.56	ug/L		97
108) tert-butylbenzene	16.618	119	38985	4.21	ug/L		94
109) 1,2,4-trimethylbenzene	16.665	105	50645	4.64	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236270.D
Acq On : 23 Sep 2017 12:27 am
Operator : ChelseaS
Sample : ic8958-5
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 25 09:07:05 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration

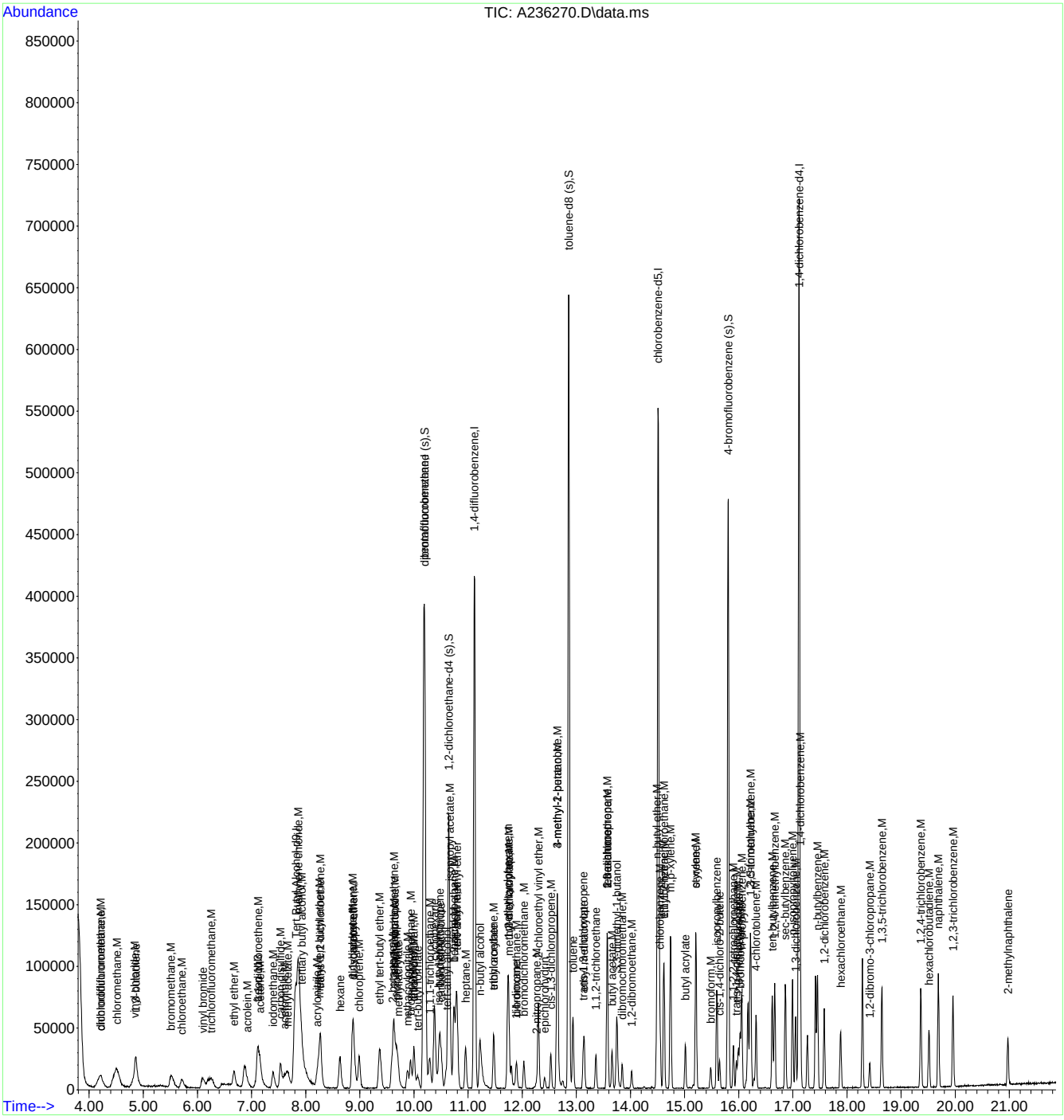
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) sec-butylbenzene	16.859	105	65162	4.49 ug/L	97
111) 1,3-dichlorobenzene	17.052	146	25508	4.79 ug/L	94
112) p-isopropyltoluene	16.995	119	54173	4.42 ug/L	98
113) 1,4-dichlorobenzene	17.141	146	27070	5.00 ug/L	99
114) 1,2-dichlorobenzene	17.580	146	28853	5.05 ug/L	94
115) n-butylbenzene	17.455	92	30435	4.76 ug/L	98
116) 1,2-dibromo-3-chloropr...	18.422	157	6092	4.77 ug/L	89
117) 1,3,5-trichlorobenzene	18.642	180	29488	4.98 ug/L	88
119) 1,2,4-trichlorobenzene	19.364	180	27348	4.94 ug/L	97
120) hexachlorobutadiene	19.515	225	11666	4.37 ug/L	92
121) naphthalene	19.688	128	78753	4.74 ug/L	98
122) 1,2,3-trichlorobenzene	19.960	180	27462	4.75 ug/L	96
123) hexachloroethane	17.884	201	9105	3.98 ug/L	98
124) 2-methylnaphthalene	20.969	142	20511	1.86 ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236270.D
Acq On : 23 Sep 2017 12:27 am
Operator : ChelseaS
Sample : ic8958-5
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 25 09:07:05 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236271.D
Acq On : 23 Sep 2017 12:57 am
Operator : ChelseaS
Sample : ic8958-10
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 25 08:14:24 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:14:14 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.815	65	452846	500.00	ug/L		0.00
5) pentafluorobenzene	10.179	168	270502	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.115	114	396931	50.00	ug/L		0.00
74) chlorobenzene-d5	14.509	117	335002	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.114	152	204006	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.200	113	154497	49.91	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.82%				
53) 1,2-dichloroethane-d4 (s)	10.639	65	181049	51.93	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.86%				
75) toluene-d8 (s)	12.857	98	468892	51.27	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 102.54%				
99) 4-bromofluorobenzene (s)	15.801	95	172538	49.68	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.36%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.930	59	44558	49.99	ug/L		97
4) 1,4-dioxane	11.852	88	11738	235.50	ug/L		95
6) chlorodifluoromethane	4.206	51	48615	9.10	ug/L		95
7) dichlorodifluoromethane	4.201	85	54041	9.60	ug/L		93
8) chloromethane	4.535	50	53633	9.16	ug/L		96
9) vinyl chloride	4.834	62	60240	9.88	ug/L		99
10) 1,3-butadiene	4.849	54	30459	9.74	ug/L		96
11) bromomethane	5.514	94	35116	10.26	ug/L		91
12) chloroethane	5.702	64	27939	10.18	ug/L		96
13) vinyl bromide	6.089	106	31272	9.72	ug/L		100
14) trichlorofluoromethane	6.241	101	56505	10.10	ug/L		97
15) ethyl ether	6.675	74	15765	10.40	ug/L		83
16) acrolein	6.915	56	8731	9.80	ug/L		98
17) freon 113	7.124	151	25525	10.16	ug/L	#	97
18) 1,1-dichloroethene	7.114	96	26226	10.19	ug/L		96
19) acetone	7.156	58	21121	40.87	ug/L		95
20) acetonitrile	7.616	41	75457	95.82	ug/L		95
21) iodomethane	7.391	142	54727	10.23	ug/L		95
22) carbon disulfide	7.532	76	104110	10.38	ug/L		99
23) methylene chloride	7.862	84	31559	10.65	ug/L		95
24) methyl acetate	7.653	43	37220	10.08	ug/L		98
25) methyl tert butyl ether	8.238	73	96276	10.12	ug/L		100
26) trans-1,2-dichloroethene	8.275	96	27182	10.24	ug/L		95
27) hexane	8.631	57	37958	10.03	ug/L		99
28) di-isopropyl ether	8.882	45	104510	10.10	ug/L		91
29) ethyl tert-butyl ether	9.363	59	96957	9.85	ug/L		96
30) 2-butanone	9.593	72	20324	40.32	ug/L		96
31) 1,1-dichloroethane	8.861	63	53128	10.33	ug/L		99
32) chloroprene	8.981	53	43192	9.83	ug/L		97
33) acrylonitrile	8.202	53	18036	10.20	ug/L		98
34) vinyl acetate	8.856	86	5332	10.16	ug/L	#	55
35) ethyl acetate	9.619	45	6366	9.93	ug/L	#	82
36) 2,2-dichloropropane	9.645	77	45458	10.17	ug/L		99
37) cis-1,2-dichloroethene	9.624	96	30289	10.08	ug/L		96
38) methyl acrylate	9.703	85	4444	8.70	ug/L	#	71
39) propionitrile	9.682	54	79672	99.69	ug/L		94
40) bromochloromethane	9.938	128	15540	9.95	ug/L		94
41) tetrahydrofuran	9.991	42	17233	9.78	ug/L		96
42) chloroform	10.001	83	50137	10.40	ug/L		98
43) tert-butyl formate	10.064	59	15475	9.64	ug/L		95
45) methacrylonitrile	9.870	67	14407	9.51	ug/L		87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236271.D
Acq On : 23 Sep 2017 12:57 am
Operator : ChelseaS
Sample : ic8958-10
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 25 08:14:24 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:14:14 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cyclohexane	10.378	84	45484	9.71	ug/L	#	86
47) 1,1,1-trichloroethane	10.289	97	48287	10.11	ug/L		95
48) iso-butyl alcohol	10.446	43	26474	85.37	ug/L		96
49) 1,1-dichloropropene	10.466	75	36863	9.82	ug/L		98
50) carbon tetrachloride	10.503	117	42439	9.98	ug/L		99
51) tert-amyl alcohol	10.602	73	21252	45.50	ug/L	#	87
54) benzene	10.733	78	104436	10.19	ug/L		99
55) iso-octane	10.786	57	110550	9.57	ug/L		98
56) tert-amyl methyl ether	10.791	73	94936	10.30	ug/L		96
57) heptane	10.953	71	19861	9.80	ug/L		98
58) isopropyl acetate	10.670	87	6650	9.55	ug/L	#	85
59) 1,2-dichloroethane	10.733	62	37003	10.30	ug/L		98
60) n-butyl alcohol	11.220	56	87878	465.41	ug/L		96
61) ethyl acrylate	11.481	55	34529	9.34	ug/L		97
62) trichloroethene	11.471	95	25052	10.46	ug/L		95
63) 2-nitropropane	12.260	41	12507	9.76	ug/L	#	79
64) methylcyclohexane	11.737	83	56954	10.23	ug/L		99
65) 2-chloroethyl vinyl ether	12.297	63	71394	48.58	ug/L		97
66) methyl methacrylate	11.758	100	6792	9.44	ug/L		96
67) 1,2-dichloropropane	11.743	63	26961	9.96	ug/L		99
68) dibromomethane	11.889	93	16757	10.15	ug/L		96
69) bromodichloromethane	12.030	83	33130	9.88	ug/L		99
70) epichlorohydrin	12.417	57	19531	47.02	ug/L		99
71) cis-1,3-dichloropropene	12.527	75	36858	9.52	ug/L		98
72) 4-methyl-2-pentanone	12.647	58	65843	39.43	ug/L		99
73) 3-methyl-1-butanol	12.647	55	64691	192.10	ug/L		99
76) toluene	12.935	92	54509	10.15	ug/L		94
77) trans-1,3-dichloropropene	13.129	75	30652	9.72	ug/L		95
78) ethyl methacrylate	13.144	69	32064	9.73	ug/L		96
79) 1,1,2-trichloroethane	13.359	83	17232	10.14	ug/L		98
80) 2-hexanone	13.573	58	57792	42.74	ug/L		95
81) tetrachloroethene	13.578	166	24270	10.34	ug/L		92
82) 1,3-dichloropropane	13.563	76	33290	10.03	ug/L		98
83) butyl acetate	13.657	56	20620	10.38	ug/L		99
84) 3,3-dimethyl-1-butanol	13.746	57	72570	98.13	ug/L		97
85) dibromochloromethane	13.850	129	23494	9.84	ug/L		99
86) 1,2-dibromoethane	14.018	107	21542	9.95	ug/L		99
87) n-butyl ether	14.483	57	112305	10.16	ug/L		97
88) chlorobenzene	14.546	112	58342	10.03	ug/L		96
89) 1,1,1,2-tetrachloroethane	14.609	131	28061	10.06	ug/L		97
90) ethylbenzene	14.619	91	105918	10.06	ug/L		98
91) m,p-xylene	14.739	106	78212	19.63	ug/L		96
92) o-xylene	15.205	106	44134	10.05	ug/L		95
93) styrene	15.210	104	63339	9.93	ug/L		98
94) butyl acrylate	15.011	55	52799	10.26	ug/L		98
95) bromoform	15.482	173	18893	10.12	ug/L		87
96) isopropylbenzene	15.597	105	121781	10.03	ug/L		100
97) cis-1,4-dichloro-2-butene	15.650	75	11353	9.28	ug/L		93
100) bromobenzene	16.026	156	26606	9.62	ug/L		91
101) 1,1,2,2-tetrachloroethane	15.901	83	38528	9.90	ug/L		99
102) trans-1,4-dichloro-2-b...	15.953	53	10141	10.54	ug/L		93
103) 1,2,3-trichloropropane	15.995	110	9972	9.94	ug/L		93
104) n-propylbenzene	16.052	91	137096	9.95	ug/L		99
105) 2-chlorotoluene	16.204	126	28193	9.76	ug/L		96
106) 4-chlorotoluene	16.319	91	75184	10.02	ug/L		98
107) 1,3,5-trimethylbenzene	16.225	105	103969	9.59	ug/L		99
108) tert-butylbenzene	16.617	119	83748	9.12	ug/L		95
109) 1,2,4-trimethylbenzene	16.664	105	105820	9.77	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236271.D
Acq On : 23 Sep 2017 12:57 am
Operator : ChelseaS
Sample : ic8958-10
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 25 08:14:24 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:14:14 2017
Response via : Initial Calibration

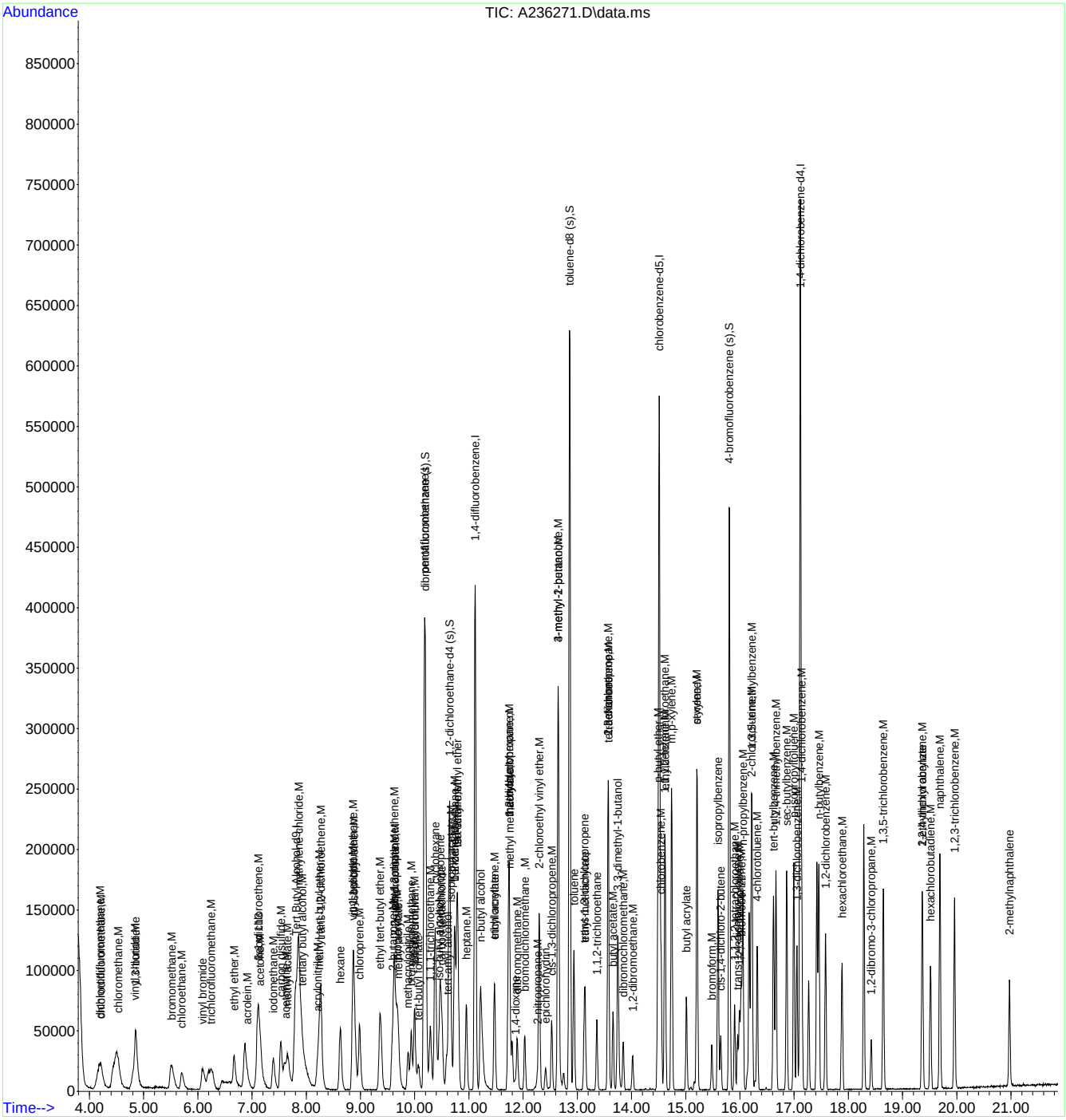
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) sec-butylbenzene	16.863	105	138559	9.62	ug/L	99
111) 1,3-dichlorobenzene	17.051	146	53336	10.11	ug/L	100
112) p-isopropyltoluene	16.994	119	116558	9.60	ug/L	97
113) 1,4-dichlorobenzene	17.140	146	54254	10.11	ug/L	96
114) 1,2-dichlorobenzene	17.579	146	57400	10.14	ug/L	99
115) n-butylbenzene	17.454	92	63094	9.94	ug/L	95
116) 1,2-dibromo-3-chloropr...	18.422	157	12272	9.69	ug/L	97
117) 1,3,5-trichlorobenzene	18.646	180	59264	10.09	ug/L	97
118) 2-ethylhexyl acrylate	19.358	70	6249	1.60	ug/L	98
119) 1,2,4-trichlorobenzene	19.368	180	56334	10.25	ug/L	98
120) hexachlorobutadiene	19.515	225	25444	9.60	ug/L	97
121) naphthalene	19.687	128	170747	10.35	ug/L	99
122) 1,2,3-trichlorobenzene	19.959	180	56949	9.93	ug/L	97
123) hexachloroethane	17.883	201	20407	8.99	ug/L	98
124) 2-methylnaphthalene	20.974	142	50277	4.61	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236271.D
Acq On : 23 Sep 2017 12:57 am
Operator : ChelseaS
Sample : ic8958-10
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 25 08:14:24 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:14:14 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236272.D
Acq On : 23 Sep 2017 1:26 am
Operator : ChelseaS
Sample : ic8958-20
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 25 08:11:38 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.849	65	473182	500.00	ug/L	0.03
5) pentafluorobenzene	10.182	168	274248	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.118	114	408839	50.00	ug/L	0.00
74) chlorobenzene-d5	14.512	117	340764	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.112	152	206259	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.208	113	157244	50.11	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.22%			
53) 1,2-dichloroethane-d4 (s)	10.642	65	183550	51.11	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 102.22%			
75) toluene-d8 (s)	12.860	98	477816	51.36	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 102.72%			
99) 4-bromofluorobenzene (s)	15.804	95	173445	49.39	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 98.78%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	7.938	59	95154	102.17	ug/L	94
4) 1,4-dioxane	11.861	88	25769	494.78	ug/L	96
6) chlorodifluoromethane	4.214	51	100324	18.53	ug/L	95
7) dichlorodifluoromethane	4.209	85	113025	19.80	ug/L	99
8) chloromethane	4.549	50	120201	20.26	ug/L	95
9) vinyl chloride	4.842	62	122278	19.77	ug/L	96
10) 1,3-butadiene	4.868	54	63249	19.94	ug/L	99
11) bromomethane	5.522	94	71556	20.62	ug/L	92
12) chloroethane	5.710	64	58866	21.16	ug/L	95
13) vinyl bromide	6.097	106	66416	20.35	ug/L	99
14) trichlorofluoromethane	6.259	101	115167	20.31	ug/L	97
15) ethyl ether	6.683	74	32061	20.87	ug/L	91
16) acrolein	6.913	56	18688	20.68	ug/L	90
17) freon 113	7.122	151	52200	20.49	ug/L	97
18) 1,1-dichloroethene	7.117	96	57386	21.99	ug/L	98
19) acetone	7.153	58	41649	79.48	ug/L	98
20) acetonitrile	7.619	41	159135	199.32	ug/L	98
21) iodomethane	7.394	142	113523	20.93	ug/L	96
22) carbon disulfide	7.535	76	212436	20.89	ug/L	99
23) methylene chloride	7.860	84	64490	21.47	ug/L	98
24) methyl acetate	7.661	43	76364	20.39	ug/L	100
25) methyl tert butyl ether	8.252	73	199943	20.73	ug/L	99
26) trans-1,2-dichloroethene	8.273	96	55974	20.81	ug/L	97
27) hexane	8.628	57	78534	20.46	ug/L	99
28) di-isopropyl ether	8.885	45	218463	20.82	ug/L	97
29) ethyl tert-butyl ether	9.366	59	201895	20.22	ug/L	100
30) 2-butanone	9.585	72	40384	79.02	ug/L #	88
31) 1,1-dichloroethane	8.864	63	108400	20.79	ug/L	99
32) chloroprene	8.984	53	91161	20.47	ug/L	99
33) acrylonitrile	8.205	53	36697	20.47	ug/L	95
34) vinyl acetate	8.864	86	10479	19.69	ug/L #	92
35) ethyl acetate	9.627	45	12500	19.23	ug/L #	61
36) 2,2-dichloropropane	9.653	77	94146	20.77	ug/L	97
37) cis-1,2-dichloroethene	9.622	96	64865	21.28	ug/L	97
38) methyl acrylate	9.701	85	10052	19.40	ug/L #	66
39) propionitrile	9.685	54	161432	199.24	ug/L	97
40) bromochloromethane	9.941	128	31171	19.69	ug/L	93
41) tetrahydrofuran	9.993	42	35448	19.84	ug/L	100
42) chloroform	9.999	83	101933	20.85	ug/L	99
43) tert-butyl formate	10.072	59	31836	19.57	ug/L	96
45) methacrylonitrile	9.878	67	30251	19.70	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236272.D
Acq On : 23 Sep 2017 1:26 am
Operator : ChelseaS
Sample : ic8958-20
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 25 08:11:38 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cyclohexane	10.386	84	97404	20.52	ug/L		98
47) 1,1,1-trichloroethane	10.292	97	99687	20.58	ug/L		96
48) iso-butyl alcohol	10.448	43	62237	197.96	ug/L		92
49) 1,1-dichloropropene	10.475	75	75965	19.96	ug/L		99
50) carbon tetrachloride	10.506	117	87328	20.25	ug/L		99
51) tert-amyl alcohol	10.600	73	44545	94.06	ug/L		93
54) benzene	10.741	78	214540	20.33	ug/L		98
55) iso-octane	10.783	57	239262	20.11	ug/L		99
56) tert-amyl methyl ether	10.799	73	196558	20.70	ug/L		99
57) heptane	10.956	71	42405	20.31	ug/L		98
58) isopropyl acetate	10.668	87	14008	19.52	ug/L	#	91
59) 1,2-dichloroethane	10.736	62	76843	20.76	ug/L		99
60) n-butyl alcohol	11.217	56	190284	978.42	ug/L		99
61) ethyl acrylate	11.474	55	71778	18.86	ug/L		97
62) trichloroethene	11.474	95	50999	20.67	ug/L		97
63) 2-nitropropane	12.263	41	25753	19.51	ug/L		87
64) methylcyclohexane	11.735	83	118249	20.63	ug/L		100
65) 2-chloroethyl vinyl ether	12.300	63	144642	95.55	ug/L		99
66) methyl methacrylate	11.756	100	14235	19.22	ug/L	#	90
67) 1,2-dichloropropane	11.746	63	56932	20.41	ug/L		95
68) dibromomethane	11.892	93	34802	20.46	ug/L		97
69) bromodichloromethane	12.033	83	68706	19.89	ug/L		100
70) epichlorohydrin	12.415	57	41536	97.08	ug/L		98
71) cis-1,3-dichloropropene	12.530	75	76364	19.16	ug/L		98
72) 4-methyl-2-pentanone	12.650	58	134946	78.46	ug/L		98
73) 3-methyl-1-butanol	12.645	55	135777	391.46	ug/L		99
76) toluene	12.938	92	113513	20.77	ug/L		96
77) trans-1,3-dichloropropene	13.126	75	64889	20.22	ug/L		99
78) ethyl methacrylate	13.147	69	68906	20.56	ug/L		98
79) 1,1,2-trichloroethane	13.362	83	35056	20.29	ug/L		98
80) 2-hexanone	13.571	58	113663	82.63	ug/L		95
81) tetrachloroethene	13.576	166	49679	20.81	ug/L		97
82) 1,3-dichloropropane	13.560	76	67450	19.99	ug/L		97
83) butyl acetate	13.660	56	42748	21.16	ug/L		97
84) 3,3-dimethyl-1-butanol	13.749	57	159230	211.67	ug/L		99
85) dibromochloromethane	13.848	129	49603	20.42	ug/L		95
86) 1,2-dibromoethane	14.021	107	44644	20.27	ug/L		100
87) n-butyl ether	14.486	57	228887	20.36	ug/L		100
88) chlorobenzene	14.549	112	119984	20.28	ug/L		98
89) 1,1,1,2-tetrachloroethane	14.612	131	58916	20.77	ug/L		99
90) ethylbenzene	14.622	91	218561	20.40	ug/L		99
91) m,p-xylene	14.742	106	164682	40.63	ug/L		96
92) o-xylene	15.203	106	91247	20.43	ug/L		97
93) styrene	15.213	104	134397	20.71	ug/L		96
94) butyl acrylate	15.009	55	109431	20.90	ug/L		98
95) bromoform	15.485	173	39041	20.56	ug/L		95
96) isopropylbenzene	15.595	105	253931	20.55	ug/L		99
97) cis-1,4-dichloro-2-butene	15.647	75	25365	20.38	ug/L		92
100) bromobenzene	16.024	156	55783	19.95	ug/L		94
101) 1,1,2,2-tetrachloroethane	15.903	83	78196	19.88	ug/L		99
102) trans-1,4-dichloro-2-b...	15.956	53	20481	21.05	ug/L		94
103) 1,2,3-trichloropropane	15.987	110	20093	19.80	ug/L		95
104) n-propylbenzene	16.055	91	278859	20.01	ug/L		99
105) 2-chlorotoluene	16.212	126	56965	19.51	ug/L		98
106) 4-chlorotoluene	16.322	91	152633	20.11	ug/L		99
107) 1,3,5-trimethylbenzene	16.223	105	215098	19.63	ug/L		99
108) tert-butylbenzene	16.620	119	182264	19.62	ug/L		99
109) 1,2,4-trimethylbenzene	16.662	105	214872	19.63	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236272.D
Acq On : 23 Sep 2017 1:26 am
Operator : ChelseaS
Sample : ic8958-20
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 25 08:11:38 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration

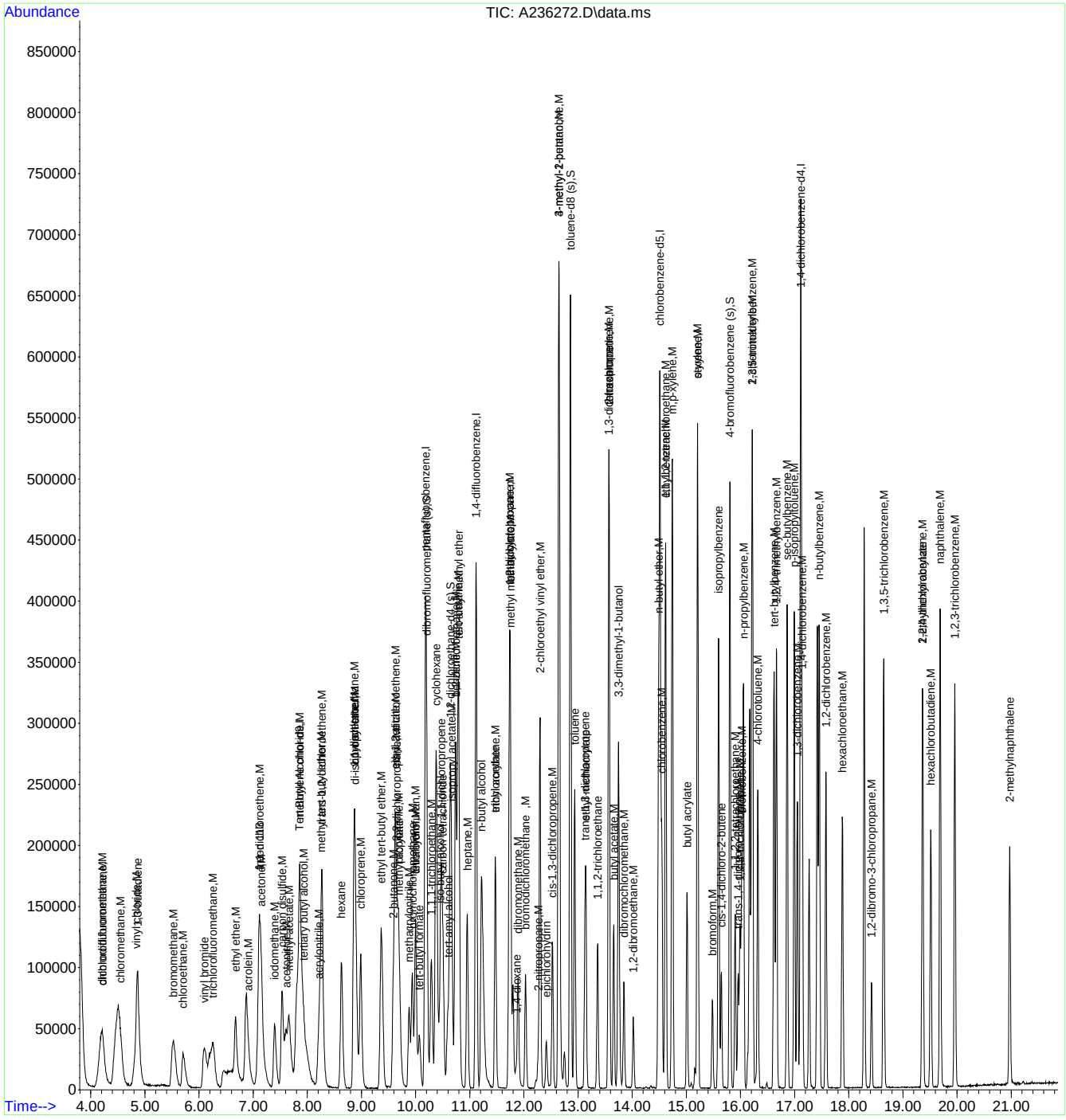
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) sec-butylbenzene	16.861	105	292447	20.08	ug/L	98
111) 1,3-dichlorobenzene	17.054	146	107577	20.17	ug/L	99
112) p-isopropyltoluene	16.991	119	242595	19.76	ug/L	99
113) 1,4-dichlorobenzene	17.143	146	110358	20.34	ug/L	99
114) 1,2-dichlorobenzene	17.577	146	117229	20.48	ug/L	98
115) n-butylbenzene	17.452	92	127978	19.95	ug/L	95
116) 1,2-dibromo-3-chloropr...	18.419	157	26066	20.36	ug/L	97
117) 1,3,5-trichlorobenzene	18.644	180	123308	20.77	ug/L	98
118) 2-ethylhexyl acrylate	19.355	70	15267	3.87	ug/L	94
119) 1,2,4-trichlorobenzene	19.366	180	117399	21.13	ug/L	100
120) hexachlorobutadiene	19.518	225	54668	20.40	ug/L	98
121) naphthalene	19.690	128	351028	21.05	ug/L	99
122) 1,2,3-trichlorobenzene	19.957	180	119429	20.59	ug/L	99
123) hexachloroethane	17.886	201	44923	19.58	ug/L	99
124) 2-methylnaphthalene	20.971	142	109575	9.94	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236272.D
Acq On : 23 Sep 2017 1:26 am
Operator : ChelseaS
Sample : ic8958-20
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 25 08:11:38 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236273.D
Acq On : 23 Sep 2017 1:55 am
Operator : ChelseaS
Sample : icc8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 25 08:08:08 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:07:46 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.816	65	479783	500.00	ug/L	0.00
5) pentafluorobenzene	10.180	168	276023	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.116	114	422213	50.00	ug/L	0.00
74) chlorobenzene-d5	14.510	117	376265	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.115	152	221955	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.201	113	157925	50.00	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.00%			
53) 1,2-dichloroethane-d4 (s)	10.645	65	185425	50.00	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 100.00%			
75) toluene-d8 (s)	12.857	98	513630	50.00	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 100.00%			
99) 4-bromofluorobenzene (s)	15.802	95	188945	50.00	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.00%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	7.936	59	236080	250.00	ug/L	100
4) 1,4-dioxane	11.848	88	66011	1250.00	ug/L	100
6) chlorodifluoromethane	4.202	51	272493	50.00	ug/L	100
7) dichlorodifluoromethane	4.186	85	287248	50.00	ug/L	100
8) chloromethane	4.536	50	298579	50.00	ug/L	100
9) vinyl chloride	4.840	62	311237	50.00	ug/L	100
10) 1,3-butadiene	4.866	54	159615	50.00	ug/L	100
11) bromomethane	5.525	94	174602	50.00	ug/L	100
12) chloroethane	5.703	64	140018	50.00	ug/L	100
13) vinyl bromide	6.095	106	164227	50.00	ug/L	100
14) trichlorofluoromethane	6.247	101	285403	50.00	ug/L	100
15) ethyl ether	6.670	74	77325	50.00	ug/L	100
16) acrolein	6.916	56	45471	50.00	ug/L	100
17) freon 113	7.115	151	128179	50.00	ug/L	100
18) 1,1-dichloroethene	7.110	96	131330	50.00	ug/L	100
19) acetone	7.151	58	105477	200.00	ug/L	100
20) acetonitrile	7.606	41	401785	500.00	ug/L	100
21) iodomethane	7.392	142	272933	50.00	ug/L	100
22) carbon disulfide	7.528	76	511755	50.00	ug/L	100
23) methylene chloride	7.857	84	151152	50.00	ug/L	100
24) methyl acetate	7.659	43	188467	50.00	ug/L	100
25) methyl tert butyl ether	8.250	73	485400	50.00	ug/L	100
26) trans-1,2-dichloroethene	8.265	96	135369	50.00	ug/L	100
27) hexane	8.626	57	193134	50.00	ug/L	100
28) di-isopropyl ether	8.883	45	527916	50.00	ug/L	100
29) ethyl tert-butyl ether	9.364	59	502466	50.00	ug/L	100
30) 2-butanone	9.589	72	102880	200.00	ug/L	100
31) 1,1-dichloroethane	8.856	63	262400	50.00	ug/L	100
32) chloroprene	8.982	53	224072	50.00	ug/L	100
33) acrylonitrile	8.197	53	90226	50.00	ug/L	100
34) vinyl acetate	8.862	86	26785	50.00	ug/L	100
35) ethyl acetate	9.620	45	32711	50.00	ug/L	100
36) 2,2-dichloropropane	9.646	77	228158	50.00	ug/L	100
37) cis-1,2-dichloroethene	9.620	96	153365	50.00	ug/L	100
38) methyl acrylate	9.698	85	26070	50.00	ug/L	100
39) propionitrile	9.683	54	407738	500.00	ug/L	100
40) bromochloromethane	9.939	128	79673	50.00	ug/L	100
41) tetrahydrofuran	9.997	42	89926	50.00	ug/L	100
42) chloroform	10.002	83	246058	50.00	ug/L	100
43) tert-butyl formate	10.065	59	81871	50.00	ug/L	100
45) methacrylonitrile	9.876	67	77279	50.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236273.D
Acq On : 23 Sep 2017 1:55 am
Operator : ChelseaS
Sample : icc8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 25 08:08:08 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:07:46 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cyclohexane	10.384	84	238883	50.00	ug/L	100
47) 1,1,1-trichloroethane	10.289	97	243764	50.00	ug/L	100
48) iso-butyl alcohol	10.452	43	158214	500.00	ug/L	100
49) 1,1-dichloropropene	10.473	75	191558	50.00	ug/L	100
50) carbon tetrachloride	10.499	117	217002	50.00	ug/L	100
51) tert-amyl alcohol	10.603	73	119158	250.00	ug/L	100
54) benzene	10.739	78	544847	50.00	ug/L	100
55) iso-octane	10.786	57	614258	50.00	ug/L	100
56) tert-amyl methyl ether	10.797	73	490384	50.00	ug/L	100
57) heptane	10.954	71	107793	50.00	ug/L	100
58) isopropyl acetate	10.666	87	37048	50.00	ug/L	100
59) 1,2-dichloroethane	10.734	62	191110	50.00	ug/L	100
60) n-butyl alcohol	11.215	56	502108	2500.00	ug/L	100
61) ethyl acrylate	11.477	55	196563	50.00	ug/L	100
62) trichloroethene	11.471	95	127403	50.00	ug/L	100
63) 2-nitropropane	12.266	41	68154	50.00	ug/L	100
64) methylcyclohexane	11.733	83	295959	50.00	ug/L	100
65) 2-chloroethyl vinyl ether	12.298	63	390839	250.00	ug/L	100
66) methyl methacrylate	11.759	100	38251	50.00	ug/L	100
67) 1,2-dichloropropane	11.743	63	144009	50.00	ug/L	100
68) dibromomethane	11.890	93	87819	50.00	ug/L	100
69) bromodichloromethane	12.031	83	178354	50.00	ug/L	100
70) epichlorohydrin	12.413	57	110466	250.00	ug/L	100
71) cis-1,3-dichloropropene	12.528	75	205834	50.00	ug/L	100
72) 4-methyl-2-pentanone	12.648	58	355222	200.00	ug/L	100
73) 3-methyl-1-butanol	12.648	55	358197	1000.00	ug/L	100
76) toluene	12.936	92	301663	50.00	ug/L	100
77) trans-1,3-dichloropropene	13.129	75	177144	50.00	ug/L	100
78) ethyl methacrylate	13.145	69	185025	50.00	ug/L	100
79) 1,1,2-trichloroethane	13.360	83	95403	50.00	ug/L	100
80) 2-hexanone	13.569	58	303771	200.00	ug/L	100
81) tetrachloroethene	13.574	166	131823	50.00	ug/L	100
82) 1,3-dichloropropane	13.563	76	186321	50.00	ug/L	100
83) butyl acetate	13.658	56	111513	50.00	ug/L	100
84) 3,3-dimethyl-1-butanol	13.747	57	415317	500.00	ug/L	100
85) dibromochloromethane	13.846	129	134142	50.00	ug/L	100
86) 1,2-dibromoethane	14.019	107	121571	50.00	ug/L	100
87) n-butyl ether	14.484	57	620642	50.00	ug/L	100
88) chlorobenzene	14.547	112	326583	50.00	ug/L	100
89) 1,1,1,2-tetrachloroethane	14.615	131	156597	50.00	ug/L	100
90) ethylbenzene	14.620	91	591560	50.00	ug/L	100
91) m,p-xylene	14.740	106	447499	100.00	ug/L	100
92) o-xylene	15.206	106	246566	50.00	ug/L	100
93) styrene	15.211	104	358364	50.00	ug/L	100
94) butyl acrylate	15.012	55	289053	50.00	ug/L	100
95) bromoform	15.483	173	104852	50.00	ug/L	100
96) isopropylbenzene	15.598	105	682046	50.00	ug/L	100
97) cis-1,4-dichloro-2-butene	15.645	75	68718	50.00	ug/L	100
100) bromobenzene	16.022	156	150410	50.00	ug/L	100
101) 1,1,2,2-tetrachloroethane	15.901	83	211633	50.00	ug/L	100
102) trans-1,4-dichloro-2-b...	15.954	53	52347	50.00	ug/L	100
103) 1,2,3-trichloropropane	15.990	110	54596	50.00	ug/L	100
104) n-propylbenzene	16.053	91	749647	50.00	ug/L	100
105) 2-chlorotoluene	16.210	126	157112	50.00	ug/L	100
106) 4-chlorotoluene	16.320	91	408348	50.00	ug/L	100
107) 1,3,5-trimethylbenzene	16.226	105	589658	50.00	ug/L	100
108) tert-butylbenzene	16.623	119	499768	50.00	ug/L	100
109) 1,2,4-trimethylbenzene	16.665	105	588927	50.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236273.D
Acq On : 23 Sep 2017 1:55 am
Operator : ChelseaS
Sample : icc8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 25 08:08:08 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:07:46 2017
Response via : Initial Calibration

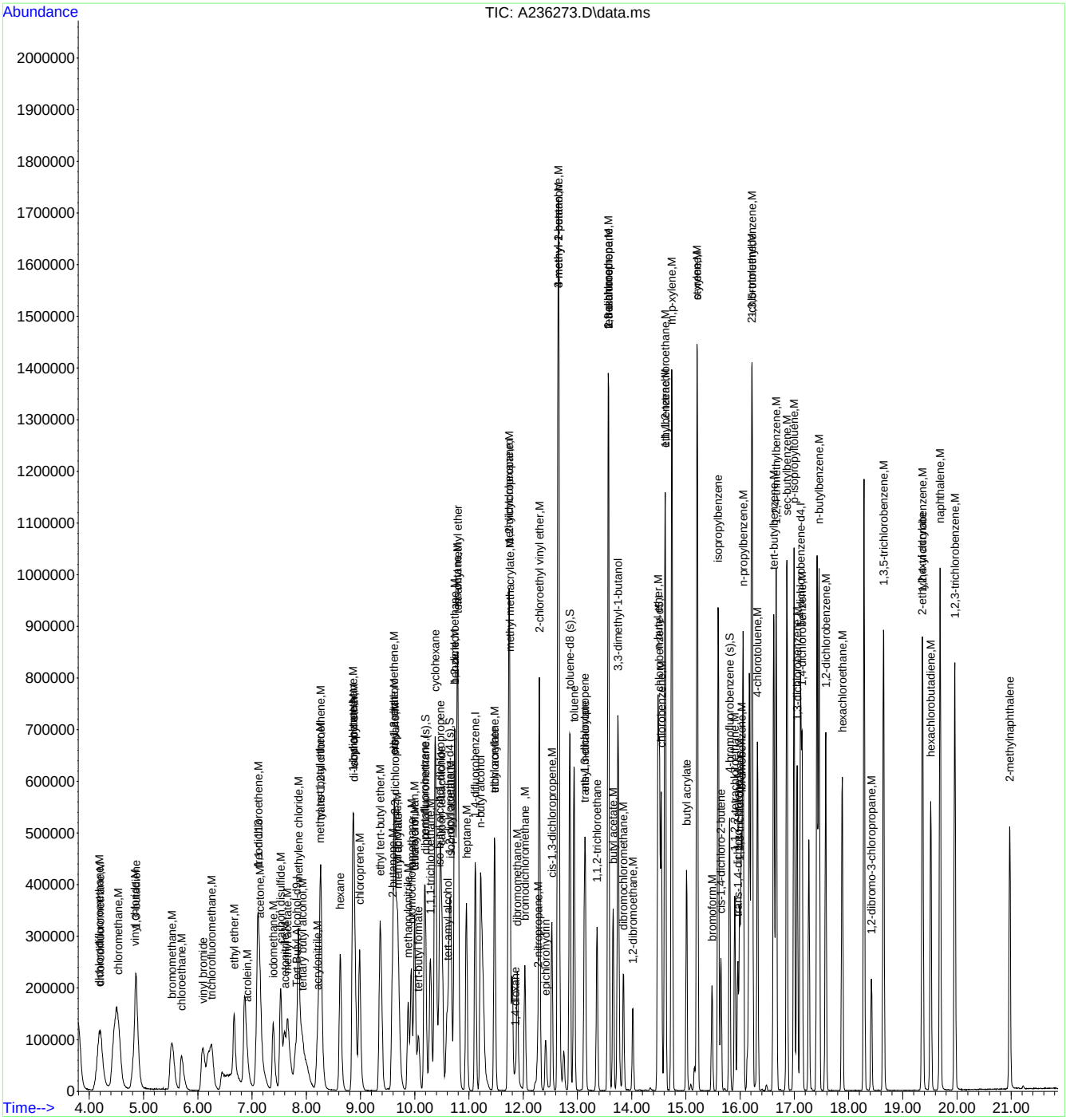
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) sec-butylbenzene	16.864	105	783494	50.00	ug/L	100
111) 1,3-dichlorobenzene	17.052	146	287023	50.00	ug/L	100
112) p-isopropyltoluene	16.994	119	660628	50.00	ug/L	100
113) 1,4-dichlorobenzene	17.141	146	291873	50.00	ug/L	100
114) 1,2-dichlorobenzene	17.580	146	307949	50.00	ug/L	100
115) n-butylbenzene	17.455	92	345186	50.00	ug/L	100
116) 1,2-dibromo-3-chloropr...	18.422	157	68882	50.00	ug/L	100
117) 1,3,5-trichlorobenzene	18.647	180	319371	50.00	ug/L	100
118) 2-ethylhexyl acrylate	19.353	70	42472	10.00	ug/L	100
119) 1,2,4-trichlorobenzene	19.364	180	298909	50.00	ug/L	100
120) hexachlorobutadiene	19.515	225	144157	50.00	ug/L	100
121) naphthalene	19.688	128	897213	50.00	ug/L	100
122) 1,2,3-trichlorobenzene	19.960	180	312027	50.00	ug/L	100
123) hexachloroethane	17.884	201	123467	50.00	ug/L	100
124) 2-methylnaphthalene	20.969	142	296687	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 : A236273.D
Acq On : 23 Sep 2017 1:55 am
Operator : ChelseaS
Sample : icc8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 25 08:08:08 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:07:46 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236274.D
Acq On : 23 Sep 2017 2:25 am
Operator : ChelseaS
Sample : ic8958-100
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 25 08:08:56 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.820	65	495103	500.00	ug/L		0.00
5) pentafluorobenzene	10.179	168	295285	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.120	114	458574	50.00	ug/L		0.00
74) chlorobenzene-d5	14.515	117	389805	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.114	152	224080	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.205	113	165685	49.04	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.08%				
53) 1,2-dichloroethane-d4 (s)	10.639	65	195756	48.60	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 97.20%				
75) toluene-d8 (s)	12.862	98	549455	51.63	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 103.26%				
99) 4-bromofluorobenzene (s)	15.807	95	191802	50.27	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.54%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.993	59	487204	499.97	ug/L		90
4) 1,4-dioxane	11.858	88	141623	2598.82	ug/L		100
6) chlorodifluoromethane	4.201	51	534779	91.73	ug/L		99
7) dichlorodifluoromethane	4.206	85	557029	90.63	ug/L		98
8) chloromethane	4.562	50	743348	116.36	ug/L		97
9) vinyl chloride	4.855	62	642527	96.49	ug/L		99
10) 1,3-butadiene	4.876	54	353947	103.64	ug/L		98
11) bromomethane	5.529	94	342872	91.78	ug/L		99
12) chloroethane	5.697	64	278647	93.01	ug/L		97
13) vinyl bromide	6.099	106	353468	100.60	ug/L		98
14) trichlorofluoromethane	6.251	101	596547	97.69	ug/L		97
15) ethyl ether	6.675	74	161224	97.45	ug/L		91
16) acrolein	6.921	56	95873	98.55	ug/L		99
17) freon 113	7.125	151	271621	99.04	ug/L		99
18) 1,1-dichloroethene	7.114	96	288416	102.64	ug/L		97
19) acetone	7.161	58	203612	360.89	ug/L		99
20) acetonitrile	7.611	41	812204	944.81	ug/L		100
21) iodomethane	7.397	142	585887	100.33	ug/L		97
22) carbon disulfide	7.533	76	1097290	100.22	ug/L		99
23) methylene chloride	7.862	84	321777	99.50	ug/L		98
24) methyl acetate	7.658	43	381098	94.51	ug/L		98
25) methyl tert butyl ether	8.249	73	1006727	96.94	ug/L		99
26) trans-1,2-dichloroethene	8.270	96	288310	99.54	ug/L		99
27) hexane	8.631	57	398224	96.37	ug/L		99
28) di-isopropyl ether	8.887	45	1077280	95.38	ug/L		97
29) ethyl tert-butyl ether	9.368	59	1035042	96.28	ug/L		98
30) 2-butanone	9.593	72	214671	390.10	ug/L		94
31) 1,1-dichloroethane	8.861	63	537021	95.65	ug/L		98
32) chloroprene	8.986	53	463891	96.76	ug/L		96
33) acrylonitrile	8.197	53	186629	96.68	ug/L		98
34) vinyl acetate	8.856	86	57615	100.54	ug/L	#	74
35) ethyl acetate	9.625	45	70536	100.78	ug/L	#	88
36) 2,2-dichloropropane	9.651	77	466715	95.61	ug/L		99
37) cis-1,2-dichloroethene	9.625	96	317086	96.63	ug/L		100
38) methyl acrylate	9.703	85	57280	102.69	ug/L	#	77
39) propionitrile	9.682	54	834116	956.13	ug/L		94
40) bromochloromethane	9.938	128	163158	95.71	ug/L		96
41) tetrahydrofuran	9.996	42	183865	95.56	ug/L		99
42) chloroform	10.001	83	505253	95.97	ug/L		98
43) tert-butyl formate	10.074	59	167752	95.77	ug/L		96
45) methacrylonitrile	9.881	67	161220	97.51	ug/L		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236274.D
Acq On : 23 Sep 2017 2:25 am
Operator : ChelseaS
Sample : ic8958-100
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 25 08:08:56 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cyclohexane	10.383	84	497508	97.34	ug/L	#	83
47) 1,1,1-trichloroethane	10.294	97	493867	94.69	ug/L		99
48) iso-butyl alcohol	10.451	43	342754	1012.54	ug/L		98
49) 1,1-dichloropropene	10.472	75	403179	98.37	ug/L		99
50) carbon tetrachloride	10.503	117	447499	96.38	ug/L		100
51) tert-amyl alcohol	10.603	73	242264	475.13	ug/L		95
54) benzene	10.739	78	1121722	94.78	ug/L		99
55) iso-octane	10.786	57	1355546	101.59	ug/L		98
56) tert-amyl methyl ether	10.796	73	1015748	95.35	ug/L		99
57) heptane	10.953	71	227236	97.05	ug/L		98
58) isopropyl acetate	10.671	87	75024	93.22	ug/L		95
59) 1,2-dichloroethane	10.733	62	393133	94.70	ug/L		99
60) n-butyl alcohol	11.220	56	1058697	4853.30	ug/L		99
61) ethyl acrylate	11.476	55	403628	94.53	ug/L		99
62) trichloroethene	11.471	95	271582	98.13	ug/L		98
63) 2-nitropropane	12.266	41	141202	95.38	ug/L		95
64) methylcyclohexane	11.732	83	626815	97.50	ug/L		99
65) 2-chloroethyl vinyl ether	12.297	63	803522	473.22	ug/L		98
66) methyl methacrylate	11.758	100	81592	98.20	ug/L	#	91
67) 1,2-dichloropropane	11.748	63	300374	96.02	ug/L		98
68) dibromomethane	11.894	93	186555	97.79	ug/L		97
69) bromodichloromethane	12.030	83	370678	95.68	ug/L		100
70) epichlorohydrin	12.417	57	226176	471.28	ug/L		100
71) cis-1,3-dichloropropene	12.527	75	430907	96.37	ug/L		99
72) 4-methyl-2-pentanone	12.648	58	709559	367.82	ug/L		97
73) 3-methyl-1-butanol	12.648	55	722655	1857.51	ug/L		99
76) toluene	12.940	92	629972	100.79	ug/L		100
77) trans-1,3-dichloropropene	13.129	75	363556	99.05	ug/L		98
78) ethyl methacrylate	13.144	69	370874	96.74	ug/L		98
79) 1,1,2-trichloroethane	13.364	83	195201	98.75	ug/L		97
80) 2-hexanone	13.573	58	593838	377.40	ug/L		95
81) tetrachloroethene	13.579	166	276628	101.28	ug/L		99
82) 1,3-dichloropropane	13.568	76	378830	98.13	ug/L		97
83) butyl acetate	13.662	56	220524	95.44	ug/L		100
84) 3,3-dimethyl-1-butanol	13.751	57	860419	999.88	ug/L		99
85) dibromochloromethane	13.851	129	273537	98.42	ug/L		98
86) 1,2-dibromoethane	14.023	107	241852	96.01	ug/L		98
87) n-butyl ether	14.483	57	1218271	94.74	ug/L		99
88) chlorobenzene	14.546	112	665886	98.41	ug/L		98
89) 1,1,1,2-tetrachloroethane	14.614	131	321184	98.99	ug/L		99
90) ethylbenzene	14.619	91	1173509	95.74	ug/L		99
91) m,p-xylene	14.740	106	911297	196.57	ug/L		98
92) o-xylene	15.205	106	506632	99.17	ug/L		98
93) styrene	15.210	104	729434	98.24	ug/L		99
94) butyl acrylate	15.012	55	556025	92.84	ug/L		98
95) bromoform	15.482	173	212289	97.72	ug/L		99
96) isopropylbenzene	15.597	105	1392356	98.53	ug/L		98
97) cis-1,4-dichloro-2-butene	15.644	75	137225	96.38	ug/L		97
100) bromobenzene	16.026	156	299241	98.53	ug/L		94
101) 1,1,2,2-tetrachloroethane	15.901	83	411624	96.33	ug/L		98
102) trans-1,4-dichloro-2-b...	15.958	53	99914	94.53	ug/L		93
103) 1,2,3-trichloropropane	15.990	110	103290	93.70	ug/L		96
104) n-propylbenzene	16.058	91	1484153	98.05	ug/L		98
105) 2-chlorotoluene	16.209	126	319594	100.74	ug/L		98
106) 4-chlorotoluene	16.319	91	807882	97.98	ug/L		98
107) 1,3,5-trimethylbenzene	16.225	105	1191880	100.11	ug/L		99
108) tert-butylbenzene	16.622	119	1060635	105.11	ug/L		97
109) 1,2,4-trimethylbenzene	16.664	105	1188043	99.91	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236274.D
Acq On : 23 Sep 2017 2:25 am
Operator : ChelseaS
Sample : ic8958-100
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 25 08:08:56 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration

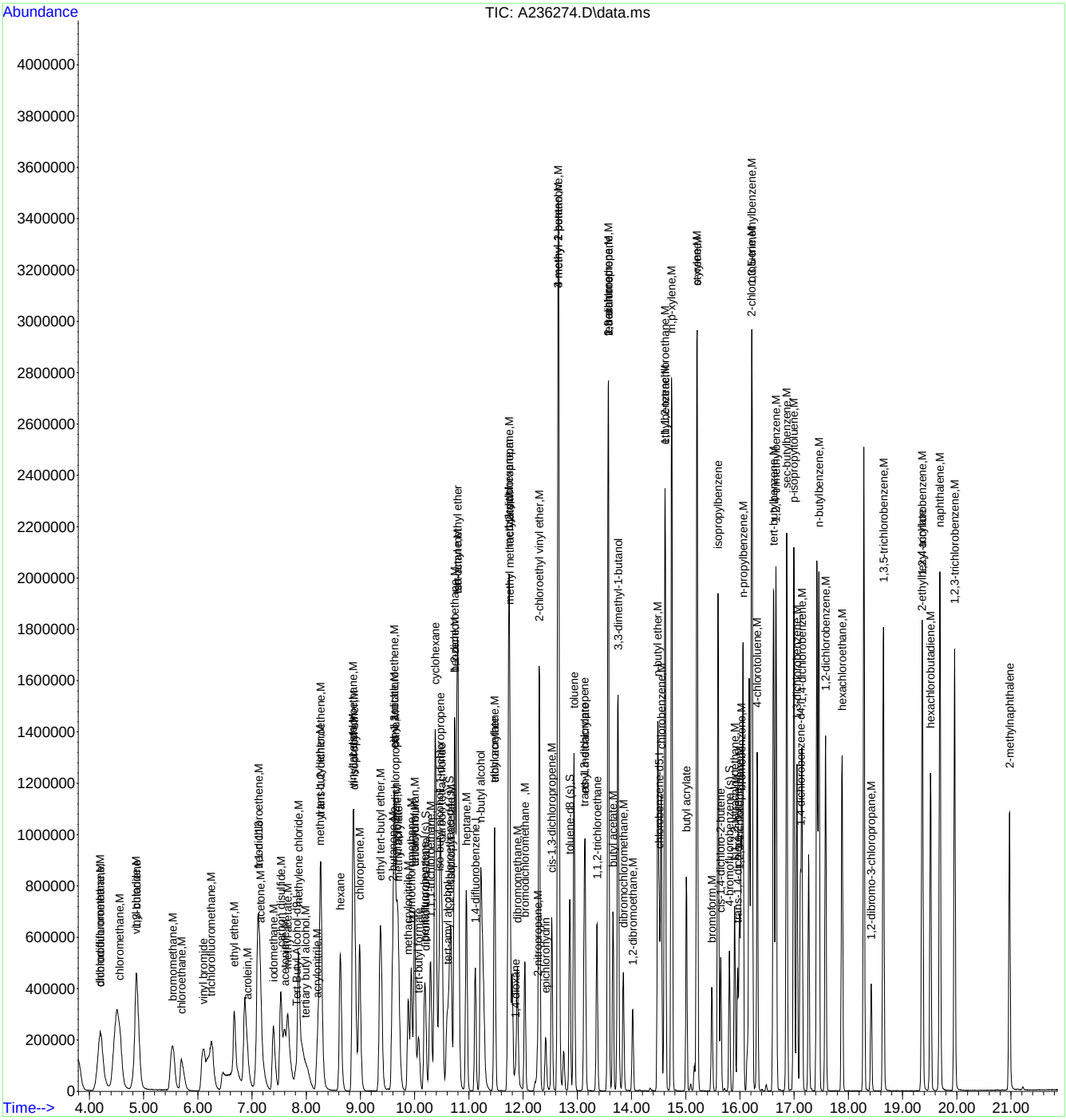
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) sec-butylbenzene	16.863	105	1637951	103.54	ug/L	99
111) 1,3-dichlorobenzene	17.051	146	577171	99.59	ug/L	100
112) p-isopropyltoluene	16.994	119	1348597	101.10	ug/L	98
113) 1,4-dichlorobenzene	17.140	146	578541	98.17	ug/L	99
114) 1,2-dichlorobenzene	17.580	146	620719	99.83	ug/L	98
115) n-butylbenzene	17.454	92	694086	99.58	ug/L	99
116) 1,2-dibromo-3-chloropr...	18.422	157	137658	98.98	ug/L	97
117) 1,3,5-trichlorobenzene	18.647	180	658119	102.06	ug/L	100
118) 2-ethylhexyl acrylate	19.353	70	95170	22.20	ug/L	99
119) 1,2,4-trichlorobenzene	19.363	180	627387	103.95	ug/L	100
120) hexachlorobutadiene	19.515	225	319550	109.78	ug/L	98
121) naphthalene	19.687	128	1808829	99.85	ug/L	99
122) 1,2,3-trichlorobenzene	19.959	180	647119	102.71	ug/L	99
123) hexachloroethane	17.883	201	273801	109.83	ug/L	99
124) 2-methylnaphthalene	20.974	142	636755	53.15	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236274.D
Acq On : 23 Sep 2017 2:25 am
Operator : ChelseaS
Sample : ic8958-100
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 25 08:08:56 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236275.D
Acq On : 23 Sep 2017 2:54 am
Operator : ChelseaS
Sample : ic8958-200
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 25 09:04:55 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.826	65	477968	500.00	ug/L		0.01
5) pentafluorobenzene	10.185	168	296751	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.116	114	486003	50.00	ug/L		0.00
74) chlorobenzene-d5	14.511	117	436912	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.115	152	249855	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.201	113	164851	48.55	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 97.10%				
53) 1,2-dichloroethane-d4 (s)	10.646	65	200720	47.02	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 94.04%				
75) toluene-d8 (s)	12.863	98	591435	49.58	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.16%				
99) 4-bromofluorobenzene (s)	15.802	95	208572	49.03	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 98.06%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.957	59	886011	941.82	ug/L		96
4) 1,4-dioxane	11.859	88	251451	4779.62	ug/L		100
6) chlorodifluoromethane	4.207	51	1081666	184.61	ug/L		98
7) dichlorodifluoromethane	4.197	85	1106049	179.08	ug/L		96
9) vinyl chloride	4.861	62	1269205	189.65	ug/L		96
10) 1,3-butadiene	4.887	54	703489	204.98	ug/L		97
11) bromomethane	5.530	94	675431	179.91	ug/L		98
12) chloroethane	5.698	64	531425	176.51	ug/L		96
13) vinyl bromide	6.095	106	714488	202.34	ug/L		99
14) trichlorofluoromethane	6.247	101	1192804	194.37	ug/L		97
15) ethyl ether	6.671	74	304205	182.97	ug/L		94
16) acrolein	6.911	56	188363	192.66	ug/L		100
17) freon 113	7.115	151	550189	199.63	ug/L		99
18) 1,1-dichloroethene	7.105	96	570325	201.97	ug/L		99
19) acetone	7.157	58	381000	671.97	ug/L		92
20) acetonitrile	7.602	41	1596679	1848.19	ug/L		100
21) iodomethane	7.392	142	1178609	200.83	ug/L		99
22) carbon disulfide	7.528	76	2165259	196.78	ug/L		99
23) methylene chloride	7.858	84	626357	192.72	ug/L		99
24) methyl acetate	7.659	43	744251	183.66	ug/L		98
25) methyl tert butyl ether	8.255	73	1994908	191.14	ug/L		100
26) trans-1,2-dichloroethene	8.266	96	556794	191.29	ug/L		99
27) hexane	8.627	57	774680	186.55	ug/L		100
28) di-isopropyl ether	8.883	45	2107244	185.64	ug/L		95
29) ethyl tert-butyl ether	9.369	59	2047959	189.56	ug/L		98
30) 2-butanone	9.594	72	440317	796.19	ug/L	#	89
31) 1,1-dichloroethane	8.862	63	1031603	182.84	ug/L		98
32) chloroprene	8.982	53	896254	186.02	ug/L		96
33) acrylonitrile	8.198	53	363904	187.58	ug/L		96
34) vinyl acetate	8.857	86	117263	203.61	ug/L	#	67
35) ethyl acetate	9.626	45	144364	205.25	ug/L	#	79
36) 2,2-dichloropropane	9.652	77	927756	189.11	ug/L		99
37) cis-1,2-dichloroethene	9.626	96	618248	187.48	ug/L		100
38) methyl acrylate	9.704	85	121363	216.51	ug/L	#	72
39) propionitrile	9.688	54	1662087	1895.81	ug/L		88
40) bromochloromethane	9.939	128	325765	190.16	ug/L		96
41) tetrahydrofuran	9.992	42	366675	189.64	ug/L		97
42) chloroform	10.002	83	985315	186.23	ug/L		99
43) tert-butyl formate	10.070	59	332984	189.15	ug/L		95
45) methacrylonitrile	9.882	67	328371	197.62	ug/L		95
46) cyclohexane	10.384	84	1004609	195.58	ug/L	#	79

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236275.D
Acq On : 23 Sep 2017 2:54 am
Operator : ChelseaS
Sample : ic8958-200
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 25 09:04:55 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) 1,1,1-trichloroethane	10.290	97	983554	187.65	ug/L		99
48) iso-butyl alcohol	10.452	43	570390	1676.68	ug/L		98
49) 1,1-dichloropropene	10.468	75	802956	194.95	ug/L		98
50) carbon tetrachloride	10.504	117	890851	190.93	ug/L		99
51) tert-amyl alcohol	10.604	73	469611	916.45	ug/L		98
54) benzene	10.740	78	2265840	180.64	ug/L		98
55) iso-octane	10.787	57	2788553	197.19	ug/L		99
56) tert-amyl methyl ether	10.797	73	2074249	183.73	ug/L		99
57) heptane	10.954	71	462733	186.47	ug/L		98
58) isopropyl acetate	10.677	87	156721	183.75	ug/L	#	93
59) 1,2-dichloroethane	10.734	62	789898	179.54	ug/L		98
60) n-butyl alcohol	11.226	56	2048655	8861.44	ug/L		98
61) ethyl acrylate	11.477	55	855559	189.06	ug/L		98
62) trichloroethene	11.472	95	563074	191.98	ug/L		99
63) 2-nitropropane	12.267	41	284849	181.55	ug/L		96
64) methylcyclohexane	11.733	83	1257767	184.60	ug/L		98
65) 2-chloroethyl vinyl ether	12.298	63	1671146	928.64	ug/L		98
66) methyl methacrylate	11.760	100	176715	200.68	ug/L		91
67) 1,2-dichloropropane	11.749	63	618037	186.42	ug/L		99
68) dibromomethane	11.890	93	391157	193.48	ug/L		98
69) bromodichloromethane	12.031	83	770132	187.56	ug/L		100
70) epichlorohydrin	12.419	57	470079	924.22	ug/L		99
71) cis-1,3-dichloropropene	12.528	75	918522	193.84	ug/L		98
72) 4-methyl-2-pentanone	12.654	58	1433936	701.38	ug/L		87
73) 3-methyl-1-butanol	12.649	55	1399397	3394.00	ug/L		98
76) toluene	12.942	92	1322173	188.73	ug/L		98
77) trans-1,3-dichloropropene	13.130	75	777616	189.02	ug/L		98
78) ethyl methacrylate	13.146	69	783381	182.31	ug/L		98
79) 1,1,2-trichloroethane	13.365	83	420927	189.98	ug/L		96
80) 2-hexanone	13.569	58	1232184	698.65	ug/L		93
81) tetrachloroethene	13.580	166	598744	195.58	ug/L		98
82) 1,3-dichloropropane	13.564	76	805725	186.21	ug/L		97
83) butyl acetate	13.658	56	465843	179.88	ug/L		99
84) 3,3-dimethyl-1-butanol	13.752	57	1688398	1750.51	ug/L		98
85) dibromochloromethane	13.846	129	596416	191.45	ug/L		99
86) 1,2-dibromoethane	14.019	107	518881	183.78	ug/L		99
87) n-butyl ether	14.484	57	2454796	170.31	ug/L		99
88) chlorobenzene	14.547	112	1449104	191.06	ug/L		98
89) 1,1,1,2-tetrachloroethane	14.610	131	678922	186.68	ug/L		98
90) ethylbenzene	14.620	91	2458701	178.97	ug/L		96
91) m,p-xylene	14.741	106	1962253	377.63	ug/L		89
92) o-xylene	15.206	106	1081703	188.91	ug/L		94
93) styrene	15.211	104	1569570	188.59	ug/L		99
94) butyl acrylate	15.013	55	1152089	171.62	ug/L		96
95) bromoform	15.483	173	455319	186.99	ug/L		96
96) isopropylbenzene	15.598	105	2867063	181.01	ug/L		95
97) cis-1,4-dichloro-2-butene	15.646	75	289102	181.16	ug/L		97
100) bromobenzene	16.027	156	663554	195.95	ug/L		93
101) 1,1,2,2-tetrachloroethane	15.902	83	863068	181.14	ug/L		100
102) trans-1,4-dichloro-2-b...	15.959	53	202111	171.49	ug/L		87
103) 1,2,3-trichloropropane	15.991	110	220389	179.30	ug/L		98
104) n-propylbenzene	16.059	91	3070346	181.92	ug/L		93
105) 2-chlorotoluene	16.210	126	701818	198.41	ug/L		95
106) 4-chlorotoluene	16.320	91	1745587	189.87	ug/L		97
107) 1,3,5-trimethylbenzene	16.226	105	2574374	193.92	ug/L		96
108) tert-butylbenzene	16.624	119	2310255	205.32	ug/L		96
109) 1,2,4-trimethylbenzene	16.665	105	2556668	192.82	ug/L		97
110) sec-butylbenzene	16.864	105	3408973	193.26	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236275.D
Acq On : 23 Sep 2017 2:54 am
Operator : ChelseaS
Sample : ic8958-200
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 25 09:04:55 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration

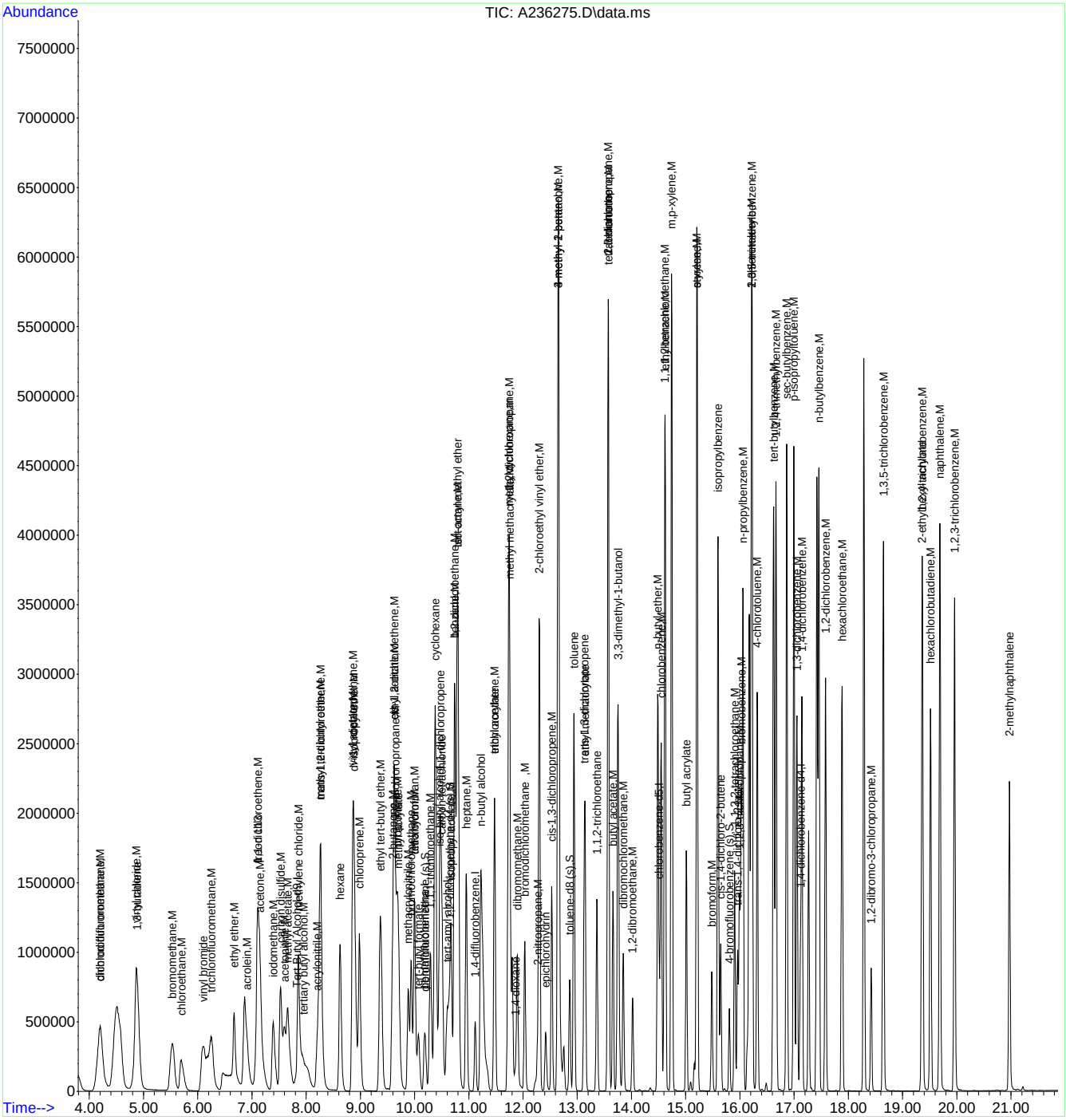
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
111) 1,3-dichlorobenzene	17.052	146	1255901	194.35 ug/L	98
112) p-isopropyltoluene	16.995	119	2874408	193.26 ug/L	95
113) 1,4-dichlorobenzene	17.141	146	1266755	192.77 ug/L	98
114) 1,2-dichlorobenzene	17.581	146	1343684	193.81 ug/L	97
115) n-butylbenzene	17.455	92	1526268	196.39 ug/L	94
116) 1,2-dibromo-3-chloropr...	18.423	157	295094	190.28 ug/L	97
117) 1,3,5-trichlorobenzene	18.648	180	1404807	195.37 ug/L	98
118) 2-ethylhexyl acrylate	19.354	70	215899	45.16 ug/L	97
119) 1,2,4-trichlorobenzene	19.364	180	1330463	197.70 ug/L	99
120) hexachlorobutadiene	19.516	225	703912	216.89 ug/L	99
121) naphthalene	19.688	128	3610627	178.75 ug/L	96
122) 1,2,3-trichlorobenzene	19.960	180	1336175	190.20 ug/L	100
123) hexachloroethane	17.884	201	619376	222.82 ug/L	98
124) 2-methylnaphthalene	20.970	142	1301263	97.41 ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236275.D
Acq On : 23 Sep 2017 2:54 am
Operator : ChelseaS
Sample : ic8958-200
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 25 09:04:55 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236278.D
Acq On : 23 Sep 2017 4:22 am
Operator : ChelseaS
Sample : icv8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 25 08:57:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:55:37 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.818	65	501539	500.00	ug/L		0.00
5) pentafluorobenzene	10.177	168	292781	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.118	114	447962	50.00	ug/L		0.00
74) chlorobenzene-d5	14.513	117	397420	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.112	152	232315	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.203	113	164966	49.66	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.32%				
53) 1,2-dichloroethane-d4 (s)	10.642	65	189371	47.28	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 94.56%				
75) toluene-d8 (s)	12.860	98	542066	48.93	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 97.86%				
99) 4-bromofluorobenzene (s)	15.805	95	198174	50.54	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 101.08%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.938	59	235967	246.60	ug/L		94
4) 1,4-dioxane	11.856	88	70153	1377.45	ug/L		99
6) chlorodifluoromethane	4.204	51	204603	41.56	ug/L		93
7) dichlorodifluoromethane	4.199	85	290065	53.43	ug/L		98
8) chloromethane	4.544	50	275458	46.30	ug/L		94
9) vinyl chloride	4.837	62	295840	47.27	ug/L		99
10) 1,3-butadiene	4.863	54	195571	57.83	ug/L		97
11) bromomethane	5.517	94	165788	46.68	ug/L		97
12) chloroethane	5.695	64	136034	47.08	ug/L		98
13) vinyl bromide	6.092	106	264413	79.17	ug/L		99
14) trichlorofluoromethane	6.239	101	270612	47.42	ug/L		97
15) ethyl ether	6.668	74	78660	51.49	ug/L		93
16) acrolein	6.908	56	49819	54.42	ug/L		93
17) freon 113	7.107	151	155729	59.82	ug/L		99
18) 1,1-dichloroethene	7.107	96	127428	46.62	ug/L		97
19) acetone	7.154	58	93064	179.44	ug/L		98
20) acetonitrile	7.604	41	176467	218.40	ug/L		96
21) iodomethane	7.389	142	271047	49.26	ug/L		99
22) carbon disulfide	7.525	76	508641	45.94	ug/L		99
23) methylene chloride	7.855	84	156364	48.78	ug/L		98
24) methyl acetate	7.661	43	171993	45.79	ug/L		97
25) methyl tert butyl ether	8.247	73	1002554	101.85	ug/L		94
26) trans-1,2-dichloroethene	8.268	96	138387	48.71	ug/L		99
27) hexane	8.634	57	143965	38.59	ug/L		99
28) di-isopropyl ether	8.885	45	528112	50.49	ug/L		97
29) ethyl tert-butyl ether	9.366	59	506446	50.72	ug/L		99
30) 2-butanone	9.586	72	103743	199.47	ug/L	#	86
31) 1,1-dichloroethane	8.859	63	266074	49.48	ug/L		98
32) chloroprene	8.984	53	226017	51.59	ug/L		95
33) acrylonitrile	8.200	53	96395	53.48	ug/L		97
34) vinyl acetate	8.854	86	28999	52.32	ug/L	#	61
35) ethyl acetate	9.628	45	33636	49.02	ug/L	#	69
36) 2,2-dichloropropane	9.649	77	224670	48.53	ug/L		99
37) cis-1,2-dichloroethene	9.623	96	157673	50.10	ug/L		96
38) methyl acrylate	9.706	85	27012	51.07	ug/L	#	71
39) propionitrile	9.680	54	379726	467.06	ug/L		99
40) bromochloromethane	9.936	128	79612	49.18	ug/L		98
41) tetrahydrofuran	9.994	42	93087	53.04	ug/L		100
42) chloroform	9.999	83	249445	48.00	ug/L		100
43) tert-butyl formate	10.067	59	95881	57.03	ug/L		98
45) methacrylonitrile	9.879	67	77684	51.76	ug/L		91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236278.D
Acq On : 23 Sep 2017 4:22 am
Operator : ChelseaS
Sample : icv8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 25 08:57:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:55:37 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cyclohexane	10.381	84	237353	50.97	ug/L #	83
47) 1,1,1-trichloroethane	10.287	97	241008	50.05	ug/L	99
48) iso-butyl alcohol	10.444	43	158948	519.82	ug/L	96
49) 1,1-dichloropropene	10.470	75	188871	50.39	ug/L	99
50) carbon tetrachloride	10.501	117	214790	50.86	ug/L	100
51) tert-amyl alcohol	10.601	73	116904	257.80	ug/L	95
54) benzene	10.737	78	547078	49.97	ug/L	99
55) iso-octane	10.784	57	607653	51.72	ug/L	98
56) tert-amyl methyl ether	10.799	73	495288	49.68	ug/L	98
57) heptane	10.951	71	111972	53.74	ug/L	99
58) isopropyl acetate	10.669	87	37265	50.72	ug/L	98
59) 1,2-dichloroethane	10.731	62	194498	49.57	ug/L	97
60) n-butyl alcohol	11.218	56	512580	2707.53	ug/L	99
61) ethyl acrylate	11.474	55	197263	53.45	ug/L	98
62) trichloroethene	11.469	95	132049	50.01	ug/L	97
63) 2-nitropropane	12.269	41	69441	51.27	ug/L	89
64) methylcyclohexane	11.736	83	274079	47.00	ug/L	100
65) 2-chloroethyl vinyl ether	12.300	63	440930	296.17	ug/L	98
66) methyl methacrylate	11.756	100	40565	52.59	ug/L	95
67) 1,2-dichloropropane	11.746	63	150366	52.00	ug/L	99
68) dibromomethane	11.892	93	91140	49.80	ug/L	99
69) bromodichloromethane	12.028	83	181613	51.95	ug/L	98
70) epichlorohydrin	12.415	57	114589	267.89	ug/L	98
71) cis-1,3-dichloropropene	12.525	75	208477	53.89	ug/L	97
72) 4-methyl-2-pentanone	12.651	58	361725	210.37	ug/L	98
73) 3-methyl-1-butanol	12.651	55	348149	1035.49	ug/L	100
76) toluene	12.938	92	306251	49.59	ug/L	99
77) trans-1,3-dichloropropene	13.127	75	181336	51.92	ug/L	97
78) ethyl methacrylate	13.148	69	182502	51.09	ug/L	99
79) 1,1,2-trichloroethane	13.362	83	100576	52.29	ug/L	96
80) 2-hexanone	13.571	58	305032	196.48	ug/L	94
81) tetrachloroethene	13.577	166	140480	51.42	ug/L	99
82) 1,3-dichloropropane	13.566	76	189536	50.96	ug/L	96
83) butyl acetate	13.660	56	117126	51.12	ug/L	95
84) 3,3-dimethyl-1-butanol	13.749	57	410786	502.37	ug/L	99
85) dibromochloromethane	13.849	129	140095	53.99	ug/L	98
86) 1,2-dibromoethane	14.021	107	125060	51.67	ug/L	98
87) n-butyl ether	14.487	57	604610	49.76	ug/L	100
88) chlorobenzene	14.544	112	336014	50.22	ug/L	99
89) 1,1,1,2-tetrachloroethane	14.612	131	160786	50.20	ug/L	98
90) ethylbenzene	14.623	91	593447	50.45	ug/L	99
91) m,p-xylene	14.743	106	459377	102.66	ug/L	96
92) o-xylene	15.208	106	250113	50.80	ug/L	98
93) styrene	15.214	104	369360	52.01	ug/L	98
94) butyl acrylate	15.015	55	293892	51.45	ug/L	97
95) bromoform	15.480	173	110879	52.91	ug/L	94
96) isopropylbenzene	15.595	105	683825	51.63	ug/L	99
97) cis-1,4-dichloro-2-butene	15.648	75	66672	49.49	ug/L	96
100) bromobenzene	16.024	156	155273	52.95	ug/L	96
101) 1,1,2,2-tetrachloroethane	15.899	83	216714	52.57	ug/L	99
102) trans-1,4-dichloro-2-b...	15.956	53	55660	51.75	ug/L	88
103) 1,2,3-trichloropropane	15.993	110	56938	52.40	ug/L	97
104) n-propylbenzene	16.056	91	756099	51.96	ug/L	99
105) 2-chlorotoluene	16.207	126	160374	52.42	ug/L	95
106) 4-chlorotoluene	16.317	91	415852	50.82	ug/L	99
107) 1,3,5-trimethylbenzene	16.223	105	591181	53.81	ug/L	99
108) tert-butylbenzene	16.620	119	516389	56.35	ug/L	99
109) 1,2,4-trimethylbenzene	16.662	105	596087	53.45	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236278.D
Acq On : 23 Sep 2017 4:22 am
Operator : ChelseaS
Sample : icv8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 25 08:57:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:55:37 2017
Response via : Initial Calibration

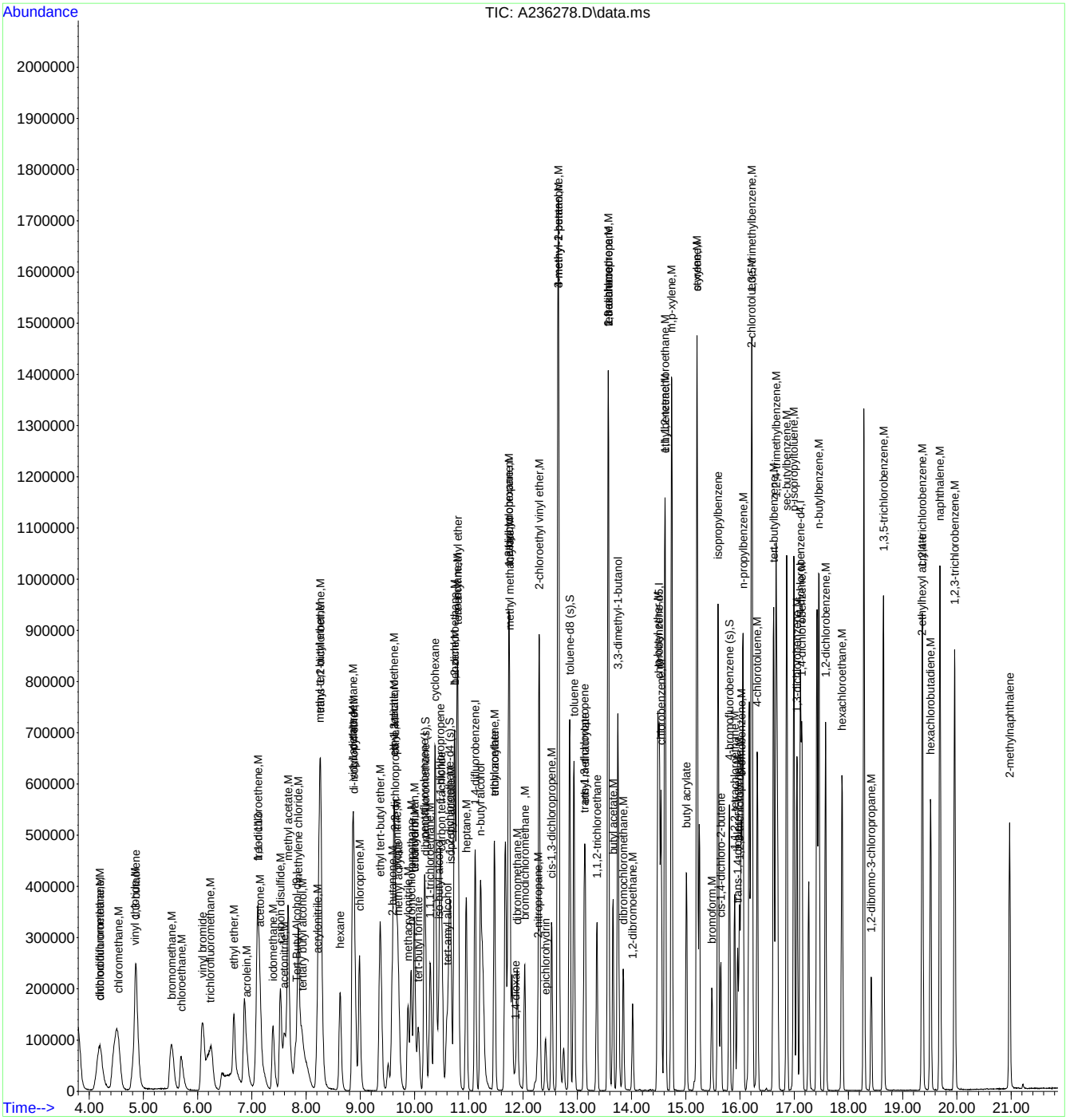
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) sec-butylbenzene	16.861	105	800619	54.98	ug/L	100
111) 1,3-dichlorobenzene	17.055	146	303728	51.85	ug/L	98
112) p-isopropyltoluene	16.997	119	680352	55.26	ug/L	98
113) 1,4-dichlorobenzene	17.144	146	302378	49.47	ug/L	97
114) 1,2-dichlorobenzene	17.578	146	325056	51.70	ug/L	99
115) n-butylbenzene	17.457	92	350122	52.06	ug/L	99
116) 1,2-dibromo-3-chloropr...	18.420	157	71251	51.94	ug/L	99
117) 1,3,5-trichlorobenzene	18.645	180	345490	52.70	ug/L	99
118) 2-ethylhexyl acrylate	19.351	70	47486	10.67	ug/L	94
119) 1,2,4-trichlorobenzene	19.366	180	316713	50.09	ug/L	98
120) hexachlorobutadiene	19.518	225	149657	52.30	ug/L	99
121) naphthalene	19.691	128	931435	51.32	ug/L	100
122) 1,2,3-trichlorobenzene	19.957	180	324576	51.39	ug/L	99
123) hexachloroethane	17.886	201	128103	53.48	ug/L	99
124) 2-methylnaphthalene	20.972	142	290348	24.61	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236278.D
Acq On : 23 Sep 2017 4:22 am
Operator : ChelseaS
Sample : icv8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 25 08:57:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:55:37 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236279.D
Acq On : 23 Sep 2017 4:51 am
Operator : ChelseaS
Sample : icv8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 25 08:59:32 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:55:37 2017
Response via : Initial Calibration

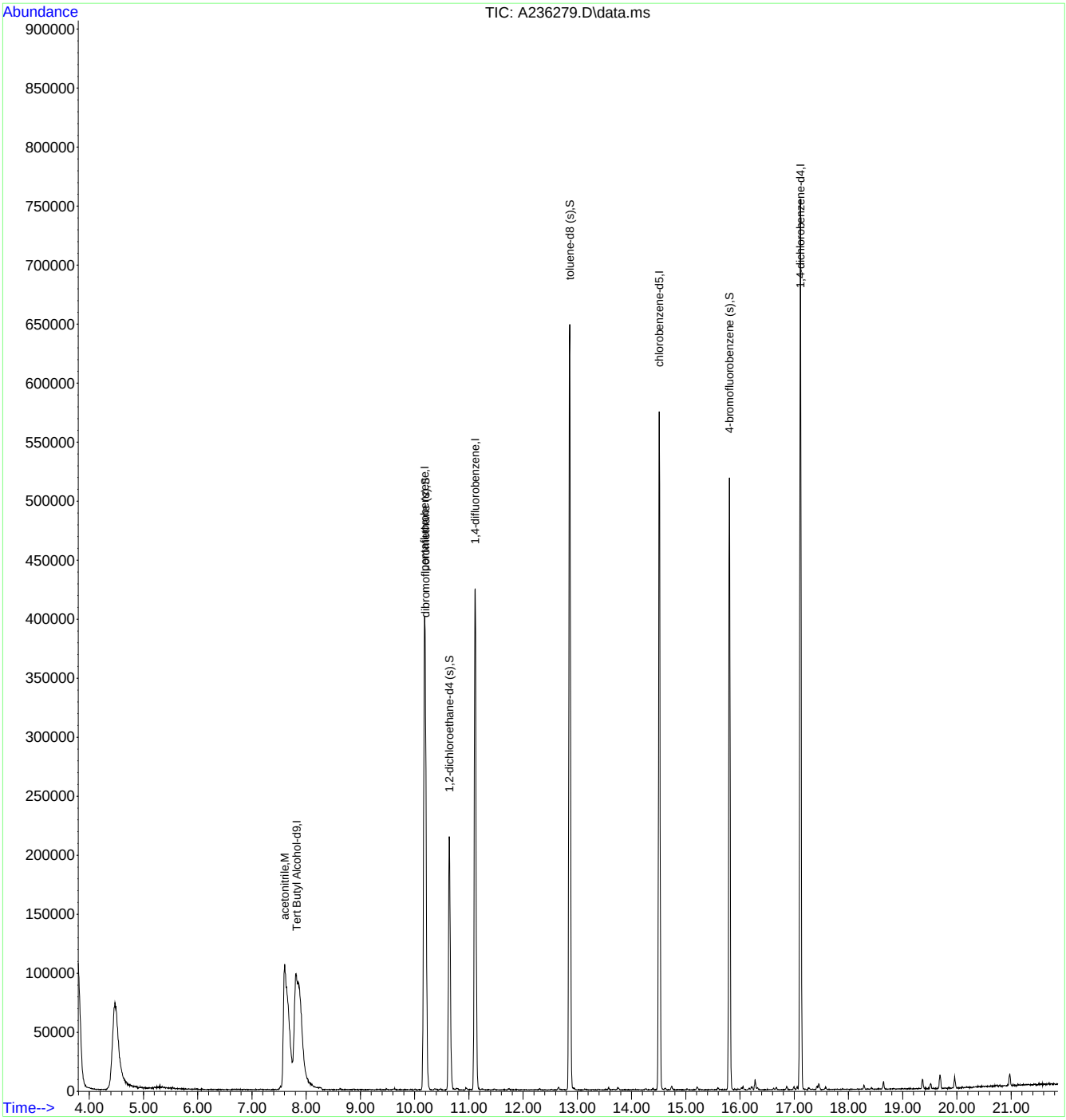
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.822	65	491433	500.00	ug/L	0.00
5) pentafluorobenzene	10.181	168	284842	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.117	114	414819	50.00	ug/L	0.00
74) chlorobenzene-d5	14.512	117	352770	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.116	152	218639	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.202	113	159654	49.40	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.80%			
53) 1,2-dichloroethane-d4 (s)	10.636	65	180129	48.57	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 97.14%			
75) toluene-d8 (s)	12.859	98	481585	48.97	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 97.94%			
99) 4-bromofluorobenzene (s)	15.804	95	182863	49.55	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.10%			
Target Compounds						Qvalue
20) acetonitrile	7.603	41	421158	535.77	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236279.D
Acq On : 23 Sep 2017 4:51 am
Operator : ChelseaS
Sample : icv8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 25 08:59:32 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:55:37 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\A\va8994part\
Data File : a237108.d
Acq On : 18 Oct 2017 7:58 am
Operator : Gabriela
Sample : cc8958-20
Misc : MS21013,VA8994,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 18 12:28:51 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.M
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 16:17:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.809	65	592178	500.00	ug/L		0.00
5) pentafluorobenzene	10.179	168	328795	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.115	114	507792	50.00	ug/L		0.00
74) chlorobenzene-d5	14.509	117	451574	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.114	152	270197	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.200	113	191187	51.24	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.48%				
53) 1,2-dichloroethane-d4 (s)	10.639	65	231766	51.05	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.10%				
75) toluene-d8 (s)	12.856	98	613914	48.77	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.54%				
99) 4-bromofluorobenzene (s)	15.801	95	225148	49.37	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.74%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.924	59	117219	103.75	ug/L		97
4) 1,4-dioxane	11.858	88	30366	504.97	ug/L		98
6) chlorodifluoromethane	4.195	51	126044	22.80	ug/L		98
7) dichlorodifluoromethane	4.185	85	139256	22.84	ug/L		97
8) chloromethane	4.525	50	150660	22.55	ug/L		99
9) vinyl chloride	4.839	62	151862	21.61	ug/L		97
10) 1,3-butadiene	4.870	54	149004	39.24	ug/L		98
11) bromomethane	5.519	94	92195	23.12	ug/L		97
12) chloroethane	5.696	64	73094	22.53	ug/L		97
13) vinyl bromide	6.104	106	87651	23.37	ug/L		99
14) trichlorofluoromethane	6.246	101	127461	19.89	ug/L		99
15) ethyl ether	6.669	74	39388	22.96	ug/L		96
16) acrolein	6.910	56	21631	21.04	ug/L		97
17) freon 113	7.114	151	57174	19.56	ug/L		96
18) 1,1-dichloroethene	7.109	96	61652	20.08	ug/L		93
19) acetone	7.150	58	46791	80.34	ug/L		96
20) acetonitrile	7.616	41	207391	228.56	ug/L		98
21) iodomethane	7.391	142	127493	20.63	ug/L		97
22) carbon disulfide	7.527	76	241250	19.40	ug/L		99
23) methylene chloride	7.856	84	75527	20.98	ug/L		98
24) methyl acetate	7.663	43	97834	23.19	ug/L		99
25) methyl tert butyl ether	8.238	73	241369	21.83	ug/L		99
26) trans-1,2-dichloroethene	8.264	96	65775	20.62	ug/L		94
27) hexane	8.625	57	86201	20.58	ug/L		99
28) di-isopropyl ether	8.882	45	259360	22.08	ug/L		98
29) ethyl tert-butyl ether	9.363	59	236476	21.09	ug/L		98
30) 2-butanone	9.582	72	50146	85.85	ug/L		95
31) 1,1-dichloroethane	8.861	63	132249	21.90	ug/L		96
32) chloroprene	8.986	53	103653	21.07	ug/L		96
33) acrylonitrile	8.202	53	45799	22.63	ug/L		98
34) vinyl acetate	8.861	86	12725	20.44	ug/L		96
35) ethyl acetate	9.614	45	16174	20.99	ug/L		100
36) 2,2-dichloropropane	9.650	77	117388	22.58	ug/L		99
37) cis-1,2-dichloroethene	9.619	96	78014	22.07	ug/L		99
38) methyl acrylate	9.697	85	12912	21.74	ug/L	#	65
39) propionitrile	9.677	54	201526	220.73	ug/L		89
40) bromochloromethane	9.938	128	38121	20.97	ug/L		96
41) tetrahydrofuran	9.990	42	41773	21.20	ug/L		97
42) chloroform	9.996	83	123570	21.17	ug/L		97
43) tert-butyl formate	10.074	59	18730	9.92	ug/L		98
45) methacrylonitrile	9.870	67	38079	22.59	ug/L		86
46) cyclohexane	10.377	84	109505	20.94	ug/L		98
47) 1,1,1-trichloroethane	10.288	97	113633	21.01	ug/L		98
48) iso-butyl alcohol	10.445	43	69464	202.29	ug/L		97
49) 1,1-dichloropropene	10.472	75	89295	21.22	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\A\va8994part\
Data File : a237108.d
Acq On : 18 Oct 2017 7:58 am
Operator : Gabriela
Sample : cc8958-20
Misc : MS21013,VA8994,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 18 12:28:51 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.M
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 16:17:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) carbon tetrachloride	10.503	117	99773	21.04	ug/L		98
51) tert-amyl alcohol	10.602	73	54113	106.26	ug/L		94
54) benzene	10.738	78	262375	21.14	ug/L		99
55) iso-octane	10.780	57	250065	18.78	ug/L		99
56) tert-amyl methyl ether	10.796	73	233770	20.68	ug/L		99
57) heptane	10.953	71	47969	20.31	ug/L		93
58) isopropyl acetate	10.665	87	17604	21.14	ug/L		95
59) 1,2-dichloroethane	10.728	62	96463	21.69	ug/L		99
60) n-butyl alcohol	11.209	56	239193	1114.59	ug/L		97
61) ethyl acrylate	11.476	55	92114	22.02	ug/L		98
62) trichloroethene	11.465	95	61141	20.43	ug/L		91
63) 2-nitropropane	12.260	41	30426	19.82	ug/L	#	78
64) methylcyclohexane	11.732	83	130634	19.76	ug/L		98
65) 2-chloroethyl vinyl ether	12.297	63	122304	72.47	ug/L		98
66) methyl methacrylate	11.758	100	18378	21.02	ug/L		92
67) 1,2-dichloropropane	11.742	63	70663	21.56	ug/L		94
68) dibromomethane	11.889	93	44574	21.49	ug/L		95
69) bromodichloromethane	12.030	83	87003	21.95	ug/L		100
70) epichlorohydrin	12.412	57	54054	111.48	ug/L		98
71) cis-1,3-dichloropropene	12.527	75	95041	21.67	ug/L		99
72) 4-methyl-2-pentanone	12.647	58	182920	93.85	ug/L		95
73) 3-methyl-1-butanol	12.642	55	173615	455.54	ug/L		99
76) toluene	12.935	92	142481	20.30	ug/L		100
77) trans-1,3-dichloropropene	13.128	75	80681	20.33	ug/L		100
78) ethyl methacrylate	13.144	69	88330	21.76	ug/L		99
79) 1,1,2-trichloroethane	13.359	83	47421	21.70	ug/L		93
80) 2-hexanone	13.568	58	153836	87.21	ug/L		98
81) tetrachloroethene	13.573	166	58447	18.83	ug/L		95
82) 1,3-dichloropropane	13.563	76	90843	21.50	ug/L		99
83) butyl acetate	13.657	56	56281	21.62	ug/L		94
84) 3,3-dimethyl-1-butanol	13.746	57	194130	208.94	ug/L		99
85) dibromochloromethane	13.845	129	61625	20.90	ug/L		98
86) 1,2-dibromoethane	14.018	107	58165	21.15	ug/L		97
87) n-butyl ether	14.483	57	291445	21.11	ug/L		99
88) chlorobenzene	14.546	112	154546	20.33	ug/L		98
89) 1,1,1,2-tetrachloroethane	14.609	131	72041	19.80	ug/L		98
90) ethylbenzene	14.619	91	279647	20.92	ug/L		98
91) m,p-xylene	14.739	106	210907	41.48	ug/L		98
92) o-xylene	15.205	106	117589	21.02	ug/L		99
93) styrene	15.210	104	168976	20.94	ug/L		98
94) butyl acrylate	15.011	55	140905	21.71	ug/L		98
95) bromoform	15.482	173	45710	19.19	ug/L		94
96) isopropylbenzene	15.592	105	312173	20.74	ug/L		98
97) cis-1,4-dichloro-2-butene	15.644	75	14931	9.75	ug/L		97
100) bromobenzene	16.026	156	71014	20.82	ug/L		93
101) 1,1,2,2-tetrachloroethane	15.900	83	107492	22.42	ug/L		97
102) trans-1,4-dichloro-2-b...	15.953	53	13775	11.01	ug/L		89
103) 1,2,3-trichloropropane	15.989	110	26590	21.04	ug/L		95
104) n-propylbenzene	16.052	91	355305	21.00	ug/L		99
105) 2-chlorotoluene	16.204	126	70796	19.90	ug/L		87
106) 4-chlorotoluene	16.319	91	197520	20.76	ug/L		99
107) 1,3,5-trimethylbenzene	16.219	105	270284	21.15	ug/L		99
108) tert-butylbenzene	16.617	119	216135	20.28	ug/L		94
109) 1,2,4-trimethylbenzene	16.664	105	278231	21.45	ug/L		98
110) sec-butylbenzene	16.863	105	354697	20.94	ug/L		99
111) 1,3-dichlorobenzene	17.051	146	138530	20.33	ug/L		100
112) p-isopropyltoluene	16.994	119	295916	20.66	ug/L		99
113) 1,4-dichlorobenzene	17.140	146	143405	20.17	ug/L		98
114) 1,2-dichlorobenzene	17.579	146	151651	20.74	ug/L		98
115) n-butylbenzene	17.454	92	154381	19.74	ug/L		96
116) 1,2-dibromo-3-chloropr...	18.421	157	31180	19.54	ug/L		96
117) 1,3,5-trichlorobenzene	18.641	180	148631	19.49	ug/L		98
118) 2-ethylhexyl acrylate	19.352	70	16647	3.22	ug/L		93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\A\va8994part\
Data File : a237108.d
Acq On : 18 Oct 2017 7:58 am
Operator : Gabriela
Sample : cc8958-20
Misc : MS21013,VA8994,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 18 12:28:51 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.M
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 16:17:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) 1,2,4-trichlorobenzene	19.363	180	141757	19.27	ug/L	97
120) hexachlorobutadiene	19.509	225	62146	18.67	ug/L	97
121) naphthalene	19.682	128	425065	20.14	ug/L	99
122) 1,2,3-trichlorobenzene	19.954	180	141214	19.23	ug/L	99
123) hexachloroethane	17.883	201	53100	19.06	ug/L	97
124) 2-methylnaphthalene	20.968	142	120716	8.80	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\A\va8994part\
Data File : a237108.d
Acq On : 18 Oct 2017 7:58 am
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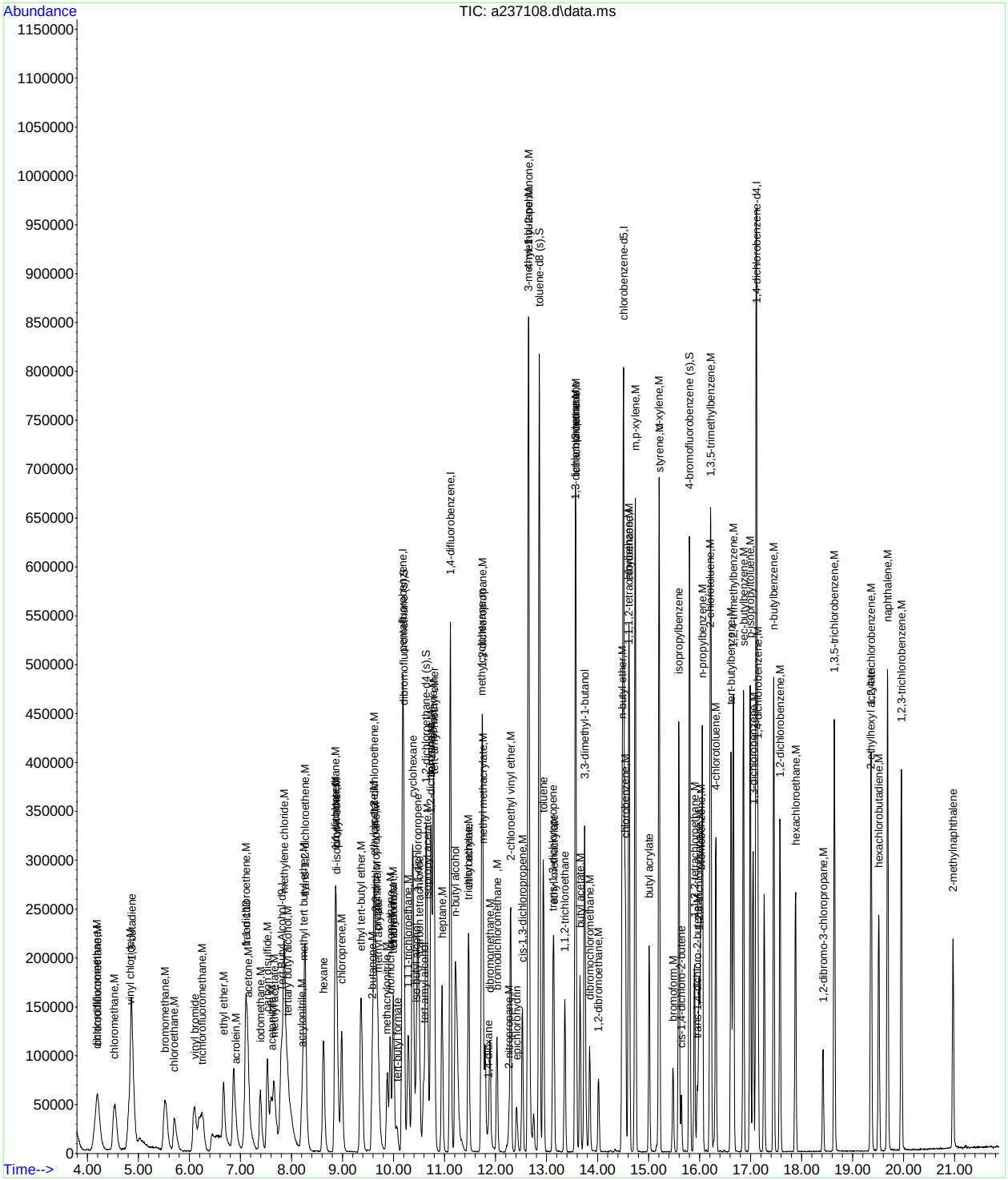
QLast Update : Mon Sep 25 16:17:38 2017
Response via : Initial Calibration



SGS

VOLATILE ANALYSIS LOG

Batch ID: VA8958

Date: 9/22/2017

Print Analyst Name: Oyinade (Dara) Fakuro

Analyst Signature: Oyinade Fakuro 09/22/17

Columns: RTX-624 (60m x .25mm x 1.4um)

Method V8260C

Initial Cal. Method MA8958

Standard Data

Lot #	Description	Conc.
VA17-2530-123	ABK Mix	100 - 10,000 ppm
VA17-2530-103	C STD	100 ppm
VA17-2530-127	C STD	100 ppm
VA17-2530-114	8260 SL	100 ppm
VA17-2530-89	Ext AB Mix	100 - 10,000 ppm
VA17-2530-128	Ext. C	100 - 10,000 ppm

Standard Data

Lot #	Description	Conc.
VA17-2530-97	Ext Ketones	200ppm
VA17-2530-94	Ext ESTD	100ppm
VA17-2530-100	Ext. Hexane	100ppm
VA17-2530-114	Ext freon 114	100ppm
VA17-2530-113	Ext. SL	100 ppm
VA17-2530-101	Ext. acetonitrile	1000 ppm

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: 9/25/2017

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
	VA236264	BFB				1	5						Not run		
	236265	BFB				1	5							BFB Failed (4)	
	236265	BFB				1	5						ok	9:44AM	
	236266	IC8958-0.2				2	5						ok	1uL ABK,C,E,SL/500mL	
	236267	IC8958-0.5				3	5						ok	2.5uL ABK,C,E,SL/500mL	
	236268	IC8958-1				4	5						ok	1uL ABK,C,E,SL/100mL	
	236269	IC8958-2				5	5						ok	2uL ABK,C,E,SL/100mL	
	236270	IC8958-5				6	5						ok	5uL ABK,C,E,SL/100mL	
	236271	IC8958-10				7	5						ok	10uL ABK,C,E,SL/100mL	
	236272	IC8958-20				8	5						ok	20uL ABK,C,E,SL/100mL	
	236273	ICC8958-50				9	5						ok	50uL ABK,C,E,SL/100mL	
	236274	IC8958-100				10	5						ok	100uL ABK,C,E,SL/100mL	
	236275	IC8958-200				11	5						ok	200uL ABK,C,E,SL/100mL	
	236276	IB				12	5						clip		
	236277	IB				13	5						clip		
	236278	ICV8958-50				14	5						ok	50uL cal AB,C,E,SL,hexane,ketones/100mL	
	236279	ICV8958-50				15	5						ok	50uL cal acetonitrile freon 114/100mL	
	236280	IB				16	5								

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

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SGS

VOLATILE ANALYSIS LOG

Batch ID: VA8994

PH216735

Date: 10/17

Print Analyst Name: Ruby Alvarez

Analyst Signature:

Columns: DB624 Wax Xtra

Method VTX60C

Initial Cal. Method VA8988

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
VOH2530-143.3	ATBIC	100ppm
VOH2535-1078	C	100ppm
VOH2530-145	E	100ppm
VOH2530-148	VS	50/100ppm

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: 10/24/17

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
	A237106	IB				1									
	237107	IB				2									
	237108	108958-D/BSB				3							ok	7:58am 20uATBIKCF/100mL	
	237109	IB				4							90.		
	237110	MB				5							ok		
	237111	BS				6							ok	50uATBIKCF/100mL	
	237112	IB				7									
R	237113	JC52451-9	2088 BENZ,TBA,DIPE,MTBE	6 W	1	8	5		1X				ok		✓
FD	237114	JC52451-23	MTBE ✓	6 W	2	9	5/50		10X				ok		✓
FD	237115	JC52451-22	✓	6 W	2	10	5/50		10X				ok		✓
	237116	IB				11	5						dly		
	237117	JC53316-1	2120 TCL70	6 W	1	12	5		1X				ok		✓
	237118	JC53316-2	✓	6 W	2	13	5		1X				ok		✓
FD	237119	JC52638-2	2108 TCL20	W	1	14	5/50		10X				ok		✓
FD	237120	JC52922-7	2092 MDPTCLH	6 W	2	15	5		1X	✓	✓	✓	ok		✓
	237121	JC52876-1	2095 TCL20	6 W	2	16	5		1x				ok	mmc, 140 to 400	~
	237122	JC52876-2 JC52876-2 6ml 10/5	✓	6 W	1	17	5		1x				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

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

SGS

VOLATILE ANALYSIS LOG

Batch ID: VA8919U

Print Analyst Name: GABRIELA VARGAS

Date: 10/18/17

Analyst Signature:

Columns: DB624 100mx0.18mmx1.0um

Method V8260C

Initial Cal. Method MA8910S8.

Standard Data		
Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.
	see pg 3	

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: 10/24/17

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
	A237123	JC528716-3	2109S TCL20	W	1	18	5		1X				OK	1,4 DIOXANE MNC.	✓
	237124	JC528716-4	✓	W	1	19	5		1X				RR	✓ RR 1X 8/10.	✓
	237125	JC528716-5	✓	W	1	20	5		1D				✓	✓	✓
	237126	JC528716 MS	✓	W	1	21	5		1X				OK	1,4 DIOXANE MNC.	✓
	237127	MB				22	5						8/10		
	237128	JC528716-2 dup	✓	W	2	23	5		1X				OK	✓	✓
	237129	JC528716-6	✓	W	1	24	5		1X				RR	✓ 8:19pm RR 1X	✓
	237130	JC528801-1	2109T SCO	W	1	25	5		1X				RR	RR 1X	✓
														GenT 10/18/17	

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

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

e-Hardcopy 2.0
Automated Report

Technical Report for

HSW Engineering

Long Island GW Sampling, Long Island, NY

1AS301101.063

SGS Accutest Job Number: JC54939

Sampling Date: 11/01/17

Report to:

RPoff@HSWEng.com
DSmolensky@Emagin-Inc.com

ATTN: Distribution3

Total number of pages in report: **38**

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)

Sections: 1 2 3 4 5 6

Table of Contents

Sample Summary

HSW Engineering

Job No: JC54939

Long Island GW Sampling, Long Island, NY
Project No: 1AS301101.063

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC54939-1	11/01/17	14:05	CMT	11/07/17	AQ	Ground Water	MW-301(HP_255)
JC54939-2	11/01/17	16:30	CMT	11/07/17	AQ	Ground Water	MW-301(HP_265)

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	HSW Engineering	**Job No**	JC54939
Site:	Long Island GW Sampling, Long Island, NY	**Report Date**	11/10/2017 4:16:32 P

On 11/07/2017, 2 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 3.2 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of JC54939 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:** V4B3142

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC54301-9MS, JC54301-9MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for cis-1,2-Dichloroethene, Vinyl chloride are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- JC54939-2 for Freon 113: Associated CCV outside of control limits high, sample was ND.
- JC54939-1 for Freon 113: Associated CCV outside of control limits high, sample was ND.

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: JC54939
Account: HSW Engineering
Project: Long Island GW Sampling, Long Island, NY
Collected: 11/01/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC54939-1	**MW-301(HP_255)**					
Chloroform		0.33 J	1.0	0.29	ug/l	SW846 8260C
1,1-Dichloroethane		0.23 J	1.0	0.21	ug/l	SW846 8260C
Tetrachloroethene		0.97 J	1.0	0.50	ug/l	SW846 8260C
JC54939-2	**MW-301(HP_265)**					
Acetone		19.7	10	5.0	ug/l	SW846 8260C

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-301(HP_255)		
Lab Sample ID:	JC54939-1	**Date Sampled:**	11/01/17
Matrix:	AQ - Ground Water	**Date Received:**	11/07/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B76591.D	1	11/08/17 13:03	HT	n/a	n/a	V4B3142
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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	0.33	1.0	0.29	ug/l	J
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	0.23	1.0	0.21	ug/l	J
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	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
76-13-1	Freon 113 [a]	ND	5.0	1.2	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.3	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:	MW-301(HP_255)		
Lab Sample ID:	JC54939-1	**Date Sampled:**	11/01/17
Matrix:	AQ - Ground Water	**Date Received:**	11/07/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	0.97	1.0	0.50	ug/l	J
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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		80-120%
17060-07-0	1,2-Dichloroethane-D4	96%		81-124%
2037-26-5	Toluene-D8	92%		80-120%
460-00-4	4-Bromofluorobenzene	95%		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:	MW-301(HP_265)		
Lab Sample ID:	JC54939-2	**Date Sampled:**	11/01/17
Matrix:	AQ - Ground Water	**Date Received:**	11/07/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B76590.D	1	11/08/17 12:35	HT	n/a	n/a	V4B3142
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	19.7	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	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
76-13-1	Freon 113 [a]	ND	5.0	1.2	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.3	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: MW-301(HP_265)
Lab Sample ID: JC54939-2
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Long Island GW Sampling, Long Island, NY

Date Sampled: 11/01/17
Date Received: 11/07/17
Percent Solids: n/a

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		80-120%
17060-07-0	1,2-Dichloroethane-D4	99%		81-124%
2037-26-5	Toluene-D8	91%		80-120%
460-00-4	4-Bromofluorobenzene	97%		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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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

GW

SGS ACCUTEST — 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

FED-EX Tracking #: | Bottle Order Control #: JC54939
SGS Accutest Quote #: | SGS Accutest Job #:

Client / Reporting Information

Company Name: EMAGIN
Street Address: 15711 Mapledale Blvd Suite B
City: Tampa State: FL Zip: 33624
Project Contact: Rich Poff E-mail: rpoff@hswmg.com; Doug Smolinsky dsmolinsky@emagin-sae.com
Phone #: 813-968-7722 Fax #:
Sampler(s) Name(s): Chad Thompson Phone #: (321-947-5148)

Project Information

Project Name: Long Island GW Sampling
Street:
City: Long Island, NY State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

VOCs by EPA Method 8260C

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	LAB USE ONLY
1	MW-301 (HP-255)	–	11-07-17	1405	CMT	GW	3	X								
2	MW-301 (HP-265)	–	11-07-17	1630	↓	↓	2	X								V147

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [x] 1 Day RUSH (24HR RUSH)
- [ ] other

Emergency & Rush T/A data available VIA Labtrack

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

NJ Data of Known Quality Protocol Reporting

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

LABEL VERIFICATION

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:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	11/07/17 1640	1 Chris Lund	2 Chris Lund	11/7/17 2010	2
3		3	4		4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Intact / Not Intact	Preserved where applicable	On Ice	Cooler Temp. 2.3°C

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

JC54939: Chain of Custody
Page 1 of 3

SGS Accutest Sample Receipt Summary

Job Number: JC54939 **Client:** EMAGIN **Project:** Long Island GW Sampling

Date / Time Received: 11/7/2017 8:10:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (2.3);

Cooler Temps (Corrected) °C: Cooler 1: (3.2);

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 -2 2 of 2 VOC vials with approx 80-90% Slurry. Sample may require cetrifuge prior to analysis.

SM089-02
Rev. Date 12/1/16

5.1
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JC54939: Chain of Custody
Page 2 of 3

Responded to by: Tammy McCloskey

Response Date: 11/8/17

Per Lab we will be able to analyze this sample with matrix as AQ.

JC54939: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

HSW Engineering

Job No: JC54939

Long Island GW Sampling, Long Island, NY
Project No: 1AS301101.063

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC54939-1	Collected: 01-NOV-17 14:05 By: CMT		Received: 07-NOV-17 By: AS			
MW-301(HP_255)						
JC54939-1	SW846 8260C	08-NOV-17 13:03	HT			V8260TCL20
JC54939-2	Collected: 01-NOV-17 16:30 By: CMT		Received: 07-NOV-17 By: AS			
MW-301(HP_265)						
JC54939-2	SW846 8260C	08-NOV-17 12:35	HT			V8260TCL20

SGS Accutest Internal Chain of Custody

Job Number: JC54939
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY
Received: 11/07/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC54939-1.2	Secured Storage	Hueanh Tran	11/08/17 11:14	Retrieve from Storage
JC54939-1.2	Hueanh Tran	GCMS4B	11/08/17 11:15	Load on Instrument
JC54939-1.2	GCMS4B	Hueanh Tran	11/09/17 10:28	Unload from Instrument
JC54939-1.2	Hueanh Tran	Secured Storage	11/09/17 10:28	Return to Storage
JC54939-2.2	Secured Storage	Hueanh Tran	11/08/17 11:14	Retrieve from Storage
JC54939-2.2	Hueanh Tran	GCMS4B	11/08/17 11:15	Load on Instrument
JC54939-2.2	GCMS4B	Hueanh Tran	11/09/17 10:28	Unload from Instrument
JC54939-2.2	Hueanh Tran	Secured Storage	11/09/17 10:28	Return to Storage

MS Volatiles

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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: JC54939
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4B3142-MB	4B76585.D	1	11/08/17	HT	n/a	n/a	V4B3142

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

JC54939-1, JC54939-2

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	
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	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	

Method Blank Summary

Job Number: JC54939
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4B3142-MB	4B76585.D	1	11/08/17	HT	n/a	n/a	V4B3142

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

JC54939-1, JC54939-2

CAS No.	Compound	Result	RL	MDL	Units	Q
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	93%	80-120%
17060-07-0	1,2-Dichloroethane-D4	96%	81-124%
2037-26-5	Toluene-D8	96%	80-120%
460-00-4	4-Bromofluorobenzene	97%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.58	11	ug/l	J
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JC54939
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4B3142-BS	4B76586.D	1	11/08/17	HT	n/a	n/a	V4B3142

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

JC54939-1, JC54939-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	170	85	42-150
71-43-2	Benzene	50	47.5	95	80-120
74-97-5	Bromochloromethane	50	47.9	96	84-121
75-27-4	Bromodichloromethane	50	49.5	99	83-120
75-25-2	Bromoform	50	49.6	99	76-129
74-83-9	Bromomethane	50	50.2	100	57-138
78-93-3	2-Butanone (MEK)	200	203	102	64-137
75-15-0	Carbon disulfide	50	49.2	98	64-137
56-23-5	Carbon tetrachloride	50	54.1	108	75-135
108-90-7	Chlorobenzene	50	49.1	98	84-117
75-00-3	Chloroethane	50	51.4	103	63-132
67-66-3	Chloroform	50	45.3	91	80-119
74-87-3	Chloromethane	50	50.4	101	46-136
110-82-7	Cyclohexane	50	55.3	111	64-137
96-12-8	1,2-Dibromo-3-chloropropane	50	48.8	98	72-127
124-48-1	Dibromochloromethane	50	49.7	99	80-123
106-93-4	1,2-Dibromoethane	50	50.1	100	84-117
95-50-1	1,2-Dichlorobenzene	50	49.0	98	84-119
541-73-1	1,3-Dichlorobenzene	50	48.8	98	81-117
106-46-7	1,4-Dichlorobenzene	50	47.9	96	82-117
75-71-8	Dichlorodifluoromethane	50	41.7	83	36-149
75-34-3	1,1-Dichloroethane	50	46.7	93	79-120
107-06-2	1,2-Dichloroethane	50	46.2	92	78-126
75-35-4	1,1-Dichloroethene	50	52.9	106	69-126
156-59-2	cis-1,2-Dichloroethene	50	47.5	95	80-120
156-60-5	trans-1,2-Dichloroethene	50	48.2	96	76-120
78-87-5	1,2-Dichloropropane	50	49.8	100	82-121
10061-01-5	cis-1,3-Dichloropropene	50	49.7	99	83-120
10061-02-6	trans-1,3-Dichloropropene	50	50.6	101	82-121
100-41-4	Ethylbenzene	50	50.1	100	80-120
76-13-1	Freon 113	50	56.3	113	62-182
591-78-6	2-Hexanone	200	193	97	65-132
98-82-8	Isopropylbenzene	50	52.7	105	83-120
79-20-9	Methyl Acetate	50	46.0	92	67-129
108-87-2	Methylcyclohexane	50	53.4	107	71-134
1634-04-4	Methyl Tert Butyl Ether	50	45.4	91	80-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC54939
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4B3142-BS	4B76586.D	1	11/08/17	HT	n/a	n/a	V4B3142

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

JC54939-1, JC54939-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	179	90	71-131
75-09-2	Methylene chloride	50	47.8	96	77-120
100-42-5	Styrene	50	53.2	106	82-122
79-34-5	1,1,2,2-Tetrachloroethane	50	47.2	94	76-119
127-18-4	Tetrachloroethene	50	55.8	112	70-131
108-88-3	Toluene	50	51.1	102	80-120
87-61-6	1,2,3-Trichlorobenzene	50	46.9	94	76-134
120-82-1	1,2,4-Trichlorobenzene	50	48.3	97	79-132
71-55-6	1,1,1-Trichloroethane	50	52.2	104	81-128
79-00-5	1,1,2-Trichloroethane	50	49.1	98	83-118
79-01-6	Trichloroethene	50	51.8	104	80-120
75-69-4	Trichlorofluoromethane	50	56.0	112	64-136
75-01-4	Vinyl chloride	50	53.1	106	51-135
	m,p-Xylene	100	100	100	80-120
95-47-6	o-Xylene	50	50.9	102	80-120
1330-20-7	Xylene (total)	150	151	101	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	93%	80-120%
17060-07-0	1,2-Dichloroethane-D4	91%	81-124%
2037-26-5	Toluene-D8	98%	80-120%
460-00-4	4-Bromofluorobenzene	99%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC54939
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54301-9MS	4B76595.D	5	11/08/17	HT	n/a	n/a	V4B3142
JC54301-9MSD	4B76596.D	5	11/08/17	HT	n/a	n/a	V4B3142
JC54301-9	4B76593.D	5	11/08/17	HT	n/a	n/a	V4B3142
JC54301-9	4B76592.D	50	11/08/17	HT	n/a	n/a	V4B3142

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

JC54939-1, JC54939-2

CAS No.	Compound	JC54301-9 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		1000	785	79	1000	754	75	4	34-149/17
71-43-2	Benzene	ND		250	233	93	250	237	95	2	54-136/10
74-97-5	Bromochloromethane	ND		250	230	92	250	235	94	2	79-124/11
75-27-4	Bromodichloromethane	ND		250	231	92	250	231	92	0	79-124/11
75-25-2	Bromoform	ND		250	203	81	250	196	78	4	71-130/11
74-83-9	Bromomethane	ND		250	244	98	250	254	102	4	53-142/14
78-93-3	2-Butanone (MEK)	ND		1000	915	92	1000	884	88	3	54-142/15
75-15-0	Carbon disulfide	ND		250	241	96	250	249	100	3	59-145/17
56-23-5	Carbon tetrachloride	ND		250	264	106	250	270	108	2	70-143/12
108-90-7	Chlorobenzene	ND		250	237	95	250	239	96	1	78-123/10
75-00-3	Chloroethane	ND		250	262	105	250	271	108	3	57-141/14
67-66-3	Chloroform	ND		250	218	87	250	224	90	3	76-123/11
74-87-3	Chloromethane	ND		250	251	100	250	262	105	4	43-141/16
110-82-7	Cyclohexane	ND		250	286	114	250	291	116	2	51-155/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		250	236	94	250	228	91	3	66-130/13
124-48-1	Dibromochloromethane	ND		250	216	86	250	210	84	3	76-125/11
106-93-4	1,2-Dibromoethane	ND		250	238	95	250	232	93	3	78-119/11
95-50-1	1,2-Dichlorobenzene	ND		250	234	94	250	236	94	1	77-123/11
541-73-1	1,3-Dichlorobenzene	ND		250	233	93	250	237	95	2	76-122/11
106-46-7	1,4-Dichlorobenzene	ND		250	230	92	250	232	93	1	76-122/11
75-71-8	Dichlorodifluoromethane	ND		250	221	88	250	224	90	1	31-159/16
75-34-3	1,1-Dichloroethane	56.3		250	270	85	250	276	88	2	73-126/11
107-06-2	1,2-Dichloroethane	ND		250	224	90	250	220	88	2	72-131/11
75-35-4	1,1-Dichloroethene	37.8		250	289	100	250	294	102	2	63-136/14
156-59-2	cis-1,2-Dichloroethene	1950	b	250	1610	-136*	a 250	1650	-120*	a 2	60-136/11
156-60-5	trans-1,2-Dichloroethene	6.2		250	238	93	250	244	95	2	70-126/11
78-87-5	1,2-Dichloropropane	ND		250	240	96	250	244	98	2	78-124/10
10061-01-5	cis-1,3-Dichloropropene	ND		250	241	96	250	244	98	1	79-123/11
10061-02-6	trans-1,3-Dichloropropene	ND		250	237	95	250	233	93	2	77-123/11
100-41-4	Ethylbenzene	ND		250	242	97	250	244	98	1	51-140/20
76-13-1	Freon 113	ND		250	296	118	250	296	118	0	60-192/14
591-78-6	2-Hexanone	ND		1000	942	94	1000	906	91	4	56-139/14
98-82-8	Isopropylbenzene	ND		250	252	101	250	256	102	2	75-129/11
79-20-9	Methyl Acetate	ND		250	226	90	250	216	86	5	55-131/15
108-87-2	Methylcyclohexane	ND		250	283	113	250	287	115	1	57-155/13
1634-04-4	Methyl Tert Butyl Ether	ND		250	223	89	250	221	88	1	72-123/11

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC54939
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54301-9MS	4B76595.D	5	11/08/17	HT	n/a	n/a	V4B3142
JC54301-9MSD	4B76596.D	5	11/08/17	HT	n/a	n/a	V4B3142
JC54301-9	4B76593.D	5	11/08/17	HT	n/a	n/a	V4B3142
JC54301-9	4B76592.D	50	11/08/17	HT	n/a	n/a	V4B3142

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

JC54939-1, JC54939-2

CAS No.	Compound	JC54301-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	909	91	1000	883	88	3	66-136/13
75-09-2	Methylene chloride	ND		250	235	94	250	234	94	0	73-125/13
100-42-5	Styrene	ND		250	249	100	250	255	102	2	75-129/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	230	92	250	223	89	3	71-122/11
127-18-4	Tetrachloroethene	ND		250	264	106	250	267	107	1	61-139/11
108-88-3	Toluene	ND		250	243	97	250	244	98	0	60-135/10
87-61-6	1,2,3-Trichlorobenzene	ND		250	221	88	250	222	89	0	70-138/13
120-82-1	1,2,4-Trichlorobenzene	ND		250	230	92	250	229	92	0	72-137/13
71-55-6	1,1,1-Trichloroethane	ND		250	252	101	250	259	104	3	74-138/12
79-00-5	1,1,2-Trichloroethane	ND		250	233	93	250	227	91	3	78-121/11
79-01-6	Trichloroethene	ND		250	255	102	250	256	102	0	62-141/10
75-69-4	Trichlorofluoromethane	ND		250	294	118	250	299	120	2	57-149/14
75-01-4	Vinyl chloride	1360 [b]		250	1190	-68* [a]	250	1250	-44* [a]	5	43-146/15
	m,p-Xylene	ND		500	481	96	500	489	98	2	50-144/20
95-47-6	o-Xylene	ND		250	244	98	250	247	99	1	63-134/10
1330-20-7	Xylene (total)	ND		750	725	97	750	735	98	1	56-139/20

CAS No.	Surrogate Recoveries	MS	MSD	JC54301-9	JC54301-9	Limits
1868-53-7	Dibromofluoromethane	94%	93%	93%	92%	80-120%
17060-07-0	1,2-Dichloroethane-D4	93%	90%	95%	94%	81-124%
2037-26-5	Toluene-D8	96%	95%	94%	94%	80-120%
460-00-4	4-Bromofluorobenzene	100%	100%	96%	98%	80-120%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Result is from Run #2.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC54939
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample:	V4B3119-BFB	**Injection Date:**	10/20/17
Lab File ID:	4B76042.D	**Injection Time:**	11:17
Instrument ID:	GCMS4B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	15588	16.7		Pass
75	30.0 - 60.0% of mass 95	43184	46.3		Pass
95	Base peak, 100% relative abundance	93234	100.0		Pass
96	5.0 - 9.0% of mass 95	6217	6.67		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	96757	103.8		Pass
175	5.0 - 9.0% of mass 174	7419	7.96	(7.67) [a]	Pass
176	95.0 - 101.0% of mass 174	94128	101.0	(97.3) [a]	Pass
177	5.0 - 9.0% of mass 176	6524	7.00	(6.93) [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
V4B3119-IC3119	4B76043.D	10/20/17	11:48	00:31	Initial cal 0.2
V4B3119-IC3119	4B76044.D	10/20/17	12:16	00:59	Initial cal 0.5
V4B3119-IC3119	4B76045.D	10/20/17	12:44	01:27	Initial cal 1
V4B3119-IC3119	4B76046.D	10/20/17	13:12	01:55	Initial cal 2
V4B3119-IC3119	4B76047.D	10/20/17	13:39	02:22	Initial cal 5
V4B3119-IC3119	4B76048.D	10/20/17	14:07	02:50	Initial cal 10
V4B3119-IC3119	4B76049.D	10/20/17	14:35	03:18	Initial cal 20
V4B3119-ICC3119	4B76050.D	10/20/17	15:03	03:46	Initial cal 50
V4B3119-IC3119	4B76051.D	10/20/17	15:31	04:14	Initial cal 100
V4B3119-IC3119	4B76052.D	10/20/17	15:59	04:42	Initial cal 200
V4B3119-ICV3119	4B76056.D	10/20/17	17:50	06:33	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC54939
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample:	V4B3142-BFB	**Injection Date:**	11/08/17
Lab File ID:	4B76584.D	**Injection Time:**	09:39
Instrument ID:	GCMS4B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	16549	16.4		Pass
75	30.0 - 60.0% of mass 95	45512	45.2		Pass
95	Base peak, 100% relative abundance	100613	100.0		Pass
96	5.0 - 9.0% of mass 95	6500	6.46		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	108237	107.6		Pass
175	5.0 - 9.0% of mass 174	8564	8.51	(7.91) [a]	Pass
176	95.0 - 101.0% of mass 174	106917	106.3	(98.8) [a]	Pass
177	5.0 - 9.0% of mass 176	6950	6.91	(6.50) [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
V4B3142-CC3119	4B76584.D	11/08/17	09:39	00:00	Continuing cal 20
V4B3142-MB	4B76585.D	11/08/17	10:13	00:34	Method Blank
V4B3142-BS	4B76586.D	11/08/17	10:41	01:02	Blank Spike
ZZZZZZ	4B76588.D	11/08/17	11:40	02:01	(unrelated sample)
ZZZZZZ	4B76589.D	11/08/17	12:07	02:28	(unrelated sample)
JC54939-2	4B76590.D	11/08/17	12:35	02:56	MW-301(HP_265)
JC54939-1	4B76591.D	11/08/17	13:03	03:24	MW-301(HP_255)
JC54301-9	4B76592.D	11/08/17	13:31	03:52	(used for QC only; not part of job JC54939)
JC54301-9	4B76593.D	11/08/17	13:58	04:19	(used for QC only; not part of job JC54939)
ZZZZZZ	4B76594.D	11/08/17	14:26	04:47	(unrelated sample)
JC54301-9MS	4B76595.D	11/08/17	14:54	05:15	Matrix Spike
JC54301-9MSD	4B76596.D	11/08/17	15:22	05:43	Matrix Spike Duplicate
ZZZZZZ	4B76598.D	11/08/17	16:17	06:38	(unrelated sample)
ZZZZZZ	4B76599.D	11/08/17	16:45	07:06	(unrelated sample)
ZZZZZZ	4B76600.D	11/08/17	17:13	07:34	(unrelated sample)
ZZZZZZ	4B76601.D	11/08/17	17:41	08:02	(unrelated sample)
ZZZZZZ	4B76602.D	11/08/17	18:09	08:30	(unrelated sample)
ZZZZZZ	4B76603.D	11/08/17	18:36	08:57	(unrelated sample)
ZZZZZZ	4B76604.D	11/08/17	19:04	09:25	(unrelated sample)
ZZZZZZ	4B76605.D	11/08/17	19:32	09:53	(unrelated sample)
ZZZZZZ	4B76606.D	11/08/17	20:00	10:21	(unrelated sample)

Internal Standard Area Summary

Job Number: JC54939
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Check Std:	V4B3142-CC3119	**Injection Date:**	11/08/17
Lab File ID:	4B76584.D	**Injection Time:**	09:39
Instrument ID:	GCMS4B	**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	85385	6.83	277721	8.83	373259	9.70	352161	12.88	232690	15.45
Upper Limit [a]	170770	7.33	555442	9.33	746518	10.20	704322	13.38	465380	15.95
Lower Limit [b]	42693	6.33	138861	8.33	186630	9.20	176081	12.38	116345	14.95
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**
V4B3142-MB	85211	6.81	286830	8.83	374657	9.70	357339	12.88	229233	15.45
V4B3142-BS	86433	6.82	287552	8.83	397218	9.70	370315	12.88	246822	15.45
ZZZZZZ	98144	6.82	266481	8.83	345463	9.70	349196	12.88	235649	15.45
ZZZZZZ	108165	6.82	310234	8.83	419633	9.70	407844	12.88	257896	15.45
JC54939-2	138696	6.82	319344	8.83	427718	9.70	419389	12.88	269223	15.45
JC54939-1	108582	6.82	311785	8.83	404290	9.70	393278	12.88	258705	15.45
JC54301-9	106096	6.82	319849	8.83	428702	9.70	416914	12.88	264828	15.45
JC54301-9	101100	6.82	305870	8.83	410658	9.70	399728	12.88	252767	15.45
ZZZZZZ	95465	6.81	304452	8.82	408939	9.70	408674	12.88	256270	15.45
JC54301-9MS	95737	6.82	293344	8.83	401706	9.70	382116	12.88	249572	15.45
JC54301-9MSD	92909	6.82	293135	8.83	397711	9.70	385545	12.88	252675	15.45
ZZZZZZ	106289	6.82	305886	8.83	402216	9.70	396973	12.88	256694	15.45
ZZZZZZ	105310	6.81	293304	8.83	381588	9.70	378801	12.88	239774	15.45
ZZZZZZ	97023	6.82	284219	8.83	370481	9.70	363455	12.88	241816	15.45
ZZZZZZ	93603	6.82	275125	8.83	357800	9.69	337731	12.88	225435	15.45
ZZZZZZ	112032	6.82	290569	8.83	381288	9.70	372733	12.88	235471	15.45
ZZZZZZ	101029	6.82	290988	8.83	385194	9.70	382114	12.88	240497	15.45
ZZZZZZ	91970	6.81	286954	8.82	380522	9.70	376090	12.88	243067	15.45
ZZZZZZ	92100	6.82	283418	8.83	366836	9.70	370683	12.88	245862	15.45
ZZZZZZ	90563	6.82	284686	8.83	372037	9.70	356263	12.88	229370	15.45

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: JC54939
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, 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
JC54939-1	4B76591.D	95	96	92	95
JC54939-2	4B76590.D	93	99	91	97
JC54301-9MS	4B76595.D	94	93	96	100
JC54301-9MSD	4B76596.D	93	90	95	100
V4B3142-BS	4B76586.D	93	91	98	99
V4B3142-MB	4B76585.D	93	96	96	97

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: JC54939
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: V4B3119-ICC3119
Lab FileID: 4B76050.D

Response Factor Report MS4B

Method : C:\MSDCHEM\1\METHODS\M4B3119.M (RTE Integrator)
Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
Last Update : Tue Oct 24 09:22:48 2017
Response via : Initial Calibration

Calibration Files
1 =4B76045.D 5 =4B76047.D 100 =4B76051.D 50 =4B76050.D
20 =4B76049.D 200 =4B76052.D 10 =4B76048.D 0.5 =4B76044.D
2 =4B76046.D 0.2 =4B76043.D = =

Compound	1	5	100	50	20	200	10	0.5	2	0.2	Avg	%RSD
1) I Tert Butyl Alcohol-d9	----------ISTD----------											
2) ethanol											0.000	-1.00
3) tertiary butyl alcohol	1.261	1.366	1.350	1.385	1.491	1.322		1.265			1.349	5.83
4) 1,4-dioxane	0.115	0.129	0.128	0.128	0.136	0.127		0.106			0.124	8.23
5) I pentafluorobenzene	----------ISTD----------											
6) chlorodifluoromethane	0.573	0.534	0.710	0.721	0.695	0.717	0.711	0.598			0.657	11.55
7) dichlorodifluoromethane	0.564	0.763	0.722	0.762	0.486	0.778		0.335			0.630	27.32
----- Quadratic regression ----- Coefficient = 0.9941												
Response Ratio = -0.02760 + 0.91878 *A + -0.10342 *A^2												
8) freon 142b	0.556	0.718	0.666	0.574	0.572	0.602		0.466			0.593	13.69
9) chloromethane	0.613	0.697	0.910	0.849	0.828	0.845	0.832	0.795	0.644		0.779	13.19
10) vinyl chloride	0.588	0.760	0.932	0.869	0.877	0.822	0.874		0.606		0.791	16.40
11) 1,3-butadiene	0.421	0.446	0.520	0.474	0.424	0.421	0.450		0.413		0.446	8.06
12) bromomethane	0.577	0.584	0.596	0.598	0.619	0.468	0.633	0.758	0.553		0.598	12.79
13) chloroethane	0.299	0.396	0.430	0.414	0.427	0.364	0.452	0.384	0.348		0.391	12.25
14) trichlorofluoromethane	0.734	0.909	0.878	0.925	0.741	0.943		0.527			0.808	18.62
15) vinyl bromide	0.398	0.500	0.605	0.570	0.575	0.556	0.597		0.410		0.526	15.56
16) ethyl ether	0.241	0.201	0.248	0.247	0.240	0.269	0.249	0.245	0.231		0.241	7.53
17) 2-chloropropane	0.754	0.633	0.779	0.775	0.781	0.821	0.839	0.744	0.731		0.762	7.78
18) acrolein	0.067	0.092	0.092	0.085	0.090	0.087					0.086	11.02
19) freon 113	0.338	0.457	0.492	0.491	0.391	0.515		0.331			0.431	17.78
20) 1,1-dichloroethene	0.640	0.615	0.735	0.758	0.754	0.742	0.814	0.584	0.686		0.703	10.88
21) acetone	0.034	0.035	0.042	0.039	0.040	0.038		0.033			0.037	9.29

Initial Calibration Summary

Job Number: JC54939
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: V4B3119-ICC3119
Lab FileID: 4B76050.D

22) acetonitrile
0.041 0.040 0.038 0.042 0.039 0.040 0.046 0.047 0.042 7.82
23) iodomethane
1.153 1.016 1.159 1.166 1.154 1.224 1.228 1.263 1.147 1.254 1.177 6.09
24) carbon disulfide
1.813 1.500 1.763 1.772 1.817 1.820 1.927 1.858 1.834 1.789 6.63
25) methylene chloride
0.589 0.482 0.541 0.544 0.545 0.575 0.591 0.607 0.580 0.562 6.75
26) methyl acetate
0.282 0.277 0.302 0.306 0.294 0.324 0.305 0.306 0.299 4.95
27) allyl chloride
0.363 0.317 0.305 0.287 0.250 0.291 0.290 0.289 0.299 10.78
28) methyl tert butyl ether
1.447 1.249 1.397 1.404 1.373 1.488 1.397 1.614 1.395 1.418 6.89
29) trans-1,2-dichloroethene
0.741 0.614 0.677 0.700 0.712 0.693 0.774 0.780 0.708 0.711 7.15
30) hexane
0.223 0.314 0.333 0.330 0.268 0.353 0.221 0.292 18.54
31) di-isopropyl ether
1.550 1.318 1.446 1.475 1.475 1.501 1.546 1.691 1.449 1.583 1.503 6.57
32) 2-butanone
0.031 0.035 0.043 0.045 0.042 0.049 0.041 0.037 0.041 14.26
33) 1,1-dichloroethane
0.895 0.787 0.834 0.853 0.867 0.860 0.938 1.004 0.917 0.884 7.17
34) chloroprene
0.581 0.524 0.656 0.676 0.667 0.679 0.707 0.542 0.623 0.628 10.37
35) acrylonitrile
0.132 0.168 0.163 0.156 0.189 0.168 0.144 0.160 11.49
36) vinyl acetate
0.055 0.072 0.070 0.067 0.077 0.068 0.068 10.70
37) ethyl tert-butyl ether
1.581 1.320 1.562 1.551 1.492 1.674 1.554 1.739 1.461 1.575 1.551 7.35
38) ethyl acetate
0.045 0.053 0.053 0.050 0.057 0.050 0.051 7.94
39) 2,2-dichloropropane
0.714 0.648 0.684 0.721 0.751 0.689 0.805 0.725 0.737 0.719 6.21
40) cis-1,2-dichloroethene
0.603 0.503 0.558 0.571 0.585 0.566 0.617 0.619 0.566 0.577 6.19
41) propionitrile
0.064 0.058 0.060 0.061 0.061 0.062 0.063 0.053 0.064 0.061 6.02
42) methyl acrylate
0.044 0.059 0.061 0.058 0.062 0.060 0.057 11.48
43) methacrylonitrile
0.146 0.130 0.170 0.165 0.158 0.188 0.165 0.140 0.158 11.82
44) bromochloromethane
0.308 0.268 0.308 0.310 0.303 0.322 0.313 0.292 0.317 0.304 5.34
45) tetrahydrofuran
0.097 0.106 0.110 0.106 0.119 0.106 0.085 0.104 10.12
46) chloroform
0.974 0.787 0.873 0.893 0.904 0.898 0.971 1.108 0.902 1.171 0.948 12.09
47) tert-Butyl Formate
0.146 0.180 0.178 0.171 0.196 0.179 0.144 0.171 11.15
48) dibromofluoromethane (s)
0.462 0.458 0.466 0.461 0.456 0.472 0.459 0.463 0.461 0.462 0.462 0.94
49) 1,1,1-trichloroethane
0.724 0.673 0.801 0.810 0.807 0.829 0.854 0.743 0.809 0.835 0.788 7.21
50) cyclohexane
0.604 0.717 0.733 0.774 0.589 0.734 0.460 0.659 16.97
51) isobutyl alcohol
0.069 0.064 0.070 0.070 0.069 0.078 0.072 0.069 0.070 5.37

Initial Calibration Summary

Job Number: JC54939 **Sample:** V4B3119-ICC3119
Account: HSWFLTAM HSW Engineering **Lab FileID:** 4B76050.D
Project: Long Island GW Sampling, Long Island, NY

52) 1,1-dichloropropene
0.538 0.502 0.610 0.624 0.616 0.624 0.663 0.576 0.585 0.593 8.32
53) carbon tetrachloride
0.608 0.606 0.705 0.729 0.733 0.708 0.800 0.555 0.684 0.641 0.677 10.85
54) tert-amyl alcohol
0.019 0.021 0.022 0.021 0.025 0.021 0.023 0.022 9.01
55) isopropyl acetate
0.059 0.077 0.075 0.072 0.086 0.073 0.067 0.073 11.69

56) I 1,4-difluorobenzene ----------ISTD----------
57) 1,2-dichloroethane-d4 (s)
0.329 0.331 0.314 0.321 0.321 0.300 0.329 0.329 0.335 0.328 0.324 3.21
58) n-butyl alcohol
0.007 0.008 0.008 0.009 0.009 0.010 0.006 0.008 14.58
59) 2,2,4-Trimethylpentane
0.966 1.276 1.410 1.345 1.116 1.475 0.976 1.223 16.84
60) benzene
1.514 1.208 1.328 1.371 1.366 1.367 1.493 1.602 1.402 1.606 1.426 8.85
61) tert-amyl methyl ether
1.124 0.949 1.026 1.066 1.057 1.083 1.108 1.215 1.020 1.053 1.070 6.61
62) heptane
0.180 0.236 0.256 0.251 0.205 0.284 0.162 0.225 19.64
63) 1,2-dichloroethane
0.511 0.396 0.404 0.433 0.441 0.405 0.469 0.487 0.454 0.444 8.87
64) ethyl acrylate
0.292 0.284 0.340 0.338 0.322 0.364 0.334 0.309 0.323 8.23
65) trichloroethene
0.362 0.322 0.363 0.376 0.379 0.367 0.406 0.375 0.349 0.367 6.21
66) 2-chloroethyl vinyl ether
0.191 0.170 0.184 0.192 0.195 0.180 0.195 0.202 0.189 0.189 5.12
67) methyl methacrylate
0.062 0.083 0.083 0.079 0.088 0.074 0.067 0.077 12.10
68) methylcyclohexane
0.521 0.676 0.737 0.736 0.584 0.792 0.502 0.650 17.63
69) 1,2-dichloropropane
0.370 0.311 0.335 0.354 0.360 0.330 0.374 0.385 0.344 0.352 6.75
70) dibromomethane
0.240 0.216 0.227 0.236 0.230 0.235 0.244 0.249 0.233 0.234 4.15
71) bromodichloromethane
0.505 0.434 0.483 0.495 0.490 0.503 0.511 0.515 0.481 0.500 0.492 4.72
72) 2-nitropropane
0.097 0.105 0.108 0.108 0.111 0.111 0.099 0.106 5.23
73) epichlorohydrin
0.021 0.027 0.029 0.029 0.029 0.033 0.029 0.030 0.028 11.63
74) cis-1,3-dichloropropene
0.585 0.490 0.587 0.597 0.591 0.603 0.607 0.622 0.560 0.582 6.64
75) 4-methyl-2-pentanone
0.104 0.105 0.103 0.109 0.110 0.105 0.116 0.115 0.117 0.109 5.03
76) isoamyl alcohol
0.007 0.007 0.008 0.008 0.009 0.009 0.009 0.008 0.008 10.13

77) I chlorobenzene-d5 ----------ISTD----------
78) toluene-d8 (s)
1.175 1.184 1.254 1.201 1.166 1.327 1.179 1.183 1.168 1.186 1.202 4.21
79) toluene
0.930 0.756 0.885 0.881 0.860 0.974 0.908 0.991 0.861 0.871 0.892 7.42
80) ethyl methacrylate
0.366 0.339 0.419 0.416 0.389 0.460 0.393 0.378 0.345 0.389 9.88
81) trans-1,3-dichloropropene
0.528 0.451 0.528 0.537 0.514 0.565 0.547 0.561 0.480 0.484 0.520 7.19

Initial Calibration Summary

Job Number: JC54939 **Sample:** V4B3119-ICC3119
Account: HSWFLTAM HSW Engineering **Lab FileID:** 4B76050.D
Project: Long Island GW Sampling, Long Island, NY

82) 1,1,2-trichloroethane
0.270 0.242 0.282 0.276 0.265 0.311 0.273 0.303 0.270 0.277 7.35
83) tetrachloroethene
0.343 0.306 0.373 0.380 0.375 0.402 0.404 0.341 0.352 0.364 8.63
84) 2-hexanone
0.101 0.097 0.104 0.110 0.105 0.111 0.109 0.101 0.107 0.105 4.57
85) 1,3-dichloropropane
0.535 0.462 0.492 0.497 0.498 0.532 0.520 0.598 0.506 0.497 0.514 7.11
86) butyl acetate
0.191 0.175 0.199 0.199 0.199 0.221 0.202 0.164 0.182 0.192 8.71
87) 3,3-Dimethyl-1-Butanol
0.021 0.021 0.024 0.024 0.025 0.030 0.025 0.021 0.023 0.024 11.83
88) dibromochloromethane
0.428 0.374 0.461 0.457 0.441 0.516 0.443 0.479 0.430 0.447 8.71
89) 1,2-dibromoethane
0.396 0.325 0.394 0.386 0.371 0.432 0.380 0.380 0.359 0.381 7.68
90) n-butyl ether
1.515 1.354 1.696 1.692 1.642 1.776 1.681 1.563 1.454 1.597 8.49
91) chlorobenzene
1.154 0.978 1.092 1.099 1.090 1.174 1.139 1.277 1.094 1.274 1.137 7.91
92) 1,1,1,2-tetrachloroethane
0.438 0.384 0.432 0.437 0.431 0.466 0.450 0.525 0.410 0.441 8.87
93) ethylbenzene
1.804 1.527 1.680 1.729 1.776 1.738 1.882 1.953 1.733 2.055 1.788 8.26
94) m,p-xylene
0.711 0.600 0.679 0.689 0.698 0.722 0.733 0.777 0.677 0.795 0.708 7.74
95) o-xylene
1.540 1.324 1.482 1.519 1.520 1.538 1.631 1.730 1.444 1.609 1.534 7.16
96) styrene
1.200 1.038 1.166 1.202 1.238 1.197 1.275 1.257 1.170 1.164 1.191 5.53
97) butyl acrylate
0.564 0.560 0.702 0.696 0.644 0.763 0.661 0.595 0.571 0.639 11.27
98) isopropylbenzene
1.828 1.647 1.975 2.012 2.005 2.119 2.078 1.939 1.835 2.117 1.955 7.62
99) bromoform
0.354 0.311 0.381 0.375 0.356 0.419 0.355 0.369 0.338 0.362 8.30
100) cis-1,4-dichloro-2-butene
0.123 0.132 0.159 0.162 0.153 0.175 0.152 0.139 0.149 11.45

101) I 1,4-dichlorobenzene-d ----------ISTD----------
102) 4-bromofluorobenzene (s)
0.755 0.755 0.810 0.784 0.785 0.779 0.754 0.753 0.764 0.757 0.770 2.50
103) 1,1,2,2-tetrachloroethane
0.762 0.654 0.757 0.760 0.731 0.797 0.729 0.772 0.744 0.755 0.746 5.08
104) trans-1,4-dichloro-2-butene
0.125 0.136 0.173 0.175 0.166 0.182 0.164 0.163 0.160 12.34
105) 1,2,3-trichloropropane
0.180 0.171 0.186 0.193 0.188 0.193 0.191 0.199 0.188 4.67
106) bromobenzene
0.946 0.800 0.891 0.912 0.932 0.875 0.958 1.045 0.934 1.040 0.933 7.82
107) n-propylbenzene
3.345 3.015 3.347 3.503 3.651 3.284 3.792 3.602 3.473 4.098 3.511 8.52
108) 2-chlorotoluene
0.788 0.686 0.790 0.799 0.822 0.798 0.814 0.845 0.753 0.698 0.779 6.66
109) 4-chlorotoluene
2.235 1.887 2.135 2.199 2.247 2.116 2.335 2.446 2.190 2.360 2.215 6.98
110) 1,3,5-trimethylbenzene
2.491 2.240 2.488 2.566 2.649 2.516 2.751 2.685 2.552 2.766 2.570 6.03
111) tert-butylbenzene
1.933 1.783 2.359 2.379 2.270 2.463 2.302 1.979 2.034 2.110 2.161 10.42

Initial Calibration Summary

Job Number: JC54939 **Sample:** V4B3119-ICC3119
Account: HSWFLTAM HSW Engineering **Lab FileID:** 4B76050.D
Project: Long Island GW Sampling, Long Island, NY

```
112)  1,2,4-trimethylbenzene
       2.649 2.356 2.617 2.724 2.827 2.627 2.894 2.921 2.607 2.718  2.694    6.13
113)  sec-butylbenzene
       2.937 2.836 3.589 3.641 3.614 3.638 3.725 2.948 3.170 3.379  3.348   10.27
114)  p-isopropyltoluene
       2.719 2.583 3.109 3.207 3.211 3.132 3.299 2.685 2.797 3.045  2.979    8.65
115)  1,3-dichlorobenzene
       1.875 1.596 1.666 1.735 1.794 1.675 1.903 2.097 1.750 2.046  1.814    9.10
116)  1,4-dichlorobenzene
       1.954 1.531 1.704 1.757 1.763 1.750 1.831 2.099 1.736 2.260  1.838   11.50
117)  1,2-dichlorobenzene
       1.909 1.573 1.740 1.809 1.849 1.774 1.865 1.939 1.737 1.958  1.815    6.37
118)  Benzyl Chloride
       1.465 1.276 1.531 1.579 1.484 1.627 1.499 1.646 1.398        1.501    7.70
119)  n-butylbenzene
       1.279 1.267 1.574 1.663 1.613 1.601 1.674 1.466 1.401 1.536  1.507    9.89
120)  hexachloroethane
       0.587 0.514 0.739 0.722 0.660 0.800 0.654 0.607 0.571        0.651   13.99
121)  1,2-dibromo-3-chloropropane
       0.163 0.160 0.230 0.228 0.203 0.257 0.199       0.175        0.202   17.21
122)  1,3,5-trichlorobenzene
       1.742 1.540 1.844 1.918 1.857 1.808 1.883 1.909 1.707        1.801    6.74
123)  1,2,4-trichlorobenzene
       1.473 1.321 1.661 1.727 1.621 1.629 1.646 1.539 1.446        1.563    8.23
124)  2-ethylhexyl acrylate
                   0.918 0.868 0.687 0.970 0.603                    0.809   19.38
125)  hexachlorobutadiene
       0.748 0.702 0.797 0.848 0.844 0.785 0.888 0.746 0.793        0.795    7.34
126)  naphthalene
       2.473 2.362 2.967 3.041 2.806 2.984 2.808 2.743 2.450        2.737    9.22
127)  1,2,3-trichlorobenzene
       1.306 1.158 1.466 1.503 1.408 1.455 1.404 1.307 1.257        1.363    8.29
128)  2-methylnaphthalene
                   1.910 1.845 1.535 2.040 1.356                    1.737   16.26
 ------------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M4B3119.M         Tue Oct 24 09:29:23 2017   GCMS4B
```

Initial Calibration Verification

Job Number: JC54939
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: V4B3119-ICV3119
Lab FileID: 4B76056.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\4B76056.D Vial: 18
Acq On : 20 Oct 2017 5:50 pm Operator: Hueanht
Sample : icv3119-50 Inst : MS4B
Misc : MS20912,V4B3119,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M4B3119.M (RTE Integrator)
Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
Last Update : Tue Oct 24 09:22:48 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	109	0.00	6.82
2	ethanol		----------NA----------				
3	tertiary butyl alcohol	1.349	1.247	7.6	100	0.01	6.93
4	1,4-dioxane	0.124	0.121	2.4	103	0.00	10.32
5 I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	8.83
6	chlorodifluoromethane	0.657	0.629	4.3	92	-0.01	3.93
	----------	True	Calc.	% Drift	----------		
7	dichlorodifluoromethane	50.000	49.787	0.4	114	-0.02	3.92
	----------	AvgRF	CCRF	% Dev	----------		
8	freon 142b	0.593	0.709	-19.6	112	-0.01	4.16
9	chloromethane	0.779	0.907	-16.4	112	-0.01	4.20
10	vinyl chloride	0.791	0.972	-22.9	118	0.00	4.45
11	1,3-butadiene	0.446	0.536	-20.2	119	0.00	4.46
12	bromomethane	0.598	0.609	-1.8	107	-0.01	4.99
13	chloroethane	0.391	0.449	-14.8	114	-0.01	5.14
14	trichlorofluoromethane	0.808	0.918	-13.6	110	-0.02	5.56
15	vinyl bromide	0.526	0.612	-16.3	113	-0.01	5.45
16	ethyl ether	0.241	0.246	-2.1	105	-0.01	5.88
17	2-chloropropane	0.762	0.770	-1.0	105	0.00	6.08
18	acrolein	0.086	0.093	-8.1	106	0.00	6.09
19	freon 113	0.431	0.471	-9.3	101	-0.01	6.27
20	1,1-dichloroethene	0.703	0.705	-0.3	98	0.00	6.26
21	acetone	0.037	0.035	5.4	88	0.00	6.26
22	acetonitrile	0.042	0.040	4.8	101	0.00	6.63
23	iodomethane	1.177	1.097	6.8	99	-0.01	6.49
24	carbon disulfide	1.789	1.789	0.0	106	0.00	6.62
25	methylene chloride	0.562	0.527	6.2	102	0.00	6.87
26	methyl acetate	0.299	0.277	7.4	95	-0.01	6.64
27	allyl chloride	0.299	0.307	-2.7	112	0.00	6.71
28	methyl tert butyl ether	1.418	1.343	5.3	100	0.00	7.18
29	trans-1,2-dichloroethene	0.711	0.658	7.5	99	0.00	7.21
30	hexane	0.292	0.269	7.9	85	0.00	7.51
31	di-isopropyl ether	1.503	1.467	2.4	105	0.00	7.69
32	2-butanone	0.041	0.041	0.0	95	0.00	8.29
33	1,1-dichloroethane	0.884	0.841	4.9	104	0.00	7.72
34	chloroprene	0.628	0.653	-4.0	102	0.00	7.81
35	acrylonitrile	0.160	0.175	-9.4	113	0.00	7.13
36	vinyl acetate	0.068	0.072	-5.9	108	0.00	7.65
37	ethyl tert-butyl ether	1.551	1.500	3.3	102	0.00	8.10

Initial Calibration Verification

Job Number: JC54939
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: V4B3119-ICV3119
Lab FileID: 4B76056.D

38		ethyl acetate	0.051	0.052	-2.0	103	0.00	8.29
39		2,2-dichloropropane	0.719	0.726	-1.0	106	0.00	8.40
40		cis-1,2-dichloroethene	0.577	0.556	3.6	102	0.00	8.36
41		propionitrile	0.061	0.055	9.8	96	0.00	8.37
42		methyl acrylate	0.057	0.055	3.5	96	0.00	8.38
43		methacrylonitrile	0.158	0.152	3.8	97	0.00	8.54
44		bromochloromethane	0.304	0.288	5.3	98	0.00	8.63
45		tetrahydrofuran	0.104	0.108	-3.8	104	0.00	8.65
46		chloroform	0.948	0.840	11.4	99	0.00	8.70
47		tert-Butyl Formate	0.171	0.179	-4.7	106	0.00	8.74
48	S	dibromofluoromethane (s)	0.462	0.461	0.2	105	0.00	8.88
49		1,1,1-trichloroethane	0.788	0.759	3.7	99	0.00	8.95
50		cyclohexane	0.659	0.624	5.3	90	0.00	9.05
51		isobutyl alcohol	0.070	0.068	2.9	103	0.00	9.21
52		1,1-dichloropropene	0.593	0.587	1.0	99	0.00	9.10
53		carbon tetrachloride	0.677	0.676	0.1	98	0.00	9.13
54		tert-amyl alcohol	0.022	0.020	9.1	96	0.00	9.20
55		isopropyl acetate	0.073	0.074	-1.4	104	0.00	9.22
56	I	1,4-difluorobenzene	1.000	1.000	0.0	107	0.00	9.70
57	S	1,2-dichloroethane-d4 (s)	0.324	0.310	4.3	103	0.00	9.27
58		n-butyl alcohol	0.008	0.008	0.0	103	0.00	9.72
59		2,2,4-Trimethylpentane	1.223	1.346	-10.1	102	0.00	9.40
60		benzene	1.426	1.294	9.3	101	0.00	9.33
61		tert-amyl methyl ether	1.070	1.008	5.8	101	0.00	9.39
62		heptane	0.225	0.271	-20.4	113	0.00	9.54
63		1,2-dichloroethane	0.444	0.394	11.3	97	0.00	9.35
64		ethyl acrylate	0.323	0.320	0.9	102	0.00	9.97
65		trichloroethene	0.367	0.352	4.1	100	0.00	10.00
66		2-chloroethyl vinyl ether	0.189	0.182	3.7	101	0.00	10.75
67		methyl methacrylate	0.077	0.075	2.6	97	0.00	10.22
68		methylcyclohexane	0.650	0.631	2.9	92	0.00	10.29
69		1,2-dichloropropane	0.352	0.336	4.5	102	0.00	10.28
70		dibromomethane	0.234	0.212	9.4	96	0.00	10.38
71		bromodichloromethane	0.492	0.459	6.7	99	0.00	10.53
72		2-nitropropane	0.106	0.099	6.6	98	0.00	10.73
73		epichlorohydrin	0.028	0.029	-3.6	105	0.00	10.84
74		cis-1,3-dichloropropene	0.582	0.560	3.8	101	0.00	10.98
75		4-methyl-2-pentanone	0.109	0.106	2.8	104	0.00	11.07
76		isoamyl alcohol	0.008	0.008	0.0	99	0.00	11.06
77	I	chlorobenzene-d5	1.000	1.000	0.0	105	0.00	12.88
78	S	toluene-d8 (s)	1.202	1.221	-1.6	107	0.00	11.29
79		toluene	0.892	0.842	5.6	100	0.00	11.37
80		ethyl methacrylate	0.389	0.379	2.6	96	0.00	11.53
81		trans-1,3-dichloropropene	0.520	0.509	2.1	99	0.00	11.56
82		1,1,2-trichloroethane	0.277	0.267	3.6	102	0.00	11.79
83		tetrachloroethene	0.364	0.358	1.6	99	0.00	11.94
84		2-hexanone	0.105	0.104	1.0	99	0.00	11.95
85		1,3-dichloropropane	0.514	0.473	8.0	100	0.00	11.98
86		butyl acetate	0.192	0.201	-4.7	106	0.00	12.03
87		3,3-Dimethyl-1-Butanol	0.024	0.024	0.0	104	0.00	12.14
88		dibromochloromethane	0.447	0.432	3.4	99	0.00	12.24
89		1,2-dibromoethane	0.381	0.360	5.5	98	0.00	12.41
90		n-butyl ether	1.597	1.634	-2.3	101	0.00	12.86
91		chlorobenzene	1.137	1.043	8.3	100	0.00	12.92
92		1,1,1,2-tetrachloroethane	0.441	0.416	5.7	100	0.00	12.98
93		ethylbenzene	1.788	1.626	9.1	99	0.00	12.98
94		m,p-xylene	0.708	0.649	8.3	99	0.00	13.11
95		o-xylene	1.534	1.439	6.2	99	0.00	13.55

Initial Calibration Verification

Job Number: JC54939
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: V4B3119-ICV3119
Lab FileID: 4B76056.D

96		styrene	1.191	1.132	5.0	99	0.00	13.56
97		butyl acrylate	0.639	0.677	-5.9	102	0.00	13.35
98		isopropylbenzene	1.955	1.889	3.4	98	0.00	13.93
99		bromoform	0.362	0.344	5.0	96	0.00	13.82
100		cis-1,4-dichloro-2-butene	0.149	0.145	2.7	94	0.00	13.97
101	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	105	0.00	15.45
102	S	4-bromofluorobenzene (s)	0.770	0.778	-1.0	105	0.00	14.15
103		1,1,2,2-tetrachloroethane	0.746	0.723	3.1	100	0.00	14.24
104		trans-1,4-dichloro-2-bute	0.160	0.178	-11.2	107	0.00	14.28
105		1,2,3-trichloropropane	0.188	0.177	5.9	97	0.00	14.34
106		bromobenzene	0.933	0.855	8.4	99	0.00	14.36
107		n-propylbenzene	3.511	3.237	7.8	97	0.00	14.39
108		2-chlorotoluene	0.779	0.762	2.2	101	0.00	14.54
109		4-chlorotoluene	2.215	2.038	8.0	98	0.00	14.66
110		1,3,5-trimethylbenzene	2.570	2.382	7.3	98	0.00	14.56
111		tert-butylbenzene	2.161	2.206	-2.1	98	0.00	14.94
112		1,2,4-trimethylbenzene	2.694	2.538	5.8	98	0.00	15.00
113		sec-butylbenzene	3.348	3.376	-0.8	98	0.00	15.18
114		p-isopropyltoluene	2.979	2.984	-0.2	98	0.00	15.33
115		1,3-dichlorobenzene	1.814	1.628	10.3	99	0.00	15.37
116		1,4-dichlorobenzene	1.838	1.633	11.2	98	0.00	15.48
117		1,2-dichlorobenzene	1.815	1.696	6.6	99	0.00	15.90
118		Benzyl Chloride	1.501	1.359	9.5	91	0.00	15.58
119		n-butylbenzene	1.507	1.541	-2.3	98	0.00	15.79
120		hexachloroethane	0.651	0.660	-1.4	96	0.00	16.22
121		1,2-dibromo-3-chloropropa	0.202	0.205	-1.5	95	0.00	16.74
122		1,3,5-trichlorobenzene	1.801	1.857	-3.1	102	0.00	16.94
123		1,2,4-trichlorobenzene	1.563	1.588	-1.6	97	0.00	17.62
124		2-ethylhexyl acrylate	0.809	0.916	-13.2	111	0.00	17.63
125		hexachlorobutadiene	0.795	0.767	3.5	95	0.00	17.74
126		naphthalene	2.737	2.767	-1.1	96	0.00	17.94
127		1,2,3-trichlorobenzene	1.363	1.380	-1.2	97	0.00	18.17
128		2-methylnaphthalene	1.737	1.513	12.9	86	0.00	19.23

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

4B76050.D M4B3119.M Tue Oct 24 09:29:49 2017 GCMS4B

Continuing Calibration Summary

Job Number: JC54939 **Sample:** V4B3142-CC3119
Account: HSWFLTAM HSW Engineering **Lab FileID:** 4B76584.D
Project: Long Island GW Sampling, Long Island, NY

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\4B76584.D Vial: 2
Acq On : 8 Nov 2017 9:39 am Operator: Hueanht
Sample : cc3119-20 Inst : MS4B
Misc : MS21885,V4B3142,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M4B3119.M (RTE Integrator)
Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
Last Update : Tue Oct 24 09:22:48 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	97	0.01	6.83
2	ethanol		----------NA----------				
3	tertiary butyl alcohol	1.349	1.483	-9.9	104	0.00	6.92
4	1,4-dioxane	0.124	0.123	0.8	93	0.00	10.32
5 I	pentafluorobenzene	1.000	1.000	0.0	112	0.00	8.83
6	chlorodifluoromethane	0.657	0.742	-12.9	119	0.00	3.95
	----------	True	Calc.	% Drift	----------		
7	dichlorodifluoromethane	20.000	17.876	10.6	105	-0.02	3.92
	----------	AvgRF	CCRF	% Dev	----------		
8	freon 142b		----------NA----------				
9	chloromethane	0.779	0.816	-4.7	110	-0.01	4.20
10	vinyl chloride	0.791	0.898	-13.5	114	0.00	4.46
11	1,3-butadiene	0.446	0.891	-99.8#	235#	-0.01	4.46
12	bromomethane	0.598	0.631	-5.5	114	0.00	5.00
13	chloroethane	0.391	0.420	-7.4	110	-0.02	5.14
14	trichlorofluoromethane	0.808	0.942	-16.6	114	0.00	5.57
15	vinyl bromide	0.526	0.615	-16.9	119	-0.01	5.45
16	ethyl ether	0.241	0.237	1.7	110	-0.01	5.88
17	2-chloropropane	0.762	0.851	-11.7	122	-0.01	6.07
18	acrolein	0.086	0.081	5.8	106	0.00	6.09
19	freon 113	0.431	0.524	-21.6#	119	-0.01	6.27
20	1,1-dichloroethene	0.703	0.796	-13.2	118	-0.01	6.26
21	acetone	0.037	0.034	8.1	97	-0.01	6.25
22	acetonitrile	0.042	0.053	-26.2#	151	-0.01	6.63
23	iodomethane	1.177	1.188	-0.9	115	-0.01	6.49
24	carbon disulfide	1.789	1.895	-5.9	117	-0.01	6.62
25	methylene chloride	0.562	0.569	-1.2	117	0.00	6.87
26	methyl acetate	0.299	0.293	2.0	111	0.00	6.64
27	allyl chloride		----------NA----------				
28	methyl tert butyl ether	1.418	1.380	2.7	112	-0.02	7.17
29	trans-1,2-dichloroethene	0.711	0.740	-4.1	116	0.00	7.21
30	hexane	0.292	0.336	-15.1	114	0.00	7.51
31	di-isopropyl ether	1.503	1.549	-3.1	117	-0.01	7.69
32	2-butanone	0.041	0.039	4.9	105	0.00	8.29
33	1,1-dichloroethane	0.884	0.908	-2.7	117	0.00	7.72
34	chloroprene	0.628	0.693	-10.4	116	0.00	7.81
35	acrylonitrile	0.160	0.159	0.6	114	0.00	7.13
36	vinyl acetate	0.068	0.072	-5.9	119	0.00	7.65
37	ethyl tert-butyl ether	1.551	1.544	0.5	116	0.00	8.10

Continuing Calibration Summary

Job Number: JC54939 **Sample:** V4B3142-CC3119
Account: HSWFLTAM HSW Engineering **Lab FileID:** 4B76584.D
Project: Long Island GW Sampling, Long Island, NY

38		ethyl acetate	0.051	0.051	0.0	114	0.00	8.29
39		2,2-dichloropropane	0.719	0.777	-8.1	116	0.00	8.40
40		cis-1,2-dichloroethene	0.577	0.588	-1.9	112	0.00	8.36
41		propionitrile	0.061	0.060	1.6	110	0.00	8.36
42		methyl acrylate	0.057	0.058	-1.8	112	0.00	8.37
43		methacrylonitrile	0.158	0.154	2.5	109	0.00	8.54
44		bromochloromethane	0.304	0.310	-2.0	114	0.00	8.63
45		tetrahydrofuran	0.104	0.103	1.0	108	0.00	8.65
46		chloroform	0.948	0.932	1.7	115	0.00	8.70
47		tert-Butyl Formate	0.171	0.060	64.9#	39#	0.00	8.74
48	S	dibromofluoromethane (s)	0.462	0.447	3.2	109	0.00	8.88
49		1,1,1-trichloroethane	0.788	0.849	-7.7	118	0.00	8.95
50		cyclohexane	0.659	0.769	-16.7	111	0.00	9.05
51		isobutyl alcohol	0.070	0.069	1.4	112	0.00	9.21
52		1,1-dichloropropene	0.593	0.667	-12.5	121	0.00	9.10
53		carbon tetrachloride	0.677	0.778	-14.9	119	0.00	9.13
54		tert-amyl alcohol	0.022	0.020	9.1	104	0.00	9.19
55		isopropyl acetate	0.073	0.074	-1.4	115	0.00	9.22
56	I	1,4-difluorobenzene	1.000	1.000	0.0	114	0.00	9.70
57	S	1,2-dichloroethane-d4 (s)	0.324	0.311	4.0	111	0.00	9.26
58		n-butyl alcohol	0.008	0.007	12.5	96	0.00	9.72
59		2,2,4-Trimethylpentane	1.223	1.294	-5.8	110	0.00	9.40
60		benzene	1.426	1.421	0.4	119	0.00	9.33
61		tert-amyl methyl ether	1.070	1.052	1.7	114	0.00	9.38
62		heptane	0.225	0.255	-13.3	116	0.00	9.54
63		1,2-dichloroethane	0.444	0.442	0.5	115	0.00	9.35
64		ethyl acrylate	0.323	0.317	1.9	113	0.00	9.97
65		trichloroethene	0.367	0.394	-7.4	119	0.00	10.00
66		2-chloroethyl vinyl ether	0.189	0.136	28.0#	80	0.00	10.75
67		methyl methacrylate	0.077	0.077	0.0	111	0.00	10.22
68		methylcyclohexane	0.650	0.757	-16.5	118	0.00	10.28
69		1,2-dichloropropane	0.352	0.367	-4.3	116	0.00	10.28
70		dibromomethane	0.234	0.232	0.9	115	0.00	10.38
71		bromodichloromethane	0.492	0.502	-2.0	117	0.00	10.53
72		2-nitropropane	0.106	0.093	12.3	98	0.00	10.72
73		epichlorohydrin	0.028	0.026	7.1	102	0.00	10.84
74		cis-1,3-dichloropropene	0.582	0.575	1.2	111	0.00	10.97
75		4-methyl-2-pentanone	0.109	0.106	2.8	110	0.00	11.07
76		isoamyl alcohol	0.008	0.007	12.5	89	0.00	11.06
77	I	chlorobenzene-d5	1.000	1.000	0.0	108	0.00	12.88
78	S	toluene-d8 (s)	1.202	1.157	3.7	107	0.00	11.29
79		toluene	0.892	0.918	-2.9	115	0.00	11.37
80		ethyl methacrylate	0.389	0.398	-2.3	110	0.00	11.53
81		trans-1,3-dichloropropene	0.520	0.514	1.2	107	0.00	11.55
82		1,1,2-trichloroethane	0.277	0.276	0.4	112	0.00	11.79
83		tetrachloroethene	0.364	0.415	-14.0	119	0.00	11.94
84		2-hexanone	0.105	0.102	2.9	104	0.00	11.95
85		1,3-dichloropropane	0.514	0.504	1.9	109	0.00	11.97
86		butyl acetate	0.192	0.191	0.5	104	0.00	12.03
87		3,3-Dimethyl-1-Butanol	0.024	0.018	25.0#	79	0.00	12.13
88		dibromochloromethane	0.447	0.441	1.3	108	0.00	12.24
89		1,2-dibromoethane	0.381	0.375	1.6	109	0.00	12.40
90		n-butyl ether	1.597	1.755	-9.9	115	0.00	12.86
91		chlorobenzene	1.137	1.124	1.1	111	0.00	12.92
92		1,1,1,2-tetrachloroethane	0.441	0.457	-3.6	114	0.00	12.98
93		ethylbenzene	1.788	1.826	-2.1	111	0.00	12.98
94		m,p-xylene	0.708	0.721	-1.8	111	0.00	13.11
95		o-xylene	1.534	1.610	-5.0	114	0.00	13.54

Continuing Calibration Summary

Job Number: JC54939 **Sample:** V4B3142-CC3119
Account: HSWFLTAM HSW Engineering **Lab FileID:** 4B76584.D
Project: Long Island GW Sampling, Long Island, NY

96		styrene	1.191	1.301	-9.2	113	0.00	13.56
97		butyl acrylate	0.639	0.684	-7.0	114	0.00	13.35
98		isopropylbenzene	1.955	2.092	-7.0	112	0.00	13.93
99		bromoform	0.362	0.349	3.6	106	0.00	13.81
100		cis-1,4-dichloro-2-butene	0.149	0.070	53.0#	49#	0.00	13.97
101	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	112	0.00	15.45
102	S	4-bromofluorobenzene (s)	0.770	0.744	3.4	106	0.00	14.15
103		1,1,2,2-tetrachloroethane	0.746	0.718	3.8	110	0.00	14.24
104		trans-1,4-dichloro-2-bute	0.160	0.082	48.8#	56	0.00	14.28
105		1,2,3-trichloropropane	0.188	0.189	-0.5	113	0.00	14.34
106		bromobenzene	0.933	0.949	-1.7	114	0.00	14.36
107		n-propylbenzene	3.511	3.729	-6.2	114	0.00	14.38
108		2-chlorotoluene	0.779	0.813	-4.4	111	0.00	14.54
109		4-chlorotoluene	2.215	2.283	-3.1	114	0.00	14.66
110		1,3,5-trimethylbenzene	2.570	2.665	-3.7	113	0.00	14.56
111		tert-butylbenzene	2.161	2.340	-8.3	115	0.00	14.93
112		1,2,4-trimethylbenzene	2.694	2.842	-5.5	113	0.00	15.00
113		sec-butylbenzene	3.348	3.716	-11.0	115	0.00	15.18
114		p-isopropyltoluene	2.979	3.263	-9.5	114	0.00	15.33
115		1,3-dichlorobenzene	1.814	1.841	-1.5	115	0.00	15.37
116		1,4-dichlorobenzene	1.838	1.811	1.5	115	0.00	15.48
117		1,2-dichlorobenzene	1.815	1.880	-3.6	114	0.00	15.89
118		Benzyl Chloride	1.501	1.423	5.2	107	0.00	15.58
119		n-butylbenzene	1.507	1.684	-11.7	117	0.00	15.78
120		hexachloroethane	0.651	0.601	7.7	102	0.00	16.22
121		1,2-dibromo-3-chloropropa	0.202	0.196	3.0	108	0.00	16.74
122		1,3,5-trichlorobenzene	1.801	1.854	-2.9	112	0.00	16.94
123		1,2,4-trichlorobenzene	1.563	1.610	-3.0	111	0.00	17.62
124		2-ethylhexyl acrylate	0.809	0.428	47.1#	70	0.00	17.62
125		hexachlorobutadiene	0.795	0.808	-1.6	107	0.00	17.74
126		naphthalene	2.737	2.689	1.8	107	0.00	17.93
127		1,2,3-trichlorobenzene	1.363	1.348	1.1	107	0.00	18.17
128		2-methylnaphthalene	1.737	1.409	18.9	103	0.00	19.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4B76049.D M4B3119.M Wed Nov 08 17:00:06 2017 GCMS4B

e-Hardcopy 2.0
Automated Report

Technical Report for

HSW Engineering

Long Island GW Sampling, Long Island, NY

1AS301101.063

SGS Accutest Job Number: JC55040

Sampling Date: 11/08/17

Report to:

HSW Engineering
15711 Mapledale Boulevard Suite B
Tampa, FL 33624
RPoff@HSWEng.com; DSmolensky@Emagin-Inc.com

ATTN: Rich Poff

Total number of pages in report: **134**

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)

Sections: 1 2 3 4 5 6 7

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Sample Summary

HSW Engineering

Job No: JC55040

Long Island GW Sampling, Long Island, NY
Project No: 1AS301101.063

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC55040-1	11/08/17	11:00	CMT	11/08/17	AQ	Ground Water	MW-301(HP-275)
JC55040-2	11/08/17	14:35	CMT	11/08/17	AQ	Ground Water	MW-301(HP-285)
JC55040-3	11/08/17	16:30	CMT	11/08/17	AQ	Ground Water	MW-301(HP-295)

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	HSW Engineering	**Job No**	JC55040
Site:	Long Island GW Sampling, Long Island, NY	**Report Date**	11/20/2017 9:43:00 A

On 11/08/2017, 3 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 3.2 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of JC55040 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:** V2E6027

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC54532-1MS, JC54532-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JC55040-2: Sample transfered to another vial due to high level of sediment inside.
- JC55040-3: Sample transfered to another vial due to high level of sediment inside.
- JC55040-2 for Acetone: Associated CCV outside of control limits high.
- JC55040-3 for Acetone: Associated CCV outside of control limits high.
- JC55040-1 for Acetone: Associated CCV outside of control limits high, sample was ND.

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: JC55040
Account: HSW Engineering
Project: Long Island GW Sampling, Long Island, NY
Collected: 11/08/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC55040-1	**MW-301(HP-275)**					
Chloroform		0.30 J	1.0	0.29	ug/l	SW846 8260C
1,1-Dichloroethane		0.48 J	1.0	0.21	ug/l	SW846 8260C
Tetrachloroethene		0.73 J	1.0	0.50	ug/l	SW846 8260C
Trichloroethene		0.51 J	1.0	0.27	ug/l	SW846 8260C
JC55040-2	**MW-301(HP-285)**					
Acetone [a]		9.2 J	10	5.0	ug/l	SW846 8260C
1,1-Dichloroethane [b]		1.1	1.0	0.21	ug/l	SW846 8260C
1,1-Dichloroethene [b]		0.49 J	1.0	0.47	ug/l	SW846 8260C
Tetrachloroethene [b]		1.1	1.0	0.50	ug/l	SW846 8260C
Trichloroethene [b]		1.1	1.0	0.27	ug/l	SW846 8260C
JC55040-3	**MW-301(HP-295)**					
Acetone [a]		12.3	10	5.0	ug/l	SW846 8260C
Carbon disulfide [b]		0.33 J	2.0	0.23	ug/l	SW846 8260C
1,1-Dichloroethane [b]		0.75 J	1.0	0.21	ug/l	SW846 8260C
Tetrachloroethene [b]		0.56 J	1.0	0.50	ug/l	SW846 8260C
Toluene [b]		0.30 J	1.0	0.25	ug/l	SW846 8260C
Trichloroethene [b]		0.56 J	1.0	0.27	ug/l	SW846 8260C

(a) Sample transfered to another vial due to high level of sediment inside. Associated CCV outside of control limits high.
(b) Sample transfered to another vial due to high level of sediment inside.

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID: MW-301(HP-275)
Lab Sample ID: JC55040-1
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Long Island GW Sampling, Long Island, NY

Date Sampled: 11/08/17
Date Received: 11/08/17
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E138182.D	1	11/09/17 00:30	JP	n/a	n/a	V2E6027
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	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	0.30	1.0	0.29	ug/l	J
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	0.48	1.0	0.21	ug/l	J
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	
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	

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:	MW-301(HP-275)		
Lab Sample ID:	JC55040-1	**Date Sampled:**	11/08/17
Matrix:	AQ - Ground Water	**Date Received:**	11/08/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	0.73	1.0	0.50	ug/l	J
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	0.51	1.0	0.27	ug/l	J
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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%
17060-07-0	1,2-Dichloroethane-D4	116%		81-124%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	106%		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

SGS Accutest

Report of Analysis

Client Sample ID: MW-301(HP-285)
Lab Sample ID: JC55040-2
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Long Island GW Sampling, Long Island, NY

Date Sampled: 11/08/17
Date Received: 11/08/17
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	2E138180.D	1	11/08/17 23:35	JP	n/a	n/a	V2E6027
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	9.2	10	5.0	ug/l	J
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	1.1	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	0.49	1.0	0.47	ug/l	J
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	
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	

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:	MW-301(HP-285)		
Lab Sample ID:	JC55040-2	**Date Sampled:**	11/08/17
Matrix:	AQ - Ground Water	**Date Received:**	11/08/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	1.1	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	1.1	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%
17060-07-0	1,2-Dichloroethane-D4	118%		81-124%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	106%		80-120%

(a) Sample transfered to another vial due to high level of sediment inside.
(b) Associated CCV outside of control limits high.

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-301(HP-295)		
Lab Sample ID:	JC55040-3	**Date Sampled:**	11/08/17
Matrix:	AQ - Ground Water	**Date Received:**	11/08/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	2E138181.D	1	11/09/17 00:03	JP	n/a	n/a	V2E6027
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	12.3	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	0.33	2.0	0.23	ug/l	J
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	0.75	1.0	0.21	ug/l	J
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	
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	

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:	MW-301(HP-295)		
Lab Sample ID:	JC55040-3	**Date Sampled:**	11/08/17
Matrix:	AQ - Ground Water	**Date Received:**	11/08/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	0.56	1.0	0.50	ug/l	J
108-88-3	Toluene	0.30	1.0	0.25	ug/l	J
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	0.56	1.0	0.27	ug/l	J
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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		80-120%
17060-07-0	1,2-Dichloroethane-D4	118%		81-124%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	106%		80-120%

(a) Sample transfered to another vial due to high level of sediment inside.
(b) Associated CCV outside of control limits high.

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

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

FED-EX Tracking #:
Bottle Order Control #: JC55040
SGS Accutest Quote #:
SGS Accutest Job #:

Client / Reporting Information

Company Name: EMAGIN
Street Address: 15711 Manchester Blvd Suite B
City: Tampa State: FL Zip: 33624
Project Contact: Kim Pate rpatte@sgs.com; Doug Smutzler dsmutzler@emagin.com
Phone #: 813-968-7722 Fax #:
Sampler(s) Name(s): Chad Thompson Phone #: (321-947-5448)

Project Information

Project Name: Long Island GW Sampling
Street:
City: Long Island State: NY
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

VOCs by EPA Method 8260C

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- Rinsate Blank
TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vol #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	EnCore	LAB USE ONLY
1	MW-301 (HP-275)	—	11-08-17	1100	CMT	GW	2	X								V156
2	MW-301 (HP-285)	—	11-08-17	1435	↓	↓	3	X								
3	MW-301 (HP-295)	—	11-08-17	1630	↓	↓	3	X								

Turnaround Time (Business days)

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

Approved By (SGS Accutest PM) / Date:

! (12 Hour RUSH)!
Tammy McCloskey (SGS)

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

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

- NYASP Category A
- NYASP Category B
- State Forms
- EDD Format
- Other

Comments / Special Instructions

INITIAL ASSESSMENT BLH

LABEL VERIFICATION

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:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	11/08/17 1645	1	2	11/8/17 1932	2
3		3	4		4
5		5	Custody Seal #	Intact / Not Intact	Preserved where applicable / On Ice / Cooler Temp. 2.3°C

Form SM058-01C Rev. Date 9/13/16

SGS Accutest Sample Receipt Summary

Job Number: JC55040 **Client:** EMAGIN **Project:** Long Island GW Sampling

Date / Time Received: 11/8/2017 7:30:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (2.3);

Cooler Temps (Corrected) °C: Cooler 1: (3.2);

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 -2 3 of 3 VOC vials rec'd with 50% sedment. We will not screen sample.

SM089-02
Rev. Date 12/1/16

JC55040: Chain of Custody
Page 2 of 3

Responded to by: CSR: N/A

Response Date: Response Date: 11/8/2017

Response:

Response: Proceed with analysis

JC55040: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

HSW Engineering

Job No: JC55040

Long Island GW Sampling, Long Island, NY
Project No: 1AS301101.063

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC55040-1	Collected: 08-NOV-17 11:00 By: CMT		Received: 08-NOV-17 By: AS			
MW-301(HP-275)						
JC55040-1	SW846 8260C	09-NOV-17 00:30	JP			V8260TCL20
JC55040-2	Collected: 08-NOV-17 14:35 By: CMT		Received: 08-NOV-17 By: AS			
MW-301(HP-285)						
JC55040-2	SW846 8260C	08-NOV-17 23:35	JP			V8260TCL20
JC55040-3	Collected: 08-NOV-17 16:30 By: CMT		Received: 08-NOV-17 By: AS			
MW-301(HP-295)						
JC55040-3	SW846 8260C	09-NOV-17 00:03	JP			V8260TCL20

SGS Accutest Internal Chain of Custody

Job Number: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY
Received: 11/08/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC55040-1.2	Secured Storage	Maricela Delgaolillo	11/08/17 22:58	Retrieve from Storage
JC55040-1.2	Maricela Delgaolillo	GCMS2E	11/08/17 22:58	Load on Instrument
JC55040-1.2	GCMS2E	Jessica Potts	11/09/17 09:26	Unload from Instrument
JC55040-1.2	Jessica Potts	Secured Storage	11/09/17 09:26	Return to Storage
JC55040-2.1	Secured Storage	Maricela Delgaolillo	11/08/17 22:58	Retrieve from Storage
JC55040-2.1	Maricela Delgaolillo	GCMS2E	11/08/17 22:58	Load on Instrument
JC55040-2.1	GCMS2E	Jessica Potts	11/09/17 09:26	Unload from Instrument
JC55040-2.1	Jessica Potts	Secured Storage	11/09/17 09:26	Return to Storage
JC55040-3.3	Secured Storage	Maricela Delgaolillo	11/08/17 22:58	Retrieve from Storage
JC55040-3.3	Maricela Delgaolillo	GCMS2E	11/08/17 22:58	Load on Instrument
JC55040-3.3	GCMS2E	Jessica Potts	11/09/17 09:26	Unload from Instrument
JC55040-3.3	Jessica Potts	Secured Storage	11/09/17 09:26	Return to Storage

MS Volatiles

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: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E6027-MB	2E138172.D	1	11/08/17	JP	n/a	n/a	V2E6027

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

JC55040-1, JC55040-2, JC55040-3

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	
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	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	

Method Blank Summary

Job Number: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E6027-MB	2E138172.D	1	11/08/17	JP	n/a	n/a	V2E6027

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

JC55040-1, JC55040-2, JC55040-3

CAS No.	Compound	Result	RL	MDL	Units	Q
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	105%	80-120%
17060-07-0	1,2-Dichloroethane-D4	119%	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	

Blank Spike Summary

Job Number: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E6027-BS	2E138173.D	1	11/08/17	JP	n/a	n/a	V2E6027

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

JC55040-1, JC55040-2, JC55040-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	185	93	42-150
71-43-2	Benzene	50	46.8	94	80-120
74-97-5	Bromochloromethane	50	49.4	99	84-121
75-27-4	Bromodichloromethane	50	51.2	102	83-120
75-25-2	Bromoform	50	49.6	99	76-129
74-83-9	Bromomethane	50	45.6	91	57-138
78-93-3	2-Butanone (MEK)	200	191	96	64-137
75-15-0	Carbon disulfide	50	48.0	96	64-137
56-23-5	Carbon tetrachloride	50	50.7	101	75-135
108-90-7	Chlorobenzene	50	47.0	94	84-117
75-00-3	Chloroethane	50	48.1	96	63-132
67-66-3	Chloroform	50	49.7	99	80-119
74-87-3	Chloromethane	50	52.2	104	46-136
110-82-7	Cyclohexane	50	45.7	91	64-137
96-12-8	1,2-Dibromo-3-chloropropane	50	56.8	114	72-127
124-48-1	Dibromochloromethane	50	50.5	101	80-123
106-93-4	1,2-Dibromoethane	50	49.5	99	84-117
95-50-1	1,2-Dichlorobenzene	50	47.5	95	84-119
541-73-1	1,3-Dichlorobenzene	50	46.3	93	81-117
106-46-7	1,4-Dichlorobenzene	50	46.5	93	82-117
75-71-8	Dichlorodifluoromethane	50	53.0	106	36-149
75-34-3	1,1-Dichloroethane	50	51.1	102	79-120
107-06-2	1,2-Dichloroethane	50	55.1	110	78-126
75-35-4	1,1-Dichloroethene	50	51.8	104	69-126
156-59-2	cis-1,2-Dichloroethene	50	46.1	92	80-120
156-60-5	trans-1,2-Dichloroethene	50	52.1	104	76-120
78-87-5	1,2-Dichloropropane	50	48.4	97	82-121
10061-01-5	cis-1,3-Dichloropropene	50	47.4	95	83-120
10061-02-6	trans-1,3-Dichloropropene	50	50.0	100	82-121
100-41-4	Ethylbenzene	50	46.4	93	80-120
76-13-1	Freon 113	50	42.5	85	62-182
591-78-6	2-Hexanone	200	188	94	65-132
98-82-8	Isopropylbenzene	50	46.1	92	83-120
79-20-9	Methyl Acetate	50	58.7	117	67-129
108-87-2	Methylcyclohexane	50	42.4	85	71-134
1634-04-4	Methyl Tert Butyl Ether	50	53.1	106	80-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E6027-BS	2E138173.D	1	11/08/17	JP	n/a	n/a	V2E6027

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

JC55040-1, JC55040-2, JC55040-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	204	102	71-131
75-09-2	Methylene chloride	50	48.7	97	77-120
100-42-5	Styrene	50	46.1	92	82-122
79-34-5	1,1,2,2-Tetrachloroethane	50	49.5	99	76-119
127-18-4	Tetrachloroethene	50	47.4	95	70-131
108-88-3	Toluene	50	48.4	97	80-120
87-61-6	1,2,3-Trichlorobenzene	50	48.8	98	76-134
120-82-1	1,2,4-Trichlorobenzene	50	48.1	96	79-132
71-55-6	1,1,1-Trichloroethane	50	50.1	100	81-128
79-00-5	1,1,2-Trichloroethane	50	51.5	103	83-118
79-01-6	Trichloroethene	50	48.0	96	80-120
75-69-4	Trichlorofluoromethane	50	51.0	102	64-136
75-01-4	Vinyl chloride	50	51.1	102	51-135
	m,p-Xylene	100	91.6	92	80-120
95-47-6	o-Xylene	50	46.8	94	80-120
1330-20-7	Xylene (total)	150	138	92	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	80-120%
17060-07-0	1,2-Dichloroethane-D4	116%	81-124%
2037-26-5	Toluene-D8	102%	80-120%
460-00-4	4-Bromofluorobenzene	106%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54532-1MS	2E138174.D	1	11/08/17	JP	n/a	n/a	V2E6027
JC54532-1MSD	2E138175.D	1	11/08/17	JP	n/a	n/a	V2E6027
JC54532-1	2E138179.D	1	11/08/17	JP	n/a	n/a	V2E6027

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

JC55040-1, JC55040-2, JC55040-3

CAS No.	Compound	JC54532-1 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	177	89	200	178	89	1	34-149/17
71-43-2	Benzene	ND		50	50.1	100	50	49.8	100	1	54-136/10
74-97-5	Bromochloromethane	ND		50	49.7	99	50	49.0	98	1	79-124/11
75-27-4	Bromodichloromethane	ND		50	53.1	106	50	52.4	105	1	79-124/11
75-25-2	Bromoform	ND		50	49.2	98	50	48.7	97	1	71-130/11
74-83-9	Bromomethane	ND		50	49.7	99	50	51.3	103	3	53-142/14
78-93-3	2-Butanone (MEK)	ND		200	186	93	200	186	93	0	54-142/15
75-15-0	Carbon disulfide	ND		50	54.1	108	50	54.0	108	0	59-145/17
56-23-5	Carbon tetrachloride	5.8		50	63.8	116	50	65.0	118	2	70-143/12
108-90-7	Chlorobenzene	ND		50	49.5	99	50	49.3	99	0	78-123/10
75-00-3	Chloroethane	ND		50	53.2	106	50	54.9	110	3	57-141/14
67-66-3	Chloroform	4.1		50	56.5	105	50	56.7	105	0	76-123/11
74-87-3	Chloromethane	ND		50	56.9	114	50	59.2	118	4	43-141/16
110-82-7	Cyclohexane	ND		50	58.2	116	50	59.9	120	3	51-155/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	55.5	111	50	55.3	111	0	66-130/13
124-48-1	Dibromochloromethane	ND		50	51.1	102	50	50.8	102	1	76-125/11
106-93-4	1,2-Dibromoethane	ND		50	49.0	98	50	48.9	98	0	78-119/11
95-50-1	1,2-Dichlorobenzene	ND		50	50.0	100	50	50.0	100	0	77-123/11
541-73-1	1,3-Dichlorobenzene	ND		50	50.0	100	50	49.4	99	1	76-122/11
106-46-7	1,4-Dichlorobenzene	ND		50	50.1	100	50	49.8	100	1	76-122/11
75-71-8	Dichlorodifluoromethane	ND		50	67.5	135	50	68.3	137	1	31-159/16
75-34-3	1,1-Dichloroethane	2.6		50	56.8	108	50	57.5	110	1	73-126/11
107-06-2	1,2-Dichloroethane	ND		50	55.7	111	50	55.2	110	1	72-131/11
75-35-4	1,1-Dichloroethene	18.1		50	76.1	116	50	77.7	119	2	63-136/14
156-59-2	cis-1,2-Dichloroethene	27.6		50	74.5	94	50	74.5	94	0	60-136/11
156-60-5	trans-1,2-Dichloroethene	ND		50	57.3	115	50	57.9	116	1	70-126/11
78-87-5	1,2-Dichloropropane	ND		50	50.0	100	50	50.0	100	0	78-124/10
10061-01-5	cis-1,3-Dichloropropene	ND		50	49.7	99	50	48.8	98	2	79-123/11
10061-02-6	trans-1,3-Dichloropropene	ND		50	51.5	103	50	51.4	103	0	77-123/11
100-41-4	Ethylbenzene	ND		50	50.8	102	50	50.7	101	0	51-140/20
76-13-1	Freon 113	ND		50	55.3	111	50	54.6	109	1	60-192/14
591-78-6	2-Hexanone	ND		200	180	90	200	177	89	2	56-139/14
98-82-8	Isopropylbenzene	ND		50	51.1	102	50	51.2	102	0	75-129/11
79-20-9	Methyl Acetate	ND		50	53.4	107	50	52.1	104	2	55-131/15
108-87-2	Methylcyclohexane	ND		50	58.5	117	50	57.3	115	2	57-155/13
1634-04-4	Methyl Tert Butyl Ether	ND		50	52.7	105	50	53.1	106	1	72-123/11

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54532-1MS	2E138174.D	1	11/08/17	JP	n/a	n/a	V2E6027
JC54532-1MSD	2E138175.D	1	11/08/17	JP	n/a	n/a	V2E6027
JC54532-1	2E138179.D	1	11/08/17	JP	n/a	n/a	V2E6027

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

JC55040-1, JC55040-2, JC55040-3

CAS No.	Compound	JC54532-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		200	196	98	200	194	97	1	66-136/13
75-09-2	Methylene chloride	ND		50	50.6	101	50	50.3	101	1	73-125/13
100-42-5	Styrene	ND		50	48.4	97	50	48.3	97	0	75-129/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	49.3	99	50	49.5	99	0	71-122/11
127-18-4	Tetrachloroethene	ND		50	53.7	107	50	53.9	108	0	61-139/11
108-88-3	Toluene	ND		50	52.0	104	50	52.6	105	1	60-135/10
87-61-6	1,2,3-Trichlorobenzene	ND		50	52.5	105	50	53.3	107	2	70-138/13
120-82-1	1,2,4-Trichlorobenzene	ND		50	52.5	105	50	52.8	106	1	72-137/13
71-55-6	1,1,1-Trichloroethane	7.3		50	63.6	113	50	63.9	113	0	74-138/12
79-00-5	1,1,2-Trichloroethane	ND		50	51.3	103	50	50.3	101	2	78-121/11
79-01-6	Trichloroethene	437	E	50	477	80	50	479	84	0	62-141/10
75-69-4	Trichlorofluoromethane	ND		50	64.0	128	50	65.2	130	2	57-149/14
75-01-4	Vinyl chloride	ND		50	58.4	117	50	60.6	121	4	43-146/15
	m,p-Xylene	ND		100	99.7	100	100	99.5	100	0	50-144/20
95-47-6	o-Xylene	ND		50	50.1	100	50	49.9	100	0	63-134/10
1330-20-7	Xylene (total)	ND		150	150	100	150	149	99	1	56-139/20

CAS No.	Surrogate Recoveries	MS	MSD	JC54532-1	Limits
1868-53-7	Dibromofluoromethane	102%	102%	102%	80-120%
17060-07-0	1,2-Dichloroethane-D4	115%	116%	120%	81-124%
2037-26-5	Toluene-D8	102%	102%	101%	80-120%
460-00-4	4-Bromofluorobenzene	108%	108%	107%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample:	V2E5986-BFB	**Injection Date:**	10/11/17
Lab File ID:	2E137230.D	**Injection Time:**	17:25
Instrument ID:	GCMS2E		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	17724	19.1		Pass
75	30.0 - 60.0% of mass 95	43629	47.1		Pass
95	Base peak, 100% relative abundance	92677	100.0		Pass
96	5.0 - 9.0% of mass 95	6172	6.66		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	68109	73.5		Pass
175	5.0 - 9.0% of mass 174	4965	5.36	(7.29) [a]	Pass
176	95.0 - 101.0% of mass 174	66664	71.9	(97.9) [a]	Pass
177	5.0 - 9.0% of mass 176	4708	5.08	(7.06) [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
V2E5986-IC5986	2E137231.D	10/11/17	18:00	00:35	Initial cal 0.2
V2E5986-IC5986	2E137232.D	10/11/17	18:27	01:02	Initial cal 0.5
V2E5986-IC5986	2E137233.D	10/11/17	18:55	01:30	Initial cal 1
V2E5986-IC5986	2E137234.D	10/11/17	19:23	01:58	Initial cal 2
V2E5986-IC5986	2E137235.D	10/11/17	19:51	02:26	Initial cal 5
V2E5986-IC5986	2E137236.D	10/11/17	20:18	02:53	Initial cal 10
V2E5986-IC5986	2E137237.D	10/11/17	20:46	03:21	Initial cal 20
V2E5986-ICC5986	2E137238.D	10/11/17	21:13	03:48	Initial cal 50
V2E5986-IC5986	2E137239.D	10/11/17	21:40	04:15	Initial cal 100
V2E5986-IC5986	2E137240.D	10/11/17	22:08	04:43	Initial cal 200
V2E5986-ICV5986	2E137243.D	10/11/17	23:30	06:05	Initial cal verification 50
V2E5986-ICV5986	2E137244.D	10/11/17	23:58	06:33	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample:	V2E6027-BFB	**Injection Date:**	11/08/17
Lab File ID:	2E138169.D	**Injection Time:**	18:30
Instrument ID:	GCMS2E		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	19293	21.5		Pass
75	30.0 - 60.0% of mass 95	45976	51.2		Pass
95	Base peak, 100% relative abundance	89861	100.0		Pass
96	5.0 - 9.0% of mass 95	6031	6.71		Pass
173	Less than 2.0% of mass 174	132	0.15	(0.21) [a]	Pass
174	50.0 - 120.0% of mass 95	63259	70.4		Pass
175	5.0 - 9.0% of mass 174	4471	4.98	(7.07) [a]	Pass
176	95.0 - 101.0% of mass 174	60939	67.8	(96.3) [a]	Pass
177	5.0 - 9.0% of mass 176	3997	4.45	(6.56) [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
V2E6027-CC5986	2E138170.D	11/08/17	18:58	00:28	Continuing cal 50
V2E6027-MB	2E138172.D	11/08/17	19:53	01:23	Method Blank
V2E6027-BS	2E138173.D	11/08/17	20:21	01:51	Blank Spike
JC54532-1MS	2E138174.D	11/08/17	20:48	02:18	Matrix Spike
JC54532-1MSD	2E138175.D	11/08/17	21:16	02:46	Matrix Spike Duplicate
ZZZZZZ	2E138177.D	11/08/17	22:12	03:42	(unrelated sample)
ZZZZZZ	2E138178.D	11/08/17	22:39	04:09	(unrelated sample)
JC54532-1	2E138179.D	11/08/17	23:07	04:37	(used for QC only; not part of job JC55040)
JC55040-2	2E138180.D	11/08/17	23:35	05:05	MW-301(HP-285)
JC55040-3	2E138181.D	11/09/17	00:03	05:33	MW-301(HP-295)
JC55040-1	2E138182.D	11/09/17	00:30	06:00	MW-301(HP-275)
ZZZZZZ	2E138183.D	11/09/17	00:58	06:28	(unrelated sample)
ZZZZZZ	2E138184.D	11/09/17	01:26	06:56	(unrelated sample)
ZZZZZZ	2E138185.D	11/09/17	01:54	07:24	(unrelated sample)
ZZZZZZ	2E138186.D	11/09/17	02:21	07:51	(unrelated sample)
ZZZZZZ	2E138187.D	11/09/17	02:49	08:19	(unrelated sample)
ZZZZZZ	2E138188.D	11/09/17	03:17	08:47	(unrelated sample)
ZZZZZZ	2E138189.D	11/09/17	03:45	09:15	(unrelated sample)
ZZZZZZ	2E138190.D	11/09/17	04:12	09:42	(unrelated sample)

Internal Standard Area Summary

Job Number: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Check Std:	V2E6027-CC5986	**Injection Date:**	11/08/17
Lab File ID:	2E138170.D	**Injection Time:**	18:58
Instrument ID:	GCMS2E	**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	119243	7.46	211529	9.69	360409	10.61	293945	13.74	141376	16.03
Upper Limit [a]	238486	7.96	423058	10.19	720818	11.11	587890	14.24	282752	16.53
Lower Limit [b]	59622	6.96	105765	9.19	180205	10.11	146973	13.24	70688	15.53

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2E6027-MB	126173	7.45	196063	9.69	340559	10.61	277294	13.74	137304	16.03
V2E6027-BS	128609	7.46	210808	9.69	360894	10.61	292323	13.74	141513	16.03
JC54532-1MS	125141	7.46	209340	9.69	357939	10.61	289439	13.74	139572	16.03
JC54532-1MSD	122614	7.46	207081	9.69	359708	10.61	289637	13.74	138597	16.03
ZZZZZZ	143296	7.46	215826	9.69	365506	10.61	298254	13.74	146346	16.03
ZZZZZZ	131299	7.46	199104	9.69	342337	10.61	279133	13.74	136730	16.03
JC54532-1	132738	7.46	206715	9.69	353687	10.61	287225	13.74	137987	16.03
JC55040-2 [c]	120060	7.46	204298	9.69	346377	10.61	281057	13.74	138727	16.03
JC55040-3 [c]	119140	7.46	198907	9.69	341835	10.61	278842	13.74	137987	16.03
JC55040-1	131083	7.46	215213	9.69	363883	10.61	295477	13.74	144442	16.03
ZZZZZZ	122494	7.46	193639	9.69	334152	10.61	273359	13.74	135120	16.03
ZZZZZZ	129378	7.46	203080	9.69	351519	10.61	285797	13.74	139914	16.03
ZZZZZZ	132445	7.46	211113	9.69	361080	10.61	292033	13.74	143859	16.03
ZZZZZZ	123251	7.46	188060	9.69	325015	10.61	265090	13.74	130380	16.03
ZZZZZZ	127742	7.46	201619	9.69	343986	10.61	282951	13.74	138919	16.03
ZZZZZZ	127245	7.45	204470	9.69	348759	10.61	285627	13.74	140818	16.03
ZZZZZZ	128559	7.45	205354	9.69	355851	10.61	290943	13.74	142893	16.03
ZZZZZZ	134761	7.46	202471	9.69	350324	10.61	278915	13.74	136498	16.03

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.
(c) Sample transfered to another vial due to high level of sediment inside.

Surrogate Recovery Summary

Job Number: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, 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
JC55040-1	2E138182.D	102	116	101	106
JC55040-2	2E138180.D	102	118	101	106
JC55040-3	2E138181.D	104	118	101	106
JC54532-1MS	2E138174.D	102	115	102	108
JC54532-1MSD	2E138175.D	102	116	102	108
V2E6027-BS	2E138173.D	101	116	102	106
V2E6027-MB	2E138172.D	105	119	102	106

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: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: V2E5986-ICC5986
Lab FileID: 2E137238.D

Response Factor Report VOAMS2E

Method : C:\msdchem\1\methods\M2E5986.M (RTE Integrator)
Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
Last Update : Fri Oct 13 17:09:02 2017
Response via : Initial Calibration

Calibration Files
5 =2E137235.D 2 =2E137234.D 0.5 =2E137232.D 50 =2E137238.D
100 =2E137239.D 1 =2E137233.D 200 =2E137240.D 20 =2E137237.D
10 =2E137236.D 0.2 =2E137231.D = =

Compound	5	2	0.5	50	100	1	200	20	10	0.2	Avg	%RSD
1) I Tert Butyl Alcohol-d9	----------ISTD----------											
2) ethanol	0.211	0.197	0.182	0.171	0.277	0.170	0.183	0.187			0.197	17.71
3) tertiary butyl alcohol	1.634	1.417	1.429	1.348	1.753	1.441	1.419	1.435			1.484	9.15
4) 1,4-dioxane	0.122	0.091	0.103	0.119	0.116	0.126	0.126	0.116	0.115		0.115	9.85
5) I pentafluorobenzene	----------ISTD----------											
6) chlorodifluoromethane	1.152	1.078	1.003	1.129	1.060	1.089	1.080	1.110	1.105		1.090	3.95
7) dichlorodifluoromethane	1.024	0.842	0.748	0.927	0.969	0.527	0.928	0.911	0.840	0.921	0.864	16.29
8) Freon 142B	1.156	0.913	0.922	1.082	1.047	0.638	1.064	1.032	0.920		0.975	15.53
9) Freon 114	0.430	0.401	0.454	0.464		0.447	0.445	0.404			0.435	5.59
10) chloromethane	1.462	1.325	1.484	1.373	1.395	1.834	1.374	1.285	1.148		1.409	13.34
11) vinyl chloride	1.380	1.144	1.205	1.293	1.354	1.384	1.310	1.230	1.099		1.266	8.14
12) bromomethane	0.721	0.629	0.688	0.651	0.656	0.947	0.548	0.625	0.568		0.670	17.43
13) chloroethane	0.773	0.714	0.683	0.708	0.713	0.959	0.680	0.673	0.632		0.726	13.12
14) trichlorofluoromethane	1.167	0.959	0.883	1.015	1.062	0.731	1.030	0.983	0.893		0.969	12.82
15) 1,3-butadiene	0.982	0.834	0.774	0.907	0.848	0.663	0.867	0.879	0.802		0.839	10.68
16) vinyl bromide	1.181	1.005	1.086	1.061	1.104	1.330	1.075	1.012	0.924		1.086	10.69
17) ethyl ether	0.464	0.422	0.469	0.425	0.402	0.525	0.421	0.416	0.408		0.439	9.02
18) 2-chloropropane	1.712	1.637	1.423	1.626	1.509	1.815	1.576	1.582	1.596		1.608	6.97
19) acrolein	0.187	0.159	0.212	0.161	0.152	0.226	0.162	0.156	0.155		0.174	15.69
20) freon 113	0.447	0.380	0.329	0.408	0.400	0.242	0.411	0.404	0.420		0.382	16.13
21) 1,1-dichloroethene	1.217	1.120	1.004	1.184	1.117	1.144	1.174	1.147	1.148		1.139	5.23
22) acetone	0.101	0.098	0.076	0.069	0.143	0.071	0.078	0.076			0.089	27.86
----- Linear regression ----- Coefficient = 0.9984												

Response Ratio = 0.00621 + 0.07074 *A

23)	acetonitrile											
	0.123	0.123	0.111	0.104	0.151	0.107	0.108	0.106			0.117	13.57
24)	iodomethane											
	1.003	0.934	0.806	0.914	0.871	1.219	0.949	0.897	0.918		0.946	12.26
25)	carbon disulfide											
	2.606	2.458	2.491	2.450	2.296	2.850	2.407	2.415	2.448		2.491	6.31
26)	methylene chloride											
	0.795	0.741	0.879	0.738	0.689	0.921	0.724	0.726	0.723		0.771	10.26
27)	methyl acetate											
	0.689	0.618	0.599	0.563	0.793	0.584	0.582	0.575			0.625	12.52
28)	methyl tert butyl ether											
	2.176	1.943	2.302	2.005	1.871	2.360	1.984	1.967	1.951		2.062	8.41
29)	trans-1,2-dichloroethene											
	1.160	1.094	1.013	1.116	1.037	1.355	1.087	1.091	1.088		1.116	8.90
30)	hexane											
	0.565	0.498	0.504	0.539	0.518	0.361	0.537	0.539	0.542		0.512	11.75
31)	di-isopropyl ether											
	3.001	2.701	2.815	2.938	2.732	3.338	2.851	2.841	2.775		2.888	6.70
32)	ethyl tert-butyl ether											
	2.703	2.299	2.405	2.582	2.399	2.948	2.519	2.463	2.448	3.056	2.582	9.61
33)	2-butanone											
	0.083	0.070	0.077	0.075	0.070	0.075	0.073	0.074	0.072		0.074	5.26
34)	1,1-dichloroethane											
	1.439	1.274	1.198	1.373	1.268	1.658	1.318	1.334	1.342		1.356	9.75
35)	chloroprene											
	1.178	1.111	0.995	1.184	1.107	1.292	1.162	1.154	1.148		1.148	6.87
36)	acrylonitrile											
	0.306	0.260	0.263	0.291	0.268	0.309	0.284	0.281	0.275		0.282	6.23
37)	vinyl acetate											
	0.115	0.103	0.127	0.119	0.114	0.130	0.118	0.118			0.118	6.90
38)	ethyl acetate											
	0.120	0.116	0.105	0.097	0.158	0.100	0.103	0.099			0.112	17.91
39)	2,2-dichloropropane											
	1.133	1.071	1.099	1.045	0.977	1.326	1.008	1.025	1.058		1.082	9.48
40)	cis-1,2-dichloroethene											
	0.789	0.729	0.786	0.748	0.694	1.008	0.731	0.732	0.725		0.772	12.15
41)	propionitrile											
	0.119	0.097	0.105	0.109	0.101	0.125	0.106	0.106	0.102	0.113	0.108	7.79
42)	methyl acrylate											
	0.091	0.058	0.085	0.083	0.063	0.089	0.079	0.083			0.079	14.99
43)	bromochloromethane											
	0.338	0.292	0.305	0.324	0.304	0.360	0.320	0.313	0.317	0.344	0.322	6.41
44)	tetrahydrofuran											
	0.098	0.078	0.085	0.078		0.084	0.081	0.083			0.084	8.21
45)	chloroform											
	1.258	1.169	1.247	1.179	1.099	1.477	1.140	1.144	1.132		1.205	9.51
46)	t-butyl formate--The compound does not meet initial criteria.											
	0.200	0.176	0.199	0.187	0.205	0.198	0.191	0.183			0.192	5.21
47)	1,1-dichloropropene											
	1.003	0.919	0.780	0.972	0.924	1.009	0.968	0.943	0.949		0.941	7.22
48)	carbon tetrachloride											
	0.859	0.781	0.709	0.824	0.785	0.832	0.829	0.806	0.822		0.805	5.38
49)	isopropyl acetate											
	0.137	0.111	0.093	0.136	0.126	0.126	0.135	0.129	0.125		0.124	11.26
50)	dibromofluoromethane (s)											
	0.513	0.522	0.508	0.525	0.522	0.513	0.522	0.515	0.515	0.505	0.516	1.31
51)	methacrylonitrile											
	0.291	0.228	0.212	0.276	0.260	0.241	0.275	0.267	0.261		0.257	9.81

Initial Calibration Summary

Job Number: JC55040 **Sample:** V2E5986-ICC5986
Account: HSWFLTAM HSW Engineering **Lab FileID:** 2E137238.D
Project: Long Island GW Sampling, Long Island, NY

52) 1,1,1-trichloroethane
1.077 0.964 0.894 1.011 0.956 1.132 0.992 0.983 0.994 1.000 6.91
53) Cyclohexane
1.202 0.958 0.871 1.131 1.076 0.963 1.116 1.086 1.036 1.049 9.79
54) iso-butyl alcohol
0.035 0.031 0.031 0.029 0.040 0.032 0.029 0.030 0.032 11.06
55) Tert Amyl Alcohol
0.036 0.041 0.032 0.031 0.033 0.031 0.035 0.034 10.26

56) I 1,4-difluorobenzene ----------ISTD----------
57) 1,2-dichloroethane-d4 (s)
0.366 0.372 0.361 0.376 0.370 0.363 0.369 0.372 0.369 0.365 0.368 1.22
58) 2,2,4-trimethylpentane
1.857 1.605 1.797 1.743 1.124 1.819 1.744 1.747 1.680 14.09
59) n-butyl alcohol
0.011 0.009 0.009 0.011 0.011 0.011 0.011 0.011 0.011 0.011 8.37
60) benzene
1.809 1.656 1.700 1.689 1.573 2.107 1.636 1.651 1.666 1.721 9.19
61) tert-amyl methyl ether
1.442 1.275 1.568 1.323 1.246 1.608 1.298 1.281 1.296 1.371 9.86
62) heptane
0.345 0.302 0.278 0.327 0.316 0.237 0.329 0.331 0.323 0.310 10.82
63) 1,2-dichloroethane
0.546 0.469 0.482 0.502 0.467 0.619 0.487 0.490 0.491 0.577 0.513 9.93
64) ethyl acrylate
0.495 0.408 0.387 0.473 0.441 0.497 0.468 0.464 0.434 0.452 8.33
65) trichloroethene
0.406 0.365 0.366 0.383 0.358 0.467 0.376 0.370 0.370 0.385 8.82
66) 2-nitropropane
0.147 0.137 0.128 0.129 0.117 0.140 0.125 0.128 0.129 0.131 6.74
67) 2-chloroethyl vinyl ether
0.231 0.192 0.209 0.217 0.202 0.227 0.210 0.211 0.206 0.215 0.212 5.39
68) methyl methacrylate
0.091 0.075 0.087 0.082 0.080 0.088 0.086 0.083 0.084 5.97
69) 1,2-dichloropropane
0.497 0.438 0.453 0.469 0.434 0.558 0.455 0.461 0.456 0.469 8.10
70) methylcyclohexane
0.858 0.774 0.657 0.807 0.780 0.547 0.800 0.807 0.810 0.817 0.766 12.12
71) dibromomethane
0.242 0.213 0.214 0.226 0.209 0.240 0.219 0.218 0.219 0.206 0.221 5.46
72) bromodichloromethane
0.517 0.464 0.475 0.512 0.473 0.574 0.499 0.493 0.484 0.499 6.66
73) epichlorohydrin
0.044 0.035 0.036 0.040 0.037 0.045 0.039 0.039 0.037 0.039 9.03
74) cis-1,3-dichloropropene
0.697 0.623 0.679 0.689 0.637 0.783 0.671 0.663 0.653 0.677 6.83
75) 4-methyl-2-pentanone
0.164 0.133 0.142 0.147 0.134 0.161 0.141 0.145 0.142 0.158 0.147 7.40
76) 3-methyl-1-butanol
0.011 0.009 0.009 0.010 0.010 0.009 0.010 0.010 0.010 0.010# 8.96

77) I chlorobenzene-d5 ----------ISTD----------
78) toluene-d8 (s)
1.409 1.420 1.399 1.422 1.417 1.417 1.412 1.413 1.421 1.417 1.415 0.50
79) toluene
1.140 1.032 0.966 1.079 1.010 1.324 1.059 1.047 1.054 1.079 9.58
80) ethyl methacrylate
0.620 0.512 0.511 0.578 0.543 0.654 0.576 0.559 0.554 0.564 0.567 7.79
81) trans-1,3-dichloropropene
0.705 0.599 0.708 0.662 0.615 0.739 0.644 0.641 0.642 0.808 0.676 9.42

Initial Calibration Summary

Job Number: JC55040 **Sample:** V2E5986-ICC5986
Account: HSWFLTAM HSW Engineering **Lab FileID:** 2E137238.D
Project: Long Island GW Sampling, Long Island, NY

82) 1,1,2-trichloroethane
0.342 0.309 0.287 0.317 0.293 0.362 0.307 0.306 0.310 0.329 0.316 7.13
83) tetrachloroethene
0.324 0.290 0.274 0.305 0.289 0.334 0.309 0.298 0.305 0.303 6.01
84) 2-hexanone
0.202 0.152 0.163 0.167 0.153 0.188 0.155 0.163 0.162 0.154 0.166 10.00
85) 1,3-dichloropropane
0.716 0.611 0.670 0.662 0.613 0.785 0.643 0.647 0.651 0.714 0.671 7.93
86) butyl acetate
0.347 0.287 0.347 0.292 0.272 0.344 0.285 0.289 0.293 0.306 9.92
87) 3,3-dimethyl-1-butanol
0.050 0.038 0.040 0.044 0.041 0.046 0.044 0.042 0.043 0.038 0.043 8.74
88) dibromochloromethane
0.395 0.351 0.376 0.383 0.365 0.443 0.387 0.368 0.379 0.406 0.385 6.64
89) 1,2-dibromoethane
0.385 0.342 0.375 0.359 0.342 0.415 0.356 0.354 0.348 0.364 6.59
90) n-butyl ether
2.506 2.231 2.089 2.369 2.209 2.904 2.289 2.300 2.299 2.355 9.99
91) chlorobenzene
1.186 1.067 1.029 1.121 1.049 1.402 1.110 1.090 1.095 1.128 9.95
92) 1,1,1,2-tetrachloroethane
0.436 0.381 0.319 0.407 0.390 0.497 0.411 0.395 0.396 0.403 11.73
93) ethylbenzene
2.148 2.034 1.856 2.030 1.903 2.567 1.995 1.990 2.056 2.064 10.00
94) m,p-xylene
0.789 0.723 0.692 0.752 0.705 0.916 0.745 0.730 0.749 0.756 8.78
95) o-xylene
1.806 1.722 1.627 1.703 1.587 2.081 1.662 1.638 1.675 1.722 8.62
96) styrene
1.368 1.156 1.257 1.282 1.202 1.485 1.261 1.244 1.237 1.277 7.59
97) butyl acrylate
1.013 0.868 0.914 0.927 0.860 1.046 0.913 0.903 0.888 0.912 0.924 6.46
98) bromoform
0.261 0.238 0.230 0.247 0.235 0.269 0.253 0.238 0.237 0.239 0.245 5.15
99) isopropylbenzene
2.102 1.901 1.716 2.015 1.896 2.390 2.001 1.941 1.977 1.993 9.18
100) cis-1,4-dichloro-2-butene
0.198 0.160 0.194 0.182 0.173 0.215 0.188 0.178 0.175 0.185 8.71

101) I 1,4-dichlorobenzene-d ----------ISTD----------
102) 4-bromofluorobenzene (s)
1.007 1.024 1.011 1.031 1.027 1.036 1.015 1.031 1.016 1.022 1.022 0.94
103) bromobenzene
0.931 0.867 0.913 0.866 0.829 1.079 0.854 0.843 0.852 0.893 8.65
104) 1,1,2,2-tetrachloroethane
1.063 0.911 1.018 0.972 0.894 1.076 0.920 0.940 0.936 1.054 0.978 7.03
105) trans-1,4-dichloro-2-butene
0.278 0.248 0.296 0.262 0.244 0.303 0.256 0.260 0.251 0.266 7.92
106) 1,2,3-trichloropropane
0.261 0.225 0.213 0.231 0.216 0.246 0.221 0.227 0.237 0.231 6.64
107) n-propylbenzene
4.941 4.607 4.248 4.775 4.455 5.756 4.538 4.665 4.698 4.743 9.02
108) 4-Ethyltoluene
3.503 2.959 3.045 3.180 3.066 3.098 3.175 3.003 2.725 2.384 3.014 9.81
109) 2-chlorotoluene
0.946 0.836 0.824 0.894 0.844 1.076 0.876 0.871 0.868 0.893 8.71
110) 4-chlorotoluene
3.017 2.820 2.921 2.854 2.685 3.700 2.777 2.831 2.787 2.932 10.32
111) 1,3,5-trimethylbenzene
3.396 3.050 2.861 3.406 3.148 4.080 3.260 3.256 3.280 3.304 10.22

Initial Calibration Summary

Job Number: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: V2E5986-ICC5986
Lab FileID: 2E137238.D

```
112)  tert-butylbenzene
       2.821 2.489 2.443 2.869 2.732 3.185 2.833 2.726 2.716        2.757    7.89
113)  1,2,4-trimethylbenzene
       3.559 3.077 2.939 3.456 3.263 4.239 3.407 3.352 3.327        3.402   10.78
114)  sec-butylbenzene
       4.455 4.060 3.777 4.419 4.229 4.724 4.314 4.274 4.259        4.279    6.14
115)  1,3-dichlorobenzene
       1.827 1.628 1.846 1.736 1.632 2.257 1.720 1.669 1.714        1.781   10.91
116)  p-isopropyltoluene
       3.656 3.270 3.034 3.590 3.443 4.204 3.575 3.450 3.434        3.517    9.06
117)  1,4-dichlorobenzene
       1.907 1.678 1.763 1.743 1.656 2.235 1.746 1.711 1.721        1.796   10.00
118)  1,2-dichlorobenzene
       1.838 1.704 1.751 1.739 1.637 2.075 1.715 1.700 1.698        1.762    7.33
119)  p-Diethylbenzene
       2.135 1.699 2.107 1.968 1.880 1.906 1.988 1.857 1.692 1.824  1.906    7.87
120)  n-butylbenzene
       2.088 1.845 1.695 2.016 1.919 2.299 2.011 1.975 1.971        1.980    8.35
121)  1,2,4,5-Tetramethylbenzene
       4.321 3.351 3.910 4.094 3.863 4.015 3.904 3.789 3.378        3.847    8.17
122)  1,2-dibromo-3-chloropropane
       0.235 0.326       0.199 0.184       0.187 0.195 0.195        0.217   23.35
             ----- Linear regression -----  Coefficient =  0.9993
               Response Ratio = 0.00505 + 0.18520 *A

123)  1,3,5-trichlorobenzene
       1.618 1.373 1.493 1.562 1.511 1.932 1.520 1.471 1.482        1.551   10.16
124)  1,2,4-trichlorobenzene
       1.441 1.238 1.382 1.437 1.357 1.687 1.342 1.342 1.313        1.393    9.07
125)  2-ethylhexyl acrylate
       1.116 0.959       1.360 1.354 1.093 1.398 1.155 1.105        1.193   13.29
126)  hexachlorobutadiene
       0.685 0.651 0.691 0.689 0.665 0.680 0.659 0.644 0.647        0.668    2.78
127)  naphthalene
       3.360 2.787 3.458 3.243 3.005 3.512 2.920 3.063 3.030        3.153    7.98
128)  1,2,3-trichlorobenzene
       1.367 1.087 1.260 1.314 1.221 1.476 1.205 1.247 1.214        1.266    8.71
129)  hexachloroethane
       0.540 0.481 0.414 0.564 0.551 0.592 0.587 0.522 0.515        0.530   10.53
130)  Benzyl chloride
       2.103 1.833 2.305 1.909 1.797 2.349 1.864 1.851 1.853        1.985   10.72
131)  2-methylnaphthalene
       1.391 1.145 1.645 1.631 1.548 1.500 1.564 1.442 1.367        1.470   10.62
 ------------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M2E5986.M         Fri Oct 13 17:10:12 2017
```

Initial Calibration Verification

Job Number: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: V2E5986-ICV5986
Lab FileID: 2E137243.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\2E137243.D Vial: 14
Acq On : 11 Oct 2017 11:30 pm Operator: JessicaP
Sample : icv5986-50 Inst : VOAMS2E
Misc : MS20739,V2E5986,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\M2E5986.M (RTE Integrator)
Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
Last Update : Fri Oct 13 17:09:02 2017
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	103	0.00	7.46
2		ethanol	0.197	0.183	7.1	103	0.00	6.19
3	M	tertiary butyl alcohol	1.484	1.379	7.1	99	0.00	7.58
4		1,4-dioxane	0.115	0.119	-3.5	102	0.00	11.33
5	I	pentafluorobenzene	1.000	1.000	0.0	100	0.00	9.69
6	M	chlorodifluoromethane	1.090	1.002	8.1	89	0.00	4.02
7	M	dichlorodifluoromethane	0.864	0.963	-11.5	104	0.00	4.01
8		Freon 142B	0.975	1.087	-11.5	101	0.00	4.29
9		Freon 114		----------	NA	----------		
10	M	chloromethane	1.409	1.333	5.4	97	0.00	4.37
11	M	vinyl chloride	1.266	1.197	5.5	93	0.00	4.63
12	M	bromomethane	0.670	0.628	6.3	97	0.00	5.30
13	M	chloroethane	0.726	0.679	6.5	96	0.00	5.47
14	M	trichlorofluoromethane	0.969	1.009	-4.1	100	-0.01	5.92
15		1,3-butadiene	0.839	0.893	-6.4	99	0.00	4.68
16		vinyl bromide	1.086	0.795	26.8	75	0.00	5.83
17	M	ethyl ether	0.439	0.425	3.2	100	0.00	6.34
18		2-chloropropane	1.608	1.638	-1.9	101	0.00	6.54
19	M	acrolein	0.174	0.172	1.1	107	0.00	6.62
20		freon 113	0.382	0.434	-13.6	107	0.00	6.73
21	M	1,1-dichloroethene	1.139	1.153	-1.2	98	0.00	6.77
		----------	True	Calc.	% Drift	----------		
22	M	acetone	200.000	181.142	9.4	87	0.00	6.83
		----------	AvgRF	CCRF	% Dev	----------		
23		acetonitrile	0.117	0.262	-123.9#	236#	0.02	7.30
24	M	iodomethane	0.946	0.919	2.9	101	0.00	7.06
25	M	carbon disulfide	2.491	2.536	-1.8	104	0.00	7.18
26	M	methylene chloride	0.771	0.743	3.6	101	0.00	7.50
27	M	methyl acetate	0.625	0.562	10.1	94	0.00	7.29
28	M	methyl tert butyl ether	2.062	2.047	0.7	103	0.00	7.82
29	M	trans-1,2-dichloroethene	1.116	1.108	0.7	100	0.00	7.88
30		hexane	0.512	0.477	6.8	89	0.00	8.16
31	M	di-isopropyl ether	2.888	2.942	-1.9	100	0.00	8.41
32	M	ethyl tert-butyl ether	2.582	2.584	-0.1	100	0.00	8.88
33	M	2-butanone	0.074	0.070	5.4	94	0.00	9.15
34	M	1,1-dichloroethane	1.356	1.379	-1.7	101	0.00	8.45
35	M	chloroprene	1.148	1.210	-5.4	102	0.00	8.55
36	M	acrylonitrile	0.282	0.313	-11.0	108	0.00	7.84
37	M	vinyl acetate	0.118	0.132	-11.9	104	0.00	8.43

Initial Calibration Verification

Job Number: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: V2E5986-ICV5986
Lab FileID: 2E137243.D

38	M	ethyl acetate	0.112	0.109	2.7	104	0.00	9.16
39	M	2,2-dichloropropane	1.082	1.033	4.5	99	0.00	9.19
40	M	cis-1,2-dichloroethene	0.772	0.752	2.6	101	0.00	9.19
41	M	propionitrile	0.108	0.103	4.6	95	0.00	9.26
42		methyl acrylate	0.079	0.090	-13.9	106	0.00	9.24
43	M	bromochloromethane	0.322	0.321	0.3	99	0.00	9.50
44	M	tetrahydrofuran	0.084	0.084	0.0	99	0.00	9.54
45	M	chloroform	1.205	1.171	2.8	100	0.00	9.55
46		t-butyl formate	0.192	0.405	-110.9#	204#	0.00	9.58
47		1,1-dichloropropene	0.941	0.975	-3.6	101	0.00	9.98
48		carbon tetrachloride	0.805	0.843	-4.7	103	0.00	10.00
49		isopropyl acetate	0.124	0.137	-10.5	101	0.00	10.16
50	S	dibromofluoromethane (s)	0.516	0.519	-0.6	99	0.00	9.75
51	M	methacrylonitrile	0.257	0.272	-5.8	99	0.00	9.44
52	M	1,1,1-trichloroethane	1.000	1.011	-1.1	100	0.00	9.80
53		Cyclohexane	1.049	1.105	-5.3	98	0.00	9.87
54		iso-butyl alcohol	0.032	0.032	0.0	103	0.00	9.99
55		Tert Amyl Alcohol	0.034	0.033	2.9	101	0.00	10.12
56	I	1,4-difluorobenzene	1.000	1.000	0.0	101	0.00	10.61
57	S	1,2-dichloroethane-d4 (s)	0.368	0.372	-1.1	100	0.00	10.18
58		2,2,4-trimethylpentane	1.680	1.881	-12.0	105	0.00	10.23
59	M	n-butyl alcohol	0.011	0.011	0.0	103	0.00	10.74
60	M	benzene	1.721	1.677	2.6	100	0.00	10.25
61		tert-amyl methyl ether	1.371	1.321	3.6	101	0.00	10.27
62	M	heptane	0.310	0.385	-24.2	119	0.00	10.39
63	M	1,2-dichloroethane	0.513	0.511	0.4	103	0.00	10.27
64		ethyl acrylate	0.452	0.477	-5.5	102	0.00	10.95
65	M	trichloroethene	0.385	0.386	-0.3	101	0.00	10.95
66	M	2-nitropropane	0.131	0.139	-6.1	108	0.00	11.74
67	M	2-chloroethyl vinyl ether	0.212	0.253	-19.3	117	0.00	11.74
68	M	methyl methacrylate	0.084	0.088	-4.8	102	0.00	11.22
69	M	1,2-dichloropropane	0.469	0.478	-1.9	103	0.00	11.23
70	M	methylcyclohexane	0.766	0.764	0.3	95	0.00	11.16
71	M	dibromomethane	0.221	0.223	-0.9	100	0.00	11.38
72	M	bromodichloromethane	0.499	0.517	-3.6	102	0.00	11.51
73		epichlorohydrin	0.039	0.040	-2.6	102	0.00	11.87
74	M	cis-1,3-dichloropropene	0.677	0.682	-0.7	100	0.00	11.96
75	M	4-methyl-2-pentanone	0.147	0.146	0.7	100	0.00	12.05
76	M	3-methyl-1-butanol	0.010	0.010	0.0	98	0.00	12.07
77	I	chlorobenzene-d5	1.000	1.000	0.0	99	0.00	13.74
78	S	toluene-d8 (s)	1.415	1.428	-0.9	100	0.00	12.24
79		toluene	1.079	1.088	-0.8	100	0.00	12.32
80		ethyl methacrylate	0.567	0.570	-0.5	98	0.00	12.50
81		trans-1,3-dichloropropene	0.676	0.670	0.9	101	0.00	12.52
82		1,1,2-trichloroethane	0.316	0.320	-1.3	100	0.00	12.73
83	M	tetrachloroethene	0.303	0.371	-22.4	121	0.00	12.89
84		2-hexanone	0.166	0.155	6.6	92	0.00	12.89
85	M	1,3-dichloropropane	0.671	0.670	0.1	101	0.00	12.91
86	M	butyl acetate	0.306	0.310	-1.3	106	0.00	12.96
87		3,3-dimethyl-1-butanol	0.043	0.045	-4.7	102	0.00	13.06
88	M	dibromochloromethane	0.385	0.395	-2.6	103	0.00	13.17
89	M	1,2-dibromoethane	0.364	0.361	0.8	100	0.00	13.32
90		n-butyl ether	2.355	2.321	1.4	97	0.00	13.66
91	M	chlorobenzene	1.128	1.120	0.7	99	0.00	13.77
92	M	1,1,1,2-tetrachloroethane	0.403	0.416	-3.2	102	0.00	13.83
93	M	ethylbenzene	2.064	2.021	2.1	99	0.00	13.82
94	M	m,p-xylene	0.756	0.750	0.8	99	0.00	13.93
95	M	o-xylene	1.722	1.675	2.7	98	0.00	14.34

Initial Calibration Verification

Job Number: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: V2E5986-ICV5986
Lab FileID: 2E137243.D

96	M	styrene	1.277	1.264	1.0	98	0.00	14.36
97		butyl acrylate	0.924	0.950	-2.8	102	0.00	14.16
98	M	bromoform	0.245	0.250	-2.0	101	0.00	14.63
99		isopropylbenzene	1.993	1.998	-0.3	99	0.00	14.68
100		cis-1,4-dichloro-2-butene	0.185	0.184	0.5	100	0.00	14.76
101	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	16.03
102	S	4-bromofluorobenzene (s)	1.022	1.026	-0.4	99	0.00	14.89
103	M	bromobenzene	0.893	0.882	1.2	102	0.00	15.09
104	M	1,1,2,2-tetrachloroethane	0.978	0.963	1.5	99	0.00	14.99
105	M	trans-1,4-dichloro-2-bute	0.266	0.292	-9.8	111	0.00	15.03
106	M	1,2,3-trichloropropane	0.231	0.235	-1.7	102	0.00	15.07
107	M	n-propylbenzene	4.743	4.721	0.5	99	0.00	15.09
108		4-Ethyltoluene	3.014	3.074	-2.0	97	0.00	15.19
109	M	2-chlorotoluene	0.893	0.899	-0.7	100	0.00	15.24
110	M	4-chlorotoluene	2.932	2.855	2.6	100	0.00	15.33
111	M	1,3,5-trimethylbenzene	3.304	3.358	-1.6	98	0.00	15.23
112	M	tert-butylbenzene	2.757	2.835	-2.8	99	0.00	15.58
113	M	1,2,4-trimethylbenzene	3.402	3.446	-1.3	100	0.00	15.63
114	M	sec-butylbenzene	4.279	4.373	-2.2	99	0.00	15.79
115	M	1,3-dichlorobenzene	1.781	1.738	2.4	100	0.00	15.98
116	M	p-isopropyltoluene	3.517	3.612	-2.7	100	0.00	15.90
117	M	1,4-dichlorobenzene	1.796	1.773	1.3	102	0.00	16.06
118	M	1,2-dichlorobenzene	1.762	1.737	1.4	100	0.00	16.44
119		p-Diethylbenzene	1.906	1.937	-1.6	98	0.00	16.27
120	M	n-butylbenzene	1.980	2.011	-1.6	100	0.00	16.30
121		1,2,4,5-Tetramethylbenzen	3.847	3.981	-3.5	97	0.00	17.01
		----------	True	Calc.	% Drift	----------		
122	M	1,2-dibromo-3-chloropropa	50.000	51.633	-3.3	98	0.00	17.17
		----------	AvgRF	CCRF	% Dev	----------		
123		1,3,5-trichlorobenzene	1.551	1.638	-5.6	105	0.00	17.33
124	M	1,2,4-trichlorobenzene	1.393	1.425	-2.3	99	0.00	17.91
125		2-ethylhexyl acrylate	1.193	1.496	-25.4	110	0.00	17.87
126	M	hexachlorobutadiene	0.668	0.680	-1.8	98	0.00	18.01
127	M	naphthalene	3.153	3.186	-1.0	98	0.00	18.17
128	M	1,2,3-trichlorobenzene	1.266	1.300	-2.7	99	0.00	18.40
129	M	hexachloroethane	0.530	0.562	-6.0	99	0.00	16.68
130		Benzyl chloride	1.985	1.657	16.5	87	0.00	16.18
131		2-methylnaphthalene	1.470	1.578	-7.3	97	0.00	19.28

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

2E137238.D M2E5986.M Fri Oct 13 17:12:52 2017

Initial Calibration Verification

Job Number: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: V2E5986-ICV5986
Lab FileID: 2E137244.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\2E137244.D Vial: 15
Acq On : 11 Oct 2017 11:58 pm Operator: JessicaP
Sample : icv5986-50 Inst : VOAMS2E
Misc : MS20739,V2E5986,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\M2E5986.M (RTE Integrator)
Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
Last Update : Fri Oct 13 17:09:02 2017
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	108	0.00	7.46
2		ethanol		----------NA----------				
3	M	tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	104	0.00	9.70
6	M	chlorodifluoromethane		----------NA----------				
7	M	dichlorodifluoromethane		----------NA----------				
8		Freon 142B		----------NA----------				
9		Freon 114	0.435	0.458	-5.3	105	0.01	4.30
10	M	chloromethane		----------NA----------				
11	M	vinyl chloride		----------NA----------				
12	M	bromomethane		----------NA----------				
13	M	chloroethane		----------NA----------				
14	M	trichlorofluoromethane		----------NA----------				
15		1,3-butadiene		----------NA----------				
16		vinyl bromide		----------NA----------				
17	M	ethyl ether		----------NA----------				
18		2-chloropropane		----------NA----------				
19	M	acrolein		----------NA----------				
20		freon 113		----------NA----------				
21	M	1,1-dichloroethene		----------NA----------				
		----------	True	Calc.	% Drift	----------		
22	M	acetone		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
23		acetonitrile	0.117	0.113	3.4	105	0.00	7.28
24	M	iodomethane		----------NA----------				
25	M	carbon disulfide		----------NA----------				
26	M	methylene chloride		----------NA----------				
27	M	methyl acetate		----------NA----------				
28	M	methyl tert butyl ether		----------NA----------				
29	M	trans-1,2-dichloroethene		----------NA----------				
30		hexane		----------NA----------				
31	M	di-isopropyl ether		----------NA----------				
32	M	ethyl tert-butyl ether		----------NA----------				
33	M	2-butanone		----------NA----------				
34	M	1,1-dichloroethane		----------NA----------				
35	M	chloroprene		----------NA----------				
36	M	acrylonitrile		----------NA----------				
37	M	vinyl acetate		----------NA----------				

Initial Calibration Verification

Job Number: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: V2E5986-ICV5986
Lab FileID: 2E137244.D

38	M	ethyl acetate			----------NA----------				
39	M	2,2-dichloropropane			----------NA----------				
40	M	cis-1,2-dichloroethene			----------NA----------				
41	M	propionitrile			----------NA----------				
42		methyl acrylate			----------NA----------				
43	M	bromochloromethane			----------NA----------				
44	M	tetrahydrofuran			----------NA----------				
45	M	chloroform			----------NA----------				
46		t-butyl formate			----------NA----------				
47		1,1-dichloropropene			----------NA----------				
48		carbon tetrachloride			----------NA----------				
49		isopropyl acetate			----------NA----------				
50	S	dibromofluoromethane (s)	0.516	0.523	-1.4	103	0.00	9.75	
51	M	methacrylonitrile			----------NA----------				
52	M	1,1,1-trichloroethane			----------NA----------				
53		Cyclohexane			----------NA----------				
54		iso-butyl alcohol			----------NA----------				
55		Tert Amyl Alcohol			----------NA----------				
56	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	10.61	
57	S	1,2-dichloroethane-d4 (s)	0.368	0.377	-2.4	104	0.00	10.18	
58		2,2,4-trimethylpentane			----------NA----------				
59	M	n-butyl alcohol			----------NA----------				
60	M	benzene			----------NA----------				
61		tert-amyl methyl ether			----------NA----------				
62	M	heptane			----------NA----------				
63	M	1,2-dichloroethane			----------NA----------				
64		ethyl acrylate			----------NA----------				
65	M	trichloroethene			----------NA----------				
66	M	2-nitropropane			----------NA----------				
67	M	2-chloroethyl vinyl ether			----------NA----------				
68	M	methyl methacrylate			----------NA----------				
69	M	1,2-dichloropropane			----------NA----------				
70	M	methylcyclohexane			----------NA----------				
71	M	dibromomethane			----------NA----------				
72	M	bromodichloromethane			----------NA----------				
73		epichlorohydrin			----------NA----------				
74	M	cis-1,3-dichloropropene			----------NA----------				
75	M	4-methyl-2-pentanone			----------NA----------				
76	M	3-methyl-1-butanol			----------NA----------				
77	I	chlorobenzene-d5	1.000	1.000	0.0	104	0.00	13.74	
78	S	toluene-d8 (s)	1.415	1.399	1.1	102	0.00	12.24	
79		toluene			----------NA----------				
80		ethyl methacrylate			----------NA----------				
81		trans-1,3-dichloropropene			----------NA----------				
82		1,1,2-trichloroethane			----------NA----------				
83	M	tetrachloroethene			----------NA----------				
84		2-hexanone			----------NA----------				
85	M	1,3-dichloropropane			----------NA----------				
86	M	butyl acetate			----------NA----------				
87		3,3-dimethyl-1-butanol			----------NA----------				
88	M	dibromochloromethane			----------NA----------				
89	M	1,2-dibromoethane			----------NA----------				
90		n-butyl ether			----------NA----------				
91	M	chlorobenzene			----------NA----------				
92	M	1,1,1,2-tetrachloroethane			----------NA----------				
93	M	ethylbenzene			----------NA----------				
94	M	m,p-xylene			----------NA----------				
95	M	o-xylene			----------NA----------				

Initial Calibration Verification

Job Number: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: V2E5986-ICV5986
Lab FileID: 2E137244.D

96	M	styrene			----------NA----------			
97		butyl acrylate			----------NA----------			
98	M	bromoform			----------NA----------			
99		isopropylbenzene			----------NA----------			
100		cis-1,4-dichloro-2-butene			----------NA----------			
101	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	105	0.00	16.03
102	S	4-bromofluorobenzene (s)	1.022	1.031	-0.9	105	0.00	14.89
103	M	bromobenzene			----------NA----------			
104	M	1,1,2,2-tetrachloroethane			----------NA----------			
105	M	trans-1,4-dichloro-2-bute			----------NA----------			
106	M	1,2,3-trichloropropane			----------NA----------			
107	M	n-propylbenzene			----------NA----------			
108		4-Ethyltoluene			----------NA----------			
109	M	2-chlorotoluene			----------NA----------			
110	M	4-chlorotoluene			----------NA----------			
111	M	1,3,5-trimethylbenzene			----------NA----------			
112	M	tert-butylbenzene			----------NA----------			
113	M	1,2,4-trimethylbenzene			----------NA----------			
114	M	sec-butylbenzene			----------NA----------			
115	M	1,3-dichlorobenzene			----------NA----------			
116	M	p-isopropyltoluene			----------NA----------			
117	M	1,4-dichlorobenzene			----------NA----------			
118	M	1,2-dichlorobenzene			----------NA----------			
119		p-Diethylbenzene			----------NA----------			
120	M	n-butylbenzene			----------NA----------			
121		1,2,4,5-Tetramethylbenzen			----------NA----------			

			True	Calc.	% Drift			
122	M	1,2-dibromo-3-chloropropa			----------NA----------			

			AvgRF	CCRF	% Dev			
123		1,3,5-trichlorobenzene			----------NA----------			
124	M	1,2,4-trichlorobenzene			----------NA----------			
125		2-ethylhexyl acrylate			----------NA----------			
126	M	hexachlorobutadiene			----------NA----------			
127	M	naphthalene			----------NA----------			
128	M	1,2,3-trichlorobenzene			----------NA----------			
129	M	hexachloroethane			----------NA----------			
130		Benzyl chloride			----------NA----------			
131		2-methylnaphthalene			----------NA----------			

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

2E137238.D M2E5986.M Fri Oct 13 17:12:54 2017

6.7.3

6

Continuing Calibration Summary

Job Number: JC55040
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: V2E6027-CC5986
Lab FileID: 2E138170.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\2E138170.D Vial: 24
Acq On : 8 Nov 2017 6:58 pm Operator: JessicaP
Sample : cc5986-50 Inst : VOAMS2E
Misc : MS21949,V2E6027,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2E5986.M (RTE Integrator)
Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
Last Update : Fri Oct 13 17:09:02 2017
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	113	0.00	7.46
2		ethanol	0.197	0.176	10.7	109	0.00	6.19
3	M	tertiary butyl alcohol	1.484	1.506	-1.5	119	0.00	7.58
4		1,4-dioxane	0.115	0.102	11.3	97	0.00	11.33
5	I	pentafluorobenzene	1.000	1.000	0.0	107	0.00	9.69
6	M	chlorodifluoromethane	1.090	1.171	-7.4	111	0.00	4.03
7	M	dichlorodifluoromethane	0.864	0.970	-12.3	112	0.00	4.01
8		Freon 142B		----------NA----------				
9		Freon 114		----------NA----------				
10	M	chloromethane	1.409	1.551	-10.1	120	0.00	4.38
11	M	vinyl chloride	1.266	1.357	-7.2	112	0.01	4.64
12	M	bromomethane	0.670	0.637	4.9	104	0.00	5.31
13	M	chloroethane	0.726	0.726	0.0	109	0.00	5.48
14	M	trichlorofluoromethane	0.969	1.039	-7.2	109	0.00	5.93
15		1,3-butadiene		----------NA----------				
16		vinyl bromide	1.086	0.574	47.1#	58	0.00	5.83
17	M	ethyl ether	0.439	0.430	2.1	108	0.00	6.35
18		2-chloropropane	1.608	1.937	-20.5#	127	0.00	6.55
19	M	acrolein	0.174	0.154	11.5	102	0.00	6.62
20		freon 113	0.382	0.343	10.2	90	0.00	6.74
21	M	1,1-dichloroethene	1.139	1.262	-10.8	114	0.00	6.78
		----------	True	Calc.	% Drift	----------		
22	M	acetone	200.000	297.917	-49.0#	150	0.00	6.83
		----------	AvgRF	CCRF	% Dev	----------		
23		acetonitrile	0.117	0.129	-10.3	123	0.00	7.28
24	M	iodomethane	0.946	1.013	-7.1	118	0.00	7.06
25	M	carbon disulfide	2.491	2.572	-3.3	112	0.00	7.19
26	M	methylene chloride	0.771	0.767	0.5	111	0.00	7.50
27	M	methyl acetate	0.625	0.702	-12.3	125	0.00	7.29
28	M	methyl tert butyl ether	2.062	2.184	-5.9	116	0.00	7.82
29	M	trans-1,2-dichloroethene	1.116	1.237	-10.8	118	0.00	7.88
30		hexane	0.512	0.538	-5.1	106	0.00	8.16
31	M	di-isopropyl ether	2.888	3.230	-11.8	117	0.00	8.41
32	M	ethyl tert-butyl ether	2.582	2.809	-8.8	116	0.00	8.87
33	M	2-butanone	0.074	0.086	-16.2	123	0.00	9.15
34	M	1,1-dichloroethane	1.356	1.442	-6.3	112	0.00	8.45
35	M	chloroprene	1.148	1.333	-16.1	120	0.00	8.55
36	M	acrylonitrile	0.282	0.313	-11.0	115	0.00	7.84
37	M	vinyl acetate	0.118	0.129	-9.3	109	0.00	8.43

Continuing Calibration Summary

Job Number: JC55040 **Sample:** V2E6027-CC5986
Account: HSWFLTAM HSW Engineering **Lab FileID:** 2E138170.D
Project: Long Island GW Sampling, Long Island, NY

38	M	ethyl acetate	0.112	0.118	-5.4	120	0.00	9.16
39	M	2,2-dichloropropane	1.082	1.147	-6.0	117	0.00	9.18
40	M	cis-1,2-dichloroethene	0.772	0.735	4.8	105	0.00	9.19
41	M	propionitrile	0.108	0.116	-7.4	114	0.00	9.26
42		methyl acrylate	0.079	0.089	-12.7	112	0.00	9.24
43	M	bromochloromethane	0.322	0.318	1.2	105	0.00	9.50
44	M	tetrahydrofuran	0.084	0.085	-1.2	107	0.00	9.54
45	M	chloroform	1.205	1.228	-1.9	111	0.00	9.55
46		t-butyl formate	0.192	0.273	-42.2#	146	0.00	9.58
47		1,1-dichloropropene	0.941	1.000	-6.3	110	0.00	9.97
48		carbon tetrachloride	0.805	0.869	-8.0	112	0.00	10.00
49		isopropyl acetate	0.124	0.136	-9.7	107	0.00	10.16
50	S	dibromofluoromethane (s)	0.516	0.532	-3.1	108	0.00	9.75
51	M	methacrylonitrile	0.257	0.287	-11.7	111	0.00	9.44
52	M	1,1,1-trichloroethane	1.000	1.070	-7.0	113	0.00	9.80
53		Cyclohexane	1.049	0.865	17.5	81	0.00	9.86
54		iso-butyl alcohol	0.032	0.032	0.0	109	0.00	9.98
55		Tert Amyl Alcohol	0.034	0.034	0.0	111	0.00	10.12
56	I	1,4-difluorobenzene	1.000	1.000	0.0	106	0.00	10.61
57	S	1,2-dichloroethane-d4 (s)	0.368	0.425	-15.5	120	0.00	10.17
58		2,2,4-trimethylpentane	1.680	1.644	2.1	97	0.00	10.22
59	M	n-butyl alcohol	0.011	0.011	0.0	107	0.00	10.73
60	M	benzene	1.721	1.678	2.5	105	0.00	10.24
61		tert-amyl methyl ether	1.371	1.351	1.5	108	0.00	10.26
62	M	heptane	0.310	0.310	0.0	100	0.00	10.39
63	M	1,2-dichloroethane	0.513	0.568	-10.7	120	0.00	10.26
64		ethyl acrylate	0.452	0.502	-11.1	112	0.00	10.95
65	M	trichloroethene	0.385	0.387	-0.5	107	0.00	10.95
66	M	2-nitropropane	0.131	0.154	-17.6	126	0.00	11.73
67	M	2-chloroethyl vinyl ether	0.212	0.209	1.4	102	0.00	11.74
68	M	methyl methacrylate	0.084	0.084	0.0	103	0.00	11.22
69	M	1,2-dichloropropane	0.469	0.467	0.4	105	0.00	11.22
70	M	methylcyclohexane	0.766	0.709	7.4	93	0.00	11.16
71	M	dibromomethane	0.221	0.229	-3.6	108	0.00	11.38
72	M	bromodichloromethane	0.499	0.530	-6.2	110	0.00	11.50
73		epichlorohydrin	0.039	0.039	0.0	104	0.00	11.87
74	M	cis-1,3-dichloropropene	0.677	0.674	0.4	103	0.00	11.96
75	M	4-methyl-2-pentanone	0.147	0.148	-0.7	107	0.00	12.04
76	M	3-methyl-1-butanol	0.010	0.010#	0.0	101	0.00	12.06
77	I	chlorobenzene-d5	1.000	1.000	0.0	100	0.00	13.74
78	S	toluene-d8 (s)	1.415	1.443	-2.0	101	0.00	12.24
79		toluene	1.079	1.101	-2.0	102	0.00	12.31
80		ethyl methacrylate	0.567	0.596	-5.1	103	0.00	12.49
81		trans-1,3-dichloropropene	0.676	0.697	-3.1	105	0.00	12.51
82		1,1,2-trichloroethane	0.316	0.322	-1.9	101	0.00	12.73
83	M	tetrachloroethene	0.303	0.306	-1.0	100	0.00	12.89
84		2-hexanone	0.166	0.175	-5.4	104	0.00	12.89
85	M	1,3-dichloropropane	0.671	0.668	0.4	101	0.00	12.90
86	M	butyl acetate	0.306	0.310	-1.3	105	0.00	12.95
87		3,3-dimethyl-1-butanol	0.043	0.043	0.0	98	0.00	13.06
88	M	dibromochloromethane	0.385	0.391	-1.6	102	0.00	13.17
89	M	1,2-dibromoethane	0.364	0.356	2.2	99	0.00	13.32
90		n-butyl ether	2.355	2.337	0.8	98	0.00	13.66
91	M	chlorobenzene	1.128	1.093	3.1	97	0.00	13.77
92	M	1,1,1,2-tetrachloroethane	0.403	0.400	0.7	98	0.00	13.83
93	M	ethylbenzene	2.064	2.015	2.4	99	0.00	13.82
94	M	m,p-xylene	0.756	0.727	3.8	96	0.00	13.92
95	M	o-xylene	1.722	1.674	2.8	98	0.00	14.34

Continuing Calibration Summary

Job Number: JC55040 **Sample:** V2E6027-CC5986
Account: HSWFLTAM HSW Engineering **Lab FileID:** 2E138170.D
Project: Long Island GW Sampling, Long Island, NY

96	M	styrene	1.277	1.213	5.0	94	0.00	14.35
97		butyl acrylate	0.924	0.924	0.0	99	0.00	14.16
98	M	bromoform	0.245	0.246	-0.4	99	0.00	14.62
99		isopropylbenzene	1.993	1.934	3.0	96	0.00	14.68
100		cis-1,4-dichloro-2-butene	0.185	0.152	17.8	83	0.00	14.76
101	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	94	0.00	16.03
102	S	4-bromofluorobenzene (s)	1.022	1.092	-6.8	100	0.00	14.89
103	M	bromobenzene	0.893	0.883	1.1	96	0.00	15.08
104	M	1,1,2,2-tetrachloroethane	0.978	0.964	1.4	93	0.00	14.99
105	M	trans-1,4-dichloro-2-bute	0.266	0.264	0.8	95	0.00	15.03
106	M	1,2,3-trichloropropane	0.231	0.235	-1.7	96	0.00	15.06
107	M	n-propylbenzene	4.743	4.836	-2.0	95	0.00	15.08
108		4-Ethyltoluene		----------NA----------				
109	M	2-chlorotoluene	0.893	0.887	0.7	93	0.00	15.23
110	M	4-chlorotoluene	2.932	2.997	-2.2	99	0.00	15.33
111	M	1,3,5-trimethylbenzene	3.304	3.425	-3.7	95	0.00	15.23
112	M	tert-butylbenzene	2.757	2.791	-1.2	92	0.00	15.57
113	M	1,2,4-trimethylbenzene	3.402	3.499	-2.9	95	0.00	15.62
114	M	sec-butylbenzene	4.279	4.377	-2.3	93	0.00	15.79
115	M	1,3-dichlorobenzene	1.781	1.728	3.0	94	0.00	15.98
116	M	p-isopropyltoluene	3.517	3.573	-1.6	94	0.00	15.90
117	M	1,4-dichlorobenzene	1.796	1.753	2.4	95	0.00	16.06
118	M	1,2-dichlorobenzene	1.762	1.714	2.7	93	0.00	16.44
119		p-Diethylbenzene		----------NA----------				
120	M	n-butylbenzene	1.980	1.958	1.1	91	0.00	16.30
121		1,2,4,5-Tetramethylbenzen		----------NA----------				
		----------	True	Calc.	% Drift	----------		
122	M	1,2-dibromo-3-chloropropa	50.000	56.611	-13.2	102	0.00	17.16
		----------	AvgRF	CCRF	% Dev	----------		
123		1,3,5-trichlorobenzene	1.551	1.537	0.9	93	0.00	17.32
124	M	1,2,4-trichlorobenzene	1.393	1.402	-0.6	92	0.00	17.91
125		2-ethylhexyl acrylate	1.193	0.979	17.9	68	0.00	17.86
126	M	hexachlorobutadiene	0.668	0.680	-1.8	93	0.00	18.01
127	M	naphthalene	3.153	3.135	0.6	91	0.00	18.17
128	M	1,2,3-trichlorobenzene	1.266	1.277	-0.9	92	0.00	18.40
129	M	hexachloroethane	0.530	0.574	-8.3	96	0.00	16.68
130		Benzyl chloride	1.985	1.987	-0.1	98	0.00	16.17
131		2-methylnaphthalene	1.470	1.536	-4.5	89	0.00	19.28

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2E137238.D M2E5986.M Thu Nov 09 08:45:57 2017

MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 2E138182.D
Acq On : 9 Nov 2017 12:30 am
Operator : JessicaP
Sample : jc55040-1
Misc : MS21833,V2E6027,5,,,,1
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Nov 09 08:51:11 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration

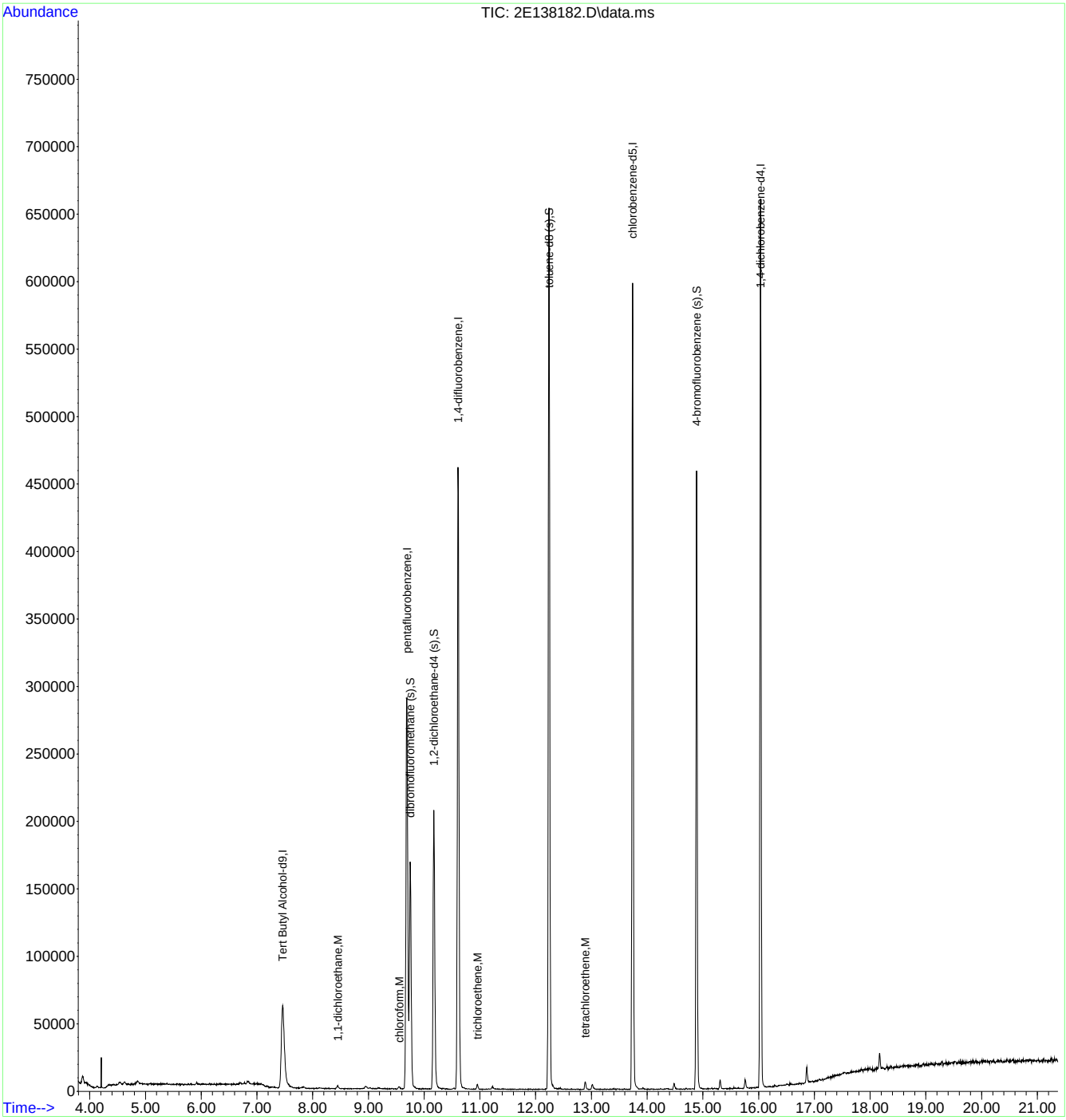
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.462	65	131083	500.00	ug/L	0.00
5) pentafluorobenzene	9.691	168	215213	50.00	ug/L	0.00
56) 1,4-difluorobenzene	10.608	114	363883	50.00	ug/L	0.00
77) chlorobenzene-d5	13.738	117	295477	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	16.035	152	144442	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.748	113	113283	51.01	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.02%			
57) 1,2-dichloroethane-d4 (s)	10.173	65	156136	58.25	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 116.50%			
78) toluene-d8 (s)	12.239	98	422441	50.53	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.06%			
102) 4-bromofluorobenzene (s)	14.886	95	156455	53.00	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 106.00%			
Target Compounds						Qvalue
34) 1,1-dichloroethane	8.453	63	2787	0.48	ug/L	89
45) chloroform	9.554	83	1574	0.30	ug/L	76
65) trichloroethene	10.954	95	1439	0.51	ug/L	93
83) tetrachloroethene	12.889	164	1305	0.73	ug/L #	79

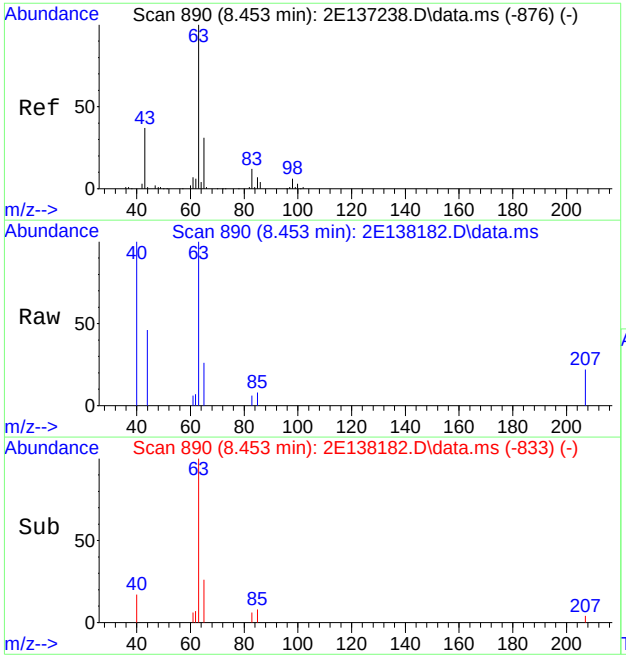
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 2E138182.D
Acq On : 9 Nov 2017 12:30 am
Operator : JessicaP
Sample : jc55040-1
Misc : MS21833,V2E6027,5,,,,1
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Nov 09 08:51:11 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration

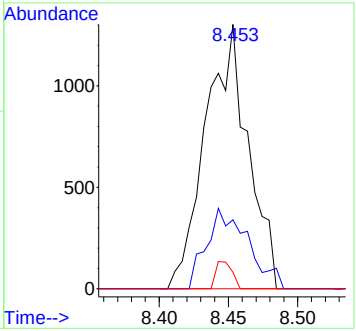


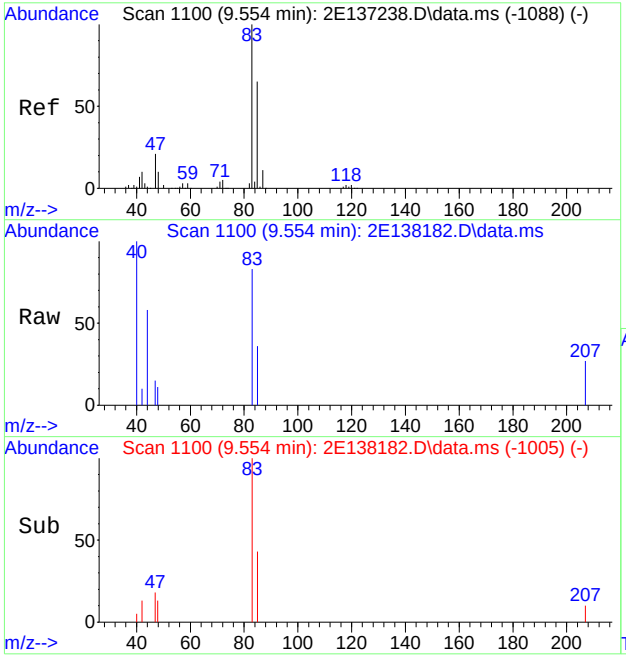


#34
1,1-dichloroethane
Concen: 0.48 ug/L
RT: 8.453 min Scan# 890
Delta R.T. 0.000 min
Lab File: 2E138182.D
Acq: 9 Nov 2017 12:30 am

Tgt Ion: 63 Resp: 2787

Ion	Ratio	Lower	Upper
63	100		
65	26.1	1.2	61.2
83	6.3	0.0	41.8

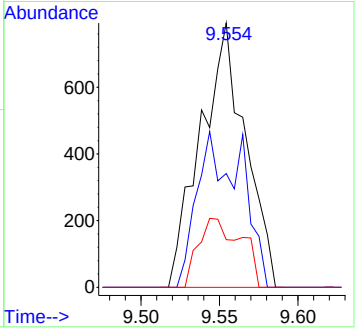


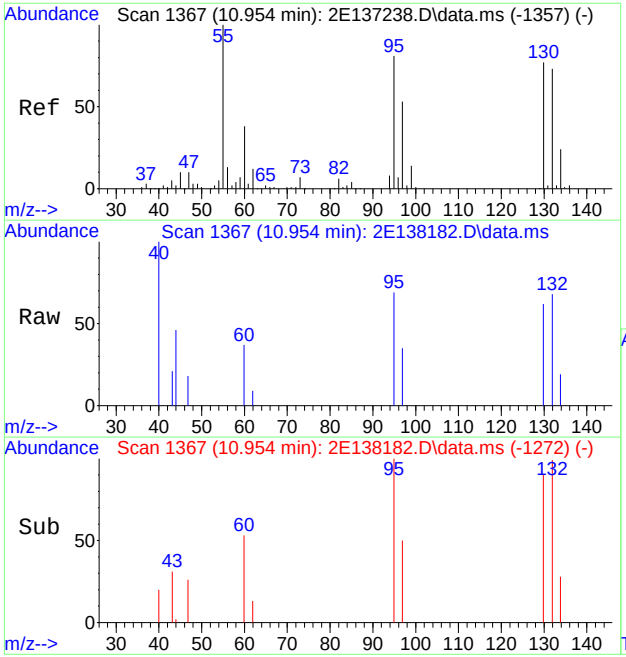


#45
chloroform
Concen: 0.30 ug/L
RT: 9.554 min Scan# 1100
Delta R.T. 0.000 min
Lab File: 2E138182.D
Acq: 9 Nov 2017 12:30 am

Tgt Ion: 83 Resp: 1574

Ion	Ratio	Lower	Upper
83	100		
85	43.0	34.7	94.7
47	18.0	0.0	55.4

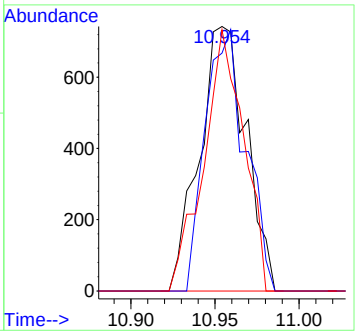


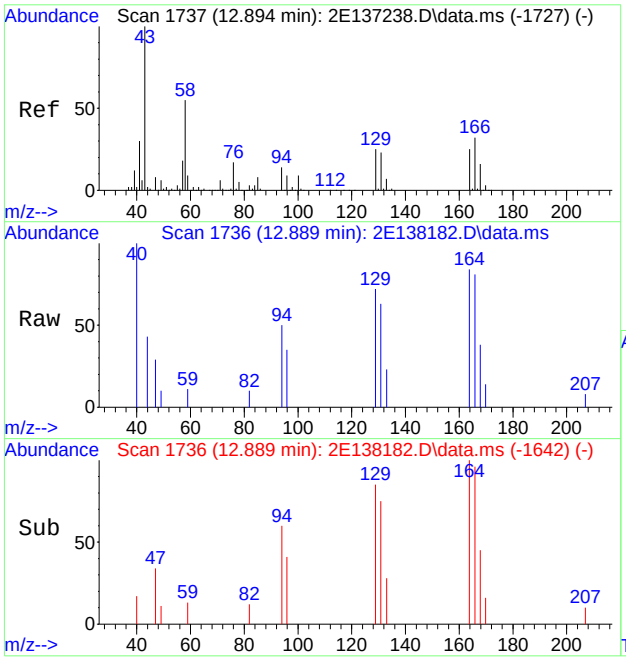


#65
trichloroethene
Concen: 0.51 ug/L
RT: 10.954 min Scan# 1367
Delta R.T. 0.000 min
Lab File: 2E138182.D
Acq: 9 Nov 2017 12:30 am

Tgt Ion: 95 Resp: 1439

Ion	Ratio	Lower	Upper
95	100		
130	89.9	64.6	124.6
132	98.7	60.5	120.5

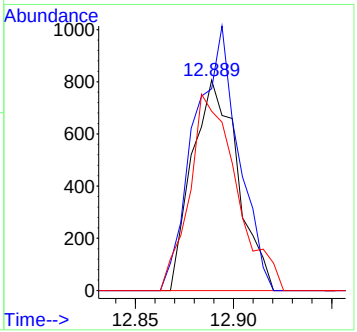




#83
tetrachloroethene
Concen: 0.73 ug/L
RT: 12.889 min Scan# 1736
Delta R.T. -0.005 min
Lab File: 2E138182.D
Acq: 9 Nov 2017 12:30 am

Tgt Ion:164 Resp: 1305

Ion	Ratio	Lower	Upper
164	100		
166	95.9	98.1	158.1#
129	85.2	67.6	127.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 2E138180.D
Acq On : 8 Nov 2017 11:35 pm
Operator : JessicaP
Sample : jc55040-2
Misc : MS21833,V2E6027,5,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Nov 09 08:48:48 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration

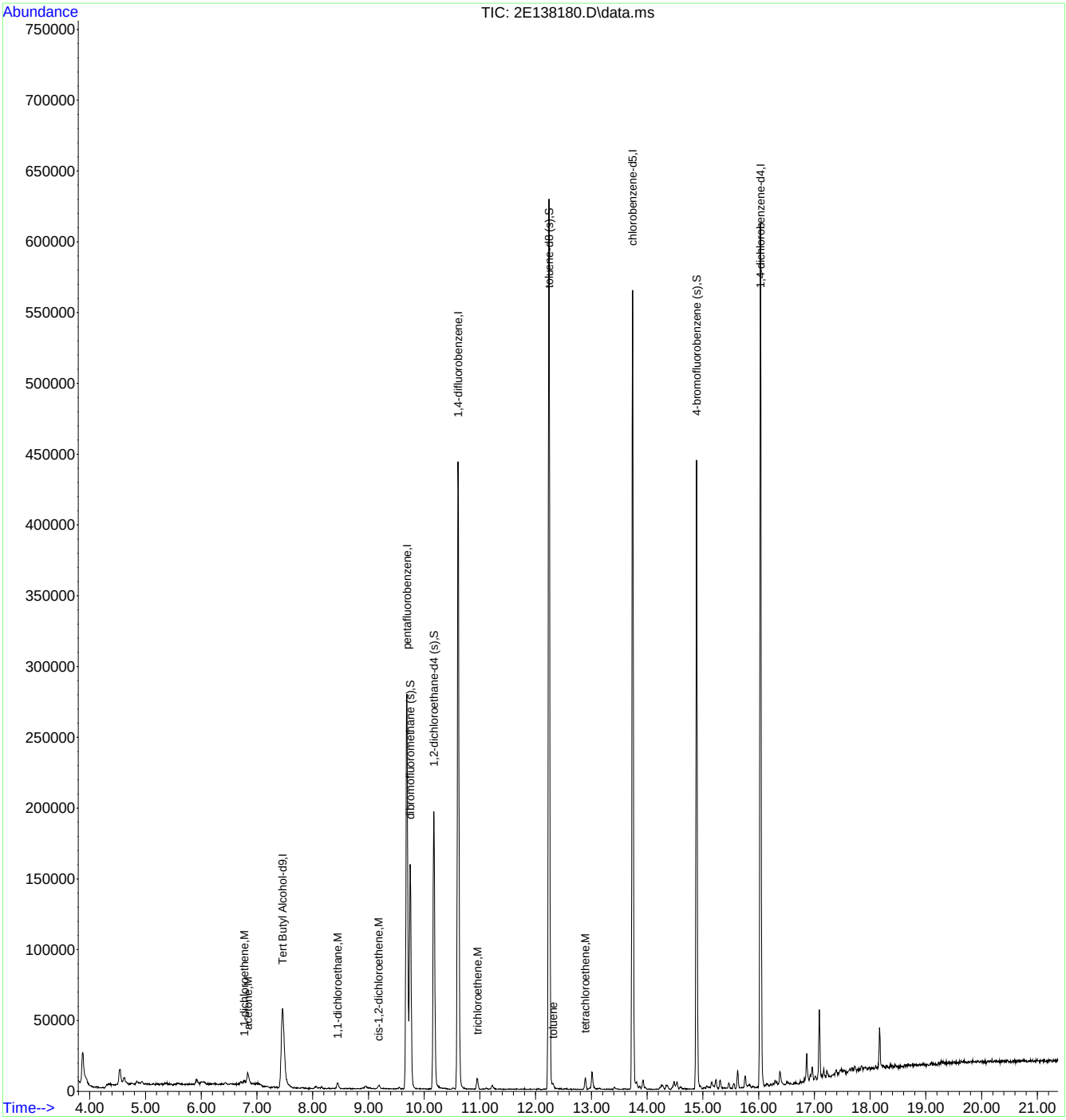
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.462	65	120060	500.00	ug/L	0.00
5) pentafluorobenzene	9.691	168	204298	50.00	ug/L	0.00
56) 1,4-difluorobenzene	10.608	114	346377	50.00	ug/L	0.00
77) chlorobenzene-d5	13.738	117	281057	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	16.035	152	138727	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.748	113	107670	51.07	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.14%			
57) 1,2-dichloroethane-d4 (s)	10.173	65	150504	58.98	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 117.96%			
78) toluene-d8 (s)	12.239	98	402374	50.60	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.20%			
102) 4-bromofluorobenzene (s)	14.886	95	149575	52.76	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.52%			
Target Compounds						Qvalue
21) 1,1-dichloroethene	6.770	61	2294	0.49	ug/L	84
22) acetone	6.838	58	3933	9.22	ug/L	92
34) 1,1-dichloroethane	8.448	63	5891	1.06	ug/L	97
40) cis-1,2-dichloroethene	9.182	96	1139	0.36	ug/L #	68
65) trichloroethene	10.954	95	2959	1.11	ug/L	97
79) toluene	12.312	92	1296	0.21	ug/L #	72
83) tetrachloroethene	12.889	164	1828	1.07	ug/L	86

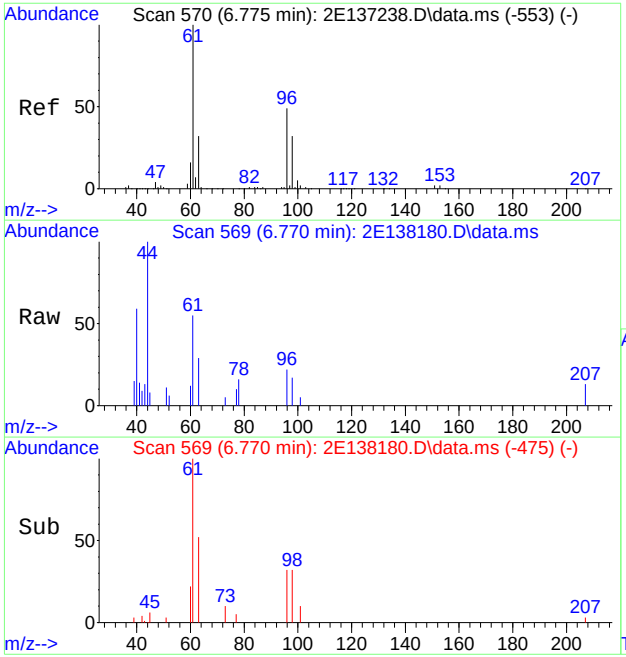
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 2E138180.D
Acq On : 8 Nov 2017 11:35 pm
Operator : JessicaP
Sample : jc55040-2
Misc : MS21833,V2E6027,5,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Nov 09 08:48:48 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration

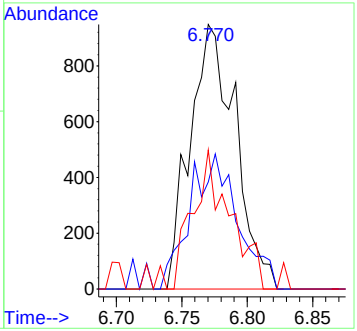


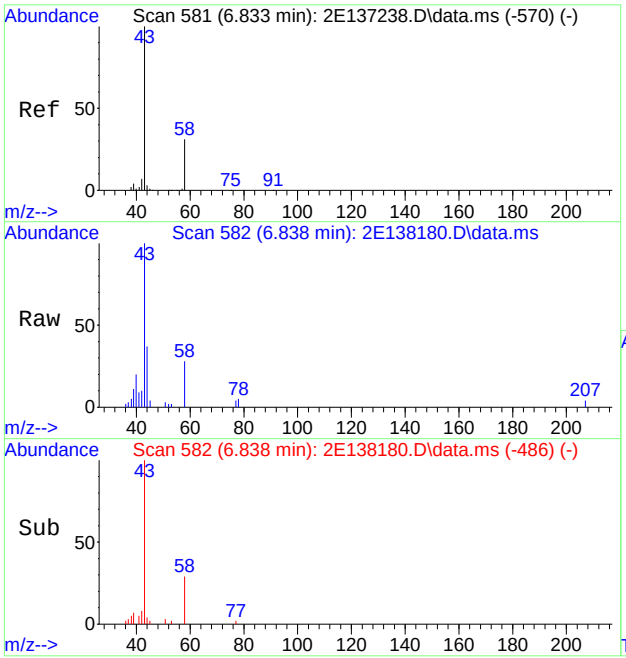


#21
1,1-dichloroethene
Concen: 0.49 ug/L
RT: 6.770 min Scan# 569
Delta R.T. -0.005 min
Lab File: 2E138180.D
Acq: 8 Nov 2017 11:35 pm

Tgt Ion: 61 Resp: 2294

Ion	Ratio	Lower	Upper
61	100		
96	40.5	18.5	78.5
63	43.7	1.7	61.7

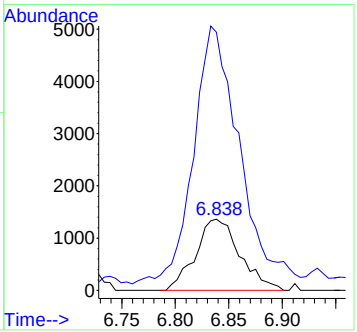


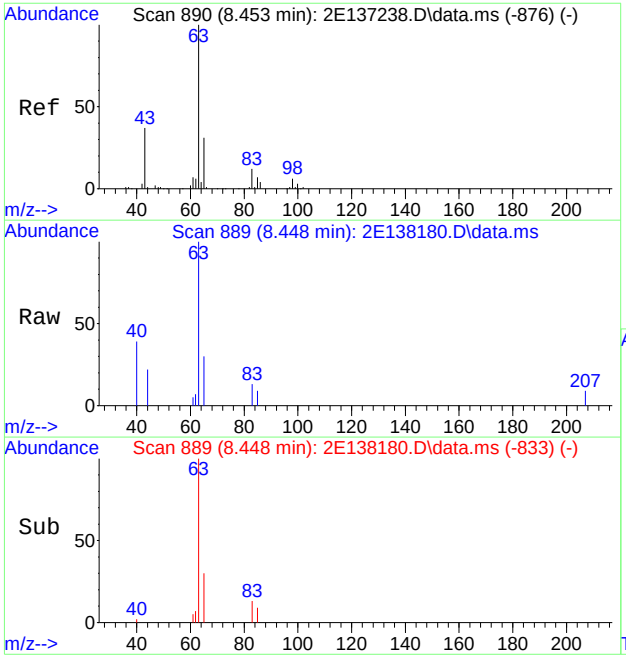


#22
acetone
Concen: 9.22 ug/L
RT: 6.838 min Scan# 582
Delta R.T. 0.005 min
Lab File: 2E138180.D
Acq: 8 Nov 2017 11:35 pm

Tgt Ion: 58 Resp: 3933

Ion	Ratio	Lower	Upper
58	100		
43	341.5	295.8	355.8

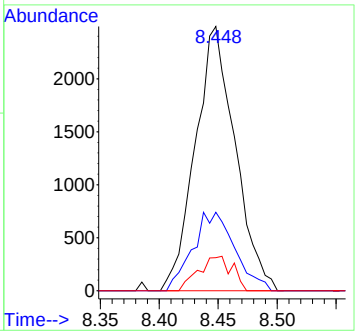


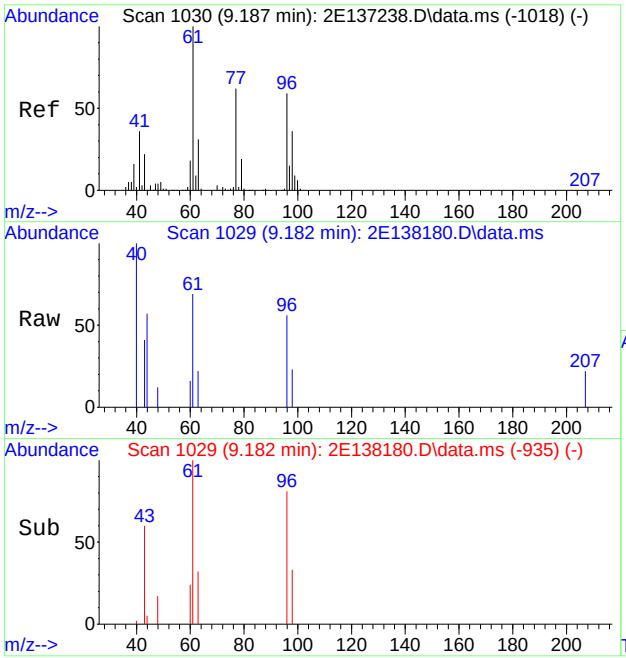


#34
1,1-dichloroethane
Concen: 1.06 ug/L
RT: 8.448 min Scan# 889
Delta R.T. -0.005 min
Lab File: 2E138180.D
Acq: 8 Nov 2017 11:35 pm

Tgt Ion: 63 Resp: 5891

Ion	Ratio	Lower	Upper
63	100		
65	29.7	1.2	61.2
83	12.5	0.0	41.8

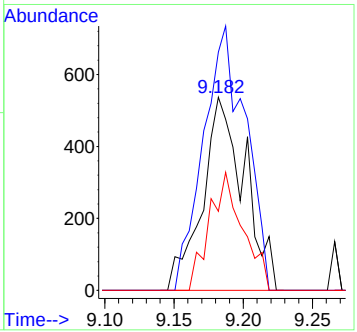


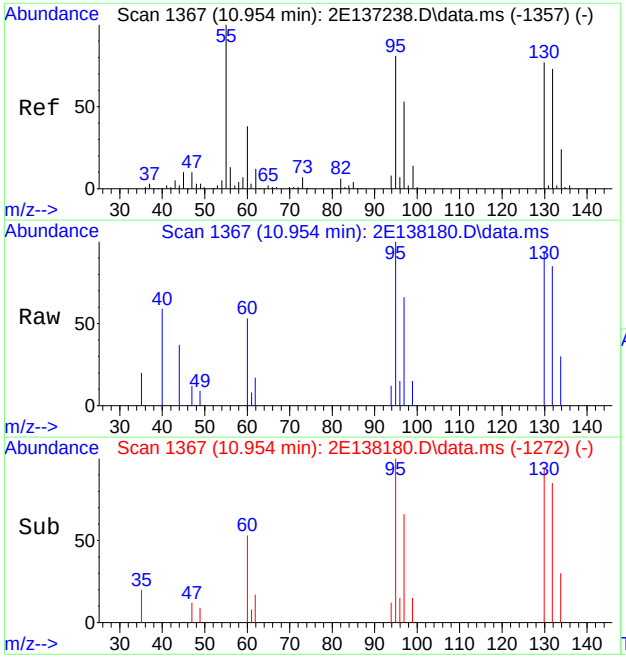


#40
cis-1,2-dichloroethene
Concen: 0.36 ug/L
RT: 9.182 min Scan# 1029
Delta R.T. -0.005 min
Lab File: 2E138180.D
Acq: 8 Nov 2017 11:35 pm

Tgt Ion: 96 Resp: 1139

Ion	Ratio	Lower	Upper
96	100		
61	123.3	139.6	199.6#
98	41.0	31.5	91.5

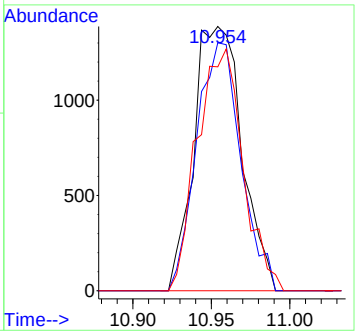


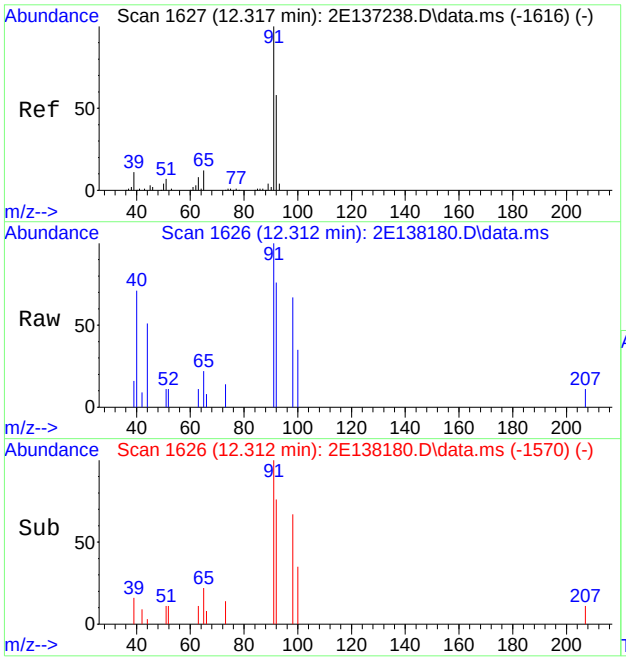


#65
trichloroethene
Concen: 1.11 ug/L
RT: 10.954 min Scan# 1367
Delta R.T. 0.000 min
Lab File: 2E138180.D
Acq: 8 Nov 2017 11:35 pm

Tgt Ion: 95 Resp: 2959

Ion	Ratio	Lower	Upper
95	100		
130	93.8	64.6	124.6
132	84.7	60.5	120.5

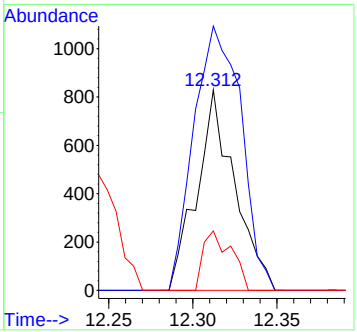


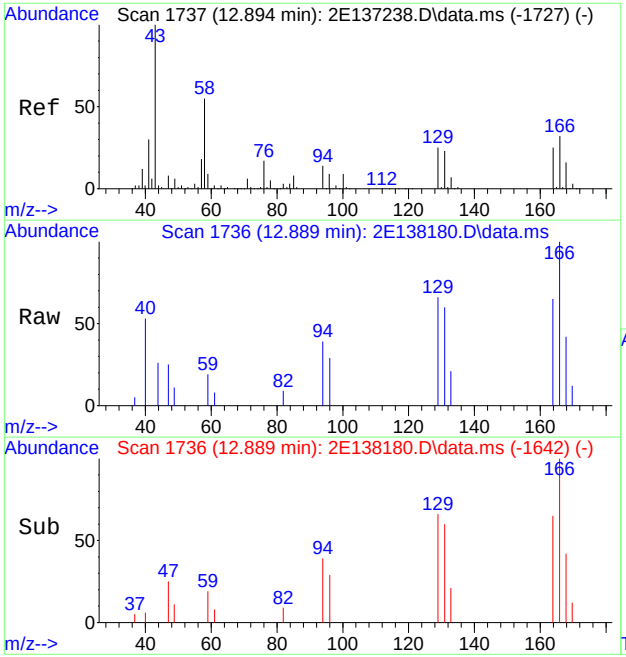


#79
toluene
Concen: 0.21 ug/L
RT: 12.312 min Scan# 1626
Delta R.T. -0.005 min
Lab File: 2E138180.D
Acq: 8 Nov 2017 11:35 pm

Tgt Ion: 92 Resp: 1296

Ion	Ratio	Lower	Upper
92	100		
91	132.0	152.4	192.4#
65	29.7	1.0	41.0

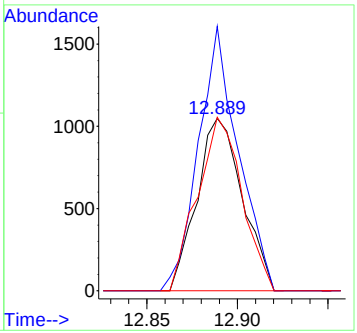




#83
tetrachloroethene
Concen: 1.07 ug/L
RT: 12.889 min Scan# 1736
Delta R.T. -0.005 min
Lab File: 2E138180.D
Acq: 8 Nov 2017 11:35 pm

Tgt Ion:164 Resp: 1828

Ion	Ratio	Lower	Upper
164	100		
166	153.4	98.1	158.1
129	100.7	67.6	127.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 2E138181.D
Acq On : 9 Nov 2017 12:03 am
Operator : JessicaP
Sample : jc55040-3
Misc : MS21833,V2E6027,5,,,,1
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Nov 09 08:50:37 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration

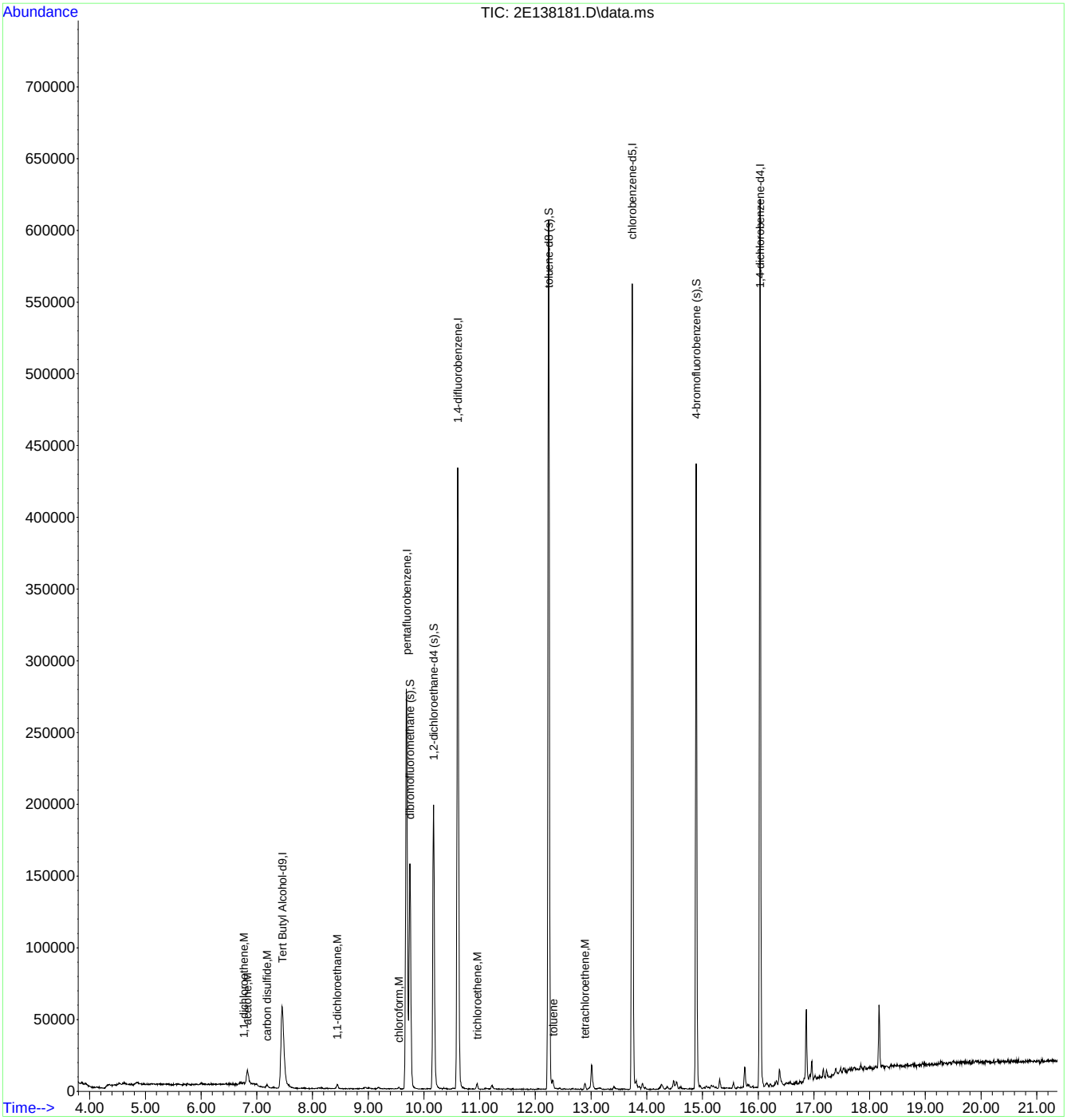
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.457	65	119140	500.00	ug/L	0.00
5) pentafluorobenzene	9.690	168	198907	50.00	ug/L	0.00
56) 1,4-difluorobenzene	10.608	114	341835	50.00	ug/L	0.00
77) chlorobenzene-d5	13.738	117	278842	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	16.035	152	137987	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.748	113	106918	52.09	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.18%			
57) 1,2-dichloroethane-d4 (s)	10.173	65	148845	59.11	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 118.22%			
78) toluene-d8 (s)	12.239	98	396920	50.31	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.62%			
102) 4-bromofluorobenzene (s)	14.886	95	149899	53.15	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 106.30%			
Target Compounds						Qvalue
21) 1,1-dichloroethene	6.765	61	947	0.21	ug/L	65
22) acetone	6.833	58	4683	12.25	ug/L #	71
25) carbon disulfide	7.179	76	3299	0.33	ug/L	77
34) 1,1-dichloroethane	8.443	63	4024	0.75	ug/L	92
45) chloroform	9.549	83	1061	0.22	ug/L	75
65) trichloroethene	10.954	95	1465	0.56	ug/L	77
79) toluene	12.317	92	1793	0.30	ug/L	87
83) tetrachloroethene	12.889	164	943	0.56	ug/L	80

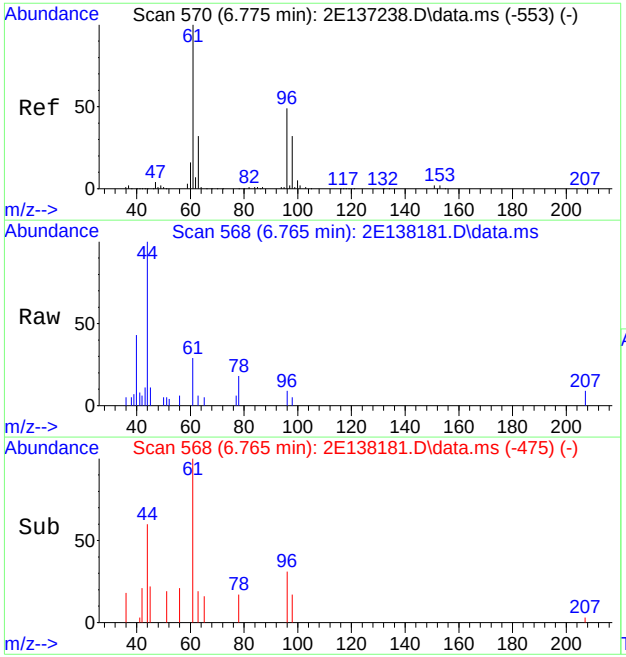
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 2E138181.D
Acq On : 9 Nov 2017 12:03 am
Operator : JessicaP
Sample : jc55040-3
Misc : MS21833,V2E6027,5,,,,1
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Nov 09 08:50:37 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration

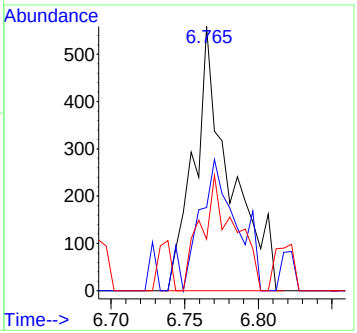


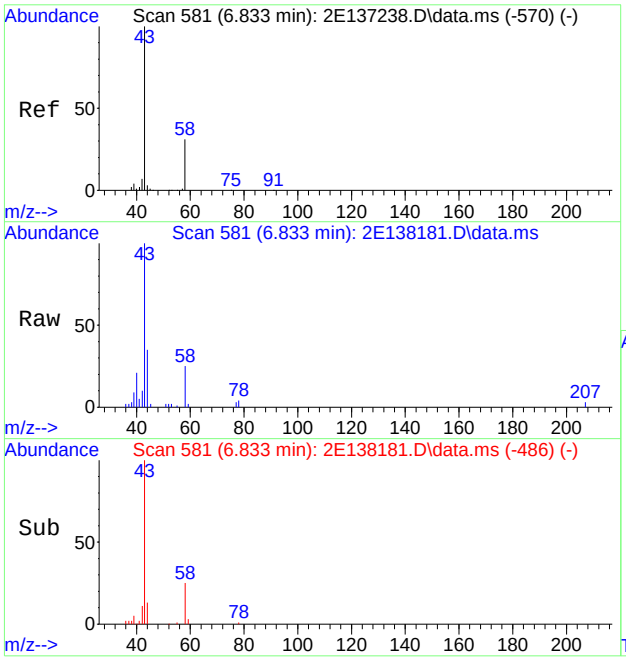


#21
1,1-dichloroethene
Concen: 0.21 ug/L
RT: 6.765 min Scan# 568
Delta R.T. -0.010 min
Lab File: 2E138181.D
Acq: 9 Nov 2017 12:03 am

Tgt Ion: 61 Resp: 947

Ion	Ratio	Lower	Upper
61	100		
96	31.5	18.5	78.5
63	3.4	1.7	61.7

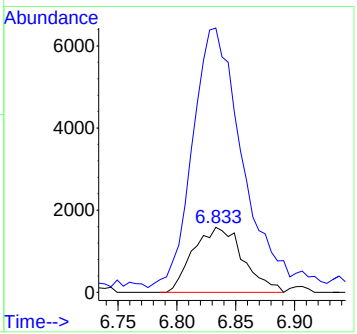


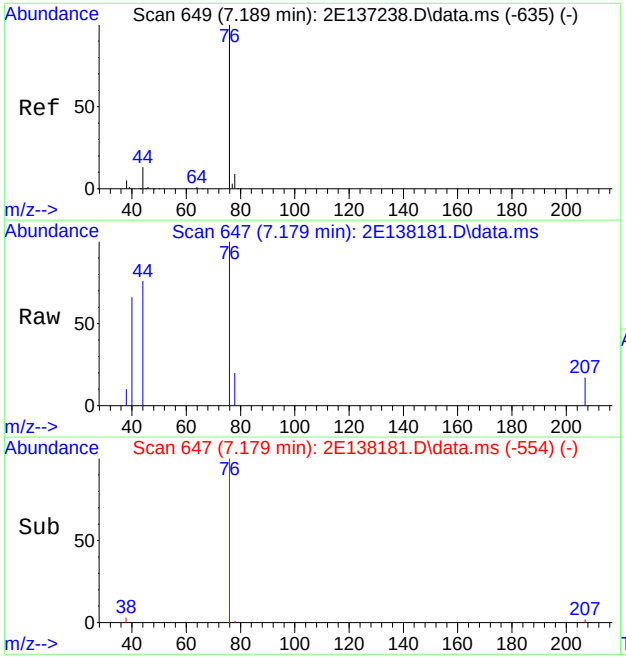


#22
acetone
Concen: 12.25 ug/L
RT: 6.833 min Scan# 581
Delta R.T. 0.000 min
Lab File: 2E138181.D
Acq: 9 Nov 2017 12:03 am

Tgt Ion: 58 Resp: 4683

Ion	Ratio	Lower	Upper
58	100		
43	386.4	295.8	355.8#

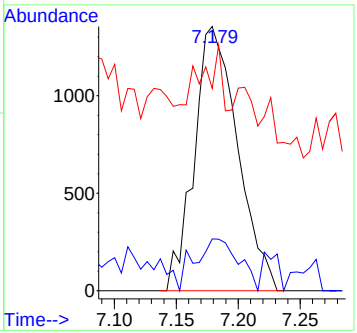


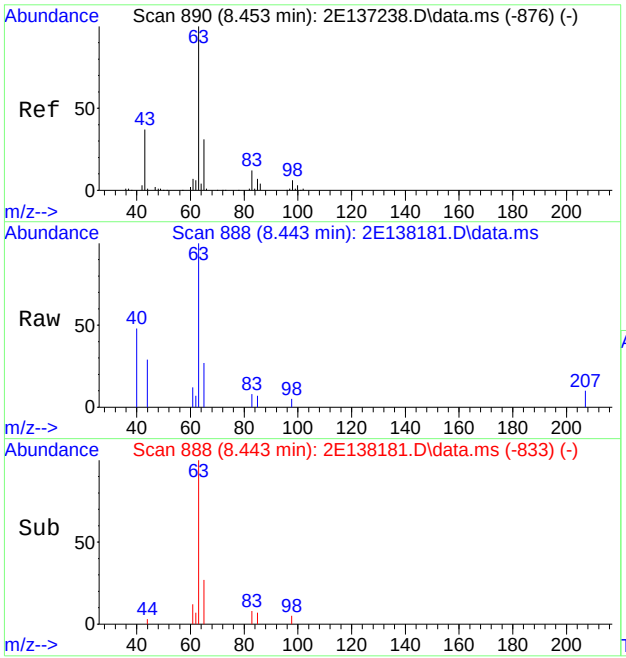


#25
carbon disulfide
Concen: 0.33 ug/L
RT: 7.179 min Scan# 647
Delta R.T. -0.010 min
Lab File: 2E138181.D
Acq: 9 Nov 2017 12:03 am

Tgt Ion: 76 Resp: 3299

Ion	Ratio	Lower	Upper
76	100		
78	19.6	0.0	39.0
44	20.4	0.0	43.1

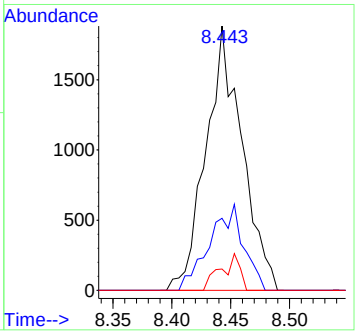


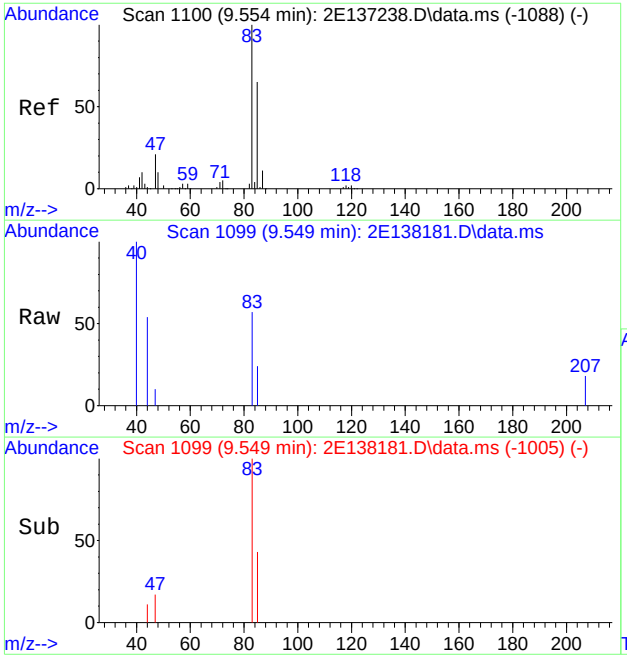


#34
1,1-dichloroethane
Concen: 0.75 ug/L
RT: 8.443 min Scan# 888
Delta R.T. -0.010 min
Lab File: 2E138181.D
Acq: 9 Nov 2017 12:03 am

Tgt Ion: 63 Resp: 4024

Ion	Ratio	Lower	Upper
63	100		
65	27.3	1.2	61.2
83	8.1	0.0	41.8

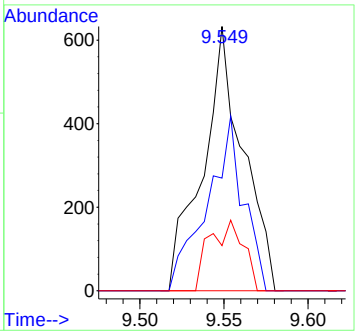


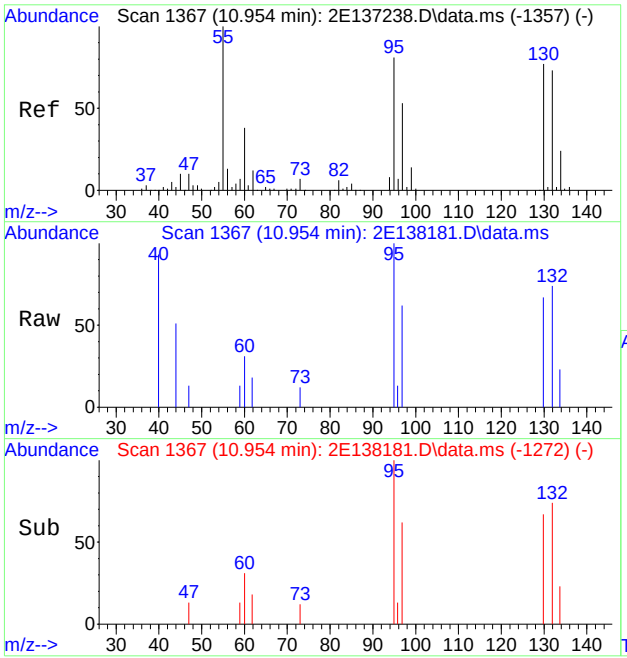


#45
chloroform
Concen: 0.22 ug/L
RT: 9.549 min Scan# 1099
Delta R.T. -0.005 min
Lab File: 2E138181.D
Acq: 9 Nov 2017 12:03 am

Tgt Ion: 83 Resp: 1061

Ion	Ratio	Lower	Upper
83	100		
85	42.7	34.7	94.7
47	17.1	0.0	55.4

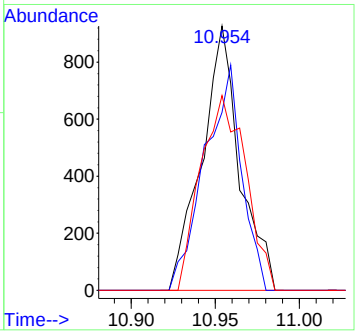


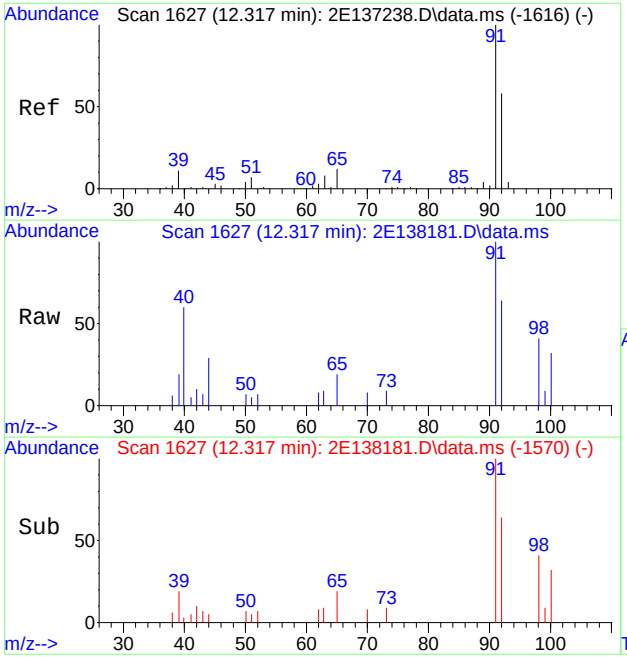


#65
trichloroethene
Concen: 0.56 ug/L
RT: 10.954 min Scan# 1367
Delta R.T. 0.000 min
Lab File: 2E138181.D
Acq: 9 Nov 2017 12:03 am

Tgt Ion: 95 Resp: 1465

Ion	Ratio	Lower	Upper
95	100		
130	67.3	64.6	124.6
132	73.7	60.5	120.5

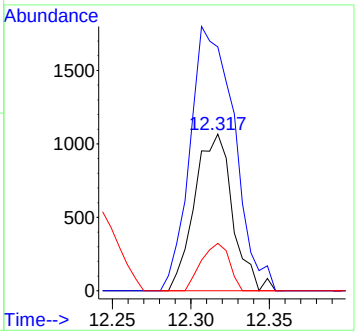


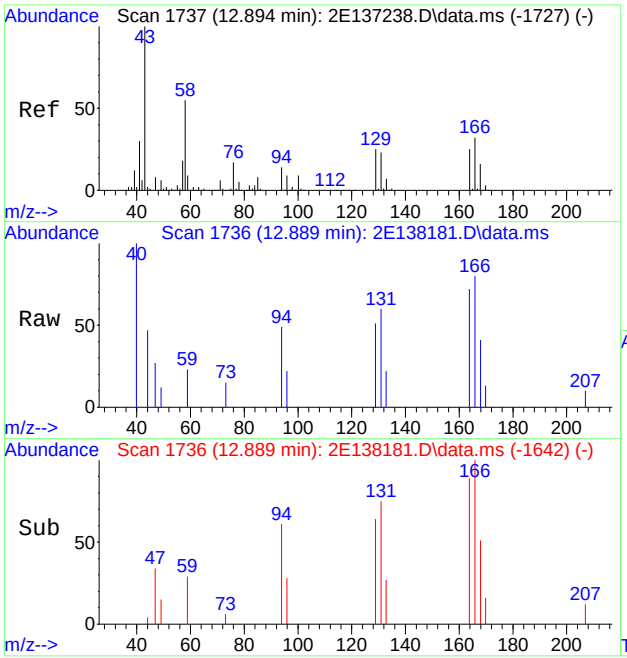


#79
toluene
Concen: 0.30 ug/L
RT: 12.317 min Scan# 1627
Delta R.T. 0.000 min
Lab File: 2E138181.D
Acq: 9 Nov 2017 12:03 am

Tgt Ion: 92 Resp: 1793

Ion	Ratio	Lower	Upper
92	100		
91	155.5	152.4	192.4
65	30.2	1.0	41.0

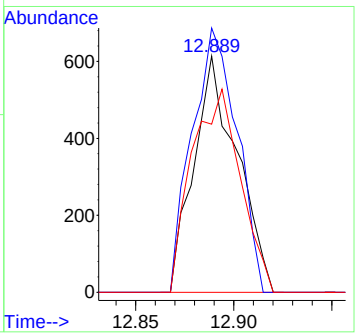




#83
tetrachloroethene
Concen: 0.56 ug/L
RT: 12.889 min Scan# 1736
Delta R.T. -0.005 min
Lab File: 2E138181.D
Acq: 9 Nov 2017 12:03 am

Tgt Ion:164 Resp: 943

Ion	Ratio	Lower	Upper
164	100		
166	111.9	98.1	158.1
129	71.2	67.6	127.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 2E138172.D
Acq On : 8 Nov 2017 7:53 pm
Operator : JessicaP
Sample : mb
Misc : MS21645,V2E6027,5,,,,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Nov 09 08:46:53 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration

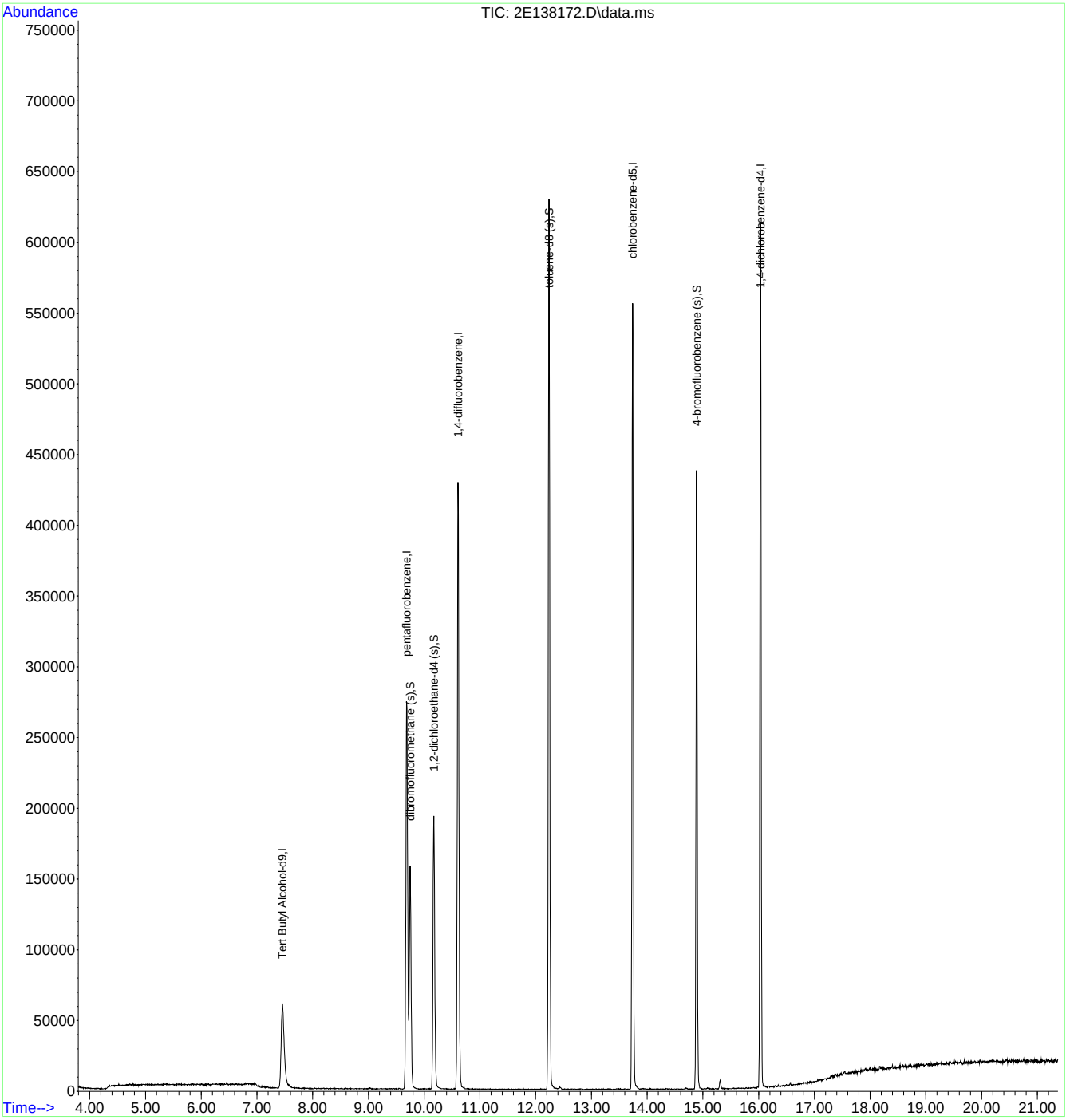
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.452	65	126173	500.00	ug/L	-0.01
5) pentafluorobenzene	9.685	168	196063	50.00	ug/L	-0.01
56) 1,4-difluorobenzene	10.608	114	340559	50.00	ug/L	0.00
77) chlorobenzene-d5	13.738	117	277294	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	16.035	152	137304	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.748	113	106072	52.43	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.86%			
57) 1,2-dichloroethane-d4 (s)	10.173	65	149302	59.51	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 119.02%			
78) toluene-d8 (s)	12.239	98	401437	51.17	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.34%			
102) 4-bromofluorobenzene (s)	14.886	95	148342	52.86	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.72%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 2E138172.D
Acq On : 8 Nov 2017 7:53 pm
Operator : JessicaP
Sample : mb
Misc : MS21645,V2E6027,5,,,,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Nov 09 08:46:53 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 2E138173.D
Acq On : 8 Nov 2017 8:21 pm
Operator : JessicaP
Sample : bs
Misc : MS21949,V2E6027,5,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 09 08:47:39 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Fri Oct 13 17:09:02 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.462	65	128609	500.00	ug/L		0.00
5) pentafluorobenzene	9.690	168	210808	50.00	ug/L		0.00
56) 1,4-difluorobenzene	10.608	114	360894	50.00	ug/L		0.00
77) chlorobenzene-d5	13.738	117	292323	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.034	152	141513	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.748	113	110321	50.72	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.44%				
57) 1,2-dichloroethane-d4 (s)	10.173	65	153781	57.84	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 115.68%				
78) toluene-d8 (s)	12.239	98	422347	51.07	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.14%				
102) 4-bromofluorobenzene (s)	14.886	95	153716	53.15	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 106.30%				
Target Compounds							Qvalue
2) ethanol	6.193	45	220594	4345.39	ug/L		96
3) tertiary butyl alcohol	7.577	59	97161	254.46	ug/L		95
4) 1,4-dioxane	11.331	88	31801	1075.87	ug/L		91
6) chlorodifluoromethane	4.028	51	227271	49.47	ug/L		98
7) dichlorodifluoromethane	4.007	85	193108	53.03	ug/L		98
10) chloromethane	4.374	50	310336	52.24	ug/L		99
11) vinyl chloride	4.631	62	272902	51.11	ug/L		98
12) bromomethane	5.307	94	128905	45.60	ug/L		99
13) chloroethane	5.480	64	147378	48.14	ug/L		97
14) trichlorofluoromethane	5.931	101	208297	50.98	ug/L		99
16) vinyl bromide	5.832	106	113401	24.76	ug/L		96
17) ethyl ether	6.345	74	89592	48.38	ug/L		90
18) 2-chloropropane	6.545	43	380324	56.08	ug/L		92
19) acrolein	6.618	56	34351	46.70	ug/L		92
20) freon 113	6.733	151	68614	42.55	ug/L		97
21) 1,1-dichloroethene	6.775	61	249026	51.84	ug/L		97
22) acetone	6.833	58	56618	185.45	ug/L	#	68
23) acetonitrile	7.284	41	281364	571.76	ug/L		98
24) iodomethane	7.064	142	201453	50.53	ug/L		98
25) carbon disulfide	7.184	76	504016	47.98	ug/L		97
26) methylene chloride	7.504	84	158175	48.67	ug/L		93
27) methyl acetate	7.294	43	154666	58.66	ug/L		97
28) methyl tert butyl ether	7.819	73	461648	53.10	ug/L		95
29) trans-1,2-dichloroethene	7.876	61	245063	52.10	ug/L		97
30) hexane	8.154	56	93861	43.51	ug/L	#	83
31) di-isopropyl ether	8.406	45	672055	55.20	ug/L		99
32) ethyl tert-butyl ether	8.873	59	587883	54.00	ug/L		96
33) 2-butanone	9.150	72	59751	190.71	ug/L	#	69
34) 1,1-dichloroethane	8.448	63	292035	51.08	ug/L		99
35) chloroprene	8.547	53	263137	54.37	ug/L		92
36) acrylonitrile	7.840	53	68056	57.26	ug/L		94
37) vinyl acetate	8.427	86	27332	54.95	ug/L	#	80
38) ethyl acetate	9.161	45	24628	52.03	ug/L	#	63
39) 2,2-dichloropropane	9.182	77	199018	43.61	ug/L		98
40) cis-1,2-dichloroethene	9.182	96	150046	46.12	ug/L		92
41) propionitrile	9.260	54	251807	551.76	ug/L		86
42) methyl acrylate	9.245	85	19167	57.57	ug/L		95
43) bromochloromethane	9.502	128	67007	49.42	ug/L		98
44) tetrahydrofuran	9.538	72	18460	52.20	ug/L		97
45) chloroform	9.549	83	252613	49.72	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 2E138173.D
Acq On : 8 Nov 2017 8:21 pm
Operator : JessicaP
Sample : bs
Misc : MS21949,V2E6027,5,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 09 08:47:39 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Fri Oct 13 17:09:02 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) t-butyl formate	9.575	59	22853	28.18	ug/L		89
47) 1,1-dichloropropene	9.974	75	195065	49.18	ug/L		99
48) carbon tetrachloride	10.000	117	172047	50.67	ug/L		97
49) isopropyl acetate	10.157	87	29000	55.34	ug/L	#	89
51) methacrylonitrile	9.439	67	60668	56.04	ug/L		87
52) 1,1,1-trichloroethane	9.801	97	211288	50.09	ug/L		96
53) Cyclohexane	9.863	84	202148	45.71	ug/L	#	84
54) iso-butyl alcohol	9.984	43	73040	538.79	ug/L		96
55) Tert Amyl Alcohol	10.110	73	39046	271.04	ug/L		94
58) 2,2,4-trimethylpentane	10.220	57	479181	39.53	ug/L		94
59) n-butyl alcohol	10.734	56	221194	2905.45	ug/L		92
60) benzene	10.241	78	581608	46.83	ug/L		98
61) tert-amyl methyl ether	10.262	73	486667	49.19	ug/L		94
62) heptane	10.393	57	90449	40.44	ug/L		94
63) 1,2-dichloroethane	10.262	62	204149	55.14	ug/L		99
64) ethyl acrylate	10.949	55	183603	56.28	ug/L		97
65) trichloroethene	10.949	95	133215	47.99	ug/L		94
66) 2-nitropropane	11.730	41	53856	56.88	ug/L	#	65
67) 2-chloroethyl vinyl ether	11.735	63	318542	208.21	ug/L		98
68) methyl methacrylate	11.216	100	31032	51.21	ug/L	#	71
69) 1,2-dichloropropane	11.221	63	163867	48.41	ug/L		98
70) methylcyclohexane	11.164	83	234161	42.37	ug/L		95
71) dibromomethane	11.384	93	82063	51.52	ug/L		97
72) bromodichloromethane	11.505	83	184492	51.24	ug/L		99
73) epichlorohydrin	11.866	57	70324	249.05	ug/L		94
74) cis-1,3-dichloropropene	11.955	75	231679	47.40	ug/L		89
75) 4-methyl-2-pentanone	12.045	58	216335	204.43	ug/L		90
76) 3-methyl-1-butanol	12.060	70	81224	1144.37	ug/L		87
79) toluene	12.312	92	305558	48.44	ug/L		99
80) ethyl methacrylate	12.495	69	173597	52.35	ug/L		96
81) trans-1,3-dichloropropene	12.511	75	197507	49.96	ug/L		98
82) 1,1,2-trichloroethane	12.726	83	95274	51.51	ug/L		99
83) tetrachloroethene	12.889	164	83905	47.35	ug/L		100
84) 2-hexanone	12.889	58	182344	187.87	ug/L		92
85) 1,3-dichloropropane	12.910	76	196342	50.04	ug/L		98
86) butyl acetate	12.952	56	90766	50.71	ug/L		93
87) 3,3-dimethyl-1-butanol	13.056	57	151118	608.10	ug/L		97
88) dibromochloromethane	13.172	129	113761	50.51	ug/L		99
89) 1,2-dibromoethane	13.324	107	105380	49.50	ug/L		98
90) n-butyl ether	13.665	57	654822	47.56	ug/L		99
91) chlorobenzene	13.770	112	309578	46.96	ug/L		95
92) 1,1,1,2-tetrachloroethane	13.832	131	113412	48.09	ug/L		99
93) ethylbenzene	13.817	91	559415	46.35	ug/L		99
94) m,p-xylene	13.922	106	404603	91.59	ug/L		96
95) o-xylene	14.341	91	471147	46.79	ug/L		97
96) styrene	14.351	104	344118	46.09	ug/L		95
97) butyl acrylate	14.157	55	270337	50.03	ug/L		98
98) bromoform	14.624	173	70983	49.64	ug/L		94
99) isopropylbenzene	14.677	105	537513	46.13	ug/L		99
100) cis-1,4-dichloro-2-butene	14.755	75	44146	40.85	ug/L		88
103) bromobenzene	15.080	156	121765	48.19	ug/L		89
104) 1,1,2,2-tetrachloroethane	14.991	83	137099	49.52	ug/L		99
105) trans-1,4-dichloro-2-b...	15.028	53	36624	48.57	ug/L		85
106) 1,2,3-trichloropropane	15.065	110	34091	52.18	ug/L		99
107) n-propylbenzene	15.080	91	639097	47.61	ug/L		98
109) 2-chlorotoluene	15.232	126	120089	47.53	ug/L		89
110) 4-chlorotoluene	15.332	91	402186	48.46	ug/L		98
111) 1,3,5-trimethylbenzene	15.232	105	455414	48.70	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 2E138173.D
Acq On : 8 Nov 2017 8:21 pm
Operator : JessicaP
Sample : bs
Misc : MS21949,V2E6027,5,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 09 08:47:39 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Fri Oct 13 17:09:02 2017
Response via : Initial Calibration

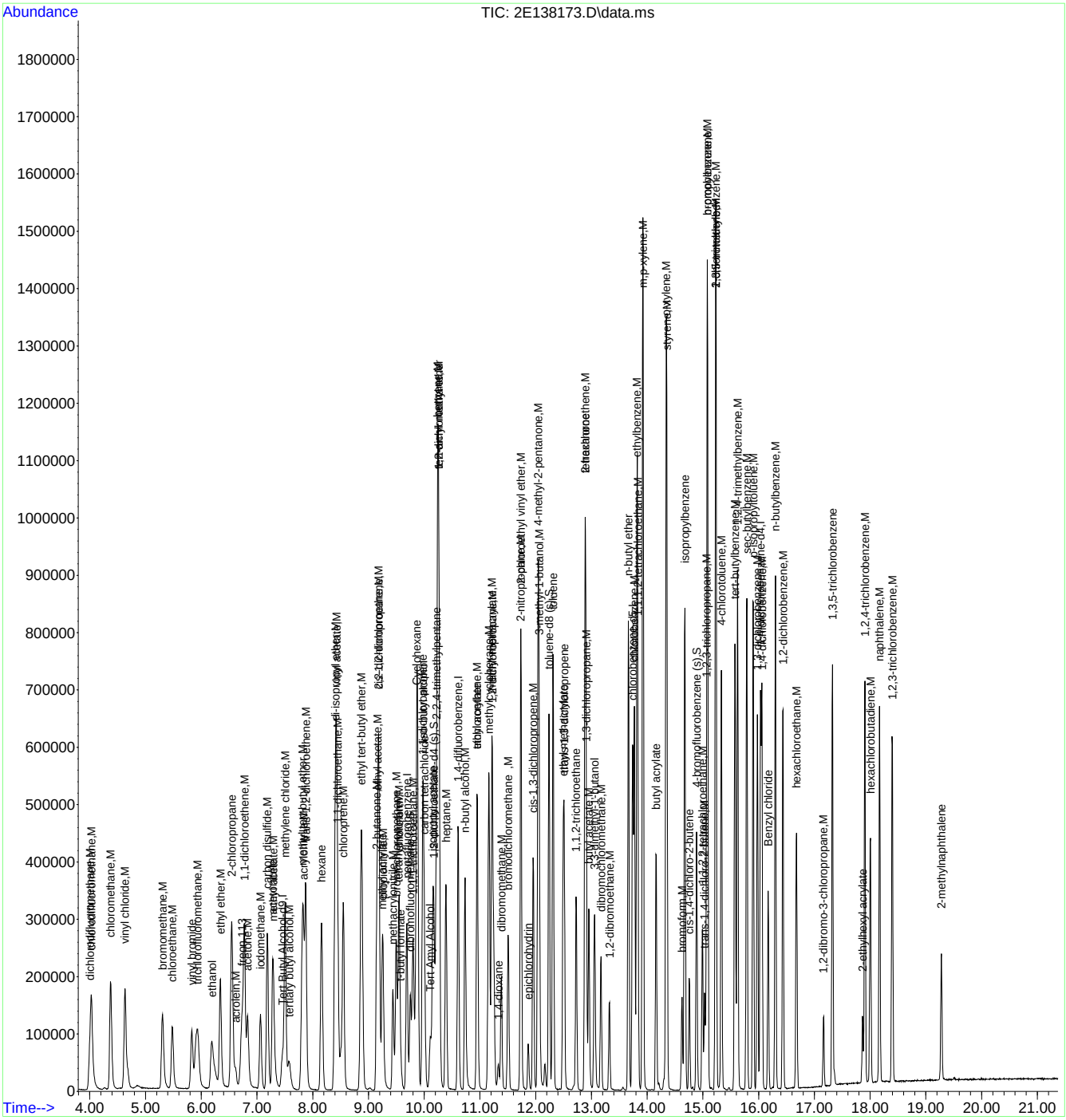
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) tert-butylbenzene	15.578	119	369419	47.34	ug/L	97
113) 1,2,4-trimethylbenzene	15.620	105	469856	48.79	ug/L	98
114) sec-butylbenzene	15.788	105	577401	47.68	ug/L	99
115) 1,3-dichlorobenzene	15.977	146	233507	46.32	ug/L	98
116) p-isopropyltoluene	15.903	119	469442	47.16	ug/L	98
117) 1,4-dichlorobenzene	16.061	146	236303	46.50	ug/L	99
118) 1,2-dichlorobenzene	16.438	146	237016	47.53	ug/L	98
120) n-butylbenzene	16.302	92	251244	44.83	ug/L	99
122) 1,2-dibromo-3-chloropr...	17.162	75	30506	56.84	ug/L	88
123) 1,3,5-trichlorobenzene	17.324	180	201652	45.93	ug/L	99
124) 1,2,4-trichlorobenzene	17.906	180	189529	48.06	ug/L	99
125) 2-ethylhexyl acrylate	17.864	70	27000	8.00	ug/L	91
126) hexachlorobutadiene	18.006	225	86392	45.70	ug/L	97
127) naphthalene	18.168	128	443905	49.74	ug/L	99
128) 1,2,3-trichlorobenzene	18.399	180	174718	48.78	ug/L	99
129) hexachloroethane	16.679	201	77133	51.46	ug/L	98
130) Benzyl chloride	16.171	91	223519	39.79	ug/L	97
131) 2-methylnaphthalene	19.280	142	107393	25.81	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 2E138173.D
Acq On : 8 Nov 2017 8:21 pm
Operator : JessicaP
Sample : bs
Misc : MS21949,V2E6027,5,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 09 08:47:39 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Fri Oct 13 17:09:02 2017
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 11/17/17 17:13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\11-10-17\v2e6027\
Data File : 2e138174.d
Acq On : 8 Nov 2017 8:48 pm
Operator : JessicaP
Sample : jc54532-1ms Inst : VOAMS2E
Misc : MS21833,V2E6027,5,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Results File: M2E5986.RES
Quant Time: Nov 09 20:28:40 2017
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.457	65	125141	500.00	ug/L	0.00
5) pentafluorobenzene	9.691	168	209340	50.00	ug/L	0.00
56) 1,4-difluorobenzene	10.608	114	357939	50.00	ug/L	0.00
77) chlorobenzene-d5	13.738	117	289439	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	16.035	152	139572	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.748	113	110687	51.24	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.48%			
57) 1,2-dichloroethane-d4 (s)	10.173	65	151912	57.61	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 115.22%			
78) toluene-d8 (s)	12.239	98	418419	51.10	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.20%			
102) 4-bromofluorobenzene (s)	14.886	95	153887	53.95	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 107.90%			
Target Compounds						Qvalue
2) ethanol	6.183	45	202375	4096.98	ug/L	100
3) tertiary butyl alcohol	7.567	59	91596	246.54	ug/L	95
4) 1,4-dioxane	11.332	88	28572	993.42	ug/L	88
6) chlorodifluoromethane	4.023	51	243511	53.38	ug/L	98
7) dichlorodifluoromethane	3.997	85	244246	67.55	ug/L	96
10) chloromethane	4.369	50	335557	56.89	ug/L	99
11) vinyl chloride	4.626	62	309647	58.40	ug/L	100
12) bromomethane	5.297	94	139641	49.75	ug/L	97
13) chloroethane	5.475	64	161601	53.16	ug/L	97
14) trichlorofluoromethane	5.921	101	259703	64.00	ug/L	97
15) 1,3-butadiene	4.662	54	15733	4.48	ug/L	94
16) vinyl bromide	5.821	106	126278	27.76	ug/L	98
17) ethyl ether	6.340	74	88848	48.31	ug/L	94
18) 2-chloropropane	6.539	43	422220	62.70	ug/L	93
19) acrolein	6.608	56	32807	44.91	ug/L	91
20) freon 113	6.728	151	88551	55.30	ug/L	93
21) 1,1-dichloroethene	6.765	61	363158	76.13	ug/L	96
22) acetone	6.823	58	53761	177.13	ug/L #	74
23) acetonitrile	7.273	41	270583	553.71	ug/L	99
24) iodomethane	7.053	142	183296	46.30	ug/L	97
25) carbon disulfide	7.179	76	564555	54.12	ug/L	96
26) methylene chloride	7.499	84	163442	50.65	ug/L	94
27) methyl acetate	7.289	43	139890	53.43	ug/L	96
28) methyl tert butyl ether	7.813	73	455426	52.75	ug/L	95
29) trans-1,2-dichloroethene	7.871	61	267423	57.26	ug/L	97
30) hexane	8.154	56	146514	68.39	ug/L	92
31) di-isopropyl ether	8.406	45	681616	56.37	ug/L	95
32) ethyl tert-butyl ether	8.873	59	589112	54.49	ug/L	98
33) 2-butanone	9.145	72	57830	185.87	ug/L #	71
34) 1,1-dichloroethane	8.443	63	322608	56.82	ug/L	99
35) chloroprene	8.542	53	299891	62.40	ug/L	92
36) acrylonitrile	7.840	53	64940	55.02	ug/L	98
37) vinyl acetate	8.422	86	24436	49.47	ug/L #	62
38) ethyl acetate	9.156	45	21498	45.74	ug/L #	90
39) 2,2-dichloropropane	9.182	77	239458	52.84	ug/L	97
40) cis-1,2-dichloroethene	9.182	96	240626	74.49	ug/L	99
41) propionitrile	9.255	54	238964	527.29	ug/L	96
42) methyl acrylate	9.240	85	18196	55.04	ug/L	94
43) bromochloromethane	9.496	128	66864	49.66	ug/L	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\11-10-17\v2e6027\
Data File : 2e138174.d
Acq On : 8 Nov 2017 8:48 pm
Operator : JessicaP
Sample : jc54532-1ms Inst : VOAMS2E
Misc : MS21833,V2E6027,5,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Results File: M2E5986.RES
Quant Time: Nov 09 20:28:40 2017
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) tetrahydrofuran	9.533	72	17745	50.53	ug/L		94
45) chloroform	9.549	83	285008	56.49	ug/L		97
47) 1,1-dichloropropene	9.974	75	223683	56.79	ug/L		98
48) carbon tetrachloride	10.000	117	215097	63.79	ug/L		98
49) isopropyl acetate	10.152	87	27030	51.95	ug/L	#	77
51) methacrylonitrile	9.434	67	59413	55.26	ug/L		85
52) 1,1,1-trichloroethane	9.795	97	266581	63.64	ug/L		96
53) Cyclohexane	9.864	84	255498	58.18	ug/L	#	81
54) iso-butyl alcohol	9.979	43	67202	499.20	ug/L		96
55) Tert Amyl Alcohol	10.110	73	34042	237.96	ug/L		92
58) 2,2,4-trimethylpentane	10.215	57	758058	63.05	ug/L		95
59) n-butyl alcohol	10.734	56	197430	2614.71	ug/L		94
60) benzene	10.241	78	617188	50.10	ug/L		99
61) tert-amyl methyl ether	10.257	73	480316	48.95	ug/L		93
62) heptane	10.388	57	145526	65.61	ug/L		96
63) 1,2-dichloroethane	10.262	62	204408	55.67	ug/L		98
64) ethyl acrylate	10.949	55	162921m	50.36	ug/L		
65) trichloroethene	10.949	95	1312145	476.59	ug/L		97
66) 2-nitropropane	11.730	41	39087	41.62	ug/L	#	1
68) methyl methacrylate	11.211	100	30721	51.11	ug/L	#	69
69) 1,2-dichloropropane	11.221	63	167939	50.02	ug/L		96
70) methylcyclohexane	11.159	83	320772	58.53	ug/L		91
71) dibromomethane	11.379	93	81303	51.46	ug/L		97
72) bromodichloromethane	11.505	83	189765	53.13	ug/L		100
73) epichlorohydrin	11.866	57	27105	96.78	ug/L		97
74) cis-1,3-dichloropropene	11.955	75	240777	49.67	ug/L		89
75) 4-methyl-2-pentanone	12.045	58	206171	196.43	ug/L		94
76) 3-methyl-1-butanol	12.060	70	71313	1013.03	ug/L		85
79) toluene	12.312	92	325060	52.04	ug/L		99
80) ethyl methacrylate	12.490	69	170791	52.02	ug/L		90
81) trans-1,3-dichloropropene	12.511	75	201622	51.51	ug/L		97
82) 1,1,2-trichloroethane	12.726	83	94010	51.34	ug/L		96
83) tetrachloroethene	12.889	164	94226	53.71	ug/L		98
84) 2-hexanone	12.889	58	173100	180.12	ug/L		92
85) 1,3-dichloropropane	12.904	76	194330	50.02	ug/L		98
86) butyl acetate	12.952	56	78968	44.56	ug/L		91
87) 3,3-dimethyl-1-butanol	13.057	57	129098	524.67	ug/L		99
88) dibromochloromethane	13.172	129	113846	51.06	ug/L		100
89) 1,2-dibromoethane	13.319	107	103206	48.96	ug/L		96
90) n-butyl ether	13.665	57	698258	51.22	ug/L		99
91) chlorobenzene	13.770	112	323280	49.52	ug/L		96
92) 1,1,1,2-tetrachloroethane	13.833	131	119221	51.05	ug/L		98
93) ethylbenzene	13.817	91	606643	50.76	ug/L		99
94) m,p-xylene	13.922	106	436058	99.69	ug/L		94
95) o-xylene	14.341	91	499869	50.14	ug/L		100
96) styrene	14.352	104	357936	48.42	ug/L		94
97) butyl acrylate	14.163	55	260225	48.64	ug/L		99
98) bromoform	14.624	173	69691	49.22	ug/L		95
99) isopropylbenzene	14.677	105	589735	51.12	ug/L		99
100) cis-1,4-dichloro-2-butene	14.755	75	44689	41.76	ug/L		87
103) bromobenzene	15.080	156	126349	50.70	ug/L		87
104) 1,1,2,2-tetrachloroethane	14.991	83	134644	49.31	ug/L		98
105) trans-1,4-dichloro-2-b...	15.028	53	38597	51.89	ug/L	#	80
106) 1,2,3-trichloropropane	15.065	110	32655	50.67	ug/L		96
107) n-propylbenzene	15.080	91	708318	53.50	ug/L		98
109) 2-chlorotoluene	15.232	126	127192	51.05	ug/L		89
110) 4-chlorotoluene	15.332	91	429136	52.42	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\11-10-17\v2e6027\
Data File : 2e138174.d
Acq On : 8 Nov 2017 8:48 pm
Operator : JessicaP
Sample : jc54532-1ms Inst : VOAMS2E
Misc : MS21833,V2E6027,5,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Results File: M2E5986.RES
Quant Time: Nov 09 20:28:40 2017
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration

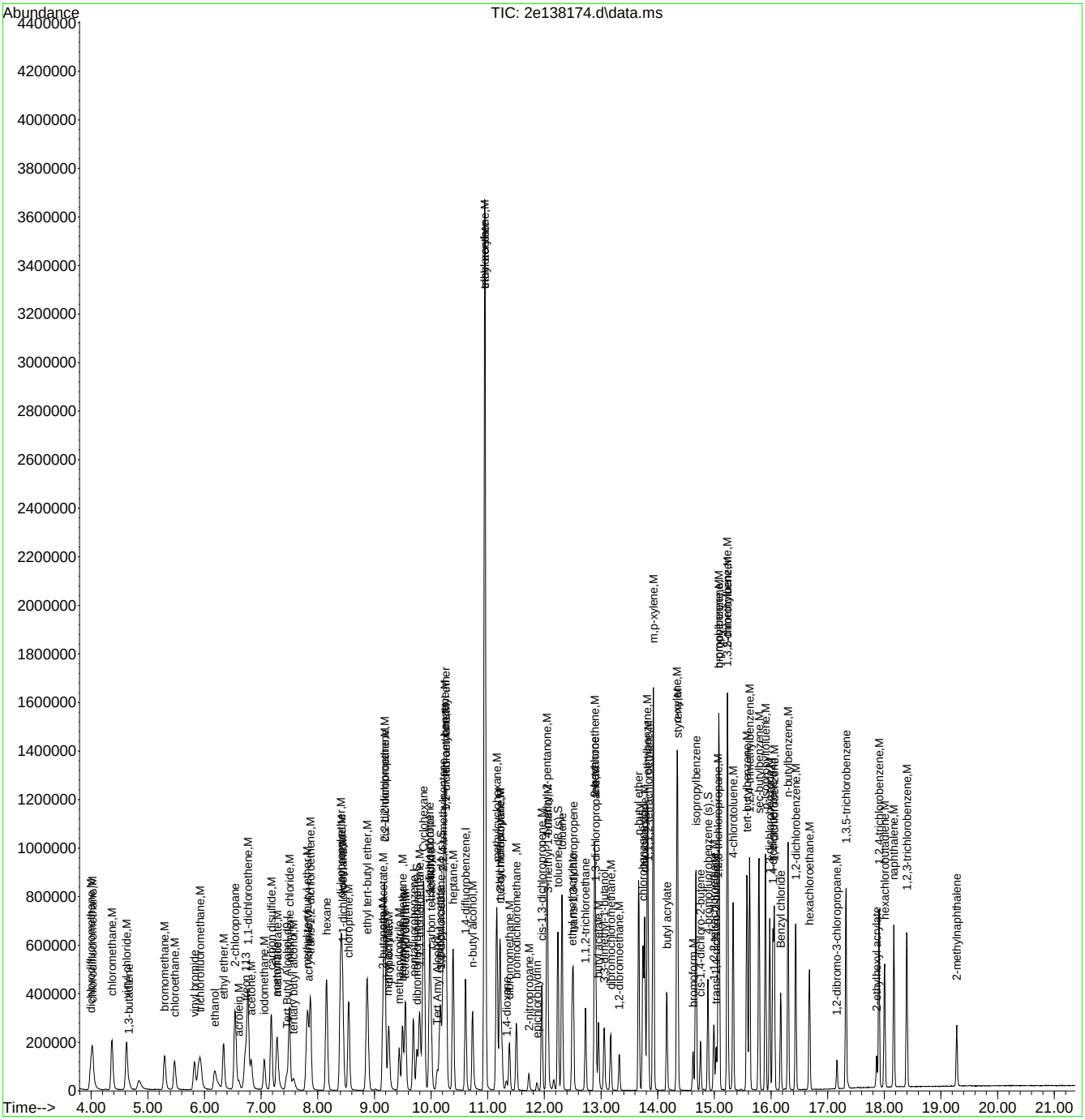
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
111) 1,3,5-trimethylbenzene	15.227	105	499413	54.15	ug/L	98
112) tert-butylbenzene	15.578	119	411487	53.47	ug/L	96
113) 1,2,4-trimethylbenzene	15.620	105	507055	53.39	ug/L	98
114) sec-butylbenzene	15.788	105	657315	55.03	ug/L	100
115) 1,3-dichlorobenzene	15.977	146	248647	50.01	ug/L	99
116) p-isopropyltoluene	15.903	119	530876	54.07	ug/L	98
117) 1,4-dichlorobenzene	16.056	146	250913	50.06	ug/L	98
118) 1,2-dichlorobenzene	16.438	146	245943	50.00	ug/L	100
120) n-butylbenzene	16.302	92	291057	52.66	ug/L	97
122) 1,2-dibromo-3-chloropr...	17.162	75	29396	55.50	ug/L	88
123) 1,3,5-trichlorobenzene	17.324	180	225708	52.12	ug/L	99
124) 1,2,4-trichlorobenzene	17.906	180	204300	52.53	ug/L	99
125) 2-ethylhexyl acrylate	17.864	70	29009	8.71	ug/L	90
126) hexachlorobutadiene	18.006	225	105044	56.34	ug/L	99
127) naphthalene	18.168	128	455229	51.72	ug/L	97
128) 1,2,3-trichlorobenzene	18.399	180	185333	52.46	ug/L	99
129) hexachloroethane	16.679	201	84861	57.40	ug/L	100
130) Benzyl chloride	16.171	91	261400	47.18	ug/L	97
131) 2-methylnaphthalene	19.280	142	115327	28.10	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\11-10-17\v2e6027\
Data File : 2e138174.d
Acq On : 8 Nov 2017 8:48 pm
Operator : JessicaP
Sample : jc54532-1ms Inst : VOAMS2E
Misc : MS21833,V2E6027,5,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Results File: M2E5986.RES
Quant Time: Nov 09 20:28:40 2017
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration



Manual Integration Approval Summary

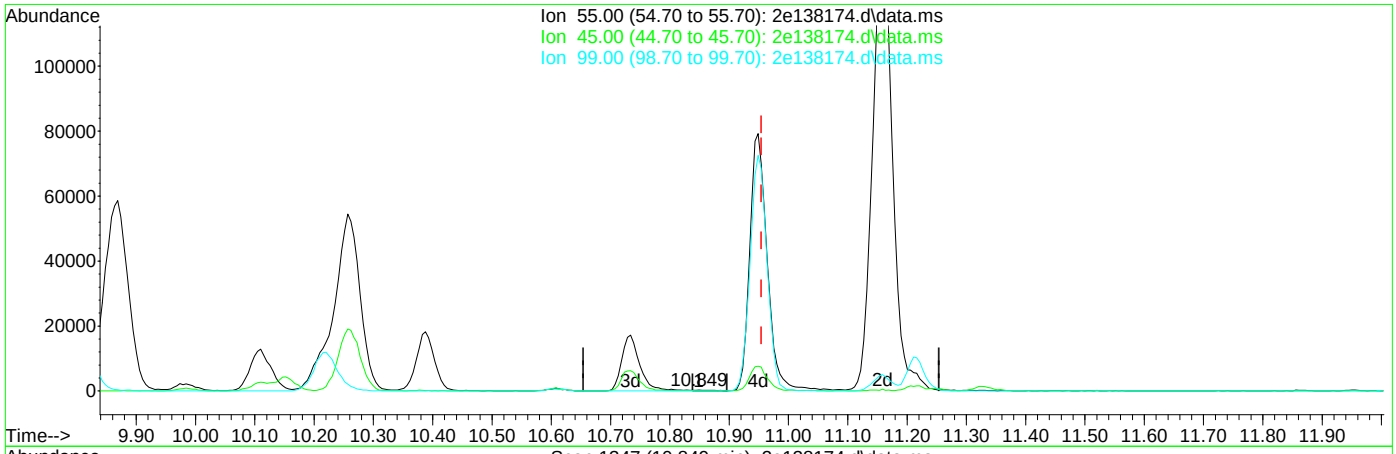
Sample Number: JC54532-1MS
Lab FileID: 2E138174.D
Injection Time: 11/08/17 20:48
Method: SW846 8260C
Analyst approved: 11/09/17 21:40 Janelle Cordova
Supervisor approved: 11/17/17 17:13 Kanya Veerawat

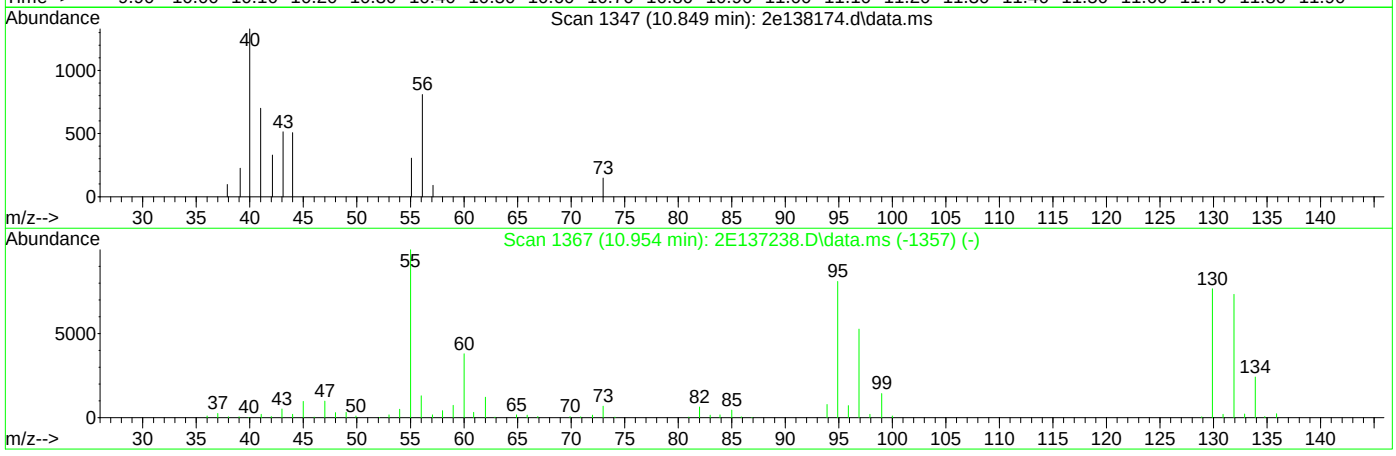
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethyl Acrylate	140-88-5		10.95	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\11-10-17\v2e6027\
Data File : 2e138174.d
Acq On : 8 Nov 2017 8:48 pm
Operator : JessicaP
Sample : jc54532-1ms Inst : VOAMS2E
Misc : MS21833,V2E6027,5,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Results File: M2E5986.RES
Quant Time: Nov 08 21:10:27 2017
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration





TIC: 2e138174.d\data.ms

(64) ethyl acrylate

10.849min (-0.105) 0.18ug/L

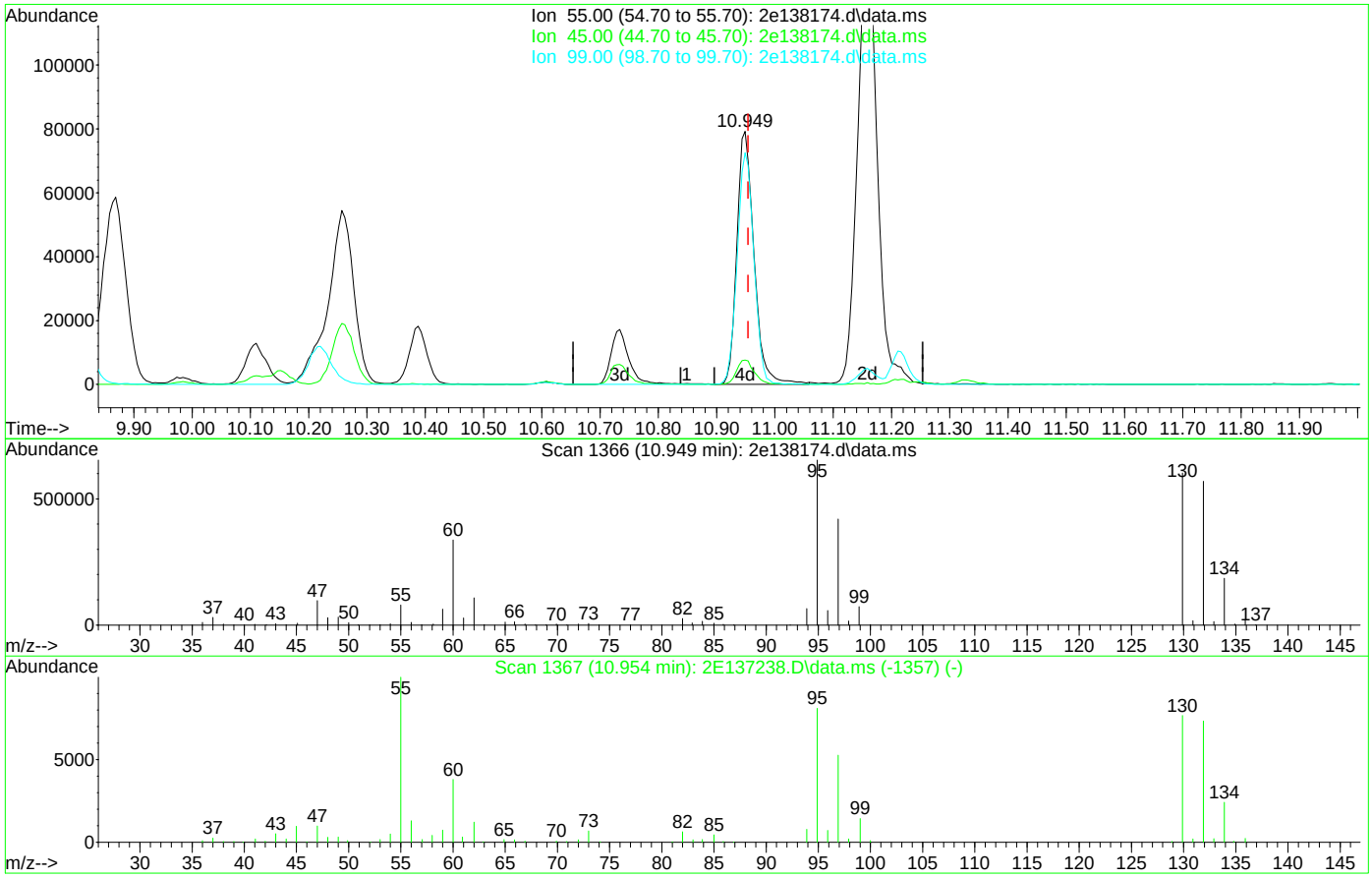
response 597

Ion	Exp%	Act%
55.00	100	100
45.00	9.60	0.00
99.00	14.30	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\11-10-17\v2e6027\
Data File : 2e138174.d
Acq On : 8 Nov 2017 8:48 pm
Operator : JessicaP
Sample : jc54532-1ms Inst : VOAMS2E
Misc : MS21833,V2E6027,5,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Results File: M2E5986.RES
Quant Time: Nov 08 21:10:27 2017
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration



TIC: 2e138174.d\data.ms

(64) ethyl acrylate

10.949min (-0.005) 50.36ug/L m

response 162921

Ion	Exp%	Act%
55.00	100	100
45.00	9.60	9.62
99.00	14.30	91.48#
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 11/17/17 17:13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\11-10-17\v2e6027\
Data File : 2e138175.d
Acq On : 8 Nov 2017 9:16 pm
Operator : JessicaP
Sample : jc54532-1msd Inst : VOAMS2E
Misc : MS21833,V2E6027,5,,,,1
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Results File: M2E5986.RES
Quant Time: Nov 09 21:44:22 2017
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.457	65	122614	500.00	ug/L		0.00
5) pentafluorobenzene	9.691	168	207081	50.00	ug/L		0.00
56) 1,4-difluorobenzene	10.608	114	359708	50.00	ug/L		0.00
77) chlorobenzene-d5	13.738	117	289637	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.035	152	138597	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.748	113	108939	50.98	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.96%				
57) 1,2-dichloroethane-d4 (s)	10.173	65	153897	58.08	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 116.16%				
78) toluene-d8 (s)	12.239	98	419857	51.24	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.48%				
102) 4-bromofluorobenzene (s)	14.886	95	152514	53.84	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 107.68%				
Target Compounds							Qvalue
2) ethanol	6.193	45	203214	4198.75	ug/L		97
3) tertiary butyl alcohol	7.572	59	92827	255.00	ug/L		93
4) 1,4-dioxane	11.332	88	29219	1036.85	ug/L		90
6) chlorodifluoromethane	4.028	51	241741	53.57	ug/L		98
7) dichlorodifluoromethane	3.997	85	244335	68.31	ug/L		98
10) chloromethane	4.369	50	345716	59.25	ug/L		98
11) vinyl chloride	4.626	62	317890	60.61	ug/L		98
12) bromomethane	5.297	94	142532	51.33	ug/L		98
13) chloroethane	5.475	64	165022	54.88	ug/L		97
14) trichlorofluoromethane	5.926	101	261708	65.20	ug/L		99
15) 1,3-butadiene	4.668	54	16051	4.62	ug/L		96
16) vinyl bromide	5.826	106	128611	28.58	ug/L		95
17) ethyl ether	6.335	74	87540	48.12	ug/L		90
18) 2-chloropropane	6.539	43	422085	63.36	ug/L		93
19) acrolein	6.613	56	33179	45.91	ug/L		94
20) freon 113	6.728	151	86447	54.57	ug/L		95
21) 1,1-dichloroethene	6.770	61	366440	77.66	ug/L		95
22) acetone	6.833	58	53576	178.48	ug/L	#	74
23) acetonitrile	7.279	41	268654	555.76	ug/L		100
24) iodomethane	7.059	142	202874	51.80	ug/L		100
25) carbon disulfide	7.179	76	556709	53.95	ug/L		96
26) methylene chloride	7.499	84	160537	50.29	ug/L		93
27) methyl acetate	7.289	43	134951	52.11	ug/L		94
28) methyl tert butyl ether	7.819	73	453446	53.09	ug/L		95
29) trans-1,2-dichloroethene	7.871	61	267435	57.88	ug/L		95
30) hexane	8.160	56	138916	65.55	ug/L		90
31) di-isopropyl ether	8.406	45	680117	56.86	ug/L		97
32) ethyl tert-butyl ether	8.873	59	586217	54.82	ug/L		97
33) 2-butanone	9.145	72	57100	185.53	ug/L	#	81
34) 1,1-dichloroethane	8.443	63	322946	57.50	ug/L		99
35) chloroprene	8.548	53	299140	62.92	ug/L		93
36) acrylonitrile	7.840	53	65008	55.68	ug/L		98
37) vinyl acetate	8.422	86	23362	47.81	ug/L	#	44
38) ethyl acetate	9.156	45	20970	45.10	ug/L	#	90
39) 2,2-dichloropropane	9.182	77	237940	53.08	ug/L		99
40) cis-1,2-dichloroethene	9.182	96	238004	74.48	ug/L		96
41) propionitrile	9.255	54	238600	532.23	ug/L		98
42) methyl acrylate	9.240	85	18177	55.58	ug/L		97
43) bromochloromethane	9.497	128	65203	48.95	ug/L		87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\11-10-17\v2e6027\
Data File : 2e138175.d
Acq On : 8 Nov 2017 9:16 pm
Operator : JessicaP
Sample : jc54532-1msd Inst : VOAMS2E
Misc : MS21833,V2E6027,5,,,,1
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Results File: M2E5986.RES
Quant Time: Nov 09 21:44:22 2017
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) tetrahydrofuran	9.533	72	17862	51.42	ug/L	#	86
45) chloroform	9.549	83	282996	56.71	ug/L		97
47) 1,1-dichloropropene	9.974	75	222025	56.98	ug/L		98
48) carbon tetrachloride	10.000	117	216860	65.02	ug/L		98
49) isopropyl acetate	10.152	87	26381	51.25	ug/L	#	81
51) methacrylonitrile	9.439	67	58920	55.40	ug/L		90
52) 1,1,1-trichloroethane	9.795	97	264897	63.93	ug/L		97
53) Cyclohexane	9.869	84	260394	59.94	ug/L	#	60
54) iso-butyl alcohol	9.984	43	66466	499.12	ug/L		97
55) Tert Amyl Alcohol	10.110	73	34318	242.51	ug/L		93
58) 2,2,4-trimethylpentane	10.220	57	740446	61.28	ug/L		95
59) n-butyl alcohol	10.734	56	196952	2595.56	ug/L		93
60) benzene	10.241	78	616332	49.79	ug/L		99
61) tert-amyl methyl ether	10.262	73	477429	48.42	ug/L		96
62) heptane	10.388	57	140245	62.92	ug/L		95
63) 1,2-dichloroethane	10.262	62	203638	55.18	ug/L		98
64) ethyl acrylate	10.949	55	161939m	49.81	ug/L		
65) trichloroethene	10.949	95	1326490	479.43	ug/L		97
66) 2-nitropropane	11.725	41	39364	41.71	ug/L	#	1
68) methyl methacrylate	11.216	100	29608	49.02	ug/L	#	63
69) 1,2-dichloropropane	11.222	63	168612	49.98	ug/L		96
70) methylcyclohexane	11.159	83	315604	57.30	ug/L		92
71) dibromomethane	11.379	93	80077	50.44	ug/L		97
72) bromodichloromethane	11.505	83	188212	52.44	ug/L		99
73) epichlorohydrin	11.866	57	26080	92.66	ug/L		92
74) cis-1,3-dichloropropene	11.956	75	237857	48.82	ug/L		89
75) 4-methyl-2-pentanone	12.045	58	204353	193.74	ug/L		90
76) 3-methyl-1-butanol	12.060	70	69416	981.23	ug/L		85
79) toluene	12.312	92	328744	52.60	ug/L		98
80) ethyl methacrylate	12.490	69	167399	50.95	ug/L		91
81) trans-1,3-dichloropropene	12.511	75	201295	51.39	ug/L		99
82) 1,1,2-trichloroethane	12.726	83	92112	50.27	ug/L		99
83) tetrachloroethene	12.889	164	94586	53.88	ug/L		97
84) 2-hexanone	12.889	58	170339	177.13	ug/L		92
85) 1,3-dichloropropane	12.905	76	192598	49.54	ug/L		99
86) butyl acetate	12.952	56	78718	44.38	ug/L		94
87) 3,3-dimethyl-1-butanol	13.057	57	126984	515.72	ug/L		96
88) dibromochloromethane	13.172	129	113450	50.84	ug/L		100
89) 1,2-dibromoethane	13.319	107	103225	48.94	ug/L		100
90) n-butyl ether	13.665	57	694861	50.93	ug/L		99
91) chlorobenzene	13.770	112	321858	49.27	ug/L		95
92) 1,1,1,2-tetrachloroethane	13.827	131	117692	50.36	ug/L		99
93) ethylbenzene	13.817	91	606059	50.68	ug/L		99
94) m,p-xylene	13.922	106	435318	99.46	ug/L		96
95) o-xylene	14.341	91	497531	49.87	ug/L		97
96) styrene	14.352	104	357597	48.34	ug/L		96
97) butyl acrylate	14.158	55	258149	48.21	ug/L		97
98) bromoform	14.624	173	69027	48.72	ug/L		96
99) isopropylbenzene	14.677	105	591462	51.23	ug/L		99
100) cis-1,4-dichloro-2-butene	14.755	75	43357	40.49	ug/L		86
103) bromobenzene	15.080	156	123823	50.04	ug/L		88
104) 1,1,2,2-tetrachloroethane	14.991	83	134191	49.49	ug/L		99
105) trans-1,4-dichloro-2-b...	15.028	53	38347	51.92	ug/L		84
106) 1,2,3-trichloropropane	15.065	110	31953	49.93	ug/L		96
107) n-propylbenzene	15.080	91	708253	53.87	ug/L		98
109) 2-chlorotoluene	15.232	126	127230	51.42	ug/L		93
110) 4-chlorotoluene	15.332	91	426604	52.48	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\11-10-17\v2e6027\
Data File : 2e138175.d
Acq On : 8 Nov 2017 9:16 pm
Operator : JessicaP
Sample : jc54532-1msd Inst : VOAMS2E
Misc : MS21833,V2E6027,5,,,,1
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Results File: M2E5986.RES
Quant Time: Nov 09 21:44:22 2017
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration

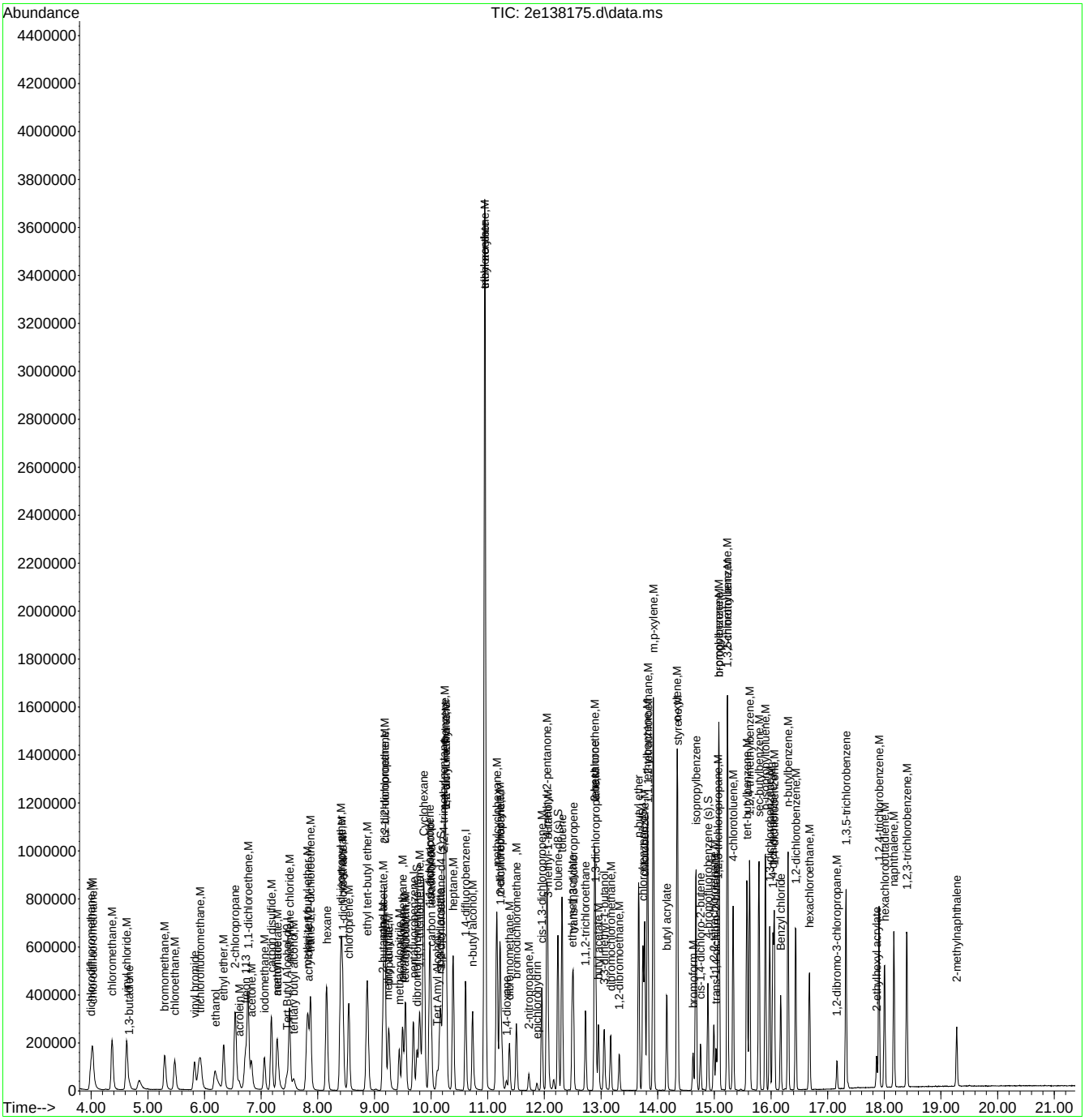
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
111) 1,3,5-trimethylbenzene	15.227	105	493001	53.83	ug/L	99
112) tert-butylbenzene	15.578	119	410626	53.73	ug/L	97
113) 1,2,4-trimethylbenzene	15.620	105	500778	53.10	ug/L	98
114) sec-butylbenzene	15.788	105	651946	54.97	ug/L	100
115) 1,3-dichlorobenzene	15.977	146	243669	49.36	ug/L	98
116) p-isopropyltoluene	15.898	119	525358	53.88	ug/L	98
117) 1,4-dichlorobenzene	16.056	146	248041	49.83	ug/L	98
118) 1,2-dichlorobenzene	16.438	146	243966	49.95	ug/L	99
120) n-butylbenzene	16.302	92	293536	53.48	ug/L	100
122) 1,2-dibromo-3-chloropr...	17.162	75	29065	55.25	ug/L	85
123) 1,3,5-trichlorobenzene	17.324	180	223150	51.89	ug/L	99
124) 1,2,4-trichlorobenzene	17.906	180	203768	52.76	ug/L	99
125) 2-ethylhexyl acrylate	17.864	70	29777	9.01	ug/L	84
126) hexachlorobutadiene	18.006	225	106461	57.50	ug/L	98
127) naphthalene	18.169	128	450684	51.57	ug/L	99
128) 1,2,3-trichlorobenzene	18.399	180	186852	53.27	ug/L	99
129) hexachloroethane	16.680	201	84748	57.72	ug/L	96
130) Benzyl chloride	16.171	91	254873	46.32	ug/L	96
131) 2-methylnaphthalene	19.280	142	117495	28.83	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\11-10-17\v2e6027\
Data File : 2e138175.d
Acq On : 8 Nov 2017 9:16 pm
Operator : JessicaP
Sample : jc54532-1msd Inst : VOAMS2E
Misc : MS21833,V2E6027,5,,,,1
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Results File: M2E5986.RES
Quant Time: Nov 09 21:44:22 2017
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration



Manual Integration Approval Summary

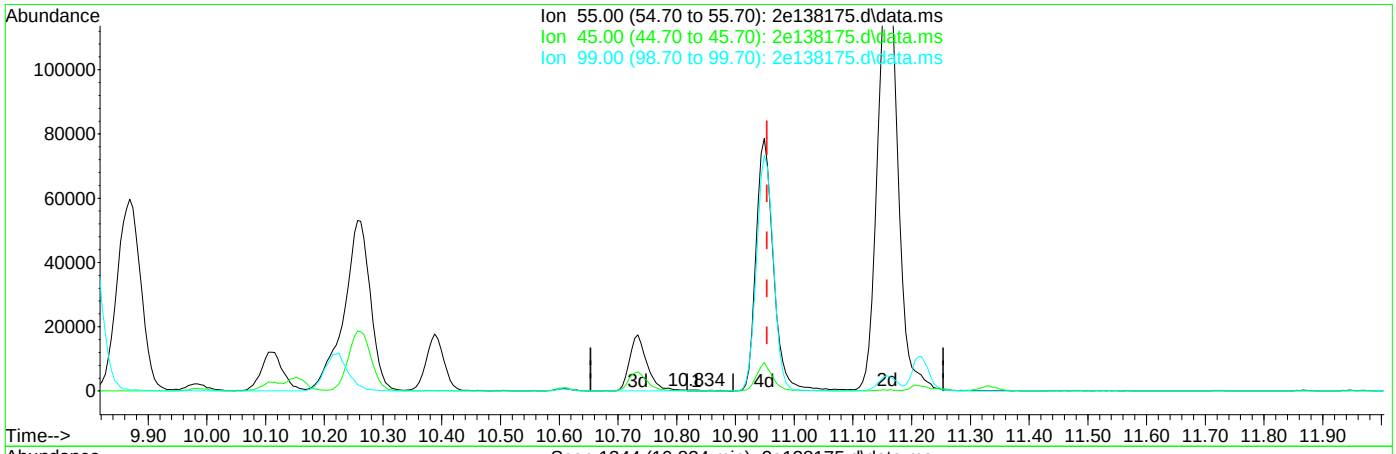
Sample Number: JC54532-1MSD
Lab FileID: 2E138175.D
Injection Time: 11/08/17 21:16
Method: SW846 8260C
Analyst approved: 11/09/17 21:43 Janelle Cordova
Supervisor approved: 11/17/17 17:13 Kanya Veerawat

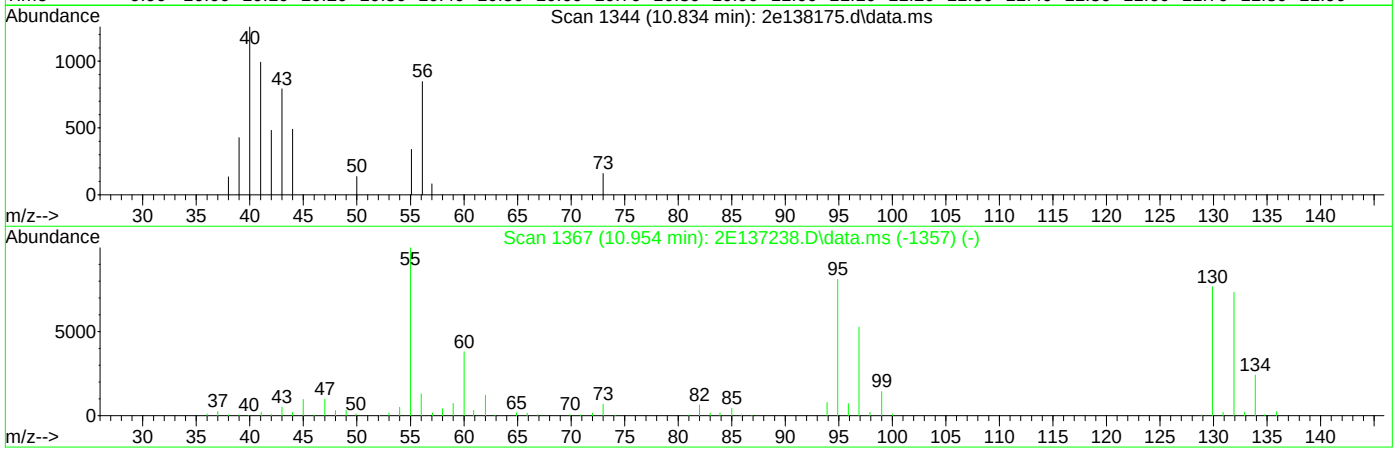
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethyl Acrylate	140-88-5		10.95	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\11-10-17\v2e6027\
Data File : 2e138175.d
Acq On : 8 Nov 2017 9:16 pm
Operator : JessicaP
Sample : jc54532-1msd Inst : VOAMS2E
Misc : MS21833,V2E6027,5,,,,1
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Results File: M2E5986.RES
Quant Time: Nov 08 21:37:54 2017
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration





TIC: 2e138175.d\data.ms

(64) ethyl acrylate

10.834min (-0.120) 0.26ug/L

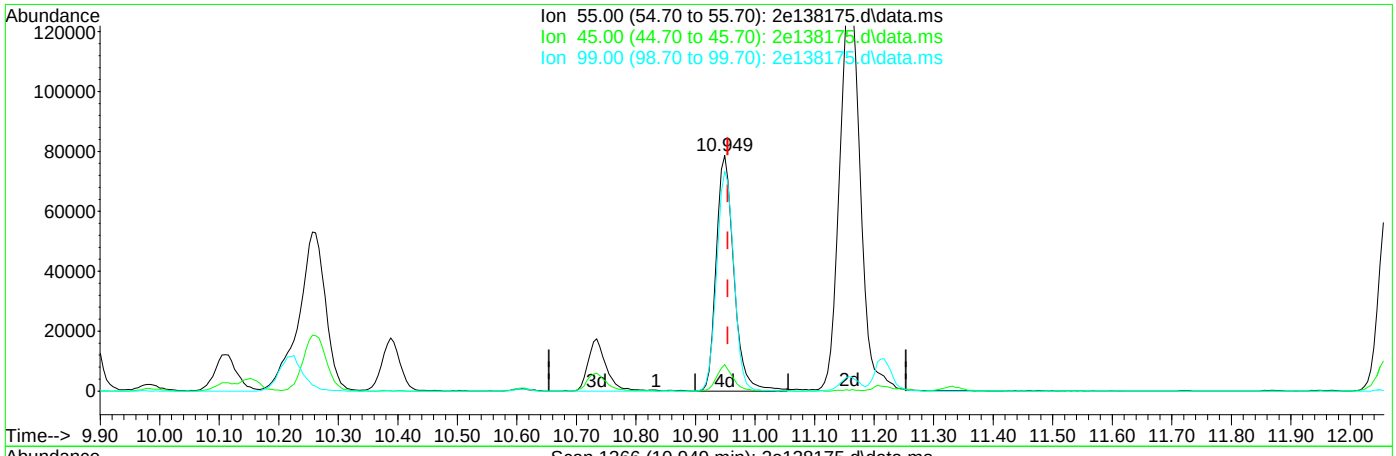
response 830

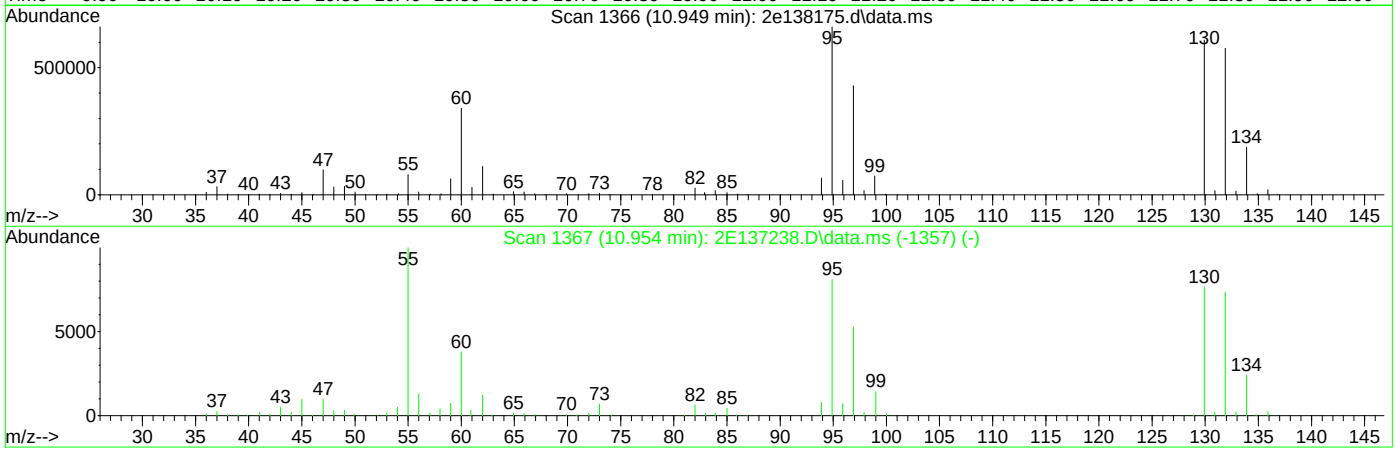
Ion	Exp%	Act%
55.00	100	100
45.00	9.60	0.00
99.00	14.30	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\11-10-17\v2e6027\
Data File : 2e138175.d
Acq On : 8 Nov 2017 9:16 pm
Operator : JessicaP
Sample : jc54532-1msd Inst : VOAMS2E
Misc : MS21833,V2E6027,5,,,,1
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Results File: M2E5986.RES
Quant Time: Nov 08 21:37:54 2017
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 11:57:35 2017
Response via : Initial Calibration





TIC: 2e138175.d\data.ms

(64) ethyl acrylate

10.949min (-0.005) 49.81ug/L m

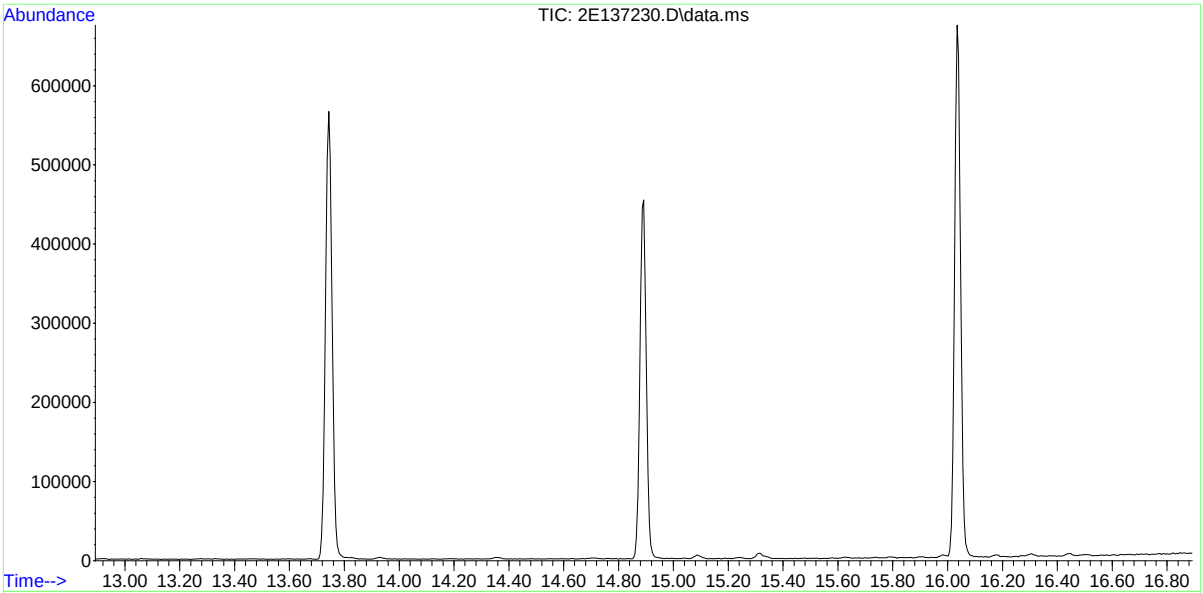
response 161939

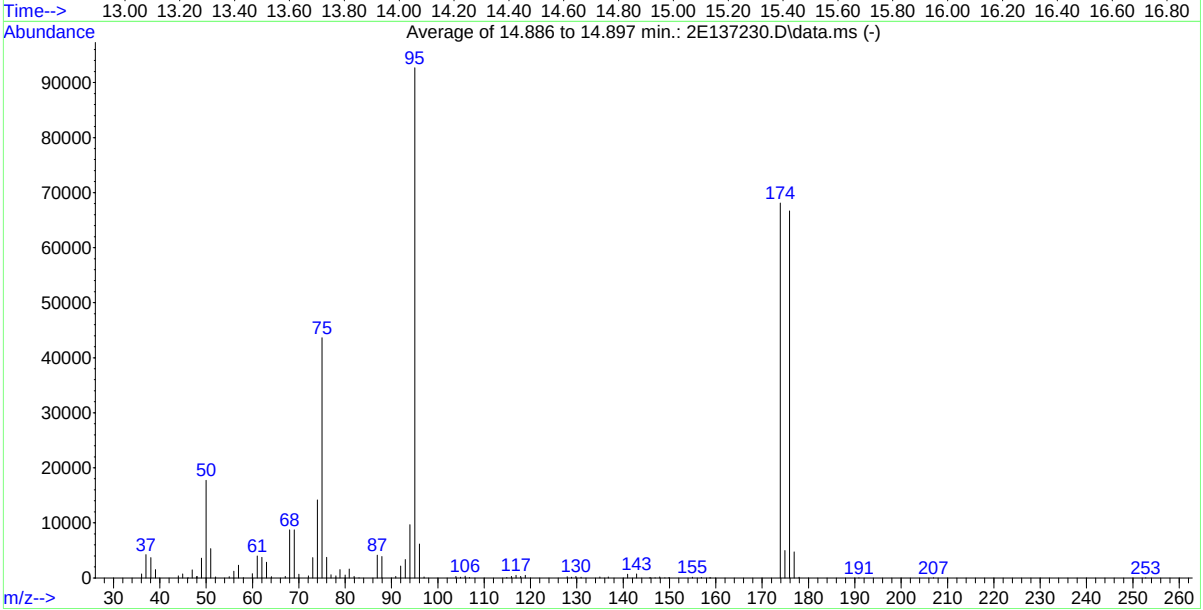
Ion	Exp%	Act%
55.00	100	100
45.00	9.60	11.23
99.00	14.30	93.21#
0.00	0.00	0.00

SW-846 Method 8260

Data File : C:\msdchem\1\data\2E\v2e5986final\2E137230.D Vial: 1
Acq On : 11 Oct 2017 5:25 pm Operator: JessicaP
Sample : bfb Inst : VOAMS2E
Misc : MS20739,V2E5986,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2E5986.M (RTE Integrator)
Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM





AutoFind: Scans 2117, 2118, 2119; Background Corrected with Scan 2108

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.1	17724	PASS
75	95	30	60	47.1	43629	PASS
95	95	100	100	100.0	92677	PASS
96	95	5	9	6.7	6172	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	73.5	68109	PASS
175	174	5	9	7.3	4965	PASS
176	174	95	101	97.9	66664	PASS
177	176	5	9	7.1	4708	PASS

2E137230.D M2E5986.M Thu Oct 12 11:44:58 2017 11

Average of 14.886 to 14.897 min.: 2E137230.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	732	50.00	17724	64.05	243	78.00	397
37.00	4235	51.00	5306	67.10	252	78.90	1529
38.05	3678	52.05	191	68.00	8712	80.00	517
39.05	1516	54.95	233	69.00	8704	80.90	1609
44.00	353	56.00	1211	70.00	666	81.95	297
44.95	733	57.00	2304	72.05	399	83.00	30
46.10	29	58.00	31	73.00	3670	86.95	4148
47.00	1476	59.95	783	74.00	14145	87.95	3869
47.90	226	61.00	3997	75.00	43629	90.90	269
48.05	291	62.00	3723	76.00	3758	92.00	2156
49.00	3586	63.00	2865	76.95	566	93.00	3340

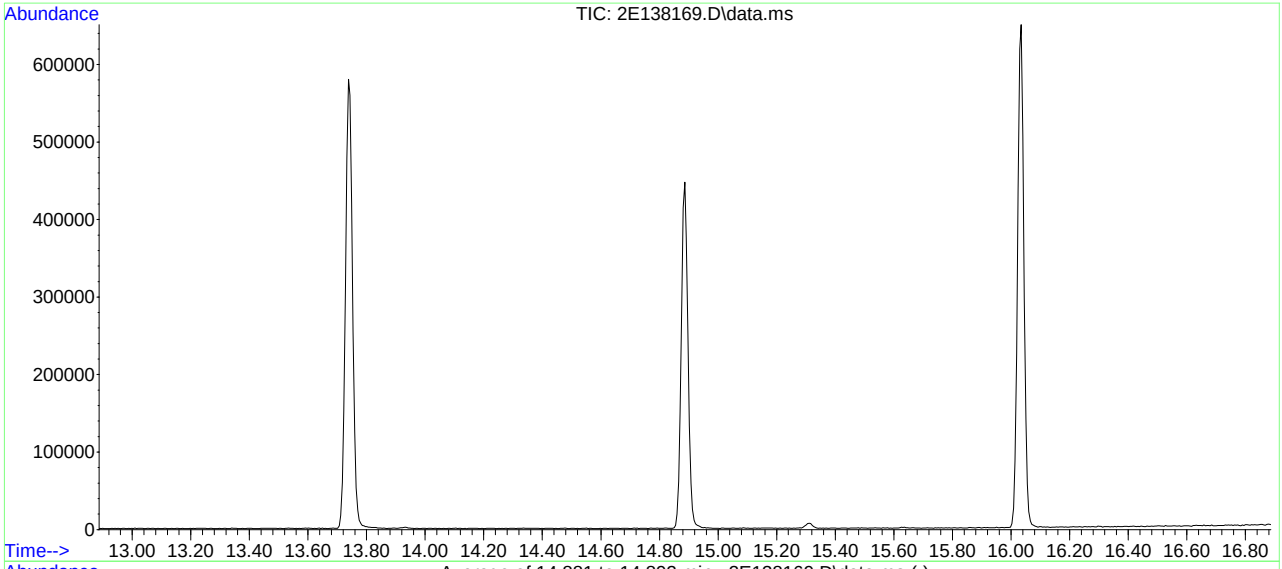
Average of 14.886 to 14.897 min.: 2E137230.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.00	9678	117.90	274	145.90	38	175.90	66664
95.00	92677	118.90	457	146.90	44	176.90	4708
96.00	6172	127.90	244	147.90	168	177.95	146
97.00	163	128.85	110	149.00	27	190.90	36
103.90	283	129.80	262	149.90	68	206.95	42
104.90	134	130.90	123	154.95	151	252.80	34
105.90	313	134.95	159	156.90	96		
106.85	70	136.80	161	158.70	27		
114.90	92	140.95	672	158.90	33		
115.85	259	142.90	728	173.90	68109		
116.90	492	145.70	38	174.90	4965		

SW-846 Method 8260

Data File : C:\msdchem\1\data\2E138169.D Vial: 23
Acq On : 8 Nov 2017 6:30 pm Operator: JessicaP
Sample : BFB Inst : VOAMS2E
Misc : MS21949,V2E6027,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2E5986.M (RTE Integrator)
Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM



AutoFind: Scans 2116, 2117, 2118; Background Corrected with Scan 2107

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.5	19293	PASS
75	95	30	60	51.2	45976	PASS
95	95	100	100	100.0	89861	PASS
96	95	5	9	6.7	6031	PASS
173	174	0.00	2	0.2	132	PASS
174	95	50	120	70.4	63259	PASS
175	174	5	9	7.1	4471	PASS
176	174	95	101	96.3	60939	PASS
177	176	5	9	6.6	3997	PASS

2E138169.D M2E5986.M Thu Nov 09 08:45:00 2017

Average of 14.881 to 14.892 min.: 2E138169.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	983	52.00	284	66.90	221	78.00	130
37.00	5046	55.00	271	68.00	9082	78.95	1830
38.00	4769	56.00	1151	69.00	8732	79.85	644
39.05	1659	57.00	2468	70.05	708	80.90	1848
44.00	227	58.05	74	71.95	595	81.85	470
45.00	807	59.95	794	72.95	3733	85.90	38
47.00	1307	61.00	4284	74.00	14325	86.95	3558
47.95	613	62.00	4299	75.00	45976	87.95	3529
49.05	4028	63.00	3046	76.00	3860	90.95	291
50.00	19293	64.05	338	77.00	520	92.00	2182
51.05	5793	64.95	85	77.80	283	93.00	3359

Average of 14.881 to 14.892 min.: 2E138169.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.00	9290	115.85	248	136.75	137	161.00	37
95.00	89861	116.85	494	140.95	600	171.80	58
96.00	6031	117.70	138	141.80	96	172.00	49
96.90	140	117.90	118	142.95	638	172.80	132
97.10	51	118.90	418	145.90	28	173.90	63259
103.95	328	127.85	276	146.95	78	174.95	4471
104.80	42	128.80	77	147.95	170	175.90	60939
105.90	261	129.00	76	150.00	28	176.90	3997
106.80	72	129.95	252	154.95	149	177.80	121
110.85	56	130.90	29	156.85	117	207.00	86
114.70	27	134.90	158	158.85	100	252.95	2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137231.D
Acq On : 11 Oct 2017 6:00 pm
Operator : JessicaP
Sample : ic5986-0.2
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 12 11:18:43 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

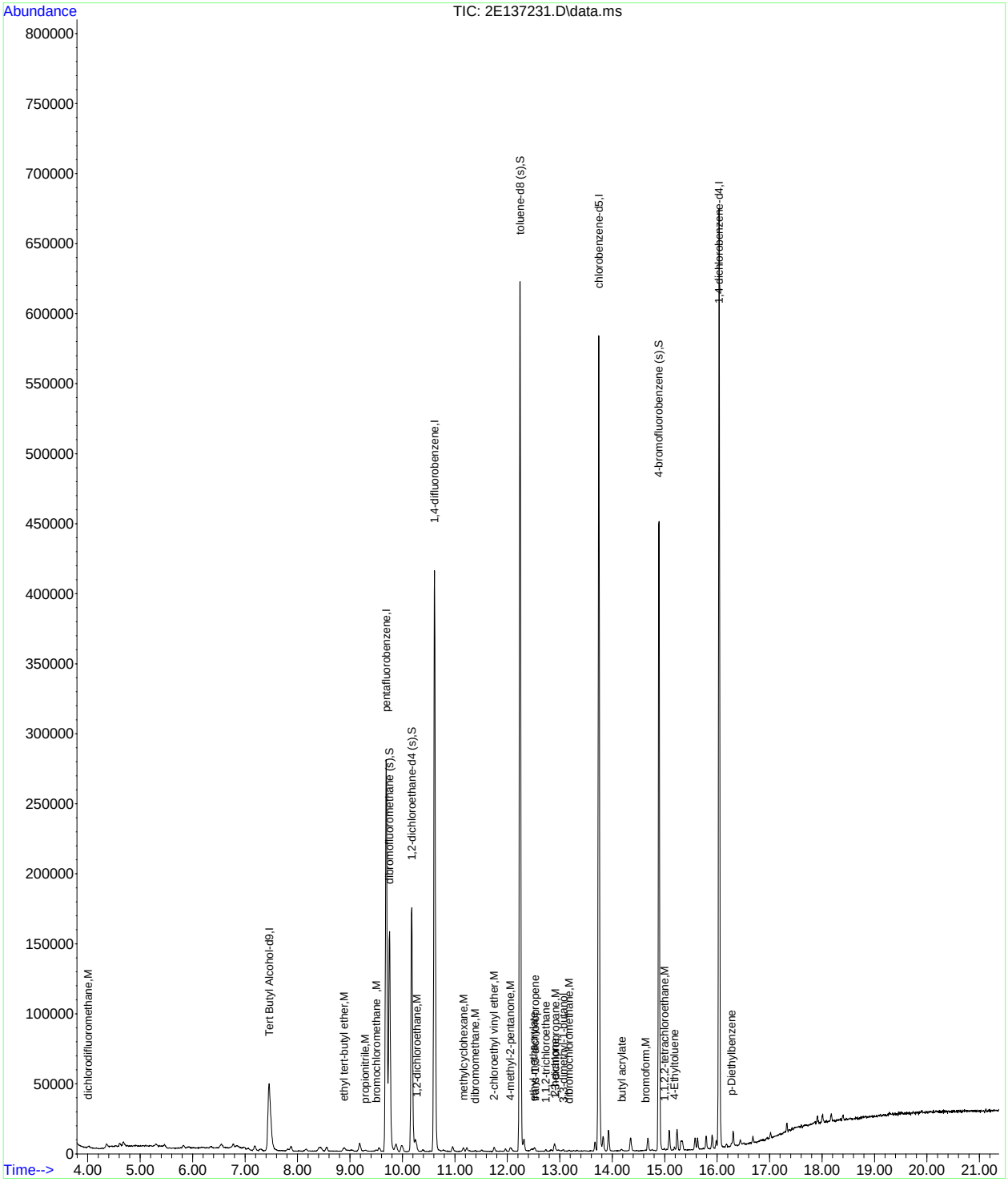
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.457	65	106035	500.00	ug/L	0.00
5) pentafluorobenzene	9.691	168	213697	50.00	ug/L	0.00
56) 1,4-difluorobenzene	10.613	114	354860	50.00	ug/L	0.00
77) chlorobenzene-d5	13.743	117	304371	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	16.035	152	157938	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.753	113	107842	50.03	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.06%			
57) 1,2-dichloroethane-d4 (s)	10.178	65	129423	49.76	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.52%			
78) toluene-d8 (s)	12.244	98	431175	50.19	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.38%			
102) 4-bromofluorobenzene (s)	14.886	95	161351	49.16	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.32%			
Target Compounds						Qvalue
7) dichlorodifluoromethane	4.007	85	787	0.25	ug/L #	47
32) ethyl tert-butyl ether	8.883	59	2612	0.29	ug/L	83
41) propionitrile	9.287	54	963	2.38	ug/L #	77
43) bromochloromethane	9.502	128	294	0.24	ug/L #	59
63) 1,2-dichloroethane	10.272	62	819	0.25	ug/L	90
67) 2-chloroethyl vinyl ether	11.746	63	1525	1.06	ug/L	91
70) methylcyclohexane	11.164	83	1159	0.24	ug/L	96
71) dibromomethane	11.384	93	293	0.20	ug/L #	59
75) 4-methyl-2-pentanone	12.055	58	895	0.92	ug/L #	82
80) ethyl methacrylate	12.501	69	687	0.22	ug/L #	65
81) trans-1,3-dichloropropene	12.532	75	984	0.27	ug/L #	69
82) 1,1,2-trichloroethane	12.731	83	400	0.23	ug/L #	74
84) 2-hexanone	12.904	58	751	0.78	ug/L	88
85) 1,3-dichloropropane	12.915	76	869	0.23	ug/L	72
87) 3,3-dimethyl-1-butanol	13.067	57	462	1.76	ug/L	82
88) dibromochloromethane	13.172	129	494	0.23	ug/L	89
97) butyl acrylate	14.179	55	1110	0.22	ug/L	85
98) bromoform	14.629	173	291	0.21	ug/L	79
104) 1,1,2,2-tetrachloroethane	14.991	83	666	0.22	ug/L	81
108) 4-Ethyltoluene	15.185	105	1506	0.40	ug/L	87
119) p-Diethylbenzene	16.271	119	1152	0.49	ug/L	91

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137231.D
Acq On : 11 Oct 2017 6:00 pm
Operator : JessicaP
Sample : ic5986-0.2
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 12 11:18:43 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137232.D
Acq On : 11 Oct 2017 6:27 pm
Operator : JessicaP
Sample : ic5986-0.5
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 12 11:19:29 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.462	65	105536	500.00	ug/L		0.00
5) pentafluorobenzene	9.696	168	219613	50.00	ug/L		0.00
56) 1,4-difluorobenzene	10.613	114	367687	50.00	ug/L		0.00
77) chlorobenzene-d5	13.743	117	317160	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.035	152	163012	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.753	113	111486	50.32	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.64%				
57) 1,2-dichloroethane-d4 (s)	10.178	65	132881	49.31	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.62%				
78) toluene-d8 (s)	12.244	98	443564	49.55	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.10%				
102) 4-bromofluorobenzene (s)	14.886	95	164802	48.65	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.30%				
Target Compounds							Qvalue
4) 1,4-dioxane	11.342	88	273	15.15	ug/L	#	7
6) chlorodifluoromethane	4.033	51	2202	0.49	ug/L		89
7) dichlorodifluoromethane	4.002	85	1643	0.52	ug/L		94
8) Freon 142B	4.290	65	2024	0.56	ug/L		84
10) chloromethane	4.358	50	3259	0.59	ug/L		99
11) vinyl chloride	4.615	62	2647	0.55	ug/L		88
12) bromomethane	5.302	94	1511	0.59	ug/L		77
13) chloroethane	5.486	64	1499	0.58	ug/L		96
14) trichlorofluoromethane	5.910	101	1940	0.55	ug/L		88
15) 1,3-butadiene	4.694	54	1699	0.55	ug/L		86
16) vinyl bromide	5.832	106	2384	0.67	ug/L		92
17) ethyl ether	6.351	74	1030	0.56	ug/L		84
18) 2-chloropropane	6.550	43	3125	0.58	ug/L		82
19) acrolein	6.618	56	465	0.61	ug/L		98
20) freon 113	6.744	151	722	0.61	ug/L	#	76
21) 1,1-dichloroethene	6.770	61	2206	0.51	ug/L		91
24) iodomethane	7.069	142	1769	0.50	ug/L		100
25) carbon disulfide	7.189	76	5471	0.56	ug/L		64
26) methylene chloride	7.504	84	1931	0.65	ug/L		94
28) methyl tert butyl ether	7.824	73	5055	0.68	ug/L		92
29) trans-1,2-dichloroethene	7.876	61	2224	0.53	ug/L		81
30) hexane	8.165	56	1107	0.50	ug/L	#	60
31) di-isopropyl ether	8.416	45	6182	0.56	ug/L		91
32) ethyl tert-butyl ether	8.883	59	5281	0.58	ug/L		93
33) 2-butanone	9.182	72	678	2.46	ug/L	#	36
34) 1,1-dichloroethane	8.453	63	2632	0.51	ug/L		92
35) chloroprene	8.558	53	2185	0.50	ug/L		92
36) acrylonitrile	7.855	53	578	0.51	ug/L		95
39) 2,2-dichloropropane	9.203	77	2413	0.66	ug/L		78
40) cis-1,2-dichloroethene	9.187	96	1726	0.57	ug/L	#	69
41) propionitrile	9.281	54	2297	5.53	ug/L		98
43) bromochloromethane	9.512	128	669	0.53	ug/L	#	70
45) chloroform	9.554	83	2738	0.57	ug/L		80
47) 1,1-dichloropropene	9.979	75	1713	0.46	ug/L		77
48) carbon tetrachloride	10.000	117	1558	0.51	ug/L		84
49) isopropyl acetate	10.162	87	205	0.36	ug/L	#	1
51) methacrylonitrile	9.460	67	465	0.43	ug/L	#	46
52) 1,1,1-trichloroethane	9.801	97	1964	0.55	ug/L		90
53) Cyclohexane	9.858	84	1912	0.53	ug/L	#	38
59) n-butyl alcohol	10.760	56	1737	27.77	ug/L		83
60) benzene	10.251	78	6252	0.55	ug/L		99
61) tert-amyl methyl ether	10.267	73	5765	0.64	ug/L		96
62) heptane	10.398	57	1021	0.44	ug/L		94
63) 1,2-dichloroethane	10.272	62	1774	0.52	ug/L		94
64) ethyl acrylate	10.975	55	1423	0.46	ug/L		73

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137232.D
Acq On : 11 Oct 2017 6:27 pm
Operator : JessicaP
Sample : ic5986-0.5
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 12 11:19:29 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

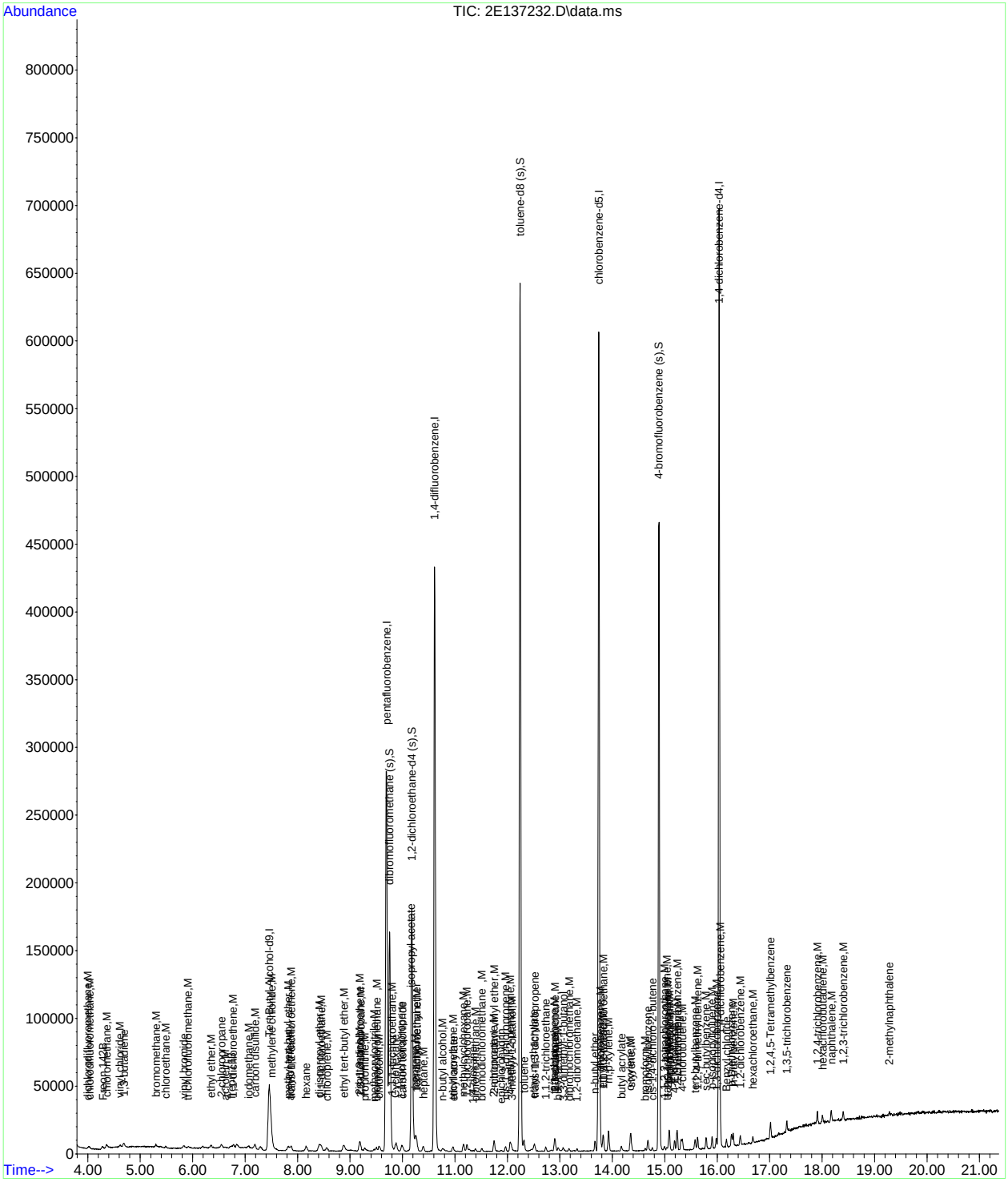
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
65) trichloroethene	10.964	95	1346	0.54	ug/L		88
66) 2-nitropropane	11.735	41	470	0.45	ug/L	#	27
67) 2-chloroethyl vinyl ether	11.751	63	3850	2.59	ug/L		92
69) 1,2-dichloropropane	11.227	63	1666	0.54	ug/L		89
70) methylcyclohexane	11.158	83	2417	0.48	ug/L		99
71) dibromomethane	11.389	93	788	0.52	ug/L		95
72) bromodichloromethane	11.510	83	1747	0.53	ug/L		97
73) epichlorohydrin	11.882	57	658	2.59	ug/L		85
74) cis-1,3-dichloropropene	11.966	75	2495	0.56	ug/L		94
75) 4-methyl-2-pentanone	12.055	58	2083	2.06	ug/L	#	83
76) 3-methyl-1-butanol	12.086	70	634	9.79	ug/L	#	68
79) toluene	12.317	92	3064	0.49	ug/L		98
80) ethyl methacrylate	12.501	69	1622	0.50	ug/L		91
81) trans-1,3-dichloropropene	12.522	75	2245	0.59	ug/L		97
82) 1,1,2-trichloroethane	12.731	83	911	0.49	ug/L		84
83) tetrachloroethene	12.894	164	869	0.49	ug/L		87
84) 2-hexanone	12.904	58	2063	2.06	ug/L		93
85) 1,3-dichloropropane	12.910	76	2126	0.54	ug/L		95
86) butyl acetate	12.967	56	1101	0.63	ug/L	#	75
87) 3,3-dimethyl-1-butanol	13.067	57	1267	4.63	ug/L		92
88) dibromochloromethane	13.177	129	1191	0.53	ug/L		90
89) 1,2-dibromoethane	13.324	107	1188	0.54	ug/L		84
90) n-butyl ether	13.670	57	6626	0.49	ug/L		94
91) chlorobenzene	13.775	112	3265	0.50	ug/L		98
92) 1,1,1,2-tetrachloroethane	13.832	131	1011	0.44	ug/L		84
93) ethylbenzene	13.822	91	5886	0.50	ug/L		94
94) m,p-xylene	13.927	106	4391	1.01	ug/L		81
95) o-xylene	14.341	91	5159	0.53	ug/L		94
96) styrene	14.357	104	3987	0.55	ug/L		94
97) butyl acrylate	14.173	55	2899	0.55	ug/L		88
98) bromoform	14.624	173	728	0.50	ug/L		79
99) isopropylbenzene	14.682	105	5443	0.49	ug/L		95
100) cis-1,4-dichloro-2-butene	14.766	75	616	1.10	ug/L		88
103) bromobenzene	15.086	156	1489	0.55	ug/L		90
104) 1,1,2,2-tetrachloroethane	14.996	83	1659	0.54	ug/L		86
105) trans-1,4-dichloro-2-b...	15.038	53	483	1.06	ug/L		80
106) 1,2,3-trichloropropane	15.065	110	347	0.50	ug/L		89
107) n-propylbenzene	15.091	91	6925	0.49	ug/L		97
108) 4-Ethyltoluene	15.190	105	4964	1.27	ug/L		92
109) 2-chlorotoluene	15.243	126	1343	0.51	ug/L	#	63
110) 4-chlorotoluene	15.337	91	4762	0.53	ug/L		96
111) 1,3,5-trimethylbenzene	15.238	105	4663	0.48	ug/L		93
112) tert-butylbenzene	15.584	119	3983	0.49	ug/L		93
113) 1,2,4-trimethylbenzene	15.626	105	4791	0.47	ug/L		96
114) sec-butylbenzene	15.788	105	6157	0.49	ug/L		96
115) 1,3-dichlorobenzene	15.987	146	3010	0.56	ug/L		99
116) p-isopropyltoluene	15.903	119	4945	0.48	ug/L		96
117) 1,4-dichlorobenzene	16.061	146	2874	0.53	ug/L		91
118) 1,2-dichlorobenzene	16.443	146	2855	0.54	ug/L		89
119) p-Diethylbenzene	16.270	119	3435	1.42	ug/L		98
120) n-butylbenzene	16.307	92	2763	0.47	ug/L		82
121) 1,2,4,5-Tetramethylben...	17.015	119	6374	1.29	ug/L		93
123) 1,3,5-trichlorobenzene	17.324	180	2433	0.54	ug/L		77
124) 1,2,4-trichlorobenzene	17.912	180	2253	0.55	ug/L		96
126) hexachlorobutadiene	18.011	225	1127	0.55	ug/L		81
127) naphthalene	18.179	128	5637	0.58	ug/L		97
128) 1,2,3-trichlorobenzene	18.404	180	2054	0.55	ug/L		95
129) hexachloroethane	16.679	201	675	0.46	ug/L		89
130) Benzyl chloride	16.176	91	3757	0.60	ug/L		97
131) 2-methylnaphthalene	19.280	142	1341	0.30	ug/L		93

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137232.D
Acq On : 11 Oct 2017 6:27 pm
Operator : JessicaP
Sample : ic5986-0.5
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 12 11:19:29 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137233.D
Acq On : 11 Oct 2017 6:55 pm
Operator : JessicaP
Sample : ic5986-1
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 13 17:13:24 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.462	65	106124	500.00	ug/L		0.00
5) pentafluorobenzene	9.696	168	213394	50.00	ug/L		0.00
56) 1,4-difluorobenzene	10.613	114	356865	50.00	ug/L		0.00
77) chlorobenzene-d5	13.743	117	306667	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.035	152	157157	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.753	113	109534	50.88	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.76%				
57) 1,2-dichloroethane-d4 (s)	10.178	65	129641	49.56	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.12%				
78) toluene-d8 (s)	12.244	98	434678	50.22	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.44%				
102) 4-bromofluorobenzene (s)	14.886	95	162886	49.88	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.76%				
Target Compounds							Qvalue
2) ethanol	6.188	45	5885	225.63	ug/L		100
3) tertiary butyl alcohol	7.578	59	1860	6.49	ug/L		78
4) 1,4-dioxane	11.347	88	667	36.81	ug/L		86
6) chlorodifluoromethane	4.028	51	4649	1.07	ug/L		91
7) dichlorodifluoromethane	4.007	85	2248	0.73	ug/L		83
8) Freon 142B	4.285	65	2725	0.77	ug/L		92
10) chloromethane	4.364	50	7828	1.45	ug/L		98
11) vinyl chloride	4.615	62	5905	1.26	ug/L		88
12) bromomethane	5.302	94	4043	1.62	ug/L		87
13) chloroethane	5.480	64	4091	1.64	ug/L		96
14) trichlorofluoromethane	5.931	101	3121	0.92	ug/L		88
15) 1,3-butadiene	4.689	54	2829	0.94	ug/L		95
16) vinyl bromide	5.826	106	5675	1.65	ug/L		93
17) ethyl ether	6.361	74	2241	1.26	ug/L		91
18) 2-chloropropane	6.545	43	7745	1.47	ug/L		96
19) acrolein	6.623	56	965	1.30	ug/L		82
20) freon 113	6.728	151	1034	0.90	ug/L	#	78
21) 1,1-dichloroethene	6.775	61	4882	1.17	ug/L		97
22) acetone	6.849	58	2440	6.08	ug/L	#	76
23) acetonitrile	7.294	41	6453	13.87	ug/L		92
24) iodomethane	7.064	142	5204	1.52	ug/L		93
25) carbon disulfide	7.190	76	12164	1.29	ug/L		94
26) methylene chloride	7.509	84	3931	1.36	ug/L		98
27) methyl acetate	7.300	43	3384	1.25	ug/L		88
28) methyl tert butyl ether	7.829	73	10073	1.39	ug/L		92
29) trans-1,2-dichloroethene	7.876	61	5784	1.41	ug/L		91
30) hexane	8.170	56	1541	0.71	ug/L	#	77
31) di-isopropyl ether	8.411	45	14248	1.32	ug/L		90
32) ethyl tert-butyl ether	8.878	59	12580	1.41	ug/L		96
33) 2-butanone	9.171	72	1284	4.79	ug/L	#	89
34) 1,1-dichloroethane	8.453	63	7078	1.41	ug/L		97
35) chloroprene	8.553	53	5516	1.29	ug/L		87
36) acrylonitrile	7.861	53	1318	1.20	ug/L	#	70
37) vinyl acetate	8.469	86	487	1.11	ug/L	#	1
38) ethyl acetate	9.192	45	673	1.59	ug/L	#	1
39) 2,2-dichloropropane	9.187	77	5659	1.59	ug/L		94
40) cis-1,2-dichloroethene	9.192	96	4304	1.47	ug/L		89
41) propionitrile	9.282	54	5326	13.20	ug/L		91
42) methyl acrylate	9.271	85	270	0.85	ug/L	#	36
43) bromochloromethane	9.502	128	1537	1.26	ug/L	#	83
45) chloroform	9.554	83	6304	1.36	ug/L		93
46) t-butyl formate	9.586	59	876	1.09	ug/L	#	76
47) 1,1-dichloropropene	9.979	75	4306	1.19	ug/L		98
48) carbon tetrachloride	10.000	117	3549	1.20	ug/L		91
49) isopropyl acetate	10.162	87	536	0.96	ug/L	#	57

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137233.D
Acq On : 11 Oct 2017 6:55 pm
Operator : JessicaP
Sample : ic5986-1
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 13 17:13:24 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
51) methacrylonitrile	9.455	67	1029	0.99	ug/L		90
52) 1,1,1-trichloroethane	9.806	97	4832	1.40	ug/L		96
53) Cyclohexane	9.869	84	4110	1.17	ug/L	#	88
54) iso-butyl alcohol	9.989	43	1691	13.43	ug/L		86
58) 2,2,4-trimethylpentane	10.225	57	8023	0.83	ug/L		91
59) n-butyl alcohol	10.765	56	3962	65.27	ug/L		94
60) benzene	10.246	78	15041	1.37	ug/L		98
61) tert-amyl methyl ether	10.262	73	11477	1.32	ug/L		94
62) heptane	10.398	57	1691	0.75	ug/L		92
63) 1,2-dichloroethane	10.267	62	4419	1.34	ug/L		97
64) ethyl acrylate	10.970	55	3548	1.18	ug/L		95
65) trichloroethene	10.959	95	3334	1.38	ug/L		93
66) 2-nitropropane	11.741	41	999	0.98	ug/L	#	70
67) 2-chloroethyl vinyl ether	11.746	63	8105	5.63	ug/L		99
68) methyl methacrylate	11.232	100	570	1.05	ug/L		94
69) 1,2-dichloropropane	11.227	63	3981	1.34	ug/L		96
70) methylcyclohexane	11.164	83	3903	0.79	ug/L		94
71) dibromomethane	11.395	93	1711	1.17	ug/L		91
72) bromodichloromethane	11.515	83	4095	1.27	ug/L		92
73) epichlorohydrin	11.887	57	1621	6.56	ug/L		93
74) cis-1,3-dichloropropene	11.961	75	5588	1.30	ug/L		100
75) 4-methyl-2-pentanone	12.055	58	4588	4.68	ug/L		99
76) 3-methyl-1-butanol	12.081	70	1341	21.34	ug/L	#	63
79) toluene	12.317	92	8121	1.33	ug/L		97
80) ethyl methacrylate	12.506	69	4012	1.28	ug/L		92
81) trans-1,3-dichloropropene	12.522	75	4530	1.23	ug/L		91
82) 1,1,2-trichloroethane	12.731	83	2222	1.24	ug/L		88
83) tetrachloroethene	12.894	164	2047	1.20	ug/L		98
84) 2-hexanone	12.899	58	4621	4.77	ug/L		96
85) 1,3-dichloropropane	12.910	76	4813	1.27	ug/L		97
86) butyl acetate	12.967	56	2108	1.25	ug/L	#	81
87) 3,3-dimethyl-1-butanol	13.062	57	2841	10.73	ug/L		89
88) dibromochloromethane	13.177	129	2719	1.25	ug/L		94
89) 1,2-dibromoethane	13.329	107	2548	1.20	ug/L		96
90) n-butyl ether	13.670	57	17813	1.38	ug/L		100
91) chlorobenzene	13.775	112	8596	1.36	ug/L		82
92) 1,1,1,2-tetrachloroethane	13.833	131	3050	1.38	ug/L		95
93) ethylbenzene	13.822	91	15742	1.38	ug/L		99
94) m,p-xylene	13.927	106	11233	2.68	ug/L		92
95) o-xylene	14.346	91	12763	1.36	ug/L		99
96) styrene	14.362	104	9110	1.30	ug/L		99
97) butyl acrylate	14.168	55	6417	1.25	ug/L		100
98) bromoform	14.635	173	1648	1.17	ug/L		83
99) isopropylbenzene	14.677	105	14659	1.36	ug/L		98
100) cis-1,4-dichloro-2-butene	14.766	75	1319	2.44	ug/L		89
103) bromobenzene	15.086	156	3392	1.31	ug/L		91
104) 1,1,2,2-tetrachloroethane	14.996	83	3382	1.14	ug/L		99
105) trans-1,4-dichloro-2-b...	15.033	53	951	2.17	ug/L		79
106) 1,2,3-trichloropropane	15.075	110	774	1.15	ug/L		70
107) n-propylbenzene	15.086	91	18093	1.32	ug/L		100
108) 4-Ethyltoluene	15.185	105	9739	2.58	ug/L		95
109) 2-chlorotoluene	15.238	126	3383	1.32	ug/L		98
110) 4-chlorotoluene	15.337	91	11630	1.34	ug/L		98
111) 1,3,5-trimethylbenzene	15.232	105	12825	1.38	ug/L		96
112) tert-butylbenzene	15.584	119	10010	1.27	ug/L		96
113) 1,2,4-trimethylbenzene	15.626	105	13324	1.36	ug/L		97
114) sec-butylbenzene	15.788	105	14847	1.22	ug/L		96
115) 1,3-dichlorobenzene	15.982	146	7095	1.36	ug/L		96
116) p-isopropyltoluene	15.909	119	13214	1.33	ug/L		98
117) 1,4-dichlorobenzene	16.061	146	7026	1.33	ug/L		97
118) 1,2-dichlorobenzene	16.444	146	6523	1.28	ug/L		96
119) p-Diethylbenzene	16.276	119	5990	2.57	ug/L		97
120) n-butylbenzene	16.307	92	7225	1.29	ug/L		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137233.D
Acq On : 11 Oct 2017 6:55 pm
Operator : JessicaP
Sample : ic5986-1
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 13 17:13:24 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

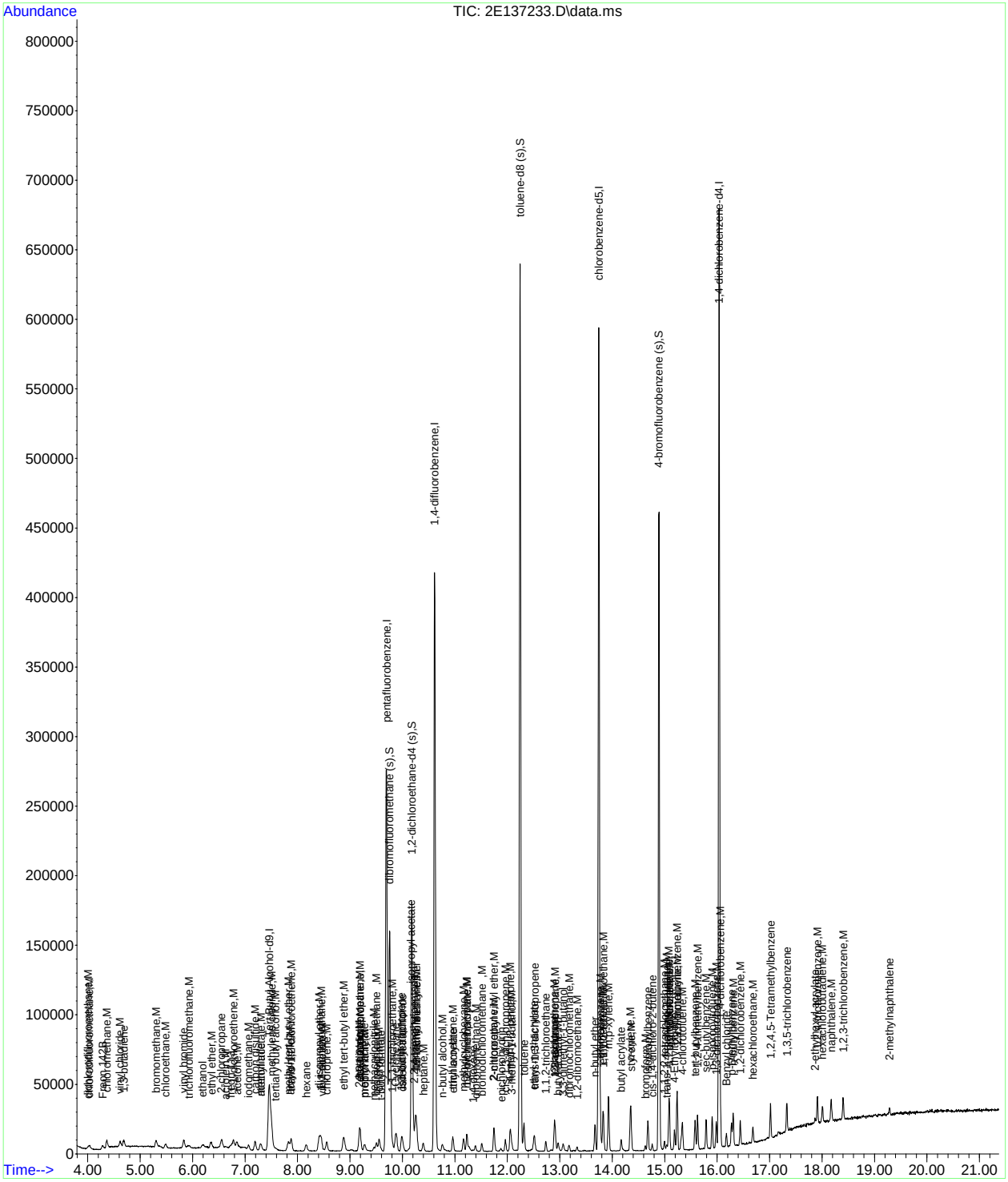
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
121) 1,2,4,5-Tetramethylben...	17.020	119	12619	2.65	ug/L	96
123) 1,3,5-trichlorobenzene	17.330	180	6074	1.40	ug/L	98
124) 1,2,4-trichlorobenzene	17.912	180	5304	1.35	ug/L	92
125) 2-ethylhexyl acrylate	17.864	70	687	0.30	ug/L	91
126) hexachlorobutadiene	18.006	225	2136	1.09	ug/L	94
127) naphthalene	18.174	128	11038	1.17	ug/L	99
128) 1,2,3-trichlorobenzene	18.404	180	4638	1.30	ug/L	96
129) hexachloroethane	16.679	201	1862	1.31	ug/L	86
130) Benzyl chloride	16.176	91	7382	1.22	ug/L	97
131) 2-methylnaphthalene	19.285	142	2357	0.54	ug/L	92

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137233.D
Acq On : 11 Oct 2017 6:55 pm
Operator : JessicaP
Sample : ic5986-1
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 13 17:13:24 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137234.D
Acq On : 11 Oct 2017 7:23 pm
Operator : JessicaP
Sample : ic5986-2
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 12 10:31:41 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.457	65	104649	500.00	ug/L		0.00
5) pentafluorobenzene	9.691	168	201256	50.00	ug/L		0.00
56) 1,4-difluorobenzene	10.613	114	341330	50.00	ug/L		0.00
77) chlorobenzene-d5	13.743	117	292975	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.035	152	151326	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.753	113	104977	51.71	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.42%				
57) 1,2-dichloroethane-d4 (s)	10.178	65	126854	50.70	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.40%				
78) toluene-d8 (s)	12.244	98	416002	50.31	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.62%				
102) 4-bromofluorobenzene (s)	14.886	95	154969	49.28	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.56%				
Target Compounds							Qvalue
2) ethanol	6.199	45	8251	320.81	ug/L		95
3) tertiary butyl alcohol	7.583	59	2965	10.50	ug/L		93
4) 1,4-dioxane	11.337	88	950	53.16	ug/L		80
6) chlorodifluoromethane	4.023	51	8675	2.12	ug/L		95
7) dichlorodifluoromethane	3.997	85	6780	2.33	ug/L		90
8) Freon 142B	4.274	65	7349	2.21	ug/L		91
9) Freon 114	4.280	135	3230	4.51	ug/L		89
10) chloromethane	4.358	50	10666	2.09	ug/L		99
11) vinyl chloride	4.610	62	9208	2.09	ug/L		94
12) bromomethane	5.297	94	5067	2.15	ug/L		95
13) chloroethane	5.475	64	5745	2.44	ug/L		98
14) trichlorofluoromethane	5.921	101	7719	2.40	ug/L		92
15) 1,3-butadiene	4.678	54	6710	2.37	ug/L		91
16) vinyl bromide	5.826	106	8091	2.50	ug/L		96
17) ethyl ether	6.346	74	3400	2.02	ug/L		94
18) 2-chloropropane	6.550	43	13180	2.66	ug/L		96
19) acrolein	6.623	56	1279	1.83	ug/L		96
20) freon 113	6.728	151	3061	2.81	ug/L		92
21) 1,1-dichloroethene	6.781	61	9013	2.29	ug/L		96
22) acetone	6.838	58	3154	8.33	ug/L		94
23) acetonitrile	7.289	41	9934	22.64	ug/L		88
24) iodomethane	7.059	142	7515	2.33	ug/L		98
25) carbon disulfide	7.184	76	19790	2.22	ug/L		95
26) methylene chloride	7.504	84	5969	2.19	ug/L		89
27) methyl acetate	7.305	43	4977	1.95	ug/L		94
28) methyl tert butyl ether	7.819	73	15643	2.28	ug/L		99
29) trans-1,2-dichloroethene	7.871	61	8803	2.27	ug/L		97
30) hexane	8.160	56	4012	1.97	ug/L		94
31) di-isopropyl ether	8.406	45	21744	2.14	ug/L		83
32) ethyl tert-butyl ether	8.878	59	18507	2.20	ug/L		97
33) 2-butanone	9.161	72	2259	8.93	ug/L	#	53
34) 1,1-dichloroethane	8.448	63	10260	2.16	ug/L		96
35) chloroprene	8.553	53	8944	2.21	ug/L		95
36) acrylonitrile	7.850	53	2094	2.02	ug/L		89
37) vinyl acetate	8.448	86	829	2.00	ug/L	#	1
38) ethyl acetate	9.182	45	935	2.35	ug/L	#	1
39) 2,2-dichloropropane	9.187	77	8620	2.57	ug/L		91
40) cis-1,2-dichloroethene	9.182	96	5867	2.12	ug/L		89
41) propionitrile	9.271	54	7837	20.59	ug/L		96
42) methyl acrylate	9.276	85	470	1.58	ug/L	#	40
43) bromochloromethane	9.502	128	2352	2.04	ug/L		89
44) tetrahydrofuran	9.539	72	629	1.98	ug/L	#	55
45) chloroform	9.554	83	9410	2.16	ug/L		97
46) t-butyl formate	9.575	59	1414	1.87	ug/L	#	85
47) 1,1-dichloropropene	9.974	75	7401	2.16	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137234.D
Acq On : 11 Oct 2017 7:23 pm
Operator : JessicaP
Sample : ic5986-2
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 12 10:31:41 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
48)	carbon tetrachloride	10.000	117	6291	2.25	ug/L		99
49)	isopropyl acetate	10.168	87	896	1.70	ug/L	#	70
51)	methacrylonitrile	9.449	67	1838	1.88	ug/L		82
52)	1,1,1-trichloroethane	9.801	97	7763	2.38	ug/L		95
53)	Cyclohexane	9.864	84	7712	2.33	ug/L	#	78
54)	iso-butyl alcohol	9.995	43	2509	21.12	ug/L		90
55)	Tert Amyl Alcohol	10.110	73	1631	6.35	ug/L	#	79
58)	2,2,4-trimethylpentane	10.225	57	21909	2.38	ug/L		98
59)	n-butyl alcohol	10.750	56	5993	103.22	ug/L		98
60)	benzene	10.246	78	22605	2.15	ug/L		97
61)	tert-amyl methyl ether	10.262	73	17405	2.09	ug/L		97
62)	heptane	10.393	57	4124	1.90	ug/L		91
63)	1,2-dichloroethane	10.267	62	6399	2.03	ug/L		98
64)	ethyl acrylate	10.965	55	5569	1.94	ug/L		98
65)	trichloroethene	10.959	95	4985	2.16	ug/L		95
66)	2-nitropropane	11.735	41	1867	1.91	ug/L	#	36
67)	2-chloroethyl vinyl ether	11.746	63	13077	9.49	ug/L		97
68)	methyl methacrylate	11.232	100	1025	1.97	ug/L	#	91
69)	1,2-dichloropropane	11.227	63	5975	2.10	ug/L		98
70)	methylcyclohexane	11.164	83	10569	2.24	ug/L		97
71)	dibromomethane	11.384	93	2913	2.08	ug/L		93
72)	bromodichloromethane	11.510	83	6332	2.05	ug/L		98
73)	epichlorohydrin	11.882	57	2400	10.16	ug/L		94
74)	cis-1,3-dichloropropene	11.961	75	8500	2.07	ug/L		98
75)	4-methyl-2-pentanone	12.060	58	7243	7.72	ug/L		99
76)	3-methyl-1-butanol	12.071	70	2378	39.56	ug/L		86
79)	toluene	12.317	92	12092	2.08	ug/L		96
80)	ethyl methacrylate	12.501	69	5995	2.00	ug/L		95
81)	trans-1,3-dichloropropene	12.522	75	7020	2.00	ug/L		95
82)	1,1,2-trichloroethane	12.732	83	3619	2.12	ug/L		98
83)	tetrachloroethene	12.894	164	3397	2.09	ug/L		86
84)	2-hexanone	12.894	58	7141	7.71	ug/L	#	88
85)	1,3-dichloropropane	12.915	76	7165	1.98	ug/L		98
86)	butyl acetate	12.967	56	3367	2.10	ug/L	#	79
87)	3,3-dimethyl-1-butanol	13.062	57	4399	17.40	ug/L		97
88)	dibromochloromethane	13.177	129	4113	1.98	ug/L		97
89)	1,2-dibromoethane	13.329	107	4006	1.98	ug/L		91
90)	n-butyl ether	13.670	57	26148	2.11	ug/L		98
91)	chlorobenzene	13.775	112	12502	2.07	ug/L		89
92)	1,1,1,2-tetrachloroethane	13.833	131	4467	2.11	ug/L		93
93)	ethylbenzene	13.822	91	23833	2.19	ug/L		95
94)	m,p-xylene	13.927	106	16942	4.23	ug/L		93
95)	o-xylene	14.346	91	20176	2.25	ug/L		99
96)	styrene	14.357	104	13551	2.02	ug/L		97
97)	butyl acrylate	14.168	55	10176	2.08	ug/L		97
98)	bromoform	14.630	173	2791	2.07	ug/L		94
99)	isopropylbenzene	14.682	105	22273	2.16	ug/L		100
100)	cis-1,4-dichloro-2-butene	14.761	75	1878	3.64	ug/L		93
103)	bromobenzene	15.086	156	5245	2.10	ug/L		92
104)	1,1,2,2-tetrachloroethane	14.991	83	5512	1.93	ug/L		89
105)	trans-1,4-dichloro-2-b...	15.033	53	1504	3.57	ug/L		91
106)	1,2,3-trichloropropane	15.070	110	1363	2.10	ug/L		91
107)	n-propylbenzene	15.086	91	27888	2.12	ug/L		98
108)	4-Ethyltoluene	15.185	105	17912	4.93	ug/L		99
109)	2-chlorotoluene	15.238	126	5059	2.05	ug/L		94
110)	4-chlorotoluene	15.337	91	17069	2.04	ug/L		98
111)	1,3,5-trimethylbenzene	15.232	105	18463	2.07	ug/L		98
112)	tert-butylbenzene	15.578	119	15066	1.99	ug/L		96
113)	1,2,4-trimethylbenzene	15.626	105	18627	1.98	ug/L		99
114)	sec-butylbenzene	15.788	105	24573	2.09	ug/L		95
115)	1,3-dichlorobenzene	15.982	146	9855	1.97	ug/L		96
116)	p-isopropyltoluene	15.904	119	19794	2.07	ug/L		97
117)	1,4-dichlorobenzene	16.061	146	10159	2.00	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137234.D
Acq On : 11 Oct 2017 7:23 pm
Operator : JessicaP
Sample : ic5986-2
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 12 10:31:41 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

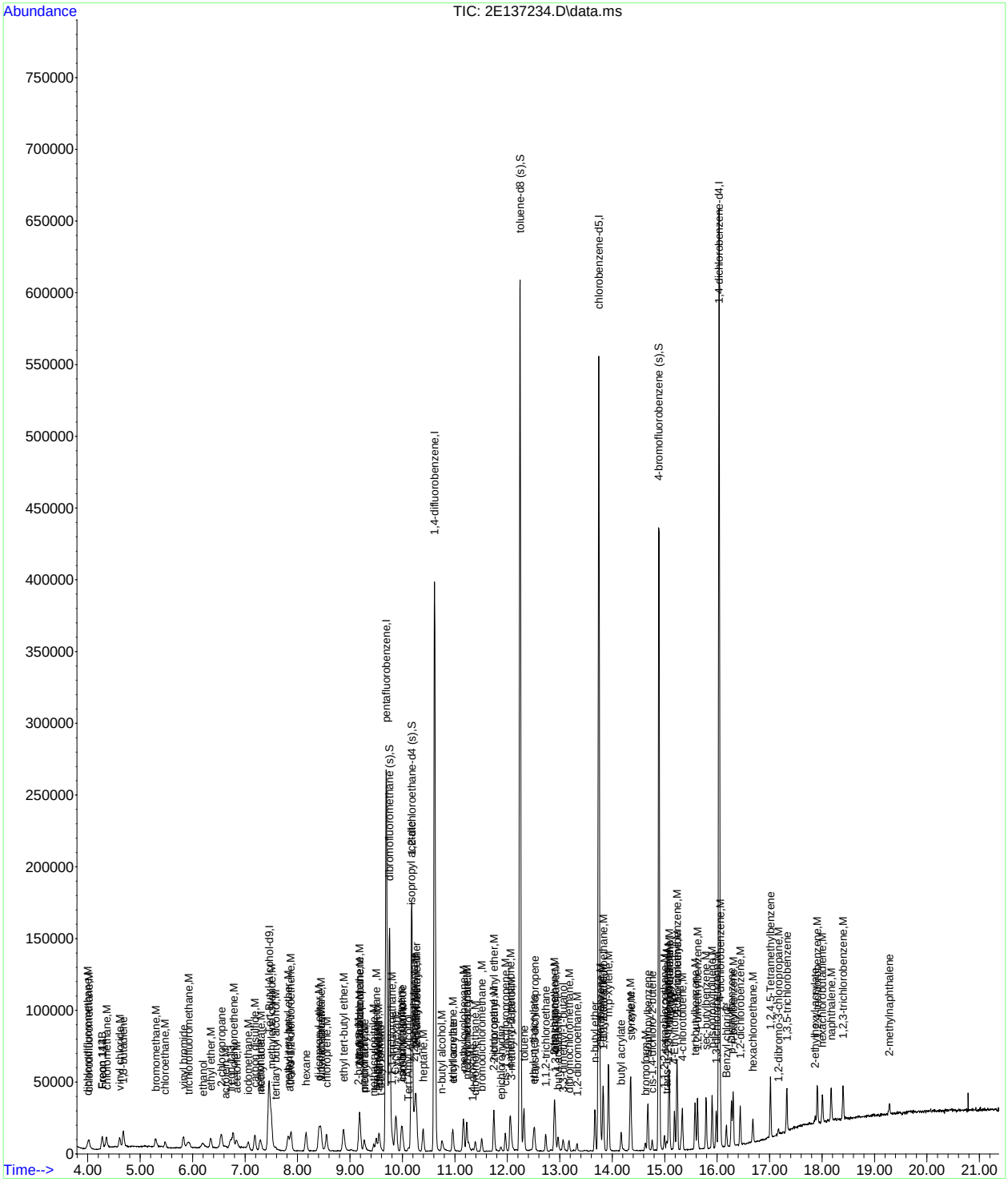
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) 1,2-dichlorobenzene	16.438	146	10313	2.10	ug/L	99
119) p-Diethylbenzene	16.271	119	10287	4.58	ug/L	97
120) n-butylbenzene	16.307	92	11168	2.07	ug/L	98
121) 1,2,4,5-Tetramethylben...	17.015	119	20281	4.42	ug/L	95
122) 1,2-dibromo-3-chloropr...	17.167	75	1971	3.16	ug/L	82
123) 1,3,5-trichlorobenzene	17.330	180	8313	1.99	ug/L	100
124) 1,2,4-trichlorobenzene	17.906	180	7496	1.99	ug/L	87
125) 2-ethylhexyl acrylate	17.870	70	1161	0.53	ug/L	97
126) hexachlorobutadiene	18.006	225	3943	2.09	ug/L	99
127) naphthalene	18.174	128	16871	1.86	ug/L	97
128) 1,2,3-trichlorobenzene	18.399	180	6580	1.91	ug/L	87
129) hexachloroethane	16.680	201	2913	2.13	ug/L	94
130) Benzyl chloride	16.176	91	11095	1.90	ug/L	95
131) 2-methylnaphthalene	19.280	142	3466	0.83	ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137234.D
Acq On : 11 Oct 2017 7:23 pm
Operator : JessicaP
Sample : ic5986-2
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 12 10:31:41 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137235.D
Acq On : 11 Oct 2017 7:51 pm
Operator : JessicaP
Sample : ic5986-5
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 12 10:15:11 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.457	65	111474	500.00	ug/L		0.00
5) pentafluorobenzene	9.690	168	214468	50.00	ug/L		0.00
56) 1,4-difluorobenzene	10.613	114	356998	50.00	ug/L		0.00
77) chlorobenzene-d5	13.743	117	308303	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.035	152	161093	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.753	113	109953	50.82	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.64%				
57) 1,2-dichloroethane-d4 (s)	10.178	65	130694	49.95	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.90%				
78) toluene-d8 (s)	12.244	98	434330	49.91	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.82%				
102) 4-bromofluorobenzene (s)	14.886	95	162172	48.45	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.90%				
Target Compounds							Qvalue
2) ethanol	6.178	45	23560	859.95	ug/L		86
3) tertiary butyl alcohol	7.578	59	9108	30.27	ug/L		94
4) 1,4-dioxane	11.332	88	3412	179.25	ug/L		86
6) chlorodifluoromethane	4.018	51	24716	5.66	ug/L		95
7) dichlorodifluoromethane	4.002	85	21953	7.08	ug/L		96
8) Freon 142B	4.274	65	24783	7.00	ug/L		92
9) Freon 114	4.274	135	9221	12.09	ug/L		90
10) chloromethane	4.358	50	31360	5.77	ug/L		94
11) vinyl chloride	4.610	62	29593	6.30	ug/L		97
12) bromomethane	5.292	94	15455	6.16	ug/L		94
13) chloroethane	5.475	64	16580	6.61	ug/L		97
14) trichlorofluoromethane	5.921	101	25021	7.30	ug/L		93
15) 1,3-butadiene	4.678	54	21060	6.97	ug/L		92
16) vinyl bromide	5.826	106	25335	7.34	ug/L		97
17) ethyl ether	6.340	74	9953	5.55	ug/L		99
18) 2-chloropropane	6.545	43	36709	6.94	ug/L		97
19) acrolein	6.623	56	4013	5.37	ug/L		97
20) freon 113	6.728	151	9597	8.27	ug/L		91
21) 1,1-dichloroethene	6.770	61	26095	6.22	ug/L		96
22) acetone	6.838	58	8673	21.49	ug/L		89
23) acetonitrile	7.284	41	26408	56.49	ug/L		94
24) iodomethane	7.058	142	21501	6.26	ug/L		97
25) carbon disulfide	7.184	76	55896	5.89	ug/L		95
26) methylene chloride	7.504	84	17055	5.87	ug/L		97
27) methyl acetate	7.300	43	14772	5.43	ug/L		93
28) methyl tert butyl ether	7.819	73	46674	6.39	ug/L		99
29) trans-1,2-dichloroethene	7.876	61	24874	6.02	ug/L		97
30) hexane	8.165	56	12109	5.57	ug/L		99
31) di-isopropyl ether	8.411	45	64356	5.94	ug/L		95
32) ethyl tert-butyl ether	8.878	59	57970	6.47	ug/L		99
33) 2-butanone	9.161	72	7086	26.29	ug/L		93
34) 1,1-dichloroethane	8.448	63	30856	6.11	ug/L		97
35) chloroprene	8.553	53	25259	5.87	ug/L		98
36) acrylonitrile	7.855	53	6571	5.93	ug/L		90
37) vinyl acetate	8.437	86	2469	5.59	ug/L	#	45
38) ethyl acetate	9.166	45	2571	6.06	ug/L	#	72
39) 2,2-dichloropropane	9.187	77	24290	6.80	ug/L		95
40) cis-1,2-dichloroethene	9.187	96	16929	5.74	ug/L		95
41) propionitrile	9.266	54	25497	62.85	ug/L		91
42) methyl acrylate	9.250	85	1943	6.12	ug/L	#	49
43) bromochloromethane	9.502	128	7247	5.89	ug/L		95
44) tetrahydrofuran	9.544	72	2109	6.22	ug/L	#	81
45) chloroform	9.554	83	26979	5.80	ug/L		94
46) t-butyl formate	9.575	59	4291	5.32	ug/L		90
47) 1,1-dichloropropene	9.979	75	21502	5.90	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137235.D
Acq On : 11 Oct 2017 7:51 pm
Operator : JessicaP
Sample : ic5986-5
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 12 10:15:11 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
48) carbon tetrachloride	10.000	117	18431	6.19	ug/L		94
49) isopropyl acetate	10.162	87	2937	5.24	ug/L	#	79
51) methacrylonitrile	9.449	67	6238	5.97	ug/L		98
52) 1,1,1-trichloroethane	9.801	97	23096	6.65	ug/L		99
53) Cyclohexane	9.864	84	25770	7.30	ug/L	#	85
54) iso-butyl alcohol	9.989	43	7508	59.31	ug/L		92
55) Tert Amyl Alcohol	10.115	73	3910	14.28	ug/L		95
58) 2,2,4-trimethylpentane	10.220	57	66312	6.88	ug/L		97
59) n-butyl alcohol	10.744	56	20505	337.68	ug/L		96
60) benzene	10.246	78	64572	5.86	ug/L		99
61) tert-amyl methyl ether	10.267	73	51463	5.92	ug/L		95
62) heptane	10.393	57	12324	5.44	ug/L		98
63) 1,2-dichloroethane	10.267	62	19500	5.91	ug/L		96
64) ethyl acrylate	10.959	55	17674	5.88	ug/L		99
65) trichloroethene	10.954	95	14493	6.00	ug/L		97
66) 2-nitropropane	11.735	41	5258	5.15	ug/L	#	85
67) 2-chloroethyl vinyl ether	11.741	63	41145	28.55	ug/L		98
68) methyl methacrylate	11.227	100	3239	5.94	ug/L	#	81
69) 1,2-dichloropropane	11.227	63	17733	5.96	ug/L		96
70) methylcyclohexane	11.164	83	30619	6.20	ug/L		96
71) dibromomethane	11.389	93	8653	5.91	ug/L		96
72) bromodichloromethane	11.515	83	18443	5.71	ug/L		97
73) epichlorohydrin	11.877	57	7856	31.79	ug/L		99
74) cis-1,3-dichloropropene	11.961	75	24867	5.78	ug/L		95
75) 4-methyl-2-pentanone	12.050	58	23484	23.94	ug/L		97
76) 3-methyl-1-butanol	12.071	70	8190	130.26	ug/L		96
79) toluene	12.317	92	35133	5.74	ug/L		97
80) ethyl methacrylate	12.496	69	19119	6.06	ug/L		96
81) trans-1,3-dichloropropene	12.516	75	21734	5.89	ug/L		94
82) 1,1,2-trichloroethane	12.731	83	10549	5.88	ug/L		97
83) tetrachloroethene	12.889	164	9983	5.83	ug/L		87
84) 2-hexanone	12.894	58	24950	25.61	ug/L		94
85) 1,3-dichloropropane	12.915	76	22065	5.79	ug/L		99
86) butyl acetate	12.962	56	10683	6.32	ug/L		90
87) 3,3-dimethyl-1-butanol	13.057	57	15343	57.66	ug/L		90
88) dibromochloromethane	13.177	129	12166	5.58	ug/L		94
89) 1,2-dibromoethane	13.329	107	11880	5.58	ug/L		95
90) n-butyl ether	13.670	57	77254	5.93	ug/L		100
91) chlorobenzene	13.775	112	36572	5.74	ug/L		97
92) 1,1,1,2-tetrachloroethane	13.832	131	13429	6.02	ug/L		91
93) ethylbenzene	13.822	91	66226	5.79	ug/L		99
94) m,p-xylene	13.927	106	48673	11.56	ug/L		96
95) o-xylene	14.341	91	55673	5.91	ug/L		98
96) styrene	14.357	104	42166	5.98	ug/L		99
97) butyl acrylate	14.163	55	31219	6.06	ug/L		97
98) bromoform	14.629	173	8060	5.68	ug/L		98
99) isopropylbenzene	14.677	105	64816	5.96	ug/L		99
100) cis-1,4-dichloro-2-butene	14.761	75	6101	11.23	ug/L		97
103) bromobenzene	15.086	156	15000	5.65	ug/L		97
104) 1,1,2,2-tetrachloroethane	14.996	83	17125	5.63	ug/L		94
105) trans-1,4-dichloro-2-b...	15.033	53	4475	9.97	ug/L		94
106) 1,2,3-trichloropropane	15.070	110	4206	6.09	ug/L		93
107) n-propylbenzene	15.086	91	79600	5.68	ug/L		99
108) 4-Ethyltoluene	15.185	105	56436	14.58	ug/L		97
109) 2-chlorotoluene	15.238	126	15236	5.80	ug/L		93
110) 4-chlorotoluene	15.337	91	48595	5.46	ug/L		100
111) 1,3,5-trimethylbenzene	15.232	105	54704	5.75	ug/L		98
112) tert-butylbenzene	15.578	119	45438	5.64	ug/L		99
113) 1,2,4-trimethylbenzene	15.626	105	57333	5.73	ug/L		98
114) sec-butylbenzene	15.788	105	71769	5.75	ug/L		98
115) 1,3-dichlorobenzene	15.982	146	29434	5.52	ug/L		99
116) p-isopropyltoluene	15.903	119	58895	5.79	ug/L		98
117) 1,4-dichlorobenzene	16.061	146	30728	5.68	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137235.D
Acq On : 11 Oct 2017 7:51 pm
Operator : JessicaP
Sample : ic5986-5
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 12 10:15:11 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

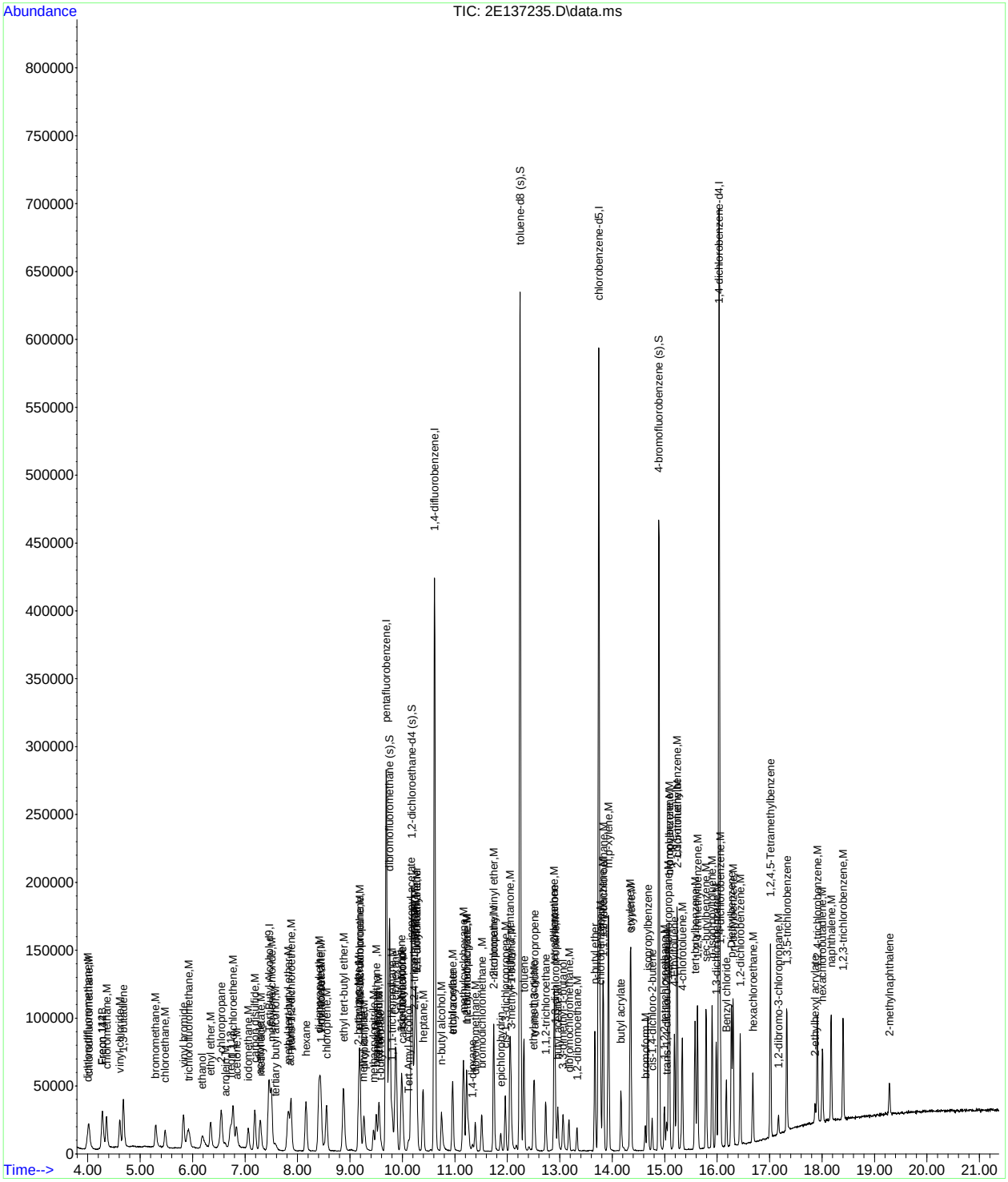
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) 1,2-dichlorobenzene	16.438	146	29602	5.67	ug/L	100
119) p-Diethylbenzene	16.270	119	34400	14.37	ug/L	99
120) n-butylbenzene	16.302	92	33644	5.85	ug/L	98
121) 1,2,4,5-Tetramethylben...	17.015	119	69603	14.25	ug/L	99
122) 1,2-dibromo-3-chloropr...	17.167	75	3783	5.69	ug/L	94
123) 1,3,5-trichlorobenzene	17.330	180	26065	5.86	ug/L	97
124) 1,2,4-trichlorobenzene	17.912	180	23209	5.78	ug/L	99
125) 2-ethylhexyl acrylate	17.864	70	3597	1.54	ug/L	99
126) hexachlorobutadiene	18.006	225	11027	5.49	ug/L	96
127) naphthalene	18.174	128	54132	5.61	ug/L	98
128) 1,2,3-trichlorobenzene	18.399	180	22015	6.00	ug/L	98
129) hexachloroethane	16.685	201	8699	5.97	ug/L	96
130) Benzyl chloride	16.176	91	33876	5.44	ug/L	97
131) 2-methylnaphthalene	19.285	142	11208	2.51	ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137235.D
Acq On : 11 Oct 2017 7:51 pm
Operator : JessicaP
Sample : ic5986-5
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 12 10:15:11 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137236.D
Acq On : 11 Oct 2017 8:18 pm
Operator : JessicaP
Sample : ic5986-10
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 12 10:13:36 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.467	65	111497	500.00	ug/L		0.01
5) pentafluorobenzene	9.696	168	211820	50.00	ug/L		0.00
56) 1,4-difluorobenzene	10.613	114	357204	50.00	ug/L		0.00
77) chlorobenzene-d5	13.743	117	304795	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.035	152	157385	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.759	113	109180	51.09	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.18%				
57) 1,2-dichloroethane-d4 (s)	10.178	65	131721	50.31	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.62%				
78) toluene-d8 (s)	12.244	98	433245	50.36	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.72%				
102) 4-bromofluorobenzene (s)	14.886	95	159912	48.90	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.80%				
Target Compounds							Qvalue
2) ethanol	6.188	45	41627	1519.09	ug/L		95
3) tertiary butyl alcohol	7.583	59	16001	53.16	ug/L		94
4) 1,4-dioxane	11.342	88	6392	335.74	ug/L		92
6) chlorodifluoromethane	4.028	51	46817	10.85	ug/L		97
7) dichlorodifluoromethane	4.012	85	35574	11.62	ug/L		98
8) Freon 142B	4.290	65	38958	11.13	ug/L		96
9) Freon 114	4.290	135	17121	22.73	ug/L	#	81
10) chloromethane	4.369	50	48625	9.06	ug/L		99
11) vinyl chloride	4.620	62	46540	10.04	ug/L		99
12) bromomethane	5.307	94	24072	9.72	ug/L		98
13) chloroethane	5.486	64	26754	10.81	ug/L		98
14) trichlorofluoromethane	5.926	101	37824	11.17	ug/L		98
15) 1,3-butadiene	4.689	54	33961	11.39	ug/L		94
16) vinyl bromide	5.832	106	39133	11.48	ug/L		95
17) ethyl ether	6.345	74	17292	9.76	ug/L		96
18) 2-chloropropane	6.550	43	67605	12.94	ug/L		98
19) acrolein	6.623	56	6586	8.93	ug/L		90
20) freon 113	6.739	151	17787	15.51	ug/L		97
21) 1,1-dichloroethene	6.781	61	48628	11.74	ug/L		100
22) acetone	6.838	58	12961	32.51	ug/L		97
23) acetonitrile	7.289	41	45059	97.59	ug/L		98
24) iodomethane	7.064	142	38903	11.47	ug/L		98
25) carbon disulfide	7.190	76	103723	11.07	ug/L		97
26) methylene chloride	7.509	84	30628	10.68	ug/L		98
27) methyl acetate	7.300	43	24366	9.07	ug/L		98
28) methyl tert butyl ether	7.829	73	82670	11.45	ug/L		98
29) trans-1,2-dichloroethene	7.876	61	46111	11.30	ug/L		97
30) hexane	8.165	56	22982	10.71	ug/L		95
31) di-isopropyl ether	8.416	45	117551	10.99	ug/L		94
32) ethyl tert-butyl ether	8.878	59	103718	11.72	ug/L		96
33) 2-butanone	9.161	72	12206	45.86	ug/L	#	88
34) 1,1-dichloroethane	8.453	63	56843	11.39	ug/L		96
35) chloroprene	8.553	53	48628	11.44	ug/L		95
36) acrylonitrile	7.850	53	11650	10.65	ug/L		97
37) vinyl acetate	8.432	86	4999	11.46	ug/L	#	63
38) ethyl acetate	9.171	45	4192	10.00	ug/L	#	47
39) 2,2-dichloropropane	9.187	77	44840	12.72	ug/L		97
40) cis-1,2-dichloroethene	9.192	96	30728	10.56	ug/L		94
41) propionitrile	9.271	54	43345	108.18	ug/L		96
42) methyl acrylate	9.255	85	3533	11.26	ug/L	#	59
43) bromochloromethane	9.507	128	13425	11.05	ug/L		91
44) tetrahydrofuran	9.549	72	3508	10.48	ug/L	#	78
45) chloroform	9.554	83	47966	10.44	ug/L		98
46) t-butyl formate	9.586	59	7748	9.73	ug/L		87
47) 1,1-dichloropropene	9.979	75	40214	11.17	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137236.D
Acq On : 11 Oct 2017 8:18 pm
Operator : JessicaP
Sample : ic5986-10
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 12 10:13:36 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
48) carbon tetrachloride	10.005	117	34812	11.83	ug/L		94
49) isopropyl acetate	10.157	87	5287	9.55	ug/L	#	91
51) methacrylonitrile	9.449	67	11062	10.73	ug/L		98
52) 1,1,1-trichloroethane	9.806	97	42103	12.28	ug/L		97
53) Cyclohexane	9.869	84	43905	12.59	ug/L		97
54) iso-butyl alcohol	9.989	43	12545	100.34	ug/L		98
55) Tert Amyl Alcohol	10.115	73	7482	27.66	ug/L		93
58) 2,2,4-trimethylpentane	10.220	57	124822	12.95	ug/L		98
59) n-butyl alcohol	10.744	56	37677	620.11	ug/L		98
60) benzene	10.246	78	119014	10.80	ug/L		99
61) tert-amyl methyl ether	10.267	73	92601	10.65	ug/L		98
62) heptane	10.393	57	23085	10.19	ug/L		95
63) 1,2-dichloroethane	10.272	62	35055	10.63	ug/L		99
64) ethyl acrylate	10.959	55	31017	10.31	ug/L		98
65) trichloroethene	10.954	95	26458	10.94	ug/L		95
66) 2-nitropropane	11.735	41	9231	9.03	ug/L	#	86
67) 2-chloroethyl vinyl ether	11.741	63	73523	50.98	ug/L		99
68) methyl methacrylate	11.216	100	5952	10.90	ug/L	#	93
69) 1,2-dichloropropane	11.227	63	32590	10.96	ug/L		97
70) methylcyclohexane	11.164	83	57833	11.70	ug/L		99
71) dibromomethane	11.389	93	15641	10.68	ug/L		96
72) bromodichloromethane	11.510	83	34567	10.70	ug/L		95
73) epichlorohydrin	11.872	57	13121	53.07	ug/L		99
74) cis-1,3-dichloropropene	11.961	75	46661	10.83	ug/L		100
75) 4-methyl-2-pentanone	12.050	58	40537	41.29	ug/L		98
76) 3-methyl-1-butanol	12.066	70	14301	227.33	ug/L		91
79) toluene	12.317	92	64239	10.61	ug/L		100
80) ethyl methacrylate	12.496	69	33784	10.83	ug/L		95
81) trans-1,3-dichloropropene	12.516	75	39123	10.72	ug/L		99
82) 1,1,2-trichloroethane	12.731	83	18924	10.66	ug/L		98
83) tetrachloroethene	12.894	164	18590	10.99	ug/L		99
84) 2-hexanone	12.894	58	39445	40.95	ug/L		96
85) 1,3-dichloropropane	12.910	76	39684	10.53	ug/L		100
86) butyl acetate	12.957	56	17883	10.70	ug/L		92
87) 3,3-dimethyl-1-butanol	13.062	57	25982	98.77	ug/L		96
88) dibromochloromethane	13.172	129	23126	10.73	ug/L		97
89) 1,2-dibromoethane	13.324	107	21223	10.08	ug/L		100
90) n-butyl ether	13.670	57	140122	10.88	ug/L		98
91) chlorobenzene	13.775	112	66758	10.60	ug/L		97
92) 1,1,1,2-tetrachloroethane	13.832	131	24116	10.94	ug/L		98
93) ethylbenzene	13.822	91	125342	11.09	ug/L		99
94) m,p-xylene	13.927	106	91277	21.92	ug/L		100
95) o-xylene	14.346	91	102098	10.96	ug/L		97
96) styrene	14.357	104	75418	10.83	ug/L		99
97) butyl acrylate	14.163	55	54121	10.62	ug/L		99
98) bromoform	14.629	173	14420	10.28	ug/L		94
99) isopropylbenzene	14.677	105	120511	11.21	ug/L		99
100) cis-1,4-dichloro-2-butene	14.761	75	10683	19.90	ug/L		95
103) bromobenzene	15.086	156	26822	10.34	ug/L		98
104) 1,1,2,2-tetrachloroethane	14.996	83	29462	9.91	ug/L		99
105) trans-1,4-dichloro-2-b...	15.033	53	7901	18.01	ug/L		94
106) 1,2,3-trichloropropane	15.070	110	7464	11.06	ug/L		97
107) n-propylbenzene	15.086	91	147879	10.81	ug/L		99
108) 4-Ethyltoluene	15.185	105	85776	22.68	ug/L		99
109) 2-chlorotoluene	15.238	126	27308	10.64	ug/L		94
110) 4-chlorotoluene	15.337	91	87736	10.09	ug/L		100
111) 1,3,5-trimethylbenzene	15.232	105	103233	11.11	ug/L		99
112) tert-butylbenzene	15.578	119	85478	10.86	ug/L		98
113) 1,2,4-trimethylbenzene	15.626	105	104737	10.71	ug/L		98
114) sec-butylbenzene	15.788	105	134071	10.99	ug/L		100
115) 1,3-dichlorobenzene	15.982	146	53937	10.35	ug/L		99
116) p-isopropyltoluene	15.903	119	108100	10.87	ug/L		99
117) 1,4-dichlorobenzene	16.061	146	54182	10.26	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137236.D
Acq On : 11 Oct 2017 8:18 pm
Operator : JessicaP
Sample : ic5986-10
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 12 10:13:36 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

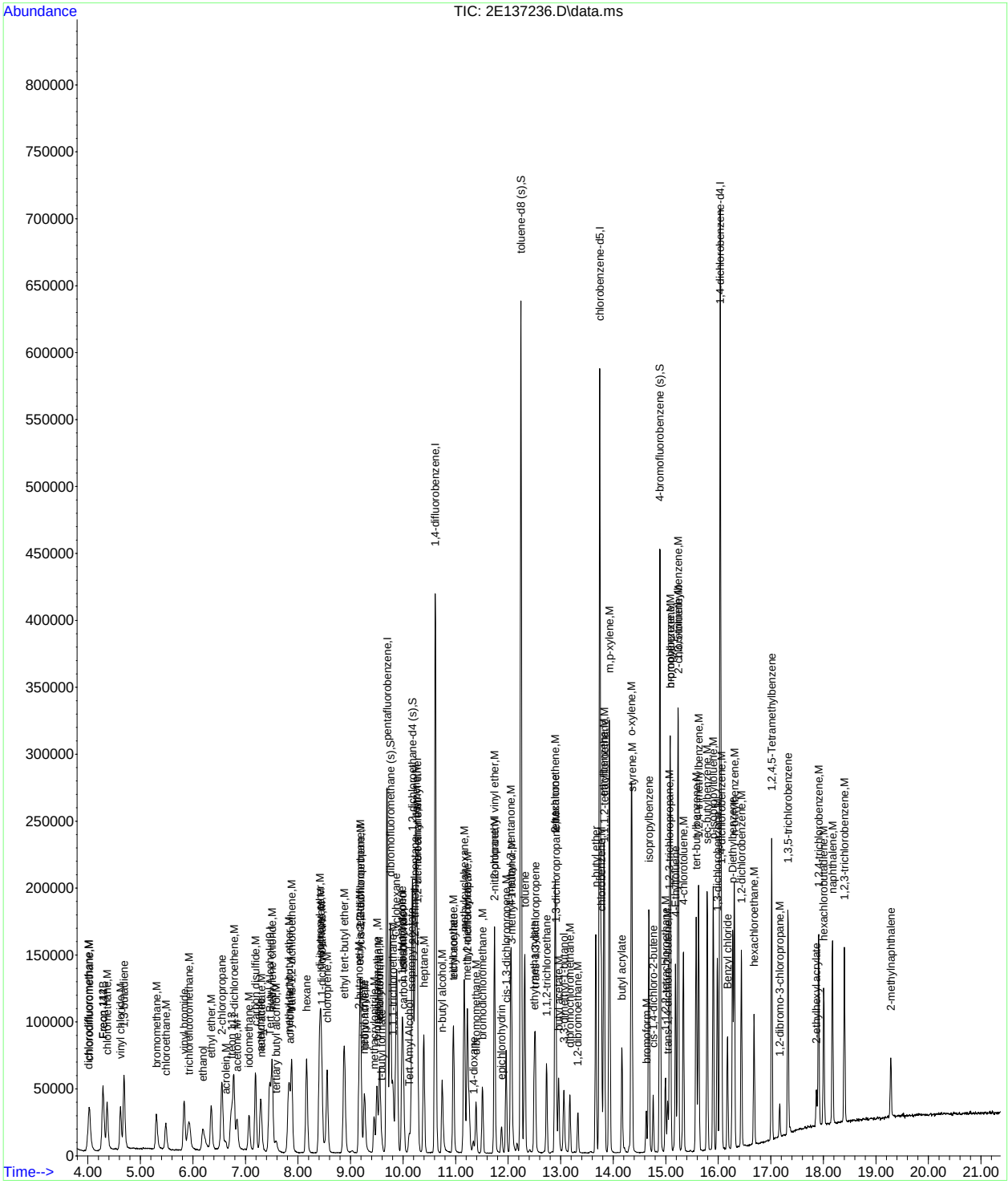
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) 1,2-dichlorobenzene	16.438	146	53444	10.48	ug/L	99
119) p-Diethylbenzene	16.270	119	53244	22.77	ug/L	99
120) n-butylbenzene	16.307	92	62047	11.04	ug/L	96
121) 1,2,4,5-Tetramethylben...	17.015	119	106338	22.29	ug/L	99
122) 1,2-dibromo-3-chloropr...	17.167	75	6124	9.43	ug/L	94
123) 1,3,5-trichlorobenzene	17.324	180	46659	10.74	ug/L	96
124) 1,2,4-trichlorobenzene	17.912	180	41315	10.52	ug/L	99
125) 2-ethylhexyl acrylate	17.864	70	6958	3.04	ug/L	97
126) hexachlorobutadiene	18.006	225	20365	10.38	ug/L	97
127) naphthalene	18.174	128	95363	10.12	ug/L	100
128) 1,2,3-trichlorobenzene	18.399	180	38227	10.67	ug/L	99
129) hexachloroethane	16.679	201	16225	11.39	ug/L	97
130) Benzyl chloride	16.176	91	58335	9.59	ug/L	98
131) 2-methylnaphthalene	19.285	142	21516	4.93	ug/L	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137236.D
Acq On : 11 Oct 2017 8:18 pm
Operator : JessicaP
Sample : ic5986-10
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 12 10:13:36 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137237.D
Acq On : 11 Oct 2017 8:46 pm
Operator : JessicaP
Sample : ic5986-20
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 12 10:11:31 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.457	65	107357	500.00	ug/L	0.00
5) pentafluorobenzene	9.696	168	201994	50.00	ug/L	0.00
56) 1,4-difluorobenzene	10.613	114	342090	50.00	ug/L	0.00
77) chlorobenzene-d5	13.743	117	295894	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	16.035	152	150564	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.753	113	103957	51.02	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.04%			
57) 1,2-dichloroethane-d4 (s)	10.178	65	127222	50.74	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.48%			
78) toluene-d8 (s)	12.244	98	418110	50.06	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.12%			
102) 4-bromofluorobenzene (s)	14.886	95	155163	49.59	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.18%			
Target Compounds						Qvalue
2) ethanol	6.188	45	78379	2970.58	ug/L	100
3) tertiary butyl alcohol	7.578	59	30458	105.10	ug/L	100
4) 1,4-dioxane	11.337	88	12454	679.38	ug/L	100
6) chlorodifluoromethane	4.028	51	89661	21.80	ug/L	100
7) dichlorodifluoromethane	4.007	85	73641	25.22	ug/L	100
8) Freon 142B	4.290	65	83407	25.00	ug/L	100
9) Freon 114	4.285	135	35922	50.00	ug/L	100
10) chloromethane	4.369	50	103807	20.27	ug/L	100
11) vinyl chloride	4.620	62	99383	22.48	ug/L	100
12) bromomethane	5.302	94	50538	21.40	ug/L	100
13) chloroethane	5.480	64	54414	23.05	ug/L	100
14) trichlorofluoromethane	5.926	101	79401	24.60	ug/L	100
15) 1,3-butadiene	4.689	54	71019	24.97	ug/L	100
16) vinyl bromide	5.826	106	81801	25.17	ug/L	100
17) ethyl ether	6.351	74	33582	19.87	ug/L	100
18) 2-chloropropane	6.550	43	127843	25.66	ug/L	100
19) acrolein	6.618	56	12588	17.90	ug/L	100
20) freon 113	6.733	151	32673	29.88	ug/L	100
21) 1,1-dichloroethene	6.775	61	92686	23.46	ug/L	100
22) acetone	6.838	58	25078	65.97	ug/L	100
23) acetonitrile	7.284	41	87351	198.39	ug/L	100
24) iodomethane	7.069	142	72493	22.42	ug/L	100
25) carbon disulfide	7.190	76	195116	21.84	ug/L	100
26) methylene chloride	7.509	84	58665	21.46	ug/L	100
27) methyl acetate	7.300	43	47039	18.36	ug/L	100
28) methyl tert butyl ether	7.824	73	158912	23.09	ug/L	100
29) trans-1,2-dichloroethene	7.876	61	88113	22.65	ug/L	100
30) hexane	8.165	56	43588	21.30	ug/L	100
31) di-isopropyl ether	8.411	45	229516	22.51	ug/L	100
32) ethyl tert-butyl ether	8.878	59	198996	23.58	ug/L	100
33) 2-butanone	9.156	72	23854	93.98	ug/L	100
34) 1,1-dichloroethane	8.448	63	107794	22.65	ug/L	100
35) chloroprene	8.553	53	93261	23.01	ug/L	100
36) acrylonitrile	7.850	53	22673	21.74	ug/L	100
37) vinyl acetate	8.432	86	9521	22.90	ug/L	100
38) ethyl acetate	9.166	45	8323	20.82	ug/L	100
39) 2,2-dichloropropane	9.182	77	82834	24.63	ug/L	100
40) cis-1,2-dichloroethene	9.187	96	59177	21.32	ug/L	100
41) propionitrile	9.266	54	85383	223.47	ug/L	100
42) methyl acrylate	9.250	85	6356	21.25	ug/L	100
43) bromochloromethane	9.502	128	25262	21.81	ug/L	100
44) tetrahydrofuran	9.538	72	6510	20.40	ug/L	100
45) chloroform	9.554	83	92440	21.10	ug/L	100
46) t-butyl formate	9.586	59	15403	20.27	ug/L	100
47) 1,1-dichloropropene	9.979	75	76205	22.20	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137237.D
Acq On : 11 Oct 2017 8:46 pm
Operator : JessicaP
Sample : ic5986-20
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 12 10:11:31 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) carbon tetrachloride	10.005	117	65131	23.21	ug/L	100
49) isopropyl acetate	10.162	87	10431	19.77	ug/L	100
51) methacrylonitrile	9.444	67	21574	21.94	ug/L	100
52) 1,1,1-trichloroethane	9.801	97	79443	24.29	ug/L	100
53) Cyclohexane	9.869	84	87780	26.39	ug/L	100
54) iso-butyl alcohol	9.989	43	23501	197.11	ug/L	100
55) Tert Amyl Alcohol	10.115	73	12593	48.82	ug/L	100
58) 2,2,4-trimethylpentane	10.220	57	238663	25.85	ug/L	100
59) n-butyl alcohol	10.739	56	73366	1260.86	ug/L	100
60) benzene	10.246	78	225850	21.40	ug/L	100
61) tert-amyl methyl ether	10.267	73	175325	21.05	ug/L	100
62) heptane	10.393	57	45252	20.85	ug/L	100
63) 1,2-dichloroethane	10.267	62	66992	21.21	ug/L	100
64) ethyl acrylate	10.954	55	63508	22.04	ug/L	100
65) trichloroethene	10.959	95	50635	21.86	ug/L	100
66) 2-nitropropane	11.735	41	17508	17.89	ug/L	100
67) 2-chloroethyl vinyl ether	11.741	63	144122	104.35	ug/L	100
68) methyl methacrylate	11.216	100	11753	22.48	ug/L	100
69) 1,2-dichloropropane	11.227	63	63134	22.16	ug/L	100
70) methylcyclohexane	11.164	83	110459	23.34	ug/L	100
71) dibromomethane	11.389	93	29827	21.27	ug/L	100
72) bromodichloromethane	11.510	83	67465	21.81	ug/L	100
73) epichlorohydrin	11.872	57	26734	112.91	ug/L	100
74) cis-1,3-dichloropropene	11.961	75	90710	21.99	ug/L	100
75) 4-methyl-2-pentanone	12.050	58	79180	84.22	ug/L	100
76) 3-methyl-1-butanol	12.071	70	27268	452.60	ug/L	100
79) toluene	12.317	92	123899	21.08	ug/L	100
80) ethyl methacrylate	12.496	69	66130	21.83	ug/L	100
81) trans-1,3-dichloropropene	12.517	75	75872	21.41	ug/L	100
82) 1,1,2-trichloroethane	12.731	83	36239	21.03	ug/L	100
83) tetrachloroethene	12.894	164	35289	21.49	ug/L	100
84) 2-hexanone	12.889	58	77276	82.64	ug/L	100
85) 1,3-dichloropropane	12.910	76	76536	20.92	ug/L	100
86) butyl acetate	12.957	56	34154	21.05	ug/L	100
87) 3,3-dimethyl-1-butanol	13.062	57	50121	196.26	ug/L	100
88) dibromochloromethane	13.172	129	43560	20.81	ug/L	100
89) 1,2-dibromoethane	13.324	107	41881	20.49	ug/L	100
90) n-butyl ether	13.670	57	272219	21.78	ug/L	100
91) chlorobenzene	13.775	112	128960	21.09	ug/L	100
92) 1,1,1,2-tetrachloroethane	13.833	131	46698	21.83	ug/L	100
93) ethylbenzene	13.822	91	235588	21.46	ug/L	100
94) m,p-xylene	13.927	106	172778	42.74	ug/L	100
95) o-xylene	14.341	91	193928	21.45	ug/L	100
96) styrene	14.357	104	147201	21.76	ug/L	100
97) butyl acrylate	14.163	55	106863	21.61	ug/L	100
98) bromoform	14.629	173	28154	20.68	ug/L	100
99) isopropylbenzene	14.677	105	229678	22.01	ug/L	100
100) cis-1,4-dichloro-2-butene	14.761	75	21094	40.47	ug/L	100
103) bromobenzene	15.086	156	50793	20.46	ug/L	100
104) 1,1,2,2-tetrachloroethane	14.991	83	56587	19.89	ug/L	100
105) trans-1,4-dichloro-2-b...	15.033	53	15678	37.36	ug/L	100
106) 1,2,3-trichloropropane	15.070	110	13661	21.15	ug/L	100
107) n-propylbenzene	15.086	91	280946	21.46	ug/L	100
108) 4-Ethyltoluene	15.185	105	180871	50.00	ug/L	100
109) 2-chlorotoluene	15.238	126	52439	21.36	ug/L	100
110) 4-chlorotoluene	15.337	91	170495	20.49	ug/L	100
111) 1,3,5-trimethylbenzene	15.232	105	196121	22.05	ug/L	100
112) tert-butylbenzene	15.578	119	164167	21.80	ug/L	100
113) 1,2,4-trimethylbenzene	15.626	105	201903	21.58	ug/L	100
114) sec-butylbenzene	15.788	105	257404	22.06	ug/L	100
115) 1,3-dichlorobenzene	15.982	146	100532	20.17	ug/L	100
116) p-isopropyltoluene	15.903	119	207775	21.84	ug/L	100
117) 1,4-dichlorobenzene	16.061	146	103023	20.39	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137237.D
Acq On : 11 Oct 2017 8:46 pm
Operator : JessicaP
Sample : ic5986-20
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 12 10:11:31 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

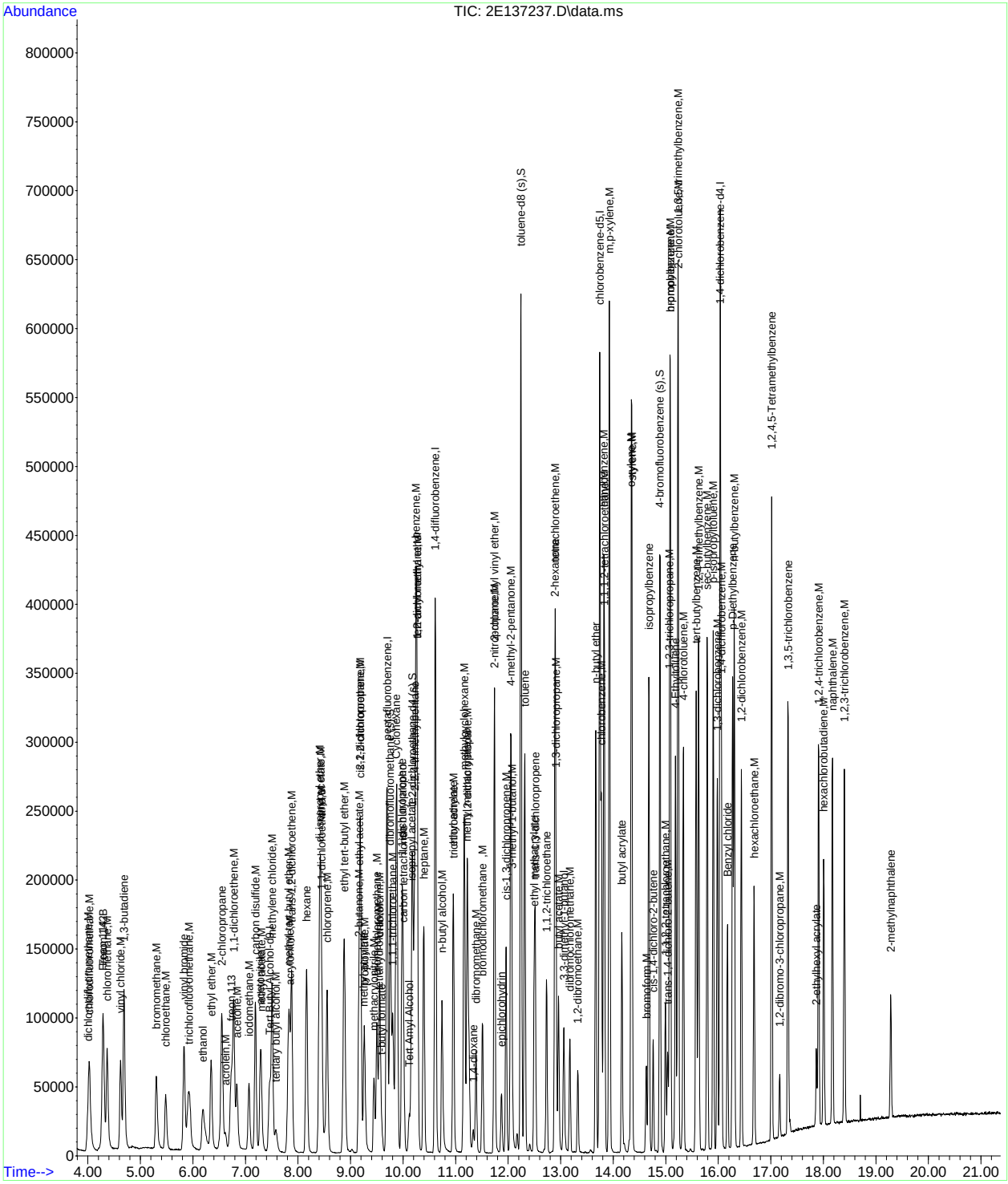
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) 1,2-dichlorobenzene	16.438	146	102383	20.99	ug/L	100
119) p-Diethylbenzene	16.271	119	111836	50.00	ug/L	100
120) n-butylbenzene	16.302	92	118964	22.12	ug/L	100
121) 1,2,4,5-Tetramethylben...	17.015	119	228200	50.00	ug/L	100
122) 1,2-dibromo-3-chloropr...	17.167	75	11721	18.86	ug/L	100
123) 1,3,5-trichlorobenzene	17.330	180	88576	21.32	ug/L	100
124) 1,2,4-trichlorobenzene	17.912	180	80840	21.52	ug/L	100
125) 2-ethylhexyl acrylate	17.870	70	13911	6.36	ug/L	100
126) hexachlorobutadiene	18.006	225	38806	20.67	ug/L	100
127) naphthalene	18.174	128	184462	20.46	ug/L	100
128) 1,2,3-trichlorobenzene	18.399	180	75086	21.90	ug/L	100
129) hexachloroethane	16.685	201	31417	23.05	ug/L	100
130) Benzyl chloride	16.176	91	111501	19.16	ug/L	100
131) 2-methylnaphthalene	19.285	142	43430	10.40	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137237.D
Acq On : 11 Oct 2017 8:46 pm
Operator : JessicaP
Sample : ic5986-20
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 12 10:11:31 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137238.D
Acq On : 11 Oct 2017 9:13 pm
Operator : JessicaP
Sample : icc5986-50
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 12 10:09:10 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.462	65	105641	500.00	ug/L		0.00
5) pentafluorobenzene	9.696	168	198450	50.00	ug/L		0.00
56) 1,4-difluorobenzene	10.613	114	340522	50.00	ug/L		0.00
77) chlorobenzene-d5	13.743	117	295233	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.034	152	150028	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.753	113	104237	52.07	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.14%				
57) 1,2-dichloroethane-d4 (s)	10.178	65	128101	51.32	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.64%				
78) toluene-d8 (s)	12.244	98	419776	50.38	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.76%				
102) 4-bromofluorobenzene (s)	14.886	95	154646	49.60	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.20%				
Target Compounds							Qvalue
2) ethanol	6.193	45	192663	7420.58	ug/L		99
3) tertiary butyl alcohol	7.577	59	75482	264.69	ug/L		94
4) 1,4-dioxane	11.331	88	31513	1746.99	ug/L		93
6) chlorodifluoromethane	4.028	51	224076	55.44	ug/L		99
7) dichlorodifluoromethane	4.007	85	183979	64.13	ug/L		95
8) Freon 142B	4.295	65	214633	65.48	ug/L		95
9) Freon 114	4.285	135	90109	127.66	ug/L		93
10) chloromethane	4.374	50	272387	54.15	ug/L		99
11) vinyl chloride	4.626	62	256608	59.07	ug/L		98
12) bromomethane	5.302	94	129270	55.72	ug/L		98
13) chloroethane	5.480	64	140491	60.57	ug/L		97
14) trichlorofluoromethane	5.926	101	201412	63.50	ug/L		98
15) 1,3-butadiene	4.688	54	179986	64.42	ug/L		97
16) vinyl bromide	5.826	106	210552	65.93	ug/L		95
17) ethyl ether	6.345	74	84417	50.84	ug/L		94
18) 2-chloropropane	6.550	43	322662	65.92	ug/L		99
19) acrolein	6.618	56	32018	46.34	ug/L		97
20) freon 113	6.733	151	80945	75.36	ug/L		99
21) 1,1-dichloroethene	6.775	61	234875	60.52	ug/L		97
22) acetone	6.833	58	60300	161.45	ug/L		91
23) acetonitrile	7.284	41	220336	509.35	ug/L		99
24) iodomethane	7.064	142	181398	57.11	ug/L		97
25) carbon disulfide	7.189	76	486238	55.40	ug/L		99
26) methylene chloride	7.509	84	146384	54.49	ug/L		99
27) methyl acetate	7.300	43	118795	47.19	ug/L		97
28) methyl tert butyl ether	7.824	73	397915	58.84	ug/L		99
29) trans-1,2-dichloroethene	7.876	61	221474	57.95	ug/L		99
30) hexane	8.165	56	106978	53.21	ug/L		98
31) di-isopropyl ether	8.411	45	583062	58.20	ug/L		93
32) ethyl tert-butyl ether	8.878	59	512386	61.80	ug/L		99
33) 2-butanone	9.150	72	59403	238.22	ug/L		92
34) 1,1-dichloroethane	8.453	63	272463	58.26	ug/L		98
35) chloroprene	8.553	53	234996	59.01	ug/L		99
36) acrylonitrile	7.845	53	57732	56.35	ug/L		99
37) vinyl acetate	8.432	86	25184	61.65	ug/L		96
38) ethyl acetate	9.166	45	20894	53.19	ug/L		92
39) 2,2-dichloropropane	9.187	77	207318	62.75	ug/L		97
40) cis-1,2-dichloroethene	9.187	96	148499	54.45	ug/L		98
41) propionitrile	9.260	54	216348	576.36	ug/L		93
42) methyl acrylate	9.250	85	16912	57.54	ug/L	#	85
43) bromochloromethane	9.502	128	64270	56.48	ug/L		99
44) tetrahydrofuran	9.538	72	16858	53.76	ug/L		99
45) chloroform	9.554	83	233888	54.34	ug/L		98
46) t-butyl formate	9.580	59	39531	52.96	ug/L		95
47) 1,1-dichloropropene	9.979	75	192948	57.22	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137238.D
Acq On : 11 Oct 2017 9:13 pm
Operator : JessicaP
Sample : icc5986-50
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 12 10:09:10 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
48) carbon tetrachloride	10.005	117	163599	59.33	ug/L		95
49) isopropyl acetate	10.157	87	26908	51.90	ug/L	#	79
51) methacrylonitrile	9.444	67	54695	56.62	ug/L		93
52) 1,1,1-trichloroethane	9.806	97	200732	62.47	ug/L		98
53) Cyclohexane	9.869	84	224520	68.70	ug/L		99
54) iso-butyl alcohol	9.989	43	62170	530.75	ug/L		97
55) Tert Amyl Alcohol	10.115	73	32118	126.73	ug/L		93
58) 2,2,4-trimethylpentane	10.225	57	611753	66.56	ug/L		98
59) n-butyl alcohol	10.739	56	189003	3263.13	ug/L		99
60) benzene	10.246	78	575037	54.73	ug/L		99
61) tert-amyl methyl ether	10.267	73	450495	54.33	ug/L		98
62) heptane	10.393	57	111405	51.57	ug/L		94
63) 1,2-dichloroethane	10.267	62	170905	54.35	ug/L		99
64) ethyl acrylate	10.954	55	161071	56.15	ug/L		99
65) trichloroethene	10.954	95	130434	56.57	ug/L		94
66) 2-nitropropane	11.735	41	44021	45.19	ug/L		99
67) 2-chloroethyl vinyl ether	11.740	63	369973	269.10	ug/L		99
68) methyl methacrylate	11.216	100	29479	56.65	ug/L	#	91
69) 1,2-dichloropropane	11.227	63	159721	56.32	ug/L		97
70) methylcyclohexane	11.164	83	274822	58.33	ug/L		99
71) dibromomethane	11.389	93	76896	55.10	ug/L		97
72) bromodichloromethane	11.510	83	174196	56.58	ug/L		97
73) epichlorohydrin	11.871	57	67270	285.41	ug/L		97
74) cis-1,3-dichloropropene	11.961	75	234733	57.17	ug/L		97
75) 4-methyl-2-pentanone	12.050	58	199787	213.49	ug/L		97
76) 3-methyl-1-butanol	12.065	70	70951	1183.08	ug/L		97
79) toluene	12.317	92	318492	54.31	ug/L		100
80) ethyl methacrylate	12.495	69	170547	56.42	ug/L		99
81) trans-1,3-dichloropropene	12.516	75	195386	55.26	ug/L		100
82) 1,1,2-trichloroethane	12.731	83	93566	54.42	ug/L		98
83) tetrachloroethene	12.894	164	90107	54.99	ug/L		98
84) 2-hexanone	12.889	58	197751	211.95	ug/L		97
85) 1,3-dichloropropane	12.910	76	195346	53.52	ug/L		99
86) butyl acetate	12.957	56	86284	53.29	ug/L		94
87) 3,3-dimethyl-1-butanol	13.062	57	129166	506.91	ug/L		97
88) dibromochloromethane	13.172	129	113031	54.13	ug/L		98
89) 1,2-dibromoethane	13.324	107	106123	52.04	ug/L		98
90) n-butyl ether	13.670	57	699536	56.09	ug/L		99
91) chlorobenzene	13.775	112	330912	54.24	ug/L		99
92) 1,1,1,2-tetrachloroethane	13.832	131	120020	56.23	ug/L		98
93) ethylbenzene	13.822	91	599464	54.74	ug/L		100
94) m,p-xylene	13.927	106	443814	110.03	ug/L		99
95) o-xylene	14.341	91	502647	55.71	ug/L		100
96) styrene	14.357	104	378539	56.09	ug/L		99
97) butyl acrylate	14.163	55	273551	55.44	ug/L		100
98) bromoform	14.629	173	72814	53.60	ug/L		94
99) isopropylbenzene	14.676	105	594802	57.11	ug/L		100
100) cis-1,4-dichloro-2-butene	14.760	75	53860	103.57	ug/L		98
103) bromobenzene	15.085	156	129878	52.51	ug/L		96
104) 1,1,2,2-tetrachloroethane	14.991	83	145791	51.43	ug/L		98
105) trans-1,4-dichloro-2-b...	15.033	53	39287	93.95	ug/L		92
106) 1,2,3-trichloropropane	15.070	110	34696	53.92	ug/L		96
107) n-propylbenzene	15.085	91	716410	54.92	ug/L		99
108) 4-Ethyltoluene	15.185	105	477067	132.35	ug/L		99
109) 2-chlorotoluene	15.237	126	134124	54.84	ug/L		97
110) 4-chlorotoluene	15.332	91	428226	51.66	ug/L		100
111) 1,3,5-trimethylbenzene	15.232	105	511053	57.67	ug/L		99
112) tert-butylbenzene	15.578	119	430449	57.35	ug/L		97
113) 1,2,4-trimethylbenzene	15.625	105	518531	55.61	ug/L		98
114) sec-butylbenzene	15.788	105	662958	57.01	ug/L		98
115) 1,3-dichlorobenzene	15.982	146	260431	52.45	ug/L		99
116) p-isopropyltoluene	15.903	119	538627	56.82	ug/L		98
117) 1,4-dichlorobenzene	16.061	146	261428	51.92	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137238.D
Acq On : 11 Oct 2017 9:13 pm
Operator : JessicaP
Sample : icc5986-50
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 12 10:09:10 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

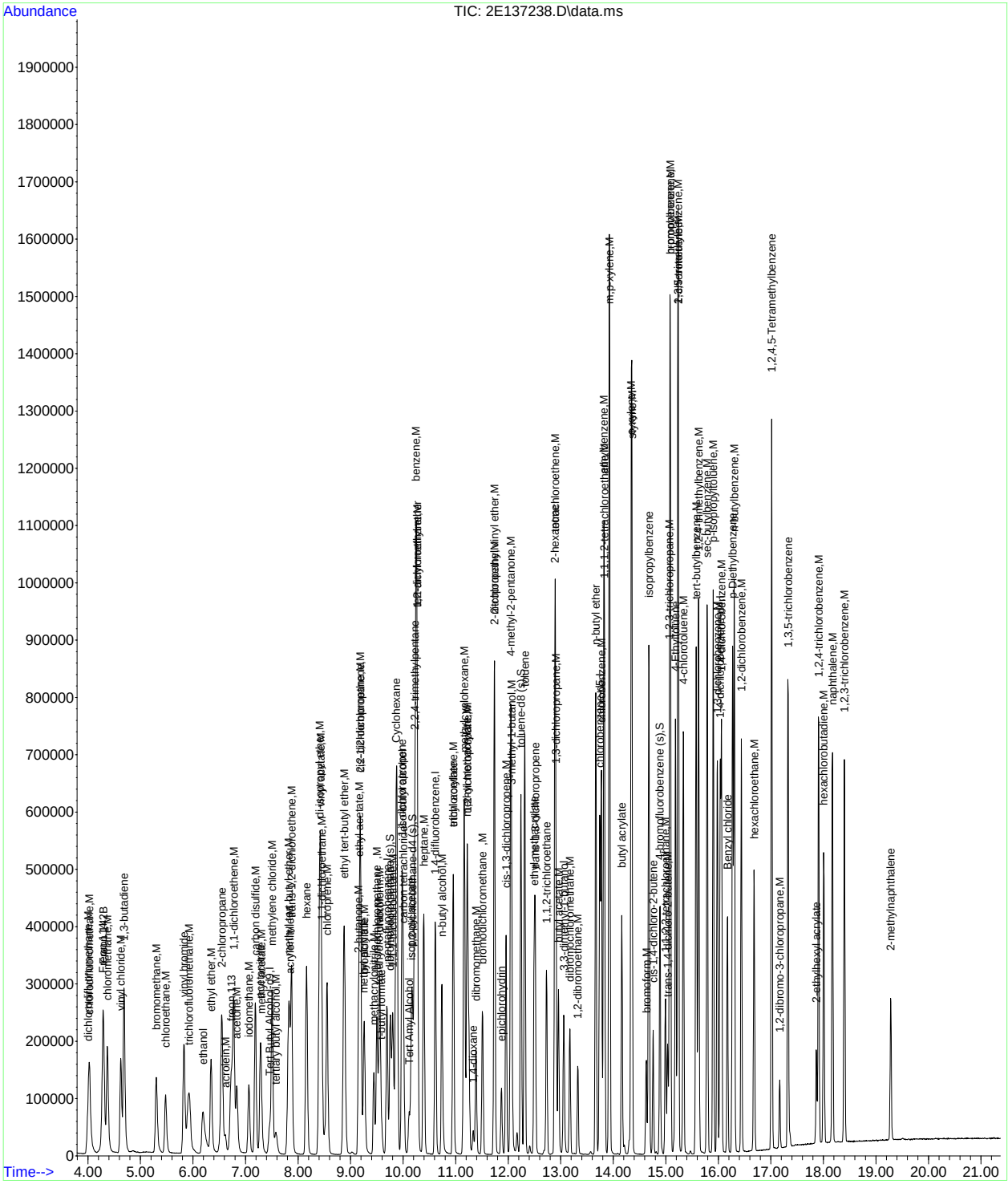
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) 1,2-dichlorobenzene	16.438	146	260947	53.69	ug/L	99
119) p-Diethylbenzene	16.270	119	295229	132.46	ug/L	99
120) n-butylbenzene	16.302	92	302487	56.45	ug/L	99
121) 1,2,4,5-Tetramethylben...	17.015	119	614243	135.07	ug/L	99
122) 1,2-dibromo-3-chloropr...	17.167	75	29878	48.25	ug/L	99
123) 1,3,5-trichlorobenzene	17.329	180	234275	56.58	ug/L	99
124) 1,2,4-trichlorobenzene	17.911	180	215534	57.59	ug/L	99
125) 2-ethylhexyl acrylate	17.864	70	40822	18.73	ug/L	98
126) hexachlorobutadiene	18.006	225	103383	55.27	ug/L	98
127) naphthalene	18.174	128	486476	54.15	ug/L	99
128) 1,2,3-trichlorobenzene	18.399	180	197076	57.68	ug/L	99
129) hexachloroethane	16.685	201	84590	62.29	ug/L	97
130) Benzyl chloride	16.176	91	286351	49.38	ug/L	99
131) 2-methylnaphthalene	19.280	142	122312	29.40	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137238.D
Acq On : 11 Oct 2017 9:13 pm
Operator : JessicaP
Sample : icc5986-50
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 12 10:09:10 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137239.D
Acq On : 11 Oct 2017 9:40 pm
Operator : JessicaP
Sample : ic5986-100
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 12 10:09:57 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.462	65	110182	500.00	ug/L	0.00
5) pentafluorobenzene	9.690	168	206461	50.00	ug/L	0.00
56) 1,4-difluorobenzene	10.613	114	356039	50.00	ug/L	0.00
77) chlorobenzene-d5	13.743	117	306654	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	16.034	152	155724	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.753	113	107723	51.72	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.44%			
57) 1,2-dichloroethane-d4 (s)	10.178	65	131790	50.50	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.00%			
78) toluene-d8 (s)	12.244	98	434547	50.21	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.42%			
102) 4-bromofluorobenzene (s)	14.886	95	159942	49.43	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.86%			
Target Compounds						Qvalue
2) ethanol	6.193	45	377317	13933.74	ug/L	98
3) tertiary butyl alcohol	7.583	59	148566	499.49	ug/L	97
4) 1,4-dioxane	11.331	88	64023	3402.97	ug/L	92
6) chlorodifluoromethane	4.028	51	437867	104.14	ug/L	98
7) dichlorodifluoromethane	4.007	85	400078	134.04	ug/L	96
8) Freon 142B	4.295	65	432276	126.76	ug/L	99
9) Freon 114	4.285	135	191466	260.74	ug/L	99
10) chloromethane	4.374	50	576164	110.09	ug/L	99
11) vinyl chloride	4.631	62	559112	123.72	ug/L	97
12) bromomethane	5.297	94	270774	112.19	ug/L	97
13) chloroethane	5.475	64	294611	122.09	ug/L	97
14) trichlorofluoromethane	5.926	101	438543	132.90	ug/L	97
15) 1,3-butadiene	4.689	54	349985	120.40	ug/L	96
16) vinyl bromide	5.826	106	456040	137.27	ug/L	95
17) ethyl ether	6.345	74	166166	96.19	ug/L	92
18) 2-chloropropane	6.550	43	623192	122.38	ug/L	99
19) acrolein	6.618	56	62929	87.54	ug/L	99
20) freon 113	6.733	151	165124	147.76	ug/L	97
21) 1,1-dichloroethene	6.775	61	461069	114.19	ug/L	98
22) acetone	6.833	58	114600	294.93	ug/L	92
23) acetonitrile	7.284	41	428178	951.42	ug/L	99
24) iodomethane	7.064	142	359772	108.87	ug/L	98
25) carbon disulfide	7.184	76	947928	103.82	ug/L	99
26) methylene chloride	7.504	84	284577	101.83	ug/L	98
27) methyl acetate	7.300	43	232290	88.70	ug/L	97
28) methyl tert butyl ether	7.824	73	772376	109.78	ug/L	99
29) trans-1,2-dichloroethene	7.876	61	428158	107.69	ug/L	99
30) hexane	8.159	56	214090	102.35	ug/L	99
31) di-isopropyl ether	8.411	45	1128200	108.25	ug/L	90
32) ethyl tert-butyl ether	8.878	59	990717	114.85	ug/L	99
33) 2-butanone	9.150	72	115290	444.40	ug/L #	89
34) 1,1-dichloroethane	8.448	63	523523	107.60	ug/L	98
35) chloroprene	8.553	53	457308	110.38	ug/L	99
36) acrylonitrile	7.845	53	110823	103.97	ug/L	98
37) vinyl acetate	8.432	86	49269	115.93	ug/L #	85
38) ethyl acetate	9.166	45	39957	97.78	ug/L #	88
39) 2,2-dichloropropane	9.182	77	403469	117.38	ug/L	97
40) cis-1,2-dichloroethene	9.187	96	286691	101.04	ug/L	95
41) propionitrile	9.266	54	416162	1065.66	ug/L	90
42) methyl acrylate	9.250	85	34402	112.50	ug/L #	80
43) bromochloromethane	9.502	128	125539	106.03	ug/L	97
44) tetrahydrofuran	9.538	72	32391	99.28	ug/L	95
45) chloroform	9.554	83	453776	101.34	ug/L	97
46) t-butyl formate	9.580	59	77255	99.49	ug/L	97
47) 1,1-dichloropropene	9.979	75	381381	108.72	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137239.D
Acq On : 11 Oct 2017 9:40 pm
Operator : JessicaP
Sample : ic5986-100
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 12 10:09:57 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
48)	carbon tetrachloride	10.005	117	324035	112.96	ug/L		94
49)	isopropyl acetate	10.162	87	52226	96.82	ug/L	#	83
51)	methacrylonitrile	9.444	67	107310	106.77	ug/L		97
52)	1,1,1-trichloroethane	9.800	97	394859	118.12	ug/L		98
53)	Cyclohexane	9.869	84	444374	130.70	ug/L		99
54)	iso-butyl alcohol	9.989	43	121794	999.43	ug/L		95
55)	Tert Amyl Alcohol	10.115	73	63308	240.10	ug/L		95
58)	2,2,4-trimethylpentane	10.225	57	1241108	129.16	ug/L		99
59)	n-butyl alcohol	10.739	56	376650	6219.44	ug/L		97
60)	benzene	10.246	78	1120198	101.98	ug/L		99
61)	tert-amyl methyl ether	10.267	73	887174	102.34	ug/L		99
62)	heptane	10.393	57	225291	99.75	ug/L		98
63)	1,2-dichloroethane	10.267	62	332588	101.15	ug/L		98
64)	ethyl acrylate	10.954	55	314031	104.71	ug/L		100
65)	trichloroethene	10.954	95	254774	105.69	ug/L		97
66)	2-nitropropane	11.735	41	83646	82.13	ug/L		94
67)	2-chloroethyl vinyl ether	11.740	63	719306	500.38	ug/L		100
68)	methyl methacrylate	11.216	100	58331	107.22	ug/L		96
69)	1,2-dichloropropane	11.227	63	309103	104.25	ug/L		96
70)	methylcyclohexane	11.164	83	555348	112.74	ug/L		100
71)	dibromomethane	11.384	93	148863	102.02	ug/L		95
72)	bromodichloromethane	11.510	83	336641	104.59	ug/L		94
73)	epichlorohydrin	11.871	57	132620	538.15	ug/L		98
74)	cis-1,3-dichloropropene	11.961	75	453765	105.70	ug/L		96
75)	4-methyl-2-pentanone	12.050	58	382973	391.40	ug/L		96
76)	3-methyl-1-butanol	12.065	70	137467	2192.31	ug/L		97
79)	toluene	12.317	92	619686	101.74	ug/L		99
80)	ethyl methacrylate	12.495	69	333111	106.09	ug/L		98
81)	trans-1,3-dichloropropene	12.516	75	377129	102.69	ug/L		99
82)	1,1,2-trichloroethane	12.731	83	179992	100.79	ug/L		99
83)	tetrachloroethene	12.894	164	177228	104.14	ug/L		98
84)	2-hexanone	12.889	58	374219	386.14	ug/L		95
85)	1,3-dichloropropane	12.910	76	375998	99.18	ug/L		99
86)	butyl acetate	12.957	56	166651	99.10	ug/L		94
87)	3,3-dimethyl-1-butanol	13.056	57	252183	952.82	ug/L		98
88)	dibromochloromethane	13.177	129	223891	103.22	ug/L		98
89)	1,2-dibromoethane	13.324	107	209937	99.12	ug/L		98
90)	n-butyl ether	13.670	57	1354858	104.59	ug/L		99
91)	chlorobenzene	13.775	112	643613	101.57	ug/L		98
92)	1,1,1,2-tetrachloroethane	13.832	131	239146	107.87	ug/L		98
93)	ethylbenzene	13.822	91	1167030	102.60	ug/L		98
94)	m,p-xylene	13.927	106	865305	206.54	ug/L		97
95)	o-xylene	14.341	91	973201	103.85	ug/L		100
96)	styrene	14.357	104	737388	105.20	ug/L		99
97)	butyl acrylate	14.163	55	527476	102.93	ug/L		99
98)	bromoform	14.629	173	144337	102.29	ug/L		98
99)	isopropylbenzene	14.677	105	1162604	107.48	ug/L		100
100)	cis-1,4-dichloro-2-butene	14.760	75	105851	195.96	ug/L		98
103)	bromobenzene	15.085	156	258162	100.56	ug/L		95
104)	1,1,2,2-tetrachloroethane	14.996	83	278361	94.61	ug/L		99
105)	trans-1,4-dichloro-2-b...	15.033	53	75951	174.98	ug/L		90
106)	1,2,3-trichloropropane	15.070	110	67247	100.68	ug/L		96
107)	n-propylbenzene	15.085	91	1387398	102.47	ug/L		99
108)	4-Ethyltoluene	15.185	105	955023	255.26	ug/L		100
109)	2-chlorotoluene	15.238	126	262736	103.50	ug/L		99
110)	4-chlorotoluene	15.337	91	836274	97.19	ug/L		99
111)	1,3,5-trimethylbenzene	15.232	105	980355	106.59	ug/L		100
112)	tert-butylbenzene	15.578	119	850783	109.22	ug/L		98
113)	1,2,4-trimethylbenzene	15.626	105	1016208	105.01	ug/L		100
114)	sec-butylbenzene	15.788	105	1317004	109.11	ug/L		98
115)	1,3-dichlorobenzene	15.982	146	508134	98.59	ug/L		99
116)	p-isopropyltoluene	15.903	119	1072264	108.97	ug/L		99
117)	1,4-dichlorobenzene	16.061	146	515889	98.70	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137239.D
Acq On : 11 Oct 2017 9:40 pm
Operator : JessicaP
Sample : ic5986-100
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 12 10:09:57 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

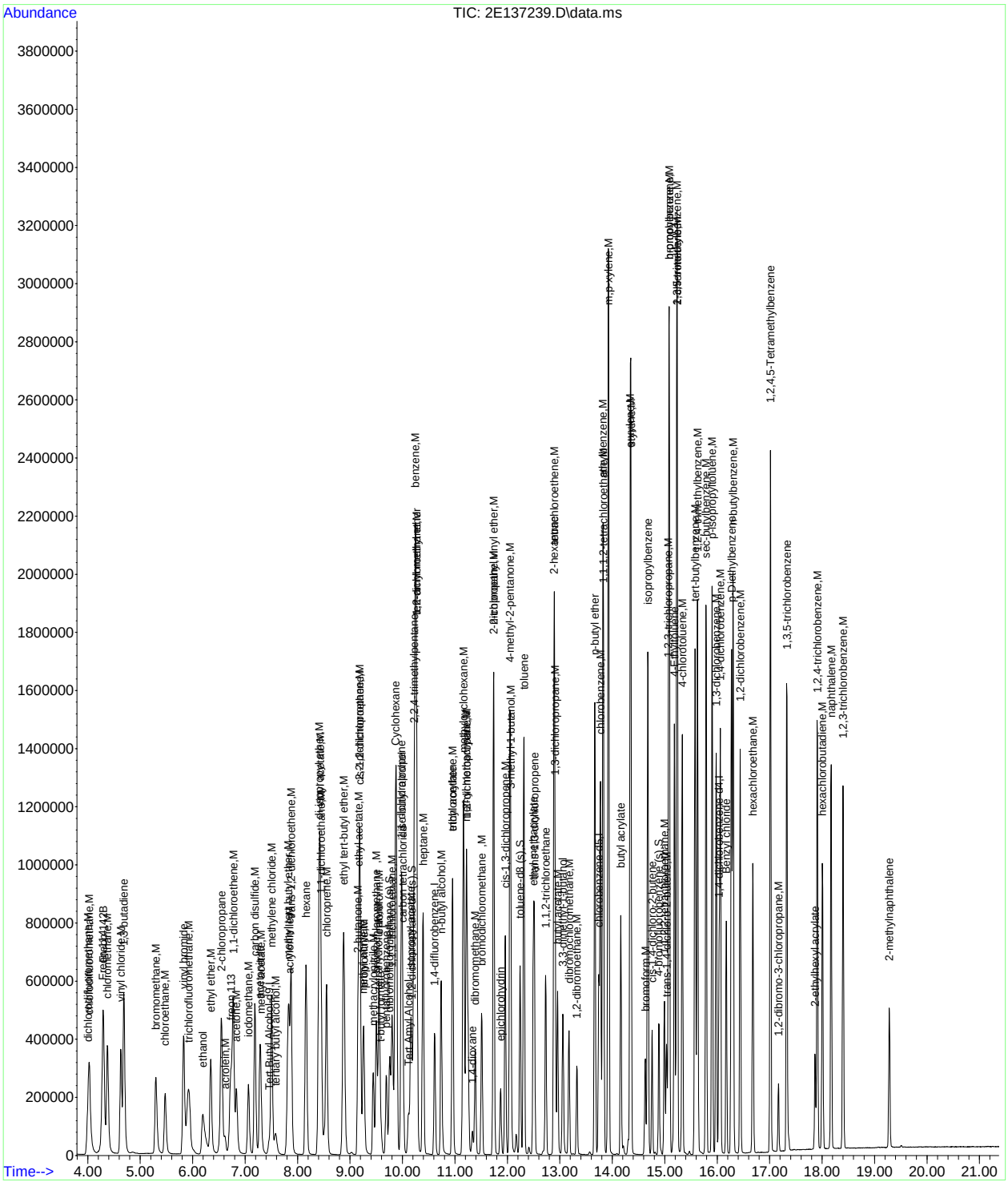
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) 1,2-dichlorobenzene	16.438	146	509858	101.07	ug/L	99
119) p-Diethylbenzene	16.276	119	585436	253.07	ug/L	97
120) n-butylbenzene	16.302	92	597795	107.47	ug/L	98
121) 1,2,4,5-Tetramethylben...	17.015	119	1202987	254.85	ug/L	99
122) 1,2-dibromo-3-chloropr...	17.167	75	57318	89.18	ug/L	99
123) 1,3,5-trichlorobenzene	17.329	180	470748	109.54	ug/L	98
124) 1,2,4-trichlorobenzene	17.911	180	422765	108.83	ug/L	98
125) 2-ethylhexyl acrylate	17.864	70	84364	37.30	ug/L	98
126) hexachlorobutadiene	18.006	225	207012	106.62	ug/L	98
127) naphthalene	18.174	128	935998	100.38	ug/L	100
128) 1,2,3-trichlorobenzene	18.399	180	380187	107.20	ug/L	98
129) hexachloroethane	16.679	201	171740	121.84	ug/L	99
130) Benzyl chloride	16.171	91	559821	93.01	ug/L	100
131) 2-methylnaphthalene	19.280	142	241070	55.82	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137239.D
Acq On : 11 Oct 2017 9:40 pm
Operator : JessicaP
Sample : ic5986-100
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 12 10:09:57 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137240.D
Acq On : 11 Oct 2017 10:08 pm
Operator : JessicaP
Sample : ic5986-200
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 12 10:10:54 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.473	65	111070	500.00	ug/L	0.02
5) pentafluorobenzene	9.696	168	211915	50.00	ug/L	0.00
56) 1,4-difluorobenzene	10.613	114	367227	50.00	ug/L	0.00
77) chlorobenzene-d5	13.743	117	317949	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	16.034	152	166711	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.753	113	110709	51.79	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.58%			
57) 1,2-dichloroethane-d4 (s)	10.178	65	135593	50.38	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.76%			
78) toluene-d8 (s)	12.244	98	448857	50.02	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.04%			
102) 4-bromofluorobenzene (s)	14.892	95	169131	48.82	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.64%			
Target Compounds						Qvalue
2) ethanol	6.199	45	756931	27728.82	ug/L	98
3) tertiary butyl alcohol	7.583	59	320152	1067.77	ug/L	81
4) 1,4-dioxane	11.337	88	139565	7358.90	ug/L	96
6) chlorodifluoromethane	4.023	51	915852	212.21	ug/L	99
7) dichlorodifluoromethane	4.002	85	786442	256.71	ug/L	96
8) Freon 142B	4.295	65	901985	257.69	ug/L	91
9) Freon 114	4.285	135	379194	503.09	ug/L	94
10) chloromethane	4.374	50	1164801	216.84	ug/L	99
11) vinyl chloride	4.631	62	1110034	239.31	ug/L	97
12) bromomethane	5.286	94	464205	187.38	ug/L	97
13) chloroethane	5.465	64	576654	232.82	ug/L	97
14) trichlorofluoromethane	5.921	101	872933	257.74	ug/L	96
15) 1,3-butadiene	4.683	54	734860	246.30	ug/L	98
16) vinyl bromide	5.821	106	911486	267.30	ug/L	95
17) ethyl ether	6.340	74	356849	201.25	ug/L	92
18) 2-chloropropane	6.539	43	1336075	255.62	ug/L	98
19) acrolein	6.613	56	136898	185.53	ug/L	98
20) freon 113	6.728	151	348795	304.09	ug/L	98
21) 1,1-dichloroethene	6.770	61	995163	240.12	ug/L	98
22) acetone	6.833	58	240232	602.33	ug/L	88
23) acetonitrile	7.284	41	905377	1959.99	ug/L	100
24) iodomethane	7.058	142	804177	237.08	ug/L	98
25) carbon disulfide	7.179	76	2040342	217.72	ug/L	99
26) methylene chloride	7.504	84	613932	214.02	ug/L	99
27) methyl acetate	7.294	43	495257	184.24	ug/L	97
28) methyl tert butyl ether	7.824	73	1681761	232.88	ug/L	100
29) trans-1,2-dichloroethene	7.871	61	921464	225.80	ug/L	99
30) hexane	8.159	56	455447	212.14	ug/L	100
31) di-isopropyl ether	8.411	45	2416274	225.87	ug/L	81
32) ethyl tert-butyl ether	8.878	59	2135132	241.16	ug/L	99
33) 2-butanone	9.150	72	248146	931.89	ug/L	97
34) 1,1-dichloroethane	8.448	63	1117342	223.75	ug/L	98
35) chloroprene	8.547	53	984821	231.60	ug/L	98
36) acrylonitrile	7.845	53	240516	219.84	ug/L	99
37) vinyl acetate	8.427	86	109803	251.71	ug/L	99
38) ethyl acetate	9.161	45	85079	202.84	ug/L #	65
39) 2,2-dichloropropane	9.182	77	854313	242.15	ug/L	98
40) cis-1,2-dichloroethene	9.187	96	619891	212.85	ug/L	96
41) propionitrile	9.266	54	901502	2249.05	ug/L	86
42) methyl acrylate	9.245	85	75304	239.93	ug/L #	69
43) bromochloromethane	9.502	128	271054	223.05	ug/L	97
44) tetrahydrofuran	9.538	72	71072	212.24	ug/L	97
45) chloroform	9.554	83	966331	210.24	ug/L	98
46) t-butyl formate	9.580	59	167706	210.41	ug/L	93
47) 1,1-dichloropropene	9.979	75	820771	227.95	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137240.D
Acq On : 11 Oct 2017 10:08 pm
Operator : JessicaP
Sample : ic5986-200
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 12 10:10:54 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) carbon tetrachloride	10.005	117	702956	238.75	ug/L	95
49) isopropyl acetate	10.157	87	114784	207.32	ug/L #	81
51) methacrylonitrile	9.439	67	233411	226.26	ug/L	95
52) 1,1,1-trichloroethane	9.801	97	840774	245.04	ug/L	98
53) Cyclohexane	9.869	84	946122	271.11	ug/L	93
54) iso-butyl alcohol	9.989	43	270455	2162.20	ug/L	96
55) Tert Amyl Alcohol	10.115	73	138464	511.63	ug/L	92
58) 2,2,4-trimethylpentane	10.225	57	2672674	269.67	ug/L	99
59) n-butyl alcohol	10.739	56	819657	13122.25	ug/L	96
60) benzene	10.246	78	2402928	212.09	ug/L	100
61) tert-amyl methyl ether	10.267	73	1906194	213.19	ug/L	100
62) heptane	10.393	57	483653	207.62	ug/L	97
63) 1,2-dichloroethane	10.267	62	715031	210.84	ug/L	98
64) ethyl acrylate	10.949	55	687697	222.31	ug/L	99
65) trichloroethene	10.954	95	551986	222.01	ug/L	95
66) 2-nitropropane	11.735	41	183392	174.58	ug/L	98
67) 2-chloroethyl vinyl ether	11.740	63	1545064	1042.07	ug/L	98
68) methyl methacrylate	11.216	100	129772	231.26	ug/L	96
69) 1,2-dichloropropane	11.221	63	667890	218.40	ug/L	95
70) methylcyclohexane	11.164	83	1175037	231.27	ug/L	99
71) dibromomethane	11.384	93	321665	213.72	ug/L	98
72) bromodichloromethane	11.510	83	733661	220.98	ug/L	96
73) epichlorohydrin	11.872	57	287502	1131.09	ug/L	98
74) cis-1,3-dichloropropene	11.961	75	986319	222.74	ug/L	97
75) 4-methyl-2-pentanone	12.050	58	831004	823.42	ug/L	99
76) 3-methyl-1-butanol	12.066	70	301509	4661.94	ug/L	97
79) toluene	12.317	92	1347137	213.31	ug/L	98
80) ethyl methacrylate	12.495	69	732740	225.08	ug/L	99
81) trans-1,3-dichloropropene	12.516	75	819188	215.13	ug/L	99
82) 1,1,2-trichloroethane	12.731	83	390857	211.08	ug/L	98
83) tetrachloroethene	12.894	164	392816	222.61	ug/L	97
84) 2-hexanone	12.889	58	789964	786.18	ug/L	95
85) 1,3-dichloropropane	12.910	76	818000	208.10	ug/L	99
86) butyl acetate	12.957	56	362366	207.82	ug/L	93
87) 3,3-dimethyl-1-butanol	13.056	57	555778	2025.29	ug/L	98
88) dibromochloromethane	13.177	129	491565	218.57	ug/L	99
89) 1,2-dibromoethane	13.324	107	452835	206.20	ug/L	98
90) n-butyl ether	13.670	57	2911547	216.78	ug/L	98
91) chlorobenzene	13.775	112	1411664	214.86	ug/L	98
92) 1,1,1,2-tetrachloroethane	13.832	131	523153	227.59	ug/L	97
93) ethylbenzene	13.822	91	2537408	215.14	ug/L	97
94) m,p-xylene	13.927	106	1893938	436.01	ug/L	97
95) o-xylene	14.341	91	2113286	217.50	ug/L	99
96) styrene	14.357	104	1604060	220.72	ug/L	99
97) butyl acrylate	14.163	55	1160658	218.43	ug/L	99
98) bromoform	14.629	173	321342	219.64	ug/L	97
99) isopropylbenzene	14.677	105	2544389	226.86	ug/L	99
100) cis-1,4-dichloro-2-butene	14.760	75	238717	426.23	ug/L	98
103) bromobenzene	15.085	156	569769	207.31	ug/L	93
104) 1,1,2,2-tetrachloroethane	14.996	83	613389	194.74	ug/L	99
105) trans-1,4-dichloro-2-b...	15.033	53	170603	367.14	ug/L	93
106) 1,2,3-trichloropropane	15.070	110	147492	206.27	ug/L	96
107) n-propylbenzene	15.085	91	3026438	208.80	ug/L	98
108) 4-Ethyltoluene	15.185	105	2117494	528.66	ug/L	99
109) 2-chlorotoluene	15.238	126	584226	214.97	ug/L	97
110) 4-chlorotoluene	15.337	91	1851516	201.00	ug/L	98
111) 1,3,5-trimethylbenzene	15.232	105	2174004	220.79	ug/L	100
112) tert-butylbenzene	15.578	119	1889199	226.53	ug/L	98
113) 1,2,4-trimethylbenzene	15.626	105	2271777	219.27	ug/L	99
114) sec-butylbenzene	15.788	105	2876809	222.62	ug/L	98
115) 1,3-dichlorobenzene	15.982	146	1146830	207.85	ug/L	99
116) p-isopropyltoluene	15.903	119	2383818	226.30	ug/L	98
117) 1,4-dichlorobenzene	16.061	146	1164227	208.07	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137240.D
Acq On : 11 Oct 2017 10:08 pm
Operator : JessicaP
Sample : ic5986-200
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 12 10:10:54 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration

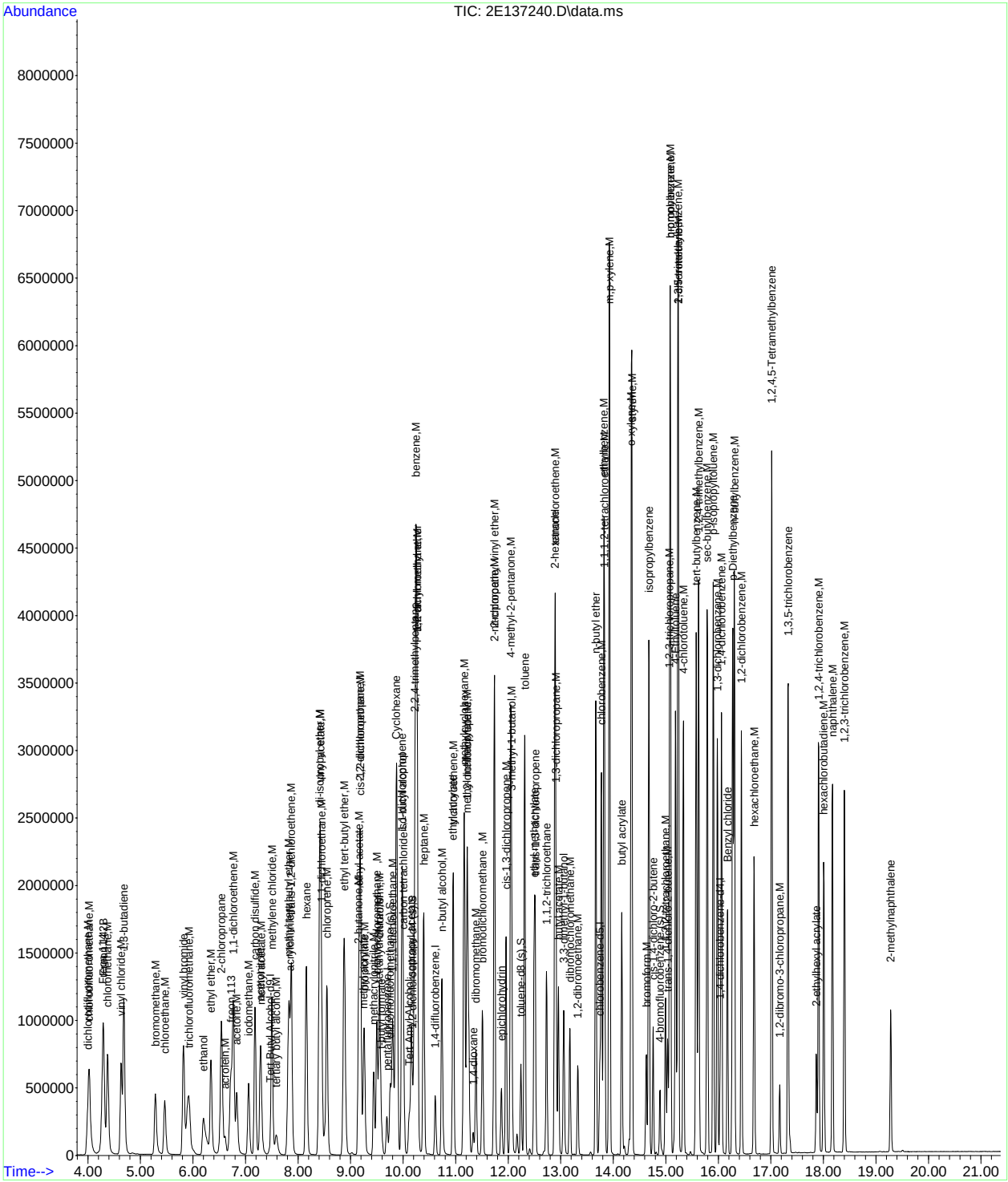
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
118) 1,2-dichlorobenzene	16.438	146	1143964	211.82	ug/L	98
119) p-Diethylbenzene	16.276	119	1325518	535.22	ug/L	97
120) n-butylbenzene	16.307	92	1341307	225.25	ug/L	96
121) 1,2,4,5-Tetramethylben...	17.015	119	2603544	515.20	ug/L	98
122) 1,2-dibromo-3-chloropr...	17.167	75	124755	181.32	ug/L	96
123) 1,3,5-trichlorobenzene	17.330	180	1013720	220.34	ug/L	98
124) 1,2,4-trichlorobenzene	17.911	180	894872	215.18	ug/L	98
125) 2-ethylhexyl acrylate	17.864	70	186466	77.01	ug/L	98
126) hexachlorobutadiene	18.006	225	439717	211.54	ug/L	98
127) naphthalene	18.174	128	1946938	195.04	ug/L	99
128) 1,2,3-trichlorobenzene	18.399	180	803405	211.61	ug/L	99
129) hexachloroethane	16.685	201	391238	259.26	ug/L	96
130) Benzyl chloride	16.176	91	1242727	192.86	ug/L	98
131) 2-methylnaphthalene	19.280	142	521358	112.77	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137240.D
Acq On : 11 Oct 2017 10:08 pm
Operator : JessicaP
Sample : ic5986-200
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 12 10:10:54 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 12 10:08:38 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137243.D
Acq On : 11 Oct 2017 11:30 pm
Operator : JessicaP
Sample : icv5986-50
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 13 17:10:39 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Fri Oct 13 17:09:02 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.462	65	108410	500.00	ug/L		0.00
5) pentafluorobenzene	9.690	168	199003	50.00	ug/L		0.00
56) 1,4-difluorobenzene	10.613	114	343052	50.00	ug/L		0.00
77) chlorobenzene-d5	13.743	117	293692	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.034	152	149846	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.753	113	103187	50.25	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.50%				
57) 1,2-dichloroethane-d4 (s)	10.178	65	127540	50.47	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.94%				
78) toluene-d8 (s)	12.244	98	419505	50.49	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.98%				
102) 4-bromofluorobenzene (s)	14.886	95	153781	50.21	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.42%				
Target Compounds							Qvalue
2) ethanol	6.193	45	198588	4640.77	ug/L		98
3) tertiary butyl alcohol	7.583	59	74750	232.24	ug/L		84
4) 1,4-dioxane	11.331	88	32287	1295.84	ug/L		98
6) chlorodifluoromethane	4.023	51	199314	45.96	ug/L		98
7) dichlorodifluoromethane	4.007	85	191564	55.73	ug/L		98
8) Freon 142B	4.290	65	216369	55.77	ug/L	#	54
10) chloromethane	4.369	50	265228	47.30	ug/L		99
11) vinyl chloride	4.626	62	238277	47.27	ug/L		98
12) bromomethane	5.297	94	124989	46.84	ug/L		99
13) chloroethane	5.475	64	135106	46.75	ug/L		99
14) trichlorofluoromethane	5.915	101	200704	52.03	ug/L		99
15) 1,3-butadiene	4.683	54	177628	53.17	ug/L		98
16) vinyl bromide	5.826	106	158305	36.61	ug/L		99
17) ethyl ether	6.340	74	84549	48.36	ug/L		97
18) 2-chloropropane	6.545	43	325964	50.92	ug/L		99
19) acrolein	6.618	56	34183	49.22	ug/L		95
20) freon 113	6.728	151	86339	56.72	ug/L		96
21) 1,1-dichloroethene	6.770	61	229536	50.62	ug/L		98
22) acetone	6.833	58	52236	181.14	ug/L		88
23) acetonitrile	7.305	41	520889	1121.30	ug/L	#	49
24) iodomethane	7.064	142	182811	48.57	ug/L		98
25) carbon disulfide	7.184	76	504657	50.89	ug/L		99
26) methylene chloride	7.504	84	147808	48.18	ug/L		99
27) methyl acetate	7.294	43	111822	44.93	ug/L		98
28) methyl tert butyl ether	7.819	73	814515	99.24	ug/L		91
29) trans-1,2-dichloroethene	7.876	61	220419	49.64	ug/L		99
30) hexane	8.165	56	94906	46.60	ug/L		98
31) di-isopropyl ether	8.411	45	585470	50.94	ug/L		95
32) ethyl tert-butyl ether	8.878	59	514258	50.04	ug/L		99
33) 2-butanone	9.150	72	55767	188.55	ug/L		94
34) 1,1-dichloroethane	8.448	63	274348	50.83	ug/L		100
35) chloroprene	8.553	53	240856	52.72	ug/L		99
36) acrylonitrile	7.845	53	62294	55.52	ug/L		94
37) vinyl acetate	8.427	86	26197	55.79	ug/L	#	89
38) ethyl acetate	9.161	45	21660	48.48	ug/L	#	45
39) 2,2-dichloropropane	9.187	77	205624	47.73	ug/L		99
40) cis-1,2-dichloroethene	9.187	96	149604	48.72	ug/L		97
41) propionitrile	9.260	54	204924	475.67	ug/L		100
42) methyl acrylate	9.245	85	17978	57.21	ug/L	#	87
43) bromochloromethane	9.502	128	63792	49.84	ug/L		98
44) tetrahydrofuran	9.538	72	16688	49.99	ug/L		97
45) chloroform	9.554	83	232969	48.58	ug/L		98
46) t-butyl formate	9.580	59	80562	105.24	ug/L		92
47) 1,1-dichloropropene	9.979	75	193964	51.80	ug/L		98
48) carbon tetrachloride	10.000	117	167710	52.32	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137243.D
Acq On : 11 Oct 2017 11:30 pm
Operator : JessicaP
Sample : icv5986-50
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 13 17:10:39 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Fri Oct 13 17:09:02 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49)	isopropyl acetate	10.162	87	27258	55.10	ug/L	#	90
51)	methacrylonitrile	9.444	67	54111	52.95	ug/L		96
52)	1,1,1-trichloroethane	9.800	97	201094	50.50	ug/L		99
53)	Cyclohexane	9.869	84	219884	52.67	ug/L		93
54)	iso-butyl alcohol	9.989	43	64191	501.61	ug/L		97
55)	Tert Amyl Alcohol	10.115	73	32463	238.71	ug/L		98
58)	2,2,4-trimethylpentane	10.225	57	645346	56.00	ug/L		99
59)	n-butyl alcohol	10.739	56	194796	2691.78	ug/L		96
60)	benzene	10.246	78	575201	48.72	ug/L		99
61)	tert-amyl methyl ether	10.267	73	453106	48.18	ug/L		100
62)	heptane	10.393	57	132234	62.20	ug/L		95
63)	1,2-dichloroethane	10.267	62	175248	49.80	ug/L		99
64)	ethyl acrylate	10.954	55	163519	52.73	ug/L		99
65)	trichloroethene	10.954	95	132342	50.15	ug/L		98
66)	2-nitropropane	11.735	41	47526	52.81	ug/L	#	79
67)	2-chloroethyl vinyl ether	11.740	63	433684	298.21	ug/L		99
68)	methyl methacrylate	11.216	100	30027	52.12	ug/L		96
69)	1,2-dichloropropane	11.227	63	163900	50.94	ug/L		99
70)	methylcyclohexane	11.164	83	262128	49.90	ug/L		99
71)	dibromomethane	11.384	93	76529	50.54	ug/L		96
72)	bromodichloromethane	11.510	83	177424	51.84	ug/L		99
73)	epichlorohydrin	11.871	57	68344	254.62	ug/L		96
74)	cis-1,3-dichloropropene	11.961	75	234132	50.39	ug/L		99
75)	4-methyl-2-pentanone	12.050	58	200639	199.46	ug/L		100
76)	3-methyl-1-butanol	12.065	70	69852	1035.34	ug/L		98
79)	toluene	12.317	92	319571	50.42	ug/L		97
80)	ethyl methacrylate	12.495	69	167310	50.22	ug/L		98
81)	trans-1,3-dichloropropene	12.516	75	196857	49.56	ug/L		99
82)	1,1,2-trichloroethane	12.731	83	93845	50.51	ug/L		100
83)	tetrachloroethene	12.894	164	109062	61.27	ug/L		98
84)	2-hexanone	12.889	58	181941	186.58	ug/L		99
85)	1,3-dichloropropane	12.910	76	196842	49.93	ug/L		98
86)	butyl acetate	12.957	56	91173	50.70	ug/L		99
87)	3,3-dimethyl-1-butanol	13.056	57	132151	529.30	ug/L		99
88)	dibromochloromethane	13.172	129	115982	51.26	ug/L		100
89)	1,2-dibromoethane	13.324	107	106105	49.61	ug/L		100
90)	n-butyl ether	13.665	57	681727	49.28	ug/L		99
91)	chlorobenzene	13.775	112	328835	49.65	ug/L		99
92)	1,1,1,2-tetrachloroethane	13.832	131	122118	51.53	ug/L		100
93)	ethylbenzene	13.822	91	593517	48.95	ug/L		99
94)	m,p-xylene	13.927	106	440495	99.25	ug/L		98
95)	o-xylene	14.341	91	491920	48.63	ug/L		99
96)	styrene	14.357	104	371314	49.50	ug/L		99
97)	butyl acrylate	14.163	55	278968	51.38	ug/L		100
98)	bromoform	14.629	173	73370	51.07	ug/L		96
99)	isopropylbenzene	14.676	105	586744	50.12	ug/L		100
100)	cis-1,4-dichloro-2-butene	14.760	75	53960	49.70	ug/L		97
103)	bromobenzene	15.085	156	132181	49.40	ug/L		97
104)	1,1,2,2-tetrachloroethane	14.991	83	144252	49.20	ug/L		100
105)	trans-1,4-dichloro-2-b...	15.033	53	43709	54.74	ug/L		97
106)	1,2,3-trichloropropane	15.070	110	35283	51.00	ug/L		98
107)	n-propylbenzene	15.085	91	707353	49.77	ug/L		99
108)	4-Ethyltoluene	15.185	105	460559	50.99	ug/L		99
109)	2-chlorotoluene	15.237	126	134729	50.36	ug/L		99
110)	4-chlorotoluene	15.332	91	427738	48.67	ug/L		99
111)	1,3,5-trimethylbenzene	15.232	105	503136	50.81	ug/L		100
112)	tert-butylbenzene	15.578	119	424881	51.42	ug/L		99
113)	1,2,4-trimethylbenzene	15.625	105	516305	50.64	ug/L		99
114)	sec-butylbenzene	15.788	105	655235	51.10	ug/L		100
115)	1,3-dichlorobenzene	15.982	146	260494	48.80	ug/L		98
116)	p-isopropyltoluene	15.903	119	541224	51.34	ug/L		99
117)	1,4-dichlorobenzene	16.061	146	265623	49.36	ug/L		99
118)	1,2-dichlorobenzene	16.438	146	260234	49.28	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137243.D
Acq On : 11 Oct 2017 11:30 pm
Operator : JessicaP
Sample : icv5986-50
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 13 17:10:39 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Fri Oct 13 17:09:02 2017
Response via : Initial Calibration

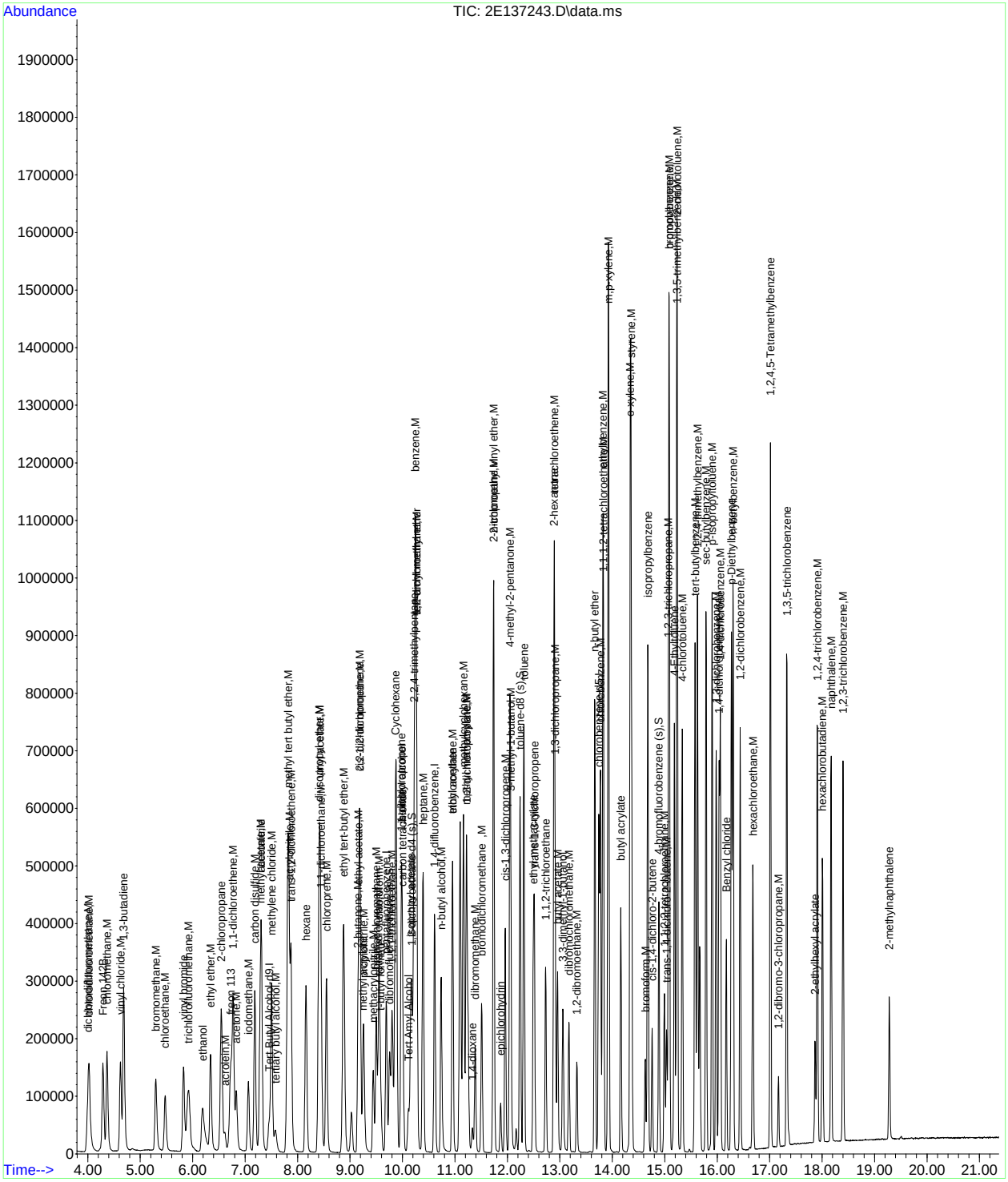
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) p-Diethylbenzene	16.270	119	290290	50.83	ug/L	100
120) n-butylbenzene	16.302	92	301377	50.79	ug/L	99
121) 1,2,4,5-Tetramethylben...	17.015	119	596483	51.73	ug/L	100
122) 1,2-dibromo-3-chloropr...	17.167	75	29415	51.63	ug/L	96
123) 1,3,5-trichlorobenzene	17.329	180	245432	52.79	ug/L	98
124) 1,2,4-trichlorobenzene	17.911	180	213588	51.15	ug/L	99
125) 2-ethylhexyl acrylate	17.869	70	44835	12.54	ug/L	99
126) hexachlorobutadiene	18.006	225	101826	50.87	ug/L	97
127) naphthalene	18.174	128	477484	50.53	ug/L	99
128) 1,2,3-trichlorobenzene	18.399	180	194756	51.35	ug/L	99
129) hexachloroethane	16.685	201	84155	53.02	ug/L	99
130) Benzyl chloride	16.176	91	248261	41.74	ug/L	99
131) 2-methylnaphthalene	19.280	142	118251	26.84	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137243.D
Acq On : 11 Oct 2017 11:30 pm
Operator : JessicaP
Sample : icv5986-50
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 13 17:10:39 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Fri Oct 13 17:09:02 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137244.D
Acq On : 11 Oct 2017 11:58 pm
Operator : JessicaP
Sample : icv5986-50
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 13 17:12:31 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Fri Oct 13 17:09:02 2017
Response via : Initial Calibration

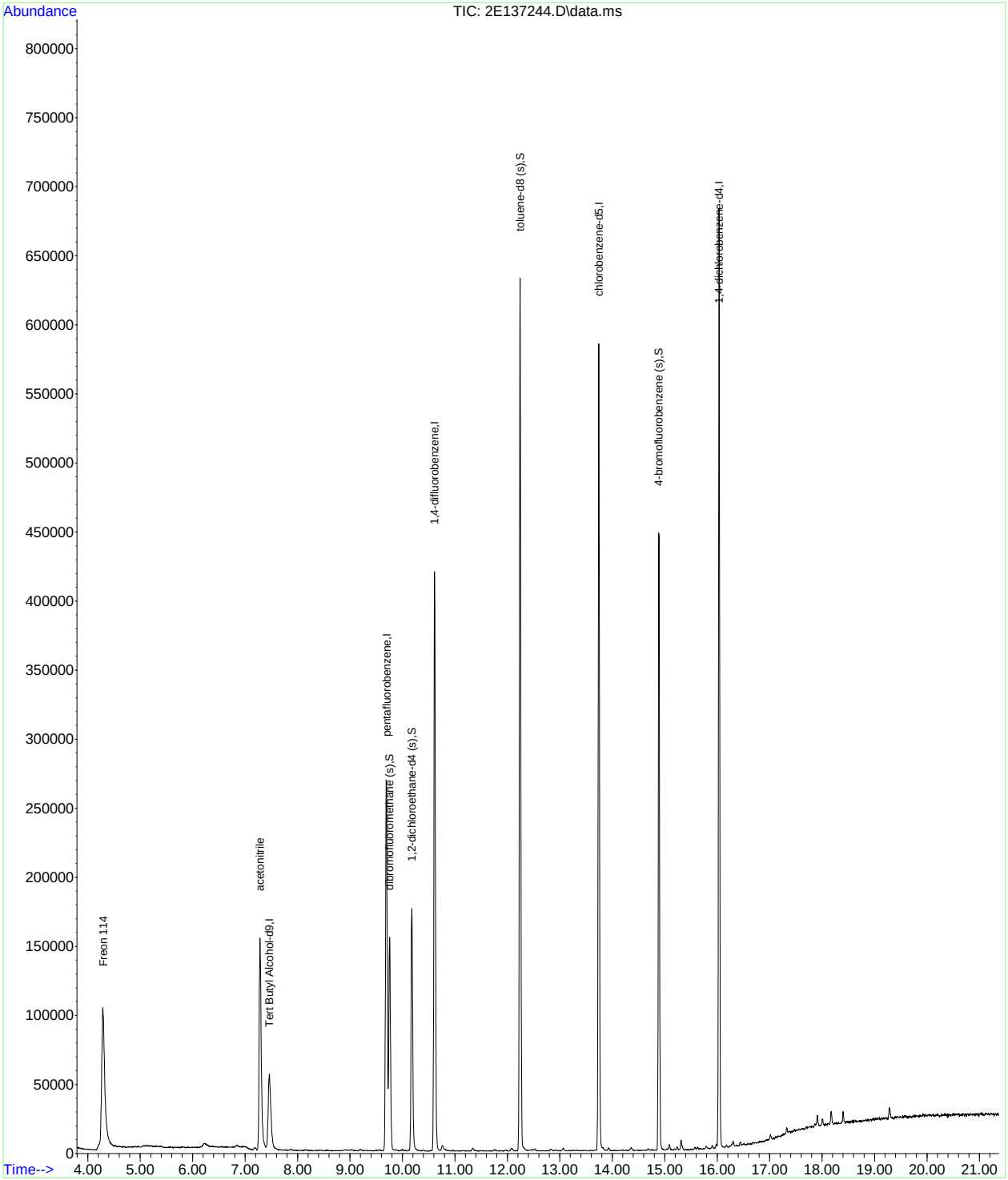
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.462	65	114419	500.00	ug/L	0.00
5) pentafluorobenzene	9.696	168	206095	50.00	ug/L	0.00
56) 1,4-difluorobenzene	10.613	114	351998	50.00	ug/L	0.00
77) chlorobenzene-d5	13.743	117	305585	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	16.035	152	157323	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	9.753	113	107838	50.71	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.42%			
57) 1,2-dichloroethane-d4 (s)	10.178	65	132620	51.14	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.28%			
78) toluene-d8 (s)	12.244	98	427435	49.44	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.88%			
102) 4-bromofluorobenzene (s)	14.886	95	162264	50.47	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.94%			
Target Compounds						Qvalue
9) Freon 114	4.295	135	94318	52.60	ug/L	# 68
23) acetonitrile	7.284	41	231972	482.17	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2E\v2e5986final\
Data File : 2E137244.D
Acq On : 11 Oct 2017 11:58 pm
Operator : JessicaP
Sample : icv5986-50
Misc : MS20739,V2E5986,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 13 17:12:31 2017
Quant Method : C:\msdchem\1\methods\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Fri Oct 13 17:09:02 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 2E138170.D
Acq On : 8 Nov 2017 6:58 pm
Operator : JessicaP
Sample : cc5986-50
Misc : MS21949,V2E6027,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Nov 09 08:45:43 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Fri Oct 13 17:09:02 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.457	65	119243	500.00	ug/L		0.00
5) pentafluorobenzene	9.691	168	211529	50.00	ug/L		0.00
56) 1,4-difluorobenzene	10.608	114	360409	50.00	ug/L		0.00
77) chlorobenzene-d5	13.738	117	293945	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	16.035	152	141376	50.00	ug/L		0.00
System Monitoring Compounds							
50) dibromofluoromethane (s)	9.748	113	112555	51.57	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.14%				
57) 1,2-dichloroethane-d4 (s)	10.173	65	153310	57.74	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 115.48%				
78) toluene-d8 (s)	12.239	98	424128	51.00	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.00%				
102) 4-bromofluorobenzene (s)	14.886	95	154327	53.41	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 106.82%				
Target Compounds							Qvalue
2) ethanol	6.188	45	210078	4463.28	ug/L		97
3) tertiary butyl alcohol	7.578	59	89774	253.58	ug/L		96
4) 1,4-dioxane	11.332	88	30415	1109.81	ug/L		86
6) chlorodifluoromethane	4.033	51	247666	53.73	ug/L		98
7) dichlorodifluoromethane	4.012	85	205192	56.16	ug/L		97
10) chloromethane	4.379	50	328111	55.05	ug/L		99
11) vinyl chloride	4.636	62	287078	53.58	ug/L		99
12) bromomethane	5.307	94	134775	47.52	ug/L		97
13) chloroethane	5.480	64	153519	49.98	ug/L		97
14) trichlorofluoromethane	5.926	101	219846	53.62	ug/L		99
16) vinyl bromide	5.832	106	121409	26.41	ug/L		98
17) ethyl ether	6.346	74	91036	48.99	ug/L		93
18) 2-chloropropane	6.550	43	409738	60.21	ug/L		92
19) acrolein	6.623	56	32605	44.17	ug/L		97
20) freon 113	6.739	151	72463	44.78	ug/L		93
21) 1,1-dichloroethene	6.775	61	267053	55.41	ug/L		95
22) acetone	6.833	58	90471	297.92	ug/L	#	73
23) acetonitrile	7.284	41	272027	550.91	ug/L		99
24) iodomethane	7.064	142	214378	53.59	ug/L		98
25) carbon disulfide	7.190	76	544023	51.62	ug/L		97
26) methylene chloride	7.504	84	162288	49.77	ug/L		93
27) methyl acetate	7.294	43	148493	56.13	ug/L		98
28) methyl tert butyl ether	7.819	73	462021	52.96	ug/L		96
29) trans-1,2-dichloroethene	7.876	61	261659	55.44	ug/L		95
30) hexane	8.160	56	113713	52.53	ug/L		92
31) di-isopropyl ether	8.411	45	683298	55.93	ug/L		86
32) ethyl tert-butyl ether	8.873	59	594174	54.39	ug/L		96
33) 2-butanone	9.145	72	72990	232.17	ug/L		93
34) 1,1-dichloroethane	8.448	63	304985	53.16	ug/L		99
35) chloroprene	8.548	53	282023	58.07	ug/L		93
36) acrylonitrile	7.840	53	66275	55.57	ug/L		94
37) vinyl acetate	8.432	86	27347	54.79	ug/L	#	87
38) ethyl acetate	9.161	45	25027	52.70	ug/L	#	68
39) 2,2-dichloropropane	9.182	77	242651	52.99	ug/L		97
40) cis-1,2-dichloroethene	9.187	96	155401	47.61	ug/L		96
41) propionitrile	9.261	54	245955	537.10	ug/L		87
42) methyl acrylate	9.245	85	18869	56.49	ug/L		93
43) bromochloromethane	9.502	128	67328	49.49	ug/L		96
44) tetrahydrofuran	9.539	72	18039	50.84	ug/L		94
45) chloroform	9.549	83	259663	50.94	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 2E138170.D
Acq On : 8 Nov 2017 6:58 pm
Operator : JessicaP
Sample : cc5986-50
Misc : MS21949,V2E6027,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Nov 09 08:45:43 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Fri Oct 13 17:09:02 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) t-butyl formate	9.575	59	57679	70.89	ug/L		94
47) 1,1-dichloropropene	9.974	75	211492	53.14	ug/L		99
48) carbon tetrachloride	10.000	117	183831	53.96	ug/L		98
49) isopropyl acetate	10.157	87	28720	54.62	ug/L	#	87
51) methacrylonitrile	9.439	67	60678	55.86	ug/L		88
52) 1,1,1-trichloroethane	9.801	97	226402	53.49	ug/L		93
53) Cyclohexane	9.864	84	182891	41.22	ug/L	#	75
54) iso-butyl alcohol	9.984	43	67729	497.91	ug/L		95
55) Tert Amyl Alcohol	10.115	73	35731	247.18	ug/L		95
58) 2,2,4-trimethylpentane	10.220	57	592673	48.95	ug/L		94
59) n-butyl alcohol	10.734	56	201796	2654.22	ug/L		93
60) benzene	10.241	78	604783	48.76	ug/L		98
61) tert-amyl methyl ether	10.262	73	486762	49.27	ug/L		94
62) heptane	10.393	57	111628	49.98	ug/L		94
63) 1,2-dichloroethane	10.262	62	204599	55.34	ug/L		99
64) ethyl acrylate	10.949	55	180936	55.54	ug/L		95
65) trichloroethene	10.954	95	139499	50.32	ug/L		96
66) 2-nitropropane	11.730	41	55536	58.74	ug/L	#	81
67) 2-chloroethyl vinyl ether	11.735	63	376231	246.24	ug/L		100
68) methyl methacrylate	11.216	100	30418	50.26	ug/L	#	68
69) 1,2-dichloropropane	11.222	63	168170	49.75	ug/L		97
70) methylcyclohexane	11.159	83	255603	46.32	ug/L		91
71) dibromomethane	11.384	93	82664	51.96	ug/L		99
72) bromodichloromethane	11.505	83	191021	53.12	ug/L		97
73) epichlorohydrin	11.866	57	70178	248.86	ug/L		96
74) cis-1,3-dichloropropene	11.956	75	242747	49.73	ug/L		90
75) 4-methyl-2-pentanone	12.045	58	213684	202.20	ug/L		89
76) 3-methyl-1-butanol	12.060	70	71723	1011.87	ug/L		84
79) toluene	12.312	92	323555	51.01	ug/L		98
80) ethyl methacrylate	12.490	69	175061	52.51	ug/L		94
81) trans-1,3-dichloropropene	12.511	75	204737	51.50	ug/L		98
82) 1,1,2-trichloroethane	12.726	83	94729	50.94	ug/L		96
83) tetrachloroethene	12.889	164	89965	50.49	ug/L		98
84) 2-hexanone	12.889	58	206033	211.11	ug/L		90
85) 1,3-dichloropropane	12.905	76	196489	49.80	ug/L		99
86) butyl acetate	12.952	56	91008	50.56	ug/L		95
87) 3,3-dimethyl-1-butanol	13.057	57	126896	507.81	ug/L		96
88) dibromochloromethane	13.172	129	115019	50.79	ug/L		99
89) 1,2-dibromoethane	13.324	107	104743	48.93	ug/L		98
90) n-butyl ether	13.665	57	686933	49.61	ug/L		99
91) chlorobenzene	13.770	112	321362	48.48	ug/L		96
92) 1,1,1,2-tetrachloroethane	13.833	131	117714	49.63	ug/L		99
93) ethylbenzene	13.817	91	592259	48.80	ug/L		99
94) m,p-xylene	13.922	106	427370	96.21	ug/L		96
95) o-xylene	14.341	91	492085	48.60	ug/L		97
96) styrene	14.352	104	356453	47.48	ug/L		96
97) butyl acrylate	14.163	55	271569	49.98	ug/L		97
98) bromoform	14.624	173	72176	50.19	ug/L		97
99) isopropylbenzene	14.677	105	568379	48.51	ug/L		99
100) cis-1,4-dichloro-2-butene	14.755	75	44555	41.00	ug/L	#	85
103) bromobenzene	15.080	156	124831	49.45	ug/L		89
104) 1,1,2,2-tetrachloroethane	14.991	83	136218	49.25	ug/L		99
105) trans-1,4-dichloro-2-b...	15.033	53	37329	49.55	ug/L		90
106) 1,2,3-trichloropropane	15.065	110	33209	50.88	ug/L		99
107) n-propylbenzene	15.080	91	683712	50.99	ug/L		99
109) 2-chlorotoluene	15.232	126	125388	49.68	ug/L		89
110) 4-chlorotoluene	15.332	91	423743	51.11	ug/L		98
111) 1,3,5-trimethylbenzene	15.232	105	484203	51.83	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 2E138170.D
Acq On : 8 Nov 2017 6:58 pm
Operator : JessicaP
Sample : cc5986-50
Misc : MS21949,V2E6027,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Nov 09 08:45:43 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Fri Oct 13 17:09:02 2017
Response via : Initial Calibration

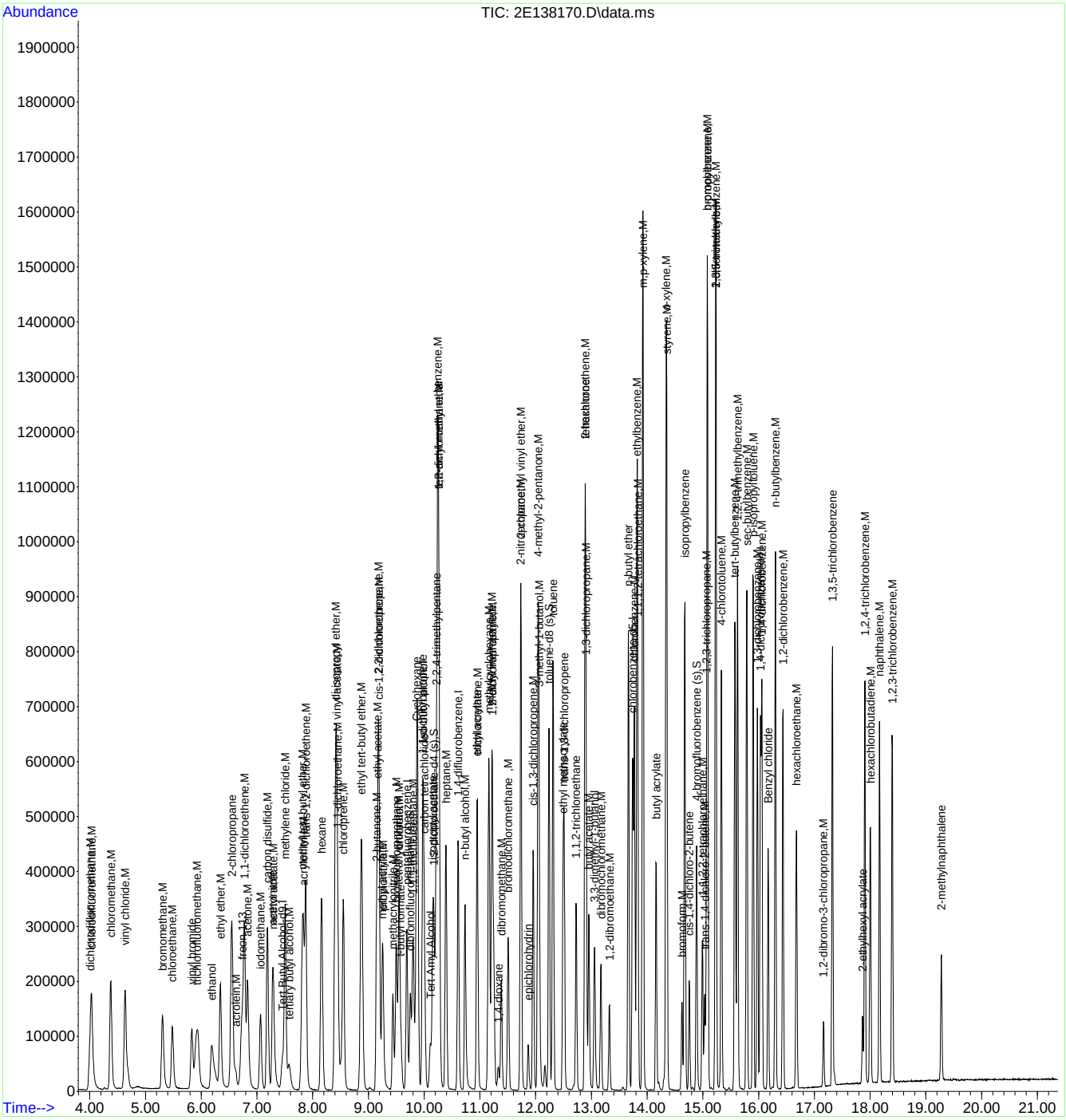
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) tert-butylbenzene	15.573	119	394513	50.61	ug/L	93
113) 1,2,4-trimethylbenzene	15.620	105	494628	51.42	ug/L	99
114) sec-butylbenzene	15.788	105	618854	51.15	ug/L	99
115) 1,3-dichlorobenzene	15.977	146	244255	48.50	ug/L	98
116) p-isopropyltoluene	15.904	119	505152	50.79	ug/L	98
117) 1,4-dichlorobenzene	16.056	146	247884	48.82	ug/L	99
118) 1,2-dichlorobenzene	16.438	146	242289	48.63	ug/L	98
120) n-butylbenzene	16.302	92	276775	49.44	ug/L	99
122) 1,2-dibromo-3-chloropr...	17.162	75	30359	56.61	ug/L	87
123) 1,3,5-trichlorobenzene	17.324	180	217345	49.55	ug/L	100
124) 1,2,4-trichlorobenzene	17.906	180	198239	50.32	ug/L	100
125) 2-ethylhexyl acrylate	17.864	70	27687	8.21	ug/L	92
126) hexachlorobutadiene	18.006	225	96186	50.93	ug/L	99
127) naphthalene	18.169	128	443280	49.72	ug/L	100
128) 1,2,3-trichlorobenzene	18.399	180	180499	50.44	ug/L	99
129) hexachloroethane	16.680	201	81094	54.15	ug/L	99
130) Benzyl chloride	16.171	91	280892	50.05	ug/L	98
131) 2-methylnaphthalene	19.280	142	108559	26.11	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 2E138170.D
Acq On : 8 Nov 2017 6:58 pm
Operator : JessicaP
Sample : cc5986-50
Misc : MS21949,V2E6027,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Nov 09 08:45:43 2017
Quant Method : C:\MSDCHEM\1\METHODS\M2E5986.M
Quant Title : SW-846 Method V8260C, ZB624 60Mx0.25MMx1.4UM
QLast Update : Fri Oct 13 17:09:02 2017
Response via : Initial Calibration



SGS

VOLATILE ANALYSIS LOG

Batch ID: V2E5986

Date: 10/11/2017 (Wednesday)

Initial Calibration

Print Analyst Name: Jessica Potts

Analyst Signature: Jessica Potts

Columns: ZB624 (60mx0.25 mmx1um)

Method V8260C

Initial Cal. Method V2E5986

Standard Data

Lot #	Description	Conc.
WI72530-145.9	ABBK	100 ppm
WI72534-106.5	C	100 ppm
WI72530-143.36	E	100 ppm
WI72530-145	I/S	250/500ppm
WI72530-112.1	SL	100ppm

Standard Data

Lot #	Description	Conc.
WI72530-142.6	Ext ABB	100 ppm
WI72534-105	Ext C	100 ppm
WI72534-103.3	Ext E	100 ppm
WI72530-132.4	Ext K	300 ppm
WI72534-104.3	Ext Hex	100ppm

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: 10/11/17

WI72534-105.4 Ext Acetone 100ppm WI72530-113.2 Ext SC 100ppm WI72530-114.2 Ext F114 100 ppm Freon

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
	2E137230	BRB				1	5						qc	5.25ppm	
	2E137231	ICV5986-0.2	8260 Initial Cal	AQ		2	5		1x				w	2uL ABBK,C,E,SL/100mL	
	2E137232	ICV5986-0.5	✓	AQ		3	5		1x				qc	5uL ABBK,C,E,SL/100mL	
	2E137233	ICV5986-1	✓	AQ		4	5		1x				w	10uL ABBK,C,E,SL/10mL	
	2E137234	ICV5986-2	✓	AQ		5	5		1x				w	20uL ABBK,C,E,SL/10mL	
	2E137235	ICV5986-5	✓	AQ		6	5		1x				w	50uL ABBK,C,E,SL/10mL	
	2E137236	ICV5986-10	✓	AQ		7	5		1x				w	100uL ABBK,C,E,SL/10mL	
	2E137237	ICV5986-20	✓	AQ		8	5		1x				w	200uL ABBK,C,E,SL/10mL	
	2E137238	ICV5986-50	✓	AQ		9	5		1x				w	500uL ABBK,C,E,SL/10mL	
	2E137239	ICV5986-100	✓	AQ		10	5		1x				w	1000uL ABBK,C,E,SL/10mL	
	2E137240	ICV5986-200	✓	AQ		11	5		1x				w	2000uL ABBK,C,E,SL/10mL	
	2E137241	IB ~~ICV5986~~				12	5		1X				–		
	2E137242	IB				13	5						–		
	2E137243	ICV5986-50	✓	AQ		14	5		1x				w	50uL ABBK,C,E,K,Hex,SL/10mL (exts)	
	2E137244	ICV5986-50	✓	AQ		15	5		1x				w	50uL Acetone, F114/10mL (ext)	
	2E137245	IB				16	5								

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

10-11-17

235

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

7.2.1

7

SGS

VOLATILE ANALYSIS LOG

Batch ID: V2E6027

Date: 1/18/17 (Wednesday)

Print Analyst Name: Jessica Ribs

Analyst Signature: Jessica Ribs

Columns: 2, B624 (60m x 0.25mm x 1.4)

Method V8260C

Initial Cal. Method M2E5P86

Standard Data

Lot #	Description	Conc.
	Same as 5ml's.)	

Standard Data

Lot #	Description	Conc.
WP75744-17.14	AABK	100 ppm
WP75744-42.2	C	100 ppm
WP75744-22.34	E	100 ppm
WP75744-16	J15	250/2500 ppm
pH Wp721815	Exp 6/15/18	

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: Kelly Date: 1/20/17

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
	2E138169	BFB				23	5						ok	6:30 P.M.	
	138170	CC5986-50				24	5						ok	Acetone / SOMAABK,E/Hexane	
	138171	lb				25	5						ok		
	138172	mb				26	5						ok		
	138173	bs				27	5						ok	SOMAABK,C,E/Hexane	
	138174	JC54532-1 MS	21833 TCL42		6	28	5		1x				ok	SOMAABK,C,E/Hexane	✓
	138175	JC54532-1 MSD	✓		15	29	5		1x				ok		✓
	138176	lb				30	5						ok		
	138177	JC54532-17	21833 TCL42	W	2	31	5		1x				ok		✓
	138178	JC54532-18	✓	W	3	32	5		1x				ok		✓
	138179	JC54532-1	✓	W	17	33	5		1x				ok	RRIXFID	✓
	138180	JC55040-2 JC54532-3	21999 ICP10	W	4	34	5		1x				ok	transfer due to segment invalid GW MS21999 ok per chem	
	138181	JC55040-3 JC54532-6	✓ ✓	W	4	35	5		1x				ok	transfer due to segment invalid JP 1/19/17 ok per chem	
	138182	JC55040-1 JC54532-8	✓ ✓	W	2	36	5		1x				ok	ok per chem	✓
	138183	JC54532-19	21833 TCL42	W	2	37	5		1x				ok		✓
	138184	JC54532-10	✓	W	1	38	5		1x				ok		✓
	138185	JC54532-13	✓	W	1	39	5		1x				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

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

V2E6027

SGS

VOLATILE ANALYSIS LOG

Batch ID: 11/8/17 JT 11/8

Date: 11/8/17 (Wednesday)

Print Analyst Name: Jessica Ritts

Analyst Signature: Jessica Ritts

Columns: ZB624(60m x 0.25mm x 1.4μm)

Method V 8260 C

Initial Cal. Method M 2E5986

Standard Data		
Lot #	Description	Conc.
	See page 95	

Standard Data		
Lot #	Description	Conc.
	See page 95	

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: BKelly Date: 11/10/17

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
	2E138186	JC54532-14	21833 TCL42	W	2	40	5		1x		✓	✓	ok		✓
	138187	JC54532-16	✓	W	6	41	5		1x		✓	✓	ok		✓
	138188	JC54416-2	21866 SC6	S	9	42	5		1x		✓	✓	ok		✓
	138189	JC54416-1	✓	S	2	43	5		1x		✓	✓	ok		✓
	138190	JC54608-1	21866 N11F	W	1	44	1/50		50x		✓	✓	ok	RR2x/combine	✓
	138191	JC54608-2	✓	W	2	45	1/50		50x		✓	✓	ok	RR1x	✓
	138192	JC54608-3	✓	W	2	46	1/50		50x		✓	✓	ok	RR1x	✓
	138193	JC54608-4	✓	W	2	47	1/50		50		✓	✓	ok	RR1x [5:35am]	✓

11-8-17

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

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

e-Hardcopy 2.0
Automated Report

Technical Report for

HSW Engineering

Long Island GW Sampling, Long Island, NY

1AS301101.063

SGS Accutest Job Number: JC55112

Sampling Date: 11/09/17

Report to:

HSW Engineering
15711 Mapledale Boulevard Suite B
Tampa, FL 33624
RPoff@HSWEng.com; DSmolensky@Emagin-Inc.com

ATTN: Rich Poff

Total number of pages in report: **125**

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)

Sections: 1 2 3 4 5 6 7

Table of Contents

Sample Summary

HSW Engineering

Job No: JC55112

Long Island GW Sampling, Long Island, NY
Project No: 1AS301101.063

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC55112-1	11/09/17	12:25	CMT	11/09/17	AQ	Ground Water	MW-301(HP-305)

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	HSW Engineering	**Job No**	JC55112
Site:	Long Island GW Sampling, Long Island, NY	**Report Date**	11/21/2017 4:33:35 P

On 11/09/2017, 1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 4.8 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of JC55112 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:** VA9023

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC54707-1MS, JC54707-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JC55112-1 for 1,2-Dichloroethane: Associated CCV outside of control limits low.
- JC55112-1 for Dichlorodifluoromethane: Associated CCV outside of control limits low.

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: JC55112
Account: HSW Engineering
Project: Long Island GW Sampling, Long Island, NY
Collected: 11/09/17

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC55112-1	**MW-301(HP-305)**					
Acetone		17.2	10	5.0	ug/l	SW846 8260C

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID: MW-301(HP-305)
Lab Sample ID: JC55112-1
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Long Island GW Sampling, Long Island, NY

Date Sampled: 11/09/17
Date Received: 11/09/17
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A237824.D	1	11/10/17 04:06	GA	n/a	n/a	VA9023
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	17.2	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 [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 [a]	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	
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	

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:	MW-301(HP-305)		
Lab Sample ID:	JC55112-1	**Date Sampled:**	11/09/17
Matrix:	AQ - Ground Water	**Date Received:**	11/09/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-120%
17060-07-0	1,2-Dichloroethane-D4	91%		81-124%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

(a) Associated CCV outside of control limits low.

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

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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

FED-EX Tracking #:
Bottle Order Control #: JC55112
SGS Accutest Quote #:
SGS Accutest Job #:

Client / Reporting Information

Company Name: EMAGIN
Street Address: 15711 Magnolia Blvd Suite B
City: Tampa State: FL Zip: 33624
Project Contact: Rich Poff rpoff@mwcs.com; Doug Sobolesky dsobolesky@emagin-inc.com
Phone #: 813-968-7722 Fax #:
Sampler(s) Name(s): Chad Thompson (321-947-5448) Phone #:

Project Information

Project Name: Long Island GW Sampling
Street:
City: Long Island State: NY
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

VOCs by EPA Method 8260C

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	Time	Sampled by	Matrix	# of bottles	Number of preservative Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
1	MW-301 (HP-305)	-	11/09/17	1225	CMT	GW	3	X								V164

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

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

* 12 HR RUSH *
Tammy McCloskey (SGS)

Emergency & Rush T/A data available VIA Labiink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULL T1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] 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

INITIAL ASSESSMENT 1B JJ
LABEL VERIFICATION

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:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		11/09/17 (1355)	1	2	11/9/17/16:30	2
2	Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal # 980	Intact / Not Intact	Preserved where applicable	On Ice: X	Cooler Temp: 3.9°C/P

Form:SMO68-01CRev.Date:9/1

JC55112: Chain of Custody
Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: JC55112 **Client:** _____ **Project:** _____

Date / Time Received: 11/9/2017 4:30:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.9);

Cooler Temps (Corrected) °C: Cooler 1: (4.8);

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

JC55112: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

HSW Engineering

Job No: JC55112

Long Island GW Sampling, Long Island, NY
Project No: 1AS301101.063

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC55112-1	Collected: 09-NOV-17 12:25 By: CMT		Received: 09-NOV-17 By: AS			
MW-301(HP-305)						
JC55112-1	SW846 8260C	10-NOV-17 04:06	GA			V8260TCL20

SGS Accutest Internal Chain of Custody

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY
Received: 11/09/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC55112-1.2	Secured Storage	Maricela Delgaolillo	11/09/17 23:58	Retrieve from Storage
JC55112-1.2	Maricela Delgaolillo	GCMS2A	11/09/17 23:58	Load on Instrument
JC55112-1.2	GCMS2A	Maricela Delgaolillo	11/10/17 01:01	Unload from Instrument
JC55112-1.2	Maricela Delgaolillo	GCMSA	11/10/17 01:01	Load on Instrument
JC55112-1.2	GCMSA	Gabriela Alvarez	11/10/17 12:44	Unload from Instrument
JC55112-1.2	Gabriela Alvarez	Secured Storage	11/10/17 12:44	Return to Storage

MS Volatiles

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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: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA9023-MB	A237816A.D	1	11/09/17	GA	n/a	n/a	VA9023

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

JC55112-1

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	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	
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	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	

Method Blank Summary

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA9023-MB	A237816A.D	1	11/09/17	GA	n/a	n/a	VA9023

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

JC55112-1

CAS No.	Compound	Result	RL	MDL	Units	Q
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	98%	80-120%
17060-07-0	1,2-Dichloroethane-D4	86%	81-124%
2037-26-5	Toluene-D8	92%	80-120%
460-00-4	4-Bromofluorobenzene	94%	80-120%

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

Blank Spike Summary

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA9023-BS	A237817.D	1	11/10/17	GA	n/a	n/a	VA9023

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

JC55112-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	167	84	42-150
71-43-2	Benzene	50	45.3	91	80-120
74-97-5	Bromochloromethane	50	46.3	93	84-121
75-27-4	Bromodichloromethane	50	44.9	90	83-120
75-25-2	Bromoform	50	45.1	90	76-129
74-83-9	Bromomethane	50	51.0	102	57-138
78-93-3	2-Butanone (MEK)	200	182	91	64-137
75-15-0	Carbon disulfide	50	40.2	80	64-137
56-23-5	Carbon tetrachloride	50	43.6	87	75-135
108-90-7	Chlorobenzene	50	45.0	90	84-117
75-00-3	Chloroethane	50	49.1	98	63-132
67-66-3	Chloroform	50	43.8	88	80-119
74-87-3	Chloromethane	50	49.2	98	46-136
110-82-7	Cyclohexane	50	47.8	96	64-137
96-12-8	1,2-Dibromo-3-chloropropane	50	46.3	93	72-127
124-48-1	Dibromochloromethane	50	46.3	93	80-123
106-93-4	1,2-Dibromoethane	50	47.0	94	84-117
95-50-1	1,2-Dichlorobenzene	50	46.6	93	84-119
541-73-1	1,3-Dichlorobenzene	50	45.9	92	81-117
106-46-7	1,4-Dichlorobenzene	50	44.8	90	82-117
75-71-8	Dichlorodifluoromethane	50	41.2	82	36-149
75-34-3	1,1-Dichloroethane	50	44.0	88	79-120
107-06-2	1,2-Dichloroethane	50	40.2	80	78-126
75-35-4	1,1-Dichloroethene	50	43.0	86	69-126
156-59-2	cis-1,2-Dichloroethene	50	47.3	95	80-120
156-60-5	trans-1,2-Dichloroethene	50	45.3	91	76-120
78-87-5	1,2-Dichloropropane	50	45.1	90	82-121
10061-01-5	cis-1,3-Dichloropropene	50	46.4	93	83-120
10061-02-6	trans-1,3-Dichloropropene	50	42.5	85	82-121
100-41-4	Ethylbenzene	50	44.8	90	80-120
76-13-1	Freon 113	50	40.9	82	62-182
591-78-6	2-Hexanone	200	175	88	65-132
98-82-8	Isopropylbenzene	50	45.1	90	83-120
79-20-9	Methyl Acetate	50	43.1	86	67-129
108-87-2	Methylcyclohexane	50	42.5	85	71-134
1634-04-4	Methyl Tert Butyl Ether	50	42.3	85	80-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA9023-BS	A237817.D	1	11/10/17	GA	n/a	n/a	VA9023

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

JC55112-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	189	95	71-131
75-09-2	Methylene chloride	50	44.8	90	77-120
100-42-5	Styrene	50	46.0	92	82-122
79-34-5	1,1,2,2-Tetrachloroethane	50	48.1	96	76-119
127-18-4	Tetrachloroethene	50	43.6	87	70-131
108-88-3	Toluene	50	44.7	89	80-120
87-61-6	1,2,3-Trichlorobenzene	50	44.4	89	76-134
120-82-1	1,2,4-Trichlorobenzene	50	43.6	87	79-132
71-55-6	1,1,1-Trichloroethane	50	43.4	87	81-128
79-00-5	1,1,2-Trichloroethane	50	46.8	94	83-118
79-01-6	Trichloroethene	50	46.3	93	80-120
75-69-4	Trichlorofluoromethane	50	43.2	86	64-136
75-01-4	Vinyl chloride	50	50.0	100	51-135
	m,p-Xylene	100	91.3	91	80-120
95-47-6	o-Xylene	50	46.0	92	80-120
1330-20-7	Xylene (total)	150	137	91	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	80-120%
17060-07-0	1,2-Dichloroethane-D4	83%	81-124%
2037-26-5	Toluene-D8	92%	80-120%
460-00-4	4-Bromofluorobenzene	98%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54707-1MS	A237818.D	5	11/10/17	GA	n/a	n/a	VA9023
JC54707-1MSD	A237819.D	5	11/10/17	GA	n/a	n/a	VA9023
JC54707-1	A237825.D	50	11/10/17	GA	n/a	n/a	VA9023

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

JC55112-1

CAS No.	Compound	JC54707-1 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		1000	869	87	1000	932	93	7	34-149/17
71-43-2	Benzene	ND		250	243	94	250	263	105	8	54-136/10
74-97-5	Bromochloromethane	ND		250	242	97	250	264	106	9	79-124/11
75-27-4	Bromodichloromethane	ND		250	231	92	250	254	102	9	79-124/11
75-25-2	Bromoform	ND		250	234	94	250	256	102	9	71-130/11
74-83-9	Bromomethane	ND		250	243	97	250	243	97	0	53-142/14
78-93-3	2-Butanone (MEK)	ND		1000	936	94	1000	1040	104	11	54-142/15
75-15-0	Carbon disulfide	ND		250	227	91	250	245	98	8	59-145/17
56-23-5	Carbon tetrachloride	ND		250	225	90	250	245	98	9	70-143/12
108-90-7	Chlorobenzene	ND		250	235	93	250	258	103	9	78-123/10
75-00-3	Chloroethane	ND		250	233	93	250	234	94	0	57-141/14
67-66-3	Chloroform	ND		250	232	89	250	251	100	8	76-123/11
74-87-3	Chloromethane	ND		250	233	93	250	234	94	0	43-141/16
110-82-7	Cyclohexane	ND		250	225	90	250	239	96	6	51-155/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		250	240	96	250	270	108	12	66-130/13
124-48-1	Dibromochloromethane	ND		250	238	95	250	262	105	10	76-125/11
106-93-4	1,2-Dibromoethane	ND		250	241	96	250	259	104	7	78-119/11
95-50-1	1,2-Dichlorobenzene	57.4		250	296	95	250	315	103	6	77-123/11
541-73-1	1,3-Dichlorobenzene	ND		250	242	97	250	266	106	9	76-122/11
106-46-7	1,4-Dichlorobenzene	ND		250	241	92	250	260	104	8	76-122/11
75-71-8	Dichlorodifluoromethane	ND		250	203	81	250	204	82	0	31-159/16
75-34-3	1,1-Dichloroethane	150		250	354	81	250	375	90	6	73-126/11
107-06-2	1,2-Dichloroethane	ND		250	209	84	250	225	90	7	72-131/11
75-35-4	1,1-Dichloroethene	ND		250	259	95	250	283	113	9	63-136/14
156-59-2	cis-1,2-Dichloroethene	130		250	362	92	250	384	102	6	60-136/11
156-60-5	trans-1,2-Dichloroethene	ND		250	248	95	250	269	108	8	70-126/11
78-87-5	1,2-Dichloropropane	ND		250	235	94	250	254	102	8	78-124/10
10061-01-5	cis-1,3-Dichloropropene	ND		250	242	97	250	267	107	10	79-123/11
10061-02-6	trans-1,3-Dichloropropene	ND		250	221	88	250	242	97	9	77-123/11
100-41-4	Ethylbenzene	22.3	J	250	247	91	250	266	97	7	51-140/20
76-13-1	Freon 113	75.9	J	250	326	92	250	337	104	3	60-192/14
591-78-6	2-Hexanone	ND		1000	888	89	1000	967	97	9	56-139/14
98-82-8	Isopropylbenzene	ND		250	231	92	250	249	100	8	75-129/11
79-20-9	Methyl Acetate	ND		250	211	84	250	227	91	7	55-131/15
108-87-2	Methylcyclohexane	ND		250	258	91	250	273	109	6	57-155/13
1634-04-4	Methyl Tert Butyl Ether	ND		250	223	89	250	243	97	9	72-123/11

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC54707-1MS	A237818.D	5	11/10/17	GA	n/a	n/a	VA9023
JC54707-1MSD	A237819.D	5	11/10/17	GA	n/a	n/a	VA9023
JC54707-1	A237825.D	50	11/10/17	GA	n/a	n/a	VA9023

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

JC55112-1

CAS No.	Compound	JC54707-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	957	96	1000	1040	104	8	66-136/13
75-09-2	Methylene chloride	ND		250	240	96	250	259	104	8	73-125/13
100-42-5	Styrene	ND		250	238	95	250	261	104	9	75-129/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	256	102	250	277	111	8	71-122/11
127-18-4	Tetrachloroethene	935		250	1150	86	250	1180	98	3	61-139/11
108-88-3	Toluene	52.1		250	280	89	250	300	99	7	60-135/10
87-61-6	1,2,3-Trichlorobenzene	ND		250	233	93	250	254	102	9	70-138/13
120-82-1	1,2,4-Trichlorobenzene	ND		250	227	91	250	248	99	9	72-137/13
71-55-6	1,1,1-Trichloroethane	80.8		250	297	84	250	316	94	6	74-138/12
79-00-5	1,1,2-Trichloroethane	ND		250	240	96	250	259	104	8	78-121/11
79-01-6	Trichloroethene	186		250	404	86	250	424	95	5	62-141/10
75-69-4	Trichlorofluoromethane	ND		250	212	85	250	214	86	1	57-149/14
75-01-4	Vinyl chloride	78.4		250	313	89	250	318	96	2	43-146/15
	m,p-Xylene	79.8		500	547	93	500	586	101	7	50-144/20
95-47-6	o-Xylene	34.4	J	250	275	95	250	293	103	6	63-134/10
1330-20-7	Xylene (total)	114		750	822	94	750	878	102	7	56-139/20

CAS No.	Surrogate Recoveries	MS	MSD	JC54707-1	Limits
1868-53-7	Dibromofluoromethane	96%	94%	101%	80-120%
17060-07-0	1,2-Dichloroethane-D4	82%	80%* [a]	89%	81-124%
2037-26-5	Toluene-D8	91%	91%	94%	80-120%
460-00-4	4-Bromofluorobenzene	97%	97%	98%	80-120%

(a) Outside in house control limits.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VA8958-BFB
Lab File ID: A236265.D
Instrument ID: GCMSA
Injection Date: 09/22/17
Injection Time: 21:44

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.95 - 40.0% of mass 95	18229	19.0		Pass
75	30.0 - 60.0% of mass 95	45637	47.6		Pass
95	Base peak, 100% relative abundance	95805	100.0		Pass
96	5.0 - 9.0% of mass 95	6546	6.83		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	83069	86.7		Pass
175	5.0 - 9.0% of mass 174	7038	7.35	(8.47) [a]	Pass
176	95.0 - 101.0% of mass 174	82181	85.8	(98.9) [a]	Pass
177	5.0 - 9.0% of mass 176	5518	5.76	(6.71) [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
VA8958-IC8958	A236266.D	09/22/17	22:31	00:47	Initial cal 0.2
VA8958-IC8958	A236267.D	09/22/17	22:59	01:15	Initial cal 0.5
VA8958-IC8958	A236268.D	09/22/17	23:29	01:45	Initial cal 1
VA8958-IC8958	A236269.D	09/22/17	23:58	02:14	Initial cal 2
VA8958-IC8958	A236270.D	09/23/17	00:27	02:43	Initial cal 5
VA8958-IC8958	A236271.D	09/23/17	00:57	03:13	Initial cal 10
VA8958-IC8958	A236272.D	09/23/17	01:26	03:42	Initial cal 20
VA8958-ICC8958	A236273.D	09/23/17	01:55	04:11	Initial cal 50
VA8958-IC8958	A236274.D	09/23/17	02:25	04:41	Initial cal 100
VA8958-IC8958	A236275.D	09/23/17	02:54	05:10	Initial cal 200
VA8958-ICV8958	A236278.D	09/23/17	04:22	06:38	Initial cal verification 50
VA8958-ICV8958	A236279.D	09/23/17	04:51	07:07	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample:	VA8995-BFB	**Injection Date:**	10/18/17
Lab File ID:	A237131.D	**Injection Time:**	21:17
Instrument ID:	GCMSA		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.95 - 40.0% of mass 95	24890	20.5		Pass
75	30.0 - 60.0% of mass 95	59949	49.3		Pass
95	Base peak, 100% relative abundance	121549	100.0		Pass
96	5.0 - 9.0% of mass 95	8574	7.05		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	102322	84.2		Pass
175	5.0 - 9.0% of mass 174	7992	6.58	(7.81) [a]	Pass
176	95.0 - 101.0% of mass 174	98829	81.3	(96.6) [a]	Pass
177	5.0 - 9.0% of mass 176	7050	5.80	(7.13) [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
VA8995-IC8958	A237134.D	10/18/17	22:43	01:26	Initial cal 1
VA8995-IC8958	A237135.D	10/18/17	23:12	01:55	Initial cal 2
VA8995-IC8958	A237136.D	10/18/17	23:41	02:24	Initial cal 5
VA8995-IC8958	A237137.D	10/19/17	00:10	02:53	Initial cal 10
VA8995-IC8958	A237138.D	10/19/17	00:39	03:22	Initial cal 20
VA8995-IC8958	A237139.D	10/19/17	01:08	03:51	Initial cal 50
VA8995-IC8958	A237140.D	10/19/17	01:37	04:20	Initial cal 100
VA8995-IC8958	A237141.D	10/19/17	02:06	04:49	Initial cal 200
VA8995-ICV8958	A237144.D	10/19/17	03:34	06:17	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VA9023-BFB
Lab File ID: A237814.D
Instrument ID: GCMSA
Injection Date: 11/09/17
Injection Time: 21:46

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.95 - 40.0% of mass 95	20893	15.9		Pass
75	30.0 - 60.0% of mass 95	58274	44.2		Pass
95	Base peak, 100% relative abundance	131736	100.0		Pass
96	5.0 - 9.0% of mass 95	8846	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	123293	93.6		Pass
175	5.0 - 9.0% of mass 174	9086	6.90	(7.37) [a]	Pass
176	95.0 - 101.0% of mass 174	119096	90.4	(96.6) [a]	Pass
177	5.0 - 9.0% of mass 176	8384	6.36	(7.04) [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
VA9023-CC8958	A237814.D	11/09/17	21:46	00:00	Continuing cal 50
VA9023-MB	A237816A.D	11/09/17	23:44	01:58	Method Blank
VA9023-BS	A237817.D	11/10/17	00:13	02:27	Blank Spike
JC54707-1MS	A237818.D	11/10/17	00:42	02:56	Matrix Spike
JC54707-1MSD	A237819.D	11/10/17	01:11	03:25	Matrix Spike Duplicate
ZZZZZZ	A237820A.D	11/10/17	02:09	04:23	(unrelated sample)
ZZZZZZ	A237821.D	11/10/17	02:39	04:53	(unrelated sample)
ZZZZZZ	A237822.D	11/10/17	03:08	05:22	(unrelated sample)
ZZZZZZ	A237823.D	11/10/17	03:37	05:51	(unrelated sample)
JC55112-1	A237824.D	11/10/17	04:06	06:20	MW-301(HP-305)
JC54707-1	A237825.D	11/10/17	05:05	07:19	(used for QC only; not part of job JC55112)
ZZZZZZ	A237830.D	11/10/17	07:30	09:44	(unrelated sample)
ZZZZZZ	A237831.D	11/10/17	07:59	10:13	(unrelated sample)
ZZZZZZ	A237833.D	11/10/17	08:57	11:11	(unrelated sample)
ZZZZZZ	A237834.D	11/10/17	09:26	11:40	(unrelated sample)

Internal Standard Area Summary

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Check Std:	VA9023-CC8958	**Injection Date:**	11/09/17
Lab File ID:	A237814.D	**Injection Time:**	21:46
Instrument ID:	GCMSA	**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	595423	7.81	392341	10.18	599708	11.12	538697	14.51	295066	17.11
Upper Limit [a]	1190846	8.31	784682	10.68	1199416	11.62	1077394	15.01	590132	17.61
Lower Limit [b]	297712	7.31	196171	9.68	299854	10.62	269349	14.01	147533	16.61
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**
VA9023-MB	556866	7.82	362821	10.18	543186	11.12	482655	14.51	289321	17.11
VA9023-BS	553053	7.82	371029	10.18	581340	11.12	525230	14.51	289240	17.11
JC54707-1MS	564127	7.81	377618	10.18	590437	11.12	538080	14.51	294878	17.11
JC54707-1MSD	591139	7.81	377758	10.18	596443	11.12	547918	14.51	302464	17.11
ZZZZZZ	542168	7.80	361034	10.18	544564	11.12	467702	14.51	269986	17.11
ZZZZZZ	530603	7.81	353272	10.17	534162	11.12	467790	14.51	270710	17.11
ZZZZZZ	539465	7.81	370794	10.18	564317	11.12	490738	14.51	290987	17.11
ZZZZZZ	543803	7.81	344785	10.18	523256	11.12	457261	14.51	265448	17.11
JC55112-1	838278	7.81	346947	10.18	528344	11.12	449384	14.51	254265	17.11
JC54707-1	506088	7.82	333612	10.18	520423	11.12	453475	14.51	259411	17.11
ZZZZZZ	558872	7.82	338876	10.18	523965	11.11	461863	14.51	269104	17.11
ZZZZZZ	538144	7.80	330388	10.18	509629	11.11	441874	14.51	253983	17.11
ZZZZZZ	526884	7.80	317158	10.18	494999	11.11	435505	14.51	254037	17.11
ZZZZZZ	507827	7.81	320717	10.18	501013	11.12	432338	14.51	247342	17.11

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: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, 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
JC55112-1	A237824.D	99	91	96	97
JC54707-1MS	A237818.D	96	82	91	97
JC54707-1MSD	A237819.D	94	80* [a]	91	97
VA9023-BS	A237817.D	97	83	92	98
VA9023-MB	A237816A.D	98	86	92	94

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%

(a) Outside in house control limits.

Initial Calibration Summary

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VA8958-ICC8958
Lab FileID: A236273.D

Response Factor Report MSA

Method : C:\msdchem\1\METHODS\MA8958.m (RTE Integrator)
Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
Last Update : Thu Oct 19 09:28:57 2017
Response via : Initial Calibration

Calibration Files
5 =A236270.D 2 =A236269.D 20 =A236272.D 50 =A236273.D
100 =A236274.D 1 =A236268.D 200 =A236275.D 0.5 =A236267.D
10 =A236271.D 0.2 =A236266.D = =

Compound	5	2	20	50	100	1	200	0.5	10	0.2	Avg	%RSD
1) I Tert Butyl Alcohol-d9	----------ISTD----------											
2) ethanol											0.000#	-1.00
3) tertiary butyl alcohol	0.984	0.809	1.005	0.984	0.984		0.927		0.984		0.954	7.18
4) 1,4-dioxane	0.049	0.035	0.054	0.055	0.057		0.053		0.052		0.051	14.70
5) I pentafluorobenzene	----------ISTD----------											
6) chlorodifluoromethane	0.808	0.585	0.915	0.987	0.906	0.716	0.911		0.899		0.841	15.67
7) dichlorodifluoromethane	0.930	0.702	1.030	1.041	0.943	0.841	0.932		0.999		0.927	12.05
8) chloromethane	0.992	0.781	1.096	1.082	1.259	0.912			0.991		1.016	14.86
9) vinyl chloride	1.112	0.866	1.115	1.128	1.088	1.059	1.069		1.113		1.069	7.98
10) 1,3-butadiene	0.555		0.577	0.578	0.599		0.593		0.563		0.578	2.91
11) bromomethane	0.641	0.559	0.652	0.633	0.581	0.620	0.569	0.555	0.649		0.607	6.64
12) chloroethane	0.528	0.428	0.537	0.507	0.472	0.512	0.448		0.516		0.493	8.00
13) vinyl bromide	*This compound does not meet initial calibration criteria*											
	0.567	0.479	0.605	0.595	0.599	0.538	0.602		0.578		0.570	7.58
14) trichlorofluoromethane	1.002	0.794	1.050	1.034	1.010	0.858	1.005		1.044		0.975	9.76
15) ethyl ether	0.275	0.208	0.292	0.280	0.273	0.232	0.256	0.239	0.291		0.261	11.16
16) acrolein	0.153	0.124	0.170	0.165	0.162		0.159		0.161		0.156	9.80
17) freon 113	0.459	0.347	0.476	0.464	0.460	0.415	0.464		0.472		0.445	9.78
18) 1,1-dichloroethene	0.509	0.376	0.523	0.476	0.488	0.450	0.480	0.413	0.485		0.467	10.01
19) acetone	0.097	0.074	0.095	0.096	0.086	0.083	0.080		0.098		0.089	9.94
20) acetonitrile	0.142	0.122	0.145	0.146	0.138		0.135		0.139		0.138	5.92
21) iodomethane	1.010	0.795	1.035	0.989	0.992	0.868	0.993	0.856	1.012	0.848	0.940	9.29
22) carbon disulfide	1.926	1.635	1.937	1.854	1.858	1.897	1.824	2.161	1.924		1.891	7.24

Initial Calibration Summary

Job Number: JC55112 **Sample:** VA8958-ICC8958
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23) methylene chloride
0.565 0.463 0.588 0.548 0.545 0.527 0.528 0.580 0.583 0.547 7.14
24) methyl acetate
0.663 0.518 0.696 0.683 0.645 0.652 0.627 0.601 0.688 0.641 8.62
25) methyl tert butyl ether
1.743 1.388 1.823 1.759 1.705 1.622 1.681 1.630 1.780 1.681 7.64
26) trans-1,2-dichloroethene
0.505 0.422 0.510 0.490 0.488 0.497 0.469 0.482 0.502 0.485 5.51
27) hexane
0.684 0.469 0.716 0.700 0.674 0.591 0.653 0.545 0.702 0.637 13.22
28) di-isopropyl ether
1.902 1.527 1.991 1.913 1.824 1.747 1.775 1.811 1.932 1.441 1.786 9.93
29) ethyl tert-butyl ether
1.747 1.425 1.840 1.820 1.753 1.615 1.725 1.628 1.792 1.705 7.65
30) 2-butanone
0.089 0.073 0.092 0.093 0.091 0.085 0.093 0.094 0.089 7.62
31) 1,1-dichloroethane
0.957 0.822 0.988 0.951 0.909 0.851 0.869 0.935 0.982 0.918 6.45
32) chloroprene
0.795 0.569 0.831 0.812 0.785 0.655 0.755 0.732 0.798 0.748 11.39
33) acrylonitrile
0.327 0.231 0.335 0.327 0.316 0.286 0.307 0.333 0.308 11.34
34) vinyl acetate
0.081 0.096 0.097 0.098 0.099 0.099 0.095 7.43
35) ethyl acetate
0.112 0.114 0.119 0.119 0.122 0.118 0.117 3.07
36) 2,2-dichloropropane
0.828 0.701 0.858 0.827 0.790 0.754 0.782 0.736 0.840 0.791 6.67
37) cis-1,2-dichloroethene
0.564 0.461 0.591 0.556 0.537 0.546 0.521 0.539 0.560 0.500 0.537 6.79
38) methyl acrylate
0.075 0.092 0.094 0.097 0.102 0.082 0.090 11.30
39) propionitrile
0.141 0.118 0.147 0.148 0.141 0.138 0.140 0.129 0.147 0.139 7.07
40) bromochloromethane
0.275 0.258 0.284 0.289 0.276 0.268 0.274 0.287 0.276 3.72
41) tetrahydrofuran
0.290 0.232 0.323 0.326 0.311 0.288 0.309 0.319 0.300 10.25
42) chloroform
0.927 0.762 0.929 0.891 0.856 0.943 0.830 0.901 0.927 0.909 0.887 6.37
43) tert-butyl formate
0.285 0.290 0.297 0.284 0.281 0.286 0.287 1.96
44) dibromofluoromethane (s)
0.576 0.574 0.573 0.572 0.561 0.570 0.556 0.572 0.571 0.549 0.567 1.58
45) methacrylonitrile
0.266 0.205 0.276 0.280 0.273 0.208 0.277 0.266 0.256 12.18
46) cyclohexane
0.788 0.664 0.888 0.865 0.842 0.627 0.846 0.841 0.795 12.22
47) 1,1,1-trichloroethane
0.864 0.682 0.909 0.883 0.836 0.812 0.829 0.694 0.893 0.822 10.01
48) iso-butyl alcohol
0.047 0.049 0.057 0.057 0.058 0.048 0.049 0.052 9.35
49) 1,1-dichloropropene
0.651 0.516 0.692 0.694 0.683 0.584 0.676 0.582 0.681 0.640 9.95
50) carbon tetrachloride
0.766 0.560 0.796 0.786 0.758 0.682 0.751 0.608 0.784 0.721 11.83
51) tert-amyl alcohol
0.077 0.058 0.081 0.086 0.082 0.079 0.079 0.077 11.97

52) I 1,4-difluorobenzene ----------ISTD----------

Initial Calibration Summary

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53) 1,2-dichloroethane-d4 (s)
0.453 0.464 0.449 0.439 0.427 0.461 0.413 0.459 0.456 0.450 0.447 3.63
54) benzene
1.292 1.042 1.312 1.290 1.223 1.247 1.166 1.224 1.316 1.108 1.222 7.50
55) iso-octane
1.337 0.960 1.463 1.455 1.478 1.205 1.434 1.077 1.393 1.311 14.35
56) tert-amyl methyl ether
1.155 0.977 1.202 1.161 1.108 1.071 1.067 1.079 1.196 1.113 6.55
57) heptane
0.239 0.176 0.259 0.255 0.248 0.195 0.238 0.250 0.233 13.09
58) isopropyl acetate
0.072 0.086 0.088 0.082 0.081 0.084 0.082 6.52
59) 1,2-dichloroethane
0.445 0.381 0.470 0.453 0.429 0.434 0.406 0.458 0.466 0.438 6.66
60) n-butyl alcohol
0.021 0.017 0.023 0.024 0.023 0.018 0.021 0.022 0.021 12.09
61) ethyl acrylate
0.403 0.339 0.439 0.466 0.440 0.334 0.440 0.435 0.412 12.02
62) trichloroethene
0.307 0.260 0.312 0.302 0.296 0.278 0.290 0.293 0.316 0.295 5.96
63) 2-nitropropane
0.147 0.134 0.157 0.161 0.154 0.147 0.158 0.151 6.14
64) methylcyclohexane
0.695 0.527 0.723 0.701 0.683 0.616 0.647 0.548 0.717 0.651 11.16
65) 2-chloroethyl vinyl ether
0.166 0.139 0.177 0.185 0.175 0.153 0.172 0.148 0.180 0.166 9.57
66) methyl methacrylate
0.073 0.087 0.091 0.089 0.091 0.086 0.086 7.56
67) 1,2-dichloropropane
0.338 0.262 0.348 0.341 0.328 0.319 0.318 0.312 0.340 0.323 8.01
68) dibromomethane
0.215 0.195 0.213 0.208 0.203 0.179 0.201 0.213 0.211 0.204 5.61
69) bromodichloromethane
0.401 0.339 0.420 0.422 0.404 0.365 0.396 0.347 0.417 0.390 8.19
70) epichlorohydrin
0.048 0.040 0.051 0.052 0.049 0.045 0.048 0.049 0.048 8.28
71) cis-1,3-dichloropropene
0.443 0.347 0.467 0.488 0.470 0.409 0.472 0.365 0.464 0.393 0.432 11.54
72) 4-methyl-2-pentanone
0.195 0.165 0.206 0.210 0.193 0.178 0.184 0.186 0.207 0.192 7.76
73) 3-methyl-1-butanol
0.037 0.030 0.042 0.042 0.039 0.033 0.036 0.041 0.038 11.86

74) I chlorobenzene-d5 ----------ISTD----------
75) toluene-d8 (s)
1.419 1.397 1.402 1.365 1.410 1.401 1.354 1.400 1.400 1.391 1.394 1.42
76) toluene
0.818 0.619 0.833 0.802 0.808 0.793 0.757 0.839 0.814 0.689 0.777 9.08
77) trans-1,3-dichloropropene
0.458 0.374 0.476 0.471 0.466 0.436 0.445 0.370 0.457 0.439 9.09
78) ethyl methacrylate
0.472 0.375 0.506 0.492 0.476 0.405 0.448 0.393 0.479 0.449 10.45
79) 1,1,2-trichloroethane
0.260 0.204 0.257 0.254 0.250 0.225 0.241 0.230 0.257 0.242 7.85
80) 2-hexanone
0.207 0.174 0.208 0.202 0.190 0.191 0.176 0.194 0.216 0.195 7.33
81) tetrachloroethene
0.339 0.298 0.364 0.350 0.355 0.359 0.343 0.323 0.362 0.344 6.28
82) 1,3-dichloropropane
0.486 0.381 0.495 0.495 0.486 0.453 0.461 0.457 0.497 0.468 7.88

Initial Calibration Summary

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83) butyl acetate
0.306 0.251 0.314 0.296 0.283 0.276 0.267 0.294 0.308 0.288 7.18
84) 3,3-dimethyl-1-butanol
0.102 0.082 0.117 0.110 0.110 0.088 0.097 0.113 0.108 0.103 11.70
85) dibromochloromethane
0.336 0.287 0.364 0.357 0.351 0.323 0.341 0.319 0.351 0.235 0.326 11.97
86) 1,2-dibromoethane
0.315 0.270 0.328 0.323 0.310 0.273 0.297 0.304 0.322 0.305 6.91
87) n-butyl ether
1.656 1.300 1.679 1.649 1.563 1.360 1.405 1.468 1.676 1.529 9.71
88) chlorobenzene
0.847 0.699 0.880 0.868 0.854 0.775 0.829 0.786 0.871 1.008 0.842 9.62
89) 1,1,1,2-tetrachloroethane
0.406 0.349 0.432 0.416 0.412 0.408 0.388 0.479 0.419 0.319 0.403 10.88
90) ethylbenzene
1.581 1.262 1.603 1.572 1.505 1.466 1.407 1.378 1.581 1.444 1.480 7.46
91) m,p-xylene
0.586 0.454 0.604 0.595 0.584 0.567 0.561 0.564 0.584 0.531 0.563 7.72
92) o-xylene
0.641 0.517 0.669 0.655 0.650 0.633 0.619 0.626 0.659 0.525 0.619 8.72
93) styrene
0.950 0.724 0.986 0.952 0.936 0.870 0.898 0.902 0.945 0.772 0.894 9.42
94) butyl acrylate
0.743 0.608 0.803 0.768 0.713 0.707 0.659 0.678 0.788 0.719 8.86
95) bromoform
0.270 0.228 0.286 0.279 0.272 0.239 0.261 0.256 0.282 0.264 7.52
96) isopropylbenzene
1.750 1.411 1.863 1.813 1.786 1.634 1.641 1.536 1.818 1.414 1.666 10.03
97) cis-1,4-dichloro-2-butene
0.182 0.146 0.186 0.183 0.176 0.148 0.165 0.169 0.169 9.18

98) I 1,4-dichlorobenzene-d ----------ISTD----------
99) 4-bromofluorobenzene (s)
0.844 0.846 0.841 0.851 0.856 0.834 0.835 0.836 0.846 0.850 0.844 0.88
100) bromobenzene
0.651 0.529 0.676 0.678 0.668 0.598 0.664 0.579 0.652 0.617 0.631 7.81
101) 1,1,2,2-tetrachloroethane
0.940 0.794 0.948 0.953 0.918 0.859 0.864 0.910 0.944 0.742 0.887 8.12
102) trans-1,4-dichloro-2-butene
0.231 0.248 0.236 0.223 0.202 0.249 0.231 7.53
103) 1,2,3-trichloropropane
0.241 0.201 0.244 0.246 0.230 0.202 0.221 0.276 0.244 0.234 10.07
104) n-propylbenzene
3.259 2.575 3.380 3.377 3.312 3.005 3.072 2.998 3.360 2.978 3.132 8.20
105) 2-chlorotoluene
0.668 0.523 0.690 0.708 0.713 0.595 0.702 0.636 0.691 0.658 9.69
106) 4-chlorotoluene
1.795 1.488 1.850 1.840 1.803 1.701 1.747 1.783 1.843 1.761 6.42
107) 1,3,5-trimethylbenzene
2.422 1.864 2.607 2.657 2.659 2.091 2.576 2.164 2.548 2.056 2.364 12.40
108) tert-butylbenzene
1.895 1.371 2.209 2.252 2.367 1.606 2.312 1.686 2.053 1.972 17.88
109) 1,2,4-trimethylbenzene
2.462 1.843 2.604 2.653 2.651 2.133 2.558 2.167 2.594 2.339 2.400 11.40
110) sec-butylbenzene
3.168 2.323 3.545 3.530 3.655 2.644 3.411 3.006 3.396 2.664 3.134 14.57
111) 1,3-dichlorobenzene
1.240 1.061 1.304 1.293 1.288 1.249 1.257 1.347 1.307 1.261 6.51
112) p-isopropyltoluene
2.634 2.025 2.940 2.976 3.009 2.255 2.876 2.277 2.857 2.650 13.99

Initial Calibration Summary

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113)  1,4-dichlorobenzene
       1.316 1.177 1.338 1.315 1.291 1.387 1.267 1.421 1.330        1.316    5.30
114)  1,2-dichlorobenzene
       1.403 1.177 1.421 1.387 1.385 1.384 1.344 1.323 1.407 1.300  1.353    5.38
115)  n-butylbenzene
       1.480 1.101 1.551 1.555 1.549 1.351 1.527 1.353 1.546 1.461  1.447   10.00
116)  1,2-dibromo-3-chloropropane
       0.296 0.225 0.316 0.310 0.307 0.311 0.295       0.301        0.295    9.91
117)  1,3,5-trichlorobenzene
       1.433 1.169 1.495 1.439 1.468 1.401 1.406 1.436 1.453        1.411    6.75
118)  2-ethylhexyl acrylate
                   0.925 0.957 1.062       1.080       0.766        0.958   13.17
119)  1,2,4-trichlorobenzene
       1.329 1.121 1.423 1.347 1.400 1.307 1.331 1.610 1.381        1.361    9.37
120)  hexachlorobutadiene
       0.567 0.480 0.663 0.649 0.713 0.519 0.704 0.624 0.624        0.616   12.97
121)  naphthalene
       3.828 3.140 4.255 4.042 4.036 3.817 3.613 4.238 4.185        3.906    9.19
122)  1,2,3-trichlorobenzene
       1.335 1.096 1.448 1.406 1.444 1.351 1.337 1.421 1.396        1.359    7.93
123)  hexachloroethane
       0.443 0.335 0.544 0.556 0.611       0.620       0.500        0.516   19.50
124)  2-methylnaphthalene
       1.994       2.656 2.673 2.842       2.604       2.464        2.539   11.55

125)     pentafluorobenzene(a) ----------------ISTD---------------------
126)  freon 142b
       0.875       0.983 1.051 1.018       1.066       1.007        1.000    6.84
127)  allyl chloride
       0.308 0.248 0.310 0.324 0.321 0.268 0.328       0.326        0.304    9.84
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 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MA8958.m          Thu Oct 19 15:49:21 2017   RPT1
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Initial Calibration Verification

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VA8958-ICV8958
Lab FileID: A236278.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\A236278.D Vial: 14
Acq On : 23 Sep 2017 4:22 am Operator: ChelseaS
Sample : icv8958-50 Inst : MSA
Misc : MS20266,VA8958,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MA8958.m (RTE Integrator)
Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
Last Update : Mon Sep 25 08:55:37 2017
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	105	0.00	7.82
2		ethanol		----------NA----------				
3	M	tertiary butyl alcohol	0.954	0.941	1.4	100	0.00	7.94
4		1,4-dioxane	0.051	0.056	-9.8	106	0.00	11.86
5	I	pentafluorobenzene	1.000	1.000	0.0	106	0.00	10.18
6	M	chlorodifluoromethane	0.841	0.699	16.9	75	0.00	4.20
7	M	dichlorodifluoromethane	0.927	0.991	-6.9	101	0.01	4.20
8	M	chloromethane	1.016	0.941	7.4	92	0.00	4.54
9	M	vinyl chloride	1.069	1.010	5.5	95	0.00	4.84
10		1,3-butadiene	0.578	0.668	-15.6	123	0.00	4.86
11	M	bromomethane	0.607	0.566	6.8	95	0.00	5.52
12	M	chloroethane	0.493	0.465	5.7	97	0.00	5.69
13		vinyl bromide	0.570	0.903	-58.4#	161	0.00	6.09
14	M	trichlorofluoromethane	0.975	0.924	5.2	95	0.00	6.24
15	M	ethyl ether	0.261	0.269	-3.1	102	0.00	6.67
16	M	acrolein	0.156	0.170	-9.0	110	0.00	6.91
17		freon 113	0.445	0.532	-19.6	121	0.00	7.11
18	M	1,1-dichloroethene	0.467	0.435	6.9	97	0.00	7.11
19	M	acetone	0.089	0.079	11.2	88	0.00	7.15
20	M	acetonitrile	0.138	0.060	56.5#	44#	0.00	7.60
21	M	iodomethane	0.940	0.926	1.5	99	0.00	7.39
22	M	carbon disulfide	1.891	1.737	8.1	99	0.00	7.53
23	M	methylene chloride	0.547	0.534	2.4	103	0.00	7.85
24	M	methyl acetate	0.641	0.587	8.4	91	0.00	7.66
25	M	methyl tert butyl ether	1.681	1.712	-1.8	104	0.00	8.25
26	M	trans-1,2-dichloroethene	0.485	0.473	2.5	102	0.00	8.27
27		hexane	0.637	0.492	22.8	75	0.00	8.63
28	M	di-isopropyl ether	1.786	1.804	-1.0	100	0.00	8.89
29	M	ethyl tert-butyl ether	1.705	1.730	-1.5	101	0.00	9.37
30	M	2-butanone	0.089	0.089	0.0	101	0.00	9.59
31	M	1,1-dichloroethane	0.918	0.909	1.0	101	0.00	8.86
32	M	chloroprene	0.748	0.772	-3.2	101	0.00	8.98
33	M	acrylonitrile	0.308	0.329	-6.8	107	0.00	8.20
34	M	vinyl acetate	0.095	0.099	-4.2	108	0.00	8.85
35	M	ethyl acetate	0.117	0.115	1.7	103	0.00	9.63
36	M	2,2-dichloropropane	0.791	0.767	3.0	98	0.00	9.65
37	M	cis-1,2-dichloroethene	0.537	0.539	-0.4	103	0.00	9.62
38		methyl acrylate	0.090	0.092	-2.2	104	0.00	9.71
39	M	propionitrile	0.139	0.130	6.5	93	0.00	9.68
40	M	bromochloromethane	0.276	0.272	1.4	100	0.00	9.94
41	M	tetrahydrofuran	0.300	0.318	-6.0	104	0.00	9.99

Initial Calibration Verification

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VA8958-ICV8958
Lab FileID: A236278.D

42	M	chloroform	0.887	0.852	3.9	101	0.00	10.00
43		tert-butyl formate	0.287	0.327	-13.9	117	0.00	10.07
44	S	dibromofluoromethane (s)	0.567	0.563	0.7	104	0.00	10.20
45	M	methacrylonitrile	0.256	0.265	-3.5	101	0.00	9.88
46		cyclohexane	0.795	0.811	-2.0	99	0.00	10.38
47	M	1,1,1-trichloroethane	0.822	0.823	-0.1	99	0.00	10.29
48		iso-butyl alcohol	0.052	0.054	-3.8	100	0.00	10.44
49		1,1-dichloropropene	0.640	0.645	-0.8	99	0.00	10.47
50		carbon tetrachloride	0.721	0.734	-1.8	99	0.00	10.50
51		tert-amyl alcohol	0.077	0.080	-3.9	98	0.00	10.60
52	I	1,4-difluorobenzene	1.000	1.000	0.0	106	0.00	11.12
53	S	1,2-dichloroethane-d4 (s)	0.447	0.423	5.4	102	0.00	10.64
54	M	benzene	1.222	1.221	0.1	100	0.00	10.74
55	M	iso-octane	1.311	1.356	-3.4	99	0.00	10.78
56		tert-amyl methyl ether	1.113	1.106	0.6	101	0.00	10.80
57	M	heptane	0.233	0.250	-7.3	104	0.00	10.95
58	M	isopropyl acetate	0.082	0.083	-1.2	101	0.00	10.67
59	M	1,2-dichloroethane	0.438	0.434	0.9	102	0.00	10.73
60		n-butyl alcohol	0.021	0.023	-9.5	102	0.00	11.22
61		ethyl acrylate	0.412	0.440	-6.8	100	0.00	11.47
62	M	trichloroethene	0.295	0.295	0.0	104	0.00	11.47
63	M	2-nitropropane	0.151	0.155	-2.6	102	0.00	12.27
64	m	methylcyclohexane	0.651	0.612	6.0	93	0.00	11.74
65	M	2-chloroethyl vinyl ether	0.166	0.197	-18.7	113	0.00	12.30
66	M	methyl methacrylate	0.086	0.091	-5.8	106	0.00	11.76
67	M	1,2-dichloropropane	0.323	0.336	-4.0	104	0.00	11.75
68	M	dibromomethane	0.204	0.203	0.5	104	0.00	11.89
69	M	bromodichloromethane	0.390	0.405	-3.8	102	0.00	12.03
70		epichlorohydrin	0.048	0.051	-6.2	104	0.00	12.42
71	M	cis-1,3-dichloropropene	0.432	0.465	-7.6	101	0.00	12.53
72	M	4-methyl-2-pentanone	0.192	0.202	-5.2	102	0.00	12.65
73	M	3-methyl-1-butanol	0.038	0.039	-2.6	97	0.00	12.65
74	I	chlorobenzene-d5	1.000	1.000	0.0	106	0.00	14.51
75	S	toluene-d8 (s)	1.394	1.364	2.2	106	0.00	12.86
76		toluene	0.777	0.771	0.8	102	0.00	12.94
77		trans-1,3-dichloropropene	0.439	0.456	-3.9	102	0.00	13.13
78		ethyl methacrylate	0.449	0.459	-2.2	99	0.00	13.15
79		1,1,2-trichloroethane	0.242	0.253	-4.5	105	0.00	13.36
80		2-hexanone	0.195	0.192	1.5	100	0.00	13.57
81	M	tetrachloroethene	0.344	0.353	-2.6	107	0.00	13.58
82	M	1,3-dichloropropane	0.468	0.477	-1.9	102	0.00	13.57
83	M	butyl acetate	0.288	0.295	-2.4	105	0.00	13.66
84		3,3-dimethyl-1-butanol	0.103	0.103	0.0	99	0.00	13.75
85	M	dibromochloromethane	0.326	0.353	-8.3	104	0.00	13.85
86	M	1,2-dibromoethane	0.305	0.315	-3.3	103	0.00	14.02
87	M	n-butyl ether	1.529	1.521	0.5	97	0.00	14.49
88	M	chlorobenzene	0.842	0.845	-0.4	103	0.00	14.54
89	M	1,1,1,2-tetrachloroethane	0.403	0.405	-0.5	103	0.00	14.61
90	M	ethylbenzene	1.480	1.493	-0.9	100	0.00	14.62
91	M	m,p-xylene	0.563	0.578	-2.7	103	0.00	14.74
92	M	o-xylene	0.619	0.629	-1.6	101	0.00	15.21
93	M	styrene	0.894	0.929	-3.9	103	0.00	15.21
94		butyl acrylate	0.719	0.739	-2.8	102	0.00	15.01
95	M	bromoform	0.264	0.279	-5.7	106	0.00	15.48
96		isopropylbenzene	1.666	1.721	-3.3	100	0.00	15.60
97		cis-1,4-dichloro-2-butene	0.169	0.168	0.6	97	0.00	15.65
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	105	0.00	17.11

Initial Calibration Verification

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VA8958-ICV8958
Lab FileID: A236278.D

99	S	4-bromofluorobenzene (s)	0.844	0.853	-1.1	105	0.00	15.80
100	M	bromobenzene	0.631	0.668	-5.9	103	0.00	16.02
101	M	1,1,2,2-tetrachloroethane	0.887	0.933	-5.2	102	0.00	15.90
102	M	trans-1,4-dichloro-2-bute	0.231	0.240	-3.9	106	0.00	15.96
103	M	1,2,3-trichloropropane	0.234	0.245	-4.7	104	0.00	15.99
104	M	n-propylbenzene	3.132	3.255	-3.9	101	0.00	16.06
105	M	2-chlorotoluene	0.658	0.690	-4.9	102	0.00	16.21
106	M	4-chlorotoluene	1.761	1.790	-1.6	102	0.00	16.32
107	M	1,3,5-trimethylbenzene	2.364	2.545	-7.7	100	0.00	16.22
108	M	tert-butylbenzene	1.972	2.223	-12.7	103	0.00	16.62
109	M	1,2,4-trimethylbenzene	2.400	2.566	-6.9	101	0.00	16.66
110	M	sec-butylbenzene	3.134	3.446	-10.0	102	0.00	16.86
111	M	1,3-dichlorobenzene	1.261	1.307	-3.6	106	0.00	17.05
112	M	p-isopropyltoluene	2.650	2.929	-10.5	103	0.00	17.00
113	M	1,4-dichlorobenzene	1.316	1.302	1.1	104	0.00	17.14
114	M	1,2-dichlorobenzene	1.353	1.399	-3.4	106	0.00	17.58
115	M	n-butylbenzene	1.447	1.507	-4.1	101	0.00	17.46
116	M	1,2-dibromo-3-chloropropa	0.295	0.307	-4.1	103	0.00	18.42
117	M	1,3,5-trichlorobenzene	1.411	1.487	-5.4	108	0.00	18.64
118		2-ethylhexyl acrylate	0.958	1.022	-6.7	112	0.00	19.35
119	M	1,2,4-trichlorobenzene	1.361	1.363	-0.1	106	0.00	19.37
120	M	hexachlorobutadiene	0.616	0.644	-4.5	104	0.00	19.52
121	M	naphthalene	3.906	4.009	-2.6	104	0.00	19.69
122	M	1,2,3-trichlorobenzene	1.359	1.397	-2.8	104	0.00	19.96
123	M	hexachloroethane	0.516	0.551	-6.8	104	0.00	17.89
124		2-methylnaphthalene	2.539	2.500	1.5	98	0.00	20.97

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

A236273.D MA8958.m Mon Sep 25 09:01:54 2017 RPT1

Initial Calibration Verification

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VA8958-ICV8958
Lab FileID: A236279.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\A236279.D Vial: 15
Acq On : 23 Sep 2017 4:51 am Operator: ChelseaS
Sample : icv8958-50 Inst : MSA
Misc : MS20266,VA8958,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MA8958.m (RTE Integrator)
Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
Last Update : Mon Sep 25 08:55:37 2017
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	102	0.00	7.82
2		ethanol		----------NA----------				
3	M	tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	103	0.00	10.18
6	M	chlorodifluoromethane		----------NA----------				
7	M	dichlorodifluoromethane		----------NA----------				
8	M	chloromethane		----------NA----------				
9	M	vinyl chloride		----------NA----------				
10		1,3-butadiene		----------NA----------				
11	M	bromomethane		----------NA----------				
12	M	chloroethane		----------NA----------				
13		vinyl bromide		----------NA----------				
14	M	trichlorofluoromethane		----------NA----------				
15	M	ethyl ether		----------NA----------				
16	M	acrolein		----------NA----------				
17		freon 113		----------NA----------				
18	M	1,1-dichloroethene		----------NA----------				
19	M	acetone		----------NA----------				
20	M	acetonitrile	0.138	0.148	-7.2	105	0.00	7.60
21	M	iodomethane		----------NA----------				
22	M	carbon disulfide		----------NA----------				
23	M	methylene chloride		----------NA----------				
24	M	methyl acetate		----------NA----------				
25	M	methyl tert butyl ether		----------NA----------				
26	M	trans-1,2-dichloroethene		----------NA----------				
27		hexane		----------NA----------				
28	M	di-isopropyl ether		----------NA----------				
29	M	ethyl tert-butyl ether		----------NA----------				
30	M	2-butanone		----------NA----------				
31	M	1,1-dichloroethane		----------NA----------				
32	M	chloroprene		----------NA----------				
33	M	acrylonitrile		----------NA----------				
34	M	vinyl acetate		----------NA----------				
35	M	ethyl acetate		----------NA----------				
36	M	2,2-dichloropropane		----------NA----------				
37	M	cis-1,2-dichloroethene		----------NA----------				
38		methyl acrylate		----------NA----------				
39	M	propionitrile		----------NA----------				
40	M	bromochloromethane		----------NA----------				
41	M	tetrahydrofuran		----------NA----------				

Initial Calibration Verification

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VA8958-ICV8958
Lab FileID: A236279.D

42	M	chloroform		----------NA----------					
43		tert-butyl formate		----------NA----------					
44	S	dibromofluoromethane (s)	0.567	0.561	1.1	101	0.00	10.20	
45	M	methacrylonitrile		----------NA----------					
46		cyclohexane		----------NA----------					
47	M	1,1,1-trichloroethane		----------NA----------					
48		iso-butyl alcohol		----------NA----------					
49		1,1-dichloropropene		----------NA----------					
50		carbon tetrachloride		----------NA----------					
51		tert-amyl alcohol		----------NA----------					
52	I	1,4-difluorobenzene	1.000	1.000	0.0	98	0.00	11.12	
53	S	1,2-dichloroethane-d4 (s)	0.447	0.434	2.9	97	0.00	10.64	
54	M	benzene		----------NA----------					
55	M	iso-octane		----------NA----------					
56		tert-amyl methyl ether		----------NA----------					
57	M	heptane		----------NA----------					
58	M	isopropyl acetate		----------NA----------					
59	M	1,2-dichloroethane		----------NA----------					
60		n-butyl alcohol		----------NA----------					
61		ethyl acrylate		----------NA----------					
62	M	trichloroethene		----------NA----------					
63	M	2-nitropropane		----------NA----------					
64	m	methylcyclohexane		----------NA----------					
65	M	2-chloroethyl vinyl ether		----------NA----------					
66	M	methyl methacrylate		----------NA----------					
67	M	1,2-dichloropropane		----------NA----------					
68	M	dibromomethane		----------NA----------					
69	M	bromodichloromethane		----------NA----------					
70		epichlorohydrin		----------NA----------					
71	M	cis-1,3-dichloropropene		----------NA----------					
72	M	4-methyl-2-pentanone		----------NA----------					
73	M	3-methyl-1-butanol		----------NA----------					
74	I	chlorobenzene-d5	1.000	1.000	0.0	94	0.00	14.51	
75	S	toluene-d8 (s)	1.394	1.365	2.1	94	0.00	12.86	
76		toluene		----------NA----------					
77		trans-1,3-dichloropropene		----------NA----------					
78		ethyl methacrylate		----------NA----------					
79		1,1,2-trichloroethane		----------NA----------					
80		2-hexanone		----------NA----------					
81	M	tetrachloroethene		----------NA----------					
82	M	1,3-dichloropropane		----------NA----------					
83	M	butyl acetate		----------NA----------					
84		3,3-dimethyl-1-butanol		----------NA----------					
85	M	dibromochloromethane		----------NA----------					
86	M	1,2-dibromoethane		----------NA----------					
87	M	n-butyl ether		----------NA----------					
88	M	chlorobenzene		----------NA----------					
89	M	1,1,1,2-tetrachloroethane		----------NA----------					
90	M	ethylbenzene		----------NA----------					
91	M	m,p-xylene		----------NA----------					
92	M	o-xylene		----------NA----------					
93	M	styrene		----------NA----------					
94		butyl acrylate		----------NA----------					
95	M	bromoform		----------NA----------					
96		isopropylbenzene		----------NA----------					
97		cis-1,4-dichloro-2-butene		----------NA----------					
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	99	0.00	17.12	

Initial Calibration Verification

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VA8958-ICV8958
Lab FileID: A236279.D

99	S	4-bromofluorobenzene (s)	0.844	0.836	0.9	97	0.00	15.80
100	M	bromobenzene		----------NA----------				
101	M	1,1,2,2-tetrachloroethane		----------NA----------				
102	M	trans-1,4-dichloro-2-bute		----------NA----------				
103	M	1,2,3-trichloropropane		----------NA----------				
104	M	n-propylbenzene		----------NA----------				
105	M	2-chlorotoluene		----------NA----------				
106	M	4-chlorotoluene		----------NA----------				
107	M	1,3,5-trimethylbenzene		----------NA----------				
108	M	tert-butylbenzene		----------NA----------				
109	M	1,2,4-trimethylbenzene		----------NA----------				
110	M	sec-butylbenzene		----------NA----------				
111	M	1,3-dichlorobenzene		----------NA----------				
112	M	p-isopropyltoluene		----------NA----------				
113	M	1,4-dichlorobenzene		----------NA----------				
114	M	1,2-dichlorobenzene		----------NA----------				
115	M	n-butylbenzene		----------NA----------				
116	M	1,2-dibromo-3-chloropropa		----------NA----------				
117	M	1,3,5-trichlorobenzene		----------NA----------				
118		2-ethylhexyl acrylate		----------NA----------				
119	M	1,2,4-trichlorobenzene		----------NA----------				
120	M	hexachlorobutadiene		----------NA----------				
121	M	naphthalene		----------NA----------				
122	M	1,2,3-trichlorobenzene		----------NA----------				
123	M	hexachloroethane		----------NA----------				
124		2-methylnaphthalene		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
A236273.D MA8958.m Mon Sep 25 09:01:55 2017 RPT1

Initial Calibration Verification

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VA8995-ICV8958
Lab FileID: A237144.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\A237144.D Vial: 14
Acq On : 19 Oct 2017 3:34 am Operator: Gabriela
Sample : icv8958-50 Inst : MSA
Misc : MS21095,VA8958,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\MA8958.m (RTE Integrator)
Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
Last Update : Thu Oct 19 09:28:57 2017
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	122	0.00	7.82
2		ethanol		----------NA----------				
3	M	tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	119	0.00	10.18
6	M	chlorodifluoromethane		----------NA----------				
7	M	dichlorodifluoromethane		----------NA----------				
8	M	chloromethane		----------NA----------				
9	M	vinyl chloride		----------NA----------				
10		1,3-butadiene		----------NA----------				
11	M	bromomethane		----------NA----------				
12	M	chloroethane		----------NA----------				
13		vinyl bromide		----------NA----------				
14	M	trichlorofluoromethane		----------NA----------				
15	M	ethyl ether		----------NA----------				
16	M	acrolein		----------NA----------				
17		freon 113		----------NA----------				
18	M	1,1-dichloroethene		----------NA----------				
19	M	acetone		----------NA----------				
20	M	acetonitrile		----------NA----------				
21	M	iodomethane		----------NA----------				
22	M	carbon disulfide		----------NA----------				
23	M	methylene chloride		----------NA----------				
24	M	methyl acetate		----------NA----------				
25	M	methyl tert butyl ether		----------NA----------				
26	M	trans-1,2-dichloroethene		----------NA----------				
27		hexane		----------NA----------				
28	M	di-isopropyl ether		----------NA----------				
29	M	ethyl tert-butyl ether		----------NA----------				
30	M	2-butanone		----------NA----------				
31	M	1,1-dichloroethane		----------NA----------				
32	M	chloroprene		----------NA----------				
33	M	acrylonitrile		----------NA----------				
34	M	vinyl acetate		----------NA----------				
35	M	ethyl acetate		----------NA----------				
36	M	2,2-dichloropropane		----------NA----------				
37	M	cis-1,2-dichloroethene		----------NA----------				
38		methyl acrylate		----------NA----------				
39	M	propionitrile		----------NA----------				
40	M	bromochloromethane		----------NA----------				
41	M	tetrahydrofuran		----------NA----------				

Initial Calibration Verification

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VA8995-ICV8958
Lab FileID: A237144.D

42	M	chloroform		----------NA----------				
43		tert-butyl formate		----------NA----------				
44	S	dibromofluoromethane (s)	0.567	0.588	-3.7	123	0.00	10.20
45	M	methacrylonitrile		----------NA----------				
46		cyclohexane		----------NA----------				
47	M	1,1,1-trichloroethane		----------NA----------				
48		iso-butyl alcohol		----------NA----------				
49		1,1-dichloropropene		----------NA----------				
50		carbon tetrachloride		----------NA----------				
51		tert-amyl alcohol		----------NA----------				
52	I	1,4-difluorobenzene	1.000	1.000	0.0	125	0.00	11.12
53	S	1,2-dichloroethane-d4 (s)	0.447	0.450	-0.7	128	0.00	10.64
54	M	benzene		----------NA----------				
55	M	iso-octane		----------NA----------				
56		tert-amyl methyl ether		----------NA----------				
57	M	heptane		----------NA----------				
58	M	isopropyl acetate		----------NA----------				
59	M	1,2-dichloroethane		----------NA----------				
60		n-butyl alcohol		----------NA----------				
61		ethyl acrylate		----------NA----------				
62	M	trichloroethene		----------NA----------				
63	M	2-nitropropane		----------NA----------				
64	m	methylcyclohexane		----------NA----------				
65	M	2-chloroethyl vinyl ether		----------NA----------				
66	M	methyl methacrylate		----------NA----------				
67	M	1,2-dichloropropane		----------NA----------				
68	M	dibromomethane		----------NA----------				
69	M	bromodichloromethane		----------NA----------				
70		epichlorohydrin		----------NA----------				
71	M	cis-1,3-dichloropropene		----------NA----------				
72	M	4-methyl-2-pentanone		----------NA----------				
73	M	3-methyl-1-butanol		----------NA----------				
74	I	chlorobenzene-d5	1.000	1.000	0.0	130	0.00	14.51
75	S	toluene-d8 (s)	1.394	1.331	4.5	127	0.00	12.86
76		toluene		----------NA----------				
77		trans-1,3-dichloropropene		----------NA----------				
78		ethyl methacrylate		----------NA----------				
79		1,1,2-trichloroethane		----------NA----------				
80		2-hexanone		----------NA----------				
81	M	tetrachloroethene		----------NA----------				
82	M	1,3-dichloropropane		----------NA----------				
83	M	butyl acetate		----------NA----------				
84		3,3-dimethyl-1-butanol		----------NA----------				
85	M	dibromochloromethane		----------NA----------				
86	M	1,2-dibromoethane		----------NA----------				
87	M	n-butyl ether		----------NA----------				
88	M	chlorobenzene		----------NA----------				
89	M	1,1,1,2-tetrachloroethane		----------NA----------				
90	M	ethylbenzene		----------NA----------				
91	M	m,p-xylene		----------NA----------				
92	M	o-xylene		----------NA----------				
93	M	styrene		----------NA----------				
94		butyl acrylate		----------NA----------				
95	M	bromoform		----------NA----------				
96		isopropylbenzene		----------NA----------				
97		cis-1,4-dichloro-2-butene		----------NA----------				
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	128	0.00	17.11

Initial Calibration Verification

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VA8995-ICV8958
Lab FileID: A237144.D

99	S	4-bromofluorobenzene (s)	0.844	0.831	1.5	124	0.00	15.80
100	M	bromobenzene		----------NA----------				
101	M	1,1,2,2-tetrachloroethane		----------NA----------				
102	M	trans-1,4-dichloro-2-bute		----------NA----------				
103	M	1,2,3-trichloropropane		----------NA----------				
104	M	n-propylbenzene		----------NA----------				
105	M	2-chlorotoluene		----------NA----------				
106	M	4-chlorotoluene		----------NA----------				
107	M	1,3,5-trimethylbenzene		----------NA----------				
108	M	tert-butylbenzene		----------NA----------				
109	M	1,2,4-trimethylbenzene		----------NA----------				
110	M	sec-butylbenzene		----------NA----------				
111	M	1,3-dichlorobenzene		----------NA----------				
112	M	p-isopropyltoluene		----------NA----------				
113	M	1,4-dichlorobenzene		----------NA----------				
114	M	1,2-dichlorobenzene		----------NA----------				
115	M	n-butylbenzene		----------NA----------				
116	M	1,2-dibromo-3-chloropropa		----------NA----------				
117	M	1,3,5-trichlorobenzene		----------NA----------				
118		2-ethylhexyl acrylate		----------NA----------				
119	M	1,2,4-trichlorobenzene		----------NA----------				
120	M	hexachlorobutadiene		----------NA----------				
121	M	naphthalene		----------NA----------				
122	M	1,2,3-trichlorobenzene		----------NA----------				
123	M	hexachloroethane		----------NA----------				
124		2-methylnaphthalene		----------NA----------				
125		pentafluorobenzene(a)	1.000	1.000	0.0	106	-0.02	10.18
126		freon 142b	1.000	0.807	19.3	81	-0.01	4.47
127		allyl chloride	0.304	0.321	-5.6	105	0.00	7.67

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

A236273.D MA8958.m Thu Oct 19 15:49:48 2017 RPT1

Continuing Calibration Summary

Job Number: JC55112
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VA9023-CC8958
Lab FileID: A237814.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\A237814.D Vial: 24
Acq On : 9 Nov 2017 9:46 pm Operator: Gabriela
Sample : cc8958-50 Inst : MSA
Misc : MS21798,VA9023,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\MA8958.m (RTE Integrator)
Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
Last Update : Fri Nov 10 09:24:35 2017
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	124	0.00	7.81
2		ethanol		----------NA----------				
3	M	tertiary butyl alcohol	0.954	0.908	4.8	114	0.00	7.93
4		1,4-dioxane	0.051	0.051	0.0	115	0.00	11.86
5	I	pentafluorobenzene	1.000	1.000	0.0	142	0.00	10.18
6	M	chlorodifluoromethane	0.841	0.655	22.1#	94	0.00	4.20
7	M	dichlorodifluoromethane	0.927	0.734	20.8#	100	0.00	4.19
8	M	chloromethane	1.016	0.845	16.8	111	0.02	4.55
9	M	vinyl chloride	1.069	0.945	11.6	119	0.01	4.85
10		1,3-butadiene	0.578	0.091	84.3#	22#	0.00	4.86
11	M	bromomethane	0.607	0.570	6.1	128	0.00	5.53
12	M	chloroethane	0.493	0.432	12.4	121	0.00	5.71
13		vinyl bromide	0.570	0.501	12.1	120	0.00	6.10
14	M	trichlorofluoromethane	0.975	0.789	19.1	108	0.00	6.25
15	M	ethyl ether	0.261	0.257	1.5	130	0.00	6.67
16	M	acrolein	0.156	0.146	6.4	126	0.00	6.91
17		freon 113	0.445	0.392	11.9	120	0.00	7.12
18	M	1,1-dichloroethene	0.467	0.418	10.5	125	0.00	7.11
19	M	acetone	0.089	0.072	19.1	107	0.00	7.15
20	M	acetonitrile	0.138	0.106	23.2#	103	0.00	7.61
21	M	iodomethane	0.940	0.898	4.5	129	0.00	7.40
22	M	carbon disulfide	1.891	1.596	15.6	122	0.00	7.53
23	M	methylene chloride	0.547	0.497	9.1	129	0.00	7.86
24	M	methyl acetate	0.641	0.543	15.3	113	0.00	7.66
25	M	methyl tert butyl ether	1.681	1.435	14.6	116	0.00	8.24
26	M	trans-1,2-dichloroethene	0.485	0.443	8.7	128	0.00	8.27
27		hexane	0.637	0.538	15.5	109	0.00	8.63
28	M	di-isopropyl ether	1.786	1.449	18.9	108	0.00	8.88
29	M	ethyl tert-butyl ether	1.705	1.408	17.4	110	0.00	9.37
30	M	2-butanone	0.089	0.081	9.0	123	0.00	9.59
31	M	1,1-dichloroethane	0.918	0.795	13.4	119	0.00	8.86
32	M	chloroprene	0.748	0.600	19.8	105	0.00	8.99
33	M	acrylonitrile	0.308	0.275	10.7	119	0.00	8.19
34	M	vinyl acetate	0.095	0.085	10.5	124	0.00	8.86
35	M	ethyl acetate	0.117	0.093	20.5#	111	0.00	9.62
36	M	2,2-dichloropropane	0.791	0.650	17.8	112	0.00	9.65
37	M	cis-1,2-dichloroethene	0.537	0.506	5.8	129	0.00	9.62
38		methyl acrylate	0.090	0.089	1.1	134	0.00	9.70
39	M	propionitrile	0.139	0.121	12.9	117	0.00	9.68
40	M	bromochloromethane	0.276	0.260	5.8	128	0.00	9.94
41	M	tetrahydrofuran	0.300	0.233	22.3#	102	0.00	9.99

Continuing Calibration Summary

Job Number: JC55112 **Sample:** VA9023-CC8958
Account: HSWFLTAM HSW Engineering **Lab FileID:** A237814.D
Project: Long Island GW Sampling, Long Island, NY

42	M	chloroform	0.887	0.752	15.2	120	0.00	10.00
43		tert-butyl formate	0.287	0.039	86.4#	19#	0.00	10.07
44	S	dibromofluoromethane (s)	0.567	0.531	6.3	132	0.00	10.20
45	M	methacrylonitrile	0.256	0.244	4.7	124	0.00	9.88
46		cyclohexane	0.795	0.697	12.3	115	0.00	10.39
47	M	1,1,1-trichloroethane	0.822	0.691	15.9	111	0.00	10.29
48		iso-butyl alcohol	0.052	0.041	21.2#	102	0.00	10.45
49		1,1-dichloropropene	0.640	0.562	12.2	115	0.00	10.47
50		carbon tetrachloride	0.721	0.613	15.0	111	0.00	10.50
51		tert-amyl alcohol	0.077	0.069	10.4	113	0.00	10.60
52	I	1,4-difluorobenzene	1.000	1.000	0.0	142	0.00	11.12
53	S	1,2-dichloroethane-d4 (s)	0.447	0.363	18.8	117	0.00	10.64
54	M	benzene	1.222	1.114	8.8	123	0.00	10.74
55	M	iso-octane	1.311	1.105	15.7	108	0.00	10.78
56		tert-amyl methyl ether	1.113	0.944	15.2	115	0.00	10.79
57	M	heptane	0.233	0.212	9.0	118	0.00	10.95
58	M	isopropyl acetate	0.082	0.076	7.3	123	0.00	10.67
59	M	1,2-dichloroethane	0.438	0.344	21.5#	108	0.00	10.73
60		n-butyl alcohol	0.021	0.019	9.5	112	0.00	11.22
61		ethyl acrylate	0.412	0.384	6.8	117	0.00	11.47
62	M	trichloroethene	0.295	0.266	9.8	125	0.00	11.47
63	M	2-nitropropane	0.151	0.098	35.1#	86	0.00	12.26
64	m	methylcyclohexane	0.651	0.572	12.1	116	0.00	11.73
65	M	2-chloroethyl vinyl ether	0.166	0.053	68.1#	41#	0.00	12.30
66	M	methyl methacrylate	0.086	0.084	2.3	132	0.00	11.76
67	M	1,2-dichloropropane	0.323	0.288	10.8	120	0.00	11.75
68	M	dibromomethane	0.204	0.186	8.8	127	0.00	11.89
69	M	bromodichloromethane	0.390	0.350	10.3	118	0.00	12.03
70		epichlorohydrin	0.048	0.041	14.6	111	0.00	12.41
71	M	cis-1,3-dichloropropene	0.432	0.412	4.6	120	0.00	12.52
72	M	4-methyl-2-pentanone	0.192	0.179	6.8	121	0.00	12.65
73	M	3-methyl-1-butanol	0.038	0.033	13.2	112	0.00	12.64
74	I	chlorobenzene-d5	1.000	1.000	0.0	143	0.00	14.51
75	S	toluene-d8 (s)	1.394	1.283	8.0	135	0.00	12.86
76		toluene	0.777	0.701	9.8	125	0.00	12.94
77		trans-1,3-dichloropropene	0.439	0.391	10.9	119	0.00	13.13
78		ethyl methacrylate	0.449	0.411	8.5	120	0.00	13.15
79		1,1,2-trichloroethane	0.242	0.227	6.2	128	0.00	13.36
80		2-hexanone	0.195	0.169	13.3	120	0.00	13.57
81	M	tetrachloroethene	0.344	0.312	9.3	127	0.00	13.58
82	M	1,3-dichloropropane	0.468	0.427	8.8	124	0.00	13.57
83	M	butyl acetate	0.288	0.243	15.6	117	0.00	13.66
84		3,3-dimethyl-1-butanol	0.103	0.085	17.5	111	0.00	13.75
85	M	dibromochloromethane	0.326	0.305	6.4	122	0.00	13.85
86	M	1,2-dibromoethane	0.305	0.288	5.6	128	0.00	14.02
87	M	n-butyl ether	1.529	1.306	14.6	113	0.00	14.48
88	M	chlorobenzene	0.842	0.768	8.8	127	0.00	14.54
89	M	1,1,1,2-tetrachloroethane	0.403	0.353	12.4	122	0.00	14.61
90	M	ethylbenzene	1.480	1.304	11.9	119	0.00	14.62
91	M	m,p-xylene	0.563	0.518	8.0	125	0.00	14.74
92	M	o-xylene	0.619	0.572	7.6	125	0.00	15.20
93	M	styrene	0.894	0.816	8.7	123	0.00	15.21
94		butyl acrylate	0.719	0.595	17.2	111	0.00	15.01
95	M	bromoform	0.264	0.243	8.0	125	0.00	15.48
96		isopropylbenzene	1.666	1.522	8.6	120	0.00	15.59
97		cis-1,4-dichloro-2-butene	0.169	0.122	27.8#	95	0.00	15.64
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	133	0.00	17.11

Continuing Calibration Summary

Job Number: JC55112 **Sample:** VA9023-CC8958
Account: HSWFLTAM HSW Engineering **Lab FileID:** A237814.D
Project: Long Island GW Sampling, Long Island, NY

99	S	4-bromofluorobenzene (s)	0.844	0.821	2.7	128	0.00	15.80
100	M	bromobenzene	0.631	0.622	1.4	122	0.00	16.02
101	M	1,1,2,2-tetrachloroethane	0.887	0.887	0.0	124	0.00	15.90
102	M	trans-1,4-dichloro-2-bute	0.231	0.154	33.3#	87	0.00	15.96
103	M	1,2,3-trichloropropane	0.234	0.225	3.8	122	0.00	15.99
104	M	n-propylbenzene	3.132	2.979	4.9	117	0.00	16.05
105	M	2-chlorotoluene	0.658	0.647	1.7	121	0.00	16.21
106	M	4-chlorotoluene	1.761	1.620	8.0	117	0.00	16.32
107	M	1,3,5-trimethylbenzene	2.364	2.335	1.2	117	0.00	16.22
108	M	tert-butylbenzene	1.972	1.987	-0.8	117	0.00	16.62
109	M	1,2,4-trimethylbenzene	2.400	2.346	2.2	118	0.00	16.66
110	M	sec-butylbenzene	3.134	3.146	-0.4	118	0.00	16.86
111	M	1,3-dichlorobenzene	1.261	1.166	7.5	120	0.00	17.05
112	M	p-isopropyltoluene	2.650	2.589	2.3	116	0.00	16.99
113	M	1,4-dichlorobenzene	1.316	1.170	11.1	118	0.00	17.14
114	M	1,2-dichlorobenzene	1.353	1.244	8.1	119	0.00	17.58
115	M	n-butylbenzene	1.447	1.289	10.9	110	0.00	17.45
116	M	1,2-dibromo-3-chloropropa	0.295	0.278	5.8	119	0.00	18.42
117	M	1,3,5-trichlorobenzene	1.411	1.269	10.1	117	0.00	18.64
118		2-ethylhexyl acrylate	0.958	0.672	29.9#	93	0.00	19.35
119	M	1,2,4-trichlorobenzene	1.361	1.209	11.2	119	0.00	19.36
120	M	hexachlorobutadiene	0.616	0.582	5.5	119	0.00	19.51
121	M	naphthalene	3.906	3.640	6.8	120	0.00	19.68
122	M	1,2,3-trichlorobenzene	1.359	1.243	8.5	118	0.00	19.96
123	M	hexachloroethane	0.516	0.500	3.1	120	0.00	17.88
124		2-methylnaphthalene	2.539	2.385	6.1	119	0.00	20.97
125		pentafluorobenzene(a)	1.000	1.000	0.0	127	-0.02	10.18
126		freon 142b		----------NA----------				
127		allyl chloride		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
A236273.D MA8958.m Fri Nov 10 09:25:38 2017 RPT1

MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A237824.D
Acq On : 10 Nov 2017 4:06 am
Operator : Gabriela
Sample : jc55112-1
Misc : MS21903,VA9023,5,,,,1
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Nov 10 09:35:34 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 15:50:16 2017
Response via : Initial Calibration

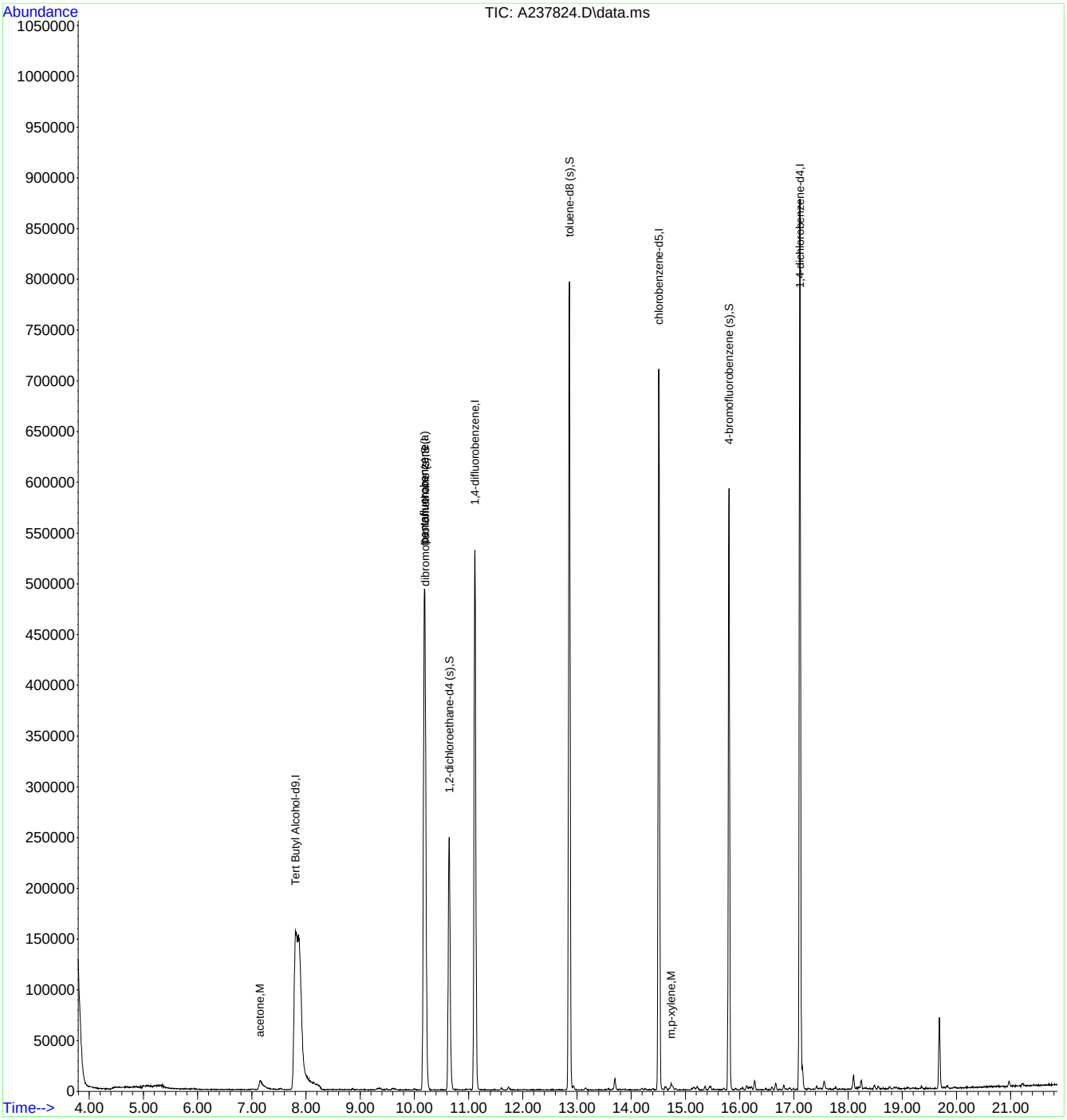
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.806	65	838278	500.00	ug/L	0.00
5) pentafluorobenzene	10.181	168	346947	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.117	114	528344	50.00	ug/L	0.00
74) chlorobenzene-d5	14.511	117	449384	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.111	152	254265	50.00	ug/L	0.00
125) pentafluorobenzene(a)	10.181	168	346947	50.00	ug/L	-0.02
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.202	113	195789	49.73	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.46%			
53) 1,2-dichloroethane-d4 (s)	10.641	65	214303	45.37	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 90.74%			
75) toluene-d8 (s)	12.858	98	599138	47.83	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.66%			
99) 4-bromofluorobenzene (s)	15.803	95	208139	48.50	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.00%			
Target Compounds						Qvalue
19) acetone	7.147	58	10573	17.20	ug/L #	74
91) m,p-xylene	14.736	106	2154	0.43	ug/L	98

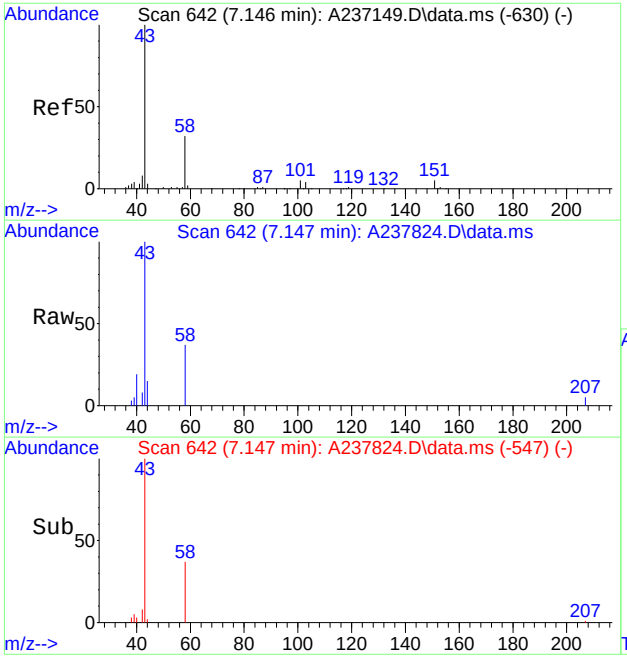
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A237824.D
Acq On : 10 Nov 2017 4:06 am
Operator : Gabriela
Sample : jc55112-1
Misc : MS21903,VA9023,5,,,,1
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Nov 10 09:35:34 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 15:50:16 2017
Response via : Initial Calibration

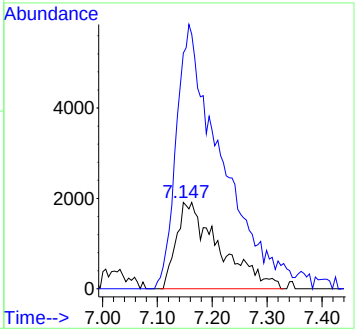


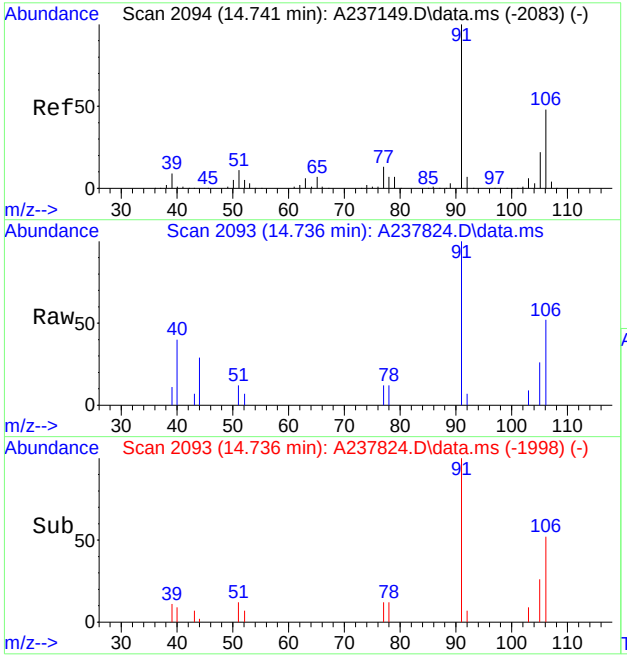


#19
acetone
Concen: 17.20 ug/L
RT: 7.147 min Scan# 642
Delta R.T. -0.004 min
Lab File: A237824.D
Acq: 10 Nov 2017 4:06 am

Tgt Ion: 58 Resp: 10573

Ion	Ratio	Lower	Upper
58	100		
43	272.8	297.6	357.6#

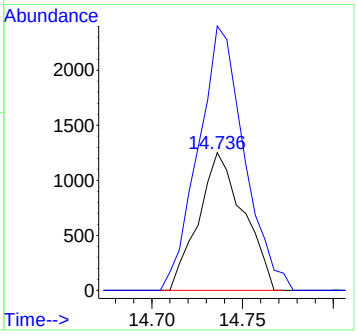




#91
m,p-xylene
Concen: 0.43 ug/L
RT: 14.736 min Scan# 2093
Delta R.T. -0.004 min
Lab File: A237824.D
Acq: 10 Nov 2017 4:06 am

Tgt Ion:106 Resp: 2154

Ion	Ratio	Lower	Upper
106	100		
91	192.1	165.7	225.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A237816a.D
Acq On : 9 Nov 2017 11:44 pm
Operator : Gabriela
Sample : mb
Misc : MS21798,VA9023,5,,,,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Nov 10 09:33:22 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 15:50:16 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.815	65	556866	500.00	ug/L	0.00
5) pentafluorobenzene	10.179	168	362821	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.115	114	543186	50.00	ug/L	0.00
74) chlorobenzene-d5	14.510	117	482655	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.109	152	289321	50.00	ug/L	0.00
125) pentafluorobenzene(a)	10.179	168	362821	50.00	ug/L	-0.02
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.200	113	201217	48.88	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.76%			
53) 1,2-dichloroethane-d4 (s)	10.639	65	207981	42.82	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 85.64%			
75) toluene-d8 (s)	12.857	98	619667	46.05	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 92.10%			
99) 4-bromofluorobenzene (s)	15.801	95	229520	47.00	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.00%			

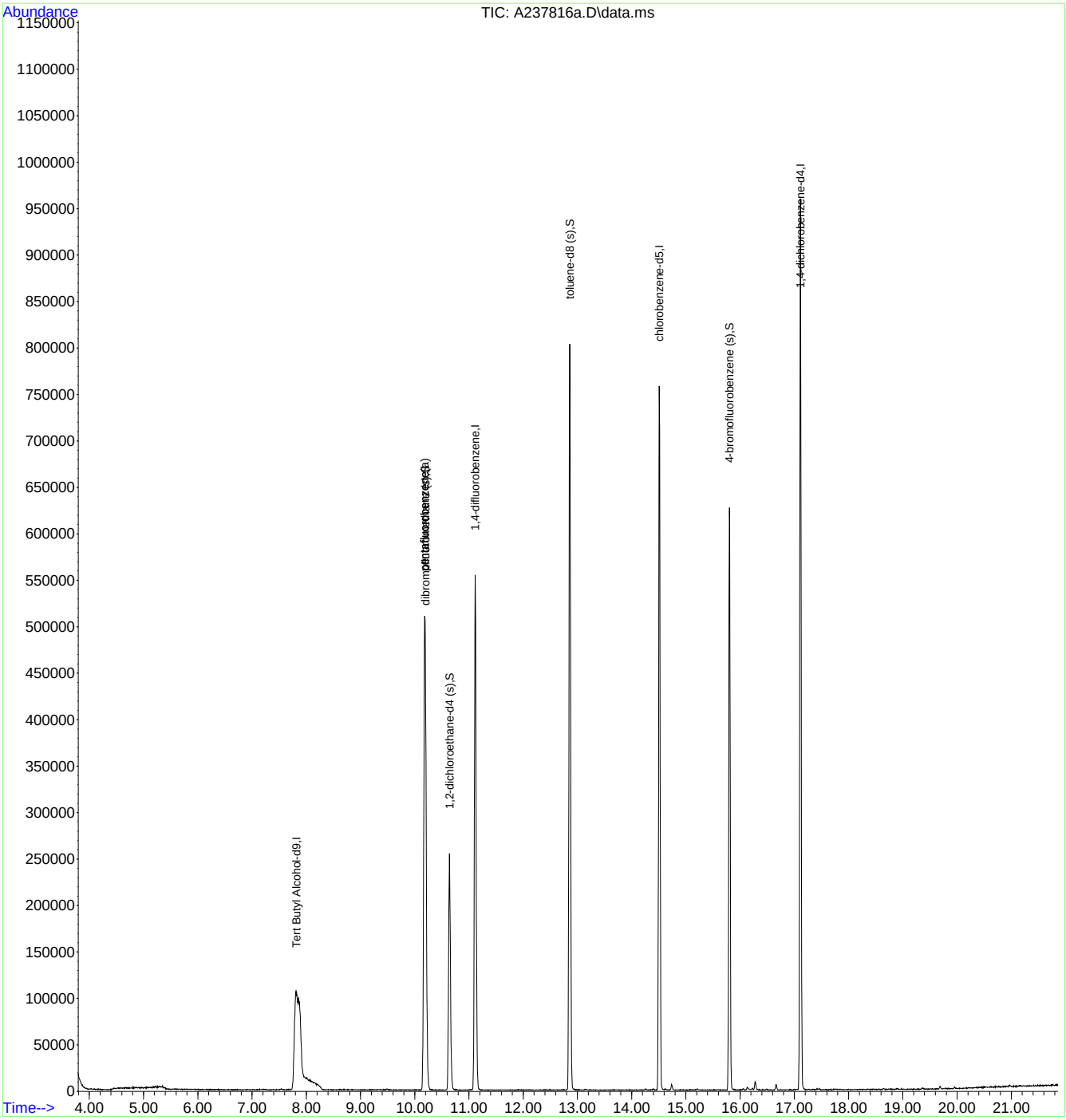
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A237816a.D
Acq On : 9 Nov 2017 11:44 pm
Operator : Gabriela
Sample : mb
Misc : MS21798,VA9023,5,,,,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Nov 10 09:33:22 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 15:50:16 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A237817.D
Acq On : 10 Nov 2017 12:13 am
Operator : Gabriela
Sample : bs
Misc : MS21903,VA9023,5,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 10 09:34:11 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 15:50:16 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.816	65	553053	500.00	ug/L		0.00
5) pentafluorobenzene	10.180	168	371029	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.116	114	581340	50.00	ug/L		0.00
74) chlorobenzene-d5	14.511	117	525230	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.110	152	289240	50.00	ug/L		0.00
125) pentafluorobenzene(a)	10.180	168	371029	50.00	ug/L		-0.02
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.201	113	203866	48.42	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.84%				
53) 1,2-dichloroethane-d4 (s)	10.640	65	215752	41.51	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 83.02%				
75) toluene-d8 (s)	12.858	98	673369	45.99	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 91.98%				
99) 4-bromofluorobenzene (s)	15.803	95	239422	49.04	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.08%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.942	59	245828	232.98	ug/L		95
4) 1,4-dioxane	11.859	88	65176	1160.53	ug/L		82
6) chlorodifluoromethane	4.207	51	209803	33.63	ug/L		98
7) dichlorodifluoromethane	4.202	85	283117	41.15	ug/L		99
8) chloromethane	4.558	50	371058	49.21	ug/L		96
9) vinyl chloride	4.845	62	396899	50.04	ug/L		97
10) 1,3-butadiene	4.851	54	31510	7.35	ug/L		93
11) bromomethane	5.525	94	229676	51.03	ug/L		99
12) chloroethane	5.703	64	179851	49.12	ug/L		94
13) vinyl bromide	6.095	106	204952	48.43	ug/L		99
14) trichlorofluoromethane	6.252	101	312562	43.22	ug/L		93
15) ethyl ether	6.671	74	92457	47.76	ug/L	#	81
16) acrolein	6.917	56	48767	42.04	ug/L		100
17) freon 113	7.126	151	134907	40.89	ug/L		99
18) 1,1-dichloroethene	7.110	96	148856	42.97	ug/L		93
19) acetone	7.152	58	109814	167.08	ug/L	#	80
20) acetonitrile	7.602	41	396992	387.71	ug/L		98
21) iodomethane	7.393	142	317642	45.55	ug/L		97
22) carbon disulfide	7.529	76	563611	40.17	ug/L		97
23) methylene chloride	7.853	84	181889	44.78	ug/L		95
24) methyl acetate	7.659	43	205259	43.12	ug/L		94
25) methyl tert butyl ether	8.245	73	528182	42.34	ug/L		98
26) trans-1,2-dichloroethene	8.271	96	163103	45.30	ug/L		96
27) hexane	8.632	57	176899	37.42	ug/L		97
28) di-isopropyl ether	8.883	45	552992	41.72	ug/L		92
29) ethyl tert-butyl ether	9.364	59	524947	41.49	ug/L		97
30) 2-butanone	9.584	72	119984	182.04	ug/L	#	75
31) 1,1-dichloroethane	8.857	63	299489	43.95	ug/L		99
32) chloroprene	8.982	53	227767	41.03	ug/L		92
33) acrylonitrile	8.198	53	102852	45.03	ug/L		97
34) vinyl acetate	8.852	86	24394	34.73	ug/L	#	31
35) ethyl acetate	9.626	45	35244	40.53	ug/L	#	83
36) 2,2-dichloropropane	9.652	77	209357	35.68	ug/L		98
37) cis-1,2-dichloroethene	9.621	96	188500	47.26	ug/L		90
38) methyl acrylate	9.699	85	32019	47.77	ug/L	#	60
39) propionitrile	9.678	54	459507	446.00	ug/L		93
40) bromochloromethane	9.934	128	94947	46.28	ug/L		94
41) tetrahydrofuran	9.992	42	87884	39.52	ug/L		88
42) chloroform	9.997	83	288566	43.82	ug/L		99
43) tert-butyl formate	10.065	59	12228	5.74	ug/L	#	54

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A237817.D
Acq On : 10 Nov 2017 12:13 am
Operator : Gabriela
Sample : bs
Misc : MS21903,VA9023,5,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 10 09:34:11 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 15:50:16 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) methacrylonitrile	9.882	67	93007	48.90	ug/L		83
46) cyclohexane	10.384	84	282081	47.80	ug/L	#	81
47) 1,1,1-trichloroethane	10.290	97	265092	43.44	ug/L		98
48) iso-butyl alcohol	10.447	43	149269	385.21	ug/L		98
49) 1,1-dichloropropene	10.468	75	212167	44.67	ug/L		98
50) carbon tetrachloride	10.504	117	233362	43.60	ug/L		100
51) tert-amyl alcohol	10.609	73	119881	208.61	ug/L		95
54) benzene	10.740	78	644121	45.34	ug/L		99
55) iso-octane	10.782	57	596832	39.14	ug/L		96
56) tert-amyl methyl ether	10.797	73	540392	41.77	ug/L		98
57) heptane	10.954	71	107346	39.70	ug/L		99
58) isopropyl acetate	10.667	87	43743	45.88	ug/L	#	73
59) 1,2-dichloroethane	10.735	62	204778	40.21	ug/L		100
60) n-butyl alcohol	11.216	56	511488	2081.89	ug/L		91
61) ethyl acrylate	11.477	55	222803	46.52	ug/L		98
62) trichloroethene	11.472	95	158504	46.26	ug/L		99
63) 2-nitropropane	12.267	41	57215	32.55	ug/L		87
64) methylcyclohexane	11.734	83	321953	42.54	ug/L		95
65) 2-chloroethyl vinyl ether	12.298	63	149055	77.15	ug/L		97
66) methyl methacrylate	11.754	100	47498	47.45	ug/L	#	89
67) 1,2-dichloropropane	11.744	63	169362	45.13	ug/L		97
68) dibromomethane	11.890	93	105477	44.41	ug/L		100
69) bromodichloromethane	12.032	83	203705	44.90	ug/L		100
70) epichlorohydrin	12.413	57	113295	204.10	ug/L		97
71) cis-1,3-dichloropropene	12.529	75	233173	46.44	ug/L		93
72) 4-methyl-2-pentanone	12.649	58	421704	188.98	ug/L	#	83
73) 3-methyl-1-butanol	12.644	55	375694	861.05	ug/L		95
76) toluene	12.936	92	365199	44.74	ug/L		97
77) trans-1,3-dichloropropene	13.125	75	196209	42.51	ug/L		99
78) ethyl methacrylate	13.146	69	213409	45.20	ug/L		91
79) 1,1,2-trichloroethane	13.360	83	119035	46.83	ug/L		96
80) 2-hexanone	13.569	58	358706	174.83	ug/L	#	87
81) tetrachloroethene	13.575	166	157285	43.56	ug/L		98
82) 1,3-dichloropropane	13.564	76	224513	45.68	ug/L		96
83) butyl acetate	13.658	56	127133	41.98	ug/L		93
84) 3,3-dimethyl-1-butanol	13.747	57	426901	395.04	ug/L		94
85) dibromochloromethane	13.847	129	158614	46.25	ug/L		96
86) 1,2-dibromoethane	14.019	107	150205	46.96	ug/L		96
87) n-butyl ether	14.485	57	702739	43.77	ug/L		96
88) chlorobenzene	14.542	112	398237	45.04	ug/L		99
89) 1,1,1,2-tetrachloroethane	14.610	131	181063	42.78	ug/L		97
90) ethylbenzene	14.621	91	695915	44.77	ug/L		98
91) m,p-xylene	14.741	106	540175	91.34	ug/L		95
92) o-xylene	15.206	106	299398	46.01	ug/L		99
93) styrene	15.206	104	431477	45.97	ug/L		98
94) butyl acrylate	15.008	55	319212	42.28	ug/L		96
95) bromoform	15.478	173	125040	45.14	ug/L		95
96) isopropylbenzene	15.593	105	789714	45.11	ug/L		98
97) cis-1,4-dichloro-2-butene	15.640	75	60891	34.20	ug/L		94
100) bromobenzene	16.022	156	177789	48.70	ug/L		94
101) 1,1,2,2-tetrachloroethane	15.897	83	246788	48.08	ug/L		99
102) trans-1,4-dichloro-2-b...	15.954	53	42652	31.85	ug/L		83
103) 1,2,3-trichloropropane	15.991	110	65767	48.61	ug/L		99
104) n-propylbenzene	16.054	91	862868	47.63	ug/L		97
105) 2-chlorotoluene	16.205	126	185742	48.76	ug/L		100
106) 4-chlorotoluene	16.315	91	466122	45.76	ug/L		97
107) 1,3,5-trimethylbenzene	16.221	105	670447	49.02	ug/L		97
108) tert-butylbenzene	16.618	119	572384	50.17	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A237817.D
Acq On : 10 Nov 2017 12:13 am
Operator : Gabriela
Sample : bs
Misc : MS21903,VA9023,5,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 10 09:34:11 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 15:50:16 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
109) 1,2,4-trimethylbenzene	16.660	105	676441	48.71 ug/L	100
110) sec-butylbenzene	16.859	105	897208	49.49 ug/L	99
111) 1,3-dichlorobenzene	17.047	146	334406	45.86 ug/L	99
112) p-isopropyltoluene	16.990	119	738710	48.19 ug/L	97
113) 1,4-dichlorobenzene	17.142	146	340871	44.79 ug/L	99
114) 1,2-dichlorobenzene	17.576	146	365138	46.65 ug/L	98
115) n-butylbenzene	17.450	92	368136	43.97 ug/L	99
116) 1,2-dibromo-3-chloropr...	18.418	157	79091	46.31 ug/L	99
117) 1,3,5-trichlorobenzene	18.643	180	359465	44.04 ug/L	99
118) 2-ethylhexyl acrylate	19.349	70	38879	7.02 ug/L	96
119) 1,2,4-trichlorobenzene	19.364	180	343520	43.63 ug/L	100
120) hexachlorobutadiene	19.511	225	161866	45.43 ug/L	97
121) naphthalene	19.683	128	1027228	45.46 ug/L	100
122) 1,2,3-trichlorobenzene	19.955	180	349335	44.43 ug/L	99
123) hexachloroethane	17.879	201	141479	47.44 ug/L	98
124) 2-methylnaphthalene	20.970	142	323381	22.02 ug/L	99

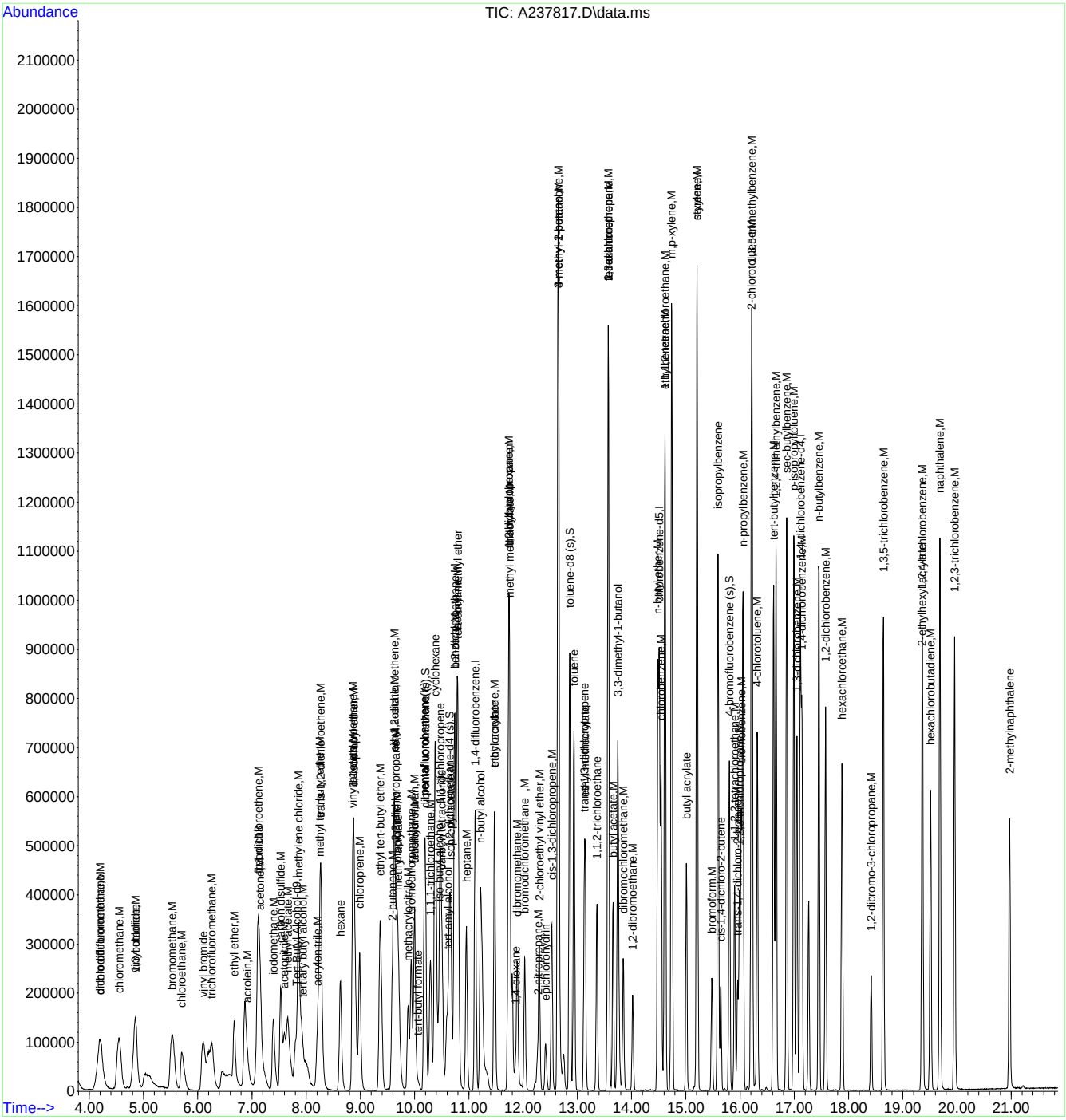
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.3.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A237817.D
Acq On : 10 Nov 2017 12:13 am
Operator : Gabriela
Sample : bs
Misc : MS21903,VA9023,5,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 10 09:34:11 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 15:50:16 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\va9023\
Data File : a237818.d
Acq On : 10 Nov 2017 12:42 am
Operator : Gabriela
Sample : jc54707-1ms Inst : MSA
Misc : MS21903,VA9023,5,,,,5
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Results File: MA8958.RES
Quant Time: Nov 12 20:48:58 2017
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 15:50:16 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	7.810	65	564127	500.00	ug/L		0.00
5) pentafluorobenzene	10.179	168	377618	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.115	114	590437	50.00	ug/L		0.00
74) chlorobenzene-d5	14.509	117	538080	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.114	152	294878	50.00	ug/L		0.00
125) pentafluorobenzene(a)	10.179	168	377618	50.00	ug/L		#-0.02
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.200	113	205362	47.93	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.86%				
53) 1,2-dichloroethane-d4 (s)	10.639	65	216037	40.92	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 81.84%				
75) toluene-d8 (s)	12.857	98	681799	45.45	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 90.90%				
99) 4-bromofluorobenzene (s)	15.801	95	240397	48.30	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.60%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.935	59	258296	239.99	ug/L		97
4) 1,4-dioxane	11.853	88	73340	1280.26	ug/L		94
6) chlorodifluoromethane	4.206	51	274769	43.27	ug/L		97
7) dichlorodifluoromethane	4.185	85	284880	40.68	ug/L		96
8) chloromethane	4.546	50	358219	46.68	ug/L		98
9) vinyl chloride	4.849	62	504748	62.53	ug/L		97
10) 1,3-butadiene	4.860	54	31461	7.21	ug/L		95
11) bromomethane	5.535	94	222475	48.57	ug/L		98
12) chloroethane	5.712	64	173889	46.66	ug/L		94
13) vinyl bromide	6.105	106	200353	46.51	ug/L		98
14) trichlorofluoromethane	6.251	101	311470	42.31	ug/L		96
15) ethyl ether	6.669	74	99467	50.49	ug/L	#	83
16) acrolein	6.910	56	51236	43.40	ug/L		97
17) freon 113	7.130	151	218703	65.14	ug/L		100
18) 1,1-dichloroethene	7.109	96	182724	51.83	ug/L		89
19) acetone	7.151	58	116218	173.74	ug/L		90
20) acetonitrile	7.606	41	403694	387.38	ug/L		99
21) iodomethane	7.391	142	351783	49.57	ug/L		98
22) carbon disulfide	7.527	76	648105	45.39	ug/L		97
23) methylene chloride	7.857	84	198666	48.05	ug/L		91
24) methyl acetate	7.658	43	204799	42.28	ug/L		93
25) methyl tert butyl ether	8.238	73	566712	44.64	ug/L		98
26) trans-1,2-dichloroethene	8.270	96	181766	49.60	ug/L		92
27) hexane	8.631	57	209575	43.56	ug/L		97
28) di-isopropyl ether	8.882	45	583990	43.29	ug/L		96
29) ethyl tert-butyl ether	9.363	59	557552	43.30	ug/L		97
30) 2-butanone	9.588	72	125598	187.23	ug/L	#	75
31) 1,1-dichloroethane	8.861	63	491666	70.89	ug/L		99
32) chloroprene	8.986	53	243906	43.17	ug/L		92
33) acrylonitrile	8.197	53	108217	46.55	ug/L		97
34) vinyl acetate	8.856	86	32190	45.03	ug/L	#	38
35) ethyl acetate	9.619	45	35890	40.55	ug/L		97
36) 2,2-dichloropropane	9.645	77	231119	38.71	ug/L		96
37) cis-1,2-dichloroethene	9.624	96	293493	72.31	ug/L		88
38) methyl acrylate	9.698	85	34761	50.95	ug/L	#	60
39) propionitrile	9.677	54	483729	461.32	ug/L		85
40) bromochloromethane	9.938	128	100997	48.37	ug/L		90
41) tetrahydrofuran	9.996	42	92387	40.82	ug/L		86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\va9023\
Data File : a237818.d
Acq On : 10 Nov 2017 12:42 am
Operator : Gabriela
Sample : jc54707-1ms Inst : MSA
Misc : MS21903,VA9023,5,,,,5
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Results File: MA8958.RES
Quant Time: Nov 12 20:48:58 2017
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 15:50:16 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) chloroform	9.996	83	310964	46.40	ug/L		98
43) tert-butyl formate	10.069	59	1644	0.76	ug/L	#	37
45) methacrylonitrile	9.881	67	97042	50.13	ug/L		86
46) cyclohexane	10.383	84	270799	45.09	ug/L		88
47) 1,1,1-trichloroethane	10.289	97	368571	59.34	ug/L		97
48) iso-butyl alcohol	10.451	43	151185	383.35	ug/L		99
49) 1,1-dichloropropene	10.467	75	227485	47.06	ug/L		97
50) carbon tetrachloride	10.503	117	245210	45.02	ug/L		98
51) tert-amyl alcohol	10.608	73	126004	215.44	ug/L		92
54) benzene	10.738	78	699997	48.51	ug/L		99
55) iso-octane	10.786	57	684170	44.18	ug/L		97
56) tert-amyl methyl ether	10.796	73	573289	43.63	ug/L		98
57) heptane	10.953	71	122362	44.55	ug/L		94
58) isopropyl acetate	10.671	87	45032	46.50	ug/L	#	70
59) 1,2-dichloroethane	10.733	62	216657	41.89	ug/L		99
60) n-butyl alcohol	11.220	56	541629	2170.61	ug/L		92
61) ethyl acrylate	11.476	55	233915	48.08	ug/L		92
62) trichloroethene	11.471	95	281409	80.86	ug/L		99
63) 2-nitropropane	12.266	41	54644	30.61	ug/L		84
64) methylcyclohexane	11.732	83	396691	51.61	ug/L		95
66) methyl methacrylate	11.753	100	51182	50.35	ug/L		94
67) 1,2-dichloropropane	11.743	63	179381	47.06	ug/L		97
68) dibromomethane	11.894	93	112926	46.82	ug/L		97
69) bromodichloromethane	12.030	83	212438	46.10	ug/L		100
70) epichlorohydrin	12.417	57	88894	157.67	ug/L		96
71) cis-1,3-dichloropropene	12.527	75	246742	48.39	ug/L		93
72) 4-methyl-2-pentanone	12.648	58	433834	191.42	ug/L	#	83
73) 3-methyl-1-butanol	12.642	55	390776	881.82	ug/L		94
76) toluene	12.935	92	467656	55.93	ug/L		98
77) trans-1,3-dichloropropene	13.129	75	208624	44.12	ug/L		99
78) ethyl methacrylate	13.144	69	227727	47.08	ug/L		92
79) 1,1,2-trichloroethane	13.359	83	124885	47.95	ug/L		96
80) 2-hexanone	13.568	58	373520	177.70	ug/L	#	88
81) tetrachloroethene	13.573	166	854296	230.96	ug/L		98
82) 1,3-dichloropropane	13.563	76	239576	47.58	ug/L		98
83) butyl acetate	13.657	56	130126	41.95	ug/L		89
84) 3,3-dimethyl-1-butanol	13.746	57	453812	409.91	ug/L		93
85) dibromochloromethane	13.845	129	167074	47.56	ug/L		99
86) 1,2-dibromoethane	14.018	107	157939	48.19	ug/L		99
87) n-butyl ether	14.483	57	736130	44.75	ug/L		95
88) chlorobenzene	14.546	112	426047	47.03	ug/L		97
89) 1,1,1,2-tetrachloroethane	14.609	131	192043	44.29	ug/L		97
90) ethylbenzene	14.619	91	785439	49.32	ug/L		98
91) m,p-xylene	14.740	106	663037	109.44	ug/L		95
92) o-xylene	15.205	106	366022	54.91	ug/L		97
93) styrene	15.210	104	457693	47.60	ug/L		97
94) butyl acrylate	15.012	55	334236	43.22	ug/L		94
95) bromoform	15.482	173	133074	46.90	ug/L		98
96) isopropylbenzene	15.592	105	828513	46.20	ug/L		99
97) cis-1,4-dichloro-2-butene	15.644	75	66030	36.20	ug/L		94
100) bromobenzene	16.021	156	189303	50.86	ug/L		92
101) 1,1,2,2-tetrachloroethane	15.901	83	267451	51.11	ug/L		98
102) trans-1,4-dichloro-2-b...	15.953	53	46999	34.43	ug/L		86
103) 1,2,3-trichloropropane	15.990	110	68860	49.92	ug/L		97
104) n-propylbenzene	16.052	91	902321	48.86	ug/L		99
105) 2-chlorotoluene	16.209	126	200533	51.64	ug/L		98
106) 4-chlorotoluene	16.319	91	493857	47.55	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\va9023\
Data File : a237818.d
Acq On : 10 Nov 2017 12:42 am
Operator : Gabriela
Sample : jc54707-1ms Inst : MSA
Misc : MS21903,VA9023,5,,,,5
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Results File: MA8958.RES
Quant Time: Nov 12 20:48:58 2017
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 15:50:16 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 1,3,5-trimethylbenzene	16.220	105	710012	50.92	ug/L	98
108) tert-butylbenzene	16.617	119	603511	51.89	ug/L	98
109) 1,2,4-trimethylbenzene	16.664	105	714612	50.48	ug/L	99
110) sec-butylbenzene	16.863	105	938894	50.79	ug/L	99
111) 1,3-dichlorobenzene	17.051	146	360104	48.44	ug/L	99
112) p-isopropyltoluene	16.994	119	775009	49.59	ug/L	96
113) 1,4-dichlorobenzene	17.140	146	374218	48.23	ug/L	99
114) 1,2-dichlorobenzene	17.579	146	472537	59.21	ug/L	98
115) n-butylbenzene	17.449	92	384938	45.10	ug/L	98
116) 1,2-dibromo-3-chloropr...	18.422	157	83737	48.09	ug/L	93
117) 1,3,5-trichlorobenzene	18.641	180	380238	45.69	ug/L	99
118) 2-ethylhexyl acrylate	19.353	70	44814	7.93	ug/L	88
119) 1,2,4-trichlorobenzene	19.363	180	363871	45.33	ug/L	98
120) hexachlorobutadiene	19.515	225	174294	47.99	ug/L	98
121) naphthalene	19.687	128	1104136	47.93	ug/L	100
122) 1,2,3-trichlorobenzene	19.954	180	373709	46.62	ug/L	98
123) hexachloroethane	17.883	201	150089	49.36	ug/L	97
124) 2-methylnaphthalene	20.969	142	353529	23.61	ug/L	99

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

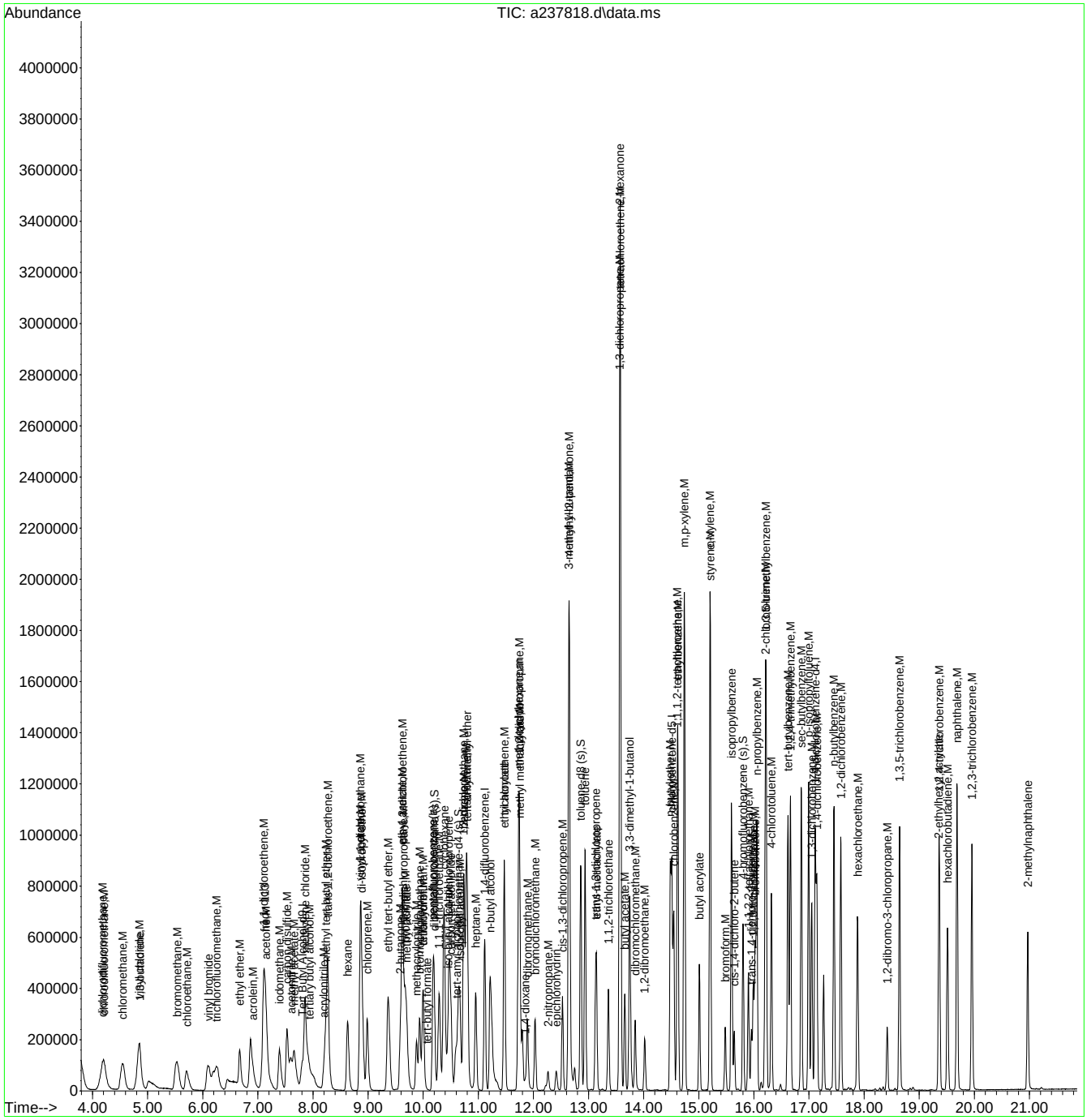
7.4.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\va9023\
Data File : a237818.d
Acq On : 10 Nov 2017 12:42 am
Operator : Gabriela
Sample : jc54707-1ms Inst : MSA
Misc : MS21903,VA9023,5,,,,5
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Results File: MA8958.RES
Quant Time: Nov 12 20:48:58 2017
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 15:50:16 2017
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna 11/21/17 16:26

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : a237819.d
Acq On : 10 Nov 2017 1:11 am
Operator : Gabriela
Sample : jc54707-1msd
Misc : MS21903,VA9023,5,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Nov 21 16:19:19 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 15:50:16 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.805	65	591139	500.00	ug/L	-0.01
5) pentafluorobenzene	10.180	168	377758	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.116	114	596443	50.00	ug/L	0.00
74) chlorobenzene-d5	14.510	117	547918	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.110	152	302464	50.00	ug/L	0.00
125) pentafluorobenzene(a)	10.180	168	377758	50.00	ug/L	#-0.02
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.201	113	202050	47.14	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.28%			
53) 1,2-dichloroethane-d4 (s)	10.640	65	212679	39.88	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 79.76%#			
75) toluene-d8 (s)	12.857	98	693405	45.40	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 90.80%			
99) 4-bromofluorobenzene (s)	15.802	95	248209	48.62	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.24%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	7.931	59	311778	276.45	ug/L	93
4) 1,4-dioxane	11.853	88	88185	1469.06	ug/L	93
6) chlorodifluoromethane	4.191	51	301149	47.41	ug/L	96
7) dichlorodifluoromethane	4.175	85	285358	40.74	ug/L	99
8) chloromethane	4.542	50	359602	46.85	ug/L	95
9) vinyl chloride	4.845	62	513393	63.58	ug/L	98
10) 1,3-butadiene	4.855	54	32692	7.49	ug/L	93
11) bromomethane	5.520	94	222945	48.65	ug/L	98
12) chloroethane	5.708	64	174342	46.77	ug/L	94
13) vinyl bromide	6.090	106	201507	46.76	ug/L	99
14) trichlorofluoromethane	6.247	101	315059	42.79	ug/L	97
15) ethyl ether	6.670	74	108723	55.16	ug/L	92
16) acrolein	6.911	56	54610	46.24	ug/L	98
17) freon 113	7.120	151	226593	67.46	ug/L	100
18) 1,1-dichloroethene	7.110	96	199457	56.56	ug/L	86
19) acetone	7.151	58	124725m	186.39	ug/L	
20) acetonitrile	7.596	41	463416	444.52	ug/L	99
21) iodomethane	7.387	142	387788	54.62	ug/L	98
22) carbon disulfide	7.528	76	700463	49.04	ug/L	97
23) methylene chloride	7.852	84	214477	51.86	ug/L	91
24) methyl acetate	7.659	43	219874	45.37	ug/L	93
25) methyl tert butyl ether	8.239	73	617171	48.59	ug/L	99
26) trans-1,2-dichloroethene	8.265	96	196898	53.71	ug/L	92
27) hexane	8.626	57	225126	46.77	ug/L	96
28) di-isopropyl ether	8.877	45	626827	46.45	ug/L	95
29) ethyl tert-butyl ether	9.364	59	617334	47.92	ug/L	97
30) 2-butanone	9.583	72	139372	207.69	ug/L #	71
31) 1,1-dichloroethane	8.856	63	520689	75.05	ug/L	99
32) chloroprene	8.982	53	263543	46.63	ug/L	89
33) acrylonitrile	8.197	53	116306	50.01	ug/L	96
34) vinyl acetate	8.856	86	36226	50.65	ug/L #	40
35) ethyl acetate	9.615	45	40042	45.23	ug/L	100
36) 2,2-dichloropropane	9.646	77	248103	41.54	ug/L	97
37) cis-1,2-dichloroethene	9.620	96	312204	76.89	ug/L	88
38) methyl acrylate	9.698	85	37725	55.28	ug/L #	70
39) propionitrile	9.678	54	529824	505.09	ug/L	93
40) bromochloromethane	9.934	128	110267	52.79	ug/L	91
41) tetrahydrofuran	9.991	42	100957	44.59	ug/L	86
42) chloroform	9.997	83	337116	50.28	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : a237819.d
Acq On : 10 Nov 2017 1:11 am
Operator : Gabriela
Sample : jc54707-1msd
Misc : MS21903,VA9023,5,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Nov 21 16:19:19 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 15:50:16 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) methacrylonitrile	9.881	67	105907	54.69	ug/L	#	81
46) cyclohexane	10.384	84	287016	47.77	ug/L		91
47) 1,1,1-trichloroethane	10.284	97	392847	63.22	ug/L		98
48) iso-butyl alcohol	10.441	43	183932	466.21	ug/L		98
49) 1,1-dichloropropene	10.467	75	249403	51.58	ug/L		96
50) carbon tetrachloride	10.499	117	266487	48.91	ug/L		99
51) tert-amyl alcohol	10.598	73	150622	257.43	ug/L		95
54) benzene	10.734	78	766941	52.62	ug/L		98
55) iso-octane	10.786	57	734648	46.96	ug/L		95
56) tert-amyl methyl ether	10.792	73	623665	46.98	ug/L		100
57) heptane	10.954	71	131467	47.39	ug/L		94
58) isopropyl acetate	10.671	87	49148	50.24	ug/L	#	76
59) 1,2-dichloroethane	10.734	62	234608	44.91	ug/L		98
60) n-butyl alcohol	11.215	56	650520	2580.74	ug/L		93
61) ethyl acrylate	11.477	55	261257	53.16	ug/L		93
62) trichloroethene	11.471	95	298275	84.85	ug/L		99
63) 2-nitropropane	12.266	41	60113	33.33	ug/L		89
64) methylcyclohexane	11.733	83	423662	54.57	ug/L		94
66) methyl methacrylate	11.754	100	56609	55.12	ug/L	#	84
67) 1,2-dichloropropane	11.743	63	195228	50.70	ug/L		99
68) dibromomethane	11.890	93	123703	50.77	ug/L		99
69) bromodichloromethane	12.026	83	236446	50.80	ug/L		99
70) epichlorohydrin	12.413	57	101303	177.87	ug/L		95
71) cis-1,3-dichloropropene	12.528	75	275517	53.49	ug/L		92
72) 4-methyl-2-pentanone	12.648	58	476023	207.92	ug/L	#	84
73) 3-methyl-1-butanol	12.648	55	457923	1022.93	ug/L		93
76) toluene	12.936	92	510883	60.00	ug/L		99
77) trans-1,3-dichloropropene	13.124	75	232765	48.34	ug/L		99
78) ethyl methacrylate	13.145	69	253700	51.51	ug/L		91
79) 1,1,2-trichloroethane	13.360	83	137622	51.90	ug/L		96
80) 2-hexanone	13.569	58	414129	193.48	ug/L	#	86
81) tetrachloroethene	13.574	166	887516	235.63	ug/L		98
82) 1,3-dichloropropane	13.563	76	262239	51.14	ug/L		98
83) butyl acetate	13.658	56	142559	45.13	ug/L		89
84) 3,3-dimethyl-1-butanol	13.747	57	529359	469.56	ug/L		93
85) dibromochloromethane	13.846	129	187489	52.41	ug/L		100
86) 1,2-dibromoethane	14.019	107	172673	51.74	ug/L		98
87) n-butyl ether	14.484	57	810261	48.37	ug/L		95
88) chlorobenzene	14.547	112	476200	51.62	ug/L		97
89) 1,1,1,2-tetrachloroethane	14.610	131	210434	47.66	ug/L		97
90) ethylbenzene	14.620	91	861746	53.14	ug/L		97
91) m,p-xylene	14.740	106	722988	117.19	ug/L		95
92) o-xylene	15.206	106	397177	58.51	ug/L		94
93) styrene	15.211	104	510957	52.18	ug/L		96
94) butyl acrylate	15.012	55	371514	47.17	ug/L		95
95) bromoform	15.483	173	148058	51.24	ug/L		96
96) isopropylbenzene	15.593	105	908279	49.74	ug/L		99
97) cis-1,4-dichloro-2-butene	15.645	75	75424	40.61	ug/L		95
100) bromobenzene	16.022	156	213566	55.94	ug/L		94
101) 1,1,2,2-tetrachloroethane	15.901	83	297208	55.37	ug/L		99
102) trans-1,4-dichloro-2-b...	15.954	53	51586	36.84	ug/L		83
103) 1,2,3-trichloropropane	15.990	110	75452	53.33	ug/L		96
104) n-propylbenzene	16.053	91	995098	52.53	ug/L		97
105) 2-chlorotoluene	16.205	126	221792	55.68	ug/L		95
106) 4-chlorotoluene	16.320	91	555028	52.10	ug/L		96
107) 1,3,5-trimethylbenzene	16.220	105	779614	54.51	ug/L		98
108) tert-butylbenzene	16.618	119	670030	56.16	ug/L		100
109) 1,2,4-trimethylbenzene	16.660	105	801355	55.19	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : a237819.d
Acq On : 10 Nov 2017 1:11 am
Operator : Gabriela
Sample : jc54707-1msd
Misc : MS21903,VA9023,5,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Nov 21 16:19:19 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 15:50:16 2017
Response via : Initial Calibration

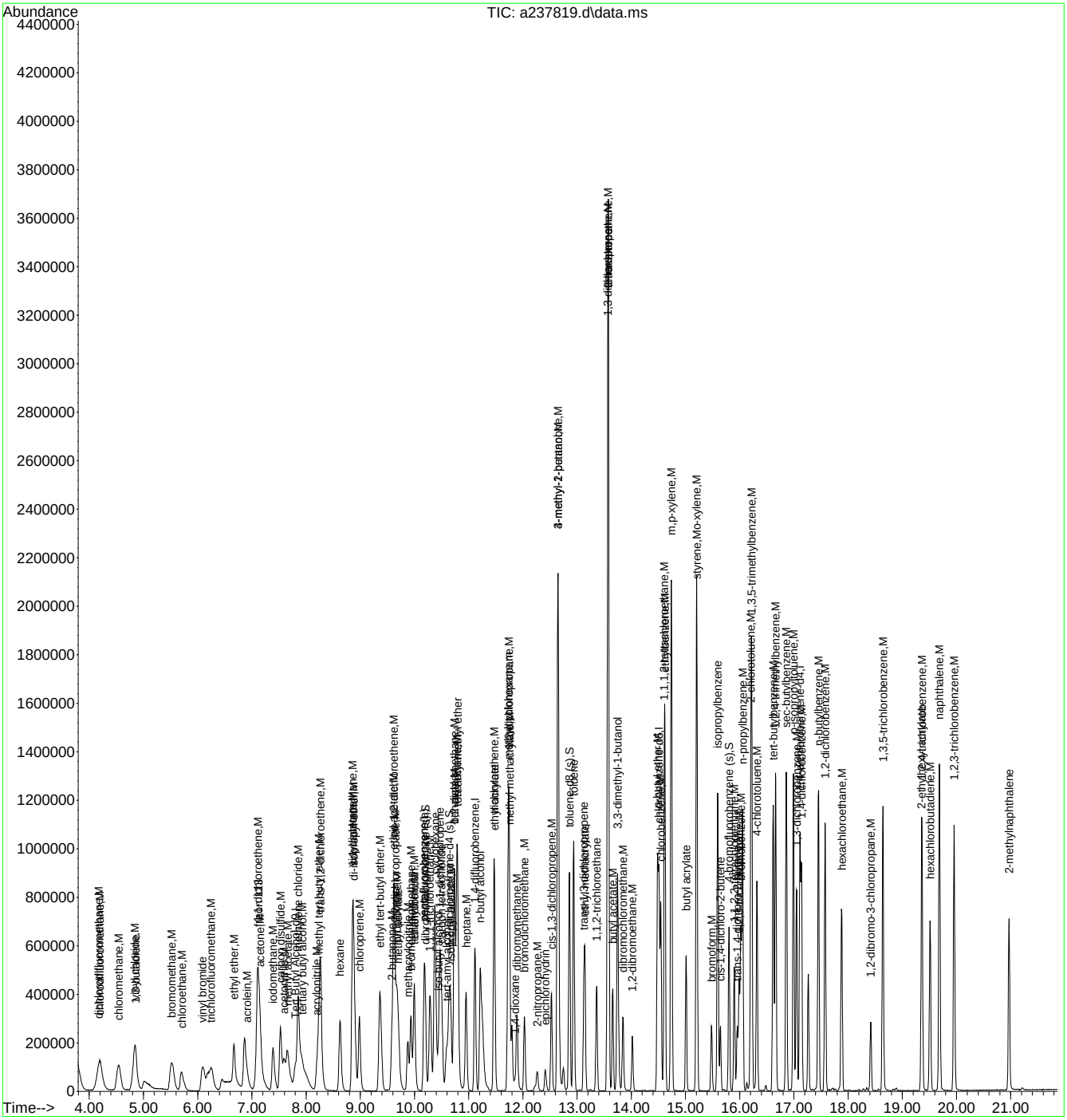
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) sec-butylbenzene	16.858	105	1037177	54.70	ug/L	99
111) 1,3-dichlorobenzene	17.052	146	406066	53.25	ug/L	97
112) p-isopropyltoluene	16.994	119	857966	53.52	ug/L	97
113) 1,4-dichlorobenzene	17.141	146	414638	52.10	ug/L	99
114) 1,2-dichlorobenzene	17.575	146	515413	62.97	ug/L	98
115) n-butylbenzene	17.455	92	428625	48.95	ug/L	99
116) 1,2-dibromo-3-chloropr...	18.417	157	96293	53.92	ug/L	96
117) 1,3,5-trichlorobenzene	18.642	180	429232	50.28	ug/L	99
118) 2-ethylhexyl acrylate	19.353	70	51448	8.88	ug/L	94
119) 1,2,4-trichlorobenzene	19.364	180	408083	49.57	ug/L	99
120) hexachlorobutadiene	19.515	225	192096	51.56	ug/L	97
121) naphthalene	19.683	128	1237993	52.39	ug/L	99
122) 1,2,3-trichlorobenzene	19.955	180	417960	50.83	ug/L	99
123) hexachloroethane	17.884	201	166453	53.37	ug/L	98
124) 2-methylnaphthalene	20.969	142	407775	26.55	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : a237819.d
Acq On : 10 Nov 2017 1:11 am
Operator : Gabriela
Sample : jc54707-1msd
Misc : MS21903,VA9023,5,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Nov 21 16:19:19 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 15:50:16 2017
Response via : Initial Calibration



Manual Integration Approval Summary

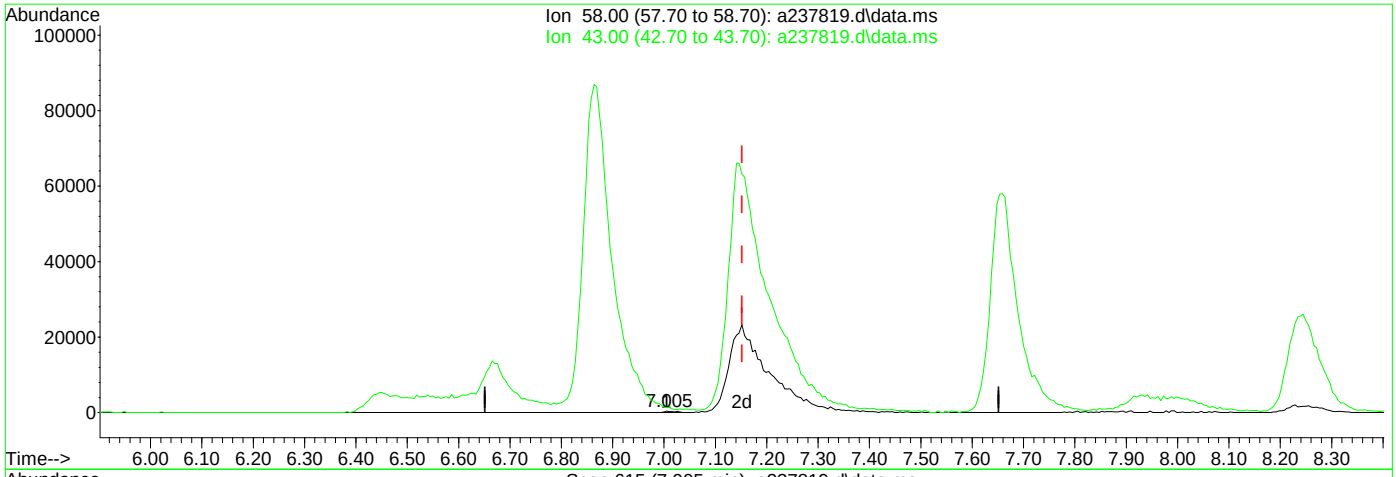
Sample Number:	JC54707-1MSD	**Method:**	SW846 8260C
Lab FileID:	A237819.D	**Analyst approved:**	11/21/17 16:25 Owen McKenna
Injection Time:	11/10/17 01:11	**Supervisor approved:**	11/21/17 16:26 Owen McKenna

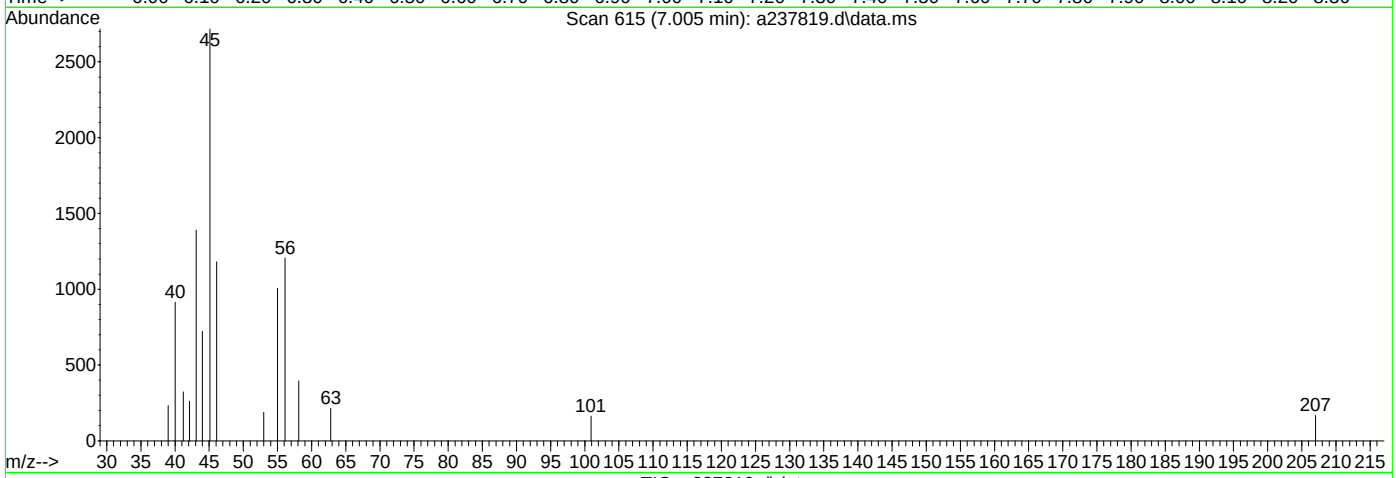
Parameter	CAS	Sig#	R.T. (min.)	Reason
Acetone	67-64-1		7.15	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\
Data File : a237819.d
Acq On : 10 Nov 2017 1:11 am
Operator : Gabriela
Sample : jc54707-1msd
Misc : MS21903,VA9023,5,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Nov 12 20:50:52 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 15:50:16 2017
Response via : Initial Calibration





TIC: a237819.d\data.ms

(19) acetone (M)

7.005min (-0.146) 0.83ug/L

response 557

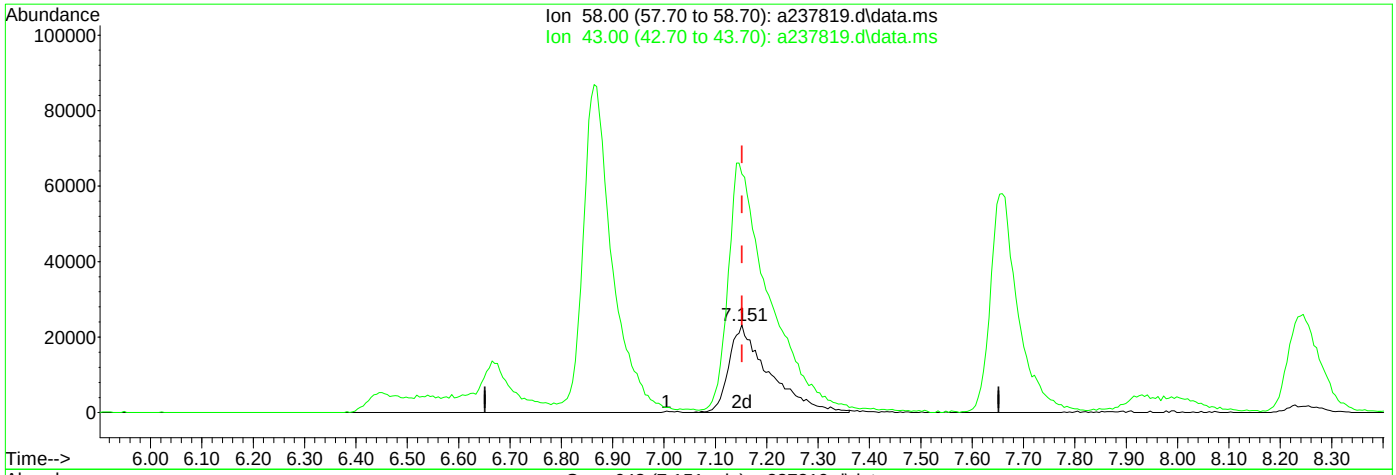
Ion	Exp%	Act%
58.00	100	100
43.00	327.60	351.90
0.00	0.00	0.00
0.00	0.00	0.00

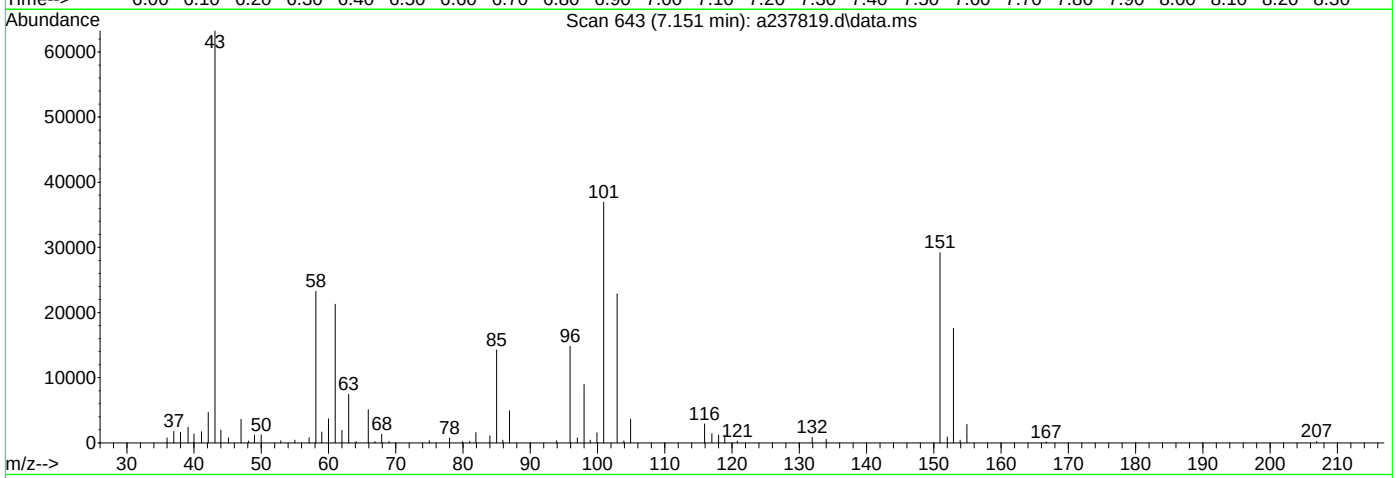
A237819.D edits: acetone

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\
Data File : a237819.d
Acq On : 10 Nov 2017 1:11 am
Operator : Gabriela
Sample : jc54707-1msd
Misc : MS21903,VA9023,5,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Nov 12 20:50:52 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 15:50:16 2017
Response via : Initial Calibration





TIC: a237819.d\data.ms

(19) acetone (M)

7.151min (0.000) 186.39ug/L m

response 124725

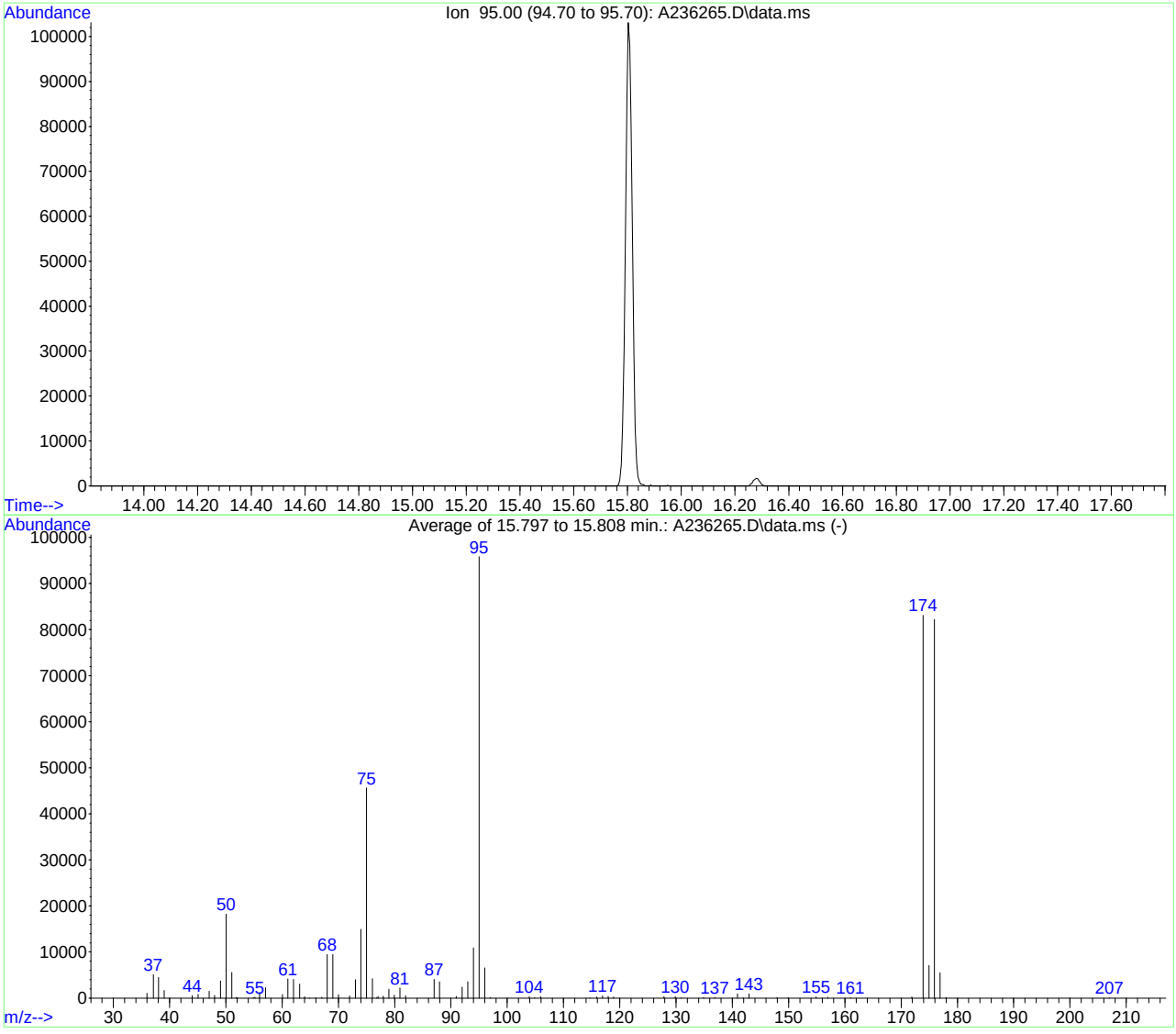
Ion	Exp%	Act%
58.00	100	100
43.00	327.60	272.06#
0.00	0.00	0.00
0.00	0.00	0.00

A237819.D edits: acetone

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\A236265.D Vial: 1
Acq On : 22 Sep 2017 9:44 pm Operator: ChelseaS
Sample : bfb Inst : MSA
Misc : MS20266,VA8958,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MA8958.m (RTE Integrator)
Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um



AutoFind: Scans 2296, 2297, 2298; Background Corrected with Scan 2287

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.0	18229	PASS
75	95	30	60	47.6	45637	PASS
95	95	100	100	100.0	95805	PASS
96	95	5	9	6.8	6546	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	86.7	83069	PASS
175	174	5	9	8.5	7038	PASS
176	174	95	101	98.9	82181	PASS
177	176	5	9	6.7	5518	PASS

A236265.D MA8958.m Mon Sep 25 07:57:32 2017 RPT1

Average of 15.797 to 15.808 min.: A236265.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	1014	51.85	143	64.90	54	76.80	141
37.10	5108	52.10	59	66.00	60	77.05	373
38.05	4523	54.90	79	67.05	214	77.95	414
39.05	1634	55.15	198	68.00	9490	78.95	1944
44.00	522	56.00	1284	69.00	9471	79.95	635
45.05	839	57.05	2270	70.00	728	80.95	2207
47.05	1462	60.05	783	72.00	491	81.95	519
48.00	574	61.00	4185	73.05	3993	87.00	4049
49.05	3733	62.00	4039	74.00	14940	87.95	3553
50.05	18229	63.10	3070	75.00	45637	90.95	350
51.05	5577	64.00	302	76.05	4192	92.00	2369

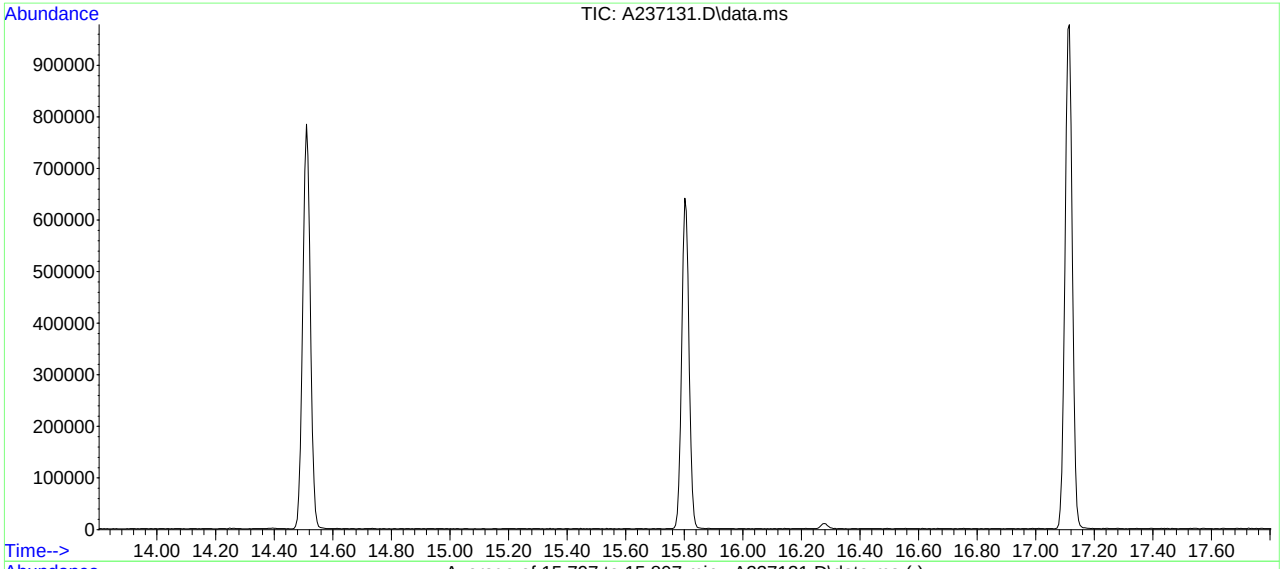
Average of 15.797 to 15.808 min.: A236265.D\data.ms
bfb
Modified:subtracted

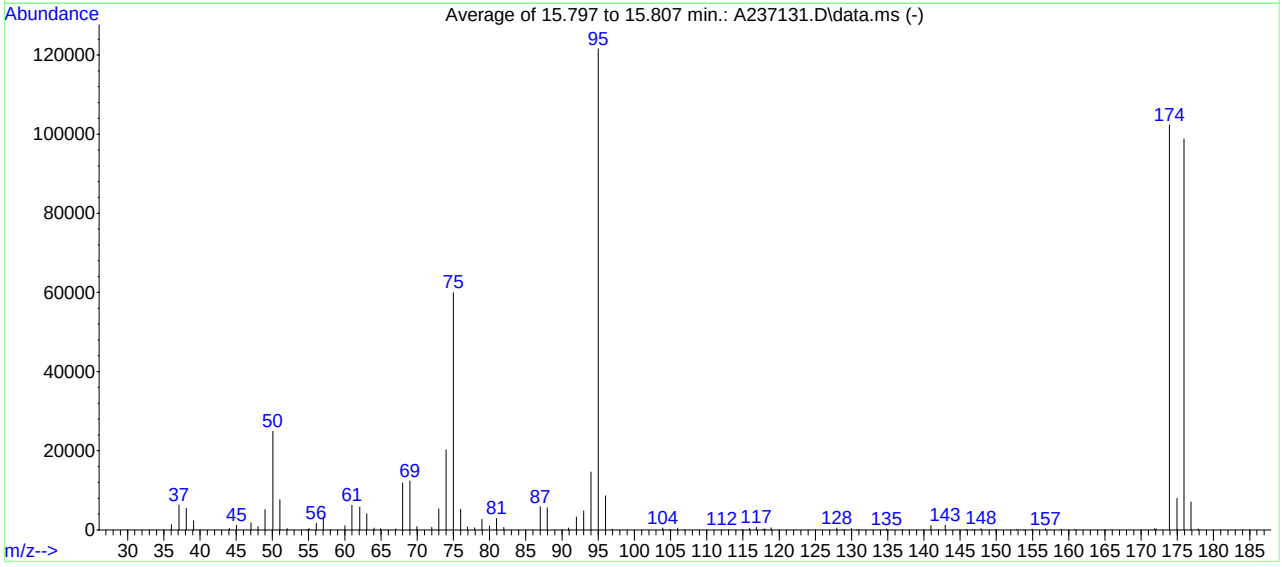
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.00	3551	117.95	372	149.90	64		
94.00	10888	118.90	275	154.90	244		
95.00	95805	127.85	290	156.95	198		
96.00	6546	129.85	331	161.00	52		
97.00	126	130.90	52	171.90	281		
103.90	333	134.90	121	173.90	83069		
104.85	113	136.90	171	174.95	7038		
105.95	286	140.90	918	175.90	82181		
114.70	57	141.90	53	176.90	5518		
115.90	259	142.95	924	177.95	137		
116.95	469	147.95	156	207.00	56		

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\A237131.D Vial: 1
Acq On : 18 Oct 2017 9:17 pm Operator: Gabriela
Sample : bfb Inst : MSA
Misc : MS21095,VA8958,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\MA8958.m (RTE Integrator)
Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um





AutoFind: Scans 2296, 2297, 2298; Background Corrected with Scan 2287

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.5	24890	PASS
75	95	30	60	49.3	59949	PASS
95	95	100	100	100.0	121549	PASS
96	95	5	9	7.1	8574	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	84.2	102322	PASS
175	174	5	9	7.8	7992	PASS
176	174	95	101	96.6	98829	PASS
177	176	5	9	7.1	7050	PASS

A237131.D MA8958.m Thu Oct 19 15:52:03 2017 RPT1

Average of 15.797 to 15.807 min.: A237131.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	1301	52.05	346	64.95	330	77.95	534
37.10	6293	54.80	85	67.05	287	78.95	2653
38.10	5413	55.05	301	68.00	11860	80.00	936
39.10	2306	56.05	1650	69.00	12354	80.95	2843
44.05	388	57.05	3289	69.95	826	81.95	618
45.05	1157	58.10	55	72.00	663	87.00	5823
47.05	1779	60.00	1009	73.00	5264	87.95	5560
48.00	831	61.00	6226	74.00	20226	90.90	445
49.00	5163	62.05	5745	75.00	59949	92.00	3262
50.05	24890	63.05	4099	76.00	5213	93.00	4798
51.05	7609	64.05	463	76.95	725	94.00	14626

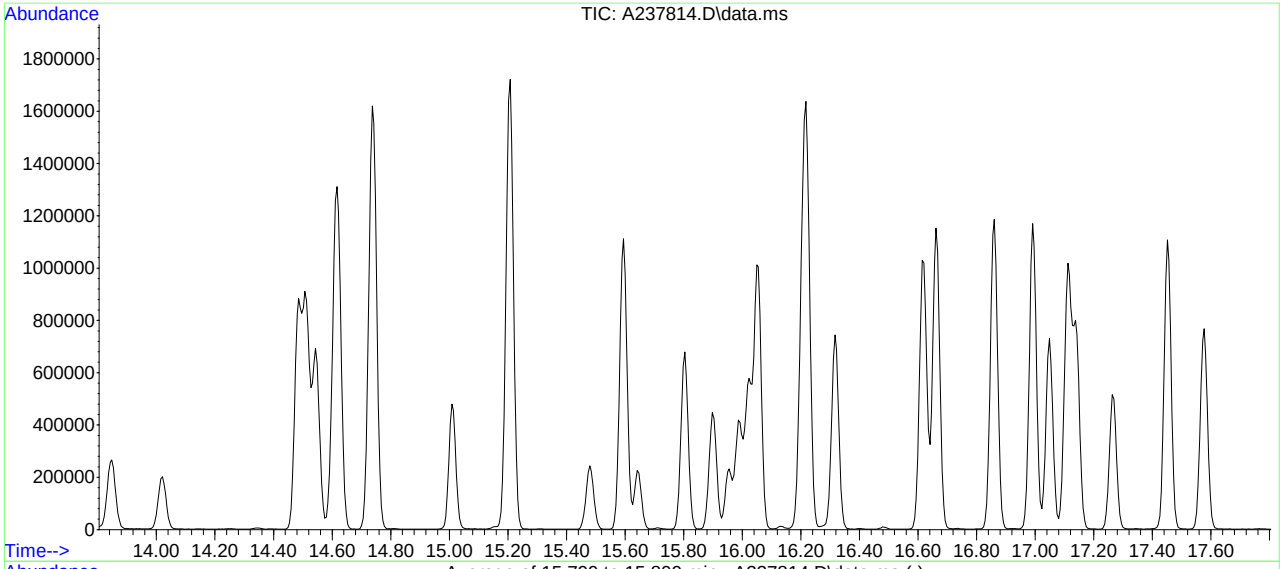
Average of 15.797 to 15.807 min.: A237131.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	121549	116.85	666	140.95	1131	156.80	276
96.00	8574	117.80	145	142.00	59	158.95	213
96.95	150	118.05	262	142.95	1174	160.80	50
103.90	476	118.90	566	145.85	143	171.85	347
104.90	51	127.95	450	146.70	56	172.10	239
105.95	402	128.80	51	147.00	74	173.90	102322
106.90	53	129.95	391	147.90	333	174.95	7992
112.10	68	130.70	56	149.85	110	175.90	98829
113.00	58	131.00	70	152.80	61	176.90	7050
114.90	132	134.85	238	153.80	57	177.90	232
115.90	365	137.00	70	154.95	169		

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\A237814.D Vial: 24
Acq On : 9 Nov 2017 9:46 pm Operator: Gabriela
Sample : bfb Inst : MSA
Misc : MS21798,VA9023,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\MA8958.m (RTE Integrator)
Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um



AutoFind: Scans 2296, 2297, 2298; Background Corrected with Scan 2286

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.9	20893	PASS
75	95	30	60	44.2	58274	PASS
95	95	100	100	100.0	131736	PASS
96	95	5	9	6.7	8846	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	93.6	123293	PASS
175	174	5	9	7.4	9086	PASS
176	174	95	101	96.6	119096	PASS
177	176	5	9	7.0	8384	PASS

A237814.D MA8958.m Fri Nov 10 09:14:22 2017 RPT1

Average of 15.799 to 15.809 min.: A237814.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	990	52.05	265	67.05	336	78.95	2087
37.05	4979	55.05	96	68.00	11343	79.95	756
38.10	4881	56.05	1603	69.00	11904	80.95	2277
39.10	1857	57.00	2592	70.00	699	81.95	628
44.00	493	58.00	81	72.00	548	86.00	203
45.05	993	60.00	1023	73.00	4863	87.00	6144
47.05	1911	61.00	5189	74.00	18514	87.95	6055
48.05	564	62.00	4762	75.00	58274	90.95	382
49.05	4456	63.05	3450	76.05	4984	92.00	3135
50.00	20893	64.05	310	76.95	672	93.00	4500
51.10	6256	65.10	59	78.00	516	94.00	13334

Average of 15.799 to 15.809 min.: A237814.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	131736	119.00	501	145.70	51	175.90	119096
96.00	8846	127.90	396	145.95	143	176.90	8384
97.00	294	128.95	157	147.95	260	177.90	214
103.85	494	129.85	408	154.00	62		
104.90	75	130.90	106	154.85	300		
105.95	441	134.95	149	156.95	280		
106.90	58	136.80	79	159.00	56		
115.00	68	137.00	60	171.90	166		
115.95	328	140.90	931	172.20	83		
116.90	644	141.80	77	173.90	123293		
117.95	324	142.90	946	174.90	9086		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236266.D
Acq On : 22 Sep 2017 10:31 pm
Operator : ChelseaS
Sample : ic8958-0.2
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 25 08:35:58 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:23:40 2017
Response via : Initial Calibration

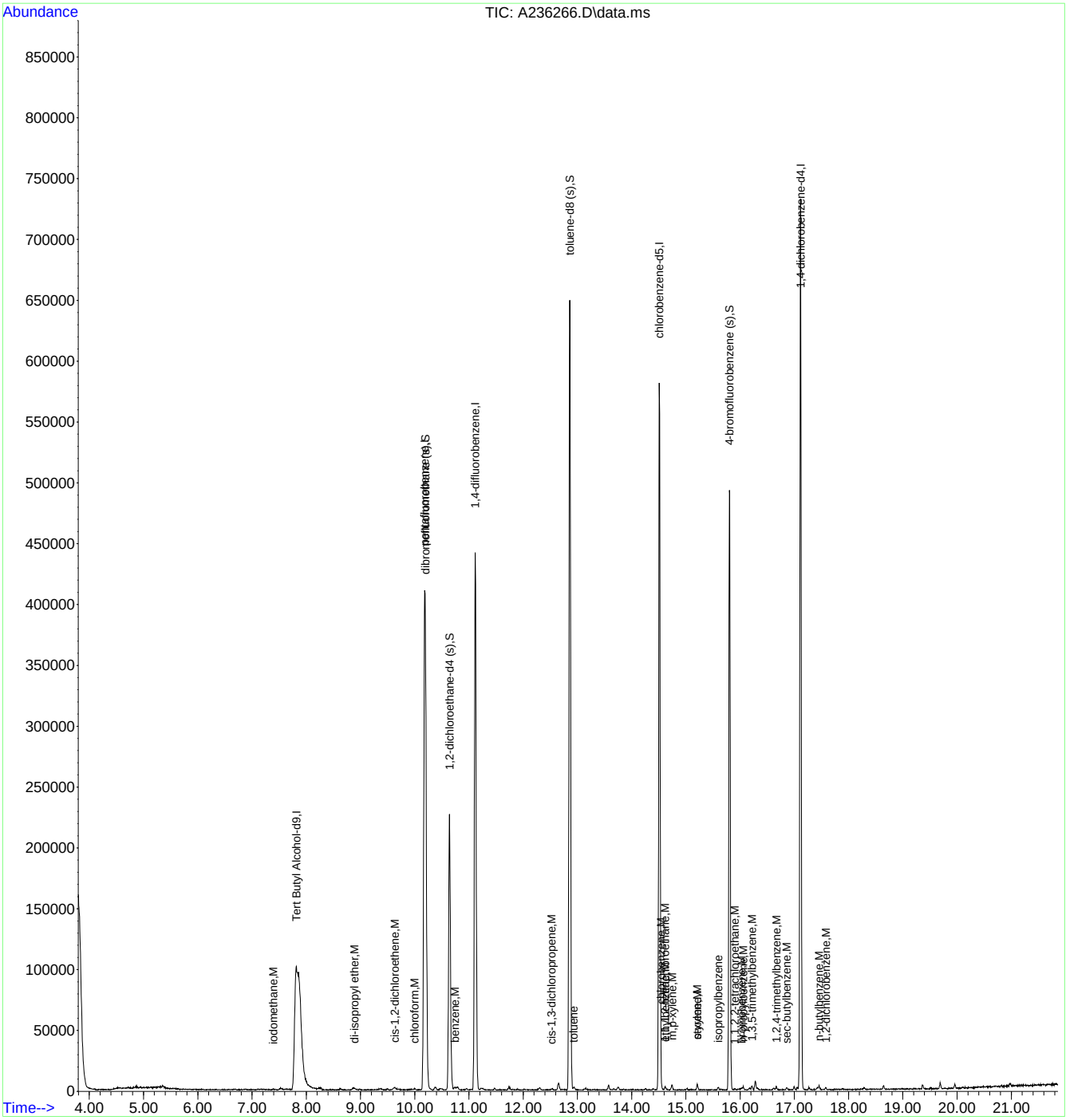
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.820	65	470150	500.00	ug/L		0.00
5) pentafluorobenzene	10.179	168	290669	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.115	114	415636	50.00	ug/L		0.00
74) chlorobenzene-d5	14.510	117	346681	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.114	152	209611	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.200	113	159633	47.99	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 95.98%				
53) 1,2-dichloroethane-d4 (s)	10.639	65	187022	51.23	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 102.46%				
75) toluene-d8 (s)	12.857	98	482191	50.95	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 101.90%				
99) 4-bromofluorobenzene (s)	15.802	95	178206	49.94	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.88%				
Target Compounds							Qvalue
21) iodomethane	7.386	142	986	0.17	ug/L	#	46
28) di-isopropyl ether	8.893	45	1675	0.15	ug/L	#	50
37) cis-1,2-dichloroethene	9.630	96	581	0.18	ug/L	#	22
42) chloroform	9.996	83	1057	0.20	ug/L		84
54) benzene	10.734	78	1842	0.17	ug/L		95
71) cis-1,3-dichloropropene	12.522	75	653	0.16	ug/L	#	76
76) toluene	12.930	92	955	0.17	ug/L	#	62
88) chlorobenzene	14.546	112	1398	0.23	ug/L		88
89) 1,1,1,2-tetrachloroethane	14.609	131	443	0.15	ug/L		91
90) ethylbenzene	14.620	91	2002	0.18	ug/L		90
91) m,p-xylene	14.740	106	1474	0.36	ug/L	#	69
92) o-xylene	15.211	106	728	0.16	ug/L	#	63
93) styrene	15.211	104	1071	0.16	ug/L		87
96) isopropylbenzene	15.598	105	1961	0.16	ug/L		86
100) bromobenzene	16.026	156	517	0.18	ug/L	#	61
101) 1,1,2,2-tetrachloroethane	15.896	83	622	0.16	ug/L		69
104) n-propylbenzene	16.058	91	2497	0.18	ug/L		83
107) 1,3,5-trimethylbenzene	16.225	105	1724	0.15	ug/L		87
109) 1,2,4-trimethylbenzene	16.670	105	1961	0.18	ug/L		90
110) sec-butylbenzene	16.853	105	2234	0.15	ug/L		79
114) 1,2-dichlorobenzene	17.580	146	1090	0.19	ug/L		88
115) n-butylbenzene	17.454	92	1225	0.19	ug/L	#	64

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236266.D
Acq On : 22 Sep 2017 10:31 pm
Operator : ChelseaS
Sample : ic8958-0.2
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 25 08:35:58 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:23:40 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236267.D
Acq On : 22 Sep 2017 10:59 pm
Operator : ChelseaS
Sample : ic8958-0.5
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 25 08:31:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:23:40 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.854	65	484700	500.00	ug/L		0.04
5) pentafluorobenzene	10.182	168	296429	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.118	114	422462	50.00	ug/L		0.00
74) chlorobenzene-d5	14.512	117	346556	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.117	152	215091	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.203	113	169446	49.95	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.90%				
53) 1,2-dichloroethane-d4 (s)	10.647	65	193856	52.24	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 104.48%				
75) toluene-d8 (s)	12.860	98	485210	51.28	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 102.56%				
99) 4-bromofluorobenzene (s)	15.804	95	179837	49.11	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 98.22%				
Target Compounds							Qvalue
11) bromomethane	5.501	94	1645	0.44	ug/L		84
15) ethyl ether	6.667	74	709	0.43	ug/L	#	67
18) 1,1-dichloroethene	7.112	96	1223	0.43	ug/L	#	66
21) iodomethane	7.405	142	2536	0.43	ug/L		74
22) carbon disulfide	7.546	76	6406	0.58	ug/L		96
23) methylene chloride	7.870	84	1720	0.53	ug/L		87
24) methyl acetate	7.671	43	1781	0.44	ug/L	#	65
25) methyl tert butyl ether	8.262	73	4833	0.46	ug/L		74
26) trans-1,2-dichloroethene	8.273	96	1428	0.49	ug/L	#	52
27) hexane	8.634	57	1617	0.39	ug/L	#	90
28) di-isopropyl ether	8.879	45	5367	0.47	ug/L		99
29) ethyl tert-butyl ether	9.382	59	4826	0.45	ug/L		83
31) 1,1-dichloroethane	8.869	63	2773	0.49	ug/L		89
32) chloroprene	8.984	53	2169	0.45	ug/L		69
36) 2,2-dichloropropane	9.648	77	2182	0.45	ug/L		96
37) cis-1,2-dichloroethene	9.627	96	1599	0.49	ug/L	#	78
39) propionitrile	9.706	54	3826	4.37	ug/L		74
42) chloroform	9.999	83	2671	0.51	ug/L		97
47) 1,1,1-trichloroethane	10.281	97	2058	0.39	ug/L		79
49) 1,1-dichloropropene	10.485	75	1726	0.42	ug/L	#	63
50) carbon tetrachloride	10.511	117	1801	0.39	ug/L		84
54) benzene	10.747	78	5170	0.47	ug/L		90
55) iso-octane	10.788	57	4551	0.37	ug/L		97
56) tert-amyl methyl ether	10.794	73	4559	0.46	ug/L		93
59) 1,2-dichloroethane	10.731	62	1936	0.51	ug/L		75
62) trichloroethene	11.468	95	1237	0.49	ug/L		80
64) methylcyclohexane	11.740	83	2316	0.39	ug/L		98
65) 2-chloroethyl vinyl ether	12.300	63	3134	2.00	ug/L		87
67) 1,2-dichloropropane	11.751	63	1317	0.46	ug/L		97
68) dibromomethane	11.892	93	898	0.51	ug/L	#	74
69) bromodichloromethane	12.044	83	1468	0.41	ug/L	#	56
71) cis-1,3-dichloropropene	12.530	75	1541	0.37	ug/L		91
72) 4-methyl-2-pentanone	12.650	58	3149	1.77	ug/L		91
76) toluene	12.938	92	2906	0.52	ug/L	#	78
77) trans-1,3-dichloropropene	13.126	75	1283	0.39	ug/L	#	69
78) ethyl methacrylate	13.158	69	1362	0.40	ug/L	#	67
79) 1,1,2-trichloroethane	13.351	83	797	0.45	ug/L	#	66
80) 2-hexanone	13.576	58	2690	1.92	ug/L	#	68
81) tetrachloroethene	13.571	166	1119	0.46	ug/L		96
82) 1,3-dichloropropane	13.571	76	1583	0.46	ug/L		81
83) butyl acetate	13.660	56	1018	0.50	ug/L	#	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236267.D
Acq On : 22 Sep 2017 10:59 pm
Operator : ChelseaS
Sample : ic8958-0.5
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 25 08:31:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:23:40 2017
Response via : Initial Calibration

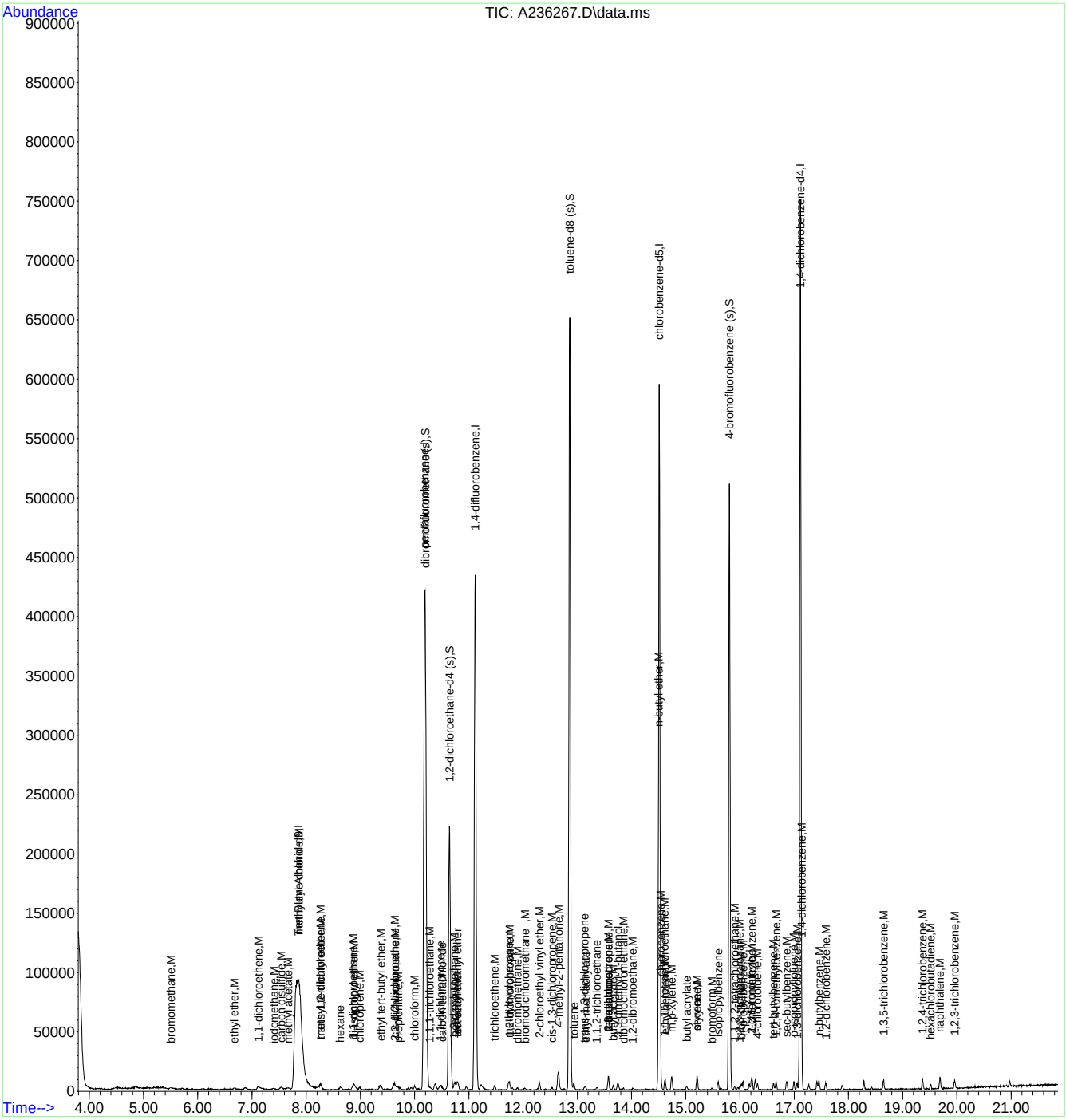
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
84) 3,3-dimethyl-1-butanol	13.749	57	3905	5.10 ug/L	95
85) dibromochloromethane	13.848	129	1107	0.45 ug/L	76
86) 1,2-dibromoethane	14.026	107	1052	0.47 ug/L	96
87) n-butyl ether	14.491	57	5089	0.45 ug/L #	23
88) chlorobenzene	14.544	112	2724	0.45 ug/L	96
89) 1,1,1,2-tetrachloroethane	14.606	131	1661	0.58 ug/L	82
90) ethylbenzene	14.622	91	4777	0.44 ug/L	94
91) m,p-xylene	14.742	106	3907	0.95 ug/L	85
92) o-xylene	15.208	106	2168	0.48 ug/L	89
93) styrene	15.213	104	3126	0.47 ug/L	85
94) butyl acrylate	15.020	55	2351	0.44 ug/L	92
95) bromoform	15.485	173	886	0.46 ug/L	75
96) isopropylbenzene	15.600	105	5324	0.42 ug/L	99
100) bromobenzene	16.019	156	1245	0.43 ug/L	86
101) 1,1,2,2-tetrachloroethane	15.903	83	1957	0.48 ug/L	73
103) 1,2,3-trichloropropane	15.987	110	593	0.56 ug/L #	53
104) n-propylbenzene	16.055	91	6448	0.44 ug/L	97
105) 2-chlorotoluene	16.207	126	1367	0.45 ug/L #	54
106) 4-chlorotoluene	16.322	91	3836	0.48 ug/L	93
107) 1,3,5-trimethylbenzene	16.223	105	4654	0.41 ug/L	90
108) tert-butylbenzene	16.620	119	3626	0.37 ug/L	97
109) 1,2,4-trimethylbenzene	16.662	105	4661	0.41 ug/L	91
110) sec-butylbenzene	16.861	105	6466	0.43 ug/L	89
111) 1,3-dichlorobenzene	17.049	146	2898	0.52 ug/L	97
112) p-isopropyltoluene	16.991	119	4898	0.38 ug/L	97
113) 1,4-dichlorobenzene	17.143	146	3056	0.54 ug/L	96
114) 1,2-dichlorobenzene	17.588	146	2846	0.48 ug/L	94
115) n-butylbenzene	17.457	92	2911	0.44 ug/L	97
117) 1,3,5-trichlorobenzene	18.649	180	3089	0.50 ug/L	94
119) 1,2,4-trichlorobenzene	19.366	180	3462	0.60 ug/L	93
120) hexachlorobutadiene	19.512	225	1343	0.48 ug/L	82
121) naphthalene	19.690	128	9116	0.52 ug/L	92
122) 1,2,3-trichlorobenzene	19.962	180	3057	0.51 ug/L	79

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236267.D
Acq On : 22 Sep 2017 10:59 pm
Operator : ChelseaS
Sample : ic8958-0.5
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 25 08:31:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:23:40 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236268.D
Acq On : 22 Sep 2017 11:29 pm
Operator : ChelseaS
Sample : ic8958-1
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 25 09:06:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:23:40 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.843	65	465532	500.00	ug/L		0.03
5) pentafluorobenzene	10.181	168	277500	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.118	114	396388	50.00	ug/L		0.00
74) chlorobenzene-d5	14.512	117	330038	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.111	152	205937	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.202	113	158047	49.77	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.54%				
53) 1,2-dichloroethane-d4 (s)	10.642	65	182571	52.44	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 104.88%				
75) toluene-d8 (s)	12.859	98	462368	51.31	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 102.62%				
99) 4-bromofluorobenzene (s)	15.804	95	171753	48.99	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 97.98%				
Target Compounds							Qvalue
6) chlorodifluoromethane	4.203	51	3976	0.73	ug/L		75
7) dichlorodifluoromethane	4.182	85	4665	0.81	ug/L		92
8) chloromethane	4.512	50	5062	0.84	ug/L		85
9) vinyl chloride	4.831	62	5880	0.94	ug/L		94
11) bromomethane	5.527	94	3443	0.98	ug/L		71
12) chloroethane	5.710	64	2840	1.01	ug/L		67
13) vinyl bromide	6.102	106	2986	0.90	ug/L	#	89
14) trichlorofluoromethane	6.243	101	4761	0.83	ug/L		91
15) ethyl ether	6.682	74	1289	0.83	ug/L	#	55
17) freon 113	7.122	151	2304	0.89	ug/L	#	41
18) 1,1-dichloroethene	7.116	96	2500	0.95	ug/L		84
19) acetone	7.174	58	1847	3.48	ug/L	#	77
21) iodomethane	7.409	142	4820	0.88	ug/L		84
22) carbon disulfide	7.524	76	10528	1.02	ug/L		94
23) methylene chloride	7.859	84	2927	0.96	ug/L		85
24) methyl acetate	7.671	43	3617	0.95	ug/L	#	74
25) methyl tert butyl ether	8.257	73	9004	0.92	ug/L		82
26) trans-1,2-dichloroethene	8.278	96	2759	1.01	ug/L		96
27) hexane	8.628	57	3279	0.84	ug/L		86
28) di-isopropyl ether	8.884	45	9695	0.91	ug/L		82
29) ethyl tert-butyl ether	9.360	59	8966	0.89	ug/L		88
30) 2-butanone	9.596	72	1897	3.67	ug/L	#	66
31) 1,1-dichloroethane	8.863	63	4723	0.90	ug/L		96
32) chloroprene	8.989	53	3637	0.81	ug/L		92
33) acrylonitrile	8.210	53	1590	0.88	ug/L		88
36) 2,2-dichloropropane	9.648	77	4185	0.91	ug/L		84
37) cis-1,2-dichloroethene	9.627	96	3029	0.98	ug/L	#	68
39) propionitrile	9.679	54	7665	9.35	ug/L	#	58
40) bromochloromethane	9.936	128	1490	0.93	ug/L	#	79
41) tetrahydrofuran	10.004	42	1598	0.88	ug/L	#	52
42) chloroform	10.004	83	5233	1.06	ug/L		92
45) methacrylonitrile	9.883	67	1155	0.74	ug/L	#	39
46) cyclohexane	10.375	84	3479	0.72	ug/L	#	82
47) 1,1,1-trichloroethane	10.286	97	4508	0.92	ug/L		94
49) 1,1-dichloropropene	10.479	75	3242	0.84	ug/L		85
50) carbon tetrachloride	10.500	117	3786	0.87	ug/L		92
54) benzene	10.741	78	9885	0.97	ug/L		99
55) iso-octane	10.778	57	9553	0.83	ug/L		94
56) tert-amyl methyl ether	10.793	73	8487	0.92	ug/L		91
57) heptane	10.955	71	1549	0.77	ug/L		84
59) 1,2-dichloroethane	10.741	62	3437	0.96	ug/L		87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236268.D
Acq On : 22 Sep 2017 11:29 pm
Operator : ChelseaS
Sample : ic8958-1
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 25 09:06:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:23:40 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
60) n-butyl alcohol	11.233	56	7252	38.46	ug/L		90
61) ethyl acrylate	11.473	55	2649	0.72	ug/L		87
62) trichloroethene	11.473	95	2205	0.92	ug/L		88
64) methylcyclohexane	11.735	83	4881	0.88	ug/L		96
65) 2-chloroethyl vinyl ether	12.300	63	6068	4.13	ug/L		95
67) 1,2-dichloropropane	11.745	63	2531	0.94	ug/L		91
68) dibromomethane	11.892	93	1422	0.86	ug/L		88
69) bromodichloromethane	12.028	83	2891	0.86	ug/L		86
70) epichlorohydrin	12.420	57	1772	4.27	ug/L	#	70
71) cis-1,3-dichloropropene	12.524	75	3243	0.84	ug/L		78
72) 4-methyl-2-pentanone	12.650	58	5653	3.39	ug/L		95
73) 3-methyl-1-butanol	12.645	55	5244	15.59	ug/L		98
76) toluene	12.943	92	5236	0.99	ug/L		94
77) trans-1,3-dichloropropene	13.131	75	2879	0.93	ug/L		93
78) ethyl methacrylate	13.152	69	2674	0.82	ug/L		91
79) 1,1,2-trichloroethane	13.361	83	1482	0.89	ug/L	#	80
80) 2-hexanone	13.570	58	5033	3.78	ug/L		94
81) tetrachloroethene	13.576	166	2369	1.02	ug/L		84
82) 1,3-dichloropropane	13.565	76	2991	0.92	ug/L		98
83) butyl acetate	13.665	56	1823	0.93	ug/L		97
84) 3,3-dimethyl-1-butanol	13.743	57	5783	7.94	ug/L		94
85) dibromochloromethane	13.842	129	2132	0.91	ug/L	#	72
86) 1,2-dibromoethane	14.020	107	1802	0.84	ug/L		98
87) n-butyl ether	14.486	57	8975	0.82	ug/L	#	83
88) chlorobenzene	14.548	112	5118	0.89	ug/L		95
89) 1,1,1,2-tetrachloroethane	14.616	131	2693	0.98	ug/L		86
90) ethylbenzene	14.622	91	9678	0.93	ug/L		93
91) m,p-xylene	14.742	106	7481	1.91	ug/L		97
92) o-xylene	15.207	106	4181	0.97	ug/L		87
93) styrene	15.213	104	5740	0.91	ug/L		93
94) butyl acrylate	15.014	55	4668	0.92	ug/L		91
95) bromoform	15.479	173	1580	0.86	ug/L		82
96) isopropylbenzene	15.600	105	10783	0.90	ug/L		95
97) cis-1,4-dichloro-2-butene	15.647	75	978	0.81	ug/L	#	82
100) bromobenzene	16.023	156	2465	0.88	ug/L		92
101) 1,1,2,2-tetrachloroethane	15.903	83	3537	0.90	ug/L		84
103) 1,2,3-trichloropropane	15.992	110	832	0.82	ug/L		78
104) n-propylbenzene	16.055	91	12376	0.89	ug/L		99
105) 2-chlorotoluene	16.206	126	2450	0.84	ug/L		90
106) 4-chlorotoluene	16.322	91	7005	0.92	ug/L		91
107) 1,3,5-trimethylbenzene	16.222	105	8613	0.79	ug/L		98
108) tert-butylbenzene	16.620	119	6616	0.71	ug/L		98
109) 1,2,4-trimethylbenzene	16.661	105	8784	0.80	ug/L		95
110) sec-butylbenzene	16.860	105	10891	0.75	ug/L		92
111) 1,3-dichlorobenzene	17.048	146	5145	0.97	ug/L		96
112) p-isopropyltoluene	16.991	119	9289	0.76	ug/L		98
113) 1,4-dichlorobenzene	17.143	146	5711	1.05	ug/L		99
114) 1,2-dichlorobenzene	17.582	146	5699	1.00	ug/L		96
115) n-butylbenzene	17.451	92	5563	0.87	ug/L		94
116) 1,2-dibromo-3-chloropr...	18.419	157	1281	1.00	ug/L		79
117) 1,3,5-trichlorobenzene	18.644	180	5771	0.97	ug/L		96
119) 1,2,4-trichlorobenzene	19.360	180	5383	0.97	ug/L		86
120) hexachlorobutadiene	19.517	225	2137	0.80	ug/L		87
121) naphthalene	19.684	128	15723	0.94	ug/L		96
122) 1,2,3-trichlorobenzene	19.956	180	5565	0.96	ug/L		91
123) hexachloroethane	17.880	201	1630	0.71	ug/L		91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236268.D
Acq On : 22 Sep 2017 11:29 pm
Operator : ChelseaS
Sample : ic8958-1
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 25 09:06:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:23:40 2017
Response via : Initial Calibration

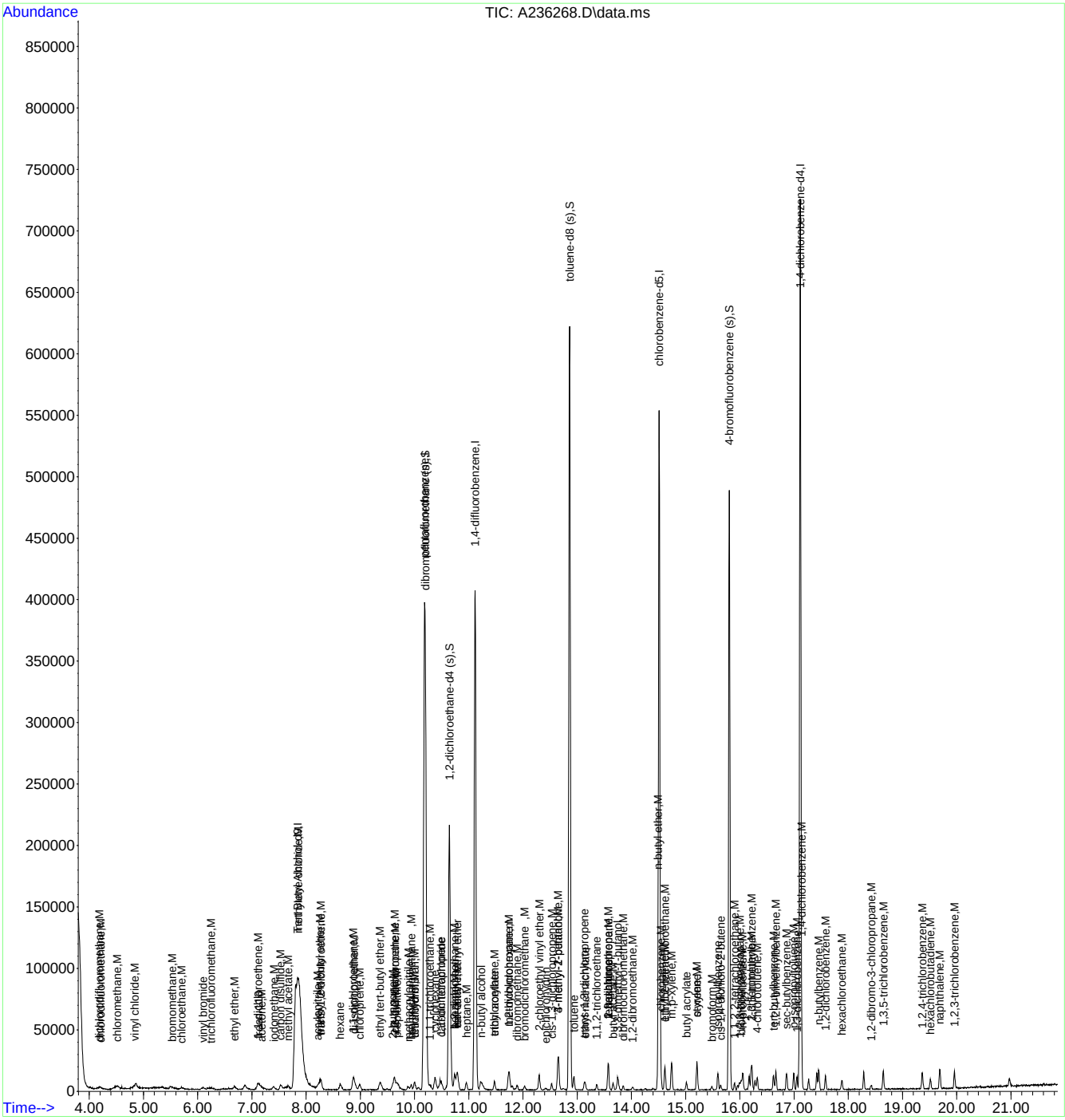
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236268.D
Acq On : 22 Sep 2017 11:29 pm
Operator : ChelseaS
Sample : ic8958-1
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 25 09:06:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:23:40 2017
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 09/27/17 13:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236269.D
Acq On : 22 Sep 2017 11:58 pm
Operator : ChelseaS
Sample : ic8958-2
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 25 09:06:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.873	65	461063	500.00	ug/L		0.06
5) pentafluorobenzene	10.184	168	281638	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.115	114	398275	50.00	ug/L		0.00
74) chlorobenzene-d5	14.510	117	331411	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.114	152	203662	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.205	113	161666	50.16	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.32%				
53) 1,2-dichloroethane-d4 (s)	10.645	65	184863	52.84	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 105.68%				
75) toluene-d8 (s)	12.857	98	463045	51.18	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 102.36%				
99) 4-bromofluorobenzene (s)	15.807	95	172216	49.67	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.34%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	8.003	59	7457	8.22	ug/L		96
4) 1,4-dioxane	11.868	88	1605	31.63	ug/L		95
6) chlorodifluoromethane	4.206	51	6588	1.18	ug/L		79
7) dichlorodifluoromethane	4.180	85	7904	1.35	ug/L		83
8) chloromethane	4.525	50	8797	1.44	ug/L		90
9) vinyl chloride	4.850	62	9758	1.54	ug/L		96
11) bromomethane	5.514	94	6297	1.77	ug/L		75
12) chloroethane	5.723	64	4824	1.69	ug/L		87
13) vinyl bromide	6.089	106	5396	1.61	ug/L		94
14) trichlorofluoromethane	6.220	101	8943	1.54	ug/L		78
15) ethyl ether	6.691	74	2341	1.48	ug/L	#	31
16) acrolein	6.942	56	1394	1.50	ug/L		70
17) freon 113	7.114	151	3913	1.50	ug/L	#	96
18) 1,1-dichloroethene	7.120	96	4238	1.58	ug/L	#	69
19) acetone	7.167	58	3347	6.22	ug/L	#	70
20) acetonitrile	7.632	41	13718	16.73	ug/L		88
21) iodomethane	7.397	142	8956	1.61	ug/L		99
22) carbon disulfide	7.533	76	18418	1.76	ug/L		91
23) methylene chloride	7.857	84	5216	1.69	ug/L		82
24) methyl acetate	7.684	43	5839	1.52	ug/L	#	91
25) methyl tert butyl ether	8.244	73	15637	1.58	ug/L		98
26) trans-1,2-dichloroethene	8.275	96	4758	1.72	ug/L		84
27) hexane	8.642	57	5289	1.34	ug/L		89
28) di-isopropyl ether	8.877	45	17203	1.60	ug/L	#	72
29) ethyl tert-butyl ether	9.363	59	16048	1.57	ug/L		89
30) 2-butanone	9.588	72	3312	6.31	ug/L	#	70
31) 1,1-dichloroethane	8.866	63	9262	1.73	ug/L		95
32) chloroprene	8.987	53	6409	1.40	ug/L		96
33) acrylonitrile	8.213	53	2603	1.41	ug/L		91
36) 2,2-dichloropropane	9.651	77	7892	1.70	ug/L		93
37) cis-1,2-dichloroethene	9.620	96	5198	1.66	ug/L		84
39) propionitrile	9.682	54	13268	15.95	ug/L		80
40) bromochloromethane	9.944	128	2905	1.79	ug/L	#	76
41) tetrahydrofuran	9.991	42	2615	1.42	ug/L		80
42) chloroform	9.996	83	8579	1.71	ug/L		82
45) methacrylonitrile	9.892	67	2305	1.46	ug/L	#	64
46) cyclohexane	10.383	84	7477	1.53	ug/L	#	82
47) 1,1,1-trichloroethane	10.284	97	7683	1.54	ug/L		94
48) iso-butyl alcohol	10.456	43	5566	17.24	ug/L		86
49) 1,1-dichloropropene	10.467	75	5815	1.49	ug/L		91
50) carbon tetrachloride	10.509	117	6314	1.43	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236269.D
Acq On : 22 Sep 2017 11:58 pm
Operator : ChelseaS
Sample : ic8958-2
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 25 09:06:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
51) tert-amyl alcohol	10.618	73	3240	6.66	ug/L	#	70
54) benzene	10.739	78	16603	1.62	ug/L		97
55) iso-octane	10.791	57	15298	1.32	ug/L		92
56) tert-amyl methyl ether	10.796	73	15561	1.68	ug/L		93
57) heptane	10.958	71	2796	1.37	ug/L		93
59) 1,2-dichloroethane	10.734	62	6075	1.68	ug/L		96
60) n-butyl alcohol	11.220	56	13172	69.53	ug/L		97
61) ethyl acrylate	11.476	55	5400	1.46	ug/L		87
62) trichloroethene	11.471	95	4135	1.72	ug/L	#	72
63) 2-nitropropane	12.271	41	2139	1.66	ug/L		91
64) methylcyclohexane	11.743	83	8399	1.50	ug/L		97
65) 2-chloroethyl vinyl ether	12.297	63	11044	7.49	ug/L		97
67) 1,2-dichloropropane	11.748	63	4175	1.54	ug/L		91
68) dibromomethane	11.889	93	3099	1.87	ug/L		76
69) bromodichloromethane	12.031	83	5393	1.60	ug/L		85
70) epichlorohydrin	12.418	57	3162	7.59	ug/L		87
71) cis-1,3-dichloropropene	12.527	75	5530	1.42	ug/L		94
72) 4-methyl-2-pentanone	12.653	58	10542	6.29	ug/L		97
73) 3-methyl-1-butanol	12.653	55	9433	27.92	ug/L		96
76) toluene	12.941	92	8210	1.54	ug/L		97
77) trans-1,3-dichloropropene	13.129	75	4964	1.59	ug/L		96
78) ethyl methacrylate	13.150	69	4974	1.53	ug/L		84
79) 1,1,2-trichloroethane	13.370	83	2705	1.61	ug/L	#	77
80) 2-hexanone	13.568	58	9211	6.89	ug/L		99
81) tetrachloroethene	13.579	166	3949	1.70	ug/L		78
82) 1,3-dichloropropane	13.563	76	5054	1.54	ug/L		97
83) butyl acetate	13.657	56	3333	1.70	ug/L		91
84) 3,3-dimethyl-1-butanol	13.751	57	10815	14.78	ug/L		96
85) dibromochloromethane	13.851	129	3811	1.61	ug/L		93
86) 1,2-dibromoethane	14.023	107	3580	1.67	ug/L		84
87) n-butyl ether	14.484	57	17236	1.58	ug/L		92
88) chlorobenzene	14.546	112	9262	1.61	ug/L		83
89) 1,1,1,2-tetrachloroethane	14.614	131	4628	1.68	ug/L		99
90) ethylbenzene	14.625	91	16724	1.60	ug/L		99
91) m,p-xylene	14.740	106	12034	3.05	ug/L		97
92) o-xylene	15.205	106	6860	1.58	ug/L		93
93) styrene	15.216	104	9598	1.52	ug/L		96
94) butyl acrylate	15.012	55	8062	1.58	ug/L		96
95) bromoform	15.483	173	3020	1.64	ug/L		90
96) isopropylbenzene	15.598	105	18709	1.56	ug/L		97
97) cis-1,4-dichloro-2-butene	15.650	75	1932	1.60	ug/L		88
100) bromobenzene	16.026	156	4309	1.56	ug/L		83
101) 1,1,2,2-tetrachloroethane	15.901	83	6471	1.67	ug/L		84
103) 1,2,3-trichloropropane	15.995	110	1638	1.63	ug/L		73
104) n-propylbenzene	16.053	91	20976	1.52	ug/L		100
105) 2-chlorotoluene	16.209	126	4257m	1.48	ug/L		
106) 4-chlorotoluene	16.314	91	12125	1.62	ug/L		97
107) 1,3,5-trimethylbenzene	16.225	105	15188	1.40	ug/L		96
108) tert-butylbenzene	16.617	119	11167	1.22	ug/L		94
109) 1,2,4-trimethylbenzene	16.665	105	15018	1.39	ug/L		92
110) sec-butylbenzene	16.863	105	18924	1.32	ug/L		99
111) 1,3-dichlorobenzene	17.057	146	8640	1.64	ug/L		95
112) p-isopropyltoluene	16.994	119	16493	1.36	ug/L		97
113) 1,4-dichlorobenzene	17.140	146	9587	1.79	ug/L		94
114) 1,2-dichlorobenzene	17.575	146	9592	1.70	ug/L		89
115) n-butylbenzene	17.449	92	8966	1.42	ug/L		96
116) 1,2-dibromo-3-chloropr...	18.422	157	1834	1.45	ug/L		81
117) 1,3,5-trichlorobenzene	18.647	180	9523	1.62	ug/L		89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236269.D
Acq On : 22 Sep 2017 11:58 pm
Operator : ChelseaS
Sample : ic8958-2
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 25 09:06:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration

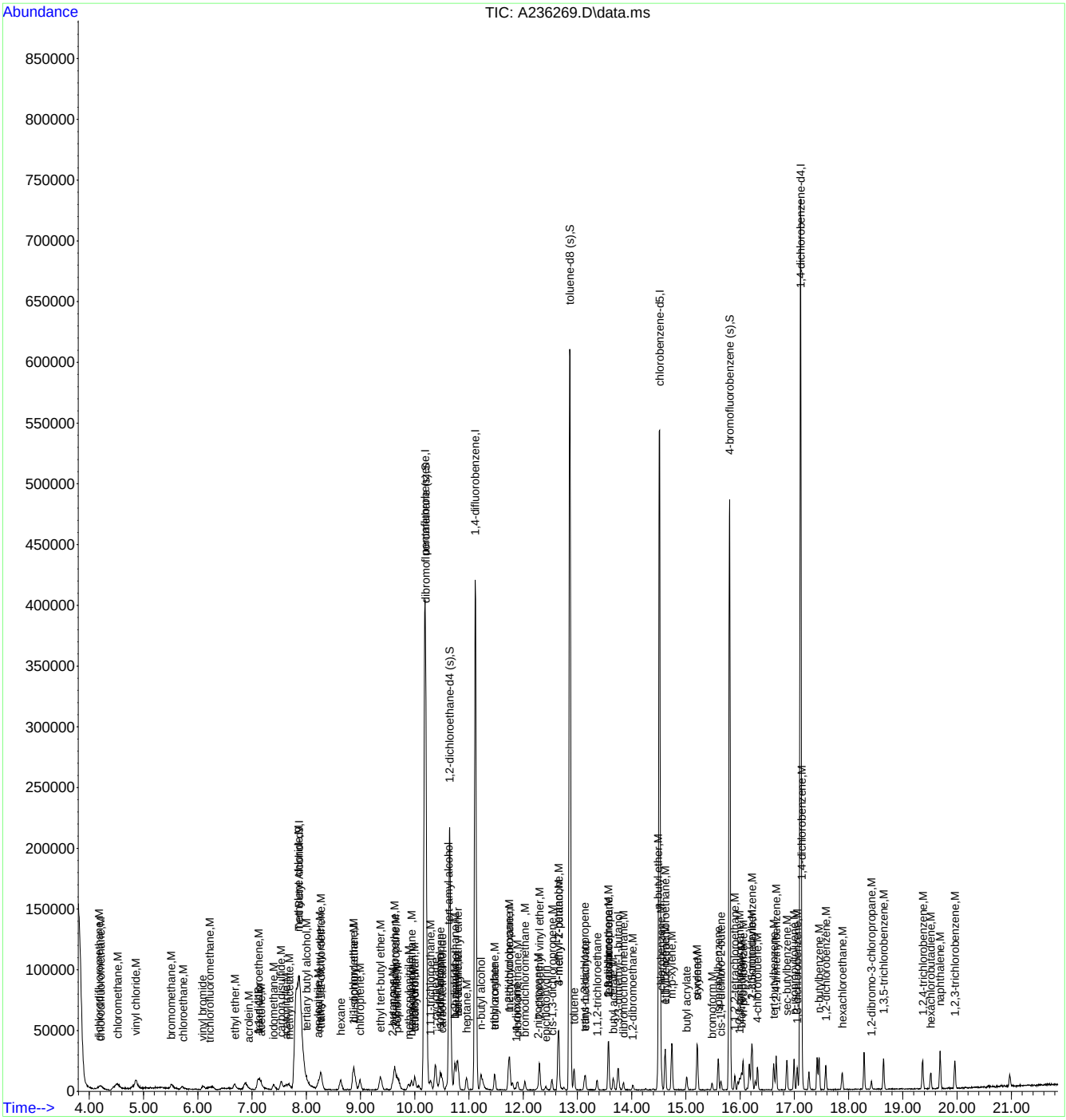
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
119) 1,2,4-trichlorobenzene	19.369	180	9133	1.66	ug/L	93
120) hexachlorobutadiene	19.515	225	3907	1.48	ug/L	90
121) naphthalene	19.688	128	25581	1.55	ug/L	98
122) 1,2,3-trichlorobenzene	19.959	180	8926	1.56	ug/L	91
123) hexachloroethane	17.883	201	2728	1.20	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236269.D
Acq On : 22 Sep 2017 11:58 pm
Operator : ChelseaS
Sample : ic8958-2
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 25 09:06:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: VA8958-IC8958
Lab FileID: A236269.D
Injection Time: 09/22/17 23:58

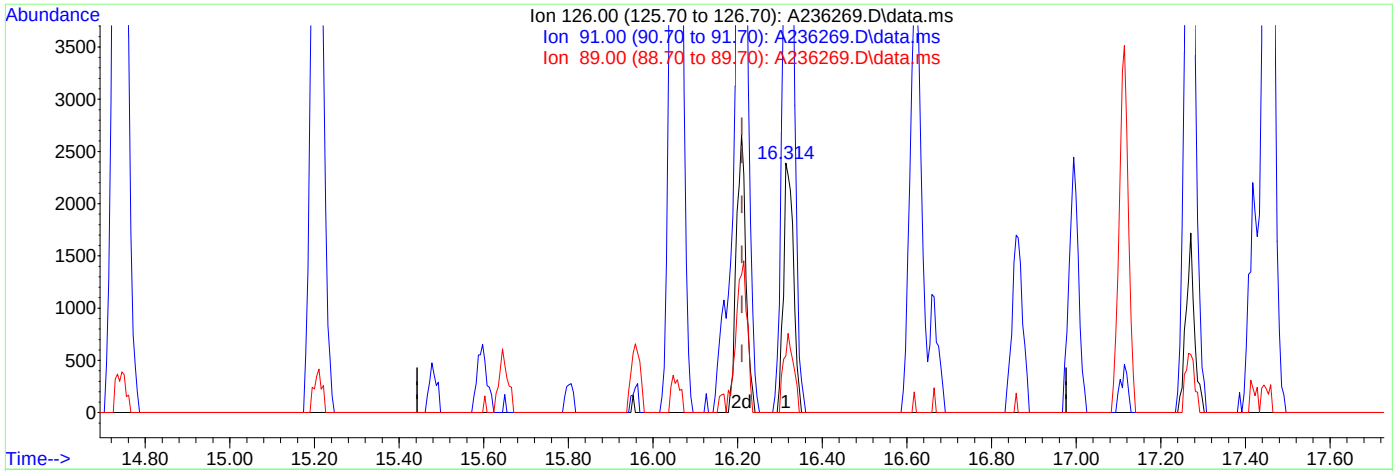
Method: SW846 8260C
Analyst approved: 09/25/17 09:10 Ying Li
Supervisor approved: 09/27/17 13:27 Kanya Veerawat

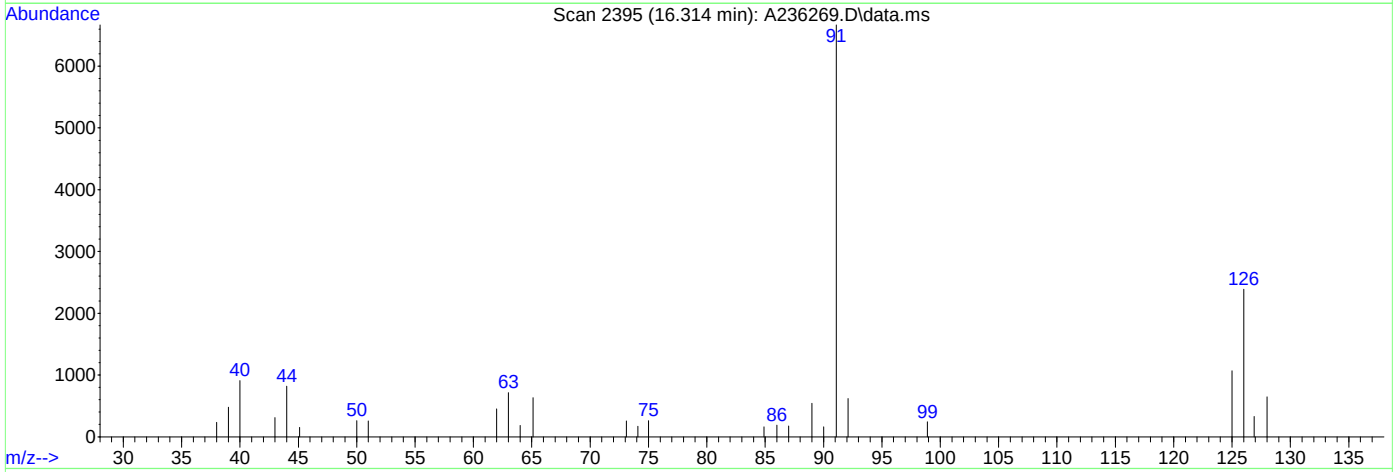
Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Chlorotoluene	95-49-8		16.21	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : A236269.D
Acq On : 22 Sep 2017 11:58 pm
Operator : ChelseaS
Sample : ic8958-2
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 25 08:19:09 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration





TIC: A236269.D\data.ms

(105) 2-chlorotoluene (M)

16.314min (+0.104) 1.35ug/L

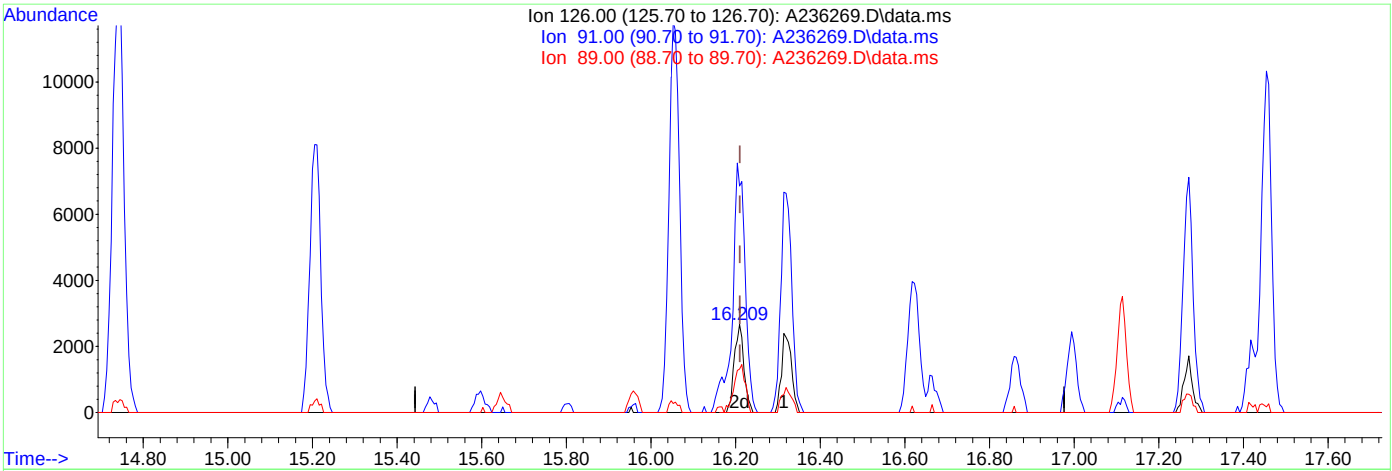
response 3898

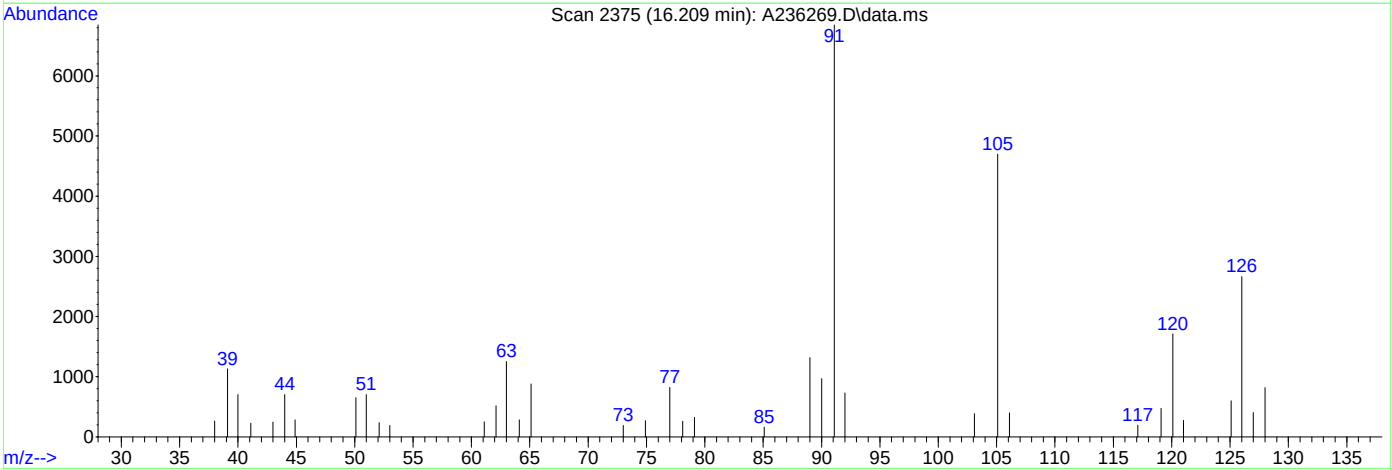
Ion	Exp%	Act%
126.00	100	100
91.00	290.80	272.59
89.00	52.50	22.76
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : A236269.D
Acq On : 22 Sep 2017 11:58 pm
Operator : ChelseaS
Sample : ic8958-2
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 25 09:06:46 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration





TIC: A236269.D\data.ms

(105) 2-chlorotoluene (M)

16.209min (-0.000) 1.48ug/L m

response 4257

Ion	Exp%	Act%
126.00	100	100
91.00	290.80	257.35#
89.00	52.50	49.53
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236270.D
Acq On : 23 Sep 2017 12:27 am
Operator : ChelseaS
Sample : ic8958-5
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 25 09:07:05 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.816	65	454270	500.00	ug/L		0.00
5) pentafluorobenzene	10.185	168	276641	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.116	114	405843	50.00	ug/L		0.00
74) chlorobenzene-d5	14.510	117	329896	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.115	152	205707	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.201	113	159310	50.33	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.66%				
53) 1,2-dichloroethane-d4 (s)	10.645	65	183731	51.54	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.08%				
75) toluene-d8 (s)	12.858	98	468191	51.98	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 103.96%				
99) 4-bromofluorobenzene (s)	15.802	95	173700	49.60	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.20%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.931	59	22359	25.01	ug/L		94
4) 1,4-dioxane	11.885	88	5616	112.32	ug/L		96
6) chlorodifluoromethane	4.217	51	22350	4.09	ug/L		93
7) dichlorodifluoromethane	4.212	85	25730	4.47	ug/L		97
8) chloromethane	4.521	50	27437	4.58	ug/L		95
9) vinyl chloride	4.840	62	30756	4.93	ug/L		97
10) 1,3-butadiene	4.866	54	15359	4.80	ug/L		95
11) bromomethane	5.509	94	17730	5.07	ug/L		97
12) chloroethane	5.713	64	14598	5.20	ug/L		91
13) vinyl bromide	6.100	106	15679	4.76	ug/L		98
14) trichlorofluoromethane	6.257	101	27726	4.85	ug/L		95
15) ethyl ether	6.676	74	7621	4.92	ug/L		93
16) acrolein	6.921	56	4234	4.65	ug/L		95
17) freon 113	7.115	151	12689	4.94	ug/L		97
18) 1,1-dichloroethene	7.120	96	14094	5.35	ug/L	#	76
19) acetone	7.162	58	10690	20.22	ug/L		93
20) acetonitrile	7.606	41	39279	48.77	ug/L		97
21) iodomethane	7.397	142	27931	5.11	ug/L		99
22) carbon disulfide	7.533	76	53281	5.19	ug/L		98
23) methylene chloride	7.863	84	15622	5.16	ug/L		91
24) methyl acetate	7.669	43	18341	4.85	ug/L		95
25) methyl tert butyl ether	8.250	73	48210	4.95	ug/L		97
26) trans-1,2-dichloroethene	8.276	96	13976	5.15	ug/L		89
27) hexane	8.637	57	18913	4.89	ug/L		97
28) di-isopropyl ether	8.888	45	52616	4.97	ug/L		97
29) ethyl tert-butyl ether	9.369	59	48318	4.80	ug/L		94
30) 2-butanone	9.599	72	9835	19.08	ug/L	#	65
31) 1,1-dichloroethane	8.862	63	26466	5.03	ug/L		100
32) chloroprene	8.992	53	22002	4.90	ug/L		99
33) acrylonitrile	8.203	53	9058	5.01	ug/L		94
34) vinyl acetate	8.862	86	2227	4.15	ug/L	#	40
35) ethyl acetate	9.631	45	3097	4.72	ug/L	#	70
36) 2,2-dichloropropane	9.651	77	22904	5.01	ug/L		94
37) cis-1,2-dichloroethene	9.625	96	15594	5.07	ug/L		96
38) methyl acrylate	9.714	85	2062	3.95	ug/L	#	26
39) propionitrile	9.678	54	39066	47.80	ug/L		72
40) bromochloromethane	9.939	128	7599	4.76	ug/L	#	80
41) tetrahydrofuran	9.991	42	8016	4.45	ug/L		95
42) chloroform	9.997	83	25640	5.20	ug/L		97
43) tert-butyl formate	10.065	59	7888	4.81	ug/L		98
45) methacrylonitrile	9.887	67	7366	4.76	ug/L		86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236270.D
Acq On : 23 Sep 2017 12:27 am
Operator : ChelseaS
Sample : ic8958-5
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 25 09:07:05 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cyclohexane	10.378	84	21809	4.55	ug/L	#	87
47) 1,1,1-trichloroethane	10.295	97	23904	4.89	ug/L		98
48) iso-butyl alcohol	10.452	43	13016	41.04	ug/L		95
49) 1,1-dichloropropene	10.478	75	18005	4.69	ug/L		96
50) carbon tetrachloride	10.504	117	21182	4.87	ug/L		99
51) tert-amyl alcohol	10.603	73	10691	22.38	ug/L		96
54) benzene	10.739	78	52427	5.01	ug/L		97
55) iso-octane	10.781	57	54263	4.60	ug/L		98
56) tert-amyl methyl ether	10.797	73	46876	4.97	ug/L		96
57) heptane	10.954	71	9705	4.68	ug/L		94
58) isopropyl acetate	10.666	87	2940	4.13	ug/L	#	77
59) 1,2-dichloroethane	10.734	62	18059	4.92	ug/L		97
60) n-butyl alcohol	11.220	56	42323	219.23	ug/L		97
61) ethyl acrylate	11.477	55	16357	4.33	ug/L		94
62) trichloroethene	11.472	95	12454	5.08	ug/L		97
63) 2-nitropropane	12.261	41	5971	4.56	ug/L	#	64
64) methylcyclohexane	11.733	83	28194	4.96	ug/L		99
65) 2-chloroethyl vinyl ether	12.298	63	33764	22.47	ug/L		95
66) methyl methacrylate	11.759	100	2982	4.06	ug/L	#	86
67) 1,2-dichloropropane	11.754	63	13702	4.95	ug/L		98
68) dibromomethane	11.890	93	8744	5.18	ug/L		83
69) bromodichloromethane	12.031	83	16279	4.75	ug/L		92
70) epichlorohydrin	12.418	57	9645	22.71	ug/L		92
71) cis-1,3-dichloropropene	12.533	75	17989	4.55	ug/L		98
72) 4-methyl-2-pentanone	12.648	58	31728	18.58	ug/L		95
73) 3-methyl-1-butanol	12.643	55	30416	88.34	ug/L		98
76) toluene	12.941	92	26979	5.10	ug/L		99
77) trans-1,3-dichloropropene	13.124	75	15111	4.86	ug/L		96
78) ethyl methacrylate	13.145	69	15569	4.80	ug/L		96
79) 1,1,2-trichloroethane	13.360	83	8585	5.13	ug/L	#	85
80) 2-hexanone	13.569	58	27300	20.50	ug/L	#	86
81) tetrachloroethene	13.574	166	11192	4.84	ug/L		90
82) 1,3-dichloropropane	13.564	76	16040	4.91	ug/L		94
83) butyl acetate	13.663	56	10090	5.16	ug/L		94
84) 3,3-dimethyl-1-butanol	13.747	57	33490	45.99	ug/L		97
85) dibromochloromethane	13.846	129	11095	4.72	ug/L		99
86) 1,2-dibromoethane	14.019	107	10386	4.87	ug/L		93
87) n-butyl ether	14.484	57	54646	5.02	ug/L		93
88) chlorobenzene	14.547	112	27951	4.88	ug/L		98
89) 1,1,1,2-tetrachloroethane	14.615	131	13395	4.88	ug/L		93
90) ethylbenzene	14.620	91	52142	5.03	ug/L		99
91) m,p-xylene	14.746	106	38660	9.85	ug/L		94
92) o-xylene	15.206	106	21141	4.89	ug/L		98
93) styrene	15.211	104	31326	4.99	ug/L		99
94) butyl acrylate	15.012	55	24503	4.83	ug/L		91
95) bromoform	15.483	173	8918	4.85	ug/L		91
96) isopropylbenzene	15.593	105	57723	4.83	ug/L		97
97) cis-1,4-dichloro-2-butene	15.650	75	6019	5.00	ug/L		92
100) bromobenzene	16.027	156	13388	4.80	ug/L		86
101) 1,1,2,2-tetrachloroethane	15.901	83	19339	4.93	ug/L		99
102) trans-1,4-dichloro-2-b...	15.954	53	4753	4.90	ug/L		93
103) 1,2,3-trichloropropane	15.996	110	4961	4.90	ug/L		97
104) n-propylbenzene	16.058	91	67037	4.82	ug/L		100
105) 2-chlorotoluene	16.210	126	13750	4.72	ug/L		98
106) 4-chlorotoluene	16.320	91	36920	4.88	ug/L		96
107) 1,3,5-trimethylbenzene	16.226	105	49812	4.56	ug/L		97
108) tert-butylbenzene	16.618	119	38985	4.21	ug/L		94
109) 1,2,4-trimethylbenzene	16.665	105	50645	4.64	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236270.D
Acq On : 23 Sep 2017 12:27 am
Operator : ChelseaS
Sample : ic8958-5
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 25 09:07:05 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration

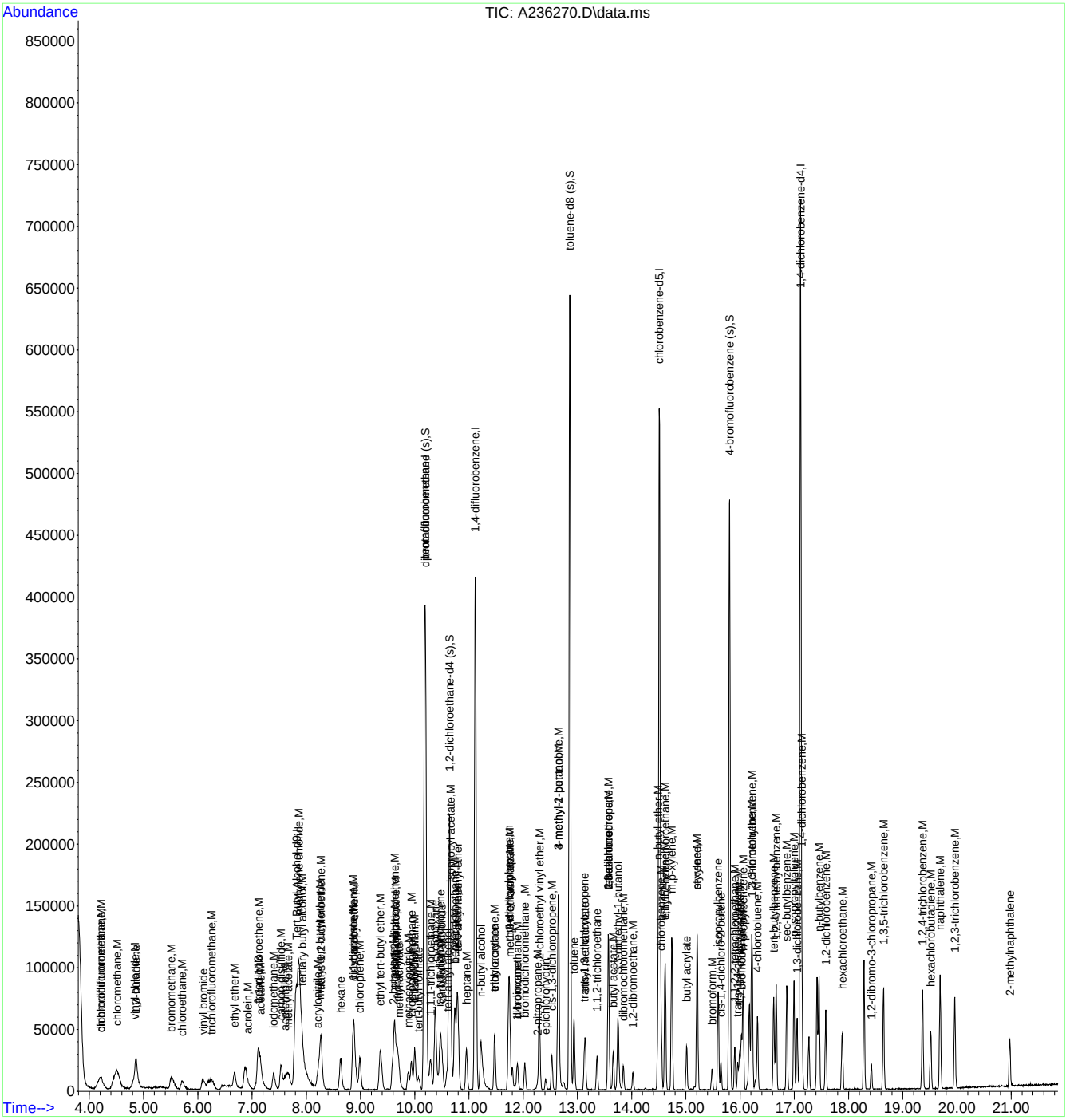
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) sec-butylbenzene	16.859	105	65162	4.49	ug/L	97
111) 1,3-dichlorobenzene	17.052	146	25508	4.79	ug/L	94
112) p-isopropyltoluene	16.995	119	54173	4.42	ug/L	98
113) 1,4-dichlorobenzene	17.141	146	27070	5.00	ug/L	99
114) 1,2-dichlorobenzene	17.580	146	28853	5.05	ug/L	94
115) n-butylbenzene	17.455	92	30435	4.76	ug/L	98
116) 1,2-dibromo-3-chloropr...	18.422	157	6092	4.77	ug/L	89
117) 1,3,5-trichlorobenzene	18.642	180	29488	4.98	ug/L	88
119) 1,2,4-trichlorobenzene	19.364	180	27348	4.94	ug/L	97
120) hexachlorobutadiene	19.515	225	11666	4.37	ug/L	92
121) naphthalene	19.688	128	78753	4.74	ug/L	98
122) 1,2,3-trichlorobenzene	19.960	180	27462	4.75	ug/L	96
123) hexachloroethane	17.884	201	9105	3.98	ug/L	98
124) 2-methylnaphthalene	20.969	142	20511	1.86	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236270.D
Acq On : 23 Sep 2017 12:27 am
Operator : ChelseaS
Sample : ic8958-5
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 25 09:07:05 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:17:41 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236271.D
Acq On : 23 Sep 2017 12:57 am
Operator : ChelseaS
Sample : ic8958-10
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 25 08:14:24 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:14:14 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.815	65	452846	500.00	ug/L		0.00
5) pentafluorobenzene	10.179	168	270502	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.115	114	396931	50.00	ug/L		0.00
74) chlorobenzene-d5	14.509	117	335002	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.114	152	204006	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.200	113	154497	49.91	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.82%				
53) 1,2-dichloroethane-d4 (s)	10.639	65	181049	51.93	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.86%				
75) toluene-d8 (s)	12.857	98	468892	51.27	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 102.54%				
99) 4-bromofluorobenzene (s)	15.801	95	172538	49.68	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.36%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.930	59	44558	49.99	ug/L		97
4) 1,4-dioxane	11.852	88	11738	235.50	ug/L		95
6) chlorodifluoromethane	4.206	51	48615	9.10	ug/L		95
7) dichlorodifluoromethane	4.201	85	54041	9.60	ug/L		93
8) chloromethane	4.535	50	53633	9.16	ug/L		96
9) vinyl chloride	4.834	62	60240	9.88	ug/L		99
10) 1,3-butadiene	4.849	54	30459	9.74	ug/L		96
11) bromomethane	5.514	94	35116	10.26	ug/L		91
12) chloroethane	5.702	64	27939	10.18	ug/L		96
13) vinyl bromide	6.089	106	31272	9.72	ug/L		100
14) trichlorofluoromethane	6.241	101	56505	10.10	ug/L		97
15) ethyl ether	6.675	74	15765	10.40	ug/L		83
16) acrolein	6.915	56	8731	9.80	ug/L		98
17) freon 113	7.124	151	25525	10.16	ug/L	#	97
18) 1,1-dichloroethene	7.114	96	26226	10.19	ug/L		96
19) acetone	7.156	58	21121	40.87	ug/L		95
20) acetonitrile	7.616	41	75457	95.82	ug/L		95
21) iodomethane	7.391	142	54727	10.23	ug/L		95
22) carbon disulfide	7.532	76	104110	10.38	ug/L		99
23) methylene chloride	7.862	84	31559	10.65	ug/L		95
24) methyl acetate	7.653	43	37220	10.08	ug/L		98
25) methyl tert butyl ether	8.238	73	96276	10.12	ug/L		100
26) trans-1,2-dichloroethene	8.275	96	27182	10.24	ug/L		95
27) hexane	8.631	57	37958	10.03	ug/L		99
28) di-isopropyl ether	8.882	45	104510	10.10	ug/L		91
29) ethyl tert-butyl ether	9.363	59	96957	9.85	ug/L		96
30) 2-butanone	9.593	72	20324	40.32	ug/L		96
31) 1,1-dichloroethane	8.861	63	53128	10.33	ug/L		99
32) chloroprene	8.981	53	43192	9.83	ug/L		97
33) acrylonitrile	8.202	53	18036	10.20	ug/L		98
34) vinyl acetate	8.856	86	5332	10.16	ug/L	#	55
35) ethyl acetate	9.619	45	6366	9.93	ug/L	#	82
36) 2,2-dichloropropane	9.645	77	45458	10.17	ug/L		99
37) cis-1,2-dichloroethene	9.624	96	30289	10.08	ug/L		96
38) methyl acrylate	9.703	85	4444	8.70	ug/L	#	71
39) propionitrile	9.682	54	79672	99.69	ug/L		94
40) bromochloromethane	9.938	128	15540	9.95	ug/L		94
41) tetrahydrofuran	9.991	42	17233	9.78	ug/L		96
42) chloroform	10.001	83	50137	10.40	ug/L		98
43) tert-butyl formate	10.064	59	15475	9.64	ug/L		95
45) methacrylonitrile	9.870	67	14407	9.51	ug/L		87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236271.D
Acq On : 23 Sep 2017 12:57 am
Operator : ChelseaS
Sample : ic8958-10
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 25 08:14:24 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:14:14 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cyclohexane	10.378	84	45484	9.71	ug/L	#	86
47) 1,1,1-trichloroethane	10.289	97	48287	10.11	ug/L		95
48) iso-butyl alcohol	10.446	43	26474	85.37	ug/L		96
49) 1,1-dichloropropene	10.466	75	36863	9.82	ug/L		98
50) carbon tetrachloride	10.503	117	42439	9.98	ug/L		99
51) tert-amyl alcohol	10.602	73	21252	45.50	ug/L	#	87
54) benzene	10.733	78	104436	10.19	ug/L		99
55) iso-octane	10.786	57	110550	9.57	ug/L		98
56) tert-amyl methyl ether	10.791	73	94936	10.30	ug/L		96
57) heptane	10.953	71	19861	9.80	ug/L		98
58) isopropyl acetate	10.670	87	6650	9.55	ug/L	#	85
59) 1,2-dichloroethane	10.733	62	37003	10.30	ug/L		98
60) n-butyl alcohol	11.220	56	87878	465.41	ug/L		96
61) ethyl acrylate	11.481	55	34529	9.34	ug/L		97
62) trichloroethene	11.471	95	25052	10.46	ug/L		95
63) 2-nitropropane	12.260	41	12507	9.76	ug/L	#	79
64) methylcyclohexane	11.737	83	56954	10.23	ug/L		99
65) 2-chloroethyl vinyl ether	12.297	63	71394	48.58	ug/L		97
66) methyl methacrylate	11.758	100	6792	9.44	ug/L		96
67) 1,2-dichloropropane	11.743	63	26961	9.96	ug/L		99
68) dibromomethane	11.889	93	16757	10.15	ug/L		96
69) bromodichloromethane	12.030	83	33130	9.88	ug/L		99
70) epichlorohydrin	12.417	57	19531	47.02	ug/L		99
71) cis-1,3-dichloropropene	12.527	75	36858	9.52	ug/L		98
72) 4-methyl-2-pentanone	12.647	58	65843	39.43	ug/L		99
73) 3-methyl-1-butanol	12.647	55	64691	192.10	ug/L		99
76) toluene	12.935	92	54509	10.15	ug/L		94
77) trans-1,3-dichloropropene	13.129	75	30652	9.72	ug/L		95
78) ethyl methacrylate	13.144	69	32064	9.73	ug/L		96
79) 1,1,2-trichloroethane	13.359	83	17232	10.14	ug/L		98
80) 2-hexanone	13.573	58	57792	42.74	ug/L		95
81) tetrachloroethene	13.578	166	24270	10.34	ug/L		92
82) 1,3-dichloropropane	13.563	76	33290	10.03	ug/L		98
83) butyl acetate	13.657	56	20620	10.38	ug/L		99
84) 3,3-dimethyl-1-butanol	13.746	57	72570	98.13	ug/L		97
85) dibromochloromethane	13.850	129	23494	9.84	ug/L		99
86) 1,2-dibromoethane	14.018	107	21542	9.95	ug/L		99
87) n-butyl ether	14.483	57	112305	10.16	ug/L		97
88) chlorobenzene	14.546	112	58342	10.03	ug/L		96
89) 1,1,1,2-tetrachloroethane	14.609	131	28061	10.06	ug/L		97
90) ethylbenzene	14.619	91	105918	10.06	ug/L		98
91) m,p-xylene	14.739	106	78212	19.63	ug/L		96
92) o-xylene	15.205	106	44134	10.05	ug/L		95
93) styrene	15.210	104	63339	9.93	ug/L		98
94) butyl acrylate	15.011	55	52799	10.26	ug/L		98
95) bromoform	15.482	173	18893	10.12	ug/L		87
96) isopropylbenzene	15.597	105	121781	10.03	ug/L		100
97) cis-1,4-dichloro-2-butene	15.650	75	11353	9.28	ug/L		93
100) bromobenzene	16.026	156	26606	9.62	ug/L		91
101) 1,1,2,2-tetrachloroethane	15.901	83	38528	9.90	ug/L		99
102) trans-1,4-dichloro-2-b...	15.953	53	10141	10.54	ug/L		93
103) 1,2,3-trichloropropane	15.995	110	9972	9.94	ug/L		93
104) n-propylbenzene	16.052	91	137096	9.95	ug/L		99
105) 2-chlorotoluene	16.204	126	28193	9.76	ug/L		96
106) 4-chlorotoluene	16.319	91	75184	10.02	ug/L		98
107) 1,3,5-trimethylbenzene	16.225	105	103969	9.59	ug/L		99
108) tert-butylbenzene	16.617	119	83748	9.12	ug/L		95
109) 1,2,4-trimethylbenzene	16.664	105	105820	9.77	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236271.D
Acq On : 23 Sep 2017 12:57 am
Operator : ChelseaS
Sample : ic8958-10
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 25 08:14:24 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:14:14 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) sec-butylbenzene	16.863	105	138559	9.62	ug/L	99
111) 1,3-dichlorobenzene	17.051	146	53336	10.11	ug/L	100
112) p-isopropyltoluene	16.994	119	116558	9.60	ug/L	97
113) 1,4-dichlorobenzene	17.140	146	54254	10.11	ug/L	96
114) 1,2-dichlorobenzene	17.579	146	57400	10.14	ug/L	99
115) n-butylbenzene	17.454	92	63094	9.94	ug/L	95
116) 1,2-dibromo-3-chloropr...	18.422	157	12272	9.69	ug/L	97
117) 1,3,5-trichlorobenzene	18.646	180	59264	10.09	ug/L	97
118) 2-ethylhexyl acrylate	19.358	70	6249	1.60	ug/L	98
119) 1,2,4-trichlorobenzene	19.368	180	56334	10.25	ug/L	98
120) hexachlorobutadiene	19.515	225	25444	9.60	ug/L	97
121) naphthalene	19.687	128	170747	10.35	ug/L	99
122) 1,2,3-trichlorobenzene	19.959	180	56949	9.93	ug/L	97
123) hexachloroethane	17.883	201	20407	8.99	ug/L	98
124) 2-methylnaphthalene	20.974	142	50277	4.61	ug/L	97

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

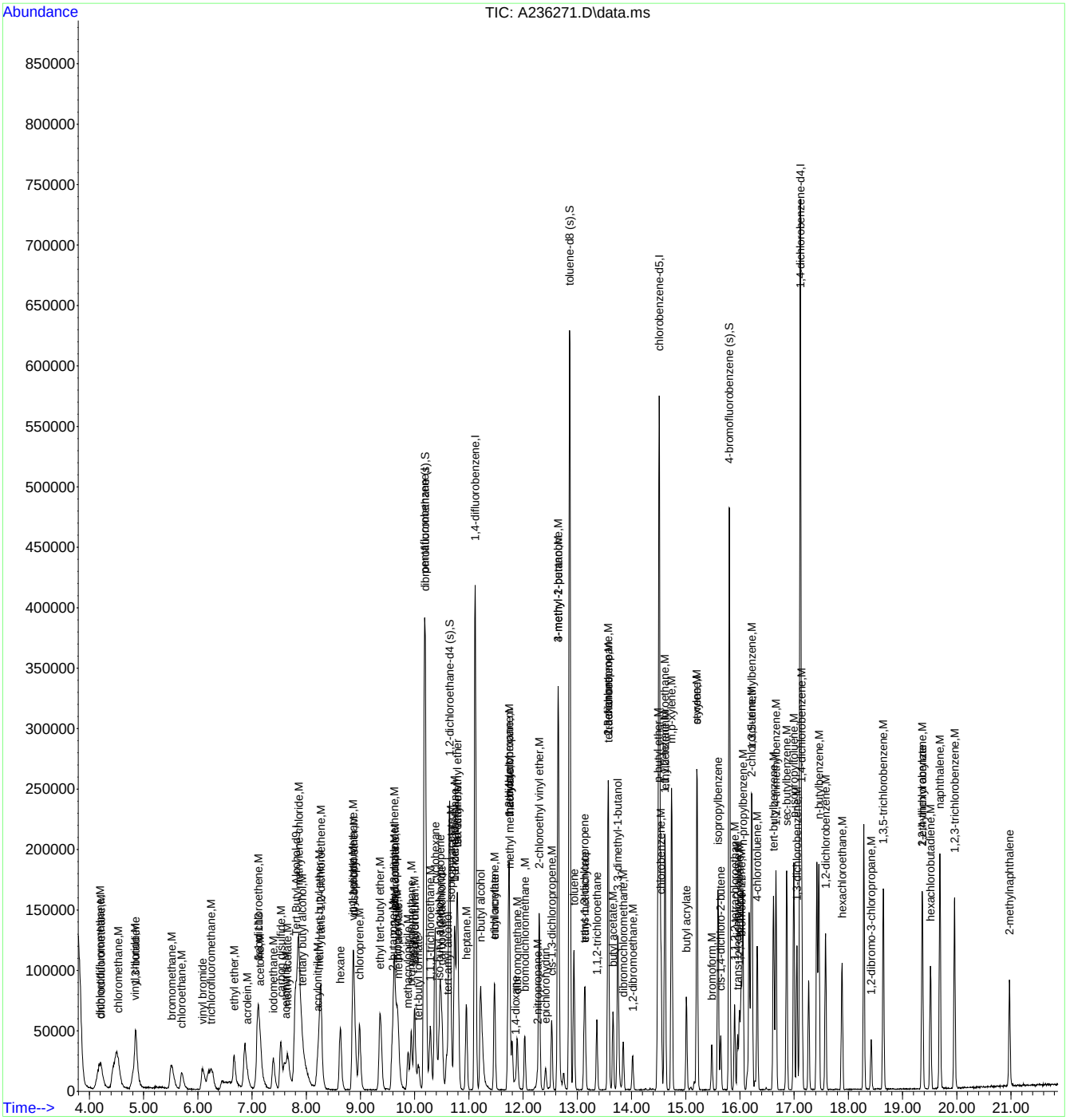
7.6.6

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236271.D
Acq On : 23 Sep 2017 12:57 am
Operator : ChelseaS
Sample : ic8958-10
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 25 08:14:24 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:14:14 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236272.D
Acq On : 23 Sep 2017 1:26 am
Operator : ChelseaS
Sample : ic8958-20
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 25 08:11:38 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.849	65	473182	500.00	ug/L	0.03
5) pentafluorobenzene	10.182	168	274248	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.118	114	408839	50.00	ug/L	0.00
74) chlorobenzene-d5	14.512	117	340764	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.112	152	206259	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.208	113	157244	50.11	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.22%			
53) 1,2-dichloroethane-d4 (s)	10.642	65	183550	51.11	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 102.22%			
75) toluene-d8 (s)	12.860	98	477816	51.36	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 102.72%			
99) 4-bromofluorobenzene (s)	15.804	95	173445	49.39	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 98.78%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	7.938	59	95154	102.17	ug/L	94
4) 1,4-dioxane	11.861	88	25769	494.78	ug/L	96
6) chlorodifluoromethane	4.214	51	100324	18.53	ug/L	95
7) dichlorodifluoromethane	4.209	85	113025	19.80	ug/L	99
8) chloromethane	4.549	50	120201	20.26	ug/L	95
9) vinyl chloride	4.842	62	122278	19.77	ug/L	96
10) 1,3-butadiene	4.868	54	63249	19.94	ug/L	99
11) bromomethane	5.522	94	71556	20.62	ug/L	92
12) chloroethane	5.710	64	58866	21.16	ug/L	95
13) vinyl bromide	6.097	106	66416	20.35	ug/L	99
14) trichlorofluoromethane	6.259	101	115167	20.31	ug/L	97
15) ethyl ether	6.683	74	32061	20.87	ug/L	91
16) acrolein	6.913	56	18688	20.68	ug/L	90
17) freon 113	7.122	151	52200	20.49	ug/L	97
18) 1,1-dichloroethene	7.117	96	57386	21.99	ug/L	98
19) acetone	7.153	58	41649	79.48	ug/L	98
20) acetonitrile	7.619	41	159135	199.32	ug/L	98
21) iodomethane	7.394	142	113523	20.93	ug/L	96
22) carbon disulfide	7.535	76	212436	20.89	ug/L	99
23) methylene chloride	7.860	84	64490	21.47	ug/L	98
24) methyl acetate	7.661	43	76364	20.39	ug/L	100
25) methyl tert butyl ether	8.252	73	199943	20.73	ug/L	99
26) trans-1,2-dichloroethene	8.273	96	55974	20.81	ug/L	97
27) hexane	8.628	57	78534	20.46	ug/L	99
28) di-isopropyl ether	8.885	45	218463	20.82	ug/L	97
29) ethyl tert-butyl ether	9.366	59	201895	20.22	ug/L	100
30) 2-butanone	9.585	72	40384	79.02	ug/L #	88
31) 1,1-dichloroethane	8.864	63	108400	20.79	ug/L	99
32) chloroprene	8.984	53	91161	20.47	ug/L	99
33) acrylonitrile	8.205	53	36697	20.47	ug/L	95
34) vinyl acetate	8.864	86	10479	19.69	ug/L #	92
35) ethyl acetate	9.627	45	12500	19.23	ug/L #	61
36) 2,2-dichloropropane	9.653	77	94146	20.77	ug/L	97
37) cis-1,2-dichloroethene	9.622	96	64865	21.28	ug/L	97
38) methyl acrylate	9.701	85	10052	19.40	ug/L #	66
39) propionitrile	9.685	54	161432	199.24	ug/L	97
40) bromochloromethane	9.941	128	31171	19.69	ug/L	93
41) tetrahydrofuran	9.993	42	35448	19.84	ug/L	100
42) chloroform	9.999	83	101933	20.85	ug/L	99
43) tert-butyl formate	10.072	59	31836	19.57	ug/L	96
45) methacrylonitrile	9.878	67	30251	19.70	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236272.D
Acq On : 23 Sep 2017 1:26 am
Operator : ChelseaS
Sample : ic8958-20
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 25 08:11:38 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cyclohexane	10.386	84	97404	20.52	ug/L		98
47) 1,1,1-trichloroethane	10.292	97	99687	20.58	ug/L		96
48) iso-butyl alcohol	10.448	43	62237	197.96	ug/L		92
49) 1,1-dichloropropene	10.475	75	75965	19.96	ug/L		99
50) carbon tetrachloride	10.506	117	87328	20.25	ug/L		99
51) tert-amyl alcohol	10.600	73	44545	94.06	ug/L		93
54) benzene	10.741	78	214540	20.33	ug/L		98
55) iso-octane	10.783	57	239262	20.11	ug/L		99
56) tert-amyl methyl ether	10.799	73	196558	20.70	ug/L		99
57) heptane	10.956	71	42405	20.31	ug/L		98
58) isopropyl acetate	10.668	87	14008	19.52	ug/L	#	91
59) 1,2-dichloroethane	10.736	62	76843	20.76	ug/L		99
60) n-butyl alcohol	11.217	56	190284	978.42	ug/L		99
61) ethyl acrylate	11.474	55	71778	18.86	ug/L		97
62) trichloroethene	11.474	95	50999	20.67	ug/L		97
63) 2-nitropropane	12.263	41	25753	19.51	ug/L		87
64) methylcyclohexane	11.735	83	118249	20.63	ug/L		100
65) 2-chloroethyl vinyl ether	12.300	63	144642	95.55	ug/L		99
66) methyl methacrylate	11.756	100	14235	19.22	ug/L	#	90
67) 1,2-dichloropropane	11.746	63	56932	20.41	ug/L		95
68) dibromomethane	11.892	93	34802	20.46	ug/L		97
69) bromodichloromethane	12.033	83	68706	19.89	ug/L		100
70) epichlorohydrin	12.415	57	41536	97.08	ug/L		98
71) cis-1,3-dichloropropene	12.530	75	76364	19.16	ug/L		98
72) 4-methyl-2-pentanone	12.650	58	134946	78.46	ug/L		98
73) 3-methyl-1-butanol	12.645	55	135777	391.46	ug/L		99
76) toluene	12.938	92	113513	20.77	ug/L		96
77) trans-1,3-dichloropropene	13.126	75	64889	20.22	ug/L		99
78) ethyl methacrylate	13.147	69	68906	20.56	ug/L		98
79) 1,1,2-trichloroethane	13.362	83	35056	20.29	ug/L		98
80) 2-hexanone	13.571	58	113663	82.63	ug/L		95
81) tetrachloroethene	13.576	166	49679	20.81	ug/L		97
82) 1,3-dichloropropane	13.560	76	67450	19.99	ug/L		97
83) butyl acetate	13.660	56	42748	21.16	ug/L		97
84) 3,3-dimethyl-1-butanol	13.749	57	159230	211.67	ug/L		99
85) dibromochloromethane	13.848	129	49603	20.42	ug/L		95
86) 1,2-dibromoethane	14.021	107	44644	20.27	ug/L		100
87) n-butyl ether	14.486	57	228887	20.36	ug/L		100
88) chlorobenzene	14.549	112	119984	20.28	ug/L		98
89) 1,1,1,2-tetrachloroethane	14.612	131	58916	20.77	ug/L		99
90) ethylbenzene	14.622	91	218561	20.40	ug/L		99
91) m,p-xylene	14.742	106	164682	40.63	ug/L		96
92) o-xylene	15.203	106	91247	20.43	ug/L		97
93) styrene	15.213	104	134397	20.71	ug/L		96
94) butyl acrylate	15.009	55	109431	20.90	ug/L		98
95) bromoform	15.485	173	39041	20.56	ug/L		95
96) isopropylbenzene	15.595	105	253931	20.55	ug/L		99
97) cis-1,4-dichloro-2-butene	15.647	75	25365	20.38	ug/L		92
100) bromobenzene	16.024	156	55783	19.95	ug/L		94
101) 1,1,2,2-tetrachloroethane	15.903	83	78196	19.88	ug/L		99
102) trans-1,4-dichloro-2-b...	15.956	53	20481	21.05	ug/L		94
103) 1,2,3-trichloropropane	15.987	110	20093	19.80	ug/L		95
104) n-propylbenzene	16.055	91	278859	20.01	ug/L		99
105) 2-chlorotoluene	16.212	126	56965	19.51	ug/L		98
106) 4-chlorotoluene	16.322	91	152633	20.11	ug/L		99
107) 1,3,5-trimethylbenzene	16.223	105	215098	19.63	ug/L		99
108) tert-butylbenzene	16.620	119	182264	19.62	ug/L		99
109) 1,2,4-trimethylbenzene	16.662	105	214872	19.63	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236272.D
Acq On : 23 Sep 2017 1:26 am
Operator : ChelseaS
Sample : ic8958-20
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 25 08:11:38 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration

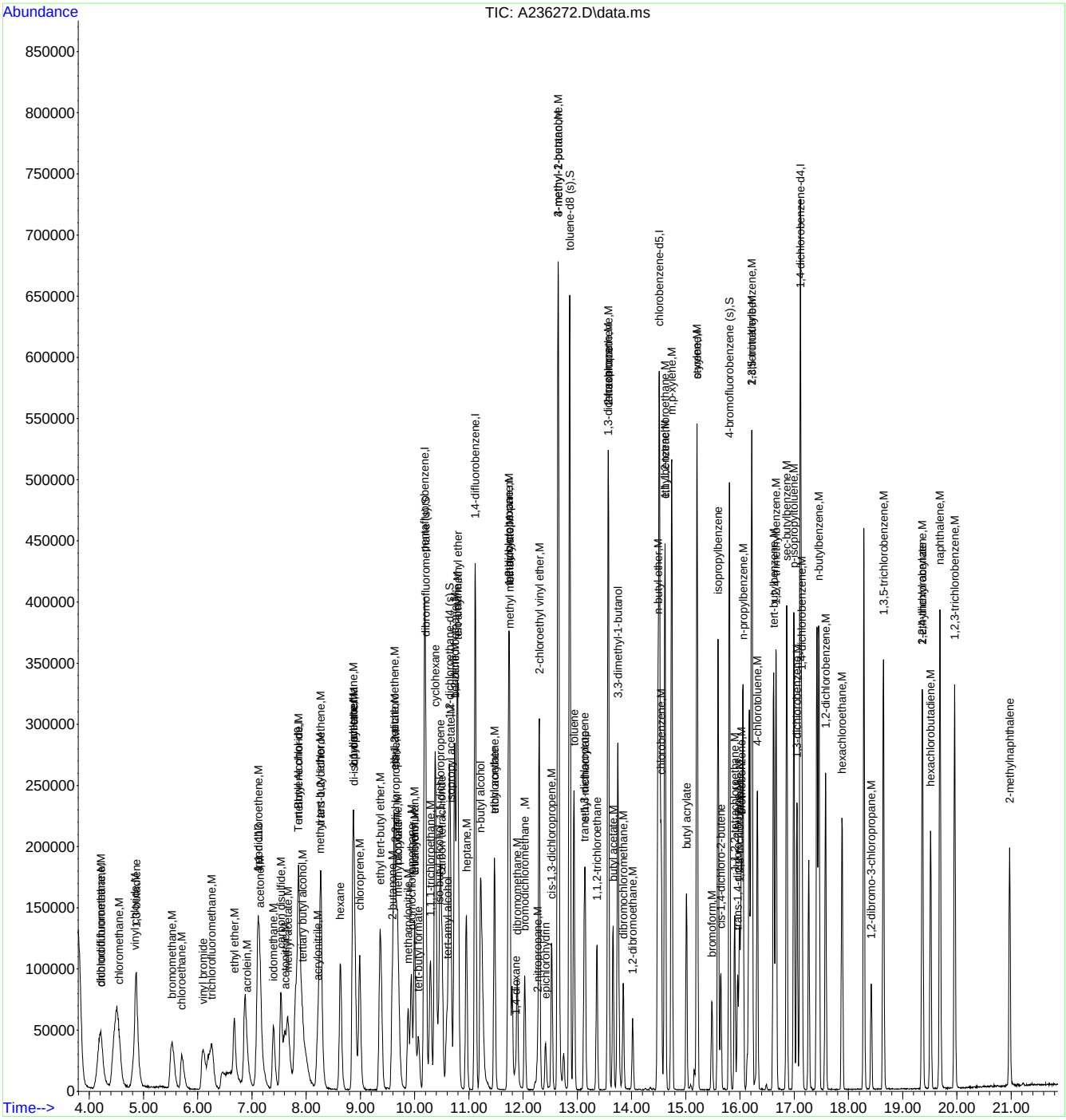
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) sec-butylbenzene	16.861	105	292447	20.08	ug/L	98
111) 1,3-dichlorobenzene	17.054	146	107577	20.17	ug/L	99
112) p-isopropyltoluene	16.991	119	242595	19.76	ug/L	99
113) 1,4-dichlorobenzene	17.143	146	110358	20.34	ug/L	99
114) 1,2-dichlorobenzene	17.577	146	117229	20.48	ug/L	98
115) n-butylbenzene	17.452	92	127978	19.95	ug/L	95
116) 1,2-dibromo-3-chloropr...	18.419	157	26066	20.36	ug/L	97
117) 1,3,5-trichlorobenzene	18.644	180	123308	20.77	ug/L	98
118) 2-ethylhexyl acrylate	19.355	70	15267	3.87	ug/L	94
119) 1,2,4-trichlorobenzene	19.366	180	117399	21.13	ug/L	100
120) hexachlorobutadiene	19.518	225	54668	20.40	ug/L	98
121) naphthalene	19.690	128	351028	21.05	ug/L	99
122) 1,2,3-trichlorobenzene	19.957	180	119429	20.59	ug/L	99
123) hexachloroethane	17.886	201	44923	19.58	ug/L	99
124) 2-methylnaphthalene	20.971	142	109575	9.94	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236272.D
Acq On : 23 Sep 2017 1:26 am
Operator : ChelseaS
Sample : ic8958-20
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 25 08:11:38 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236273.D
Acq On : 23 Sep 2017 1:55 am
Operator : ChelseaS
Sample : icc8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 25 08:08:08 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:07:46 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.816	65	479783	500.00	ug/L	0.00
5) pentafluorobenzene	10.180	168	276023	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.116	114	422213	50.00	ug/L	0.00
74) chlorobenzene-d5	14.510	117	376265	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.115	152	221955	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.201	113	157925	50.00	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.00%			
53) 1,2-dichloroethane-d4 (s)	10.645	65	185425	50.00	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 100.00%			
75) toluene-d8 (s)	12.857	98	513630	50.00	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 100.00%			
99) 4-bromofluorobenzene (s)	15.802	95	188945	50.00	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.00%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	7.936	59	236080	250.00	ug/L	100
4) 1,4-dioxane	11.848	88	66011	1250.00	ug/L	100
6) chlorodifluoromethane	4.202	51	272493	50.00	ug/L	100
7) dichlorodifluoromethane	4.186	85	287248	50.00	ug/L	100
8) chloromethane	4.536	50	298579	50.00	ug/L	100
9) vinyl chloride	4.840	62	311237	50.00	ug/L	100
10) 1,3-butadiene	4.866	54	159615	50.00	ug/L	100
11) bromomethane	5.525	94	174602	50.00	ug/L	100
12) chloroethane	5.703	64	140018	50.00	ug/L	100
13) vinyl bromide	6.095	106	164227	50.00	ug/L	100
14) trichlorofluoromethane	6.247	101	285403	50.00	ug/L	100
15) ethyl ether	6.670	74	77325	50.00	ug/L	100
16) acrolein	6.916	56	45471	50.00	ug/L	100
17) freon 113	7.115	151	128179	50.00	ug/L	100
18) 1,1-dichloroethene	7.110	96	131330	50.00	ug/L	100
19) acetone	7.151	58	105477	200.00	ug/L	100
20) acetonitrile	7.606	41	401785	500.00	ug/L	100
21) iodomethane	7.392	142	272933	50.00	ug/L	100
22) carbon disulfide	7.528	76	511755	50.00	ug/L	100
23) methylene chloride	7.857	84	151152	50.00	ug/L	100
24) methyl acetate	7.659	43	188467	50.00	ug/L	100
25) methyl tert butyl ether	8.250	73	485400	50.00	ug/L	100
26) trans-1,2-dichloroethene	8.265	96	135369	50.00	ug/L	100
27) hexane	8.626	57	193134	50.00	ug/L	100
28) di-isopropyl ether	8.883	45	527916	50.00	ug/L	100
29) ethyl tert-butyl ether	9.364	59	502466	50.00	ug/L	100
30) 2-butanone	9.589	72	102880	200.00	ug/L	100
31) 1,1-dichloroethane	8.856	63	262400	50.00	ug/L	100
32) chloroprene	8.982	53	224072	50.00	ug/L	100
33) acrylonitrile	8.197	53	90226	50.00	ug/L	100
34) vinyl acetate	8.862	86	26785	50.00	ug/L	100
35) ethyl acetate	9.620	45	32711	50.00	ug/L	100
36) 2,2-dichloropropane	9.646	77	228158	50.00	ug/L	100
37) cis-1,2-dichloroethene	9.620	96	153365	50.00	ug/L	100
38) methyl acrylate	9.698	85	26070	50.00	ug/L	100
39) propionitrile	9.683	54	407738	500.00	ug/L	100
40) bromochloromethane	9.939	128	79673	50.00	ug/L	100
41) tetrahydrofuran	9.997	42	89926	50.00	ug/L	100
42) chloroform	10.002	83	246058	50.00	ug/L	100
43) tert-butyl formate	10.065	59	81871	50.00	ug/L	100
45) methacrylonitrile	9.876	67	77279	50.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236273.D
Acq On : 23 Sep 2017 1:55 am
Operator : ChelseaS
Sample : icc8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 25 08:08:08 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:07:46 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cyclohexane	10.384	84	238883	50.00	ug/L	100
47) 1,1,1-trichloroethane	10.289	97	243764	50.00	ug/L	100
48) iso-butyl alcohol	10.452	43	158214	500.00	ug/L	100
49) 1,1-dichloropropene	10.473	75	191558	50.00	ug/L	100
50) carbon tetrachloride	10.499	117	217002	50.00	ug/L	100
51) tert-amyl alcohol	10.603	73	119158	250.00	ug/L	100
54) benzene	10.739	78	544847	50.00	ug/L	100
55) iso-octane	10.786	57	614258	50.00	ug/L	100
56) tert-amyl methyl ether	10.797	73	490384	50.00	ug/L	100
57) heptane	10.954	71	107793	50.00	ug/L	100
58) isopropyl acetate	10.666	87	37048	50.00	ug/L	100
59) 1,2-dichloroethane	10.734	62	191110	50.00	ug/L	100
60) n-butyl alcohol	11.215	56	502108	2500.00	ug/L	100
61) ethyl acrylate	11.477	55	196563	50.00	ug/L	100
62) trichloroethene	11.471	95	127403	50.00	ug/L	100
63) 2-nitropropane	12.266	41	68154	50.00	ug/L	100
64) methylcyclohexane	11.733	83	295959	50.00	ug/L	100
65) 2-chloroethyl vinyl ether	12.298	63	390839	250.00	ug/L	100
66) methyl methacrylate	11.759	100	38251	50.00	ug/L	100
67) 1,2-dichloropropane	11.743	63	144009	50.00	ug/L	100
68) dibromomethane	11.890	93	87819	50.00	ug/L	100
69) bromodichloromethane	12.031	83	178354	50.00	ug/L	100
70) epichlorohydrin	12.413	57	110466	250.00	ug/L	100
71) cis-1,3-dichloropropene	12.528	75	205834	50.00	ug/L	100
72) 4-methyl-2-pentanone	12.648	58	355222	200.00	ug/L	100
73) 3-methyl-1-butanol	12.648	55	358197	1000.00	ug/L	100
76) toluene	12.936	92	301663	50.00	ug/L	100
77) trans-1,3-dichloropropene	13.129	75	177144	50.00	ug/L	100
78) ethyl methacrylate	13.145	69	185025	50.00	ug/L	100
79) 1,1,2-trichloroethane	13.360	83	95403	50.00	ug/L	100
80) 2-hexanone	13.569	58	303771	200.00	ug/L	100
81) tetrachloroethene	13.574	166	131823	50.00	ug/L	100
82) 1,3-dichloropropane	13.563	76	186321	50.00	ug/L	100
83) butyl acetate	13.658	56	111513	50.00	ug/L	100
84) 3,3-dimethyl-1-butanol	13.747	57	415317	500.00	ug/L	100
85) dibromochloromethane	13.846	129	134142	50.00	ug/L	100
86) 1,2-dibromoethane	14.019	107	121571	50.00	ug/L	100
87) n-butyl ether	14.484	57	620642	50.00	ug/L	100
88) chlorobenzene	14.547	112	326583	50.00	ug/L	100
89) 1,1,1,2-tetrachloroethane	14.615	131	156597	50.00	ug/L	100
90) ethylbenzene	14.620	91	591560	50.00	ug/L	100
91) m,p-xylene	14.740	106	447499	100.00	ug/L	100
92) o-xylene	15.206	106	246566	50.00	ug/L	100
93) styrene	15.211	104	358364	50.00	ug/L	100
94) butyl acrylate	15.012	55	289053	50.00	ug/L	100
95) bromoform	15.483	173	104852	50.00	ug/L	100
96) isopropylbenzene	15.598	105	682046	50.00	ug/L	100
97) cis-1,4-dichloro-2-butene	15.645	75	68718	50.00	ug/L	100
100) bromobenzene	16.022	156	150410	50.00	ug/L	100
101) 1,1,2,2-tetrachloroethane	15.901	83	211633	50.00	ug/L	100
102) trans-1,4-dichloro-2-b...	15.954	53	52347	50.00	ug/L	100
103) 1,2,3-trichloropropane	15.990	110	54596	50.00	ug/L	100
104) n-propylbenzene	16.053	91	749647	50.00	ug/L	100
105) 2-chlorotoluene	16.210	126	157112	50.00	ug/L	100
106) 4-chlorotoluene	16.320	91	408348	50.00	ug/L	100
107) 1,3,5-trimethylbenzene	16.226	105	589658	50.00	ug/L	100
108) tert-butylbenzene	16.623	119	499768	50.00	ug/L	100
109) 1,2,4-trimethylbenzene	16.665	105	588927	50.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236273.D
Acq On : 23 Sep 2017 1:55 am
Operator : ChelseaS
Sample : icc8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 25 08:08:08 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:07:46 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) sec-butylbenzene	16.864	105	783494	50.00	ug/L	100
111) 1,3-dichlorobenzene	17.052	146	287023	50.00	ug/L	100
112) p-isopropyltoluene	16.994	119	660628	50.00	ug/L	100
113) 1,4-dichlorobenzene	17.141	146	291873	50.00	ug/L	100
114) 1,2-dichlorobenzene	17.580	146	307949	50.00	ug/L	100
115) n-butylbenzene	17.455	92	345186	50.00	ug/L	100
116) 1,2-dibromo-3-chloropr...	18.422	157	68882	50.00	ug/L	100
117) 1,3,5-trichlorobenzene	18.647	180	319371	50.00	ug/L	100
118) 2-ethylhexyl acrylate	19.353	70	42472	10.00	ug/L	100
119) 1,2,4-trichlorobenzene	19.364	180	298909	50.00	ug/L	100
120) hexachlorobutadiene	19.515	225	144157	50.00	ug/L	100
121) naphthalene	19.688	128	897213	50.00	ug/L	100
122) 1,2,3-trichlorobenzene	19.960	180	312027	50.00	ug/L	100
123) hexachloroethane	17.884	201	123467	50.00	ug/L	100
124) 2-methylnaphthalene	20.969	142	296687	25.00	ug/L	100

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

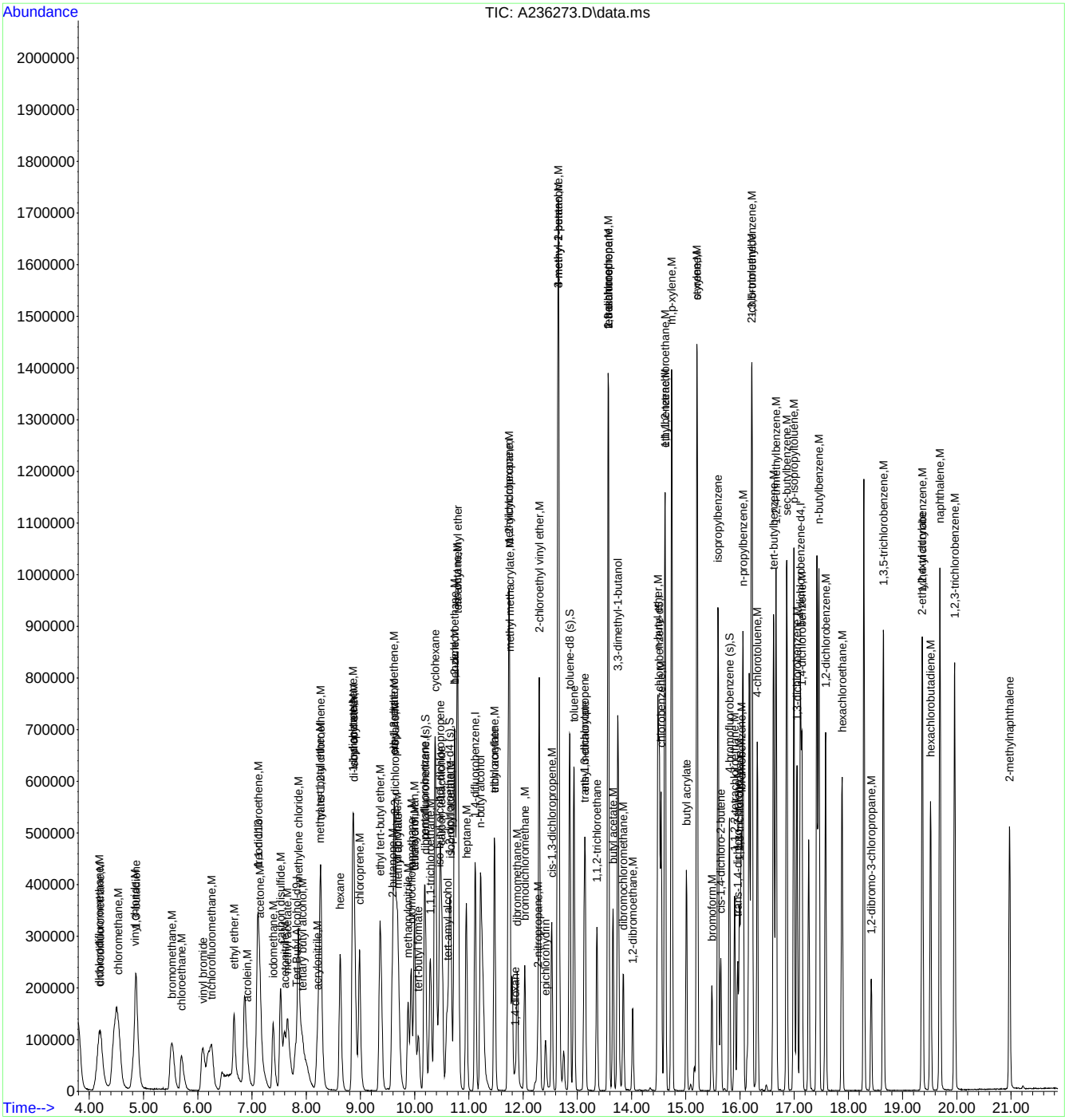
7.6.8

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236273.D
Acq On : 23 Sep 2017 1:55 am
Operator : ChelseaS
Sample : icc8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 25 08:08:08 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:07:46 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236274.D
Acq On : 23 Sep 2017 2:25 am
Operator : ChelseaS
Sample : ic8958-100
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 25 08:08:56 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.820	65	495103	500.00	ug/L		0.00
5) pentafluorobenzene	10.179	168	295285	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.120	114	458574	50.00	ug/L		0.00
74) chlorobenzene-d5	14.515	117	389805	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.114	152	224080	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.205	113	165685	49.04	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.08%				
53) 1,2-dichloroethane-d4 (s)	10.639	65	195756	48.60	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 97.20%				
75) toluene-d8 (s)	12.862	98	549455	51.63	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 103.26%				
99) 4-bromofluorobenzene (s)	15.807	95	191802	50.27	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.54%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.993	59	487204	499.97	ug/L		90
4) 1,4-dioxane	11.858	88	141623	2598.82	ug/L		100
6) chlorodifluoromethane	4.201	51	534779	91.73	ug/L		99
7) dichlorodifluoromethane	4.206	85	557029	90.63	ug/L		98
8) chloromethane	4.562	50	743348	116.36	ug/L		97
9) vinyl chloride	4.855	62	642527	96.49	ug/L		99
10) 1,3-butadiene	4.876	54	353947	103.64	ug/L		98
11) bromomethane	5.529	94	342872	91.78	ug/L		99
12) chloroethane	5.697	64	278647	93.01	ug/L		97
13) vinyl bromide	6.099	106	353468	100.60	ug/L		98
14) trichlorofluoromethane	6.251	101	596547	97.69	ug/L		97
15) ethyl ether	6.675	74	161224	97.45	ug/L		91
16) acrolein	6.921	56	95873	98.55	ug/L		99
17) freon 113	7.125	151	271621	99.04	ug/L		99
18) 1,1-dichloroethene	7.114	96	288416	102.64	ug/L		97
19) acetone	7.161	58	203612	360.89	ug/L		99
20) acetonitrile	7.611	41	812204	944.81	ug/L		100
21) iodomethane	7.397	142	585887	100.33	ug/L		97
22) carbon disulfide	7.533	76	1097290	100.22	ug/L		99
23) methylene chloride	7.862	84	321777	99.50	ug/L		98
24) methyl acetate	7.658	43	381098	94.51	ug/L		98
25) methyl tert butyl ether	8.249	73	1006727	96.94	ug/L		99
26) trans-1,2-dichloroethene	8.270	96	288310	99.54	ug/L		99
27) hexane	8.631	57	398224	96.37	ug/L		99
28) di-isopropyl ether	8.887	45	1077280	95.38	ug/L		97
29) ethyl tert-butyl ether	9.368	59	1035042	96.28	ug/L		98
30) 2-butanone	9.593	72	214671	390.10	ug/L		94
31) 1,1-dichloroethane	8.861	63	537021	95.65	ug/L		98
32) chloroprene	8.986	53	463891	96.76	ug/L		96
33) acrylonitrile	8.197	53	186629	96.68	ug/L		98
34) vinyl acetate	8.856	86	57615	100.54	ug/L	#	74
35) ethyl acetate	9.625	45	70536	100.78	ug/L	#	88
36) 2,2-dichloropropane	9.651	77	466715	95.61	ug/L		99
37) cis-1,2-dichloroethene	9.625	96	317086	96.63	ug/L		100
38) methyl acrylate	9.703	85	57280	102.69	ug/L	#	77
39) propionitrile	9.682	54	834116	956.13	ug/L		94
40) bromochloromethane	9.938	128	163158	95.71	ug/L		96
41) tetrahydrofuran	9.996	42	183865	95.56	ug/L		99
42) chloroform	10.001	83	505253	95.97	ug/L		98
43) tert-butyl formate	10.074	59	167752	95.77	ug/L		96
45) methacrylonitrile	9.881	67	161220	97.51	ug/L		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236274.D
Acq On : 23 Sep 2017 2:25 am
Operator : ChelseaS
Sample : ic8958-100
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 25 08:08:56 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cyclohexane	10.383	84	497508	97.34	ug/L	#	83
47) 1,1,1-trichloroethane	10.294	97	493867	94.69	ug/L		99
48) iso-butyl alcohol	10.451	43	342754	1012.54	ug/L		98
49) 1,1-dichloropropene	10.472	75	403179	98.37	ug/L		99
50) carbon tetrachloride	10.503	117	447499	96.38	ug/L		100
51) tert-amyl alcohol	10.603	73	242264	475.13	ug/L		95
54) benzene	10.739	78	1121722	94.78	ug/L		99
55) iso-octane	10.786	57	1355546	101.59	ug/L		98
56) tert-amyl methyl ether	10.796	73	1015748	95.35	ug/L		99
57) heptane	10.953	71	227236	97.05	ug/L		98
58) isopropyl acetate	10.671	87	75024	93.22	ug/L		95
59) 1,2-dichloroethane	10.733	62	393133	94.70	ug/L		99
60) n-butyl alcohol	11.220	56	1058697	4853.30	ug/L		99
61) ethyl acrylate	11.476	55	403628	94.53	ug/L		99
62) trichloroethene	11.471	95	271582	98.13	ug/L		98
63) 2-nitropropane	12.266	41	141202	95.38	ug/L		95
64) methylcyclohexane	11.732	83	626815	97.50	ug/L		99
65) 2-chloroethyl vinyl ether	12.297	63	803522	473.22	ug/L		98
66) methyl methacrylate	11.758	100	81592	98.20	ug/L	#	91
67) 1,2-dichloropropane	11.748	63	300374	96.02	ug/L		98
68) dibromomethane	11.894	93	186555	97.79	ug/L		97
69) bromodichloromethane	12.030	83	370678	95.68	ug/L		100
70) epichlorohydrin	12.417	57	226176	471.28	ug/L		100
71) cis-1,3-dichloropropene	12.527	75	430907	96.37	ug/L		99
72) 4-methyl-2-pentanone	12.648	58	709559	367.82	ug/L		97
73) 3-methyl-1-butanol	12.648	55	722655	1857.51	ug/L		99
76) toluene	12.940	92	629972	100.79	ug/L		100
77) trans-1,3-dichloropropene	13.129	75	363556	99.05	ug/L		98
78) ethyl methacrylate	13.144	69	370874	96.74	ug/L		98
79) 1,1,2-trichloroethane	13.364	83	195201	98.75	ug/L		97
80) 2-hexanone	13.573	58	593838	377.40	ug/L		95
81) tetrachloroethene	13.579	166	276628	101.28	ug/L		99
82) 1,3-dichloropropane	13.568	76	378830	98.13	ug/L		97
83) butyl acetate	13.662	56	220524	95.44	ug/L		100
84) 3,3-dimethyl-1-butanol	13.751	57	860419	999.88	ug/L		99
85) dibromochloromethane	13.851	129	273537	98.42	ug/L		98
86) 1,2-dibromoethane	14.023	107	241852	96.01	ug/L		98
87) n-butyl ether	14.483	57	1218271	94.74	ug/L		99
88) chlorobenzene	14.546	112	665886	98.41	ug/L		98
89) 1,1,1,2-tetrachloroethane	14.614	131	321184	98.99	ug/L		99
90) ethylbenzene	14.619	91	1173509	95.74	ug/L		99
91) m,p-xylene	14.740	106	911297	196.57	ug/L		98
92) o-xylene	15.205	106	506632	99.17	ug/L		98
93) styrene	15.210	104	729434	98.24	ug/L		99
94) butyl acrylate	15.012	55	556025	92.84	ug/L		98
95) bromoform	15.482	173	212289	97.72	ug/L		99
96) isopropylbenzene	15.597	105	1392356	98.53	ug/L		98
97) cis-1,4-dichloro-2-butene	15.644	75	137225	96.38	ug/L		97
100) bromobenzene	16.026	156	299241	98.53	ug/L		94
101) 1,1,2,2-tetrachloroethane	15.901	83	411624	96.33	ug/L		98
102) trans-1,4-dichloro-2-b...	15.958	53	99914	94.53	ug/L		93
103) 1,2,3-trichloropropane	15.990	110	103290	93.70	ug/L		96
104) n-propylbenzene	16.058	91	1484153	98.05	ug/L		98
105) 2-chlorotoluene	16.209	126	319594	100.74	ug/L		98
106) 4-chlorotoluene	16.319	91	807882	97.98	ug/L		98
107) 1,3,5-trimethylbenzene	16.225	105	1191880	100.11	ug/L		99
108) tert-butylbenzene	16.622	119	1060635	105.11	ug/L		97
109) 1,2,4-trimethylbenzene	16.664	105	1188043	99.91	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236274.D
Acq On : 23 Sep 2017 2:25 am
Operator : ChelseaS
Sample : ic8958-100
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 25 08:08:56 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration

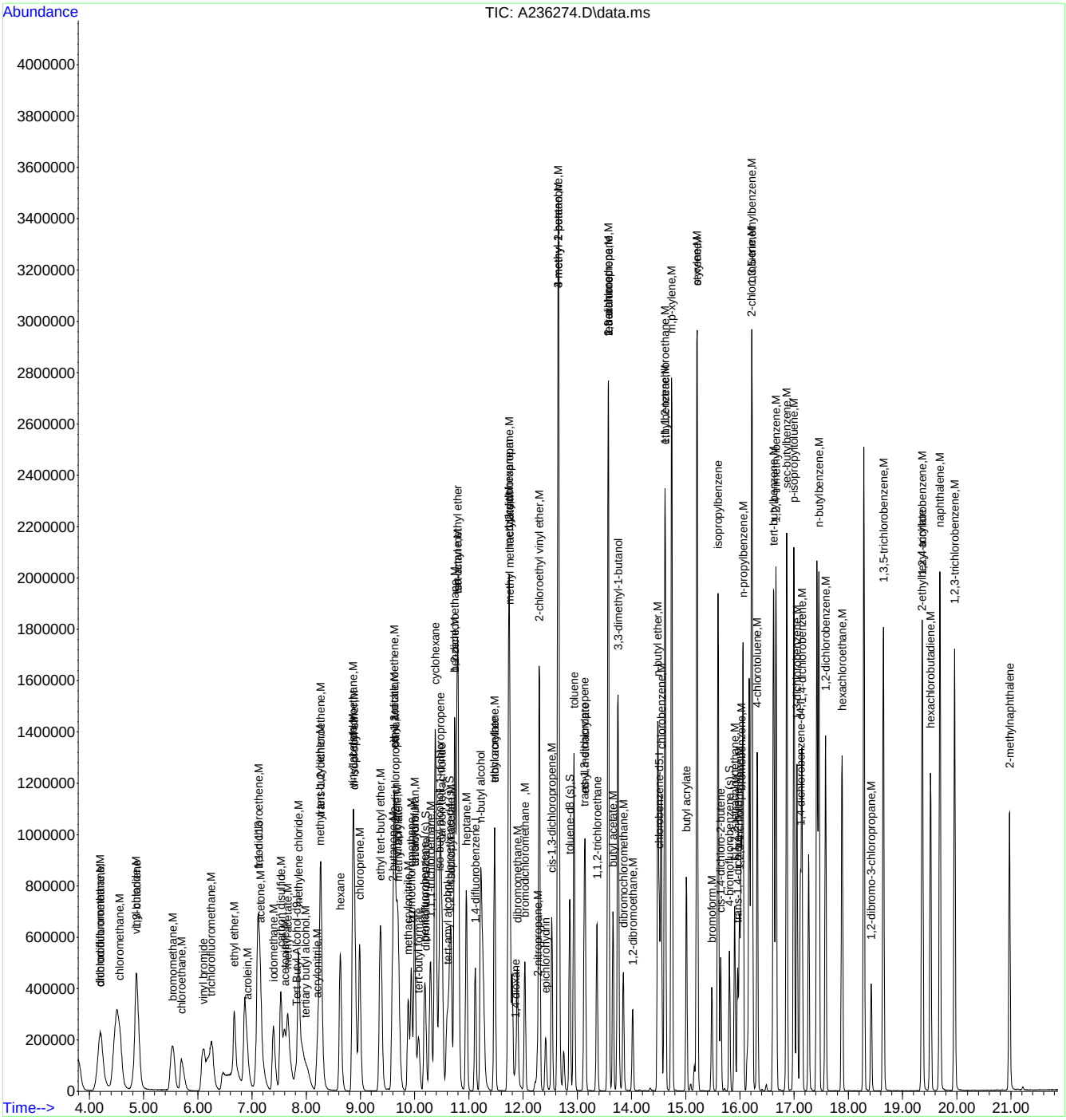
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) sec-butylbenzene	16.863	105	1637951	103.54	ug/L	99
111) 1,3-dichlorobenzene	17.051	146	577171	99.59	ug/L	100
112) p-isopropyltoluene	16.994	119	1348597	101.10	ug/L	98
113) 1,4-dichlorobenzene	17.140	146	578541	98.17	ug/L	99
114) 1,2-dichlorobenzene	17.580	146	620719	99.83	ug/L	98
115) n-butylbenzene	17.454	92	694086	99.58	ug/L	99
116) 1,2-dibromo-3-chloropr...	18.422	157	137658	98.98	ug/L	97
117) 1,3,5-trichlorobenzene	18.647	180	658119	102.06	ug/L	100
118) 2-ethylhexyl acrylate	19.353	70	95170	22.20	ug/L	99
119) 1,2,4-trichlorobenzene	19.363	180	627387	103.95	ug/L	100
120) hexachlorobutadiene	19.515	225	319550	109.78	ug/L	98
121) naphthalene	19.687	128	1808829	99.85	ug/L	99
122) 1,2,3-trichlorobenzene	19.959	180	647119	102.71	ug/L	99
123) hexachloroethane	17.883	201	273801	109.83	ug/L	99
124) 2-methylnaphthalene	20.974	142	636755	53.15	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236274.D
Acq On : 23 Sep 2017 2:25 am
Operator : ChelseaS
Sample : ic8958-100
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 25 08:08:56 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236275.D
Acq On : 23 Sep 2017 2:54 am
Operator : ChelseaS
Sample : ic8958-200
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 25 09:04:55 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.826	65	477968	500.00	ug/L		0.01
5) pentafluorobenzene	10.185	168	296751	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.116	114	486003	50.00	ug/L		0.00
74) chlorobenzene-d5	14.511	117	436912	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.115	152	249855	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.201	113	164851	48.55	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 97.10%				
53) 1,2-dichloroethane-d4 (s)	10.646	65	200720	47.02	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 94.04%				
75) toluene-d8 (s)	12.863	98	591435	49.58	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.16%				
99) 4-bromofluorobenzene (s)	15.802	95	208572	49.03	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 98.06%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.957	59	886011	941.82	ug/L		96
4) 1,4-dioxane	11.859	88	251451	4779.62	ug/L		100
6) chlorodifluoromethane	4.207	51	1081666	184.61	ug/L		98
7) dichlorodifluoromethane	4.197	85	1106049	179.08	ug/L		96
9) vinyl chloride	4.861	62	1269205	189.65	ug/L		96
10) 1,3-butadiene	4.887	54	703489	204.98	ug/L		97
11) bromomethane	5.530	94	675431	179.91	ug/L		98
12) chloroethane	5.698	64	531425	176.51	ug/L		96
13) vinyl bromide	6.095	106	714488	202.34	ug/L		99
14) trichlorofluoromethane	6.247	101	1192804	194.37	ug/L		97
15) ethyl ether	6.671	74	304205	182.97	ug/L		94
16) acrolein	6.911	56	188363	192.66	ug/L		100
17) freon 113	7.115	151	550189	199.63	ug/L		99
18) 1,1-dichloroethene	7.105	96	570325	201.97	ug/L		99
19) acetone	7.157	58	381000	671.97	ug/L		92
20) acetonitrile	7.602	41	1596679	1848.19	ug/L		100
21) iodomethane	7.392	142	1178609	200.83	ug/L		99
22) carbon disulfide	7.528	76	2165259	196.78	ug/L		99
23) methylene chloride	7.858	84	626357	192.72	ug/L		99
24) methyl acetate	7.659	43	744251	183.66	ug/L		98
25) methyl tert butyl ether	8.255	73	1994908	191.14	ug/L		100
26) trans-1,2-dichloroethene	8.266	96	556794	191.29	ug/L		99
27) hexane	8.627	57	774680	186.55	ug/L		100
28) di-isopropyl ether	8.883	45	2107244	185.64	ug/L		95
29) ethyl tert-butyl ether	9.369	59	2047959	189.56	ug/L		98
30) 2-butanone	9.594	72	440317	796.19	ug/L	#	89
31) 1,1-dichloroethane	8.862	63	1031603	182.84	ug/L		98
32) chloroprene	8.982	53	896254	186.02	ug/L		96
33) acrylonitrile	8.198	53	363904	187.58	ug/L		96
34) vinyl acetate	8.857	86	117263	203.61	ug/L	#	67
35) ethyl acetate	9.626	45	144364	205.25	ug/L	#	79
36) 2,2-dichloropropane	9.652	77	927756	189.11	ug/L		99
37) cis-1,2-dichloroethene	9.626	96	618248	187.48	ug/L		100
38) methyl acrylate	9.704	85	121363	216.51	ug/L	#	72
39) propionitrile	9.688	54	1662087	1895.81	ug/L		88
40) bromochloromethane	9.939	128	325765	190.16	ug/L		96
41) tetrahydrofuran	9.992	42	366675	189.64	ug/L		97
42) chloroform	10.002	83	985315	186.23	ug/L		99
43) tert-butyl formate	10.070	59	332984	189.15	ug/L		95
45) methacrylonitrile	9.882	67	328371	197.62	ug/L		95
46) cyclohexane	10.384	84	1004609	195.58	ug/L	#	79

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236275.D
Acq On : 23 Sep 2017 2:54 am
Operator : ChelseaS
Sample : ic8958-200
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 25 09:04:55 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) 1,1,1-trichloroethane	10.290	97	983554	187.65	ug/L		99
48) iso-butyl alcohol	10.452	43	570390	1676.68	ug/L		98
49) 1,1-dichloropropene	10.468	75	802956	194.95	ug/L		98
50) carbon tetrachloride	10.504	117	890851	190.93	ug/L		99
51) tert-amyl alcohol	10.604	73	469611	916.45	ug/L		98
54) benzene	10.740	78	2265840	180.64	ug/L		98
55) iso-octane	10.787	57	2788553	197.19	ug/L		99
56) tert-amyl methyl ether	10.797	73	2074249	183.73	ug/L		99
57) heptane	10.954	71	462733	186.47	ug/L		98
58) isopropyl acetate	10.677	87	156721	183.75	ug/L	#	93
59) 1,2-dichloroethane	10.734	62	789898	179.54	ug/L		98
60) n-butyl alcohol	11.226	56	2048655	8861.44	ug/L		98
61) ethyl acrylate	11.477	55	855559	189.06	ug/L		98
62) trichloroethene	11.472	95	563074	191.98	ug/L		99
63) 2-nitropropane	12.267	41	284849	181.55	ug/L		96
64) methylcyclohexane	11.733	83	1257767	184.60	ug/L		98
65) 2-chloroethyl vinyl ether	12.298	63	1671146	928.64	ug/L		98
66) methyl methacrylate	11.760	100	176715	200.68	ug/L		91
67) 1,2-dichloropropane	11.749	63	618037	186.42	ug/L		99
68) dibromomethane	11.890	93	391157	193.48	ug/L		98
69) bromodichloromethane	12.031	83	770132	187.56	ug/L		100
70) epichlorohydrin	12.419	57	470079	924.22	ug/L		99
71) cis-1,3-dichloropropene	12.528	75	918522	193.84	ug/L		98
72) 4-methyl-2-pentanone	12.654	58	1433936	701.38	ug/L		87
73) 3-methyl-1-butanol	12.649	55	1399397	3394.00	ug/L		98
76) toluene	12.942	92	1322173	188.73	ug/L		98
77) trans-1,3-dichloropropene	13.130	75	777616	189.02	ug/L		98
78) ethyl methacrylate	13.146	69	783381	182.31	ug/L		98
79) 1,1,2-trichloroethane	13.365	83	420927	189.98	ug/L		96
80) 2-hexanone	13.569	58	1232184	698.65	ug/L		93
81) tetrachloroethene	13.580	166	598744	195.58	ug/L		98
82) 1,3-dichloropropane	13.564	76	805725	186.21	ug/L		97
83) butyl acetate	13.658	56	465843	179.88	ug/L		99
84) 3,3-dimethyl-1-butanol	13.752	57	1688398	1750.51	ug/L		98
85) dibromochloromethane	13.846	129	596416	191.45	ug/L		99
86) 1,2-dibromoethane	14.019	107	518881	183.78	ug/L		99
87) n-butyl ether	14.484	57	2454796	170.31	ug/L		99
88) chlorobenzene	14.547	112	1449104	191.06	ug/L		98
89) 1,1,1,2-tetrachloroethane	14.610	131	678922	186.68	ug/L		98
90) ethylbenzene	14.620	91	2458701	178.97	ug/L		96
91) m,p-xylene	14.741	106	1962253	377.63	ug/L		89
92) o-xylene	15.206	106	1081703	188.91	ug/L		94
93) styrene	15.211	104	1569570	188.59	ug/L		99
94) butyl acrylate	15.013	55	1152089	171.62	ug/L		96
95) bromoform	15.483	173	455319	186.99	ug/L		96
96) isopropylbenzene	15.598	105	2867063	181.01	ug/L		95
97) cis-1,4-dichloro-2-butene	15.646	75	289102	181.16	ug/L		97
100) bromobenzene	16.027	156	663554	195.95	ug/L		93
101) 1,1,2,2-tetrachloroethane	15.902	83	863068	181.14	ug/L		100
102) trans-1,4-dichloro-2-b...	15.959	53	202111	171.49	ug/L		87
103) 1,2,3-trichloropropane	15.991	110	220389	179.30	ug/L		98
104) n-propylbenzene	16.059	91	3070346	181.92	ug/L		93
105) 2-chlorotoluene	16.210	126	701818	198.41	ug/L		95
106) 4-chlorotoluene	16.320	91	1745587	189.87	ug/L		97
107) 1,3,5-trimethylbenzene	16.226	105	2574374	193.92	ug/L		96
108) tert-butylbenzene	16.624	119	2310255	205.32	ug/L		96
109) 1,2,4-trimethylbenzene	16.665	105	2556668	192.82	ug/L		97
110) sec-butylbenzene	16.864	105	3408973	193.26	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236275.D
Acq On : 23 Sep 2017 2:54 am
Operator : ChelseaS
Sample : ic8958-200
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 25 09:04:55 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration

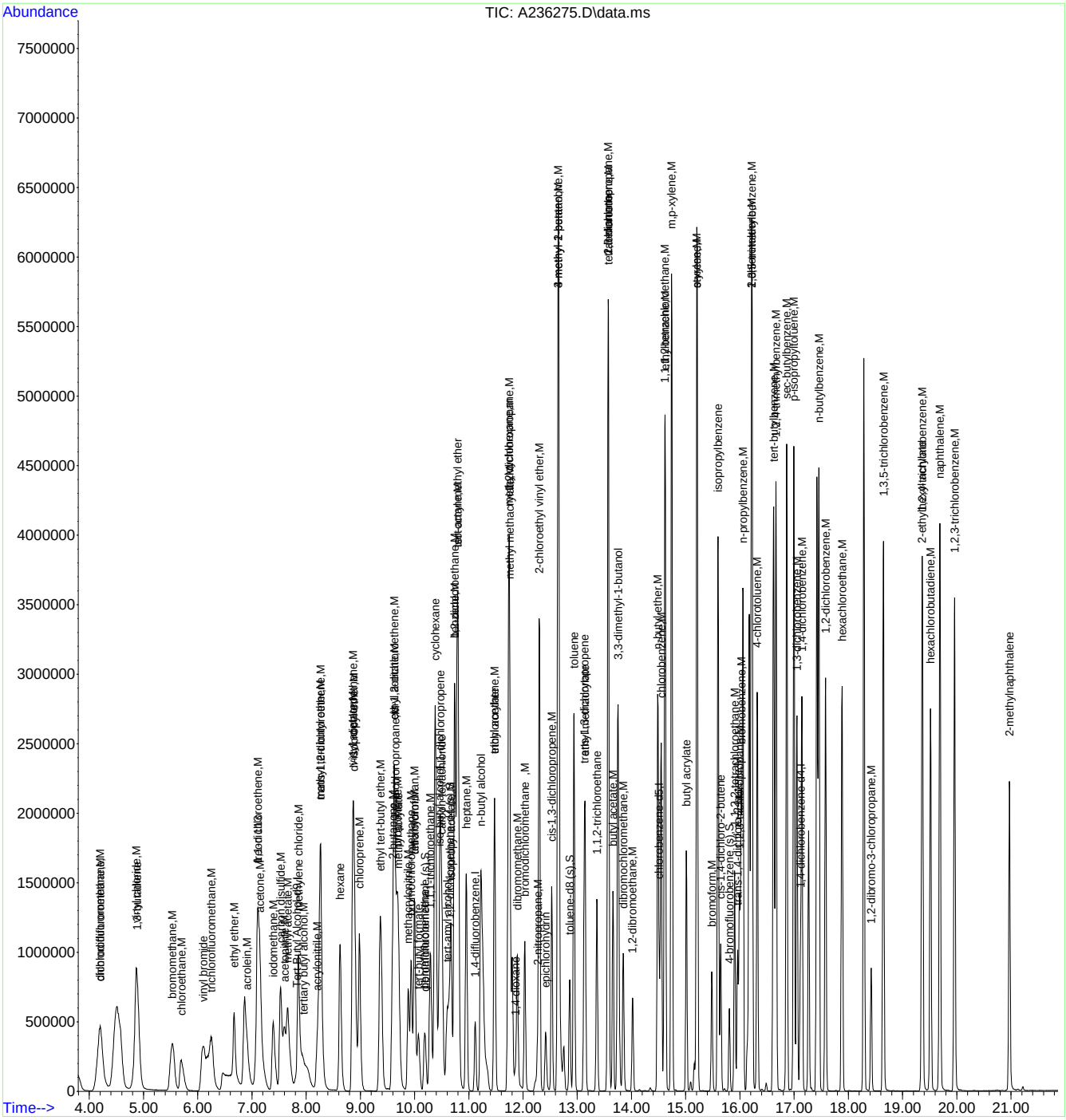
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
111) 1,3-dichlorobenzene	17.052	146	1255901	194.35 ug/L	98
112) p-isopropyltoluene	16.995	119	2874408	193.26 ug/L	95
113) 1,4-dichlorobenzene	17.141	146	1266755	192.77 ug/L	98
114) 1,2-dichlorobenzene	17.581	146	1343684	193.81 ug/L	97
115) n-butylbenzene	17.455	92	1526268	196.39 ug/L	94
116) 1,2-dibromo-3-chloropr...	18.423	157	295094	190.28 ug/L	97
117) 1,3,5-trichlorobenzene	18.648	180	1404807	195.37 ug/L	98
118) 2-ethylhexyl acrylate	19.354	70	215899	45.16 ug/L	97
119) 1,2,4-trichlorobenzene	19.364	180	1330463	197.70 ug/L	99
120) hexachlorobutadiene	19.516	225	703912	216.89 ug/L	99
121) naphthalene	19.688	128	3610627	178.75 ug/L	96
122) 1,2,3-trichlorobenzene	19.960	180	1336175	190.20 ug/L	100
123) hexachloroethane	17.884	201	619376	222.82 ug/L	98
124) 2-methylnaphthalene	20.970	142	1301263	97.41 ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236275.D
Acq On : 23 Sep 2017 2:54 am
Operator : ChelseaS
Sample : ic8958-200
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 25 09:04:55 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:08:52 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236278.D
Acq On : 23 Sep 2017 4:22 am
Operator : ChelseaS
Sample : icv8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 25 08:57:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:55:37 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.818	65	501539	500.00	ug/L		0.00
5) pentafluorobenzene	10.177	168	292781	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.118	114	447962	50.00	ug/L		0.00
74) chlorobenzene-d5	14.513	117	397420	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.112	152	232315	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.203	113	164966	49.66	ug/L		0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.32%				
53) 1,2-dichloroethane-d4 (s)	10.642	65	189371	47.28	ug/L		0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 94.56%				
75) toluene-d8 (s)	12.860	98	542066	48.93	ug/L		0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 97.86%				
99) 4-bromofluorobenzene (s)	15.805	95	198174	50.54	ug/L		0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 101.08%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.938	59	235967	246.60	ug/L		94
4) 1,4-dioxane	11.856	88	70153	1377.45	ug/L		99
6) chlorodifluoromethane	4.204	51	204603	41.56	ug/L		93
7) dichlorodifluoromethane	4.199	85	290065	53.43	ug/L		98
8) chloromethane	4.544	50	275458	46.30	ug/L		94
9) vinyl chloride	4.837	62	295840	47.27	ug/L		99
10) 1,3-butadiene	4.863	54	195571	57.83	ug/L		97
11) bromomethane	5.517	94	165788	46.68	ug/L		97
12) chloroethane	5.695	64	136034	47.08	ug/L		98
13) vinyl bromide	6.092	106	264413	79.17	ug/L		99
14) trichlorofluoromethane	6.239	101	270612	47.42	ug/L		97
15) ethyl ether	6.668	74	78660	51.49	ug/L		93
16) acrolein	6.908	56	49819	54.42	ug/L		93
17) freon 113	7.107	151	155729	59.82	ug/L		99
18) 1,1-dichloroethene	7.107	96	127428	46.62	ug/L		97
19) acetone	7.154	58	93064	179.44	ug/L		98
20) acetonitrile	7.604	41	176467	218.40	ug/L		96
21) iodomethane	7.389	142	271047	49.26	ug/L		99
22) carbon disulfide	7.525	76	508641	45.94	ug/L		99
23) methylene chloride	7.855	84	156364	48.78	ug/L		98
24) methyl acetate	7.661	43	171993	45.79	ug/L		97
25) methyl tert butyl ether	8.247	73	1002554	101.85	ug/L		94
26) trans-1,2-dichloroethene	8.268	96	138387	48.71	ug/L		99
27) hexane	8.634	57	143965	38.59	ug/L		99
28) di-isopropyl ether	8.885	45	528112	50.49	ug/L		97
29) ethyl tert-butyl ether	9.366	59	506446	50.72	ug/L		99
30) 2-butanone	9.586	72	103743	199.47	ug/L	#	86
31) 1,1-dichloroethane	8.859	63	266074	49.48	ug/L		98
32) chloroprene	8.984	53	226017	51.59	ug/L		95
33) acrylonitrile	8.200	53	96395	53.48	ug/L		97
34) vinyl acetate	8.854	86	28999	52.32	ug/L	#	61
35) ethyl acetate	9.628	45	33636	49.02	ug/L	#	69
36) 2,2-dichloropropane	9.649	77	224670	48.53	ug/L		99
37) cis-1,2-dichloroethene	9.623	96	157673	50.10	ug/L		96
38) methyl acrylate	9.706	85	27012	51.07	ug/L	#	71
39) propionitrile	9.680	54	379726	467.06	ug/L		99
40) bromochloromethane	9.936	128	79612	49.18	ug/L		98
41) tetrahydrofuran	9.994	42	93087	53.04	ug/L		100
42) chloroform	9.999	83	249445	48.00	ug/L		100
43) tert-butyl formate	10.067	59	95881	57.03	ug/L		98
45) methacrylonitrile	9.879	67	77684	51.76	ug/L		91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236278.D
Acq On : 23 Sep 2017 4:22 am
Operator : ChelseaS
Sample : icv8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 25 08:57:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:55:37 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cyclohexane	10.381	84	237353	50.97	ug/L #	83
47) 1,1,1-trichloroethane	10.287	97	241008	50.05	ug/L	99
48) iso-butyl alcohol	10.444	43	158948	519.82	ug/L	96
49) 1,1-dichloropropene	10.470	75	188871	50.39	ug/L	99
50) carbon tetrachloride	10.501	117	214790	50.86	ug/L	100
51) tert-amyl alcohol	10.601	73	116904	257.80	ug/L	95
54) benzene	10.737	78	547078	49.97	ug/L	99
55) iso-octane	10.784	57	607653	51.72	ug/L	98
56) tert-amyl methyl ether	10.799	73	495288	49.68	ug/L	98
57) heptane	10.951	71	111972	53.74	ug/L	99
58) isopropyl acetate	10.669	87	37265	50.72	ug/L	98
59) 1,2-dichloroethane	10.731	62	194498	49.57	ug/L	97
60) n-butyl alcohol	11.218	56	512580	2707.53	ug/L	99
61) ethyl acrylate	11.474	55	197263	53.45	ug/L	98
62) trichloroethene	11.469	95	132049	50.01	ug/L	97
63) 2-nitropropane	12.269	41	69441	51.27	ug/L	89
64) methylcyclohexane	11.736	83	274079	47.00	ug/L	100
65) 2-chloroethyl vinyl ether	12.300	63	440930	296.17	ug/L	98
66) methyl methacrylate	11.756	100	40565	52.59	ug/L	95
67) 1,2-dichloropropane	11.746	63	150366	52.00	ug/L	99
68) dibromomethane	11.892	93	91140	49.80	ug/L	99
69) bromodichloromethane	12.028	83	181613	51.95	ug/L	98
70) epichlorohydrin	12.415	57	114589	267.89	ug/L	98
71) cis-1,3-dichloropropene	12.525	75	208477	53.89	ug/L	97
72) 4-methyl-2-pentanone	12.651	58	361725	210.37	ug/L	98
73) 3-methyl-1-butanol	12.651	55	348149	1035.49	ug/L	100
76) toluene	12.938	92	306251	49.59	ug/L	99
77) trans-1,3-dichloropropene	13.127	75	181336	51.92	ug/L	97
78) ethyl methacrylate	13.148	69	182502	51.09	ug/L	99
79) 1,1,2-trichloroethane	13.362	83	100576	52.29	ug/L	96
80) 2-hexanone	13.571	58	305032	196.48	ug/L	94
81) tetrachloroethene	13.577	166	140480	51.42	ug/L	99
82) 1,3-dichloropropane	13.566	76	189536	50.96	ug/L	96
83) butyl acetate	13.660	56	117126	51.12	ug/L	95
84) 3,3-dimethyl-1-butanol	13.749	57	410786	502.37	ug/L	99
85) dibromochloromethane	13.849	129	140095	53.99	ug/L	98
86) 1,2-dibromoethane	14.021	107	125060	51.67	ug/L	98
87) n-butyl ether	14.487	57	604610	49.76	ug/L	100
88) chlorobenzene	14.544	112	336014	50.22	ug/L	99
89) 1,1,1,2-tetrachloroethane	14.612	131	160786	50.20	ug/L	98
90) ethylbenzene	14.623	91	593447	50.45	ug/L	99
91) m,p-xylene	14.743	106	459377	102.66	ug/L	96
92) o-xylene	15.208	106	250113	50.80	ug/L	98
93) styrene	15.214	104	369360	52.01	ug/L	98
94) butyl acrylate	15.015	55	293892	51.45	ug/L	97
95) bromoform	15.480	173	110879	52.91	ug/L	94
96) isopropylbenzene	15.595	105	683825	51.63	ug/L	99
97) cis-1,4-dichloro-2-butene	15.648	75	66672	49.49	ug/L	96
100) bromobenzene	16.024	156	155273	52.95	ug/L	96
101) 1,1,2,2-tetrachloroethane	15.899	83	216714	52.57	ug/L	99
102) trans-1,4-dichloro-2-b...	15.956	53	55660	51.75	ug/L	88
103) 1,2,3-trichloropropane	15.993	110	56938	52.40	ug/L	97
104) n-propylbenzene	16.056	91	756099	51.96	ug/L	99
105) 2-chlorotoluene	16.207	126	160374	52.42	ug/L	95
106) 4-chlorotoluene	16.317	91	415852	50.82	ug/L	99
107) 1,3,5-trimethylbenzene	16.223	105	591181	53.81	ug/L	99
108) tert-butylbenzene	16.620	119	516389	56.35	ug/L	99
109) 1,2,4-trimethylbenzene	16.662	105	596087	53.45	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236278.D
Acq On : 23 Sep 2017 4:22 am
Operator : ChelseaS
Sample : icv8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 25 08:57:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:55:37 2017
Response via : Initial Calibration

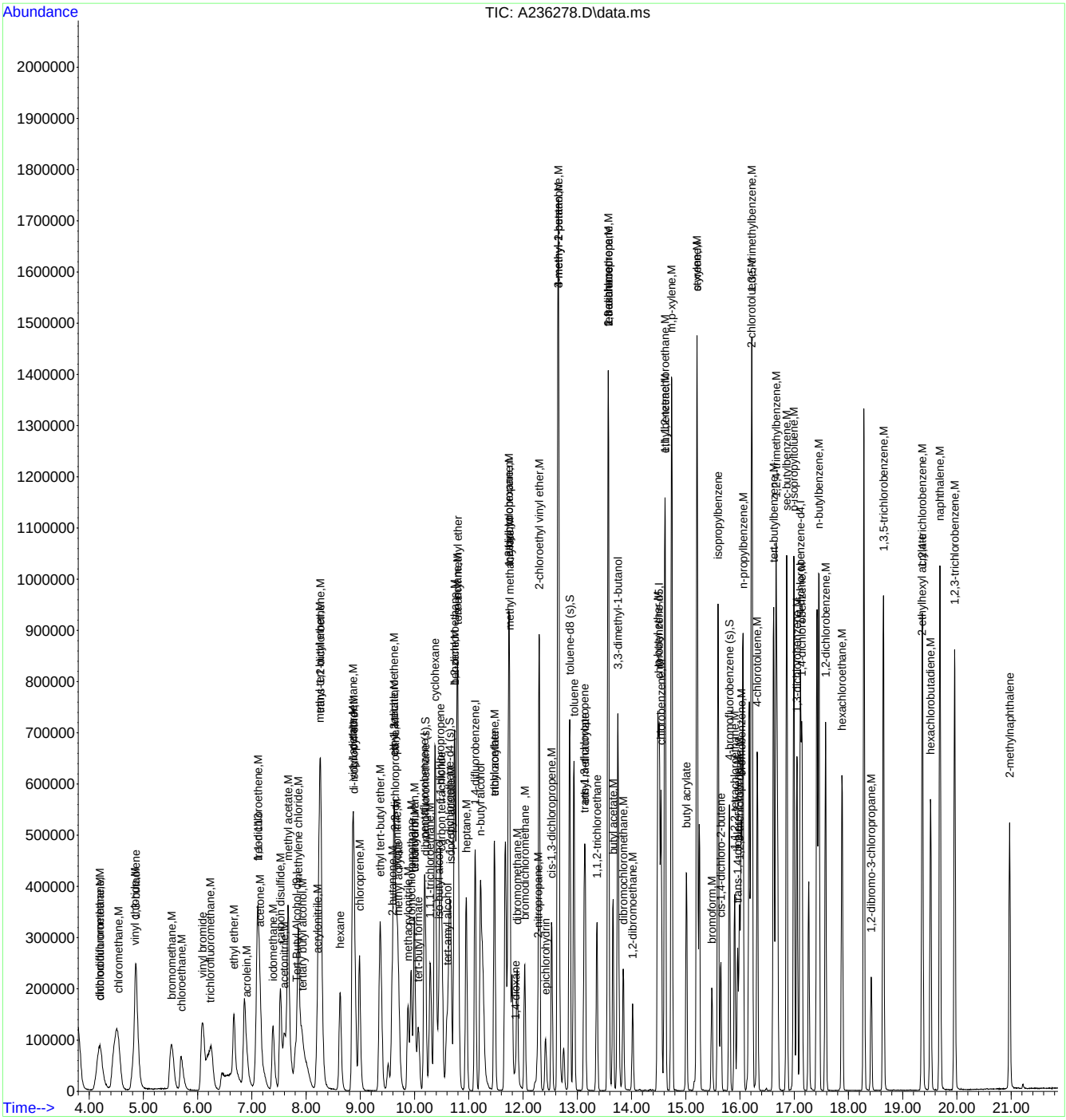
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) sec-butylbenzene	16.861	105	800619	54.98 ug/L	100
111) 1,3-dichlorobenzene	17.055	146	303728	51.85 ug/L	98
112) p-isopropyltoluene	16.997	119	680352	55.26 ug/L	98
113) 1,4-dichlorobenzene	17.144	146	302378	49.47 ug/L	97
114) 1,2-dichlorobenzene	17.578	146	325056	51.70 ug/L	99
115) n-butylbenzene	17.457	92	350122	52.06 ug/L	99
116) 1,2-dibromo-3-chloropr...	18.420	157	71251	51.94 ug/L	99
117) 1,3,5-trichlorobenzene	18.645	180	345490	52.70 ug/L	99
118) 2-ethylhexyl acrylate	19.351	70	47486	10.67 ug/L	94
119) 1,2,4-trichlorobenzene	19.366	180	316713	50.09 ug/L	98
120) hexachlorobutadiene	19.518	225	149657	52.30 ug/L	99
121) naphthalene	19.691	128	931435	51.32 ug/L	100
122) 1,2,3-trichlorobenzene	19.957	180	324576	51.39 ug/L	99
123) hexachloroethane	17.886	201	128103	53.48 ug/L	99
124) 2-methylnaphthalene	20.972	142	290348	24.61 ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236278.D
Acq On : 23 Sep 2017 4:22 am
Operator : ChelseaS
Sample : icv8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 25 08:57:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:55:37 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236279.D
Acq On : 23 Sep 2017 4:51 am
Operator : ChelseaS
Sample : icv8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 25 08:59:32 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:55:37 2017
Response via : Initial Calibration

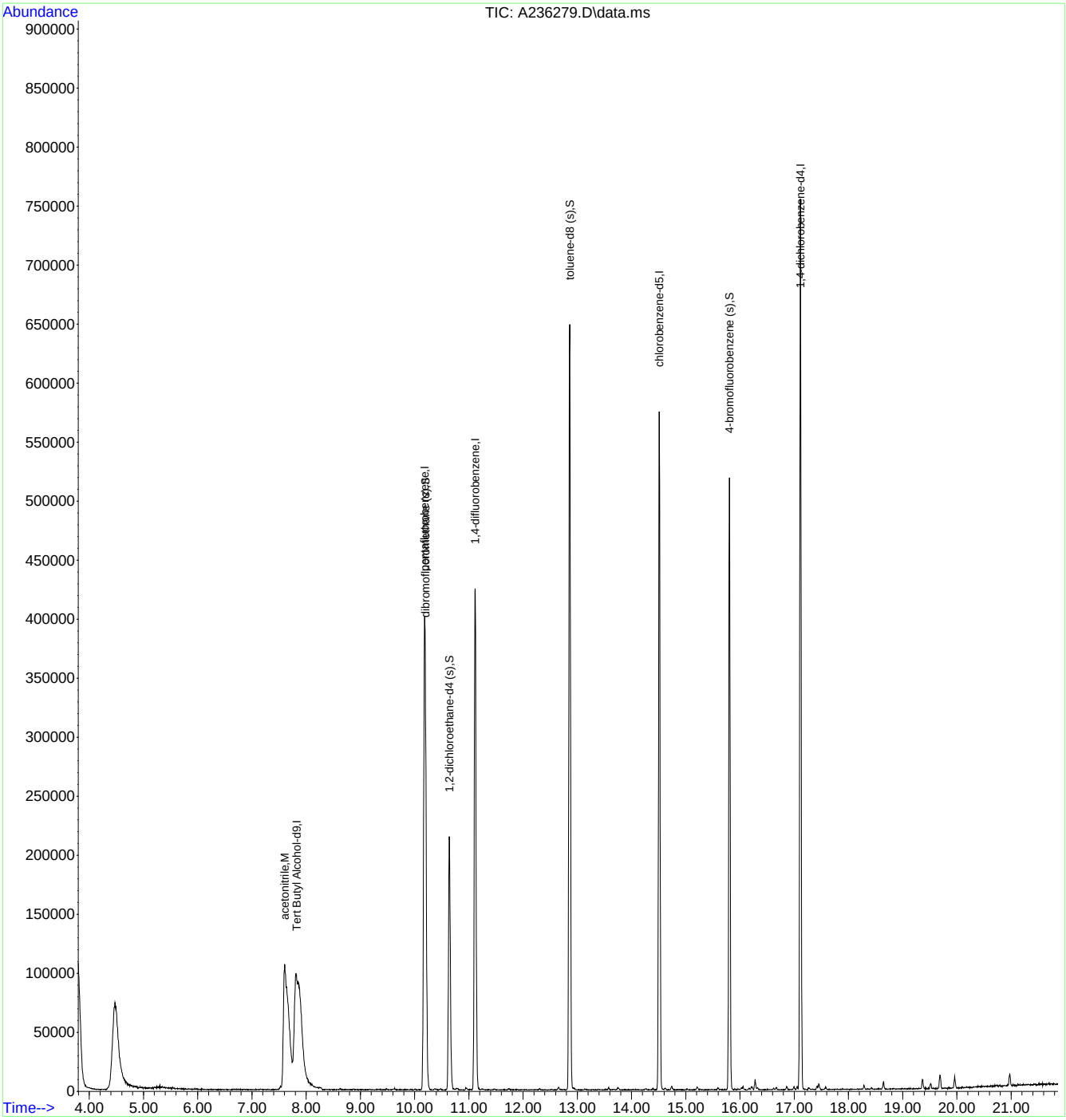
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.822	65	491433	500.00	ug/L	0.00
5) pentafluorobenzene	10.181	168	284842	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.117	114	414819	50.00	ug/L	0.00
74) chlorobenzene-d5	14.512	117	352770	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.116	152	218639	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.202	113	159654	49.40	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.80%			
53) 1,2-dichloroethane-d4 (s)	10.636	65	180129	48.57	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 97.14%			
75) toluene-d8 (s)	12.859	98	481585	48.97	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 97.94%			
99) 4-bromofluorobenzene (s)	15.804	95	182863	49.55	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.10%			
Target Compounds						Qvalue
20) acetonitrile	7.603	41	421158	535.77	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A236279.D
Acq On : 23 Sep 2017 4:51 am
Operator : ChelseaS
Sample : icv8958-50
Misc : MS20266,VA8958,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 25 08:59:32 2017
Quant Method : C:\MSDCHEM\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Mon Sep 25 08:55:37 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\a237000-237999\
Data File : A237144.D
Acq On : 19 Oct 2017 3:34 am
Operator : Gabriela
Sample : icv8958-50
Misc : MS21095,VA8958,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 19 15:49:05 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 09:28:57 2017
Response via : Initial Calibration

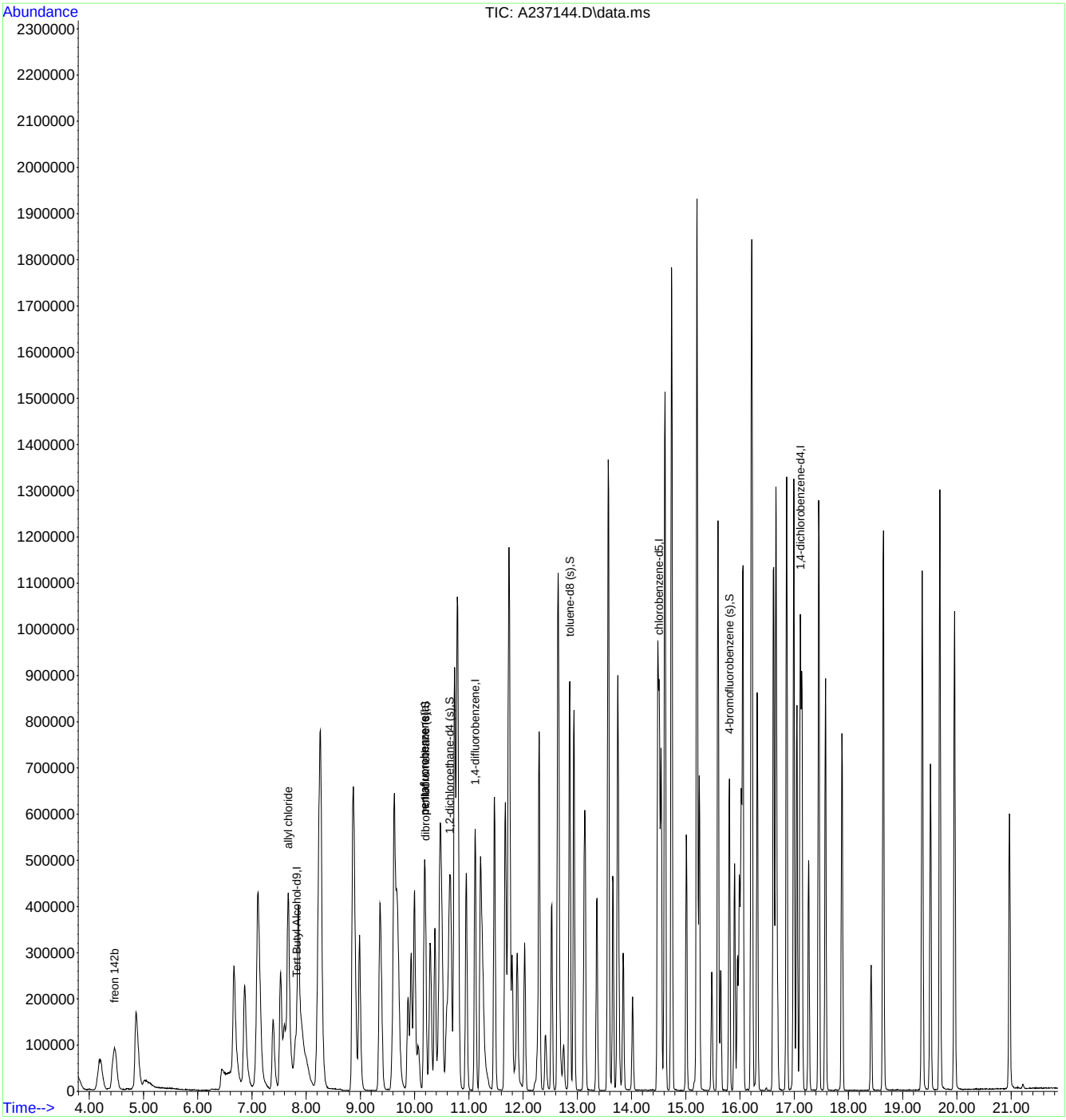
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.818	65	586606	500.00	ug/L	0.00
5) pentafluorobenzene	10.182	168	328784	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.118	114	526829	50.00	ug/L	0.00
74) chlorobenzene-d5	14.512	117	488081	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.112	152	283003	50.00	ug/L	0.00
125) pentafluorobenzene(a)	10.182	168	328784	50.00	ug/L	-0.02
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.203	113	193483	51.86	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.72%			
53) 1,2-dichloroethane-d4 (s)	10.642	65	237168	50.35	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.70%			
75) toluene-d8 (s)	12.860	98	649856	47.76	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.52%			
99) 4-bromofluorobenzene (s)	15.804	95	235164	49.23	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.46%			
Target Compounds						Qvalue
126) freon 142b	4.465	65	265377	40.35	ug/L	96
127) allyl chloride	7.671	76	105485	52.71	ug/L #	64

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\a237000-237999\
Data File : A237144.D
Acq On : 19 Oct 2017 3:34 am
Operator : Gabriela
Sample : icv8958-50
Misc : MS21095,VA8958,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 19 15:49:05 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Thu Oct 19 09:28:57 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A237814.D
Acq On : 9 Nov 2017 9:46 pm
Operator : Gabriela
Sample : cc8958-50
Misc : MS21798,VA9023,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Nov 10 09:25:01 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Nov 10 09:24:35 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	7.807	65	595423	500.00	ug/L		0.00
5) pentafluorobenzene	10.181	168	392341	50.00	ug/L		0.00
52) 1,4-difluorobenzene	11.118	114	599708	50.00	ug/L		0.00
74) chlorobenzene-d5	14.512	117	538697	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.111	152	295066	50.00	ug/L		0.00
125) pentafluorobenzene(a)	10.181	168	392341	50.00	ug/L		-0.02
System Monitoring Compounds							
44) dibromofluoromethane (s)	10.202	113	208393	46.81	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 93.62%				
53) 1,2-dichloroethane-d4 (s)	10.642	65	217415	40.55	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 81.10%				
75) toluene-d8 (s)	12.859	98	691179	46.03	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 92.06%				
99) 4-bromofluorobenzene (s)	15.804	95	242329	48.66	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.32%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	7.927	59	270182	237.84	ug/L		93
4) 1,4-dioxane	11.855	88	75622	1250.71	ug/L		95
6) chlorodifluoromethane	4.198	51	256806	38.93	ug/L		97
7) dichlorodifluoromethane	4.188	85	287914	39.58	ug/L		96
8) chloromethane	4.554	50	331398	41.57	ug/L		96
9) vinyl chloride	4.852	62	370704	44.20	ug/L		99
10) 1,3-butadiene	4.857	54	35574	7.85	ug/L		95
11) bromomethane	5.532	94	223614	46.98	ug/L		99
12) chloroethane	5.710	64	169642	43.81	ug/L		94
13) vinyl bromide	6.102	106	196397	43.88	ug/L		98
14) trichlorofluoromethane	6.254	101	309649	40.49	ug/L		99
15) ethyl ether	6.672	74	100821	49.25	ug/L		88
16) acrolein	6.907	56	57185	46.62	ug/L		100
17) freon 113	7.122	151	153744	44.07	ug/L		98
18) 1,1-dichloroethene	7.106	96	163906	44.75	ug/L		88
19) acetone	7.153	58	113040	162.65	ug/L	#	79
20) acetonitrile	7.608	41	414704	383.01	ug/L		98
21) iodomethane	7.399	142	352478	47.80	ug/L		96
22) carbon disulfide	7.530	76	626192	42.21	ug/L		96
23) methylene chloride	7.859	84	194827	45.36	ug/L		89
24) methyl acetate	7.655	43	212920	42.30	ug/L		94
25) methyl tert butyl ether	8.241	73	562949	42.68	ug/L		98
26) trans-1,2-dichloroethene	8.272	96	173839	45.66	ug/L		92
27) hexane	8.628	57	211259	42.26	ug/L		96
28) di-isopropyl ether	8.879	45	568317	40.55	ug/L		92
29) ethyl tert-butyl ether	9.366	59	552350	41.28	ug/L		96
30) 2-butanone	9.590	72	127022	182.25	ug/L	#	75
31) 1,1-dichloroethane	8.858	63	312003	43.30	ug/L		97
32) chloroprene	8.989	53	235327	40.09	ug/L		90
33) acrylonitrile	8.194	53	107760	44.62	ug/L		97
34) vinyl acetate	8.858	86	33280	44.80	ug/L	#	52
35) ethyl acetate	9.617	45	36450	39.64	ug/L		96
36) 2,2-dichloropropane	9.648	77	255129	41.12	ug/L		98
37) cis-1,2-dichloroethene	9.622	96	198517	47.07	ug/L		93
38) methyl acrylate	9.700	85	35005	49.38	ug/L	#	68
39) propionitrile	9.679	54	476174	437.07	ug/L		93
40) bromochloromethane	9.936	128	101904	46.97	ug/L	#	86
41) tetrahydrofuran	9.988	42	91289	38.82	ug/L		86
42) chloroform	9.998	83	295179	42.39	ug/L		97
43) tert-butyl formate	10.066	59	15465	6.86	ug/L	#	55

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A237814.D
Acq On : 9 Nov 2017 9:46 pm
Operator : Gabriela
Sample : cc8958-50
Misc : MS21798,VA9023,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Nov 10 09:25:01 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Nov 10 09:24:35 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) methacrylonitrile	9.878	67	95552	47.51	ug/L		85
46) cyclohexane	10.385	84	273576	43.84	ug/L	#	85
47) 1,1,1-trichloroethane	10.291	97	271225	42.03	ug/L		97
48) iso-butyl alcohol	10.448	43	161978	395.30	ug/L		98
49) 1,1-dichloropropene	10.469	75	220690	43.94	ug/L		96
50) carbon tetrachloride	10.500	117	240400	42.48	ug/L		99
51) tert-amyl alcohol	10.600	73	134882	221.96	ug/L		98
54) benzene	10.736	78	668023	45.58	ug/L		98
55) iso-octane	10.783	57	662574	42.12	ug/L		95
56) tert-amyl methyl ether	10.793	73	566105	42.41	ug/L		99
57) heptane	10.950	71	127148	45.58	ug/L		95
58) isopropyl acetate	10.673	87	45742	46.51	ug/L	#	73
59) 1,2-dichloroethane	10.731	62	206380	39.29	ug/L		98
60) n-butyl alcohol	11.217	56	560195	2210.31	ug/L		92
61) ethyl acrylate	11.473	55	230141	46.58	ug/L		98
62) trichloroethene	11.468	95	159557	45.14	ug/L		99
63) 2-nitropropane	12.263	41	58692	32.37	ug/L		86
64) methylcyclohexane	11.735	83	342952	43.93	ug/L		94
65) 2-chloroethyl vinyl ether	12.300	63	158346	79.45	ug/L		97
66) methyl methacrylate	11.756	100	50575	48.98	ug/L	#	78
67) 1,2-dichloropropane	11.745	63	172667	44.60	ug/L		98
68) dibromomethane	11.892	93	111525	45.52	ug/L		95
69) bromodichloromethane	12.028	83	209779	44.82	ug/L		98
70) epichlorohydrin	12.415	57	122660	214.20	ug/L		96
71) cis-1,3-dichloropropene	12.525	75	247140	47.72	ug/L		93
72) 4-methyl-2-pentanone	12.650	58	428771	186.27	ug/L	#	83
73) 3-methyl-1-butanol	12.645	55	400442	889.66	ug/L		93
76) toluene	12.938	92	377439	45.09	ug/L		99
77) trans-1,3-dichloropropene	13.126	75	210750	44.52	ug/L		99
78) ethyl methacrylate	13.147	69	221628	45.77	ug/L		92
79) 1,1,2-trichloroethane	13.361	83	122359	46.93	ug/L		96
80) 2-hexanone	13.571	58	364693	173.30	ug/L	#	86
81) tetrachloroethene	13.576	166	167976	45.36	ug/L		99
82) 1,3-dichloropropane	13.565	76	230176	45.66	ug/L		97
83) butyl acetate	13.659	56	130709	42.09	ug/L		89
84) 3,3-dimethyl-1-butanol	13.748	57	460337	415.33	ug/L		93
85) dibromochloromethane	13.848	129	164179	46.68	ug/L		99
86) 1,2-dibromoethane	14.020	107	155212	47.31	ug/L		99
87) n-butyl ether	14.481	57	703599	42.72	ug/L		95
88) chlorobenzene	14.543	112	413763	45.62	ug/L		98
89) 1,1,1,2-tetrachloroethane	14.606	131	190273	43.83	ug/L		98
90) ethylbenzene	14.622	91	702194	44.04	ug/L		98
91) m,p-xylene	14.737	106	558507	92.08	ug/L		98
92) o-xylene	15.202	106	308349	46.20	ug/L		99
93) styrene	15.208	104	439688	45.67	ug/L		97
94) butyl acrylate	15.009	55	320514	41.39	ug/L		96
95) bromoform	15.480	173	130706	46.01	ug/L		97
96) isopropylbenzene	15.595	105	819747	45.66	ug/L		98
97) cis-1,4-dichloro-2-butene	15.642	75	65588	35.92	ug/L		95
100) bromobenzene	16.024	156	183565	49.29	ug/L		92
101) 1,1,2,2-tetrachloroethane	15.898	83	261805	50.00	ug/L		97
102) trans-1,4-dichloro-2-b...	15.956	53	45392	33.23	ug/L	#	80
103) 1,2,3-trichloropropane	15.992	110	66409	48.12	ug/L		95
104) n-propylbenzene	16.055	91	878977	47.56	ug/L		98
105) 2-chlorotoluene	16.207	126	190880	49.12	ug/L		98
106) 4-chlorotoluene	16.316	91	478144	46.01	ug/L		98
107) 1,3,5-trimethylbenzene	16.222	105	689095	49.39	ug/L		98
108) tert-butylbenzene	16.620	119	586262	50.37	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A237814.D
Acq On : 9 Nov 2017 9:46 pm
Operator : Gabriela
Sample : cc8958-50
Misc : MS21798,VA9023,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Nov 10 09:25:01 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Nov 10 09:24:35 2017
Response via : Initial Calibration

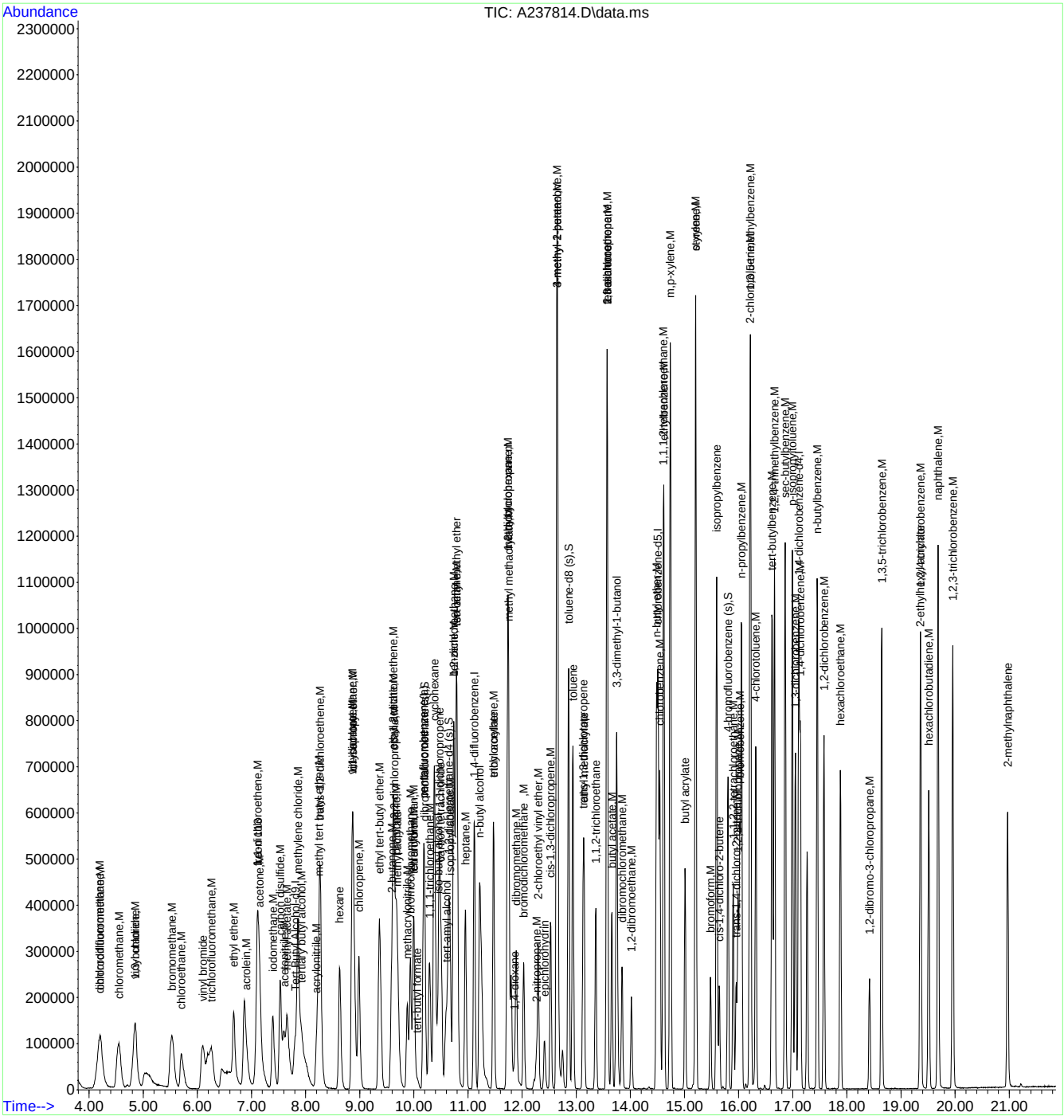
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
109) 1,2,4-trimethylbenzene	16.662	105	692086	48.86	ug/L	99
110) sec-butylbenzene	16.860	105	928275	50.19	ug/L	99
111) 1,3-dichlorobenzene	17.049	146	344073	46.25	ug/L	100
112) p-isopropyltoluene	16.991	119	764064	48.86	ug/L	97
113) 1,4-dichlorobenzene	17.143	146	345139	44.45	ug/L	98
114) 1,2-dichlorobenzene	17.577	146	366949	45.95	ug/L	98
115) n-butylbenzene	17.451	92	380434	44.54	ug/L	98
116) 1,2-dibromo-3-chloropr...	18.419	157	81884	47.00	ug/L	94
117) 1,3,5-trichlorobenzene	18.644	180	374364	44.96	ug/L	98
118) 2-ethylhexyl acrylate	19.350	70	39632	7.01	ug/L	89
119) 1,2,4-trichlorobenzene	19.360	180	356635	44.40	ug/L	99
120) hexachlorobutadiene	19.512	225	171757	47.26	ug/L	99
121) naphthalene	19.685	128	1074144	46.60	ug/L	99
122) 1,2,3-trichlorobenzene	19.957	180	366874	45.74	ug/L	98
123) hexachloroethane	17.880	201	147610	48.51	ug/L	98
124) 2-methylnaphthalene	20.971	142	351861	23.48	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : A237814.D
Acq On : 9 Nov 2017 9:46 pm
Operator : Gabriela
Sample : cc8958-50
Misc : MS21798,VA9023,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Nov 10 09:25:01 2017
Quant Method : C:\msdchem\1\METHODS\MA8958.m
Quant Title : SW 846 8260C DB624 60m x 0.25mm x 1.4um
QLast Update : Fri Nov 10 09:24:35 2017
Response via : Initial Calibration



SGS

VOLATILE ANALYSIS LOG

Batch ID: VA8958

Date: 9/22/2017

Print Analyst Name: Oyinade (Dara) Fakuro

Analyst Signature: Oyinade Fakuro 09/22/17

Columns: RTX624(60m x .25mm x 1.4um)

Method V8260C

Initial Cal. Method MA8958

Standard Data

Lot #	Description	Conc.
VO17-2530-123	ABK Mix	100-10,000 ppm
VO17-2530-103	C STD	100 ppm
VO17-2530-127	C STD	100 ppm
VO17-2530-114	8260 SL	100 ppm
VO17-2530-89	Ext AB mix	100-10,000 ppm
VO17-2530-128	Ext. C	100-5000 ppm

Standard Data

Lot #	Description	Conc.
VO17-2530-97	Ext Ketones	200ppm
VO17-2530-94	Ext E STD	100ppm
VO17-2530-100	Ext. Hexane	100ppm
VO17-2530-114	Ext freon 114	100ppm
VO17-2530-113	Ext. SL	100 ppm
VO17-2530-101	Ext. acetonitrile	1000 ppm

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: 9/25/2017

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
	VA236264	BFB				1	5						Not run		
	236265	BFB				1	5							BFB Failed (4)	
	236265	BFB				1	5						ok	9:44AM	
	236266	IC8958-0.2				2	5						ok	1uL ABK,C,E,SL/500mL	
	236267	IC8958-0.5				3	5						ok	2.5uL ABK,C,E,SL/500mL	
	236268	IC8958-1				4	5						ok	1uL ABK,C,E,SL/100mL	
	236269	IC8958-2				5	5						ok	2uL ABK,C,E,SL/100mL	
	236270	IC8958-5				6	5						ok	5uL ABK,C,E,SL/100mL	
	236271	IC8958-10				7	5						ok	10uL ABK,C,E,SL/100mL	
	236272	IC8958-20				8	5						ok	20uL ABK,C,E,SL/100mL	
	236273	ICC8958-50				9	5						ok	50uL ABK,C,E,SL/100mL	
	236274	IC8958-100				10	5						ok	100uL ABK,C,E,SL/100mL	
	236275	IC8958-200				11	5						ok	200uL ABK,C,E,SL/100mL	
	236276	IB				12	5						clip		
	236277	IB				13	5						clip		
	236278	ICV8958-50				14	5						ok	50uL cal.AB,C,E,SL,hexane,ketones/100mL	
	236279	ICV8958-50				15	5						ok	50uL cal acetonitrile freon 114/100mL	
	236280	IB				16	5								

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

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SGS

VOLATILE ANALYSIS LOG

Batch ID: VA ~~8958~~ 8995 10/19/17

Print Analyst Name: AUSTIN PARK

Date: 10/18/2017

Analyst Signature:

Columns: DB624 (60m x 0.25mm x 1.4µm)

Method V 8260 C

Initial Cal. Method MA8958

Standard Data

Lot #	Description	Conc.
019-2814-M	① SL	100ppm
019-1330-149	I/S	200/100ppm

Standard Data

Lot #	Description	Conc.
019-1330-142	② EXT. AB MIX	100-10,000ppm
019-1330-136	EXT FH4B4FM2B.	100ppm
019-1330-175	EXT. 1,3 BUTADIENE	100ppm

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: 10/19/17

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
	A237131	BFB				1							Ok		
	237132	ICV8958-0.2	8260C initial calibration	AQ		2	5						not used	0.5µL SL/100mL D.I. H2O	
	237133	ICV8958-0.5	V	AQ		3	5						not used	0.5µL SL/100mL D.I. H2O.	
	237134	ICV8958-1	✓	AQ		4	5						Ok	1µL SL/100mL D.I. H2O.	
	237135	ICV8958-2	V	AQ		5	5						Ok	2µL SL/100mL D.I. H2O	
	237136	ICV8958-5	V	AQ		6	5						Ok	5µL SL/100mL D.I. H2O	
	237137	ICV8958-10	V	AQ		7	5						Ok	10µL SL/100mL D.I. H2O	
	237138	ICV8958-20	✓	AQ		8	5						Ok	20µL SL/100mL D.I. H2O.	
	237139	ICV8958-50	V	AQ		9	5						Ok	50µL SL/100mL D.I. H2O.	
	237140	ICV8958-100	V	AQ		10	5						Ok	100µL SL/100mL D.I. H2O.	
	237141	ICV8958-200	V	AQ		11	5						Ok	200µL SL/100mL D.I. H2O	
	237142	IB				12							—		
	237143	IB				13							—		
	237144	ICV8958-50	✓	AQ		14	5						Ok	50µL EXT-AB, EXT. 1,3BUTADIENE, EXT. FH4B4FM2B.	
	237145	IB.				15							—		
													Ok 10/18/2017		

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

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

SGS

VOLATILE ANALYSIS LOG

Batch ID: ~~VA9022~~ VA9023 (GCA 11/09/17) VA9023

Date: ~~11/10/17~~ 11/09/17 (GCA 11/9/17)

Print Analyst Name: GAH-MVC/KEJ

Analyst Signature:

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

Method V8260C

Initial Cal. Method MA8958

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
VM11254	28.29 AIBIK	100ppm
VC11254-424	C	100ppm
VOA11254-12	F	100ppm
MOA11254-24	I/S	50/50ppm
VHH1254	DA216035	

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: 11/10/17

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
	A237814	CC8958-50IB5IB				24					✓	✓	OK	7h, 59h 9:40am 50uAIBIICCE 1100ML	
	237815	~~CC8958-50~~ IB									✓	✓			
	237815A	IB CC8950-0.5				25					✓	✓	OK	FOR SCH 1ul ABIK, CE → 200mL	
	237816	CC8950-2									✓	✓	OK	FOR H + 2ul ABIK, CE → 100mL	
	237816A	IMB				26					✓	✓	OK		
	237817	BS				27					✓	✓	OK	50uAIBIKCE/100mL	
	237818	JC54707-1MS	21903 TCL20	6 W	1	28	10/50		5X		✓	✓	OK	50uAIBIKCE/100mL	✓
	237819	JC54707-1MSD	V	6 W	1	29	10/50		5X		✓	✓	OK		✓
	237820A	IB									✓	✓			
	237820	IB JC55009	21903 TCL20	W		30	5		1X ✓		✓	✓	OK		✓
	237821	JC54455-8	21785 TCL20	W	1	31	5		1X.		✓	✓	OK		✓
	237822	JC54707-16	21903 TCL20	W	1	32	5		1X		✓	✓	OK		✓
	237823	JC54704-4	21903 TCL20	6 W	2	33	5		1X		✓	✓	OK	RR 25X f/D	✓
	237824	JC55112-1		6	2		5		1X		✓	✓	OK		✓
	237824A	JC54707-1	V	W		34	10/50		5X		✓	✓	OK	RR 5X CCHit	✓
	237825	JC54707-1	V	6 W	1	35	1/50		50X		✓	✓	OK		✓
	237826	JC54455-7	21785 TCL20	6 W		36	25/50		2X		✓	✓	OK		✓
	237827	JC54455-1	V	6 W		37	2.5/50		20X		✓	✓	OK		✓
	237828	JC54704-2	21903 TCL20	6 W	2	38	25/50		2X		✓	✓	OK RR	RR 2X CCHit	✓
	237829	JC54704-2	V	6 W	2	39	2.5/50		20X		✓	✓	OK		✓
	237830	JC54704-1	V	6 W	2	40	5		1X		✓	✓	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

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

SGS

VOLATILE ANALYSIS LOG

Batch ID: VA9023

Date: ~~11/9/17~~ ~~BCA 11/10/17~~ BCA 11/10/17

Print Analyst Name: Gabi Angeret

Analyst Signature:

Columns: DB624 (60m x 0.25mm x 1.4 um)

Method V8260C

Initial Cal. Method V4A8458

Standard Data		
Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.
	See pg 195	

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: 11/17/17

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
	A237831	JC54704-3	21903 TCL10		2	41	5		1X		VV		CC		✓
	237832	JC54707-4	✓		1	42	5		1X		VV		CC		✓
	237833	JC54707-3	✓		1	43	5		1X		VV		CC		✓
	237834	JC54707-4	✓		2	44	5		1X				~~NR~~ CC per 11/9/17		
	237835	JC54707-5	✓		1	45	5		1X				NR		
	237836	JC54455-1	21798 TCL10	W	2	46	5		1X				NR		
	237837	JC54455-3	✓	W	1	47	5		1X				NOT RUN		
	237838	JC54455-4	✓	W	2	48	5		1X				NOT RUN		
	237837	JC55009-1	22001 TCL42	C		49	5		1X				NR		
1	237834	JC54675-9	22586 TCL00		4	43	0.5/10		100X		VV		CC		✓
	237835	JC55009-1	2201 TCL42	C	3	~~44~~	5		1X		VV		NOT RUN		

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

HS 11/17/17

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Form: ORG001-10
Rev. Date: 1/19/16

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

HSW Engineering

Long Island GW Sampling, Long Island, NY

1AS301101.063

SGS Job Number: JC57987

Sampling Date: 12/21/17

Report to:

RPoff@HSWEng.com
DSmolensky@Emagin-Inc.com

ATTN: Distribution3

Total number of pages in report: 52

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)

Sections: 1 2 3 4 5 6

Table of Contents

Sample Summary

HSW Engineering

Job No: JC57987

Long Island GW Sampling, Long Island, NY
Project No: 1AS301101.063

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC57987-1	12/21/17	16:20	AR	12/22/17	AQ	Ground Water	MW-300
JC57987-2	12/21/17	15:40	AR	12/22/17	AQ	Ground Water	MW-301
JC57987-2D	12/21/17	15:40	AR	12/22/17	AQ	Water Dup/MSD	MW-301
JC57987-2S	12/21/17	15:40	AR	12/22/17	AQ	Water Matrix Spike	MW-301
JC57987-3	12/21/17	00:00	AR	12/22/17	AQ	Ground Water	DUP
JC57987-4	12/21/17	16:20	AR	12/22/17	AQ	Trip Blank Water	TB 12-21-17
JC57987-5	12/21/17	11:30	AR	12/22/17	AQ	Equipment Blank	EB 12-21-17

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	HSW Engineering	**Job No**	JC57987
Site:	Long Island GW Sampling, Long Island, NY	**Report Date**	1/9/2018 3:44:06 PM

On 12/22/2017, 3 Sample(s), 1 Trip Blank(s) and 1 Equipment Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2.9 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC57987 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:** VD10278

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC57987-2MS, JC57987-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Bromodichloromethane, Bromoform, Dibromochloromethane are outside control limits. High percent recoveries and no associated positive reported in the QC batch.
- Matrix Spike Recovery(s) for Chloroethane, Chloromethane, Dichlorodifluoromethane, Trichlorofluoromethane, Vinyl chloride are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Bromoform, Chloroethane, Chloromethane, Dibromochloromethane, Dichlorodifluoromethane, Trichlorofluoromethane, Vinyl chloride are outside control limits. Outside control limits due to matrix interference.
- JC57987-4 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57987-4 for Dibromochloromethane: Associated CCV and BS outside of control limits high, sample was ND.
- JC57987-4 for Bromodichloromethane: Associated CCV and BS outside of control limits high, sample was ND.
- JC57987-1 for Dibromochloromethane: Associated CCV and BS outside of control limits high, sample was ND.
- JC57987-2 for Bromodichloromethane: Associated CCV and BS outside of control limits high, sample was ND.
- JC57987-5 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC57987-4 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC57987-5 for Bromodichloromethane: Associated CCV and BS outside of control limits high, sample was ND.
- JC57987-5 for Bromoform: Associated CCV and BS outside of control limits high, sample was ND.
- JC57987-5 for Dibromochloromethane: Associated CCV and BS outside of control limits high, sample was ND.
- JC57987-5 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57987-4 for Bromoform: Associated CCV and BS outside of control limits high, sample was ND.
- JC57987-1 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57987-2 for Bromoform: Associated CCV and BS outside of control limits high, sample was ND.
- JC57987-2 for Dibromochloromethane: Associated CCV and BS outside of control limits high, sample was ND.
- JC57987-2 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57987-2 for Chloromethane: Associated CCV outside of control limits high, sample was ND.
- JC57987-2 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC57987-1 for Bromodichloromethane: Associated CCV and BS outside of control limits high, sample was ND.
- JC57987-4 for Chloromethane: Associated CCV outside of control limits high, sample was ND.
- JC57987-3 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.

MS Volatiles By Method SW846 8260C

Matrix: AQ **Batch ID:** VD10278

- JC57987-1 for Chloromethane: Associated CCV outside of control limits high, sample was ND.
- JC57987-5 for Chloromethane: Associated CCV outside of control limits high, sample was ND.
- JC57987-1 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC57987-3 for Bromodichloromethane: Associated CCV and BS outside of control limits high, sample was ND.
- JC57987-3 for Bromoform: Associated CCV and BS outside of control limits high, sample was ND.
- JC57987-3 for Dibromochloromethane: Associated CCV and BS outside of control limits high, sample was ND.
- JC57987-3 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57987-3 for Chloromethane: Associated CCV outside of control limits high, sample was ND.
- JC57987-1 for Bromoform: Associated CCV and BS outside of control limits high, sample was ND.

SGS North America Inc. 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 North America Inc. 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 North America Inc indicated via signature on the report cover

Summary of Hits

Job Number: JC57987
Account: HSW Engineering
Project: Long Island GW Sampling, Long Island, NY
Collected: 12/21/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC57987-1	**MW-300**					
Chloroform		0.41 J	1.0	0.29	ug/l	SW846 8260C
1,1-Dichloroethane		4.2	1.0	0.21	ug/l	SW846 8260C
1,1-Dichloroethene		1.2	1.0	0.47	ug/l	SW846 8260C
Tetrachloroethene		1.0	1.0	0.50	ug/l	SW846 8260C
1,1,1-Trichloroethane		0.41 J	1.0	0.25	ug/l	SW846 8260C
Trichloroethene		3.2	1.0	0.27	ug/l	SW846 8260C
JC57987-2	**MW-301**					
Chloroform		0.39 J	1.0	0.29	ug/l	SW846 8260C
1,1-Dichloroethane		2.1	1.0	0.21	ug/l	SW846 8260C
1,1-Dichloroethene		1.1	1.0	0.47	ug/l	SW846 8260C
cis-1,2-Dichloroethene		0.72 J	1.0	0.50	ug/l	SW846 8260C
Tetrachloroethene		1.2	1.0	0.50	ug/l	SW846 8260C
1,1,1-Trichloroethane		0.38 J	1.0	0.25	ug/l	SW846 8260C
Trichloroethene		1.7	1.0	0.27	ug/l	SW846 8260C
JC57987-3	**DUP**					
Chloroform		0.44 J	1.0	0.29	ug/l	SW846 8260C
1,1-Dichloroethane		4.2	1.0	0.21	ug/l	SW846 8260C
1,1-Dichloroethene		1.2	1.0	0.47	ug/l	SW846 8260C
Tetrachloroethene		1.1	1.0	0.50	ug/l	SW846 8260C
1,1,1-Trichloroethane		0.42 J	1.0	0.25	ug/l	SW846 8260C
Trichloroethene		3.0	1.0	0.27	ug/l	SW846 8260C
JC57987-4	**TB 12-21-17**					
No hits reported in this sample.						
JC57987-5	**EB 12-21-17**					
No hits reported in this sample.						

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-300		
Lab Sample ID:	JC57987-1	**Date Sampled:**	12/21/17
Matrix:	AQ - Ground Water	**Date Received:**	12/22/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D254852.D	1	01/04/18 04:02	TDN	n/a	n/a	VD10278
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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 [a]	ND	1.0	0.22	ug/l	
75-25-2	Bromoform [a]	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	0.50	ug/l	
56-23-5	Carbon tetrachloride [b]	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	0.41	1.0	0.29	ug/l	J
74-87-3	Chloromethane [b]	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 [a]	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 [b]	ND	2.0	1.9	ug/l	
75-34-3	1,1-Dichloroethane	4.2	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	1.2	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	
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	

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:	MW-300		
Lab Sample ID:	JC57987-1	**Date Sampled:**	12/21/17
Matrix:	AQ - Ground Water	**Date Received:**	12/22/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	1.0	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	0.41	1.0	0.25	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	3.2	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		80-120%
17060-07-0	1,2-Dichloroethane-D4	115%		81-124%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

(a) Associated CCV and BS outside of control limits high, sample was ND.
(b) 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:	MW-301		
Lab Sample ID:	JC57987-2	**Date Sampled:**	12/21/17
Matrix:	AQ - Ground Water	**Date Received:**	12/22/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D254850.D	1	01/04/18 03:02	TDN	n/a	n/a	VD10278
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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 [a]	ND	1.0	0.22	ug/l	
75-25-2	Bromoform [a]	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	0.50	ug/l	
56-23-5	Carbon tetrachloride [b]	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	0.39	1.0	0.29	ug/l	J
74-87-3	Chloromethane [b]	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 [a]	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 [b]	ND	2.0	1.9	ug/l	
75-34-3	1,1-Dichloroethane	2.1	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	1.1	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.72	1.0	0.50	ug/l	J
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	
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	

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:	MW-301		
Lab Sample ID:	JC57987-2	**Date Sampled:**	12/21/17
Matrix:	AQ - Ground Water	**Date Received:**	12/22/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	1.2	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	0.38	1.0	0.25	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	1.7	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		80-120%
17060-07-0	1,2-Dichloroethane-D4	114%		81-124%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

(a) Associated CCV and BS outside of control limits high, sample was ND.
(b) 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: DUP
Lab Sample ID: JC57987-3
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Long Island GW Sampling, Long Island, NY

Date Sampled: 12/21/17
Date Received: 12/22/17
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D254853.D	1	01/04/18 04:32	TDN	n/a	n/a	VD10278
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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 [a]	ND	1.0	0.22	ug/l	
75-25-2	Bromoform [a]	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	0.50	ug/l	
56-23-5	Carbon tetrachloride [b]	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	0.44	1.0	0.29	ug/l	J
74-87-3	Chloromethane [b]	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 [a]	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 [b]	ND	2.0	1.9	ug/l	
75-34-3	1,1-Dichloroethane	4.2	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	1.2	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	
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	

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:	DUP		
Lab Sample ID:	JC57987-3	**Date Sampled:**	12/21/17
Matrix:	AQ - Ground Water	**Date Received:**	12/22/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	1.1	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	0.42	1.0	0.25	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.24	ug/l	
79-01-6	Trichloroethene	3.0	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		80-120%
17060-07-0	1,2-Dichloroethane-D4	115%		81-124%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

(a) Associated CCV and BS outside of control limits high, sample was ND.
(b) 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:	TB 12-21-17		
Lab Sample ID:	JC57987-4	**Date Sampled:**	12/21/17
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/22/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D254848.D	1	01/04/18 02:02	TDN	n/a	n/a	VD10278
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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 [a]	ND	1.0	0.22	ug/l	
75-25-2	Bromoform [a]	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	0.50	ug/l	
56-23-5	Carbon tetrachloride [b]	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 [b]	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 [a]	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 [b]	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	
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	

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: TB 12-21-17
Lab Sample ID: JC57987-4
Matrix: AQ - Trip Blank Water
Method: SW846 8260C
Project: Long Island GW Sampling, Long Island, NY

Date Sampled: 12/21/17
Date Received: 12/22/17
Percent Solids: n/a

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		80-120%
17060-07-0	1,2-Dichloroethane-D4	111%		81-124%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

(a) Associated CCV and BS outside of control limits high, sample was ND.
(b) 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: EB 12-21-17
Lab Sample ID: JC57987-5
Matrix: AQ - Equipment Blank
Method: SW846 8260C
Project: Long Island GW Sampling, Long Island, NY

Date Sampled: 12/21/17
Date Received: 12/22/17
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D254849.D	1	01/04/18 02:32	TDN	n/a	n/a	VD10278
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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 [a]	ND	1.0	0.22	ug/l	
75-25-2	Bromoform [a]	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	0.50	ug/l	
56-23-5	Carbon tetrachloride [b]	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 [b]	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 [a]	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 [b]	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	
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	

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:	EB 12-21-17		
Lab Sample ID:	JC57987-5	**Date Sampled:**	12/21/17
Matrix:	AQ - Equipment Blank	**Date Received:**	12/22/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		80-120%
17060-07-0	1,2-Dichloroethane-D4	114%		81-124%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	98%		80-120%

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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

GW
EB
TB

SGS ACCUTEST

CHAIN OF CUSTODY

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

PAGE 1 OF 1

EDEX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: JC57987

Client / Reporting Information	Project Information	Requested Analysis (see TEST CODE sheet)	Matrix Codes
Company Name: HSW Engineering, Inc.	Project Name:		DW - Drinking Water GW - Ground Water WW - Waste 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
Street Address: 15711 Mapledale Blvd, Suite B	Street:	Billing Information (if different from Report to)	
City: Tampa State: FL Zip: 33624	City: Bethpage State: NY	Company Name:	
Project Contact: Rich Poff E-mail: rpoff@hsweng.com	Project #:	Street Address:	
Phone #: 813-649-1018 Fax #:	Client Purchase Order #:	City: State: Zip:	
Sampler(s) Name(s): Albina Redzepagic Phone #: 212-265-4651	Project Manager: Rich Poff	Attention: Accounts Payable	

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: ICI	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	NaHSO4	EPA Method 8260C	LAB USE ONLY
1	MW-300		12/21/2017	1620	AR	GW	3	3									X	V600
2	MW-301			1540	CK	GW	9	9									X	
3	DUP			—	AR/CK	GW	3	3									X	
4	TB 12-21-17		12-21-17	1000	—	TB	2	2									X	
5	EB 12-21-17		12-21-17	1130	CK	EB	3	3									X	

INITIAL ASSESSMENT: 12/28
LABEL VERIFICATION:

Turnaround Time (Business days)

- ☐ Std. 15 Business Days
- ☒ Std. 10 Business Days (by Contract only)
- ☐ 10 Day *RUSH*
- ☐ 5 Day *RUSH*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Labtink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ FULLT1 (Level 3+4)
- ☐ NJ Reduced
- ☐ Commercial "C"
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☒ EDD Format-EQuIS 8
- ☒ Other COMMC+

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

RL reporting for metals

MW-301 MS/MSD

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Albina Redzepagic	12/21/17 1745	1	2	12/22/17 1800	2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by:	Date Time:	Received By:	Custody Seal #	☐ Intact ☐ Not Intact	Preserved where applicable ☐	On Ice	Cooler Temp.
5		5	217			8	2.0°C

5.1 5

JC57987: Chain of Custody
Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: JC57987 **Client:** _____ **Project:** _____

Date / Time Received: 12/22/2017 6:28:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (2.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.9);

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:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 216017 pH 12+: 208717 Other: (Specify) _____ _____

Comments

SM089-03
Rev. Date 12/7/17

JC57987: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

HSW Engineering

Job No: JC57987

Long Island GW Sampling, Long Island, NY
Project No: 1AS301101.063

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC57987-1 MW-300	Collected: 21-DEC-17 16:20 By: AR		Received: 22-DEC-17 By: AS			
JC57987-1	SW846 8260C	04-JAN-18 04:02	TDN			V8260TCL20
JC57987-2 MW-301	Collected: 21-DEC-17 15:40 By: AR		Received: 22-DEC-17 By: AS			
JC57987-2	SW846 8260C	04-JAN-18 03:02	TDN			V8260TCL20
JC57987-3 DUP	Collected: 21-DEC-17 00:00 By: AR		Received: 22-DEC-17 By: AS			
JC57987-3	SW846 8260C	04-JAN-18 04:32	TDN			V8260TCL20
JC57987-4 TB 12-21-17	Collected: 21-DEC-17 16:20 By: AR		Received: 22-DEC-17 By: AS			
JC57987-4	SW846 8260C	04-JAN-18 02:02	TDN			V8260TCL20
JC57987-5 EB 12-21-17	Collected: 21-DEC-17 11:30 By: AR		Received: 22-DEC-17 By: AS			
JC57987-5	SW846 8260C	04-JAN-18 02:32	TDN			V8260TCL20

SGS Internal Chain of Custody

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY
Received: 12/22/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC57987-1.2	Secured Storage	Ryan Rusak	01/02/18 07:45	Retrieve from Storage
JC57987-1.2	Ryan Rusak	VOA Prep Storage	01/02/18 07:45	Return to Storage
JC57987-1.2	VOA Prep Storage	Hueanh Tran	01/03/18 13:44	Retrieve from Storage
JC57987-1.2	Hueanh Tran	GCMS4B	01/03/18 13:44	Load on Instrument
JC57987-1.2	GCMS4B	Toan Pham	01/03/18 22:40	Unload from Instrument
JC57987-1.2	Toan Pham	Secured Storage	01/03/18 22:40	Return to Storage
JC57987-1.2	Secured Storage	Toan Pham	01/03/18 22:47	Retrieve from Storage
JC57987-1.2	Toan Pham	GCMSD	01/03/18 22:47	Load on Instrument
JC57987-1.2	GCMSD	Thien Nguyen	01/09/18 13:37	Unload from Instrument
JC57987-1.2	Thien Nguyen	Secured Storage	01/09/18 13:37	Return to Storage
JC57987-2.2	Secured Storage	Ryan Rusak	01/02/18 07:45	Retrieve from Storage
JC57987-2.2	Ryan Rusak	VOA Prep Storage	01/02/18 07:45	Return to Storage
JC57987-2.2	VOA Prep Storage	Hueanh Tran	01/03/18 13:44	Retrieve from Storage
JC57987-2.2	Hueanh Tran	GCMS4B	01/03/18 13:44	Load on Instrument
JC57987-2.2	GCMS4B	Toan Pham	01/03/18 22:40	Unload from Instrument
JC57987-2.2	Toan Pham	Secured Storage	01/03/18 22:40	Return to Storage
JC57987-2.2	Secured Storage	Toan Pham	01/03/18 22:47	Retrieve from Storage
JC57987-2.2	Toan Pham	GCMSD	01/03/18 22:47	Load on Instrument
JC57987-2.2	GCMSD	Thien Nguyen	01/09/18 13:37	Unload from Instrument
JC57987-2.2	Thien Nguyen	Secured Storage	01/09/18 13:37	Return to Storage
JC57987-2.3	Secured Storage	Ryan Rusak	01/02/18 07:45	Retrieve from Storage
JC57987-2.3	Ryan Rusak	VOA Prep Storage	01/02/18 07:45	Return to Storage
JC57987-2.3	VOA Prep Storage	Hueanh Tran	01/03/18 13:44	Retrieve from Storage
JC57987-2.3	Hueanh Tran	GCMS4B	01/03/18 13:44	Load on Instrument
JC57987-2.3	GCMS4B	Toan Pham	01/03/18 22:40	Unload from Instrument
JC57987-2.3	Toan Pham	Secured Storage	01/03/18 22:40	Return to Storage
JC57987-2.3	Secured Storage	Toan Pham	01/03/18 22:47	Retrieve from Storage
JC57987-2.3	Toan Pham	GCMSD	01/03/18 22:47	Load on Instrument
JC57987-2.3	GCMSD	Thien Nguyen	01/09/18 13:37	Unload from Instrument
JC57987-2.3	Thien Nguyen	Secured Storage	01/09/18 13:37	Return to Storage
JC57987-2.5	Secured Storage	Ryan Rusak	01/02/18 07:45	Retrieve from Storage
JC57987-2.5	Ryan Rusak	VOA Prep Storage	01/02/18 07:45	Return to Storage
JC57987-2.5	VOA Prep Storage	Hueanh Tran	01/03/18 13:44	Retrieve from Storage
JC57987-2.5	Hueanh Tran	GCMS4B	01/03/18 13:44	Load on Instrument
JC57987-2.5	GCMS4B	Toan Pham	01/03/18 22:40	Unload from Instrument
JC57987-2.5	Toan Pham	Secured Storage	01/03/18 22:40	Return to Storage
JC57987-2.5	Secured Storage	Toan Pham	01/03/18 22:47	Retrieve from Storage
JC57987-2.5	Toan Pham	GCMSD	01/03/18 22:47	Load on Instrument
JC57987-2.5	GCMSD	Thien Nguyen	01/09/18 13:37	Unload from Instrument
JC57987-2.5	Thien Nguyen	Secured Storage	01/09/18 13:37	Return to Storage

SGS Internal Chain of Custody

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY
Received: 12/22/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC57987-3.1	Secured Storage	Ryan Rusak	01/02/18 07:45	Retrieve from Storage
JC57987-3.1	Ryan Rusak	VOA Prep Storage	01/02/18 07:45	Return to Storage
JC57987-3.1	VOA Prep Storage	Hueanh Tran	01/03/18 13:44	Retrieve from Storage
JC57987-3.1	Hueanh Tran	GCMS4B	01/03/18 13:44	Load on Instrument
JC57987-3.1	GCMS4B	Toan Pham	01/03/18 22:40	Unload from Instrument
JC57987-3.1	Toan Pham	Secured Storage	01/03/18 22:40	Return to Storage
JC57987-3.1	Secured Storage	Toan Pham	01/03/18 22:47	Retrieve from Storage
JC57987-3.1	Toan Pham	GCMSD	01/03/18 22:47	Load on Instrument
JC57987-3.1	GCMSD	Thien Nguyen	01/09/18 13:37	Unload from Instrument
JC57987-3.1	Thien Nguyen	Secured Storage	01/09/18 13:37	Return to Storage
JC57987-3.2	Secured Storage	Todd Shoemaker	12/27/17 14:12	Retrieve from Storage
JC57987-3.2	Todd Shoemaker	Secured Staging Area	12/27/17 14:12	Return to Storage
JC57987-3.2	Secured Staging Area	Amanda Furka	12/27/17 22:11	Retrieve from Storage
JC57987-3.2	Amanda Furka	Secured Storage	12/27/17 22:11	Return to Storage
JC57987-4.1	Secured Storage	Ryan Rusak	01/02/18 07:45	Retrieve from Storage
JC57987-4.1	Ryan Rusak	VOA Prep Storage	01/02/18 07:45	Return to Storage
JC57987-4.1	VOA Prep Storage	Hueanh Tran	01/03/18 13:44	Retrieve from Storage
JC57987-4.1	Hueanh Tran	GCMS4B	01/03/18 13:44	Load on Instrument
JC57987-4.1	GCMS4B	Toan Pham	01/03/18 22:40	Unload from Instrument
JC57987-4.1	Toan Pham	Secured Storage	01/03/18 22:40	Return to Storage
JC57987-4.1	Secured Storage	Toan Pham	01/03/18 22:47	Retrieve from Storage
JC57987-4.1	Toan Pham	GCMSD	01/03/18 22:47	Load on Instrument
JC57987-4.1	GCMSD	Thien Nguyen	01/09/18 13:37	Unload from Instrument
JC57987-4.1	Thien Nguyen	Secured Storage	01/09/18 13:37	Return to Storage
JC57987-5.2	Secured Storage	Ryan Rusak	01/02/18 07:45	Retrieve from Storage
JC57987-5.2	Ryan Rusak	VOA Prep Storage	01/02/18 07:45	Return to Storage
JC57987-5.2	VOA Prep Storage	Hueanh Tran	01/03/18 13:44	Retrieve from Storage
JC57987-5.2	Hueanh Tran	GCMS4B	01/03/18 13:44	Load on Instrument
JC57987-5.2	GCMS4B	Toan Pham	01/03/18 22:40	Unload from Instrument
JC57987-5.2	Toan Pham	Secured Storage	01/03/18 22:40	Return to Storage
JC57987-5.2	Secured Storage	Toan Pham	01/03/18 22:47	Retrieve from Storage
JC57987-5.2	Toan Pham	GCMSD	01/03/18 22:47	Load on Instrument
JC57987-5.2	GCMSD	Thien Nguyen	01/09/18 13:37	Unload from Instrument
JC57987-5.2	Thien Nguyen	Secured Storage	01/09/18 13:37	Return to Storage

MS Volatiles

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: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VD10278-MB	D254843.D	1	01/03/18	TDN	n/a	n/a	VD10278

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

JC57987-1, JC57987-2, JC57987-3, JC57987-4, JC57987-5

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	0.50	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	
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	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	

Method Blank Summary

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VD10278-MB	D254843.D	1	01/03/18	TDN	n/a	n/a	VD10278

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

JC57987-1, JC57987-2, JC57987-3, JC57987-4, JC57987-5

CAS No.	Compound	Result	RL	MDL	Units	Q
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	108%	80-120%
17060-07-0	1,2-Dichloroethane-D4	114%	81-124%
2037-26-5	Toluene-D8	100%	80-120%
460-00-4	4-Bromofluorobenzene	97%	80-120%

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

Blank Spike Summary

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VD10278-BS	D254844.D	1	01/04/18	TDN	n/a	n/a	VD10278

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

JC57987-1, JC57987-2, JC57987-3, JC57987-4, JC57987-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	227	114	42-150
71-43-2	Benzene	50	52.9	106	80-120
74-97-5	Bromochloromethane	50	55.3	111	84-121
75-27-4	Bromodichloromethane	50	61.5	123* [a]	83-120
75-25-2	Bromoform	50	69.3	139* [a]	76-129
74-83-9	Bromomethane	50	51.1	102	57-138
78-93-3	2-Butanone (MEK)	200	235	118	64-137
75-15-0	Carbon disulfide	50	53.9	108	64-137
56-23-5	Carbon tetrachloride	50	62.3	125	75-135
108-90-7	Chlorobenzene	50	50.3	101	84-117
75-00-3	Chloroethane	50	51.7	103	63-132
67-66-3	Chloroform	50	57.0	114	80-119
74-87-3	Chloromethane	50	60.5	121	46-136
110-82-7	Cyclohexane	50	52.9	106	64-137
96-12-8	1,2-Dibromo-3-chloropropane	50	54.8	110	72-127
124-48-1	Dibromochloromethane	50	63.6	127* [a]	80-123
106-93-4	1,2-Dibromoethane	50	56.4	113	84-117
95-50-1	1,2-Dichlorobenzene	50	50.3	101	84-119
541-73-1	1,3-Dichlorobenzene	50	50.2	100	81-117
106-46-7	1,4-Dichlorobenzene	50	50.0	100	82-117
75-71-8	Dichlorodifluoromethane	50	65.4	131	36-149
75-34-3	1,1-Dichloroethane	50	55.8	112	79-120
107-06-2	1,2-Dichloroethane	50	58.5	117	78-126
75-35-4	1,1-Dichloroethene	50	45.3	91	69-126
156-59-2	cis-1,2-Dichloroethene	50	50.4	101	80-120
156-60-5	trans-1,2-Dichloroethene	50	49.7	99	76-120
78-87-5	1,2-Dichloropropane	50	56.4	113	82-121
10061-01-5	cis-1,3-Dichloropropene	50	55.1	110	83-120
10061-02-6	trans-1,3-Dichloropropene	50	55.1	110	82-121
100-41-4	Ethylbenzene	50	52.7	105	80-120
76-13-1	Freon 113	50	53.4	107	62-182
591-78-6	2-Hexanone	200	215	108	65-132
98-82-8	Isopropylbenzene	50	52.6	105	83-120
79-20-9	Methyl Acetate	50	55.4	111	67-129
108-87-2	Methylcyclohexane	50	52.2	104	71-134
1634-04-4	Methyl Tert Butyl Ether	50	51.6	103	80-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VD10278-BS	D254844.D	1	01/04/18	TDN	n/a	n/a	VD10278

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

JC57987-1, JC57987-2, JC57987-3, JC57987-4, JC57987-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	227	114	71-131
75-09-2	Methylene chloride	50	53.3	107	77-120
100-42-5	Styrene	50	51.2	102	82-122
79-34-5	1,1,2,2-Tetrachloroethane	50	55.1	110	76-119
127-18-4	Tetrachloroethene	50	49.5	99	70-131
108-88-3	Toluene	50	51.5	103	80-120
87-61-6	1,2,3-Trichlorobenzene	50	52.4	105	76-134
120-82-1	1,2,4-Trichlorobenzene	50	51.0	102	79-132
71-55-6	1,1,1-Trichloroethane	50	58.5	117	81-128
79-00-5	1,1,2-Trichloroethane	50	56.5	113	83-118
79-01-6	Trichloroethene	50	52.8	106	80-120
75-69-4	Trichlorofluoromethane	50	56.1	112	64-136
75-01-4	Vinyl chloride	50	56.4	113	51-135
	m,p-Xylene	100	103	103	80-120
95-47-6	o-Xylene	50	53.5	107	80-120
1330-20-7	Xylene (total)	150	157	105	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	109%	80-120%
17060-07-0	1,2-Dichloroethane-D4	120%	81-124%
2037-26-5	Toluene-D8	100%	80-120%
460-00-4	4-Bromofluorobenzene	99%	80-120%

(a) High percent recoveries and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC57987-2MS	D254845.D	1	01/04/18	TDN	n/a	n/a	VD10278
JC57987-2MSD	D254846.D	1	01/04/18	TDN	n/a	n/a	VD10278
JC57987-2	D254850.D	1	01/04/18	TDN	n/a	n/a	VD10278

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

JC57987-1, JC57987-2, JC57987-3, JC57987-4, JC57987-5

CAS No.	Compound	JC57987-2 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	107	54	200	110	55	3	34-149/17
71-43-2	Benzene	ND		50	53.2	106	50	53.9	108	1	54-136/10
74-97-5	Bromochloromethane	ND		50	53.4	107	50	54.0	108	1	79-124/11
75-27-4	Bromodichloromethane	ND		50	58.5	117	50	60.3	121	3	79-124/11
75-25-2	Bromoform	ND		50	64.5	129	50	67.4	135* [a]	4	71-130/11
74-83-9	Bromomethane	ND		50	69.6	139	50	66.3	133	5	53-142/14
78-93-3	2-Butanone (MEK)	ND		200	164	82	200	170	85	4	54-142/15
75-15-0	Carbon disulfide	ND		50	57.6	115	50	58.1	116	1	59-145/17
56-23-5	Carbon tetrachloride	ND		50	64.4	129	50	66.1	132	3	70-143/12
108-90-7	Chlorobenzene	ND		50	49.7	99	50	51.1	102	3	78-123/10
75-00-3	Chloroethane	ND		50	75.3	151* [a]	50	72.7	145* [a]	4	57-141/14
67-66-3	Chloroform	0.39	J	50	56.1	111	50	57.4	114	2	76-123/11
74-87-3	Chloromethane	ND		50	82.6	165* [a]	50	79.2	158* [a]	4	43-141/16
110-82-7	Cyclohexane	ND		50	49.2	98	50	49.1	98	0	51-155/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	52.0	104	50	52.8	106	2	66-130/13
124-48-1	Dibromochloromethane	ND		50	61.6	123	50	63.0	126* [a]	2	76-125/11
106-93-4	1,2-Dibromoethane	ND		50	52.5	105	50	54.6	109	4	78-119/11
95-50-1	1,2-Dichlorobenzene	ND		50	48.3	97	50	49.0	98	1	77-123/11
541-73-1	1,3-Dichlorobenzene	ND		50	48.6	97	50	49.4	99	2	76-122/11
106-46-7	1,4-Dichlorobenzene	ND		50	48.2	96	50	49.3	99	2	76-122/11
75-71-8	Dichlorodifluoromethane	ND		50	86.9	174* [a]	50	87.4	175* [a]	1	31-159/16
75-34-3	1,1-Dichloroethane	2.1		50	58.5	113	50	59.1	114	1	73-126/11
107-06-2	1,2-Dichloroethane	ND		50	55.3	111	50	55.7	111	1	72-131/11
75-35-4	1,1-Dichloroethene	1.1		50	49.9	98	50	50.8	99	2	63-136/14
156-59-2	cis-1,2-Dichloroethene	0.72	J	50	51.3	101	50	52.0	103	1	60-136/11
156-60-5	trans-1,2-Dichloroethene	ND		50	51.2	102	50	52.4	105	2	70-126/11
78-87-5	1,2-Dichloropropane	ND		50	53.5	107	50	55.3	111	3	78-124/10
10061-01-5	cis-1,3-Dichloropropene	ND		50	50.2	100	50	52.4	105	4	79-123/11
10061-02-6	trans-1,3-Dichloropropene	ND		50	52.0	104	50	53.3	107	2	77-123/11
100-41-4	Ethylbenzene	ND		50	53.4	107	50	54.1	108	1	51-140/20
76-13-1	Freon 113	ND		50	54.9	110	50	57.7	115	5	60-192/14
591-78-6	2-Hexanone	ND		200	164	82	200	166	83	1	56-139/14
98-82-8	Isopropylbenzene	ND		50	53.9	108	50	54.5	109	1	75-129/11
79-20-9	Methyl Acetate	ND		50	42.9	86	50	44.7	89	4	55-131/15
108-87-2	Methylcyclohexane	ND		50	52.4	105	50	54.9	110	5	57-155/13
1634-04-4	Methyl Tert Butyl Ether	ND		50	49.0	98	50	50.5	101	3	72-123/11

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC57987-2MS	D254845.D	1	01/04/18	TDN	n/a	n/a	VD10278
JC57987-2MSD	D254846.D	1	01/04/18	TDN	n/a	n/a	VD10278
JC57987-2	D254850.D	1	01/04/18	TDN	n/a	n/a	VD10278

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

JC57987-1, JC57987-2, JC57987-3, JC57987-4, JC57987-5

CAS No.	Compound	JC57987-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		200	211	106	200	220	110	4	66-136/13
75-09-2	Methylene chloride	ND		50	52.9	106	50	52.9	106	0	73-125/13
100-42-5	Styrene	ND		50	45.0	90	50	46.3	93	3	75-129/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	54.2	108	50	55.2	110	2	71-122/11
127-18-4	Tetrachloroethene	1.2		50	51.3	100	50	52.8	103	3	61-139/11
108-88-3	Toluene	ND		50	52.2	104	50	53.4	107	2	60-135/10
87-61-6	1,2,3-Trichlorobenzene	ND		50	50.3	101	50	49.7	99	1	70-138/13
120-82-1	1,2,4-Trichlorobenzene	ND		50	48.7	97	50	48.7	97	0	72-137/13
71-55-6	1,1,1-Trichloroethane	0.38	J	50	59.6	118	50	61.0	121	2	74-138/12
79-00-5	1,1,2-Trichloroethane	ND		50	52.9	106	50	54.3	109	3	78-121/11
79-01-6	Trichloroethene	1.7		50	53.0	103	50	54.6	106	3	62-141/10
75-69-4	Trichlorofluoromethane	ND		50	84.7	169* [a]	50	81.6	163* [a]	4	57-149/14
75-01-4	Vinyl chloride	ND		50	78.8	158* [a]	50	78.6	157* [a]	0	43-146/15
	m,p-Xylene	ND		100	104	104	100	105	105	1	50-144/20
95-47-6	o-Xylene	ND		50	52.5	105	50	54.2	108	3	63-134/10
1330-20-7	Xylene (total)	ND		150	157	105	150	160	107	2	56-139/20

CAS No.	Surrogate Recoveries	MS	MSD	JC57987-2	Limits
1868-53-7	Dibromofluoromethane	107%	108%	109%	80-120%
17060-07-0	1,2-Dichloroethane-D4	119%	117%	114%	81-124%
2037-26-5	Toluene-D8	102%	101%	100%	80-120%
460-00-4	4-Bromofluorobenzene	100%	100%	99%	80-120%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VD10266-BFB
Lab File ID: D254550.D
Instrument ID: GCMSD
Injection Date: 12/21/17
Injection Time: 18:13

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	14605	16.9		Pass
75	30.0 - 60.0% of mass 95	39730	46.0		Pass
95	Base peak, 100% relative abundance	86306	100.0		Pass
96	5.0 - 9.0% of mass 95	6173	7.15		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	74821	86.7		Pass
175	5.0 - 9.0% of mass 174	5604	6.49	(7.49) [a]	Pass
176	95.0 - 101.0% of mass 174	72453	83.9	(96.8) [a]	Pass
177	5.0 - 9.0% of mass 176	4856	5.63	(6.70) [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
VD10266-IC10266	D254551.D	12/21/17	20:44	02:31	Initial cal 0.2
VD10266-IC10266	D254552.D	12/21/17	21:14	03:01	Initial cal 0.5
VD10266-IC10266	D254553.D	12/21/17	21:44	03:31	Initial cal 1
VD10266-IC10266	D254554.D	12/21/17	22:13	04:00	Initial cal 2
VD10266-IC10266	D254555.D	12/21/17	22:43	04:30	Initial cal 4
VD10266-IC10266	D254556.D	12/21/17	23:13	05:00	Initial cal 8
VD10266-IC10266	D254557.D	12/21/17	23:42	05:29	Initial cal 20
VD10266-ICC10266	D254558.D	12/22/17	00:12	05:59	Initial cal 50
VD10266-IC10266	D254559.D	12/22/17	00:42	06:29	Initial cal 100
VD10266-IC10266	D254560.D	12/22/17	01:12	06:59	Initial cal 200
VD10266-ICV10266	D254563.D	12/22/17	02:41	08:28	Initial cal verification 50
VD10266-ICV10266	D254564.D	12/22/17	03:11	08:58	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample:	VD10266-BFB2	**Injection Date:**	12/22/17
Lab File ID:	D254567.D	**Injection Time:**	09:36
Instrument ID:	GCMSD		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	14557	16.5		Pass
75	30.0 - 60.0% of mass 95	40624	46.1		Pass
95	Base peak, 100% relative abundance	88112	100.0		Pass
96	5.0 - 9.0% of mass 95	6013	6.82		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	79210	89.9		Pass
175	5.0 - 9.0% of mass 174	6013	6.82	(7.59) [a]	Pass
176	95.0 - 101.0% of mass 174	75386	85.6	(95.2) [a]	Pass
177	5.0 - 9.0% of mass 176	5197	5.90	(6.89) [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
VD10266-ICV10266	D254568.D	12/22/17	10:06	00:30	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample:	VD10278-BFB	**Injection Date:**	01/03/18
Lab File ID:	D254841.D	**Injection Time:**	22:27
Instrument ID:	GCMSD		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	10725	18.0		Pass
75	30.0 - 60.0% of mass 95	28660	48.0		Pass
95	Base peak, 100% relative abundance	59654	100.0		Pass
96	5.0 - 9.0% of mass 95	4071	6.82		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	51824	86.9		Pass
175	5.0 - 9.0% of mass 174	3746	6.28	(7.23) [a]	Pass
176	95.0 - 101.0% of mass 174	49590	83.1	(95.7) [a]	Pass
177	5.0 - 9.0% of mass 176	3362	5.64	(6.78) [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
VD10278-CC10266	D254841.D	01/03/18	22:27	00:00	Continuing cal 50
VD10278-MB	D254843.D	01/03/18	23:32	01:05	Method Blank
VD10278-BS	D254844.D	01/04/18	00:02	01:35	Blank Spike
JC57987-2MS	D254845.D	01/04/18	00:32	02:05	Matrix Spike
JC57987-2MSD	D254846.D	01/04/18	01:02	02:35	Matrix Spike Duplicate
JC57987-4	D254848.D	01/04/18	02:02	03:35	TB 12-21-17
JC57987-5	D254849.D	01/04/18	02:32	04:05	EB 12-21-17
JC57987-2	D254850.D	01/04/18	03:02	04:35	MW-301
ZZZZZZ	D254851.D	01/04/18	03:32	05:05	(unrelated sample)
JC57987-1	D254852.D	01/04/18	04:02	05:35	MW-300
JC57987-3	D254853.D	01/04/18	04:32	06:05	DUP
ZZZZZZ	D254854.D	01/04/18	05:02	06:35	(unrelated sample)
ZZZZZZ	D254855.D	01/04/18	05:32	07:05	(unrelated sample)
ZZZZZZ	D254856.D	01/04/18	06:03	07:36	(unrelated sample)
ZZZZZZ	D254857.D	01/04/18	06:33	08:06	(unrelated sample)

Internal Standard Area Summary

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Check Std:	VD10278-CC10266	**Injection Date:**	01/03/18
Lab File ID:	D254841.D	**Injection Time:**	22:27
Instrument ID:	GCMSD	**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	89075	7.60	160761	9.88	248705	10.84	243230	14.25	160229	16.89
Upper Limit [a]	178150	8.10	321522	10.38	497410	11.34	486460	14.75	320458	17.39
Lower Limit [b]	44538	7.10	80381	9.38	124353	10.34	121615	13.75	80115	16.39

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VD10278-MB	89969	7.61	157710	9.88	240808	10.84	236934	14.25	158028	16.89
VD10278-BS	92061	7.61	162714	9.88	250543	10.84	247988	14.25	159538	16.89
JC57987-2MS	97877	7.62	165720	9.88	255566	10.84	247864	14.25	160367	16.89
JC57987-2MSD	100536	7.62	170728	9.88	262891	10.84	257110	14.25	167675	16.89
JC57987-4	94803	7.60	159856	9.88	246291	10.84	242781	14.25	160756	16.89
JC57987-5	93056	7.62	160031	9.88	243686	10.84	242148	14.25	161247	16.89
JC57987-2	92619	7.60	156844	9.88	240815	10.84	236883	14.25	153663	16.89
ZZZZZZ	92051	7.60	152103	9.88	234232	10.84	228862	14.25	148404	16.89
JC57987-1	89111	7.61	152637	9.88	235076	10.84	229091	14.25	150687	16.89
JC57987-3	91901	7.59	156158	9.88	241305	10.84	236499	14.25	154926	16.89
ZZZZZZ	70620	7.61	120084	9.88	187211	10.84	184387	14.25	119898	16.89
ZZZZZZ	88980	7.61	148970	9.88	228581	10.84	227449	14.25	149808	16.89
ZZZZZZ	89358	7.61	150559	9.88	228952	10.84	227414	14.25	149252	16.89
ZZZZZZ	88512	7.60	148751	9.88	231385	10.84	224189	14.25	145446	16.89

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: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, 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
JC57987-1	D254852.D	111	115	100	99
JC57987-2	D254850.D	109	114	100	99
JC57987-3	D254853.D	112	115	100	99
JC57987-4	D254848.D	109	111	100	99
JC57987-5	D254849.D	109	114	100	98
JC57987-2MS	D254845.D	107	119	102	100
JC57987-2MSD	D254846.D	108	117	101	100
VD10278-BS	D254844.D	109	120	100	99
VD10278-MB	D254843.D	108	114	100	97

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: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VD10266-ICC10266
Lab FileID: D254558.D

Response Factor Report MSD

Method : C:\MSDCHEM\1\METHODS\MD10266.M (RTE Integrator)
Title : SW846 8260C, Rxi-624 MS 60m x 0.25mm x 1.4um
Last Update : Fri Dec 22 11:06:37 2017
Response via : Initial Calibration

Calibration Files

1	=d254553.D	4	=d254555.D	100	=d254559.D	50	=d254558.D
20	=d254557.D	200	=d254560.D	8	=d254556.D	0.5	=d254552.D
2	=d254554.D	0.2	=d254551.D		=		=

Compound	1	4	100	50	20	200	8	0.5	2	0.2	Avg	%RSD
1) I Tert Butyl Alcohol-d9	----------ISTD----------											
2) ethanol											0.000	-1.00
3) tertiary butyl alcohol	0.979	1.116	1.261	1.260	1.309	1.219	1.288		1.160		1.199	9.17
4) 1,4-dioxane		0.097	0.127	0.126	0.135	0.123	0.128				0.123	10.81
5) I pentafluorobenzene	----------ISTD----------											
6) chlorodifluoromethane	1.110	1.109	1.151	1.157	1.298	1.097	1.297	1.385	1.126		1.192	8.86
7) dichlorodifluoromethane	0.789	1.111	1.069	1.078	1.191	1.013	1.126		0.878		1.032	13.06
8) chloromethane	1.080	1.241	1.180	1.162	1.291	1.124	1.236	1.248	1.142		1.189	5.79
9) 1,3-butadiene											0.000	-1.00
10) vinyl chloride	0.902	1.280	1.190	1.167	1.291	1.156	1.243		1.097		1.166	10.74
11) bromomethane	0.729	0.842	0.780	0.777	0.850	0.734	0.841	0.842	0.799	0.830	0.802	5.72
12) chloroethane	0.593	0.680	0.599	0.614	0.651	0.580	0.660	0.751	0.594		0.636	8.75
13) trichlorofluoromethane	0.833	1.125	1.066	1.064	1.155	1.041	1.132		0.979		1.049	9.94
14) vinyl bromide	0.631	0.714	0.675	0.683	0.724	0.668	0.704	0.548	0.681		0.670	7.95
15) ethyl ether	0.285	0.255	0.289	0.292	0.300	0.282	0.307	0.256	0.281		0.283	6.23
16) 2-chloropropane	0.992	0.948	0.987	1.008	1.052	0.966	1.157		1.149		1.032	7.81
17) acrolein		0.106	0.094	0.097	0.099	0.092	0.105		0.087		0.097	7.14
18) freon 113	0.477	0.534	0.586	0.595	0.639	0.587	0.648	0.504	0.517		0.565	10.64
19) 1,1-dichloroethene	0.809	0.644	0.603	0.606	0.649	0.594	0.709		0.701		0.664	10.96
20) acetone	0.086	0.080	0.087	0.088	0.089	0.084	0.094		0.086		0.087	4.70
21) acetonitrile		0.078	0.077	0.079	0.083	0.073	0.092				0.080	8.16
22) iodomethane	1.136	1.031	1.147	1.138	1.197	1.133	1.233	1.168	1.033		1.135	5.91
23) carbon disulfide												

Initial Calibration Summary

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VD10266-ICC10266
Lab FileID: D254558.D

	2.131	1.954	2.267	2.262	2.374	2.220	2.397	2.347	2.088	2.620	2.266	8.19
24)	methylene chloride											
	0.677	0.599	0.643	0.646	0.683	0.625	0.691	0.672	0.648		0.654	4.58
25)	methyl acetate											
		0.346	0.378	0.332	0.419	0.315	0.358		0.404		0.364	10.35
26)	methyl tert butyl ether											
	2.201	1.732	1.915	1.916	2.018	1.868	2.085	2.324	2.025		2.009	8.91
27)	trans-1,2-dichloroethene											
	0.479	0.636	0.562	0.569	0.607	0.539	0.642		0.741		0.597	13.24
28)	hexane											
	0.260	0.306	0.334	0.344	0.377	0.332	0.381		0.303		0.330	12.21
29)	di-isopropyl ether											
	2.068	1.834	2.012	2.030	2.124	1.967	2.127	2.234	1.934	2.512	2.084	8.99
30)	2-butanone											
	0.064	0.061	0.070	0.071	0.070	0.069	0.071	0.045	0.064		0.065	12.95
31)	1,1-dichloroethane											
	0.937	0.849	0.956	0.969	1.009	0.925	1.059	1.014	0.952		0.963	6.27
32)	chloroprene											
	0.680	0.673	0.765	0.776	0.808	0.755	0.842	0.774	0.705	0.536	0.732	11.94
33)	acrylonitrile											
	0.136	0.150	0.165	0.169	0.174	0.162	0.175		0.165		0.162	8.07
34)	vinyl acetate											
		0.054	0.062	0.066	0.070	0.063	0.068				0.064	8.49
35)	ethyl tert-butyl ether											
	2.103	1.854	2.104	2.100	2.176	2.079	2.210	2.165	2.006	2.333	2.113	6.00
36)	ethyl acetate											
		0.053	0.069	0.071	0.068	0.068	0.069				0.066	10.17
37)	2,2-dichloropropane											
	1.104	0.941	0.996	1.015	1.086	0.985	1.090	1.147	0.993	1.171	1.053	7.31
38)	cis-1,2-dichloroethene											
	0.654	0.556	0.610	0.620	0.651	0.587	0.716		0.780		0.647	11.16
39)	propionitrile											
	0.080	0.067	0.074	0.077	0.078	0.072	0.082	0.084	0.074	0.071	0.076	6.77
40)	methyl acrylate											
		0.053	0.067	0.067	0.068	0.066	0.065		0.056		0.063	9.51
41)	methacrylonitrile											
	0.211	0.175	0.189	0.193	0.200	0.192	0.204		0.179		0.193	6.27
42)	bromochloromethane											
	0.285	0.257	0.275	0.280	0.290	0.270	0.281	0.235	0.271		0.272	6.21
43)	tetrahydrofuran											
	0.161	0.134	0.149	0.153	0.154	0.147	0.152		0.138		0.149	5.90
44)	chloroform											
	0.873	0.785	0.871	0.877	0.913	0.854	0.933	0.901	0.854	0.825	0.869	4.93
45)	tert-Butyl Formate											
	0.270	0.240	0.264	0.252	0.265	0.266	0.277	0.267	0.269		0.263	4.19
46)	dibromofluoromethane (s)											
	0.455	0.454	0.463	0.463	0.454	0.472	0.462	0.456	0.453	0.470	0.460	1.50
47)	1,1,1-trichloroethane											
	0.962	0.876	1.003	1.000	1.061	1.005	1.054	0.993	0.930	0.858	0.974	7.00
48)	cyclohexane											
	1.007	1.210	1.195	1.196	1.291	1.194	1.282	0.892	1.116		1.154	11.26
49)	isobutyl alcohol											
											0.000	-1.00
50)	1,1-dichloropropene											
	0.623	0.587	0.670	0.685	0.722	0.660	0.741	0.688	0.642		0.669	7.16
51)	carbon tetrachloride											
	0.674	0.666	0.807	0.799	0.822	0.824	0.805	0.749	0.667		0.757	9.17
52)	tert-amyl alcohol											
		0.034	0.032	0.030	0.033	0.032	0.036		0.040		0.034	9.33
53)	isopropyl acetate											

Initial Calibration Summary

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VD10266-ICC10266
Lab FileID: D254558.D

```
            0.091 0.113 0.112 0.112 0.117 0.111       0.089        0.107   10.66

54) I   1,4-difluorobenzene   ----------------ISTD--------------------
55)  1,2-dichloroethane-d4 (s)
      0.317 0.318 0.309 0.337 0.318 0.308 0.322 0.316 0.319 0.319  0.318    2.50
56)  n-butyl alcohol
            0.013 0.011 0.011 0.011 0.010 0.013                    0.011    9.48
57)  2,2,4-Trimethylpentane
      0.964 1.037 1.335 1.274 1.297 1.332 1.287       1.021        1.193   13.13
58)  benzene
      1.418 1.261 1.393 1.404 1.483 1.341 1.493 1.465 1.411 1.452  1.412    4.98
59)  tert-amyl methyl ether
      1.455 1.150 1.367 1.326 1.369 1.335 1.384 1.623 1.322        1.370    9.13
60)  heptane
            0.206 0.216 0.220 0.242 0.209 0.242       0.189        0.218    8.82
61)  1,2-dichloroethane
      0.401 0.351 0.387 0.390 0.409 0.370 0.417 0.420 0.367        0.390    6.13
62)  ethyl acrylate
      0.381 0.317 0.359 0.351 0.365 0.344 0.367 0.411 0.359        0.362    7.04
63)  trichloroethene
      0.341 0.301 0.340 0.342 0.364 0.330 0.362 0.324 0.331        0.337    5.73
64)  2-chloroethyl vinyl ether
      0.200 0.176 0.204 0.205 0.216 0.196 0.213 0.212 0.198 0.197  0.202    5.70
65)  methyl methacrylate
            0.074 0.090 0.087 0.090 0.088 0.088       0.065        0.083   11.53
66)  methylcyclohexane
      0.697 0.709 0.815 0.810 0.872 0.803 0.870 0.823 0.738        0.793    8.12
67)  1,2-dichloropropane
      0.351 0.317 0.357 0.358 0.378 0.342 0.382 0.363 0.349        0.355    5.48
68)  dibromomethane
      0.187 0.164 0.195 0.194 0.204 0.189 0.204 0.168 0.182        0.187    7.65
69)  bromodichloromethane
      0.386 0.337 0.423 0.417 0.428 0.417 0.407 0.389 0.368        0.397    7.50
70)  2-nitropropane
            0.104 0.104 0.104 0.105 0.102 0.110       0.129        0.108    8.73
71)  epichlorohydrin
      0.037 0.029 0.033 0.033 0.033 0.032 0.034       0.032        0.033    6.32
72)  cis-1,3-dichloropropene
      0.554 0.450 0.541 0.538 0.567 0.531 0.551 0.538 0.521 0.547  0.534    6.00
73)  4-methyl-2-pentanone
      0.130 0.110 0.132 0.126 0.129 0.128 0.131 0.140 0.118 0.102  0.125    9.02
74)  isoamyl alcohol
      0.009 0.009 0.011 0.010 0.010 0.010 0.010       0.009        0.010    7.46

75) I   chlorobenzene-d5      ----------------ISTD--------------------
76)  toluene-d8 (s)
      1.226 1.231 1.215 1.234 1.230 1.218 1.227 1.211 1.236 1.214  1.224    0.73
77)  toluene
      0.900 0.804 0.875 0.893 0.951 0.842 0.957 0.905 0.839 0.851  0.882    5.60
78)  ethyl methacrylate
      0.424 0.387 0.451 0.439 0.458 0.439 0.458 0.484 0.407 0.437  0.438    6.30
79)  trans-1,3-dichloropropene
      0.467 0.409 0.471 0.474 0.499 0.456 0.489 0.533 0.455 0.545  0.480    8.23
80)  1,1,2-trichloroethane
      0.230 0.224 0.241 0.245 0.258 0.232 0.269 0.234 0.246 0.214  0.239    6.73
81)  tetrachloroethene
      0.276 0.267 0.298 0.299 0.320 0.292 0.319 0.293 0.261        0.292    7.14
82)  2-hexanone
      0.159 0.128 0.148 0.141 0.146 0.142 0.151 0.146 0.139 0.142  0.144    5.54
83)  1,3-dichloropropane
```

	0.518	0.455	0.489	0.498	0.524	0.474	0.530	0.580	0.504		0.508	7.14
84)	butyl acetate												
	0.199	0.185	0.214	0.205	0.214	0.209	0.214	0.240	0.195		0.208	7.41
85)	3,3-Dimethyl-1-Butanol												
	0.023	0.021	0.031	0.027	0.025	0.030	0.027		0.024		0.026	12.91
86)	dibromochloromethane												
	0.257	0.238	0.314	0.307	0.305	0.316	0.298	0.242	0.254		0.281	11.65
87)	1,2-dibromoethane												
	0.295	0.279	0.304	0.309	0.318	0.299	0.324	0.266	0.299	0.268	0.296	6.69
88)	n-butyl ether												
	1.687	1.529	1.643	1.670	1.796	1.563	1.783	1.769	1.649	1.640	1.673	5.35
89)	chlorobenzene												
	0.979	0.871	0.963	0.980	1.037	0.938	1.038	1.045	0.965	1.046	0.986	5.74
90)	1,1,1,2-tetrachloroethane												
	0.371	0.317	0.409	0.400	0.407	0.411	0.393	0.359	0.355		0.380	8.39
91)	ethylbenzene												
	1.668	1.558	1.716	1.738	1.857	1.665	1.859	1.811	1.614	1.642	1.713	6.01
92)	m,p-xylene												
	0.647	0.605	0.683	0.688	0.726	0.678	0.723	0.705	0.632	0.600	0.669	6.86
93)	o-xylene												
	1.437	1.324	1.498	1.511	1.594	1.464	1.576	1.468	1.401	1.422	1.470	5.49
94)	styrene												
	1.135	1.013	1.172	1.179	1.222	1.161	1.217	1.182	1.094	1.289	1.166	6.44
95)	butyl acrylate												
	0.725	0.596	0.696	0.662	0.681	0.693	0.697	0.761	0.636	0.805	0.695	8.58
96)	isopropylbenzene												
	1.796	1.714	1.964	1.983	2.079	1.922	2.091	1.934	1.766	1.755	1.900	7.13
97)	bromoform												
	0.175	0.144	0.218	0.205	0.191	0.229	0.183		0.167		0.189	14.76
98)	cis-1,4-dichloro-2-butene												
		0.102	0.136	0.133	0.129	0.140	0.120		0.114		0.125	10.97
99)	I 1,4-dichlorobenzene-d ----------ISTD----------												
100)	4-bromofluorobenzene (s)												
	0.782	0.789	0.781	0.798	0.798	0.736	0.791	0.800	0.789	0.828	0.789	2.90
101)	1,1,2,2-tetrachloroethane												
	0.669	0.603	0.632	0.667	0.697	0.581	0.716	0.741	0.650	0.677	0.663	7.42
102)	trans-1,4-dichloro-2-butene												
	0.153	0.129	0.135	0.142	0.147	0.127	0.144	0.120	0.136		0.137	7.62
103)	1,2,3-trichloropropane												
	0.178	0.163	0.183	0.193	0.197	0.170	0.211		0.177		0.184	8.46
104)	bromobenzene												
	0.722	0.655	0.734	0.758	0.798	0.685	0.798	0.768	0.734	0.655	0.731	7.18
105)	n-propylbenzene												
	3.199	3.031	3.266	3.455	3.712	2.955	3.667	3.514	3.244	3.192	3.324	7.68
106)	2-chlorotoluene												
	0.665	0.648	0.722	0.743	0.790	0.676	0.762	0.725	0.674	0.830	0.724	8.20
107)	4-chlorotoluene												
	2.071	1.820	2.006	2.055	2.181	1.853	2.176	2.204	1.983	2.134	2.048	6.56
108)	1,3,5-trimethylbenzene												
	2.649	2.462	2.725	2.818	2.966	2.519	2.928	2.865	2.546	2.481	2.696	7.09
109)	tert-butylbenzene												
	2.126	2.079	2.335	2.391	2.483	2.168	2.456		2.029		2.258	7.90
110)	1,2,4-trimethylbenzene												
	2.786	2.448	2.727	2.834	2.987	2.525	2.953	2.894	2.619	2.976	2.775	6.91
111)	sec-butylbenzene												
	3.126	3.113	3.488	3.624	3.857	3.158	3.777	3.348	3.165	3.144	3.380	8.51
112)	p-isopropyltoluene												
	2.781	2.700	3.004	3.085	3.278	2.767	3.285	3.062	2.794	2.658	2.941	7.91
113)	1,3-dichlorobenzene												

Initial Calibration Summary

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VD10266-ICC10266
Lab FileID: D254558.D

```
       1.527 1.375 1.501 1.533 1.611 1.437 1.637 1.724 1.521 1.885  1.575    9.34
114)  1,4-dichlorobenzene
       1.583 1.441 1.530 1.553 1.648 1.468 1.687 1.797 1.538 2.037  1.628   10.93
115)  1,2-dichlorobenzene
       1.679 1.485 1.586 1.623 1.740 1.492 1.778 1.845 1.613 1.894  1.673    8.34
116)  Benzyl Chloride
       1.601 1.310 1.459 1.505 1.528 1.386 1.573 1.737 1.445        1.505    8.34
117)  n-butylbenzene
       1.363 1.362 1.468 1.514 1.620 1.390 1.604 1.520 1.392 1.307  1.454    7.42
118)  2-ethylhexyl acrylate
                0.826 0.731 0.700 0.738 0.632                      0.725    9.70
119)  hexachloroethane
       0.313 0.318 0.493 0.468 0.443 0.493 0.396       0.325        0.406   19.39
120)  1,2-dibromo-3-chloropropane
       0.181 0.146 0.153 0.154 0.154 0.140 0.159       0.155        0.155    7.71
121)  1,3,5-trichlorobenzene
       1.570 1.381 1.506 1.548 1.655 1.343 1.658 1.602 1.498 1.814  1.557    8.85
122)  1,2,4-trichlorobenzene
       1.435 1.316 1.445 1.482 1.598 1.240 1.584 1.542 1.422        1.451    8.17
123)  hexachlorobutadiene
       0.526 0.564 0.612 0.619 0.658 0.545 0.666 0.546 0.562        0.589    8.75
124)  naphthalene
       3.311 2.927 3.153 3.302 3.464 2.558 3.449 3.393 3.069        3.181    9.27
125)  1,2,3-trichlorobenzene
       1.243 1.194 1.296 1.329 1.403 1.124 1.383 1.381 1.252        1.289    7.34
126)  2-methylnaphthalene
       1.328 1.375 1.766 1.753 1.710 1.456 1.653       1.326        1.546   12.54
 ----------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          MD10266.M         Fri Dec 22 11:53:41 2017   RPT1
```

Initial Calibration Verification

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VD10266-ICV10266
Lab FileID: D254563.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\d254563.D Vial: 14
Acq On : 22 Dec 2017 2:41 am Operator: thienn
Sample : icv10266-50 Inst : MSD
Misc : ms23117,vd10266,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MD10266.M (RTE Integrator)
Title : SW846 8260C, Rxi-624 MS 60m x 0.25mm x 1.4um
Last Update : Fri Dec 22 11:06:37 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	94	0.00	7.63
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	99	0.00	9.89
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		1,3-butadiene		----------NA----------				
10		vinyl chloride		----------NA----------				
11		bromomethane		----------NA----------				
12		chloroethane		----------NA----------				
13		trichlorofluoromethane		----------NA----------				
14		vinyl bromide		----------NA----------				
15		ethyl ether		----------NA----------				
16		2-chloropropane		----------NA----------				
17		acrolein		----------NA----------				
18		freon 113		----------NA----------				
19		1,1-dichloroethene		----------NA----------				
20		acetone		----------NA----------				
21		acetonitrile	0.080	0.077	3.8	97	0.00	7.39
22		iodomethane		----------NA----------				
23		carbon disulfide		----------NA----------				
24		methylene chloride		----------NA----------				
25		methyl acetate		----------NA----------				
26		methyl tert butyl ether		----------NA----------				
27		trans-1,2-dichloroethene		----------NA----------				
28		hexane		----------NA----------				
29		di-isopropyl ether		----------NA----------				
30		2-butanone		----------NA----------				
31		1,1-dichloroethane		----------NA----------				
32		chloroprene		----------NA----------				
33		acrylonitrile		----------NA----------				
34		vinyl acetate		----------NA----------				
35		ethyl tert-butyl ether		----------NA----------				
36		ethyl acetate		----------NA----------				
37		2,2-dichloropropane		----------NA----------				
38		cis-1,2-dichloroethene		----------NA----------				
39		propionitrile		----------NA----------				
40		methyl acrylate		----------NA----------				
41		methacrylonitrile		----------NA----------				

Initial Calibration Verification

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VD10266-ICV10266
Lab FileID: D254563.D

42		bromochloromethane		----------NA----------				
43		tetrahydrofuran		----------NA----------				
44		chloroform		----------NA----------				
45		tert-Butyl Formate		----------NA----------				
46	S	dibromofluoromethane (s)	0.460	0.458	0.4	98	0.00	9.93
47		1,1,1-trichloroethane		----------NA----------				
48		cyclohexane		----------NA----------				
49		isobutyl alcohol		----------NA----------				
50		1,1-dichloropropene		----------NA----------				
51		carbon tetrachloride		----------NA----------				
52		tert-amyl alcohol		----------NA----------				
53		isopropyl acetate		----------NA----------				
54	I	1,4-difluorobenzene	1.000	1.000	0.0	98	0.00	10.85
55	S	1,2-dichloroethane-d4 (s)	0.318	0.316	0.6	92	0.00	10.37
56		n-butyl alcohol		----------NA----------				
57		2,2,4-Trimethylpentane		----------NA----------				
58		benzene		----------NA----------				
59		tert-amyl methyl ether		----------NA----------				
60		heptane		----------NA----------				
61		1,2-dichloroethane		----------NA----------				
62		ethyl acrylate		----------NA----------				
63		trichloroethene		----------NA----------				
64		2-chloroethyl vinyl ether		----------NA----------				
65		methyl methacrylate		----------NA----------				
66		methylcyclohexane		----------NA----------				
67		1,2-dichloropropane		----------NA----------				
68		dibromomethane		----------NA----------				
69		bromodichloromethane		----------NA----------				
70		2-nitropropane		----------NA----------				
71		epichlorohydrin		----------NA----------				
72		cis-1,3-dichloropropene		----------NA----------				
73		4-methyl-2-pentanone		----------NA----------				
74		isoamyl alcohol		----------NA----------				
75	I	chlorobenzene-d5	1.000	1.000	0.0	97	0.00	14.26
76	S	toluene-d8 (s)	1.224	1.229	-0.4	97	0.00	12.58
77		toluene		----------NA----------				
78		ethyl methacrylate		----------NA----------				
79		trans-1,3-dichloropropene		----------NA----------				
80		1,1,2-trichloroethane		----------NA----------				
81		tetrachloroethene		----------NA----------				
82		2-hexanone		----------NA----------				
83		1,3-dichloropropane		----------NA----------				
84		butyl acetate		----------NA----------				
85		3,3-Dimethyl-1-Butanol		----------NA----------				
86		dibromochloromethane		----------NA----------				
87		1,2-dibromoethane		----------NA----------				
88		n-butyl ether		----------NA----------				
89		chlorobenzene		----------NA----------				
90		1,1,1,2-tetrachloroethane		----------NA----------				
91		ethylbenzene		----------NA----------				
92		m,p-xylene		----------NA----------				
93		o-xylene		----------NA----------				
94		styrene		----------NA----------				
95		butyl acrylate		----------NA----------				
96		isopropylbenzene		----------NA----------				
97		bromoform		----------NA----------				
98		cis-1,4-dichloro-2-butene		----------NA----------				

Initial Calibration Verification

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VD10266-ICV10266
Lab FileID: D254563.D

99	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	95	0.00	16.90
100	S	4-bromofluorobenzene (s)	0.789	0.796	-0.9	95	0.00	15.58
101		1,1,2,2-tetrachloroethane	----------NA----------					
102		trans-1,4-dichloro-2-bute	----------NA----------					
103		1,2,3-trichloropropane	----------NA----------					
104		bromobenzene	----------NA----------					
105		n-propylbenzene	----------NA----------					
106		2-chlorotoluene	----------NA----------					
107		4-chlorotoluene	----------NA----------					
108		1,3,5-trimethylbenzene	----------NA----------					
109		tert-butylbenzene	----------NA----------					
110		1,2,4-trimethylbenzene	----------NA----------					
111		sec-butylbenzene	----------NA----------					
112		p-isopropyltoluene	----------NA----------					
113		1,3-dichlorobenzene	----------NA----------					
114		1,4-dichlorobenzene	----------NA----------					
115		1,2-dichlorobenzene	----------NA----------					
116		Benzyl Chloride	----------NA----------					
117		n-butylbenzene	----------NA----------					
118		2-ethylhexyl acrylate	----------NA----------					
119		hexachloroethane	----------NA----------					
120		1,2-dibromo-3-chloropropa	----------NA----------					
121		1,3,5-trichlorobenzene	----------NA----------					
122		1,2,4-trichlorobenzene	----------NA----------					
123		hexachlorobutadiene	----------NA----------					
124		naphthalene	----------NA----------					
125		1,2,3-trichlorobenzene	----------NA----------					
126		2-methylnaphthalene	----------NA----------					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
d254558.D MD10266.M Fri Dec 22 11:54:02 2017 RPT1

6.7.2
6

Initial Calibration Verification

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VD10266-ICV10266
Lab FileID: D254564.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\d254564.D Vial: 15
Acq On : 22 Dec 2017 3:11 am Operator: thienn
Sample : icv10266-50 Inst : MSD
Misc : ms23117,vd10266,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MD10266.M (RTE Integrator)
Title : SW846 8260C, Rxi-624 MS 60m x 0.25mm x 1.4um
Last Update : Fri Dec 22 11:06:37 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	96	-0.01	7.62
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.199	1.231	-2.7	94	0.01	7.75
4		1,4-dioxane	0.123	0.122	0.8	93	0.00	11.53
5	I	pentafluorobenzene	1.000	1.000	0.0	98	0.00	9.89
6		chlorodifluoromethane	1.192	1.073	10.0	90	0.00	4.44
7		dichlorodifluoromethane	1.032	1.121	-8.6	101	0.01	4.44
8		chloromethane	1.189	1.138	4.3	96	0.00	4.81
9		1,3-butadiene		----------NA----------				
10		vinyl chloride	1.166	1.096	6.0	92	0.00	5.05
11		bromomethane	0.802	0.754	6.0	95	0.00	5.63
12		chloroethane	0.636	0.587	7.7	93	0.00	5.78
13		trichlorofluoromethane	1.049	1.011	3.6	93	0.00	6.24
14		vinyl bromide	0.670	0.707	-5.5	101	0.00	6.11
15		ethyl ether	0.283	0.287	-1.4	96	0.00	6.57
16		2-chloropropane	1.032	0.954	7.6	92	0.00	6.80
17		acrolein	0.097	0.086	11.3	86	0.00	6.79
18		freon 113	0.565	0.645	-14.2	106	-0.01	7.02
19		1,1-dichloroethene	0.664	0.542	18.4	87	0.00	7.00
20		acetone	0.087	0.075	13.8	83	0.00	6.99
21		acetonitrile	0.080	0.071	11.3	88	0.00	7.39
22		iodomethane	1.135	1.064	6.3	91	0.00	7.26
23		carbon disulfide	2.266	2.458	-8.5	106	0.00	7.42
24		methylene chloride	0.654	0.616	5.8	93	0.00	7.69
25		methyl acetate	0.364	0.372	-2.2	109	0.00	7.43
26		methyl tert butyl ether	2.009	1.923	4.3	98	0.00	8.05
27		trans-1,2-dichloroethene	0.597	0.527	11.7	90	0.00	8.08
28		hexane	0.330	0.242	26.7	69	0.00	8.43
29		di-isopropyl ether	2.084	2.008	3.6	97	0.00	8.64
30		2-butanone	0.065	0.063	3.1	86	0.00	9.28
31		1,1-dichloroethane	0.963	0.922	4.3	93	0.00	8.65
32		chloroprene	0.732	0.755	-3.1	95	0.00	8.75
33		acrylonitrile	0.162	0.163	-0.6	94	0.00	7.96
34		vinyl acetate	0.064	0.047	26.6	70	0.00	8.57
35		ethyl tert-butyl ether	2.113	2.079	1.6	97	0.00	9.10
36		ethyl acetate	0.066	0.071	-7.6	98	0.00	9.29
37		2,2-dichloropropane	1.053	0.945	10.3	91	0.00	9.41
38		cis-1,2-dichloroethene	0.647	0.594	8.2	93	0.00	9.36
39		propionitrile	0.076	0.070	7.9	89	0.00	9.36
40		methyl acrylate	0.063	0.066	-4.8	95	0.00	9.38
41		methacrylonitrile	0.193	0.187	3.1	94	0.00	9.56

Initial Calibration Verification

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VD10266-ICV10266
Lab FileID: D254564.D

42		bromochloromethane	0.272	0.268	1.5	93	0.00	9.66
43		tetrahydrofuran	0.149	0.150	-0.7	96	0.00	9.69
44		chloroform	0.869	0.873	-0.5	97	0.00	9.74
45		tert-Butyl Formate	0.263	0.211	19.8	82	0.00	9.79
46	S	dibromofluoromethane (s)	0.460	0.460	0.0	97	0.00	9.93
47		1,1,1-trichloroethane	0.974	0.976	-0.2	95	0.00	10.03
48		cyclohexane	1.154	0.982	14.9	80	0.00	10.15
49		isobutyl alcohol		----------NA----------				
50		1,1-dichloropropene	0.669	0.656	1.9	93	0.00	10.19
51		carbon tetrachloride	0.757	0.781	-3.2	95	0.00	10.23
52		tert-amyl alcohol	0.034	0.030	11.8	95	0.00	10.30
53		isopropyl acetate	0.107	0.115	-7.5	100	0.00	10.32
54	I	1,4-difluorobenzene	1.000	1.000	0.0	97	0.00	10.85
55	S	1,2-dichloroethane-d4 (s)	0.318	0.338	-6.3	97	0.00	10.37
56		n-butyl alcohol	0.011	0.010	9.1	91	0.00	10.88
57		2,2,4-Trimethylpentane	1.193	1.202	-0.8	91	0.00	10.54
58		benzene	1.412	1.372	2.8	94	0.00	10.44
59		tert-amyl methyl ether	1.370	1.323	3.4	96	0.00	10.52
60		heptane	0.218	0.224	-2.8	98	0.00	10.70
61		1,2-dichloroethane	0.390	0.388	0.5	96	0.00	10.46
62		ethyl acrylate	0.362	0.363	-0.3	100	0.00	11.15
63		trichloroethene	0.337	0.352	-4.5	99	0.00	11.18
64		2-chloroethyl vinyl ether	0.202	0.202	0.0	95	0.00	12.00
65		methyl methacrylate	0.083	0.090	-8.4	100	0.00	11.43
66		methylcyclohexane	0.793	0.714	10.0	85	0.00	11.51
67		1,2-dichloropropane	0.355	0.359	-1.1	97	0.00	11.48
68		dibromomethane	0.187	0.194	-3.7	97	0.00	11.60
69		bromodichloromethane	0.397	0.409	-3.0	95	0.00	11.75
70		2-nitropropane	0.108	0.099	8.3	92	0.00	11.96
71		epichlorohydrin	0.033	0.033	0.0	96	0.00	12.09
72		cis-1,3-dichloropropene	0.534	0.531	0.6	95	0.00	12.24
73		4-methyl-2-pentanone	0.125	0.131	-4.8	100	0.00	12.34
74		isoamyl alcohol	0.010	0.009	10.0	89	0.00	12.33
75	I	chlorobenzene-d5	1.000	1.000	0.0	98	0.00	14.26
76	S	toluene-d8 (s)	1.224	1.210	1.1	96	0.00	12.58
77		toluene	0.882	0.859	2.6	95	0.00	12.66
78		ethyl methacrylate	0.438	0.422	3.7	95	0.00	12.85
79		trans-1,3-dichloropropene	0.480	0.464	3.3	96	0.00	12.86
80		1,1,2-trichloroethane	0.239	0.241	-0.8	97	0.00	13.10
81		tetrachloroethene	0.292	0.531	-81.8#	175	0.00	13.28
82		2-hexanone	0.144	0.128	11.1	89	0.00	13.28
83		1,3-dichloropropane	0.508	0.499	1.8	98	0.00	13.31
84		butyl acetate	0.208	0.212	-1.9	101	0.00	13.37
85		3,3-Dimethyl-1-Butanol	0.026	0.025	3.8	92	0.00	13.47
86		dibromochloromethane	0.281	0.312	-11.0	100	0.00	13.58
87		1,2-dibromoethane	0.296	0.307	-3.7	98	0.00	13.76
88		n-butyl ether	1.673	1.593	4.8	94	0.00	14.25
89		chlorobenzene	0.986	0.962	2.4	97	0.00	14.30
90		1,1,1,2-tetrachloroethane	0.380	0.393	-3.4	97	0.00	14.37
91		ethylbenzene	1.713	1.686	1.6	95	0.00	14.37
92		m,p-xylene	0.669	0.667	0.3	95	0.00	14.50
93		o-xylene	1.470	1.467	0.2	95	0.00	14.96
94		styrene	1.166	1.158	0.7	97	0.00	14.97
95		butyl acrylate	0.695	0.660	5.0	98	0.00	14.75
96		isopropylbenzene	1.900	1.929	-1.5	96	0.00	15.36
97		bromoform	0.189	0.219	-15.9	105	0.00	15.23
98		cis-1,4-dichloro-2-butene	0.125	0.125	0.0	93	0.00	15.39

Initial Calibration Verification

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VD10266-ICV10266
Lab FileID: D254564.D

99	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	98	0.00	16.90
100	S	4-bromofluorobenzene (s)	0.789	0.795	-0.8	98	0.00	15.58
101		1,1,2,2-tetrachloroethane	0.663	0.629	5.1	93	0.00	15.66
102		trans-1,4-dichloro-2-bute	0.137	0.174	-27.0	121	0.00	15.70
103		1,2,3-trichloropropane	0.184	0.188	-2.2	96	0.00	15.76
104		bromobenzene	0.731	0.745	-1.9	97	0.00	15.79
105		n-propylbenzene	3.324	3.353	-0.9	95	0.00	15.83
106		2-chlorotoluene	0.724	0.721	0.4	95	0.00	15.98
107		4-chlorotoluene	2.048	2.057	-0.4	98	0.00	16.10
108		1,3,5-trimethylbenzene	2.696	2.713	-0.6	95	0.00	16.00
109		tert-butylbenzene	2.258	2.328	-3.1	96	0.00	16.39
110		1,2,4-trimethylbenzene	2.775	2.813	-1.4	97	0.00	16.44
111		sec-butylbenzene	3.380	3.533	-4.5	96	0.00	16.64
112		p-isopropyltoluene	2.941	3.033	-3.1	97	0.00	16.78
113		1,3-dichlorobenzene	1.575	1.535	2.5	98	0.00	16.83
114		1,4-dichlorobenzene	1.628	1.554	4.5	98	0.00	16.93
115		1,2-dichlorobenzene	1.673	1.616	3.4	98	0.00	17.35
116		Benzyl Chloride	1.505	1.169	22.3	76	0.00	17.03
117		n-butylbenzene	1.454	1.457	-0.2	95	0.00	17.24
118		2-ethylhexyl acrylate	0.725	0.767	-5.8	103	0.00	19.16
119		hexachloroethane	0.406	0.452	-11.3	95	0.00	17.69
120		1,2-dibromo-3-chloropropa	0.155	0.149	3.9	95	0.00	18.20
121		1,3,5-trichlorobenzene	1.557	1.580	-1.5	100	0.00	18.42
122		1,2,4-trichlorobenzene	1.451	1.454	-0.2	96	0.00	19.16
123		hexachlorobutadiene	0.589	0.600	-1.9	95	0.00	19.30
124		naphthalene	3.181	3.286	-3.3	98	0.00	19.52
125		1,2,3-trichlorobenzene	1.289	1.307	-1.4	97	0.00	19.79
126		2-methylnaphthalene	1.546	1.514	2.1	85	0.00	20.93

(#) = Out of Range SPCC's out = 0 CCC's out = 0
d254558.D MD10266.M Fri Dec 22 11:54:03 2017 RPT1

Initial Calibration Verification

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VD10266-ICV10266
Lab FileID: D254568.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\d254568.D Vial: 2
Acq On : 22 Dec 2017 10:06 am Operator: thienn
Sample : icv10266-50 Inst : MSD
Misc : ms23117,vd10266,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MD10266.M (RTE Integrator)
Title : SW846 8260C, Rxi-624 MS 60m x 0.25mm x 1.4um
Last Update : Fri Dec 22 11:06:37 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	91	-0.02	7.61
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	98	0.00	9.89
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		1,3-butadiene		----------NA----------				
10		vinyl chloride		----------NA----------				
11		bromomethane		----------NA----------				
12		chloroethane		----------NA----------				
13		trichlorofluoromethane		----------NA----------				
14		vinyl bromide		----------NA----------				
15		ethyl ether		----------NA----------				
16		2-chloropropane		----------NA----------				
17		acrolein		----------NA----------				
18		freon 113		----------NA----------				
19		1,1-dichloroethene		----------NA----------				
20		acetone		----------NA----------				
21		acetonitrile		----------NA----------				
22		iodomethane		----------NA----------				
23		carbon disulfide		----------NA----------				
24		methylene chloride		----------NA----------				
25		methyl acetate		----------NA----------				
26		methyl tert butyl ether		----------NA----------				
27		trans-1,2-dichloroethene		----------NA----------				
28		hexane		----------NA----------				
29		di-isopropyl ether		----------NA----------				
30		2-butanone		----------NA----------				
31		1,1-dichloroethane		----------NA----------				
32		chloroprene		----------NA----------				
33		acrylonitrile		----------NA----------				
34		vinyl acetate		----------NA----------				
35		ethyl tert-butyl ether		----------NA----------				
36		ethyl acetate		----------NA----------				
37		2,2-dichloropropane		----------NA----------				
38		cis-1,2-dichloroethene		----------NA----------				
39		propionitrile		----------NA----------				
40		methyl acrylate		----------NA----------				
41		methacrylonitrile		----------NA----------				

Initial Calibration Verification

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VD10266-ICV10266
Lab FileID: D254568.D

42		bromochloromethane		----------NA----------					
43		tetrahydrofuran		----------NA----------					
44		chloroform		----------NA----------					
45		tert-Butyl Formate		----------NA----------					
46	S	dibromofluoromethane (s)	0.460	0.462	-0.4	97	0.00	9.93	
47		1,1,1-trichloroethane		----------NA----------					
48		cyclohexane		----------NA----------					
49		isobutyl alcohol		----------NA----------					
50		1,1-dichloropropene		----------NA----------					
51		carbon tetrachloride		----------NA----------					
52		tert-amyl alcohol		----------NA----------					
53		isopropyl acetate		----------NA----------					
54	I	1,4-difluorobenzene	1.000	1.000	0.0	96	0.00	10.85	
55	S	1,2-dichloroethane-d4 (s)	0.318	0.343	-7.9	98	0.00	10.37	
56		n-butyl alcohol		----------NA----------					
57		2,2,4-Trimethylpentane		----------NA----------					
58		benzene		----------NA----------					
59		tert-amyl methyl ether		----------NA----------					
60		heptane		----------NA----------					
61		1,2-dichloroethane		----------NA----------					
62		ethyl acrylate		----------NA----------					
63		trichloroethene		----------NA----------					
64		2-chloroethyl vinyl ether		----------NA----------					
65		methyl methacrylate		----------NA----------					
66		methylcyclohexane		----------NA----------					
67		1,2-dichloropropane		----------NA----------					
68		dibromomethane		----------NA----------					
69		bromodichloromethane		----------NA----------					
70		2-nitropropane		----------NA----------					
71		epichlorohydrin		----------NA----------					
72		cis-1,3-dichloropropene		----------NA----------					
73		4-methyl-2-pentanone		----------NA----------					
74		isoamyl alcohol		----------NA----------					
75	I	chlorobenzene-d5	1.000	1.000	0.0	98	0.00	14.26	
76	S	toluene-d8 (s)	1.224	1.223	0.1	97	0.00	12.58	
77		toluene		----------NA----------					
78		ethyl methacrylate		----------NA----------					
79		trans-1,3-dichloropropene		----------NA----------					
80		1,1,2-trichloroethane		----------NA----------					
81		tetrachloroethene	0.292	0.371	-27.1	121	0.00	13.28	
82		2-hexanone		----------NA----------					
83		1,3-dichloropropane		----------NA----------					
84		butyl acetate		----------NA----------					
85		3,3-Dimethyl-1-Butanol		----------NA----------					
86		dibromochloromethane		----------NA----------					
87		1,2-dibromoethane		----------NA----------					
88		n-butyl ether		----------NA----------					
89		chlorobenzene		----------NA----------					
90		1,1,1,2-tetrachloroethane		----------NA----------					
91		ethylbenzene		----------NA----------					
92		m,p-xylene		----------NA----------					
93		o-xylene		----------NA----------					
94		styrene		----------NA----------					
95		butyl acrylate		----------NA----------					
96		isopropylbenzene		----------NA----------					
97		bromoform		----------NA----------					
98		cis-1,4-dichloro-2-butene		----------NA----------					

Initial Calibration Verification

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VD10266-ICV10266
Lab FileID: D254568.D

99	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	101	0.00	16.90
100	S	4-bromofluorobenzene (s)	0.789	0.778	1.4	99	0.00	15.58
101		1,1,2,2-tetrachloroethane	----------NA----------					
102		trans-1,4-dichloro-2-bute	----------NA----------					
103		1,2,3-trichloropropane	----------NA----------					
104		bromobenzene	----------NA----------					
105		n-propylbenzene	----------NA----------					
106		2-chlorotoluene	----------NA----------					
107		4-chlorotoluene	----------NA----------					
108		1,3,5-trimethylbenzene	----------NA----------					
109		tert-butylbenzene	----------NA----------					
110		1,2,4-trimethylbenzene	----------NA----------					
111		sec-butylbenzene	----------NA----------					
112		p-isopropyltoluene	----------NA----------					
113		1,3-dichlorobenzene	----------NA----------					
114		1,4-dichlorobenzene	----------NA----------					
115		1,2-dichlorobenzene	----------NA----------					
116		Benzyl Chloride	----------NA----------					
117		n-butylbenzene	----------NA----------					
118		2-ethylhexyl acrylate	----------NA----------					
119		hexachloroethane	----------NA----------					
120		1,2-dibromo-3-chloropropa	----------NA----------					
121		1,3,5-trichlorobenzene	----------NA----------					
122		1,2,4-trichlorobenzene	----------NA----------					
123		hexachlorobutadiene	----------NA----------					
124		naphthalene	----------NA----------					
125		1,2,3-trichlorobenzene	----------NA----------					
126		2-methylnaphthalene	----------NA----------					

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

d254558.D MD10266.M Fri Dec 22 11:54:04 2017 RPT1

Continuing Calibration Summary

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VD10278-CC10266
Lab FileID: D254841.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\d254841.D Vial: 24
Acq On : 3 Jan 2018 10:27 pm Operator: thienn
Sample : cc10266-50 Inst : MSD
Misc : ms23476,vd10278,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MD10266.M (RTE Integrator)
Title : SW846 8260C, Rxi-624 MS 60m x 0.25mm x 1.4um
Last Update : Fri Dec 22 12:17:09 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	75	-0.03	7.60
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.199	1.386	-15.6	83	-0.02	7.72
4		1,4-dioxane	0.123	0.132	-7.3	79	-0.01	11.52
5	I	pentafluorobenzene	1.000	1.000	0.0	74	-0.01	9.88
6		chlorodifluoromethane	1.192	1.576	-32.2#	101	-0.02	4.43
7		dichlorodifluoromethane	1.032	1.429	-38.5#	98	0.00	4.42
8		chloromethane	1.189	1.506	-26.7#	96	-0.01	4.81
9		1,3-butadiene		----------NA----------				
10		vinyl chloride	1.166	1.364	-17.0	87	0.00	5.04
11		bromomethane	0.802	0.835	-4.1	80	0.00	5.63
12		chloroethane	0.636	0.677	-6.4	82	-0.01	5.77
13		trichlorofluoromethane	1.049	1.208	-15.2	84	0.00	6.24
14		vinyl bromide	0.670	0.709	-5.8	77	-0.01	6.10
15		ethyl ether	0.283	0.321	-13.4	82	-0.01	6.56
16		2-chloropropane	1.032	1.190	-15.3	87	-0.02	6.79
17		acrolein	0.097	0.115	-18.6	88	-0.02	6.78
18		freon 113	0.565	0.640	-13.3	80	0.00	7.02
19		1,1-dichloroethene	0.664	0.608	8.4	74	0.00	7.00
20		acetone	0.087	0.103	-18.4	86	0.00	6.98
21		acetonitrile	0.080	0.100	-25.0#	94	-0.02	7.38
22		iodomethane	1.135	1.152	-1.5	75	-0.02	7.25
23		carbon disulfide	2.266	2.458	-8.5	81	0.00	7.40
24		methylene chloride	0.654	0.697	-6.6	80	-0.02	7.67
25		methyl acetate	0.364	0.409	-12.4	91	-0.01	7.42
26		methyl tert butyl ether	2.009	2.097	-4.4	81	-0.01	8.04
27		trans-1,2-dichloroethene	0.597	0.601	-0.7	78	0.00	8.07
28		hexane	0.330	0.397	-20.3#	86	-0.01	8.42
29		di-isopropyl ether	2.084	2.459	-18.0	90	-0.01	8.62
30		2-butanone	0.065	0.078	-20.0	81	-0.02	9.27
31		1,1-dichloroethane	0.963	1.097	-13.9	84	-0.01	8.64
32		chloroprene	0.732	0.849	-16.0	81	-0.02	8.74
33		acrylonitrile	0.162	0.195	-20.4#	85	-0.02	7.94
34		vinyl acetate	0.064	0.097	-51.6#	108	-0.02	8.55
35		ethyl tert-butyl ether	2.113	2.341	-10.8	83	-0.01	9.08
36		ethyl acetate	0.066	0.087	-31.8#	92	-0.01	9.28
37		2,2-dichloropropane	1.053	1.224	-16.2	89	-0.01	9.40
38		cis-1,2-dichloroethene	0.647	0.654	-1.1	78	-0.01	9.35
39		propionitrile	0.076	0.091	-19.7	88	-0.02	9.34
40		methyl acrylate	0.063	0.074	-17.5	82	-0.01	9.37
41		methacrylonitrile	0.193	0.215	-11.4	82	-0.01	9.55

Continuing Calibration Summary

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VD10278-CC10266
Lab FileID: D254841.D

42		bromochloromethane	0.272	0.303	-11.4	80	-0.01	9.65
43		tetrahydrofuran	0.149	0.188	-26.2#	91	-0.01	9.67
44		chloroform	0.869	0.998	-14.8	84	-0.01	9.73
45		tert-Butyl Formate	0.263	0.347	-31.9#	102	-0.01	9.78
46	S	dibromofluoromethane (s)	0.460	0.494	-7.4	79	-0.01	9.92
47		1,1,1-trichloroethane	0.974	1.148	-17.9	85	0.00	10.02
48		cyclohexane	1.186	1.304	-9.9	81	-0.01	10.14
49		isobutyl alcohol		----------NA----------				
50		1,1-dichloropropene	0.669	0.731	-9.3	79	-0.01	10.18
51		carbon tetrachloride	0.757	0.957	-26.4#	89	-0.01	10.22
52		tert-amyl alcohol	0.034	0.035	-2.9	84	-0.02	10.28
53		isopropyl acetate	0.107	0.122	-14.0	81	-0.01	10.32
54	I	1,4-difluorobenzene	1.000	1.000	0.0	74	-0.01	10.84
55	S	1,2-dichloroethane-d4 (s)	0.318	0.352	-10.7	78	-0.01	10.35
56		n-butyl alcohol	0.011	0.011	0.0	80	-0.02	10.86
57		2,2,4-Trimethylpentane	1.193	1.435	-20.3#	84	-0.01	10.53
58		benzene	1.412	1.506	-6.7	80	-0.01	10.43
59		tert-amyl methyl ether	1.370	1.480	-8.0	83	-0.01	10.51
60		heptane	0.218	0.252	-15.6	85	-0.01	10.68
61		1,2-dichloroethane	0.390	0.463	-18.7	89	-0.01	10.45
62		ethyl acrylate	0.362	0.386	-6.6	82	-0.01	11.13
63		trichloroethene	0.337	0.351	-4.2	76	-0.01	11.17
64		2-chloroethyl vinyl ether	0.202	0.233	-15.3	85	-0.02	11.98
65		methyl methacrylate	0.083	0.088	-6.0	75	-0.01	11.42
66		methylcyclohexane	0.793	0.865	-9.1	80	0.00	11.50
67		1,2-dichloropropane	0.355	0.403	-13.5	84	-0.01	11.47
68		dibromomethane	0.187	0.215	-15.0	83	-0.02	11.58
69		bromodichloromethane	0.397	0.491	-23.7#	88	-0.02	11.74
70		2-nitropropane	0.108	0.130	-20.4#	93	-0.02	11.94
71		epichlorohydrin	0.033	0.037	-12.1	82	-0.02	12.08
72		cis-1,3-dichloropropene	0.534	0.598	-12.0	83	-0.01	12.23
73		4-methyl-2-pentanone	0.125	0.144	-15.2	85	-0.02	12.33
74		isoamyl alcohol	0.010	0.011	-10.0	80	-0.01	12.32
75	I	chlorobenzene-d5	1.000	1.000	0.0	73	-0.01	14.25
76	S	toluene-d8 (s)	1.224	1.241	-1.4	74	0.00	12.57
77		toluene	0.882	0.929	-5.3	76	-0.01	12.65
78		ethyl methacrylate	0.438	0.473	-8.0	79	-0.01	12.83
79		trans-1,3-dichloropropene	0.480	0.550	-14.6	85	-0.02	12.84
80		1,1,2-trichloroethane	0.239	0.277	-15.9	83	-0.02	13.08
81		tetrachloroethene	0.292	0.296	-1.4	73	-0.01	13.27
82		2-hexanone	0.144	0.161	-11.8	83	-0.01	13.27
83		1,3-dichloropropane	0.508	0.562	-10.6	83	-0.01	13.29
84		butyl acetate	0.208	0.238	-14.4	85	0.00	13.36
85		3,3-Dimethyl-1-Butanol	0.026	0.031	-19.2	84	-0.01	13.46
86		dibromochloromethane	0.281	0.367	-30.6#	87	-0.01	13.57
87		1,2-dibromoethane	0.296	0.341	-15.2	81	-0.01	13.74
88		n-butyl ether	1.673	1.812	-8.3	79	0.00	14.24
89		chlorobenzene	0.986	1.020	-3.4	76	-0.01	14.29
90		1,1,1,2-tetrachloroethane	0.380	0.451	-18.7	83	-0.01	14.36
91		ethylbenzene	1.713	1.857	-8.4	78	-0.01	14.36
92		m,p-xylene	0.669	0.713	-6.6	76	-0.01	14.49
93		o-xylene	1.470	1.620	-10.2	78	-0.01	14.95
94		styrene	1.166	1.235	-5.9	77	-0.01	14.96
95		butyl acrylate	0.695	0.757	-8.9	84	-0.01	14.74
96		isopropylbenzene	1.900	2.053	-8.1	76	-0.01	15.34
97		bromoform	0.189	0.264	-39.7#	94	-0.01	15.21
98		cis-1,4-dichloro-2-butene	0.125	0.163	-30.4#	90	-0.01	15.37

Continuing Calibration Summary

Job Number: JC57987
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY

Sample: VD10278-CC10266
Lab FileID: D254841.D

99	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	76	-0.01	16.89
100	S	4-bromofluorobenzene (s)	0.789	0.776	1.6	74	-0.01	15.57
101		1,1,2,2-tetrachloroethane	0.663	0.753	-13.6	86	-0.01	15.65
102		trans-1,4-dichloro-2-bute	0.137	0.171	-24.8#	92	-0.01	15.68
103		1,2,3-trichloropropane	0.184	0.211	-14.7	83	-0.01	15.75
104		bromobenzene	0.731	0.777	-6.3	78	-0.01	15.78
105		n-propylbenzene	3.324	3.589	-8.0	79	-0.01	15.81
106		2-chlorotoluene	0.724	0.747	-3.2	77	-0.01	15.97
107		4-chlorotoluene	2.048	2.182	-6.5	81	-0.01	16.09
108		1,3,5-trimethylbenzene	2.696	2.805	-4.0	76	0.00	15.99
109		tert-butylbenzene	2.258	2.313	-2.4	74	-0.01	16.37
110		1,2,4-trimethylbenzene	2.775	2.830	-2.0	76	-0.01	16.43
111		sec-butylbenzene	3.380	3.606	-6.7	76	-0.01	16.63
112		p-isopropyltoluene	2.941	3.054	-3.8	75	0.00	16.77
113		1,3-dichlorobenzene	1.575	1.602	-1.7	80	-0.01	16.81
114		1,4-dichlorobenzene	1.628	1.648	-1.2	81	-0.01	16.92
115		1,2-dichlorobenzene	1.673	1.697	-1.4	80	0.00	17.34
116		Benzyl Chloride	1.505	1.822	-21.1#	92	-0.01	17.02
117		n-butylbenzene	1.454	1.567	-7.8	79	0.00	17.23
118		2-ethylhexyl acrylate	0.725	0.578	20.3#	60	0.00	19.15
119		hexachloroethane	0.406	0.511	-25.9#	83	-0.01	17.68
120		1,2-dibromo-3-chloropropa	0.155	0.172	-11.0	85	0.00	18.19
121		1,3,5-trichlorobenzene	1.557	1.530	1.7	75	0.00	18.41
122		1,2,4-trichlorobenzene	1.451	1.489	-2.6	77	-0.01	19.15
123		hexachlorobutadiene	0.589	0.596	-1.2	73	-0.01	19.29
124		naphthalene	3.181	3.303	-3.8	76	-0.01	19.51
125		1,2,3-trichlorobenzene	1.289	1.366	-6.0	78	-0.01	19.78
126		2-methylnaphthalene	1.546	1.501	2.9	65	-0.01	20.92

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

d254558.D MD10266.M Thu Jan 04 16:31:15 2018 RPT1

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

HSW Engineering

Bethpage Deep Park Investigation, Bethpage, NY

PO#7AS301101.063

SGS Job Number: JC67175

Sampling Date: 05/31/18

Report to:

RPoff@HSWEng.com
DSmolensky@Emagin-Inc.com

ATTN: Distribution3

Total number of pages in report: **117**

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 (ANAB L2248)

Sections: 1 2 3 4 5 6

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Sample Summary

HSW Engineering

Job No: JC67175

Bethpage Deep Park Investigation, Bethpage, NY
Project No: PO#7AS301101.063

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC67175-1	05/31/18	14:05	DC	06/01/18	AQ	Ground Water	MW-207A-1R
JC67175-1D	05/31/18	14:05	DC	06/01/18	AQ	Water Dup/MSD	MW-207A-1R MSD
JC67175-1S	05/31/18	14:05	DC	06/01/18	AQ	Water Matrix Spike	MW-207A-1R MS
JC67175-2	05/31/18	14:00	DC	06/01/18	AQ	Ground Water	MW-207B-1R
JC67175-3	05/31/18	00:00	DC	06/01/18	AQ	Ground Water	DUP-1
JC67175-4	05/31/18	14:05	DC	06/01/18	AQ	Trip Blank Water	TB053118DC1
JC67175-5	05/31/18	11:00	DC	06/01/18	AQ	Equipment Blank	EB053118DC1

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	HSW Engineering	**Job No**	JC67175
Site:	Bethpage Deep Park Investigation, Bethpage, NY	**Report Date**	6/12/2018 4:48:13 PM

On 06/01/2018, 3 Sample(s), 1 Trip Blank(s) and 1 Equipment Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 1.9 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC67175 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:** V2C7088

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC67381-15MS, JC67381-15MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for Ethylbenzene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- RPD(s) for MSD for Acetone are outside control limits for sample JC67381-15MSD. Outside control limits due to matrix interference.
- JC67175-2 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC67175-4 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.

Matrix: AQ **Batch ID:** V3B6513

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC67261-3MS, JC67261-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for Tetrachloroethene are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix: AQ **Batch ID:** VL8609

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC67175-1MS, JC67175-1MSD were used as the QC samples indicated.
- JC67175-5 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC67175-5 for Bromoform: Associated CCV outside of control limits high, sample was ND.
- JC67175-1 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JC67175-5 for 1,1,2,2-Tetrachloroethane: Associated CCV outside of control limits high, sample was ND.
- JC67175-1 for 1,1,2,2-Tetrachloroethane: Associated CCV outside of control limits high, sample was ND.
- JC67175-1 for Bromoform: Associated CCV outside of control limits high, sample was ND.
- JC67175-1 for Dibromochloromethane: Associated CCV outside of control limits high, sample was ND.
- JC67175-5 for Dibromochloromethane: Associated CCV outside of control limits high, sample was ND.

SGS North America Inc. 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 North America Inc. 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 North America Inc indicated via signature on the report cover

Summary of Hits

Job Number: JC67175
Account: HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY
Collected: 05/31/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC67175-1	**MW-207A-1R**					
No hits reported in this sample.						
JC67175-2	**MW-207B-1R**					
Bromoform		0.65 J	1.0	0.42	ug/l	SW846 8260C
Dibromochloromethane		0.46 J	1.0	0.16	ug/l	SW846 8260C
Freon 113		1.3 J	5.0	1.2	ug/l	SW846 8260C
Toluene		0.39 J	1.0	0.25	ug/l	SW846 8260C
Trichloroethene		1.1	1.0	0.27	ug/l	SW846 8260C
JC67175-3	**DUP-1**					
Bromoform		0.58 J	1.0	0.42	ug/l	SW846 8260C
Dibromochloromethane		0.42 J	1.0	0.16	ug/l	SW846 8260C
Freon 113		1.2 J	5.0	1.2	ug/l	SW846 8260C
Toluene		0.41 J	1.0	0.25	ug/l	SW846 8260C
Trichloroethene		1.1	1.0	0.27	ug/l	SW846 8260C
JC67175-4	**TB053118DC1**					
No hits reported in this sample.						
JC67175-5	**EB053118DC1**					
No hits reported in this sample.						

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-207A-1R		
Lab Sample ID:	JC67175-1	**Date Sampled:**	05/31/18
Matrix:	AQ - Ground Water	**Date Received:**	06/01/18
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Bethpage Deep Park Investigation, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L301952.D	1	06/05/18 09:27	SS	n/a	n/a	VL8609
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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 [a]	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	0.50	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 [a]	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	
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	

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:	MW-207A-1R		
Lab Sample ID:	JC67175-1	**Date Sampled:**	05/31/18
Matrix:	AQ - Ground Water	**Date Received:**	06/01/18
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Bethpage Deep Park Investigation, Bethpage, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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 [a]	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		80-120%
17060-07-0	1,2-Dichloroethane-D4	108%		81-124%
2037-26-5	Toluene-D8	115%		80-120%
460-00-4	4-Bromofluorobenzene	99%		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: MW-207B-1R
Lab Sample ID: JC67175-2
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Bethpage Deep Park Investigation, Bethpage, NY

Date Sampled: 05/31/18
Date Received: 06/01/18
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C159637.D	1	06/08/18 12:29	HT	n/a	n/a	V2C7088
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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	0.65	1.0	0.42	ug/l	J
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	0.50	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	0.46	1.0	0.16	ug/l	J
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	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
76-13-1	Freon 113	1.3	5.0	1.2	ug/l	J
591-78-6	2-Hexanone	ND	5.0	3.3	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:	MW-207B-1R		
Lab Sample ID:	JC67175-2	**Date Sampled:**	05/31/18
Matrix:	AQ - Ground Water	**Date Received:**	06/01/18
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Bethpage Deep Park Investigation, Bethpage, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.39	1.0	0.25	ug/l	J
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	1.1	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		80-120%
17060-07-0	1,2-Dichloroethane-D4	102%		81-124%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	96%		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:	DUP-1		
Lab Sample ID:	JC67175-3	**Date Sampled:**	05/31/18
Matrix:	AQ - Ground Water	**Date Received:**	06/01/18
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Bethpage Deep Park Investigation, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B146943.D	1	06/06/18 21:00	JP	n/a	n/a	V3B6513
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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	0.58	1.0	0.42	ug/l	J
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	0.50	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	0.42	1.0	0.16	ug/l	J
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	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
76-13-1	Freon 113	1.2	5.0	1.2	ug/l	J
591-78-6	2-Hexanone	ND	5.0	3.3	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:	DUP-1		
Lab Sample ID:	JC67175-3	**Date Sampled:**	05/31/18
Matrix:	AQ - Ground Water	**Date Received:**	06/01/18
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Bethpage Deep Park Investigation, Bethpage, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.41	1.0	0.25	ug/l	J
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	1.1	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		80-120%
17060-07-0	1,2-Dichloroethane-D4	109%		81-124%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	91%		80-120%

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:	TB053118DC1		
Lab Sample ID:	JC67175-4	**Date Sampled:**	05/31/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	06/01/18
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Bethpage Deep Park Investigation, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C159636.D	1	06/08/18 12:01	HT	n/a	n/a	V2C7088
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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	0.50	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 [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	
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	

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:	TB053118DC1		
Lab Sample ID:	JC67175-4	**Date Sampled:**	05/31/18
Matrix:	AQ - Trip Blank Water	**Date Received:**	06/01/18
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Bethpage Deep Park Investigation, Bethpage, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		80-120%
17060-07-0	1,2-Dichloroethane-D4	102%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	97%		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:	EB053118DC1		
Lab Sample ID:	JC67175-5	**Date Sampled:**	05/31/18
Matrix:	AQ - Equipment Blank	**Date Received:**	06/01/18
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Bethpage Deep Park Investigation, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L301956.D	1	06/05/18 11:16	SS	n/a	n/a	VL8609
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

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 [a]	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	0.50	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 [a]	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	
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	

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:	EB053118DC1		
Lab Sample ID:	JC67175-5	**Date Sampled:**	05/31/18
Matrix:	AQ - Equipment Blank	**Date Received:**	06/01/18
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Bethpage Deep Park Investigation, Bethpage, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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 [a]	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		80-120%
17060-07-0	1,2-Dichloroethane-D4	108%		81-124%
2037-26-5	Toluene-D8	116%		80-120%
460-00-4	4-Bromofluorobenzene	98%		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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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

GW
EB
WTB

SGS ACCUTEST

CHAIN OF CUSTODY

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

PAGE 1 OF 1

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: JC67175

Client / Reporting Information

Company Name: EMAGIN
Street Address: 15711 Mapledale Blvd, Suite B
City: Tampa State: FL Zip: 33624
Project Contact: Rich Poff E-mail: rpoff@hsweng.com
Phone #: 813-549-1018 Fax #:
Sampler(s) Name(s): Pat Prozeski Phone #: 516 297-6247

Project Information

Project Name: Bethpage Deep Park Investigation
Street:
City: Bethpage State: NY
Client Purchase Order #: 7AS301101.063
Project Manager: Rich Poff

Billing Information (If different from Report to)

Company Name: EMAGIN
Street Address:
City: State: Zip:
Attention: Accounts Payable

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Waste 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

#	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	NaHSO4	EPA Method 8260C	LAB USE ONLY
1	MW-207A-1R		5-31-18	1405	DC	GW	9	9									X	
2	MW-207B-1R		5-31-18	1400	DC	GW	3	3									X	V625
3	DUP-1		5-31-18	—	—	GW	3	3									X	
4	TB053118DC1		5-31-18	—	—	TB	2	2									X	
5	EB053118DC1		5-31-18	1100	DC/PP	EB	2	2									X	

Turnaround Time (Business days)

- [ ] Std. 15 Business Days
- [X] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

INITIAL ASESSMENT 3A Days

LABEL VERIFICATION

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [X] EDD Format-EQuIS 6
- [ ] Other COMMC+

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

SGS PM: Tammy McCloskey

MW-207A-1R MS/MSD

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

Relinquished by Sampler	Date Time:	Received By:	Relinquished By	Date Time:	Received By:
Pat Prozeski	5-31-18 2000	1	2	6/1/18 1222	2
Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Intact / Not Intact	Preserved where applicable

On Ice: 21 Cooler Temp.: 1.9°C +0

SGS Sample Receipt Summary

Job Number: JC67175 **Client:** _____ **Project:** _____

Date / Time Received: 6/1/2018 5:22:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (1.9);

Cooler Temps (Corrected) °C: Cooler 1: (1.9);

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:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 216017 pH 12+: 208717 Other: (Specify) _____ _____

Comments

SM089-03
Rev. Date 12/7/17

JC67175: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

HSW Engineering

Job No: JC67175

Bethpage Deep Park Investigation, Bethpage, NY
Project No: PO#7AS301101.063

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC67175-1 Collected: 31-MAY-18 14:05 By: DC MW-207A-1R			Received: 01-JUN-18 By: AS			
JC67175-1	SW846 8260C	05-JUN-18 09:27	SS			V8260TCL20
JC67175-2 Collected: 31-MAY-18 14:00 By: DC MW-207B-1R			Received: 01-JUN-18 By: AS			
JC67175-2	SW846 8260C	08-JUN-18 12:29	HT			V8260TCL20
JC67175-3 Collected: 31-MAY-18 00:00 By: DC DUP-1			Received: 01-JUN-18 By: AS			
JC67175-3	SW846 8260C	06-JUN-18 21:00	JP			V8260TCL20
JC67175-4 Collected: 31-MAY-18 14:05 By: DC TB053118DC1			Received: 01-JUN-18 By: AS			
JC67175-4	SW846 8260C	08-JUN-18 12:01	HT			V8260TCL20
JC67175-5 Collected: 31-MAY-18 11:00 By: DC EB053118DC1			Received: 01-JUN-18 By: AS			
JC67175-5	SW846 8260C	05-JUN-18 11:16	SS			V8260TCL20

SGS Internal Chain of Custody

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY
Received: 06/01/18

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC67175-1.2	Secured Storage	Sydney Scelfo	06/05/18 08:30	Retrieve from Storage
JC67175-1.2	Sydney Scelfo	GCMSL	06/05/18 08:30	Load on Instrument
JC67175-1.2	GCMSL	Jessica Potts	06/07/18 08:27	Unload from Instrument
JC67175-1.2	Jessica Potts	Secured Storage	06/07/18 08:27	Return to Storage
JC67175-1.4	Secured Storage	Sydney Scelfo	06/05/18 08:30	Retrieve from Storage
JC67175-1.4	Sydney Scelfo	GCMSL	06/05/18 08:30	Load on Instrument
JC67175-1.4	GCMSL	Jessica Potts	06/07/18 08:27	Unload from Instrument
JC67175-1.4	Jessica Potts	Secured Storage	06/07/18 08:27	Return to Storage
JC67175-1.5	Secured Storage	Sydney Scelfo	06/05/18 08:30	Retrieve from Storage
JC67175-1.5	Sydney Scelfo	GCMSL	06/05/18 08:30	Load on Instrument
JC67175-1.5	GCMSL	Jessica Potts	06/07/18 08:27	Unload from Instrument
JC67175-1.5	Jessica Potts	Secured Storage	06/07/18 08:27	Return to Storage
JC67175-2.1	Secured Storage	Hueanh Tran	06/08/18 11:19	Retrieve from Storage
JC67175-2.1	Hueanh Tran	GCMS2C	06/08/18 11:19	Load on Instrument
JC67175-2.1	GCMS2C	Hueanh Tran	06/11/18 10:20	Unload from Instrument
JC67175-2.1	Hueanh Tran	Secured Storage	06/11/18 10:20	Return to Storage
JC67175-2.2	Secured Storage	Gabriela Alvarez	06/05/18 08:20	Retrieve from Storage
JC67175-2.2	Gabriela Alvarez		06/05/18 08:20	Broken
JC67175-3.1	VOA Prep Storage	Toan Pham	06/06/18 19:35	Retrieve from Storage
JC67175-3.1	Toan Pham	GCMS3B	06/06/18 19:35	Load on Instrument
JC67175-3.1	GCMS3B	Jessica Potts	06/07/18 08:26	Unload from Instrument
JC67175-3.1	Jessica Potts	Secured Storage	06/07/18 08:26	Return to Storage
JC67175-3.2	Secured Storage	Sydney Scelfo	06/05/18 08:30	Retrieve from Storage
JC67175-3.2	Sydney Scelfo	GCMSL	06/05/18 08:30	Load on Instrument
JC67175-3.2	GCMSL	Jessica Potts	06/07/18 08:27	Unload from Instrument
JC67175-3.2	Jessica Potts	Secured Storage	06/07/18 08:27	Return to Storage
JC67175-4.1	Secured Storage	Sydney Scelfo	06/05/18 08:30	Retrieve from Storage
JC67175-4.1	Sydney Scelfo	GCMSL	06/05/18 08:30	Load on Instrument
JC67175-4.1	GCMSL	Sydney Scelfo	06/05/18 08:40	Unload from Instrument
JC67175-4.1	Sydney Scelfo	VOA Prep Storage	06/05/18 08:40	Return to Storage
JC67175-4.1	VOA Prep Storage	Sydney Scelfo	06/05/18 08:46	Retrieve from Storage
JC67175-4.1	Sydney Scelfo		06/05/18 08:46	Broken
JC67175-4.2	Secured Storage	Hueanh Tran	06/08/18 11:19	Retrieve from Storage
JC67175-4.2	Hueanh Tran	GCMS2C	06/08/18 11:19	Load on Instrument
JC67175-4.2	GCMS2C	Hueanh Tran	06/11/18 10:20	Unload from Instrument
JC67175-4.2	Hueanh Tran	Secured Storage	06/11/18 10:20	Return to Storage

SGS Internal Chain of Custody

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY
Received: 06/01/18

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC67175-5.2	Secured Storage	Sydney Scelfo	06/05/18 08:30	Retrieve from Storage
JC67175-5.2	Sydney Scelfo	GCMSL	06/05/18 08:30	Load on Instrument
JC67175-5.2	GCMSL	Jessica Potts	06/07/18 08:27	Unload from Instrument
JC67175-5.2	Jessica Potts	Secured Storage	06/07/18 08:27	Return to Storage

MS Volatiles

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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: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL8609-MB	L301950.D	1	06/05/18	SS	n/a	n/a	VL8609

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

JC67175-1, JC67175-5

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	0.50	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	
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	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	

Method Blank Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL8609-MB	L301950.D	1	06/05/18	SS	n/a	n/a	VL8609

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

JC67175-1, JC67175-5

CAS No.	Compound	Result	RL	MDL	Units	Q
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	107%	80-120%
17060-07-0	1,2-Dichloroethane-D4	109%	81-124%
2037-26-5	Toluene-D8	114%	80-120%
460-00-4	4-Bromofluorobenzene	100%	80-120%

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

Method Blank Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B6513-MB	3B146942.D	1	06/06/18	JP	n/a	n/a	V3B6513

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

JC67175-3

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	0.50	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	
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	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	

Method Blank Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B6513-MB	3B146942.D	1	06/06/18	JP	n/a	n/a	V3B6513

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

JC67175-3

CAS No.	Compound	Result	RL	MDL	Units	Q
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	112%	80-120%
17060-07-0	1,2-Dichloroethane-D4	109%	81-124%
2037-26-5	Toluene-D8	99%	80-120%
460-00-4	4-Bromofluorobenzene	92%	80-120%

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

Method Blank Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C7088-MB	2C159635.D	1	06/08/18	HT	n/a	n/a	V2C7088

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

JC67175-2, JC67175-4

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	0.50	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	
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	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	

Method Blank Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C7088-MB	2C159635.D	1	06/08/18	HT	n/a	n/a	V2C7088

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

JC67175-2, JC67175-4

CAS No.	Compound	Result	RL	MDL	Units	Q
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	101%	80-120%
17060-07-0	1,2-Dichloroethane-D4	100%	81-124%
2037-26-5	Toluene-D8	96%	80-120%
460-00-4	4-Bromofluorobenzene	97%	80-120%

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

Method Blank Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B6513-MB2	3B146968A.D	1	06/07/18	JP	n/a	n/a	V3B6513

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

JC67261-3MS, JC67261-3MSD

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	0.50	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	
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	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	

Method Blank Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B6513-MB2	3B146968A.D	1	06/07/18	JP	n/a	n/a	V3B6513

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

JC67261-3MS, JC67261-3MSD

CAS No.	Compound	Result	RL	MDL	Units	Q
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	108%	80-120%
17060-07-0	1,2-Dichloroethane-D4	107%	81-124%
2037-26-5	Toluene-D8	100%	80-120%
460-00-4	4-Bromofluorobenzene	95%	80-120%

Blank Spike Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL8609-BS	L301948.D	1	06/05/18	SS	n/a	n/a	VL8609

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

JC67175-1, JC67175-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	190	95	42-150
71-43-2	Benzene	50	47.9	96	80-120
74-97-5	Bromochloromethane	50	51.7	103	84-121
75-27-4	Bromodichloromethane	50	51.4	103	83-120
75-25-2	Bromoform	50	58.0	116	76-129
74-83-9	Bromomethane	50	44.4	89	57-138
78-93-3	2-Butanone (MEK)	200	198	99	64-137
75-15-0	Carbon disulfide	50	54.2	108	64-137
56-23-5	Carbon tetrachloride	50	50.0	100	75-135
108-90-7	Chlorobenzene	50	50.2	100	84-117
75-00-3	Chloroethane	50	47.6	95	63-132
67-66-3	Chloroform	50	47.3	95	80-119
74-87-3	Chloromethane	50	43.8	88	46-136
110-82-7	Cyclohexane	50	54.6	109	64-137
96-12-8	1,2-Dibromo-3-chloropropane	50	55.2	110	72-127
124-48-1	Dibromochloromethane	50	55.3	111	80-123
106-93-4	1,2-Dibromoethane	50	54.3	109	84-117
95-50-1	1,2-Dichlorobenzene	50	51.7	103	84-119
541-73-1	1,3-Dichlorobenzene	50	52.1	104	81-117
106-46-7	1,4-Dichlorobenzene	50	51.8	104	82-117
75-71-8	Dichlorodifluoromethane	50	47.6	95	36-149
75-34-3	1,1-Dichloroethane	50	48.6	97	79-120
107-06-2	1,2-Dichloroethane	50	45.5	91	78-126
75-35-4	1,1-Dichloroethene	50	54.0	108	69-126
156-59-2	cis-1,2-Dichloroethene	50	49.7	99	80-120
156-60-5	trans-1,2-Dichloroethene	50	50.9	102	76-120
78-87-5	1,2-Dichloropropane	50	47.6	95	82-121
10061-01-5	cis-1,3-Dichloropropene	50	48.3	97	83-120
10061-02-6	trans-1,3-Dichloropropene	50	50.5	101	82-121
100-41-4	Ethylbenzene	50	48.8	98	80-120
76-13-1	Freon 113	50	52.3	105	62-182
591-78-6	2-Hexanone	200	194	97	65-132
98-82-8	Isopropylbenzene	50	49.6	99	83-120
79-20-9	Methyl Acetate	50	51.4	103	67-129
108-87-2	Methylcyclohexane	50	48.3	97	71-134
1634-04-4	Methyl Tert Butyl Ether	50	49.6	99	80-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL8609-BS	L301948.D	1	06/05/18	SS	n/a	n/a	VL8609

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

JC67175-1, JC67175-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	188	94	71-131
75-09-2	Methylene chloride	50	50.8	102	77-120
100-42-5	Styrene	50	49.5	99	82-122
79-34-5	1,1,2,2-Tetrachloroethane	50	55.0	110	76-119
127-18-4	Tetrachloroethene	50	50.7	101	70-131
108-88-3	Toluene	50	50.8	102	80-120
87-61-6	1,2,3-Trichlorobenzene	50	51.2	102	76-134
120-82-1	1,2,4-Trichlorobenzene	50	53.5	107	79-132
71-55-6	1,1,1-Trichloroethane	50	49.4	99	81-128
79-00-5	1,1,2-Trichloroethane	50	51.8	104	83-118
79-01-6	Trichloroethene	50	50.0	100	80-120
75-69-4	Trichlorofluoromethane	50	49.5	99	64-136
75-01-4	Vinyl chloride	50	46.4	93	51-135
	m,p-Xylene	100	97.3	97	80-120
95-47-6	o-Xylene	50	49.8	100	80-120
1330-20-7	Xylene (total)	150	147	98	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	107%	80-120%
17060-07-0	1,2-Dichloroethane-D4	102%	81-124%
2037-26-5	Toluene-D8	106%	80-120%
460-00-4	4-Bromofluorobenzene	105%	80-120%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B6513-BS	3B146940.D	1	06/06/18	JP	n/a	n/a	V3B6513

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

JC67175-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	192	96	42-150
71-43-2	Benzene	50	46.5	93	80-120
74-97-5	Bromochloromethane	50	52.4	105	84-121
75-27-4	Bromodichloromethane	50	48.4	97	83-120
75-25-2	Bromoform	50	49.8	100	76-129
74-83-9	Bromomethane	50	47.1	94	57-138
78-93-3	2-Butanone (MEK)	200	181	91	64-137
75-15-0	Carbon disulfide	50	44.8	90	64-137
56-23-5	Carbon tetrachloride	50	50.9	102	75-135
108-90-7	Chlorobenzene	50	46.8	94	84-117
75-00-3	Chloroethane	50	50.6	101	63-132
67-66-3	Chloroform	50	46.7	93	80-119
74-87-3	Chloromethane	50	48.6	97	46-136
110-82-7	Cyclohexane	50	47.0	94	64-137
96-12-8	1,2-Dibromo-3-chloropropane	50	52.4	105	72-127
124-48-1	Dibromochloromethane	50	47.6	95	80-123
106-93-4	1,2-Dibromoethane	50	49.7	99	84-117
95-50-1	1,2-Dichlorobenzene	50	49.3	99	84-119
541-73-1	1,3-Dichlorobenzene	50	48.1	96	81-117
106-46-7	1,4-Dichlorobenzene	50	47.3	95	82-117
75-71-8	Dichlorodifluoromethane	50	51.1	102	36-149
75-34-3	1,1-Dichloroethane	50	47.9	96	79-120
107-06-2	1,2-Dichloroethane	50	46.1	92	78-126
75-35-4	1,1-Dichloroethene	50	49.7	99	69-126
156-59-2	cis-1,2-Dichloroethene	50	49.0	98	80-120
156-60-5	trans-1,2-Dichloroethene	50	52.0	104	76-120
78-87-5	1,2-Dichloropropane	50	48.8	98	82-121
10061-01-5	cis-1,3-Dichloropropene	50	48.9	98	83-120
10061-02-6	trans-1,3-Dichloropropene	50	46.6	93	82-121
100-41-4	Ethylbenzene	50	43.6	87	80-120
76-13-1	Freon 113	50	55.3	111	62-182
591-78-6	2-Hexanone	200	178	89	65-132
98-82-8	Isopropylbenzene	50	44.5	89	83-120
79-20-9	Methyl Acetate	50	48.9	98	67-129
108-87-2	Methylcyclohexane	50	47.8	96	71-134
1634-04-4	Methyl Tert Butyl Ether	50	50.9	102	80-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B6513-BS	3B146940.D	1	06/06/18	JP	n/a	n/a	V3B6513

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

JC67175-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	196	98	71-131
75-09-2	Methylene chloride	50	47.2	94	77-120
100-42-5	Styrene	50	46.1	92	82-122
79-34-5	1,1,2,2-Tetrachloroethane	50	46.7	93	76-119
127-18-4	Tetrachloroethene	50	49.9	100	70-131
108-88-3	Toluene	50	44.7	89	80-120
87-61-6	1,2,3-Trichlorobenzene	50	56.0	112	76-134
120-82-1	1,2,4-Trichlorobenzene	50	54.4	109	79-132
71-55-6	1,1,1-Trichloroethane	50	47.0	94	81-128
79-00-5	1,1,2-Trichloroethane	50	47.6	95	83-118
79-01-6	Trichloroethene	50	49.4	99	80-120
75-69-4	Trichlorofluoromethane	50	49.3	99	64-136
75-01-4	Vinyl chloride	50	51.8	104	51-135
	m,p-Xylene	100	90.3	90	80-120
95-47-6	o-Xylene	50	44.0	88	80-120
1330-20-7	Xylene (total)	150	134	89	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	80-120%
17060-07-0	1,2-Dichloroethane-D4	103%	81-124%
2037-26-5	Toluene-D8	99%	80-120%
460-00-4	4-Bromofluorobenzene	97%	80-120%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C7088-BS	2C159633.D	1	06/08/18	HT	n/a	n/a	V2C7088

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

JC67175-2, JC67175-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	170	85	42-150
71-43-2	Benzene	50	46.8	94	80-120
74-97-5	Bromochloromethane	50	51.0	102	84-121
75-27-4	Bromodichloromethane	50	46.1	92	83-120
75-25-2	Bromoform	50	54.5	109	76-129
74-83-9	Bromomethane	50	42.4	85	57-138
78-93-3	2-Butanone (MEK)	200	182	91	64-137
75-15-0	Carbon disulfide	50	47.7	95	64-137
56-23-5	Carbon tetrachloride	50	52.6	105	75-135
108-90-7	Chlorobenzene	50	47.9	96	84-117
75-00-3	Chloroethane	50	40.9	82	63-132
67-66-3	Chloroform	50	44.8	90	80-119
74-87-3	Chloromethane	50	41.0	82	46-136
110-82-7	Cyclohexane	50	53.4	107	64-137
96-12-8	1,2-Dibromo-3-chloropropane	50	47.9	96	72-127
124-48-1	Dibromochloromethane	50	53.2	106	80-123
106-93-4	1,2-Dibromoethane	50	49.1	98	84-117
95-50-1	1,2-Dichlorobenzene	50	48.9	98	84-119
541-73-1	1,3-Dichlorobenzene	50	47.2	94	81-117
106-46-7	1,4-Dichlorobenzene	50	47.3	95	82-117
75-71-8	Dichlorodifluoromethane	50	65.1	130	36-149
75-34-3	1,1-Dichloroethane	50	46.2	92	79-120
107-06-2	1,2-Dichloroethane	50	43.2	86	78-126
75-35-4	1,1-Dichloroethene	50	48.5	97	69-126
156-59-2	cis-1,2-Dichloroethene	50	46.4	93	80-120
156-60-5	trans-1,2-Dichloroethene	50	46.2	92	76-120
78-87-5	1,2-Dichloropropane	50	45.7	91	82-121
10061-01-5	cis-1,3-Dichloropropene	50	44.5	89	83-120
10061-02-6	trans-1,3-Dichloropropene	50	44.8	90	82-121
100-41-4	Ethylbenzene	50	47.1	94	80-120
76-13-1	Freon 113	50	58.8	118	62-182
591-78-6	2-Hexanone	200	166	83	65-132
98-82-8	Isopropylbenzene	50	49.1	98	83-120
79-20-9	Methyl Acetate	50	40.1	80	67-129
108-87-2	Methylcyclohexane	50	50.6	101	71-134
1634-04-4	Methyl Tert Butyl Ether	50	46.6	93	80-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C7088-BS	2C159633.D	1	06/08/18	HT	n/a	n/a	V2C7088

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

JC67175-2, JC67175-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	176	88	71-131
75-09-2	Methylene chloride	50	43.8	88	77-120
100-42-5	Styrene	50	45.2	90	82-122
79-34-5	1,1,2,2-Tetrachloroethane	50	47.5	95	76-119
127-18-4	Tetrachloroethene	50	51.6	103	70-131
108-88-3	Toluene	50	48.4	97	80-120
87-61-6	1,2,3-Trichlorobenzene	50	51.5	103	76-134
120-82-1	1,2,4-Trichlorobenzene	50	52.6	105	79-132
71-55-6	1,1,1-Trichloroethane	50	42.9	86	81-128
79-00-5	1,1,2-Trichloroethane	50	45.8	92	83-118
79-01-6	Trichloroethene	50	46.1	92	80-120
75-69-4	Trichlorofluoromethane	50	46.8	94	64-136
75-01-4	Vinyl chloride	50	47.7	95	51-135
	m,p-Xylene	100	96.1	96	80-120
95-47-6	o-Xylene	50	51.1	102	80-120
1330-20-7	Xylene (total)	150	147	98	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	105%	80-120%
17060-07-0	1,2-Dichloroethane-D4	95%	81-124%
2037-26-5	Toluene-D8	104%	80-120%
460-00-4	4-Bromofluorobenzene	97%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC67175-1MS	L301953.D	1	06/05/18	SS	n/a	n/a	VL8609
JC67175-1MSD	L301954.D	1	06/05/18	SS	n/a	n/a	VL8609
JC67175-1	L301952.D	1	06/05/18	SS	n/a	n/a	VL8609

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

JC67175-1, JC67175-5

CAS No.	Compound	JC67175-1 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	166	83	200	162	81	2	34-149/17
71-43-2	Benzene	ND		50	44.0	88	50	42.6	85	3	54-136/10
74-97-5	Bromochloromethane	ND		50	45.3	91	50	44.6	89	2	79-124/11
75-27-4	Bromodichloromethane	ND		50	47.1	94	50	45.5	91	3	79-124/11
75-25-2	Bromoform	ND		50	51.9	104	50	50.0	100	4	71-130/11
74-83-9	Bromomethane	ND		50	39.8	80	50	41.3	83	4	53-142/14
78-93-3	2-Butanone (MEK)	ND		200	172	86	200	168	84	2	54-142/15
75-15-0	Carbon disulfide	ND		50	50.3	101	50	48.6	97	3	59-145/17
56-23-5	Carbon tetrachloride	ND		50	48.2	96	50	46.2	92	4	70-143/12
108-90-7	Chlorobenzene	ND		50	46.2	92	50	44.3	89	4	78-123/10
75-00-3	Chloroethane	ND		50	37.9	76	50	39.4	79	4	57-141/14
67-66-3	Chloroform	ND		50	44.5	89	50	42.4	85	5	76-123/11
74-87-3	Chloromethane	ND		50	32.9	66	50	34.7	69	5	43-141/16
110-82-7	Cyclohexane	ND		50	51.1	102	50	51.5	103	1	51-155/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	48.4	97	50	47.4	95	2	66-130/13
124-48-1	Dibromochloromethane	ND		50	50.1	100	50	48.6	97	3	76-125/11
106-93-4	1,2-Dibromoethane	ND		50	48.4	97	50	47.2	94	3	78-119/11
95-50-1	1,2-Dichlorobenzene	ND		50	46.9	94	50	46.0	92	2	77-123/11
541-73-1	1,3-Dichlorobenzene	ND		50	48.1	96	50	46.6	93	3	76-122/11
106-46-7	1,4-Dichlorobenzene	ND		50	47.5	95	50	45.7	91	4	76-122/11
75-71-8	Dichlorodifluoromethane	ND		50	37.6	75	50	39.6	79	5	31-159/16
75-34-3	1,1-Dichloroethane	ND		50	45.4	91	50	43.7	87	4	73-126/11
107-06-2	1,2-Dichloroethane	ND		50	41.4	83	50	39.1	78	6	72-131/11
75-35-4	1,1-Dichloroethene	ND		50	52.0	104	50	49.1	98	6	63-136/14
156-59-2	cis-1,2-Dichloroethene	ND		50	46.2	92	50	43.7	87	6	60-136/11
156-60-5	trans-1,2-Dichloroethene	ND		50	47.9	96	50	45.9	92	4	70-126/11
78-87-5	1,2-Dichloropropane	ND		50	44.2	88	50	42.6	85	4	78-124/10
10061-01-5	cis-1,3-Dichloropropene	ND		50	46.2	92	50	44.3	89	4	79-123/11
10061-02-6	trans-1,3-Dichloropropene	ND		50	45.6	91	50	44.1	88	3	77-123/11
100-41-4	Ethylbenzene	ND		50	45.3	91	50	44.1	88	3	51-140/20
76-13-1	Freon 113	ND		50	52.8	106	50	49.4	99	7	60-192/14
591-78-6	2-Hexanone	ND		200	172	86	200	169	85	2	56-139/14
98-82-8	Isopropylbenzene	ND		50	46.0	92	50	44.7	89	3	75-129/11
79-20-9	Methyl Acetate	ND		50	43.2	86	50	41.3	83	4	55-131/15
108-87-2	Methylcyclohexane	ND		50	48.3	97	50	47.2	94	2	57-155/13
1634-04-4	Methyl Tert Butyl Ether	ND		50	45.7	91	50	43.5	87	5	72-123/11

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC67175-1MS	L301953.D	1	06/05/18	SS	n/a	n/a	VL8609
JC67175-1MSD	L301954.D	1	06/05/18	SS	n/a	n/a	VL8609
JC67175-1	L301952.D	1	06/05/18	SS	n/a	n/a	VL8609

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

JC67175-1, JC67175-5

CAS No.	Compound	JC67175-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		200	172	86	200	169	85	2	66-136/13
75-09-2	Methylene chloride	ND		50	46.7	93	50	44.6	89	5	73-125/13
100-42-5	Styrene	ND		50	45.3	91	50	43.1	86	5	75-129/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	50.0	100	50	48.2	96	4	71-122/11
127-18-4	Tetrachloroethene	ND		50	48.1	96	50	46.3	93	4	61-139/11
108-88-3	Toluene	ND		50	47.0	94	50	45.3	91	4	60-135/10
87-61-6	1,2,3-Trichlorobenzene	ND		50	45.6	91	50	44.8	90	2	70-138/13
120-82-1	1,2,4-Trichlorobenzene	ND		50	47.6	95	50	46.3	93	3	72-137/13
71-55-6	1,1,1-Trichloroethane	ND		50	47.1	94	50	45.3	91	4	74-138/12
79-00-5	1,1,2-Trichloroethane	ND		50	47.2	94	50	45.1	90	5	78-121/11
79-01-6	Trichloroethene	ND		50	46.6	93	50	44.3	89	5	62-141/10
75-69-4	Trichlorofluoromethane	ND		50	42.7	85	50	44.0	88	3	57-149/14
75-01-4	Vinyl chloride	ND		50	36.5	73	50	37.8	76	3	43-146/15
	m,p-Xylene	ND		100	90.7	91	100	87.7	88	3	50-144/20
95-47-6	o-Xylene	ND		50	45.6	91	50	44.8	90	2	63-134/10
1330-20-7	Xylene (total)	ND		150	136	91	150	132	88	3	56-139/20

CAS No.	Surrogate Recoveries	MS	MSD	JC67175-1	Limits
1868-53-7	Dibromofluoromethane	110%	109%	106%	80-120%
17060-07-0	1,2-Dichloroethane-D4	105%	104%	108%	81-124%
2037-26-5	Toluene-D8	107%	107%	115%	80-120%
460-00-4	4-Bromofluorobenzene	105%	105%	99%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC67261-3MS	3B146979.D	20	06/07/18	JP	n/a	n/a	V3B6513
JC67261-3MSD	3B146980.D	20	06/07/18	JP	n/a	n/a	V3B6513
JC67261-3	3B146954.D	20	06/07/18	JP	n/a	n/a	V3B6513

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

JC67175-3

CAS No.	Compound	JC67261-3 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		4000	3840	96	4000	3920	98	2	34-149/17
71-43-2	Benzene	ND		1000	991	99	1000	1010	101	2	54-136/10
74-97-5	Bromochloromethane	ND		1000	1120	112	1000	1140	114	2	79-124/11
75-27-4	Bromodichloromethane	ND		1000	1030	103	1000	1050	105	2	79-124/11
75-25-2	Bromoform	ND		1000	1050	105	1000	1090	109	4	71-130/11
74-83-9	Bromomethane	ND		1000	950	95	1000	953	95	0	53-142/14
78-93-3	2-Butanone (MEK)	ND		4000	3710	93	4000	3770	94	2	54-142/15
75-15-0	Carbon disulfide	ND		1000	1010	101	1000	1020	102	1	59-145/17
56-23-5	Carbon tetrachloride	160		1000	1170	101	1000	1180	102	1	70-143/12
108-90-7	Chlorobenzene	ND		1000	990	99	1000	1020	102	3	78-123/10
75-00-3	Chloroethane	ND		1000	1030	103	1000	1030	103	0	57-141/14
67-66-3	Chloroform	6.3	J	1000	1010	100	1000	1020	101	1	76-123/11
74-87-3	Chloromethane	ND		1000	973	97	1000	991	99	2	43-141/16
110-82-7	Cyclohexane	ND		1000	1150	115	1000	1160	116	1	51-155/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		1000	1040	104	1000	1090	109	5	66-130/13
124-48-1	Dibromochloromethane	ND		1000	991	99	1000	1030	103	4	76-125/11
106-93-4	1,2-Dibromoethane	ND		1000	1020	102	1000	1060	106	4	78-119/11
95-50-1	1,2-Dichlorobenzene	ND		1000	1030	103	1000	1060	106	3	77-123/11
541-73-1	1,3-Dichlorobenzene	ND		1000	999	100	1000	1030	103	3	76-122/11
106-46-7	1,4-Dichlorobenzene	ND		1000	997	100	1000	1040	104	4	76-122/11
75-71-8	Dichlorodifluoromethane	ND		1000	1230	123	1000	1250	125	2	31-159/16
75-34-3	1,1-Dichloroethane	ND		1000	1040	104	1000	1060	106	2	73-126/11
107-06-2	1,2-Dichloroethane	ND		1000	976	98	1000	994	99	2	72-131/11
75-35-4	1,1-Dichloroethene	20.1		1000	1120	110	1000	1140	112	2	63-136/14
156-59-2	cis-1,2-Dichloroethene	81.6		1000	1120	104	1000	1130	105	1	60-136/11
156-60-5	trans-1,2-Dichloroethene	ND		1000	1130	113	1000	1140	114	1	70-126/11
78-87-5	1,2-Dichloropropane	ND		1000	1050	105	1000	1050	105	0	78-124/10
10061-01-5	cis-1,3-Dichloropropene	ND		1000	1050	105	1000	1070	107	2	79-123/11
10061-02-6	trans-1,3-Dichloropropene	ND		1000	980	98	1000	1010	101	3	77-123/11
100-41-4	Ethylbenzene	ND		1000	914	91	1000	944	94	3	51-140/20
76-13-1	Freon 113	ND		1000	1310	131	1000	1340	134	2	60-192/14
591-78-6	2-Hexanone	ND		4000	3510	88	4000	3620	91	3	56-139/14
98-82-8	Isopropylbenzene	ND		1000	924	92	1000	949	95	3	75-129/11
79-20-9	Methyl Acetate	ND		1000	935	94	1000	918	92	2	55-131/15
108-87-2	Methylcyclohexane	ND		1000	1120	112	1000	1140	114	2	57-155/13
1634-04-4	Methyl Tert Butyl Ether	ND		1000	1060	106	1000	1070	107	1	72-123/11

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC67261-3MS	3B146979.D	20	06/07/18	JP	n/a	n/a	V3B6513
JC67261-3MSD	3B146980.D	20	06/07/18	JP	n/a	n/a	V3B6513
JC67261-3	3B146954.D	20	06/07/18	JP	n/a	n/a	V3B6513

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

JC67175-3

CAS No.	Compound	JC67261-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		4000	4110	103	4000	4140	104	1	66-136/13
75-09-2	Methylene chloride	ND		1000	1020	102	1000	1020	102	0	73-125/13
100-42-5	Styrene	ND		1000	970	97	1000	1010	101	4	75-129/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		1000	970	97	1000	987	99	2	71-122/11
127-18-4	Tetrachloroethene	12300	E	1000	8090	-421* [a]	1000	8370	-393* [a]	3	61-139/11
108-88-3	Toluene	ND		1000	925	93	1000	961	96	4	60-135/10
87-61-6	1,2,3-Trichlorobenzene	ND		1000	1100	110	1000	1160	116	5	70-138/13
120-82-1	1,2,4-Trichlorobenzene	ND		1000	1080	108	1000	1130	113	5	72-137/13
71-55-6	1,1,1-Trichloroethane	ND		1000	1020	102	1000	1020	102	0	74-138/12
79-00-5	1,1,2-Trichloroethane	ND		1000	983	98	1000	1020	102	4	78-121/11
79-01-6	Trichloroethene	363		1000	1300	94	1000	1330	97	2	62-141/10
75-69-4	Trichlorofluoromethane	ND		1000	1120	112	1000	1130	113	1	57-149/14
75-01-4	Vinyl chloride	ND		1000	1050	105	1000	1070	107	2	43-146/15
	m,p-Xylene	ND		2000	1900	95	2000	1950	98	3	50-144/20
95-47-6	o-Xylene	ND		1000	923	92	1000	949	95	3	63-134/10
1330-20-7	Xylene (total)	ND		3000	2820	94	3000	2900	97	3	56-139/20

CAS No.	Surrogate Recoveries	MS	MSD	JC67261-3	Limits
1868-53-7	Dibromofluoromethane	108%	104%	119%	80-120%
17060-07-0	1,2-Dichloroethane-D4	103%	102%	113%	81-124%
2037-26-5	Toluene-D8	98%	99%	101%	80-120%
460-00-4	4-Bromofluorobenzene	97%	99%	92%	80-120%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC67381-15MS	2C159646.D	5	06/08/18	HT	n/a	n/a	V2C7088
JC67381-15MSD	2C159647.D	5	06/08/18	HT	n/a	n/a	V2C7088
JC67381-15	2C159640.D	5	06/08/18	HT	n/a	n/a	V2C7088
JC67381-15	2C159641.D	50	06/08/18	HT	n/a	n/a	V2C7088

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

JC67175-2, JC67175-4

CAS No.	Compound	JC67381-15 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	29.9	J	1000	1340	131	1000	1010	98	28* [a]	34-149/17
71-43-2	Benzene	2.7		250	239	95	250	241	95	1	54-136/10
74-97-5	Bromochloromethane	ND		250	256	102	250	251	100	2	79-124/11
75-27-4	Bromodichloromethane	ND		250	233	93	250	234	94	0	79-124/11
75-25-2	Bromoform	ND		250	266	106	250	270	108	1	71-130/11
74-83-9	Bromomethane	ND		250	222	89	250	204	82	8	53-142/14
78-93-3	2-Butanone (MEK)	ND		1000	882	88	1000	888	89	1	54-142/15
75-15-0	Carbon disulfide	ND		250	251	100	250	241	96	4	59-145/17
56-23-5	Carbon tetrachloride	ND		250	272	109	250	261	104	4	70-143/12
108-90-7	Chlorobenzene	ND		250	240	96	250	246	98	2	78-123/10
75-00-3	Chloroethane	ND		250	223	89	250	206	82	8	57-141/14
67-66-3	Chloroform	ND		250	228	91	250	222	89	3	76-123/11
74-87-3	Chloromethane	ND		250	218	87	250	200	80	9	43-141/16
110-82-7	Cyclohexane	244		250	487	97	250	459	86	6	51-155/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		250	235	94	250	244	98	4	66-130/13
124-48-1	Dibromochloromethane	ND		250	261	104	250	269	108	3	76-125/11
106-93-4	1,2-Dibromoethane	ND		250	246	98	250	256	102	4	78-119/11
95-50-1	1,2-Dichlorobenzene	ND		250	238	95	250	245	98	3	77-123/11
541-73-1	1,3-Dichlorobenzene	ND		250	238	95	250	242	97	2	76-122/11
106-46-7	1,4-Dichlorobenzene	ND		250	234	94	250	240	96	3	76-122/11
75-71-8	Dichlorodifluoromethane	ND		250	335	134	250	304	122	10	31-159/16
75-34-3	1,1-Dichloroethane	ND		250	235	94	250	226	90	4	73-126/11
107-06-2	1,2-Dichloroethane	ND		250	214	86	250	218	87	2	72-131/11
75-35-4	1,1-Dichloroethene	ND		250	247	99	250	238	95	4	63-136/14
156-59-2	cis-1,2-Dichloroethene	ND		250	228	91	250	223	89	2	60-136/11
156-60-5	trans-1,2-Dichloroethene	ND		250	234	94	250	225	90	4	70-126/11
78-87-5	1,2-Dichloropropane	ND		250	231	92	250	239	96	3	78-124/10
10061-01-5	cis-1,3-Dichloropropene	ND		250	227	91	250	229	92	1	79-123/11
10061-02-6	trans-1,3-Dichloropropene	ND		250	216	86	250	226	90	5	77-123/11
100-41-4	Ethylbenzene	1640 [c]		250	1360	-112* [b]	250	1380	-104* [b]	1	51-140/20
76-13-1	Freon 113	ND		250	310	124	250	289	116	7	60-192/14
591-78-6	2-Hexanone	ND		1000	873	87	1000	917	92	5	56-139/14
98-82-8	Isopropylbenzene	49.5		250	288	95	250	293	97	2	75-129/11
79-20-9	Methyl Acetate	ND		250	198	79	250	200	80	1	55-131/15
108-87-2	Methylcyclohexane	97.7		250	347	100	250	338	96	3	57-155/13
1634-04-4	Methyl Tert Butyl Ether	ND		250	241	96	250	233	93	3	72-123/11

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC67381-15MS	2C159646.D	5	06/08/18	HT	n/a	n/a	V2C7088
JC67381-15MSD	2C159647.D	5	06/08/18	HT	n/a	n/a	V2C7088
JC67381-15	2C159640.D	5	06/08/18	HT	n/a	n/a	V2C7088
JC67381-15	2C159641.D	50	06/08/18	HT	n/a	n/a	V2C7088

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

JC67175-2, JC67175-4

CAS No.	Compound	JC67381-15 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	926	93	1000	952	95	3	66-136/13
75-09-2	Methylene chloride	ND		250	232	93	250	220	88	5	73-125/13
100-42-5	Styrene	ND		250	237	95	250	241	96	2	75-129/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	235	94	250	242	97	3	71-122/11
127-18-4	Tetrachloroethene	ND		250	250	100	250	262	105	5	61-139/11
108-88-3	Toluene	280		250	486	82	250	501	88	3	60-135/10
87-61-6	1,2,3-Trichlorobenzene	ND		250	247	99	250	255	102	3	70-138/13
120-82-1	1,2,4-Trichlorobenzene	ND		250	250	100	250	258	103	3	72-137/13
71-55-6	1,1,1-Trichloroethane	ND		250	233	93	250	223	89	4	74-138/12
79-00-5	1,1,2-Trichloroethane	ND		250	226	90	250	236	94	4	78-121/11
79-01-6	Trichloroethene	ND		250	234	94	250	235	94	0	62-141/10
75-69-4	Trichlorofluoromethane	ND		250	243	97	250	227	91	7	57-149/14
75-01-4	Vinyl chloride	ND		250	257	103	250	240	96	7	43-146/15
	m,p-Xylene	1830		500	2140	62	500	2170	68	1	50-144/20
95-47-6	o-Xylene	759		250	952	77	250	961	81	1	63-134/10
1330-20-7	Xylene (total)	2590		750	3090	67	750	3130	72	1	56-139/20

CAS No.	Surrogate Recoveries	MS	MSD	JC67381-15	JC67381-15	Limits
1868-53-7	Dibromofluoromethane	102%	98%	99%	100%	80-120%
17060-07-0	1,2-Dichloroethane-D4	92%	91%	99%	100%	81-124%
2037-26-5	Toluene-D8	100%	101%	99%	98%	80-120%
460-00-4	4-Bromofluorobenzene	99%	100%	97%	97%	80-120%

(a) Outside control limits due to matrix interference.
(b) Outside control limits due to high level in sample relative to spike amount.
(c) Result is from Run #2.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: V2C7025-BFB
Lab File ID: 2C158318.D
Instrument ID: GCMS2C
Injection Date: 04/16/18
Injection Time: 16:16

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	14691	17.8		Pass
75	30.0 - 60.0% of mass 95	37965	46.0		Pass
95	Base peak, 100% relative abundance	82565	100.0		Pass
96	5.0 - 9.0% of mass 95	5414	6.56		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	85733	103.8		Pass
175	5.0 - 9.0% of mass 174	6848	8.29	(7.99) [a]	Pass
176	95.0 - 101.0% of mass 174	83202	100.8	(97.0) [a]	Pass
177	5.0 - 9.0% of mass 176	5410	6.55	(6.50) [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
V2C7025-IC7025	2C158319.D	04/16/18	16:59	00:43	Initial cal 0.5
V2C7025-IC7025	2C158320.D	04/16/18	17:28	01:12	Initial cal 1
V2C7025-IC7025	2C158321.D	04/16/18	17:57	01:41	Initial cal 2
V2C7025-IC7025	2C158322.D	04/16/18	18:26	02:10	Initial cal 5
V2C7025-IC7025	2C158323.D	04/16/18	18:55	02:39	Initial cal 10
V2C7025-IC7025	2C158324.D	04/16/18	19:24	03:08	Initial cal 20
V2C7025-ICC7025	2C158325.D	04/16/18	19:52	03:36	Initial cal 50
V2C7025-IC7025	2C158326.D	04/16/18	20:21	04:05	Initial cal 100
V2C7025-IC7025	2C158327.D	04/16/18	20:50	04:34	Initial cal 200
V2C7025-ICV7025	2C158330.D	04/16/18	22:16	06:00	Initial cal verification 50
V2C7025-ICV7025	2C158331.D	04/16/18	22:45	06:29	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample:	V2C7025-BFB2	**Injection Date:**	04/17/18
Lab File ID:	2C158334.D	**Injection Time:**	15:57
Instrument ID:	GCMS2C		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	16413	17.8		Pass
75	30.0 - 60.0% of mass 95	41570	45.1		Pass
95	Base peak, 100% relative abundance	92157	100.0		Pass
96	5.0 - 9.0% of mass 95	6076	6.59		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	95880	104.0		Pass
175	5.0 - 9.0% of mass 174	7709	8.37	(8.04) [a]	Pass
176	95.0 - 101.0% of mass 174	93357	101.3	(97.4) [a]	Pass
177	5.0 - 9.0% of mass 176	6373	6.92	(6.83) [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
V2C7025-ICV7025	2C158335.D	04/17/18	16:26	00:29	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample:	V2C7088-BFB	**Injection Date:**	06/08/18
Lab File ID:	2C159632.D	**Injection Time:**	09:52
Instrument ID:	GCMS2C		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	15968	16.0		Pass
75	30.0 - 60.0% of mass 95	44027	44.2		Pass
95	Base peak, 100% relative abundance	99616	100.0		Pass
96	5.0 - 9.0% of mass 95	6324	6.35		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	104067	104.5		Pass
175	5.0 - 9.0% of mass 174	7775	7.80	(7.47) [a]	Pass
176	95.0 - 101.0% of mass 174	99645	100.0	(95.8) [a]	Pass
177	5.0 - 9.0% of mass 176	6629	6.65	(6.65) [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
V2C7088-CC7025	2C159632.D	06/08/18	09:52	00:00	Continuing cal 20
V2C7088-BS	2C159633.D	06/08/18	10:28	00:36	Blank Spike
V2C7088-MB	2C159635.D	06/08/18	11:26	01:34	Method Blank
JC67175-4	2C159636.D	06/08/18	12:01	02:09	TB053118DC1
JC67175-2	2C159637.D	06/08/18	12:29	02:37	MW-207B-1R
ZZZZZZ	2C159638.D	06/08/18	12:58	03:06	(unrelated sample)
ZZZZZZ	2C159639.D	06/08/18	13:27	03:35	(unrelated sample)
JC67381-15	2C159640.D	06/08/18	13:56	04:04	(used for QC only; not part of job JC67175)
JC67381-15	2C159641.D	06/08/18	14:25	04:33	(used for QC only; not part of job JC67175)
ZZZZZZ	2C159642.D	06/08/18	14:54	05:02	(unrelated sample)
ZZZZZZ	2C159643.D	06/08/18	15:23	05:31	(unrelated sample)
ZZZZZZ	2C159644.D	06/08/18	15:52	06:00	(unrelated sample)
ZZZZZZ	2C159645.D	06/08/18	16:21	06:29	(unrelated sample)
JC67381-15MS	2C159646.D	06/08/18	16:51	06:59	Matrix Spike
JC67381-15MSD	2C159647.D	06/08/18	17:20	07:28	Matrix Spike Duplicate
ZZZZZZ	2C159649.D	06/08/18	18:18	08:26	(unrelated sample)
ZZZZZZ	2C159650.D	06/08/18	18:47	08:55	(unrelated sample)
ZZZZZZ	2C159651.D	06/08/18	19:16	09:24	(unrelated sample)
ZZZZZZ	2C159652.D	06/08/18	19:44	09:52	(unrelated sample)
ZZZZZZ	2C159653.D	06/08/18	20:13	10:21	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample:	V3B6447-BFB	**Injection Date:**	04/16/18
Lab File ID:	3B145645.D	**Injection Time:**	13:59
Instrument ID:	GCMS3B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	11869	18.2		Pass
75	30.0 - 60.0% of mass 95	30389	46.7		Pass
95	Base peak, 100% relative abundance	65053	100.0		Pass
96	5.0 - 9.0% of mass 95	4300	6.61		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	52619	80.9		Pass
175	5.0 - 9.0% of mass 174	4016	6.17	(7.63) [a]	Pass
176	95.0 - 101.0% of mass 174	51216	78.7	(97.3) [a]	Pass
177	5.0 - 9.0% of mass 176	3409	5.24	(6.66) [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
V3B6447-IC6447	3B145646.D	04/16/18	14:58	00:59	Initial cal 0.5
V3B6447-IC6447	3B145647.D	04/16/18	15:26	01:27	Initial cal 1
V3B6447-IC6447	3B145648.D	04/16/18	15:55	01:56	Initial cal 2
V3B6447-IC6447	3B145649.D	04/16/18	16:23	02:24	Initial cal 5
V3B6447-IC6447	3B145650.D	04/16/18	16:51	02:52	Initial cal 10
V3B6447-IC6447	3B145651.D	04/16/18	17:19	03:20	Initial cal 20
V3B6447-ICC6447	3B145652.D	04/16/18	17:48	03:49	Initial cal 50
V3B6447-IC6447	3B145653.D	04/16/18	18:17	04:18	Initial cal 100
V3B6447-IC6447	3B145654.D	04/16/18	18:45	04:46	Initial cal 200
V3B6447-ICV6447	3B145657.D	04/16/18	20:11	06:12	Initial cal verification 50
V3B6447-ICV6447	3B145658.D	04/16/18	20:40	06:41	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample:	V3B6447-BFB2	**Injection Date:**	04/17/18
Lab File ID:	3B145660.D	**Injection Time:**	09:32
Instrument ID:	GCMS3B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	9813	17.6		Pass
75	30.0 - 60.0% of mass 95	25275	45.3		Pass
95	Base peak, 100% relative abundance	55800	100.0		Pass
96	5.0 - 9.0% of mass 95	3822	6.85		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	45144	80.9		Pass
175	5.0 - 9.0% of mass 174	3414	6.12	(7.56) [a]	Pass
176	95.0 - 101.0% of mass 174	43640	78.2	(96.7) [a]	Pass
177	5.0 - 9.0% of mass 176	2864	5.13	(6.56) [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
V3B6447-ICV6447	3B145661.D	04/17/18	10:10	00:38	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: V3B6513-BFB
Lab File ID: 3B146939.D
Instrument ID: GCMS3B
Injection Date: 06/06/18
Injection Time: 18:57

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	10522	16.7		Pass
75	30.0 - 60.0% of mass 95	28272	45.0		Pass
95	Base peak, 100% relative abundance	62856	100.0		Pass
96	5.0 - 9.0% of mass 95	4235	6.74		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	55035	87.6		Pass
175	5.0 - 9.0% of mass 174	4195	6.67	(7.62) [a]	Pass
176	95.0 - 101.0% of mass 174	53680	85.4	(97.5) [a]	Pass
177	5.0 - 9.0% of mass 176	3417	5.44	(6.37) [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
V3B6513-CC6447	3B146939.D	06/06/18	18:57	00:00	Continuing cal 50
V3B6513-BS	3B146940.D	06/06/18	19:34	00:37	Blank Spike
V3B6513-MB	3B146942.D	06/06/18	20:31	01:34	Method Blank
JC67175-3	3B146943.D	06/06/18	21:00	02:03	DUP-1
ZZZZZZ	3B146944.D	06/06/18	21:29	02:32	(unrelated sample)
ZZZZZZ	3B146945.D	06/06/18	21:58	03:01	(unrelated sample)
ZZZZZZ	3B146946.D	06/06/18	22:26	03:29	(unrelated sample)
ZZZZZZ	3B146947.D	06/06/18	22:55	03:58	(unrelated sample)
ZZZZZZ	3B146948.D	06/06/18	23:23	04:26	(unrelated sample)
ZZZZZZ	3B146949.D	06/06/18	23:52	04:55	(unrelated sample)
ZZZZZZ	3B146950.D	06/07/18	00:21	05:24	(unrelated sample)
ZZZZZZ	3B146951.D	06/07/18	00:50	05:53	(unrelated sample)
ZZZZZZ	3B146952.D	06/07/18	01:18	06:21	(unrelated sample)
ZZZZZZ	3B146953.D	06/07/18	01:47	06:50	(unrelated sample)
JC67261-3	3B146954.D	06/07/18	02:15	07:18	(used for QC only; not part of job JC67175)
ZZZZZZ	3B146958.D	06/07/18	04:11	09:14	(unrelated sample)
ZZZZZZ	3B146960.D	06/07/18	05:08	10:11	(unrelated sample)
ZZZZZZ	3B146962.D	06/07/18	06:05	11:08	(unrelated sample)
ZZZZZZ	3B146963.D	06/07/18	06:33	11:36	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample:	V3B6514-BFB	**Injection Date:**	06/07/18
Lab File ID:	3B146965.D	**Injection Time:**	07:46
Instrument ID:	GCMS3B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	11063	17.3		Pass
75	30.0 - 60.0% of mass 95	29243	45.8		Pass
95	Base peak, 100% relative abundance	63816	100.0		Pass
96	5.0 - 9.0% of mass 95	4239	6.64		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	55845	87.5		Pass
175	5.0 - 9.0% of mass 174	4054	6.35	(7.26) [a]	Pass
176	95.0 - 101.0% of mass 174	53736	84.2	(96.2) [a]	Pass
177	5.0 - 9.0% of mass 176	3572	5.60	(6.65) [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
V3B6514-CC6447	3B146965.D	06/07/18	07:46	00:00	Continuing cal 20
V3B6513-BS2	3B146966A.D	06/07/18	08:27	00:41	Blank Spike
V3B6514-BS	3B146966.D	06/07/18	08:27	00:41	Blank Spike
V3B6513-MB2	3B146968A.D	06/07/18	09:40	01:54	Method Blank
V3B6514-MB	3B146968.D	06/07/18	09:40	01:54	Method Blank
JC67393-1	3B146969.D	06/07/18	10:23	02:37	(used for QC only; not part of job JC67175)
ZZZZZZ	3B146970.D	06/07/18	10:52	03:06	(unrelated sample)
JC67393-4	3B146971.D	06/07/18	11:20	03:34	(used for QC only; not part of job JC67175)
ZZZZZZ	3B146972.D	06/07/18	11:48	04:02	(unrelated sample)
ZZZZZZ	3B146973.D	06/07/18	12:36	04:50	(unrelated sample)
JC67393-1MS	3B146974.D	06/07/18	13:15	05:29	Matrix Spike
JC67393-4DUP	3B146976.D	06/07/18	14:12	06:26	Duplicate
ZZZZZZ	3B146977.D	06/07/18	14:41	06:55	(unrelated sample)
ZZZZZZ	3B146978.D	06/07/18	15:10	07:24	(unrelated sample)
JC67261-3MS	3B146979.D	06/07/18	15:39	07:53	Matrix Spike
JC67261-3MSD	3B146980.D	06/07/18	16:08	08:22	Matrix Spike Duplicate

Instrument Performance Check (BFB)

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample:	VL8534-BFB	**Injection Date:**	04/16/18
Lab File ID:	L300307.D	**Injection Time:**	14:00
Instrument ID:	GCMSL		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	19875	21.3		Pass
75	30.0 - 60.0% of mass 95	46019	49.4		Pass
95	Base peak, 100% relative abundance	93168	100.0		Pass
96	5.0 - 9.0% of mass 95	6085	6.53		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	71544	76.8		Pass
175	5.0 - 9.0% of mass 174	5637	6.05	(7.88) [a]	Pass
176	95.0 - 101.0% of mass 174	70635	75.8	(98.7) [a]	Pass
177	5.0 - 9.0% of mass 176	4975	5.34	(7.04) [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
VL8534-IC8534	L300308.D	04/16/18	14:54	00:54	Initial cal 0.5
VL8534-IC8534	L300309.D	04/16/18	15:21	01:21	Initial cal 1
VL8534-IC8534	L300310.D	04/16/18	15:49	01:49	Initial cal 2
VL8534-IC8534	L300311.D	04/16/18	16:16	02:16	Initial cal 5
VL8534-IC8534	L300312.D	04/16/18	16:43	02:43	Initial cal 10
VL8534-IC8534	L300313.D	04/16/18	17:10	03:10	Initial cal 20
VL8534-ICC8534	L300314.D	04/16/18	17:37	03:37	Initial cal 50
VL8534-IC8534	L300315.D	04/16/18	18:04	04:04	Initial cal 100
VL8534-IC8534	L300316.D	04/16/18	18:31	04:31	Initial cal 200
VL8534-ICV8534	L300319.D	04/16/18	19:52	05:52	Initial cal verification 50
VL8534-ICV8534	L300320.D	04/16/18	20:20	06:20	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample:	VL8534-BFB2	**Injection Date:**	04/17/18
Lab File ID:	L300323.D	**Injection Time:**	11:23
Instrument ID:	GCMSL		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	20005	21.2		Pass
75	30.0 - 60.0% of mass 95	47325	50.1		Pass
95	Base peak, 100% relative abundance	94549	100.0		Pass
96	5.0 - 9.0% of mass 95	6180	6.54		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	73965	78.2		Pass
175	5.0 - 9.0% of mass 174	5667	5.99	(7.66) [a]	Pass
176	95.0 - 101.0% of mass 174	71344	75.5	(96.5) [a]	Pass
177	5.0 - 9.0% of mass 176	5191	5.49	(7.28) [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
VL8534-ICV8534	L300324.D	04/17/18	11:51	00:28	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample:	VL8568-BFB	**Injection Date:**	05/09/18
Lab File ID:	L301058.D	**Injection Time:**	17:38
Instrument ID:	GCMSL		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	18672	19.4		Pass
75	30.0 - 60.0% of mass 95	47413	49.2		Pass
95	Base peak, 100% relative abundance	96365	100.0		Pass
96	5.0 - 9.0% of mass 95	6728	6.98		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	74595	77.4		Pass
175	5.0 - 9.0% of mass 174	5458	5.66	(7.32) [a]	Pass
176	95.0 - 101.0% of mass 174	71656	74.4	(96.1) [a]	Pass
177	5.0 - 9.0% of mass 176	4673	4.85	(6.52) [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
VL8568-IC8534	L301059.D	05/09/18	18:06	00:28	Initial cal 0.5
VL8568-IC8534	L301060.D	05/09/18	18:33	00:55	Initial cal 1
VL8568-IC8534	L301061.D	05/09/18	19:00	01:22	Initial cal 2
VL8568-IC8534	L301062.D	05/09/18	19:27	01:49	Initial cal 5
VL8568-IC8534	L301063.D	05/09/18	19:54	02:16	Initial cal 10
VL8568-IC8534	L301064.D	05/09/18	20:22	02:44	Initial cal 20
VL8568-IC8534	L301065.D	05/09/18	20:49	03:11	Initial cal 50
VL8568-IC8534	L301066.D	05/09/18	21:16	03:38	Initial cal 100
VL8568-IC8534	L301067.D	05/09/18	21:43	04:05	Initial cal 200
VL8568-ICV8534	L301070.D	05/09/18	23:05	05:27	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample:	VL8609-BFB	**Injection Date:**	06/05/18
Lab File ID:	L301947.D	**Injection Time:**	06:54
Instrument ID:	GCMSL		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	15059	19.7		Pass
75	30.0 - 60.0% of mass 95	38115	49.9		Pass
95	Base peak, 100% relative abundance	76323	100.0		Pass
96	5.0 - 9.0% of mass 95	4912	6.44		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	58675	76.9		Pass
175	5.0 - 9.0% of mass 174	4339	5.69	(7.39) [a]	Pass
176	95.0 - 101.0% of mass 174	57845	75.8	(98.6) [a]	Pass
177	5.0 - 9.0% of mass 176	4120	5.40	(7.12) [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
VL8609-CC8534	L301947.D	06/05/18	06:54	00:00	Continuing cal 20
VL8609-BS	L301948.D	06/05/18	07:29	00:35	Blank Spike
VL8609-MB	L301950.D	06/05/18	08:29	01:35	Method Blank
JC67175-1	L301952.D	06/05/18	09:27	02:33	MW-207A-1R
JC67175-1MS	L301953.D	06/05/18	09:54	03:00	Matrix Spike
JC67175-1MSD	L301954.D	06/05/18	10:22	03:28	Matrix Spike Duplicate
JC67175-5	L301956.D	06/05/18	11:16	04:22	EB053118DC1
ZZZZZZ	L301957.D	06/05/18	11:43	04:49	(unrelated sample)
ZZZZZZ	L301958.D	06/05/18	12:10	05:16	(unrelated sample)
ZZZZZZ	L301959.D	06/05/18	12:37	05:43	(unrelated sample)
ZZZZZZ	L301960.D	06/05/18	13:04	06:10	(unrelated sample)
ZZZZZZ	L301961.D	06/05/18	13:31	06:37	(unrelated sample)
ZZZZZZ	L301962.D	06/05/18	13:58	07:04	(unrelated sample)
ZZZZZZ	L301963.D	06/05/18	14:26	07:32	(unrelated sample)
ZZZZZZ	L301964.D	06/05/18	14:53	07:59	(unrelated sample)

Internal Standard Area Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Check Std:	V2C7088-CC7025	**Injection Date:**	06/08/18
Lab File ID:	2C159632.D	**Injection Time:**	09:52
Instrument ID:	GCMS2C	**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	301066	8.31	289185	10.77	363682	11.71	328382	14.69	217547	16.86
Upper Limit [a]	602132	8.81	578370	11.27	727364	12.21	656764	15.19	435094	17.36
Lower Limit [b]	150533	7.81	144593	10.27	181841	11.21	164191	14.19	108774	16.36

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2C7088-BS	291199	8.32	294512	10.78	378509	11.71	302650	14.69	193891	16.86
V2C7088-MB	310042	8.32	290786	10.77	356747	11.71	320352	14.69	210775	16.86
JC67175-4	297615	8.32	298239	10.78	374005	11.72	315226	14.69	204228	16.86
JC67175-2	297716	8.32	292162	10.77	354424	11.71	312738	14.69	209354	16.86
ZZZZZZ	302947	8.30	283248	10.77	349099	11.71	312507	14.69	206556	16.86
ZZZZZZ	295323	8.31	279739	10.77	346046	11.71	307621	14.69	202408	16.86
JC67381-15	295224	8.32	286204	10.77	351729	11.71	309499	14.68	200460	16.86
JC67381-15	282779	8.31	285638	10.77	351391	11.71	303801	14.69	199588	16.86
ZZZZZZ	305779	8.32	282628	10.77	347506	11.71	301923	14.69	200263	16.86
ZZZZZZ	334878	8.31	289283	10.77	352550	11.71	311922	14.69	201951	16.86
ZZZZZZ	322565	8.31	305124	10.77	375523	11.71	322624	14.69	213836	16.86
ZZZZZZ	405867	8.31	307062	10.77	389653	11.71	321207	14.68	206980	16.86
JC67381-15MS	341629	8.31	279351	10.77	355553	11.71	305479	14.69	197531	16.86
JC67381-15MSD	333351	8.31	302321	10.77	375400	11.71	318162	14.68	203181	16.86
ZZZZZZ	325869	8.31	314766	10.77	382878	11.71	329907	14.69	218696	16.86
ZZZZZZ	335343	8.32	313667	10.77	386413	11.71	334352	14.69	221699	16.86
ZZZZZZ	348488	8.32	315155	10.77	382289	11.71	334549	14.69	213897	16.86
ZZZZZZ	325344	8.31	311348	10.77	379588	11.71	326362	14.69	217714	16.86
ZZZZZZ	325024	8.32	310230	10.77	377532	11.71	331427	14.69	218592	16.86

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: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Check Std:	V3B6513-CC6447	**Injection Date:**	06/06/18
Lab File ID:	3B146939.D	**Injection Time:**	18:57
Instrument ID:	GCMS3B	**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	180213	8.00	145380	10.50	217286	11.48	227231	14.81	132603	17.30
Upper Limit [a]	360426	8.50	290760	11.00	434572	11.98	454462	15.31	265206	17.80
Lower Limit [b]	90107	7.50	72690	10.00	108643	10.98	113616	14.31	66302	16.80

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3B6513-BS	187079	7.98	139679	10.50	206711	11.47	206120	14.81	120154	17.30
V3B6513-MB	177339	7.98	135364	10.50	200135	11.48	192933	14.81	120543	17.30
JC67175-3	181063	7.98	137610	10.50	203258	11.48	191185	14.81	120551	17.30
ZZZZZZ	184354	7.99	134037	10.50	198188	11.48	191696	14.81	118030	17.30
ZZZZZZ	184342	7.99	140321	10.50	208525	11.48	198120	14.81	120291	17.30
ZZZZZZ	167610	7.98	128339	10.50	187088	11.48	181561	14.81	110145	17.30
ZZZZZZ	183217	7.99	138556	10.50	201996	11.48	189647	14.81	116781	17.30
ZZZZZZ	168880	7.98	125655	10.50	190307	11.48	185569	14.81	113887	17.30
ZZZZZZ	179351	7.99	140818	10.50	203631	11.48	193736	14.81	122477	17.30
ZZZZZZ	182186	7.99	132157	10.50	199915	11.48	196025	14.81	117701	17.30
ZZZZZZ	182396	7.99	135617	10.50	204464	11.48	194316	14.81	115064	17.30
ZZZZZZ	168792	7.98	123453	10.50	184712	11.47	182371	14.81	109552	17.30
ZZZZZZ	182303	7.98	137923	10.50	208601	11.48	201034	14.81	117488	17.30
JC67261-3	174098	7.98	127465	10.50	192589	11.48	183832	14.81	110368	17.30
ZZZZZZ	177090	7.98	130385	10.50	192874	11.48	183408	14.81	110279	17.30
ZZZZZZ	175259	7.98	131576	10.50	199446	11.47	197598	14.81	116052	17.30
ZZZZZZ	175559	7.98	130426	10.50	194027	11.48	185423	14.81	115073	17.30
ZZZZZZ	170328	7.99	124954	10.50	189780	11.48	183019	14.81	119955	17.30

IS 1 = Tert Butyl Alcohol-D9
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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: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Check Std:	V3B6514-CC6447	**Injection Date:**	06/07/18
Lab File ID:	3B146965.D	**Injection Time:**	07:46
Instrument ID:	GCMS3B	**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	199229	7.99	150804	10.50	227947	11.48	228169	14.81	131215	17.30
Upper Limit [a]	398458	8.49	301608	11.00	455894	11.98	456338	15.31	262430	17.80
Lower Limit [b]	99615	7.49	75402	10.00	113974	10.98	114085	14.31	65608	16.80

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3B6513-BS2	209400	7.98	149674	10.50	228585	11.48	230245	14.81	130592	17.30
V3B6514-BS	209400	7.98	149674	10.50	228585	11.48	230245	14.81	130592	17.30
V3B6513-MB2	193570	7.98	144966	10.50	212398	11.48	205044	14.81	125746	17.30
V3B6514-MB	193570	7.98	144966	10.50	212398	11.48	205044	14.81	125746	17.30
JC67393-1	192017	7.98	147106	10.50	209205	11.48	198491	14.81	118560	17.30
ZZZZZZ	181328	7.99	141071	10.50	204336	11.48	194943	14.81	119066	17.30
JC67393-4	182356	7.98	148042	10.50	212322	11.48	199605	14.81	123016	17.30
ZZZZZZ	179770	7.99	144934	10.50	207999	11.48	201143	14.81	122161	17.30
ZZZZZZ	183233	7.99	133837	10.50	196786	11.47	188648	14.81	112409	17.30
JC67393-1MS	186348	8.00	137828	10.50	207190	11.48	211880	14.81	122066	17.30
JC67393-4DUP	184391	7.98	142721	10.50	207091	11.47	196770	14.81	120105	17.30
ZZZZZZ	180021	7.99	142834	10.50	210182	11.48	199276	14.81	120155	17.30
ZZZZZZ	173703	7.99	135882	10.50	204824	11.48	197944	14.81	118126	17.30
JC67261-3MS	175641	7.99	141894	10.50	214153	11.48	219919	14.81	127703	17.30
JC67261-3MSD	179791	7.99	142042	10.50	211137	11.47	214062	14.81	124642	17.30

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: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Check Std:	VL8609-CC8534	**Injection Date:**	06/05/18
Lab File ID:	L301947.D	**Injection Time:**	06:54
Instrument ID:	GCMSL	**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	197436	3.12	207805	4.34	302051	4.91	265496	7.32	111286	9.51
Upper Limit [a]	394872	3.62	415610	4.84	604102	5.41	530992	7.82	222572	10.01
Lower Limit [b]	98718	2.62	103903	3.84	151026	4.41	132748	6.82	55643	9.01

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VL8609-BS	185528	3.13	194170	4.34	285906	4.91	256794	7.32	105277	9.51
VL8609-MB	224140	3.12	240461	4.35	338022	4.92	290851	7.32	130585	9.51
JC67175-1	219251	3.12	239379	4.35	338878	4.92	286797	7.32	129213	9.51
JC67175-1MS	186689	3.12	196315	4.34	291303	4.91	261958	7.32	107567	9.51
JC67175-1MSD	194826	3.12	202828	4.34	300141	4.91	269564	7.31	110769	9.51
JC67175-5	225281	3.12	239968	4.35	335104	4.92	283599	7.32	129510	9.51
ZZZZZZ	268162	3.12	250490	4.35	348705	4.92	296893	7.32	133650	9.51
ZZZZZZ	224424	3.12	244161	4.35	343343	4.92	289074	7.32	129672	9.52
ZZZZZZ	227154	3.12	235704	4.34	334064	4.91	288100	7.32	131252	9.51
ZZZZZZ	239985	3.12	242963	4.35	345639	4.92	299258	7.32	135553	9.52
ZZZZZZ	237337	3.12	239801	4.35	342832	4.92	298209	7.32	134675	9.51
ZZZZZZ	226657	3.12	239278	4.35	337691	4.92	292673	7.32	133323	9.51
ZZZZZZ	221338	3.12	236632	4.35	333062	4.92	286915	7.32	130568	9.51
ZZZZZZ	223607	3.12	233858	4.34	329880	4.91	283122	7.32	128701	9.51

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: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, 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
JC67175-1	L301952.D	106	108	115	99
JC67175-2	2C159637.D	101	102	96	96
JC67175-3	3B146943.D	113	109	100	91
JC67175-4	2C159636.D	104	102	99	97
JC67175-5	L301956.D	105	108	116	98
JC67175-1MS	L301953.D	110	105	107	105
JC67175-1MSD	L301954.D	109	104	107	105
JC67261-3MS	3B146979.D	108	103	98	97
JC67261-3MSD	3B146980.D	104	102	99	99
JC67381-15MS	2C159646.D	102	92	100	99
JC67381-15MSD	2C159647.D	98	91	101	100
V2C7088-BS	2C159633.D	105	95	104	97
V2C7088-MB	2C159635.D	101	100	96	97
V3B6513-BS	3B146940.D	104	103	99	97
V3B6513-MB	3B146942.D	112	109	99	92
VL8609-BS	L301948.D	107	102	106	105
VL8609-MB	L301950.D	107	109	114	100
V3B6513-MB2	3B146968A.D	108	107	100	95

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: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: V2C7025-ICC7025
Lab FileID: 2C158325.D

Response Factor Report Instrument #1

Method : C:\MSDCHEM\1\METHODS\M2C7025.M (RTE Integrator)
Title : SW846 8260C, Column ZB624 60mX0.25mmX1.4um
Last Update : Mon Apr 23 10:59:15 2018
Response via : Initial Calibration

Calibration Files
1 =2C158320.D 2 =2C158321.D 100 =2C158326.D 50 =2C158325.D
20 =2C158324.D 200 =2C158327.D 5 =2C158322.D 10 =2C158323.D
0.5 =2C158319.D =

Compound	1	2	100	50	20	200	5	10	0.5	Avg	%RSD
1) I Tert Butyl Alcohol-d9	----------ISTD----------										
2) ethanol										0.000#	-1.00
3) tertiary butyl alcohol	1.235	1.255	1.291	1.227	1.227	1.261	1.183	1.205		1.235	2.72
4) 1,4-dioxane	0.079	0.095	0.090	0.088	0.092	0.090	0.088	0.092		0.089	5.18
5) I pentafluorobenzene	----------ISTD----------										
6) chlorodifluoromethane			0.776	0.841	0.919	0.811	0.983	0.969		0.883	9.78
7) dichlorodifluoromethane		0.865	0.655	0.724	0.763	0.753	0.885	0.808		0.779	10.33
8) chloromethane	1.460	1.283	1.043	1.059	1.123	1.149	1.273	1.241		1.204	11.52
9) vinyl chloride	0.978	0.993	0.959	0.983	1.040	1.062	1.049	1.098	1.143	1.034	5.93
10) 1,3-butadiene										0.000#	-1.00
11) bromomethane	0.816	0.721	0.569	0.609	0.656	0.604	0.689	0.702		0.671	11.80
12) chloroethane	0.662	0.577	0.472	0.503	0.527	0.508	0.547	0.553		0.544	10.70
13) trichlorofluoromethane	0.931	0.921	0.930	0.969	1.011	1.035	1.002	1.037	1.038	0.986	4.97
14) vinyl bromide	0.664	0.613	0.588	0.608	0.635	0.648	0.637	0.650	0.787	0.648	8.86
15) ethyl ether	0.281	0.271	0.292	0.295	0.289	0.295	0.288	0.292	0.299	0.289	2.95
16) 2-chloropropane	1.080	1.068	0.962	1.021	1.057	1.034	1.099	1.084	1.445	1.095	12.59
17) acrolein			0.174	0.187	0.194	0.184	0.188	0.194		0.187	3.95
18) freon 113	0.408	0.414	0.424	0.456	0.486	0.473	0.459	0.480	0.381	0.442	8.35
19) 1,1-dichloroethene	0.693	0.610	0.525	0.560	0.604	0.569	0.619	0.620		0.600	8.38
20) acetone	0.082	0.078	0.074	0.075	0.081	0.077	0.076	0.081		0.078	3.75
21) iodomethane	0.950	0.931	0.936	0.971	1.003	1.024	0.989	1.019	1.188	1.001	7.79
22) acetonitrile			0.127	0.126	0.139	0.136	0.123	0.151		0.134	7.75
23) carbon disulfide											

Initial Calibration Summary

Job Number: JC67175 **Sample:** V2C7025-ICC7025
Account: HSWFLTAM HSW Engineering **Lab FileID:** 2C158325.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

		1.774	1.707	1.647	1.743	1.840	1.822	1.806	1.854		1.774	4.02
24)	methylene chloride											
		0.739	0.668	0.629	0.637	0.676	0.683	0.652	0.680	0.938	0.700	13.53
25)	methyl acetate											
		0.649	0.695	0.633	0.636	0.631	0.629	0.618	0.641	0.821	0.661	9.66
26)	methyl tert butyl ether											
		1.820	1.759	1.748	1.697	1.789	1.693	1.778	1.799	2.253	1.815	9.35
27)	trans-1,2-dichloroethene											
		0.601	0.585	0.502	0.518	0.535	0.527	0.558	0.549	0.697	0.564	10.48
28)	hexane											
		0.420	0.366	0.312	0.325	0.334	0.325	0.369	0.339		0.349	10.06
29)	di-isopropyl ether											
		2.197	2.018	1.835	1.891	2.008	1.905	2.018	2.048	2.713	2.070	12.71
30)	1,1-dichloroethane											
		1.012	0.949	0.906	0.920	0.944	0.923	0.938	0.960	1.120	0.964	6.86
31)	chloroprene											
		0.826	0.807	0.741	0.758	0.748	0.747	0.780	0.793	1.049	0.806	11.89
32)	acrylonitrile											
		0.328	0.312	0.322	0.318	0.328	0.336	0.316	0.335	0.393	0.332	7.25
33)	vinyl acetate											
		0.070	0.081	0.099	0.095	0.095	0.097	0.094	0.099		0.091	11.35
34)	ethyl tert-butyl ether											
		1.878	1.785	1.820	1.808	1.868	1.940	1.843	1.864	2.197	1.889	6.57
35)	2-butanone											
		0.089	0.091	0.093	0.093	0.090	0.091	0.090	0.087	0.089	0.090	2.09
36)	ethyl acetate											
				0.116	0.116	0.120	0.107	0.139	0.133		0.122	9.78
37)	2,2-dichloropropane											
		0.801	0.745	0.630	0.662	0.733	0.684	0.771	0.768		0.724	8.24
38)	cis-1,2-dichloroethene											
		0.657	0.613	0.539	0.553	0.558	0.546	0.570	0.591	0.774	0.600	12.51
39)	propionitrile											
		0.159	0.153	0.138	0.143	0.147	0.137	0.147	0.149	0.164	0.149	6.09
40)	bromochloromethane											
		0.317	0.270	0.293	0.292	0.290	0.299	0.279	0.303	0.329	0.297	6.04
41)	tetrahydrofuran											
			0.386	0.286	0.295	0.306	0.287	0.317	0.331		0.315	11.09
42)	chloroform											
		1.054	0.915	0.857	0.865	0.871	0.869	0.910	0.892	1.289	0.947	14.97
43)	t-butyl formate											
		0.585	0.565	0.548	0.545	0.582	0.559	0.580	0.604		0.571	3.51
44)	dibromofluoromethane (s)											
		0.431	0.428	0.427	0.427	0.424	0.441	0.420	0.435	0.461	0.433	2.86
45)	methacrylonitrile											
		0.297	0.289	0.281	0.277	0.274	0.279	0.263	0.279	0.230	0.274	6.97
46)	1,1,1-trichloroethane											
		0.918	0.851	0.820	0.835	0.860	0.913	0.866	0.896	1.171	0.903	11.71
47)	Cyclohexane											
		0.795	0.726	0.675	0.736	0.805	0.771	0.782	0.772	0.810	0.764	5.72
48)	1,1-dichloropropene											
		0.703	0.676	0.597	0.618	0.620	0.589	0.665	0.648	0.773	0.654	8.90
49)	carbon tetrachloride											
		0.685	0.686	0.648	0.666	0.686	0.718	0.707	0.707		0.688	3.37
50)	isobutyl alcohol											
				0.034	0.034	0.037	0.035	0.034	0.043		0.036	10.37
51)	I 1,4-difluorobenzene	----------ISTD----------										
52)	1,2-dichloroethane-d4 (s)											
		0.376	0.374	0.336	0.352	0.361	0.333	0.368	0.361	0.401	0.362	5.78
53)	n-butyl alcohol											

Initial Calibration Summary

Job Number: JC67175 **Sample:** V2C7025-ICC7025
Account: HSWFLTAM HSW Engineering **Lab FileID:** 2C158325.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

	0.031	0.029	0.025	0.026	0.029	0.026	0.027	0.028		0.028	7.68
54) tert-amyl alcohol											
	0.051	0.035	0.036	0.044	0.036	0.041	0.042			0.041	13.59
55) iso-octane											
	1.721	1.622	1.415	1.542	1.677	1.628	1.669	1.666		1.618	6.00
56) benzene											
	1.544	1.513	1.370	1.406	1.435	1.363	1.455	1.464	1.785	1.482	8.68
57) tert-amyl methyl ether											
	0.308	0.282	0.276	0.285	0.299	0.294	0.297	0.297		0.292	3.57
58) heptane											
	0.335	0.287	0.295	0.307	0.302	0.332	0.300			0.308	5.97
59) isopropyl acetate											
	0.071	0.091	0.093	0.094	0.095	0.093	0.092	0.096		0.091	8.77
60) 1,2-dichloroethane											
	0.606	0.553	0.469	0.477	0.504	0.453	0.515	0.503		0.510	9.71
61) ethyl acrylate											
	0.590	0.557	0.563	0.557	0.552	0.553	0.556			0.561	2.36
62) trichloroethene											
	0.396	0.376	0.338	0.348	0.354	0.335	0.366	0.365	0.453	0.370	9.84
63) 2-nitropropane											
	0.191	0.168	0.165	0.163	0.173	0.205	0.158			0.175	9.82
64) 2-chloroethyl vinyl ether											
	0.251	0.238	0.239	0.247	0.248	0.236	0.240	0.244	0.247	0.243	2.16
65) methyl methacrylate											
	0.108	0.102	0.116	0.113	0.112	0.118	0.108	0.113		0.111	4.41
66) 1,2-dichloropropane											
	0.399	0.387	0.351	0.364	0.376	0.346	0.378	0.377	0.376	0.373	4.44
67) dibromomethane											
	0.273	0.241	0.243	0.241	0.251	0.245	0.252	0.254	0.288	0.254	6.27
68) methylcyclohexane											
	0.765	0.727	0.640	0.689	0.748	0.730	0.735	0.737		0.721	5.44
69) bromodichloromethane											
	0.512	0.501	0.491	0.491	0.484	0.501	0.473	0.477	0.626	0.506	9.18
70) epichlorohydrin											
	0.073	0.067	0.062	0.063	0.064	0.065	0.061	0.064		0.065	5.68
71) cis-1,3-dichloropropene											
	0.602	0.557	0.584	0.583	0.570	0.592	0.575	0.567	0.597	0.581	2.56
72) 4-methyl-2-pentanone											
	0.231	0.215	0.201	0.212	0.222	0.206	0.219	0.222		0.216	4.45
73) 3-methyl-1-butanol											
	0.049	0.036	0.040	0.045	0.037	0.046	0.046			0.043	11.37
74) I chlorobenzene-d5	----------ISTD----------										
75) toluene-d8 (s)											
	1.267	1.259	1.296	1.244	1.254	1.267	1.247	1.261	1.250	1.261	1.25
76) toluene											
	0.991	0.969	0.955	0.927	0.923	0.913	0.939	0.943	1.039	0.955	4.14
77) ethyl methacrylate											
	0.666	0.600	0.573	0.551	0.559	0.547	0.568	0.573	0.728	0.596	10.28
78) trans-1,3-dichloropropene											
	0.619	0.615	0.608	0.589	0.582	0.565	0.594	0.593	0.606	0.597	2.89
79) 1,1,2-trichloroethane											
	0.342	0.332	0.333	0.317	0.319	0.318	0.318	0.336	0.435	0.339	11.02
80) 2-hexanone											
	0.259	0.254	0.220	0.219	0.236	0.210	0.242	0.242	0.266	0.238	8.11
81) tetrachloroethene											
	0.378	0.380	0.378	0.373	0.368	0.362	0.379	0.386	0.400	0.378	2.89
82) 1,3-dichloropropane											
	0.615	0.598	0.566	0.556	0.575	0.539	0.573	0.581	0.601	0.578	4.08
83) butyl acetate											

```
          0.415 0.350 0.322 0.318 0.343 0.319 0.359 0.361 0.404   0.355    9.99
 84)  dibromochloromethane
          0.416 0.402 0.482 0.446 0.433 0.482 0.407 0.417 0.456   0.438    6.96
 85)  1,2-dibromoethane
          0.440 0.441 0.459 0.439 0.440 0.460 0.431 0.434 0.421   0.440    2.82
 86)  n-butyl ether
          1.992 1.846 1.724 1.714 1.803 1.711 1.845 1.864 2.313   1.868   10.15
 87)  chlorobenzene
          1.097 0.999 1.045 1.026 1.022 1.051 1.047 1.029 1.103   1.047    3.27
 88)  1,1,1,2-tetrachloroethane
          0.438 0.427 0.437 0.426 0.445 0.435 0.449 0.455 0.507   0.446    5.52
 89)  ethylbenzene
          1.814 1.713 1.645 1.651 1.716 1.639 1.733 1.733 2.105   1.750    8.25
 90)  m,p-xylene
          0.676 0.674 0.659 0.650 0.663 0.676 0.683 0.676 0.791   0.683    6.14
 91)  o-xylene
          0.714 0.681 0.716 0.703 0.732 0.738 0.717 0.725 0.804   0.725    4.68
 92)  styrene
          1.221 1.178 1.117 1.118 1.150 1.159 1.195 1.180 1.301   1.180    4.80
 93)  butyl acrylate
          1.083 0.994 0.898 0.887 0.963 0.908 0.989 0.997         0.965    6.82
 94)  bromoform
          0.340 0.342 0.393 0.368 0.358 0.422 0.343 0.350 0.354   0.363    7.59
 95)  isopropylbenzene
          2.033 1.926 1.892 1.909 1.994 1.940 1.983 2.029 2.372   2.009    7.23
 96)  cis-1,4-dichloro-2-butene
          0.209 0.231 0.234 0.232 0.239 0.248 0.225 0.241 0.225   0.231    4.93

 97) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
 98)  4-bromofluorobenzene (s)
          0.719 0.728 0.756 0.749 0.717 0.761 0.725 0.719 0.689   0.729    3.12
 99)  bromobenzene
          0.883 0.863 0.822 0.832 0.811 0.791 0.855 0.830 0.857   0.838    3.44
100)  1,1,2,2-tetrachloroethane
          1.098 1.101 1.080 1.078 1.069 1.010 1.068 1.058 1.251   1.090    6.05
101)  trans-1,4-dichloro-2-butene
                0.123 0.131 0.126 0.123 0.125 0.126 0.120         0.125    2.82
102)  1,2,3-trichloropropane
          0.269 0.267 0.263 0.261 0.261 0.247 0.273 0.269 0.278   0.265    3.37
103)  n-propylbenzene
          3.535 3.348 3.090 3.178 3.188 2.955 3.311 3.307 3.830   3.305    7.78
104)  2-chlorotoluene
          0.781 0.782 0.746 0.750 0.732 0.719 0.754 0.741 0.739   0.749    2.78
105)  4-chlorotoluene
          2.131 2.065 1.955 1.959 1.940 1.904 1.976 1.958 2.309   2.022    6.34
106)  1,3,5-trimethylbenzene
          2.730 2.684 2.465 2.543 2.562 2.354 2.597 2.614 2.878   2.603    5.84
107)  tert-butylbenzene
          2.184 2.235 2.374 2.327 2.239 2.212 2.210 2.231 2.347   2.262    3.02
108)  1,2,4-trimethylbenzene
          2.836 2.621 2.502 2.565 2.593 2.399 2.690 2.647 2.993   2.650    6.67
109)  sec-butylbenzene
          3.431 3.423 3.428 3.499 3.472 3.296 3.502 3.484 3.791   3.481    3.80
110)  1,3-dichlorobenzene
          1.644 1.674 1.582 1.611 1.640 1.529 1.674 1.694 1.814   1.651    4.83
111)  p-isopropyltoluene
          2.957 2.994 2.970 3.028 3.027 2.868 3.020 3.095 3.303   3.029    3.97
112)  1,4-dichlorobenzene
          1.702 1.644 1.613 1.625 1.613 1.560 1.613 1.604 1.783   1.639    3.99
113)  1,2-dichlorobenzene
```

Initial Calibration Summary

Job Number: JC67175 **Sample:** V2C7025-ICC7025
Account: HSWFLTAM HSW Engineering **Lab FileID:** 2C158325.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

```
            1.813 1.762 1.737 1.759 1.785 1.624 1.784 1.789 1.958   1.779    4.86
114)  n-butylbenzene
            1.558 1.509 1.500 1.543 1.545 1.470 1.563 1.550 1.807   1.560    6.24
115)  1,2-dibromo-3-chloropropane
            0.249 0.266 0.292 0.276 0.269 0.274 0.271 0.284 0.250   0.270    5.24
116)  1,3,5-trichlorobenzene
            1.772 1.758 1.809 1.823 1.880 1.605 1.818 1.858 2.028   1.817    6.18
117)  Nitrobenzene
                  0.046 0.056 0.052 0.052 0.061 0.049 0.043         0.051   12.30
118)  1,2,4-trichlorobenzene
            1.409 1.450 1.606 1.578 1.615 1.390 1.503 1.549 1.786   1.543    7.96
119)  2-ethylhexyl acrylate
                  1.211 1.337 1.175 1.145 1.255 1.128 1.073         1.189    7.37
120)  hexachlorobutadiene
            0.883 0.901 0.865 0.888 0.921 0.782 0.913 0.915         0.883    5.10
121)  naphthalene
            3.130 3.221 3.834 3.755 3.870 3.235 3.588 3.752 3.953   3.593    8.79
122)  1,2,3-trichlorobenzene
            1.279 1.384 1.495 1.448 1.488 1.318 1.396 1.459 1.522   1.421    5.83
123)  hexachloroethane
            0.524 0.521 0.657 0.629 0.569 0.632 0.549 0.558 0.573   0.579    8.49
124)  2-methylnaphthalene
                        2.219 2.037 1.878 1.945       1.661         1.948   10.55
125)  Ethylenimine
                                                                    0.000#  -1.00
126)  Bis(chloromethyl)ether
                                                                    0.000#  -1.00
 ------------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M2C7025.M         Mon Apr 23 11:00:19 2018   RPT1
```

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: V2C7025-ICV7025
Lab FileID: 2C158330.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\v2c7025\2C158330.D Vial: 19
Acq On : 16 Apr 2018 10:16 pm Operator: HueanhT
Sample : icv7025-50 Inst : Instrument #1
Misc : MS25516,V2C7025,w,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2C7025.M (RTE Integrator)
Title : SW846 8260C, Column ZB624 60mX0.25mmX1.4um
Last Update : Mon Apr 23 10:59:15 2018
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	8.33
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.235	1.282	-3.8	105	-0.02	8.45
4		1,4-dioxane	0.089	0.073	18.0	83	0.00	12.35
5	I	pentafluorobenzene	1.000	1.000	0.0	103	0.00	10.78
6		chlorodifluoromethane	0.883	0.566	35.9#	70	0.01	4.45
7		dichlorodifluoromethane	0.779	0.693	11.0	99	0.00	4.42
8		chloromethane	1.204	1.119	7.1	109	0.01	4.87
9		vinyl chloride	1.034	0.978	5.4	103	0.00	5.14
10		1,3-butadiene		----------NA----------				
11		bromomethane	0.671	0.642	4.3	109	0.02	5.86
12		chloroethane	0.544	0.520	4.4	107	0.01	6.05
13		trichlorofluoromethane	0.986	0.942	4.5	100	0.01	6.60
14		vinyl bromide	0.648	0.713	-10.0	121	0.02	6.46
15		ethyl ether	0.289	0.286	1.0	100	0.00	7.04
16		2-chloropropane	1.095	1.034	5.6	105	0.00	7.30
17		acrolein	0.187	0.255	-36.4#	141	0.00	7.31
18		freon 113	0.442	0.507	-14.7	115	0.01	7.55
19		1,1-dichloroethene	0.600	0.500	16.7	92	0.00	7.54
20		acetone	0.078	0.075	3.8	103	0.00	7.53
21		iodomethane	1.001	1.074	-7.3	114	0.00	7.83
22		acetonitrile	0.134	0.079	41.0#	64	0.00	8.04
23		carbon disulfide	1.774	1.661	6.4	98	0.01	7.99
24		methylene chloride	0.700	0.639	8.7	104	0.01	8.36
25		methyl acetate	0.661	0.593	10.3	96	0.00	8.06
26		methyl tert butyl ether	1.815	3.655	-0.7	111	0.00	8.75
27		trans-1,2-dichloroethene	0.564	0.501	11.2	100	0.00	8.77
28		hexane	0.349	0.292	16.3	93	0.01	9.17
29		di-isopropyl ether	2.070	2.017	2.6	110	0.00	9.41
30		1,1-dichloroethane	0.964	0.933	3.2	105	0.00	9.41
31		chloroprene	0.806	0.788	2.2	107	0.00	9.52
32		acrylonitrile	0.332	0.356	-7.2	115	0.00	8.68
33		vinyl acetate	0.091	0.110	-20.9	120	0.00	9.36
34		ethyl tert-butyl ether	1.889	1.950	-3.2	111	0.00	9.92
35		2-butanone	0.090	0.093	-3.3	103	0.00	10.13
36		ethyl acetate	0.122	0.120	1.6	107	0.00	10.15
37		2,2-dichloropropane	0.724	0.677	6.5	106	0.00	10.23
38		cis-1,2-dichloroethene	0.600	0.582	3.0	109	0.00	10.19
39		propionitrile	0.149	0.140	6.0	101	0.00	10.22
40		bromochloromethane	0.297	0.310	-4.4	110	0.00	10.51
41		tetrahydrofuran	0.315	0.294	6.7	103	0.00	10.53

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: V2C7025-ICV7025
Lab FileID: 2C158330.D

42		chloroform	0.947	0.919	3.0	110	0.00	10.60
43		t-butyl formate	0.571	0.400	29.9	76	0.00	10.65
44	S	dibromofluoromethane (s)	0.433	0.432	0.2	105	0.00	10.80
45		methacrylonitrile	0.274	0.291	-6.2	108	0.00	10.42
46		1,1,1-trichloroethane	0.903	0.842	6.8	104	0.00	10.88
47		Cyclohexane	0.764	1.076	-40.8#	151	0.00	10.99
48		1,1-dichloropropene	0.654	0.632	3.4	106	0.00	11.05
49		carbon tetrachloride	0.688	0.679	1.3	105	0.00	11.08
50		isobutyl alcohol	0.036	0.039	-8.3	121	0.00	11.03
51	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	11.72
52	S	1,2-dichloroethane-d4 (s)	0.362	0.345	4.7	102	0.00	11.24
53		n-butyl alcohol	0.028	0.024	14.3	94	0.00	11.77
54		tert-amyl alcohol	0.041	0.036	12.2	103	0.00	11.20
55		iso-octane	1.618	1.456	10.0	98	0.00	11.40
56		benzene	1.482	1.461	1.4	108	0.00	11.30
57		tert-amyl methyl ether	0.292	0.300	-2.7	109	0.00	11.39
58		heptane	0.308	0.307	0.3	108	0.00	11.55
59		isopropyl acetate	0.091	0.099	-8.8	110	0.00	11.22
60		1,2-dichloroethane	0.510	0.502	1.6	109	0.00	11.33
61		ethyl acrylate	0.561	0.604	-7.7	112	0.00	12.00
62		trichloroethene	0.370	0.373	-0.8	111	0.00	12.01
63		2-nitropropane	0.175	0.180	-2.9	113	0.00	12.74
64		2-chloroethyl vinyl ether	0.243	0.273	-12.3	115	0.00	12.78
65		methyl methacrylate	0.111	0.121	-9.0	111	0.00	12.26
66		1,2-dichloropropane	0.373	0.370	0.8	106	0.00	12.29
67		dibromomethane	0.254	0.263	-3.5	113	0.00	12.40
68		methylcyclohexane	0.721	0.633	12.2	95	0.00	12.30
69		bromodichloromethane	0.506	0.516	-2.0	109	0.00	12.55
70		epichlorohydrin	0.065	0.063	3.1	105	0.00	12.86
71		cis-1,3-dichloropropene	0.581	0.625	-7.6	111	0.00	12.98
72		4-methyl-2-pentanone	0.216	0.221	-2.3	108	0.00	13.08
73		3-methyl-1-butanol	0.043	0.039	9.3	101	0.00	13.08
74	I	chlorobenzene-d5	1.000	1.000	0.0	102	0.00	14.69
75	S	toluene-d8 (s)	1.261	1.232	2.3	101	0.00	13.27
76		toluene	0.955	0.993	-4.0	110	0.00	13.34
77		ethyl methacrylate	0.596	0.597	-0.2	111	0.00	13.50
78		trans-1,3-dichloropropene	0.597	0.610	-2.2	106	0.00	13.51
79		1,1,2-trichloroethane	0.339	0.349	-2.9	112	0.00	13.72
80		2-hexanone	0.238	0.236	0.8	110	0.00	13.88
81		tetrachloroethene	0.378	0.404	-6.9	111	0.00	13.86
82		1,3-dichloropropane	0.578	0.616	-6.6	113	0.00	13.90
83		butyl acetate	0.355	0.365	-2.8	117	0.00	13.95
84		dibromochloromethane	0.438	0.512	-16.9	117	0.00	14.13
85		1,2-dibromoethane	0.440	0.492	-11.8	114	0.00	14.27
86		n-butyl ether	1.868	1.846	1.2	110	0.00	14.67
87		chlorobenzene	1.047	1.126	-7.5	112	0.00	14.72
88		1,1,1,2-tetrachloroethane	0.446	0.471	-5.6	113	0.00	14.78
89		ethylbenzene	1.750	1.824	-4.2	113	0.00	14.77
90		m,p-xylene	0.683	0.719	-5.3	113	0.00	14.88
91		o-xylene	0.725	0.781	-7.7	114	0.00	15.26
92		styrene	1.180	1.246	-5.6	114	0.00	15.27
93		butyl acrylate	0.965	1.003	-3.9	116	0.00	15.09
94		bromoform	0.363	0.431	-18.7	120	0.00	15.49
95		isopropylbenzene	2.009	2.092	-4.1	112	0.00	15.59
96		cis-1,4-dichloro-2-butene	0.231	0.242	-4.8	107	0.00	15.62
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	16.86
98	S	4-bromofluorobenzene (s)	0.729	0.748	-2.6	102	0.00	15.77

Initial Calibration Verification

Job Number: JC67175 **Sample:** V2C7025-ICV7025
Account: HSWFLTAM HSW Engineering **Lab FileID:** 2C158330.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

99	bromobenzene	0.838	0.930	-11.0	115	0.00	15.95
100	1,1,2,2-tetrachloroethane	1.090	1.175	-7.8	112	0.00	15.84
101	trans-1,4-dichloro-2-bute	0.125	0.148	-18.4	121	0.00	15.87
102	1,2,3-trichloropropane	0.265	0.282	-6.4	111	0.00	15.93
103	n-propylbenzene	3.305	3.505	-6.1	113	0.00	15.97
104	2-chlorotoluene	0.749	0.812	-8.4	111	0.00	16.10
105	4-chlorotoluene	2.022	2.214	-9.5	116	0.00	16.20
106	1,3,5-trimethylbenzene	2.603	2.720	-4.5	110	0.00	16.12
107	tert-butylbenzene	2.262	2.550	-12.7	112	0.00	16.43
108	1,2,4-trimethylbenzene	2.650	2.854	-7.7	114	0.00	16.48
109	sec-butylbenzene	3.481	3.826	-9.9	112	0.00	16.64
110	1,3-dichlorobenzene	1.651	1.774	-7.5	113	0.00	16.80
111	p-isopropyltoluene	3.029	3.325	-9.8	113	0.00	16.76
112	1,4-dichlorobenzene	1.639	1.785	-8.9	113	0.00	16.89
113	1,2-dichlorobenzene	1.779	1.928	-8.4	112	0.00	17.25
114	n-butylbenzene	1.560	1.680	-7.7	112	0.00	17.15
115	1,2-dibromo-3-chloropropa	0.270	0.299	-10.7	111	0.00	18.01
116	1,3,5-trichlorobenzene	1.817	2.018	-11.1	113	0.00	18.20
117	Nitrobenzene	0.051	0.049	3.9	97	0.00	18.21
118	1,2,4-trichlorobenzene	1.543	1.798	-16.5	117	0.00	18.85
119	2-ethylhexyl acrylate	1.189	1.392	-17.1	121	0.00	18.86
120	hexachlorobutadiene	0.883	0.940	-6.5	109	0.00	18.97
121	naphthalene	3.593	4.283	-19.2	117	0.00	19.16
122	1,2,3-trichlorobenzene	1.421	1.639	-15.3	116	0.00	19.38
123	hexachloroethane	0.579	0.704	-21.6	115	0.00	17.54
124	2-methylnaphthalene	1.948	2.105	-8.1	106	0.00	20.31
125	Ethylenimine		----------NA----------				
126	Bis(chloromethyl)ether		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2C158325.D M2C7025.M Mon Apr 23 11:00:34 2018 RPT1

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: V2C7025-ICV7025
Lab FileID: 2C158331.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\v2c7025\2C158331.D Vial: 20
Acq On : 16 Apr 2018 10:45 pm Operator: HueanhT
Sample : icv7025-50 Inst : Instrument #1
Misc : MS25516,V2C7025,w,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2C7025.M (RTE Integrator)
Title : SW846 8260C, Column ZB624 60mX0.25mmX1.4um
Last Update : Tue Apr 17 15:50:34 2018
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	115	0.01	8.34
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	100	0.00	10.77
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		1,3-butadiene		----------NA----------				
11		bromomethane		----------NA----------				
12		chloroethane		----------NA----------				
13		trichlorofluoromethane		----------NA----------				
14		vinyl bromide		----------NA----------				
15		ethyl ether		----------NA----------				
16		2-chloropropane		----------NA----------				
17		acrolein		----------NA----------				
18		freon 113		----------NA----------				
19		1,1-dichloroethene		----------NA----------				
20		acetone		----------NA----------				
21		iodomethane		----------NA----------				
22		acetonitrile	0.134	0.154	-14.9	122	0.02	8.06
23		carbon disulfide		----------NA----------				
24		methylene chloride		----------NA----------				
25		methyl acetate		----------NA----------				
26		methyl tert butyl ether		----------NA----------				
27		trans-1,2-dichloroethene		----------NA----------				
28		hexane		----------NA----------				
29		di-isopropyl ether		----------NA----------				
30		1,1-dichloroethane		----------NA----------				
31		chloroprene		----------NA----------				
32		acrylonitrile		----------NA----------				
33		vinyl acetate		----------NA----------				
34		ethyl tert-butyl ether		----------NA----------				
35		2-butanone		----------NA----------				
36		ethyl acetate		----------NA----------				
37		2,2-dichloropropane		----------NA----------				
38		cis-1,2-dichloroethene		----------NA----------				
39		propionitrile		----------NA----------				
40		bromochloromethane		----------NA----------				
41		tetrahydrofuran		----------NA----------				

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: V2C7025-ICV7025
Lab FileID: 2C158331.D

42		chloroform			NA				
43		t-butyl formate			NA				
44	S	dibromofluoromethane (s)	0.433	0.427	1.4	100	0.00	10.80	
45		methacrylonitrile			NA				
46		1,1,1-trichloroethane			NA				
47		Cyclohexane			NA				
48		1,1-dichloropropene			NA				
49		carbon tetrachloride			NA				
			True	Calc.	% Drift				
50		isobutyl alcohol			NA				
			AvgRF	CCRF	% Dev				
51	I	1,4-difluorobenzene	1.000	1.000	0.0	98	0.00	11.71	
52	S	1,2-dichloroethane-d4 (s)	0.362	0.373	-3.0	104	0.00	11.23	
53		n-butyl alcohol			NA				
54		tert-amyl alcohol			NA				
55		iso-octane			NA				
56		benzene			NA				
57		tert-amyl methyl ether			NA				
58		heptane			NA				
59		isopropyl acetate			NA				
60		1,2-dichloroethane			NA				
61		ethyl acrylate			NA				
62		trichloroethene			NA				
63		2-nitropropane			NA				
64		2-chloroethyl vinyl ether			NA				
65		methyl methacrylate			NA				
66		1,2-dichloropropane			NA				
67		dibromomethane			NA				
68		methylcyclohexane			NA				
69		bromodichloromethane			NA				
70		epichlorohydrin			NA				
71		cis-1,3-dichloropropene			NA				
72		4-methyl-2-pentanone			NA				
73		3-methyl-1-butanol			NA				
74	I	chlorobenzene-d5	1.000	1.000	0.0	101	0.00	14.69	
75	S	toluene-d8 (s)	1.261	1.235	2.1	100	0.00	13.27	
76		toluene			NA				
77		ethyl methacrylate			NA				
78		trans-1,3-dichloropropene			NA				
79		1,1,2-trichloroethane			NA				
80		2-hexanone			NA				
81		tetrachloroethene	0.378	0.364	3.7	98	0.00	13.86	
82		1,3-dichloropropane			NA				
83		butyl acetate			NA				
84		dibromochloromethane			NA				
85		1,2-dibromoethane			NA				
86		n-butyl ether			NA				
87		chlorobenzene			NA				
88		1,1,1,2-tetrachloroethane			NA				
89		ethylbenzene			NA				
90		m,p-xylene			NA				
91		o-xylene			NA				
92		styrene			NA				
93		butyl acrylate			NA				
94		bromoform			NA				
95		isopropylbenzene			NA				

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: V2C7025-ICV7025
Lab FileID: 2C158331.D

96		cis-1,4-dichloro-2-butene		----------NA----------				
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	108	0.00	16.86
98	S	4-bromofluorobenzene (s)	0.729	0.708	2.9	102	0.00	15.77
99		bromobenzene		----------NA----------				
100		1,1,2,2-tetrachloroethane		----------NA----------				
101		trans-1,4-dichloro-2-bute		----------NA----------				
102		1,2,3-trichloropropane		----------NA----------				
103		n-propylbenzene		----------NA----------				
104		2-chlorotoluene		----------NA----------				
105		4-chlorotoluene		----------NA----------				
106		1,3,5-trimethylbenzene		----------NA----------				
107		tert-butylbenzene		----------NA----------				
108		1,2,4-trimethylbenzene		----------NA----------				
109		sec-butylbenzene		----------NA----------				
110		1,3-dichlorobenzene		----------NA----------				
111		p-isopropyltoluene		----------NA----------				
112		1,4-dichlorobenzene		----------NA----------				
113		1,2-dichlorobenzene		----------NA----------				
114		n-butylbenzene		----------NA----------				
115		1,2-dibromo-3-chloropropa		----------NA----------				
116		1,3,5-trichlorobenzene		----------NA----------				
117		Nitrobenzene		----------NA----------				
118		1,2,4-trichlorobenzene		----------NA----------				
119		2-ethylhexyl acrylate		----------NA----------				
120		hexachlorobutadiene		----------NA----------				
121		naphthalene		----------NA----------				
122		1,2,3-trichlorobenzene		----------NA----------				
123		hexachloroethane		----------NA----------				
124		2-methylnaphthalene		----------NA----------				

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

2C158325.D M2C7025.M Tue Apr 17 16:02:35 2018 RPT1

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: V2C7025-ICV7025
Lab FileID: 2C158335.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\v2c7025\2C158335.D Vial: 24
Acq On : 17 Apr 2018 4:26 pm Operator: HueanhT
Sample : icv7025-50 Inst : Instrument #1
Misc : MS25516,V2C7025,w,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2C7025.M (RTE Integrator)
Title : SW846 8260C, Column ZB624 60mX0.25mmX1.4um
Last Update : Tue Apr 17 15:50:34 2018
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	122	0.00	8.34
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	10.77
6		chlorodifluoromethane	0.883	0.926	-4.9	115	0.00	4.45
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		1,3-butadiene		----------NA----------				
11		bromomethane		----------NA----------				
12		chloroethane		----------NA----------				
13		trichlorofluoromethane		----------NA----------				
14		vinyl bromide		----------NA----------				
15		ethyl ether		----------NA----------				
16		2-chloropropane		----------NA----------				
17		acrolein	0.187	0.207	-10.7	116	0.02	7.32
18		freon 113		----------NA----------				
19		1,1-dichloroethene		----------NA----------				
20		acetone		----------NA----------				
21		iodomethane		----------NA----------				
22		acetonitrile		----------NA----------				
23		carbon disulfide		----------NA----------				
24		methylene chloride		----------NA----------				
25		methyl acetate		----------NA----------				
26		methyl tert butyl ether		----------NA----------				
27		trans-1,2-dichloroethene		----------NA----------				
28		hexane		----------NA----------				
29		di-isopropyl ether		----------NA----------				
30		1,1-dichloroethane		----------NA----------				
31		chloroprene		----------NA----------				
32		acrylonitrile		----------NA----------				
33		vinyl acetate		----------NA----------				
34		ethyl tert-butyl ether		----------NA----------				
35		2-butanone		----------NA----------				
36		ethyl acetate		----------NA----------				
37		2,2-dichloropropane		----------NA----------				
38		cis-1,2-dichloroethene		----------NA----------				
39		propionitrile		----------NA----------				
40		bromochloromethane		----------NA----------				
41		tetrahydrofuran		----------NA----------				

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: V2C7025-ICV7025
Lab FileID: 2C158335.D

42		chloroform		----------NA----------					
43		t-butyl formate		----------NA----------					
44	S	dibromofluoromethane (s)	0.433	0.429	0.9	105	0.00	10.80	
45		methacrylonitrile		----------NA----------					
46		1,1,1-trichloroethane		----------NA----------					
47		Cyclohexane	0.764	0.877	-14.8	125	0.00	10.99	
48		1,1-dichloropropene		----------NA----------					
49		carbon tetrachloride		----------NA----------					
		----------	True	Calc.	% Drift	----------			
50		isobutyl alcohol		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
51	I	1,4-difluorobenzene	1.000	1.000	0.0	101	0.00	11.71	
52	S	1,2-dichloroethane-d4 (s)	0.362	0.377	-4.1	108	0.00	11.23	
53		n-butyl alcohol		----------NA----------					
54		tert-amyl alcohol		----------NA----------					
55		iso-octane		----------NA----------					
56		benzene		----------NA----------					
57		tert-amyl methyl ether		----------NA----------					
58		heptane		----------NA----------					
59		isopropyl acetate		----------NA----------					
60		1,2-dichloroethane		----------NA----------					
61		ethyl acrylate		----------NA----------					
62		trichloroethene		----------NA----------					
63		2-nitropropane		----------NA----------					
64		2-chloroethyl vinyl ether		----------NA----------					
65		methyl methacrylate		----------NA----------					
66		1,2-dichloropropane		----------NA----------					
67		dibromomethane		----------NA----------					
68		methylcyclohexane		----------NA----------					
69		bromodichloromethane		----------NA----------					
70		epichlorohydrin		----------NA----------					
71		cis-1,3-dichloropropene		----------NA----------					
72		4-methyl-2-pentanone		----------NA----------					
73		3-methyl-1-butanol		----------NA----------					
74	I	chlorobenzene-d5	1.000	1.000	0.0	100	0.00	14.69	
75	S	toluene-d8 (s)	1.261	1.247	1.1	100	0.00	13.27	
76		toluene		----------NA----------					
77		ethyl methacrylate		----------NA----------					
78		trans-1,3-dichloropropene		----------NA----------					
79		1,1,2-trichloroethane		----------NA----------					
80		2-hexanone		----------NA----------					
81		tetrachloroethene		----------NA----------					
82		1,3-dichloropropane		----------NA----------					
83		butyl acetate		----------NA----------					
84		dibromochloromethane		----------NA----------					
85		1,2-dibromoethane		----------NA----------					
86		n-butyl ether		----------NA----------					
87		chlorobenzene		----------NA----------					
88		1,1,1,2-tetrachloroethane		----------NA----------					
89		ethylbenzene		----------NA----------					
90		m,p-xylene		----------NA----------					
91		o-xylene		----------NA----------					
92		styrene		----------NA----------					
93		butyl acrylate		----------NA----------					
94		bromoform		----------NA----------					
95		isopropylbenzene		----------NA----------					

Initial Calibration Verification

Job Number: JC67175 **Sample:** V2C7025-ICV7025
Account: HSWFLTAM HSW Engineering **Lab FileID:** 2C158335.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

96		cis-1,4-dichloro-2-butene		----------NA----------				
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	106	0.00	16.86
98	S	4-bromofluorobenzene (s)	0.729	0.716	1.8	101	0.00	15.77
99		bromobenzene		----------NA----------				
100		1,1,2,2-tetrachloroethane		----------NA----------				
101		trans-1,4-dichloro-2-bute		----------NA----------				
102		1,2,3-trichloropropane		----------NA----------				
103		n-propylbenzene		----------NA----------				
104		2-chlorotoluene		----------NA----------				
105		4-chlorotoluene		----------NA----------				
106		1,3,5-trimethylbenzene		----------NA----------				
107		tert-butylbenzene		----------NA----------				
108		1,2,4-trimethylbenzene		----------NA----------				
109		sec-butylbenzene		----------NA----------				
110		1,3-dichlorobenzene		----------NA----------				
111		p-isopropyltoluene		----------NA----------				
112		1,4-dichlorobenzene		----------NA----------				
113		1,2-dichlorobenzene		----------NA----------				
114		n-butylbenzene		----------NA----------				
115		1,2-dibromo-3-chloropropa		----------NA----------				
116		1,3,5-trichlorobenzene		----------NA----------				
117		Nitrobenzene		----------NA----------				
118		1,2,4-trichlorobenzene		----------NA----------				
119		2-ethylhexyl acrylate		----------NA----------				
120		hexachlorobutadiene		----------NA----------				
121		naphthalene		----------NA----------				
122		1,2,3-trichlorobenzene		----------NA----------				
123		hexachloroethane		----------NA----------				
124		2-methylnaphthalene		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2C158325.D M2C7025.M Tue Apr 17 16:51:51 2018 RPT1

Continuing Calibration Summary

Job Number: JC67175 **Sample:** V2C7088-CC7025
Account: HSWFLTAM HSW Engineering **Lab FileID:** 2C159632.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ma...18\v2c7088\2c159632.d Vial: 4
Acq On : 8 Jun 2018 9:52 am Operator: HueanhT
Sample : CC7025-20 Inst : Instrument #1
Misc : MS26955,V2C7088,w,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2C7025.M (RTE Integrator)
Title : SW846 8260C, Column ZB624 60mX0.25mmX1.4um
Last Update : Mon Apr 23 10:59:15 2018
Response via : Multiple Level Calibration

Min. RRF : 0.010 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	107	-0.03	8.31
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.235	1.321	-7.0	115	-0.04	8.43
4		1,4-dioxane	0.089	0.091	-2.2	105	-0.01	12.34
5	I	pentafluorobenzene	1.000	1.000	0.0	125	0.00	10.77
6		chlorodifluoromethane	0.883	0.728	17.6	99	0.00	4.44
7		dichlorodifluoromethane	0.779	0.944	-21.2#	155	0.00	4.42
8		chloromethane	1.204	1.015	15.7	113	-0.07	4.78
9		vinyl chloride	1.034	1.031	0.3	124	-0.03	5.10
10		1,3-butadiene		----------NA----------				
11		bromomethane	0.671	0.611	8.9	116	-0.04	5.80
12		chloroethane	0.544	0.477	12.3	113	-0.02	6.02
13		trichlorofluoromethane	0.986	0.929	5.8	115	0.00	6.59
14		vinyl bromide	0.648	0.628	3.1	124	-0.01	6.43
15		ethyl ether	0.289	0.300	-3.8	130	0.00	7.04
16		2-chloropropane	1.095	0.842	23.1#	100	0.00	7.29
17		acrolein	0.187	0.164	12.3	106	0.00	7.31
18		freon 113	0.442	0.524	-18.6	135	0.00	7.54
19		1,1-dichloroethene	0.600	0.585	2.5	121	-0.02	7.52
20		acetone	0.078	0.076	2.6	118	0.01	7.55
21		iodomethane	1.001	0.977	2.4	122	-0.02	7.80
22		acetonitrile	0.134	0.121	9.7	109	0.00	8.03
23		carbon disulfide	1.774	1.649	7.0	112	0.00	7.97
24		methylene chloride	0.700	0.646	7.7	120	0.00	8.34
25		methyl acetate	0.661	0.582	12.0	116	0.00	8.06
26		methyl tert butyl ether	1.815	1.844	-1.6	129	0.00	8.74
27		trans-1,2-dichloroethene	0.564	0.538	4.6	126	0.00	8.77
28		hexane	0.349	0.310	11.2	116	0.00	9.17
29		di-isopropyl ether	2.070	1.853	10.5	115	0.00	9.41
30		1,1-dichloroethane	0.964	0.923	4.3	122	0.00	9.41
31		chloroprene	0.806	0.657	18.5	110	0.00	9.52
32		acrylonitrile	0.332	0.305	8.1	116	0.00	8.66
33		vinyl acetate	0.091	0.094	-3.3	123	0.00	9.35
34		ethyl tert-butyl ether	1.889	1.815	3.9	122	0.00	9.91
35		2-butanone	0.090	0.087	3.3	120	0.00	10.12
36		ethyl acetate	0.122	0.101	17.2	106	-0.01	10.14
37		2,2-dichloropropane	0.724	0.762	-5.2	130	0.00	10.23
38		cis-1,2-dichloroethene	0.600	0.577	3.8	129	0.00	10.19
39		propionitrile	0.149	0.135	9.4	115	-0.01	10.21
40		bromochloromethane	0.297	0.313	-5.4	135	0.00	10.51
41		tetrahydrofuran	0.315	0.261	17.1	107	0.00	10.52

Continuing Calibration Summary

Job Number: JC67175 **Sample:** V2C7088-CC7025
Account: HSWFLTAM HSW Engineering **Lab FileID:** 2C159632.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

42		chloroform	0.947	0.869	8.2	125	0.00	10.60
43		t-butyl formate	0.571	0.521	8.8	112	0.00	10.65
44	S	dibromofluoromethane (s)	0.433	0.433	0.0	128	0.00	10.80
45		methacrylonitrile	0.274	0.249	9.1	114	0.00	10.42
46		1,1,1-trichloroethane	0.903	0.796	11.8	116	0.00	10.87
47		Cyclohexane	0.764	0.751	1.7	117	0.00	10.99
48		1,1-dichloropropene	0.654	0.575	12.1	116	0.00	11.04
49		carbon tetrachloride	0.688	0.746	-8.4	136	0.00	11.08
50		isobutyl alcohol	0.036	0.031	13.9	105	-0.01	11.02
51	I	1,4-difluorobenzene	1.000	1.000	0.0	120	0.00	11.71
52	S	1,2-dichloroethane-d4 (s)	0.362	0.344	5.0	114	0.00	11.23
53		n-butyl alcohol	0.028	0.026	7.1	108	0.00	11.77
54		tert-amyl alcohol	0.041	0.042	-2.4	113	0.00	11.20
55		iso-octane	1.618	1.549	4.3	111	0.00	11.40
56		benzene	1.482	1.453	2.0	121	0.00	11.30
57		tert-amyl methyl ether	0.292	0.321	-9.9	128	-0.01	11.38
58		heptane	0.308	0.241	21.8#	94	0.00	11.55
59		isopropyl acetate	0.091	0.103	-13.2	130	0.00	11.21
60		1,2-dichloroethane	0.510	0.470	7.8	111	0.00	11.32
61		ethyl acrylate	0.561	0.520	7.3	112	0.00	12.00
62		trichloroethene	0.370	0.353	4.6	119	0.00	12.01
63		2-nitropropane	0.175	0.155	11.4	114	0.00	12.74
64		2-chloroethyl vinyl ether	0.243	0.230	5.3	111	0.00	12.77
65		methyl methacrylate	0.111	0.114	-2.7	121	0.00	12.26
66		1,2-dichloropropane	0.373	0.374	-0.3	119	0.00	12.29
67		dibromomethane	0.254	0.259	-2.0	123	0.00	12.40
68		methylcyclohexane	0.721	0.741	-2.8	118	0.00	12.30
69		bromodichloromethane	0.506	0.497	1.8	123	0.00	12.54
70		epichlorohydrin	0.065	0.061	6.2	113	0.00	12.85
71		cis-1,3-dichloropropene	0.581	0.567	2.4	119	0.00	12.98
72		4-methyl-2-pentanone	0.216	0.217	-0.5	117	0.00	13.07
73		3-methyl-1-butanol	0.043	0.042	2.3	110	0.00	13.08
74	I	chlorobenzene-d5	1.000	1.000	0.0	126	0.00	14.69
75	S	toluene-d8 (s)	1.261	1.194	5.3	120	0.00	13.27
76		toluene	0.955	0.880	7.9	120	0.00	13.34
77		ethyl methacrylate	0.596	0.519	12.9	117	0.00	13.50
78		trans-1,3-dichloropropene	0.597	0.554	7.2	119	0.00	13.51
79		1,1,2-trichloroethane	0.339	0.321	5.3	126	0.00	13.72
80		2-hexanone	0.238	0.220	7.6	117	0.00	13.88
81		tetrachloroethene	0.378	0.368	2.6	126	0.00	13.86
82		1,3-dichloropropane	0.578	0.551	4.7	120	0.00	13.89
83		butyl acetate	0.355	0.315	11.3	115	0.00	13.94
84		dibromochloromethane	0.438	0.470	-7.3	136	0.00	14.12
85		1,2-dibromoethane	0.440	0.452	-2.7	129	0.00	14.27
86		n-butyl ether	1.868	1.583	15.3	110	0.00	14.67
87		chlorobenzene	1.047	1.042	0.5	128	0.00	14.72
88		1,1,1,2-tetrachloroethane	0.446	0.464	-4.0	131	0.00	14.78
89		ethylbenzene	1.750	1.663	5.0	122	0.00	14.77
90		m,p-xylene	0.683	0.664	2.8	126	0.00	14.88
91		o-xylene	0.725	0.732	-1.0	126	0.00	15.26
92		styrene	1.180	1.138	3.6	124	0.00	15.27
93		butyl acrylate	0.965	0.819	15.1	107	0.00	15.09
94		bromoform	0.363	0.418	-15.2	146	0.00	15.49
95		isopropylbenzene	2.009	1.904	5.2	120	0.00	15.58
96		cis-1,4-dichloro-2-butene	0.231	0.201	13.0	106	0.00	15.62
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	124	0.00	16.86
98	S	4-bromofluorobenzene (s)	0.729	0.707	3.0	122	0.00	15.77

Continuing Calibration Summary

Job Number: JC67175 **Sample:** V2C7088-CC7025
Account: HSWFLTAM HSW Engineering **Lab FileID:** 2C159632.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

99	bromobenzene	0.838	0.861	-2.7	131	0.00	15.94
100	1,1,2,2-tetrachloroethane	1.090	1.074	1.5	124	0.00	15.84
101	trans-1,4-dichloro-2-bute	0.125	0.111	11.2	112	0.00	15.87
102	1,2,3-trichloropropane	0.265	0.270	-1.9	128	0.00	15.92
103	n-propylbenzene	3.305	3.140	5.0	122	0.00	15.97
104	2-chlorotoluene	0.749	0.756	-0.9	128	0.00	16.09
105	4-chlorotoluene	2.022	1.906	5.7	121	0.00	16.20
106	1,3,5-trimethylbenzene	2.603	2.443	6.1	118	0.00	16.11
107	tert-butylbenzene	2.262	2.106	6.9	116	0.00	16.43
108	1,2,4-trimethylbenzene	2.650	2.515	5.1	120	0.00	16.48
109	sec-butylbenzene	3.481	3.197	8.2	114	0.00	16.63
110	1,3-dichlorobenzene	1.651	1.707	-3.4	129	0.00	16.80
111	p-isopropyltoluene	3.029	2.856	5.7	117	0.00	16.75
112	1,4-dichlorobenzene	1.639	1.651	-0.7	126	0.00	16.89
113	1,2-dichlorobenzene	1.779	1.826	-2.6	126	0.00	17.25
114	n-butylbenzene	1.560	1.414	9.4	113	0.00	17.15
115	1,2-dibromo-3-chloropropa	0.270	0.250	7.4	115	0.00	18.00
116	1,3,5-trichlorobenzene	1.817	1.789	1.5	118	0.00	18.19
117	Nitrobenzene	0.051	0.063	-23.5#	152	0.00	18.20
118	1,2,4-trichlorobenzene	1.543	1.501	2.7	115	0.00	18.85
119	2-ethylhexyl acrylate	1.189	0.736	38.1#	79	0.00	18.85
120	hexachlorobutadiene	0.883	0.767	13.1	103	0.00	18.97
121	naphthalene	3.593	3.233	10.0	103	0.00	19.15
122	1,2,3-trichlorobenzene	1.421	1.331	6.3	111	0.00	19.38
123	hexachloroethane	0.579	0.582	-0.5	126	0.00	17.54
124	2-methylnaphthalene	1.948	1.088	44.1#	72	0.00	20.31
125	Ethylenimine		----------NA----------				
126	Bis(chloromethyl)ether		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2C158324.D M2C7025.M Mon Jun 11 03:02:02 2018

Initial Calibration Summary

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: V3B6447-ICC6447
Lab FileID: 3B145652.D

Response Factor Report MS3B

Method : C:\MSDCHEM\1\METHODS\M3B6447.M (RTE Integrator)
Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
Last Update : Tue Apr 17 11:55:34 2018
Response via : Initial Calibration

Calibration Files
1 =3b145647.D 5 =3b145649.D 100 =3b145653.D 50 =3b145652.D
20 =3b145651.D 200 =3b145654.D 10 =3b145650.D 0.5 =3b145646.D
2 =3b145648.D =

Compound	1	5	100	50	20	200	10	0.5	2	Avg	%RSD
1) I Tert Butyl Alcohol-d9	----------ISTD----------										
2) ethanol										0.000	-1.00
3) tertiary butyl alcohol	1.242	1.467	1.390	1.333	1.427	1.245			1.169	1.325	8.30
4) 1,4-dioxane	0.104	0.123	0.114	0.108	0.120	0.108			0.088	0.109	10.61
5) I pentafluorobenzene	----------ISTD----------										
6) chlorodifluoromethane	1.322	1.255	1.251	1.322	1.197	1.171	1.264	1.488	1.296	1.285	7.15
7) dichlorodifluoromethane	0.921	1.071	1.169	1.194	1.065	1.160	1.144		1.075	1.100	7.96
8) chloromethane	1.767	1.583	1.577	1.635	1.447	1.542	1.592		1.615	1.595	5.65
9) vinyl chloride	1.501	1.415	1.492	1.519	1.350	1.455	1.458	1.571	1.481	1.471	4.29
10) 1,3-Butadiene										0.000	-1.00
11) bromomethane	0.946	0.808	0.676	0.743	0.712		0.797		0.863	0.792	11.67
12) chloroethane	0.778	0.669	0.529	0.594	0.577		0.676		0.709	0.648	13.21
13) trichlorofluoromethane	1.139	1.181	1.086	1.150	1.057	1.045	1.184	1.046	1.220	1.123	5.90
14) vinyl bromide	0.704	0.714	0.686	0.723	0.655	0.624	0.710	0.611	0.698	0.681	5.99
15) ethyl ether	0.295	0.336	0.334	0.331	0.327	0.311	0.339		0.325	0.325	4.62
16) 2-chloropropane	1.194	1.080	1.136	1.055	1.069	1.210			1.264	1.144	7.07
17) acrolein	0.179	0.192	0.195	0.187	0.204	0.199			0.143	0.186	10.97
18) freon 113	0.458	0.498	0.497	0.521	0.485	0.496	0.502		0.514	0.496	3.84
19) 1,1-dichloroethene	0.559	0.602	0.576	0.609	0.571	0.599	0.599	0.583	0.596	0.588	2.85
20) acetone	0.093	0.092	0.093	0.089	0.091	0.091			0.078	0.089	5.98
21) acetonitrile	0.193	0.190	0.173	0.188	0.183	0.179			0.187	0.185	3.62
22) iodomethane	0.941	0.955	0.952	0.981	0.923	0.965	0.967	0.819	0.928	0.937	5.11
23) carbon disulfide											

Initial Calibration Summary

Job Number: JC67175 **Sample:** V3B6447-ICC6447
Account: HSWFLTAM HSW Engineering **Lab FileID:** 3B145652.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

	2.241	2.106	2.061	2.170	2.034	2.081	2.145	2.648	2.117	2.178	8.57
24) methylene chloride											
	0.777	0.726	0.703	0.712	0.689	0.714	0.698	0.750	0.683	0.717	4.22
25) methyl acetate											
		0.733	0.693	0.714	0.689	0.665	0.713		0.748	0.708	3.96
26) methyl tert butyl ether											
	2.011	1.991	2.048	2.026	1.961	1.942	2.028	2.088	1.980	2.008	2.26
27) trans-1,2-dichloroethene											
	0.562	0.572	0.552	0.566	0.549	0.543	0.554	0.558	0.572	0.559	1.83
28) hexane											
	0.385	0.430	0.398	0.420	0.411	0.393	0.425	0.314	0.446	0.403	9.51
29) di-isopropyl ether											
	2.438	2.323	2.371	2.364	2.271	2.271	2.303	2.626	2.267	2.359	4.88
30) 2-butanone											
		0.108	0.119	0.115	0.106	0.118	0.108		0.101	0.111	6.01
31) 1,1-dichloroethane											
	1.126	1.090	1.076	1.101	1.056	1.033	1.090	1.206	1.091	1.096	4.45
32) chloroprene											
	0.870	0.919	0.884	0.911	0.881	0.855	0.907	0.982	0.930	0.904	4.20
33) acrylonitrile											
	0.258	0.334	0.362	0.356	0.342	0.355	0.350		0.299	0.332	10.75
34) vinyl acetate											
		0.099	0.126	0.120	0.114	0.121	0.110			0.115	8.47
35) ethyl tert-butyl ether											
	2.125	2.146	2.218	2.210	2.095	2.122	2.136	2.201	2.116	2.152	2.11
36) ethyl acetate											
		0.116	0.154	0.149	0.139	0.152	0.136			0.141	9.94
37) 2,2-dichloropropane											
	1.076	1.007	0.949	0.968	0.934	0.911	0.993	1.220	1.062	1.013	9.38
38) cis-1,2-dichloroethene											
	0.653	0.666	0.651	0.659	0.646	0.628	0.657	0.658	0.673	0.655	1.94
39) propionitrile											
	0.191	0.182	0.184	0.183	0.176	0.179	0.184	0.195	0.183	0.184	3.17
40) methyl acrylate											
		0.111	0.126	0.121	0.109	0.124	0.109		0.091	0.113	10.58
41) methacrylonitrile											
	0.285	0.334	0.352	0.341	0.321	0.346	0.335		0.300	0.327	7.15
42) bromochloromethane											
	0.268	0.329	0.328	0.322	0.312	0.319	0.315	0.275	0.311	0.309	7.21
43) tetrahydrofuran											
	0.314	0.332	0.337	0.343	0.324	0.331	0.347		0.326	0.332	3.23
44) chloroform											
	1.126	1.060	1.031	1.048	1.031	0.993	1.031	1.175	1.046	1.060	5.27
45) tert-Butyl Formate											
	0.808	0.807	0.821	0.819	0.786	0.762	0.791	0.782	0.771	0.794	2.64
46) dibromofluoromethane (s)											
	0.458	0.461	0.455	0.450	0.453	0.452	0.458	0.466	0.454	0.456	1.10
47) 1,1,1-trichloroethane											
	1.088	1.007	1.051	1.052	0.980	1.034	1.028	1.101	1.012	1.039	3.73
48) cyclohexane											
	0.991	0.980	0.940	0.990	0.945	0.963	0.955	0.832	0.945	0.949	5.06
49) isobutyl alcohol											
		0.079	0.074	0.074	0.072	0.072	0.077		0.077	0.075	3.69
50) 1,1-dichloropropene											
	0.770	0.831	0.796	0.827	0.793	0.777	0.832	0.860	0.836	0.814	3.76
51) carbon tetrachloride											
	0.861	0.874	0.867	0.889	0.832	0.865	0.876	0.954	0.894	0.879	3.77
52) tert-amyl alcohol											
	0.085	0.095	0.106	0.107	0.103	0.104	0.097		0.098	0.099	7.10
53) isopropyl acetate											

Initial Calibration Summary

Job Number: JC67175 **Sample:** V3B6447-ICC6447
Account: HSWFLTAM HSW Engineering **Lab FileID:** 3B145652.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

	0.146	0.172	0.166	0.154	0.169	0.157		0.137	0.157	8.19
54) I 1,4-difluorobenzene	----------ISTD----------									
55) 1,2-dichloroethane-d4 (s)										
	0.360	0.359	0.324	0.336	0.351	0.316	0.353	0.370	0.360	0.348	5.21
56) n-butyl alcohol										
	0.030	0.031	0.031	0.032	0.030	0.031	0.031	0.032	0.030	0.031	2.51
57) 2,2,4-Trimethylpentane										
	1.625	1.671	1.684	1.761	1.689	1.689	1.697	1.550	1.679	1.672	3.45
58) benzene										
	1.721	1.702	1.603	1.642	1.616	1.517	1.669	1.859	1.734	1.673	5.78
59) tert-amyl methyl ether										
	1.481	1.361	1.302	1.321	1.317	1.202	1.382	1.499	1.371	1.360	6.70
60) heptane										
	0.303	0.320	0.289	0.312	0.302	0.280	0.314	0.270	0.320	0.301	5.96
61) 1,2-dichloroethane										
	0.605	0.545	0.506	0.511	0.512	0.479	0.538		0.594	0.536	8.22
62) ethyl acrylate										
	0.543	0.568	0.632	0.603	0.557	0.624	0.574		0.585	0.586	5.41
63) trichloroethene										
	0.370	0.389	0.390	0.399	0.380	0.376	0.391	0.423	0.395	0.390	3.93
64) 2-chloroethyl vinyl ether										
	0.271	0.260	0.288	0.281	0.264	0.280	0.272	0.284	0.267	0.274	3.59
65) methyl methacrylate										
	0.107	0.126	0.121	0.110	0.128	0.108		0.093	0.113	11.02
66) methylcyclohexane										
	0.882	0.825	0.783	0.821	0.791	0.772	0.823	0.822	0.838	0.817	4.01
67) 1,2-dichloropropane										
	0.433	0.441	0.442	0.439	0.429	0.411	0.437	0.434	0.442	0.434	2.29
68) dibromomethane										
	0.249	0.260	0.264	0.262	0.255	0.254	0.256	0.211	0.238	0.250	6.66
69) bromodichloromethane										
	0.534	0.523	0.569	0.559	0.536	0.544	0.538	0.519	0.561	0.543	3.17
70) 2-nitropropane										
	0.133	0.144	0.138	0.118	0.137	0.136				0.134	6.34
71) epichlorohydrin										
	0.072	0.068	0.072	0.070	0.065	0.072	0.068		0.066	0.069	4.30
72) cis-1,3-dichloropropene										
	0.625	0.619	0.702	0.673	0.612	0.696	0.631	0.651	0.608	0.646	5.58
73) 4-methyl-2-pentanone										
	0.246	0.252	0.257	0.258	0.249	0.234	0.252	0.260	0.247	0.251	3.15
74) isoamyl alcohol										
	0.026	0.029	0.030	0.031	0.029	0.027	0.030	0.028	0.028	0.029	4.66
75) I chlorobenzene-d5	----------ISTD----------									
76) toluene-d8 (s)										
	1.247	1.254	1.256	1.262	1.246	1.245	1.242	1.237	1.245	1.248	0.61
77) toluene										
	1.107	1.054	1.080	1.074	1.020	1.027	1.039	1.132	1.079	1.068	3.45
78) ethyl methacrylate										
	0.620	0.625	0.662	0.652	0.637	0.619	0.641	0.590	0.638	0.631	3.37
79) trans-1,3-dichloropropene										
	0.637	0.604	0.644	0.632	0.604	0.620	0.614	0.655	0.604	0.624	3.05
80) 1,1,2-trichloroethane										
	0.296	0.334	0.348	0.338	0.324	0.334	0.331	0.289	0.347	0.327	6.38
81) tetrachloroethene										
	0.337	0.349	0.350	0.353	0.335	0.343	0.339	0.304	0.337	0.339	4.32
82) 2-hexanone										
	0.259	0.259	0.246	0.250	0.245	0.225	0.258	0.250	0.247	0.249	4.27
83) 1,3-dichloropropane										

```
           0.671 0.647 0.643 0.635 0.615 0.609 0.622 0.646 0.621   0.634    3.11
 84)  butyl acetate
           0.385 0.376 0.374 0.377 0.377 0.345 0.390 0.350 0.386   0.373    4.16
 85)  dibromochloromethane
           0.439 0.424 0.461 0.446 0.423 0.445 0.426 0.392 0.429   0.432    4.50
 86)  1,2-dibromoethane
           0.413 0.405 0.431 0.422 0.405 0.416 0.406 0.383 0.412   0.410    3.23
 87)  n-butyl ether
           2.193 2.260 2.222 2.244 2.181 2.016 2.225 2.384 2.215   2.216    4.30
 88)  chlorobenzene
           1.169 1.141 1.163 1.155 1.096 1.125 1.130 1.196 1.153   1.148    2.49
 89)  1,1,1,2-tetrachloroethane
           0.514 0.512 0.507 0.511 0.504 0.454 0.508 0.490 0.521   0.502    4.00
 90)  ethylbenzene
           2.198 2.116 2.073 2.086 2.025 1.907 2.102 2.289 2.168   2.107    5.13
 91)  m,p-xylene
           0.811 0.798 0.789 0.797 0.772 0.732 0.786 0.827 0.806   0.791    3.44
 92)  o-xylene
           1.890 1.897 1.887 1.892 1.846 1.714 1.860 1.922 1.956   1.874    3.62
 93)  styrene
           1.324 1.322 1.331 1.317 1.288 1.221 1.317 1.316 1.349   1.310    2.81
 94)  butyl acrylate
           1.104 1.132 1.079 1.088 1.103 0.971 1.122 1.120 1.110   1.092    4.42
 95)  isopropylbenzene
           2.370 2.344 2.400 2.448 2.317 2.203 2.367 2.446 2.366   2.362    3.13
 96)  bromoform
           0.346 0.333 0.347 0.340 0.322 0.327 0.320 0.282 0.319   0.326    6.10
 97)  cis-1,4-dichloro-2-butene
           0.218 0.208 0.222 0.216 0.221 0.202 0.216       0.197   0.212    4.35

 98) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
 99)  4-bromofluorobenzene (s)
           0.802 0.816 0.827 0.828 0.827 0.852 0.829 0.812 0.811   0.823    1.78
100)  1,1,2,2-tetrachloroethane
           1.193 1.257 1.304 1.297 1.255 1.255 1.280 1.292 1.221   1.261    2.91
101)  trans-1,4-dichloro-2-butene
      *This compound does not meet initial calibration criteria*
           0.304 0.299 0.298 0.298 0.292 0.282 0.301 0.289 0.281   0.294    2.77
102)  1,2,3-trichloropropane
           0.296 0.322 0.324 0.323 0.316 0.310 0.314 0.297 0.296   0.311    3.77
103)  bromobenzene
           0.821 0.881 0.917 0.904 0.861 0.894 0.888 0.908 0.826   0.878    3.97
104)  n-propylbenzene
           4.401 4.528 4.530 4.594 4.432 4.350 4.579 4.761 4.466   4.516    2.72
105)  2-chlorotoluene
           0.900 0.933 0.957 0.945 0.903 0.928 0.908 0.930 0.882   0.921    2.60
106)  4-chlorotoluene
           2.547 2.545 2.591 2.583 2.516 2.535 2.628 2.696 2.659   2.589    2.35
107)  1,3,5-trimethylbenzene
           3.258 3.268 3.594 3.580 3.360 3.456 3.404 3.286 3.243   3.383    4.01
108)  tert-butylbenzene
                 2.480 3.035 3.014 2.656 3.001 2.626       2.429   2.749    9.55
109)  1,2,4-trimethylbenzene
           3.299 3.306 3.627 3.587 3.411 3.473 3.435 3.396 3.316   3.428    3.45
110)  sec-butylbenzene
           4.066 4.180 4.747 4.751 4.358 4.643 4.375 4.271 4.183   4.397    5.85
111)  p-isopropyltoluene
           3.400 3.535 4.006 4.007 3.667 3.910 3.683 3.684 3.551   3.716    5.79
112)  1,3-dichlorobenzene
           1.900 1.781 1.838 1.849 1.735 1.757 1.776 1.979 1.798   1.824    4.24
```

Initial Calibration Summary

Job Number: JC67175 **Sample:** V3B6447-ICC6447
Account: HSWFLTAM HSW Engineering **Lab FileID:** 3B145652.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

```
113)  1,4-dichlorobenzene
           1.836 1.807 1.859 1.843 1.760 1.795 1.795 1.949 1.846   1.832    2.94
114)  1,2-dichlorobenzene
           1.864 1.881 2.043 2.002 1.873 1.938 1.938 1.906 1.881   1.925    3.22
115)  Benzyl Chloride
           2.658 2.569 2.551 2.555 2.524 2.399 2.609 2.891 2.650   2.601    5.13
116)  n-butylbenzene
           1.954 1.974 2.065 2.080 2.021 1.997 2.054 2.016 1.983   2.016    2.16
117)  hexachloroethane
        *This compound does not meet initial calibration criteria*
                 0.541 0.715 0.646 0.561 0.716 0.561       0.491   0.604   14.68
118)  1,2-dibromo-3-chloropropane
           0.344 0.345 0.416 0.388 0.364 0.404 0.367       0.311   0.367    9.34
119)  1,3,5-trichlorobenzene
           1.907 1.804 2.062 1.948 1.842 1.963 1.879 1.892 1.827   1.903    4.20
120)  2-ethylhexyl acrylate
         *This compound does not meet initial calibration criteria*
                 1.034 1.617 1.467 1.247 1.573 1.209               1.358   16.94
121)  1,2,4-trichlorobenzene
           1.728 1.705 1.933 1.890 1.744 1.886 1.762 1.893 1.647   1.799    5.70
122)  hexachlorobutadiene
           0.718 0.719 0.814 0.797 0.714 0.854 0.748 0.620 0.734   0.746    9.17
123)  naphthalene
           4.744 4.726 5.552 5.428 5.076 5.212 5.095 5.023 4.575   5.048    6.45
124)  1,2,3-trichlorobenzene
           1.581 1.617 1.910 1.856 1.709 1.875 1.735 1.792 1.622   1.744    6.98
125)  2-methylnaphthalene
                       3.664 3.401 2.901 3.708 2.819               3.298   12.68
 ------------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M3B6447.M         Tue Apr 17 11:59:52 2018   M3B
```

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: V3B6447-ICV6447
Lab FileID: 3B145657.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\V3B6447\3b145657.D Vial: 13
Acq On : 16 Apr 2018 8:11 pm Operator: OyinadeI
Sample : icv6447-50 Inst : MS3B
Misc : MS25425,V3B6447,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3B6447.M (RTE Integrator)
Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
Last Update : Tue Apr 17 11:55:34 2018
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	98	0.01	8.01
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.325	1.648	-24.4	116	0.00	8.13
4		1,4-dioxane	0.109	0.129	-18.3	111	0.00	12.16
5	I	pentafluorobenzene	1.000	1.000	0.0	104	0.00	10.51
6		chlorodifluoromethane	1.285	0.841	34.6#	66	0.01	4.22
7		dichlorodifluoromethane	1.100	1.137	-3.4	99	0.00	4.20
8		chloromethane	1.595	1.606	-0.7	102	0.02	4.62
9		vinyl chloride	1.471	1.428	2.9	98	0.02	4.88
10		1,3-Butadiene		----------NA----------				
11		bromomethane	0.792	0.770	2.8	108	0.01	5.58
12		chloroethane	0.648	0.625	3.5	110	0.02	5.76
13		trichlorofluoromethane	1.123	1.117	0.5	101	0.00	6.30
14		vinyl bromide	0.681	0.838	-23.1	121	0.00	6.16
15		ethyl ether	0.325	0.347	-6.8	109	0.00	6.75
16		2-chloropropane	1.144	1.208	-5.6	111	0.00	6.98
17		acrolein	0.186	0.286	-53.8#	153	0.00	6.99
18		freon 113	0.496	0.576	-16.1	115	0.00	7.24
19		1,1-dichloroethene	0.588	0.575	2.2	98	0.01	7.22
20		acetone	0.089	0.100	-12.4	113	0.00	7.22
21		acetonitrile	0.185	0.152	17.8	91	0.02	7.72
22		iodomethane	0.937	1.133	-20.9	120	0.00	7.50
23		carbon disulfide	2.178	2.269	-4.2	109	0.01	7.66
24		methylene chloride	0.717	0.748	-4.3	109	0.01	8.04
25		methyl acetate	0.708	0.725	-2.4	106	0.00	7.77
26		methyl tert butyl ether	2.008	2.170	-8.1	112	0.00	8.45
27		trans-1,2-dichloroethene	0.559	0.576	-3.0	106	0.00	8.48
28		hexane	0.403	0.387	4.0	96	0.00	8.89
29		di-isopropyl ether	2.359	2.628	-11.4	116	0.00	9.13
30		2-butanone	0.111	0.125	-12.6	113	0.00	9.85
31		1,1-dichloroethane	1.096	1.162	-6.0	110	0.00	9.12
32		chloroprene	0.904	0.974	-7.7	111	0.00	9.24
33		acrylonitrile	0.332	0.424	-27.7	124	0.00	8.37
34		vinyl acetate	0.115	0.145	-26.1	126	0.00	9.07
35		ethyl tert-butyl ether	2.152	2.397	-11.4	113	0.00	9.64
36		ethyl acetate	0.141	0.167	-18.4	117	0.00	9.88
37		2,2-dichloropropane	1.013	0.987	2.6	106	0.00	9.95
38		cis-1,2-dichloroethene	0.655	0.719	-9.8	114	0.00	9.91
39		propionitrile	0.184	0.197	-7.1	112	0.00	9.93
40		methyl acrylate	0.113	0.134	-18.6	115	0.00	9.96
41		methacrylonitrile	0.327	0.379	-15.9	116	0.00	10.14

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: V3B6447-ICV6447
Lab FileID: 3B145657.D

42		bromochloromethane	0.309	0.353	-14.2	114	0.00	10.23
43		tetrahydrofuran	0.332	0.373	-12.3	113	0.00	10.25
44		chloroform	1.060	1.148	-8.3	114	0.00	10.33
45		tert-Butyl Formate	0.794	0.623	21.5	79	0.00	10.37
46	S	dibromofluoromethane (s)	0.456	0.455	0.2	105	0.00	10.53
47		1,1,1-trichloroethane	1.039	1.086	-4.5	108	0.00	10.60
48		cyclohexane	0.949	1.463	-54.2#	154	0.00	10.72
49		isobutyl alcohol	0.075	0.085	-13.3	120	0.00	10.78
50		1,1-dichloropropene	0.814	0.868	-6.6	109	0.00	10.79
51		carbon tetrachloride	0.879	0.919	-4.6	108	0.00	10.81
52		tert-amyl alcohol	0.099	0.109	-10.1	106	0.00	10.94
53		isopropyl acetate	0.157	0.184	-17.2	115	0.00	10.97
54	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	11.49
55	S	1,2-dichloroethane-d4 (s)	0.348	0.338	2.9	105	0.00	10.98
56		n-butyl alcohol	0.031	0.034	-9.7	113	0.00	11.56
57		2,2,4-Trimethylpentane	1.672	1.726	-3.2	102	0.00	11.16
58		benzene	1.673	1.754	-4.8	111	0.00	11.04
59		tert-amyl methyl ether	1.360	1.432	-5.3	113	0.00	11.14
60		heptane	0.301	0.335	-11.3	112	0.00	11.32
61		1,2-dichloroethane	0.536	0.570	-6.3	116	0.00	11.07
62		ethyl acrylate	0.586	0.688	-17.4	119	0.00	11.81
63		trichloroethene	0.390	0.431	-10.5	113	0.00	11.81
64		2-chloroethyl vinyl ether	0.274	0.317	-15.7	118	0.00	12.65
65		methyl methacrylate	0.113	0.134	-18.6	116	0.00	12.08
66		methylcyclohexane	0.817	0.771	5.6	98	0.00	12.12
67		1,2-dichloropropane	0.434	0.479	-10.4	114	0.00	12.11
68		dibromomethane	0.250	0.298	-19.2	119	0.00	12.22
69		bromodichloromethane	0.543	0.617	-13.6	115	0.00	12.39
70		2-nitropropane	0.134	0.162	-20.9	123	0.00	12.61
71		epichlorohydrin	0.069	0.078	-13.0	117	0.00	12.73
72		cis-1,3-dichloropropene	0.646	0.757	-17.2	117	0.00	12.87
73		4-methyl-2-pentanone	0.251	0.283	-12.7	115	0.00	12.99
74		isoamyl alcohol	0.029	0.033	-13.8	114	0.00	13.00
75	I	chlorobenzene-d5	1.000	1.000	0.0	101	0.00	14.82
76	S	toluene-d8 (s)	1.248	1.281	-2.6	102	0.00	13.20
77		toluene	1.068	1.219	-14.1	114	0.00	13.28
78		ethyl methacrylate	0.631	0.727	-15.2	112	0.00	13.47
79		trans-1,3-dichloropropene	0.624	0.695	-11.4	111	0.00	13.48
80		1,1,2-trichloroethane	0.327	0.392	-19.9	117	0.00	13.72
81		tetrachloroethene	0.339	0.401	-18.3	114	0.00	13.87
82		2-hexanone	0.249	0.280	-12.4	113	0.00	13.89
83		1,3-dichloropropane	0.634	0.743	-17.2	118	0.00	13.91
84		butyl acetate	0.373	0.443	-18.8	118	0.00	13.98
85		dibromochloromethane	0.432	0.526	-21.8	119	0.00	14.17
86		1,2-dibromoethane	0.410	0.485	-18.3	116	0.00	14.34
87		n-butyl ether	2.216	2.500	-12.8	112	0.00	14.81
88		chlorobenzene	1.148	1.291	-12.5	113	0.00	14.85
89		1,1,1,2-tetrachloroethane	0.502	0.592	-17.9	117	0.00	14.93
90		ethylbenzene	2.107	2.330	-10.6	113	0.00	14.92
91		m,p-xylene	0.791	0.887	-12.1	112	0.00	15.05
92		o-xylene	1.874	2.111	-12.6	112	0.00	15.48
93		styrene	1.310	1.482	-13.1	113	0.00	15.50
94		butyl acrylate	1.092	1.238	-13.4	115	0.00	15.30
95		isopropylbenzene	2.362	2.700	-14.3	111	0.00	15.86
96		bromoform	0.326	0.396	-21.5	117	0.00	15.74
97		cis-1,4-dichloro-2-butene	0.212	0.234	-10.4	109	0.00	15.90
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	97	0.00	17.31

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: V3B6447-ICV6447
Lab FileID: 3B145657.D

99	S	4-bromofluorobenzene (s)	0.823	0.842	-2.3	99	0.00	16.07
100		1,1,2,2-tetrachloroethane	1.261	1.527	-21.1	115	0.00	16.16
101		trans-1,4-dichloro-2-bute	0.294	0.412	-40.1#	134	0.00	16.19
102		1,2,3-trichloropropane	0.311	0.379	-21.9	114	0.00	16.25
103		bromobenzene	0.878	1.011	-15.1	109	0.00	16.27
104		n-propylbenzene	4.516	5.404	-19.7	114	0.00	16.30
105		2-chlorotoluene	0.921	1.070	-16.2	110	0.00	16.44
106		4-chlorotoluene	2.589	3.098	-19.7	117	0.00	16.56
107		1,3,5-trimethylbenzene	3.383	4.171	-23.3	113	0.00	16.47
108		tert-butylbenzene	2.749	3.564	-29.6	115	0.00	16.83
109		1,2,4-trimethylbenzene	3.428	4.254	-24.1	115	0.00	16.88
110		sec-butylbenzene	4.397	5.552	-26.3	114	0.00	17.06
111		p-isopropyltoluene	3.716	4.634	-24.7	112	0.00	17.20
112		1,3-dichlorobenzene	1.824	2.065	-13.2	109	0.00	17.24
113		1,4-dichlorobenzene	1.832	2.083	-13.7	110	0.00	17.34
114		1,2-dichlorobenzene	1.925	2.272	-18.0	110	0.00	17.73
115		Benzyl Chloride	2.601	2.371	8.8	90	0.00	17.43
116		n-butylbenzene	2.016	2.427	-20.4	113	0.00	17.62
117		hexachloroethane	0.604	0.787	-30.3#	118	0.00	18.03
118		1,2-dibromo-3-chloropropa	0.367	0.453	-23.4	113	0.00	18.50
119		1,3,5-trichlorobenzene	1.903	2.257	-18.6	113	0.00	18.68
120		2-ethylhexyl acrylate	1.358	1.834	-35.1#	122	0.00	19.30
121		1,2,4-trichlorobenzene	1.799	2.228	-23.8	115	0.00	19.31
122		hexachlorobutadiene	0.746	0.890	-19.3	109	0.00	19.42
123		naphthalene	5.048	6.509	-28.9	117	0.00	19.59
124		1,2,3-trichlorobenzene	1.744	2.167	-24.3	114	0.00	19.81
125		2-methylnaphthalene	3.298	3.586	-8.7	103	0.00	20.75

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

3b145652.D M3B6447.M Tue Apr 17 12:04:15 2018 M3B

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: V3B6447-ICV6447
Lab FileID: 3B145658.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\V3B6447\3b145658.D Vial: 14
Acq On : 16 Apr 2018 8:40 pm Operator: OyinadeI
Sample : icv6447-50 Inst : MS3B
Misc : MS25425,V3B6447,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3B6447.M (RTE Integrator)
Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
Last Update : Tue Apr 17 11:55:34 2018
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	122	0.00	8.00
2		ethanol		----------	NA	----------		
3		tertiary butyl alcohol		----------	NA	----------		
4		1,4-dioxane		----------	NA	----------		
5	I	pentafluorobenzene	1.000	1.000	0.0	106	0.00	10.51
6		chlorodifluoromethane		----------	NA	----------		
7		dichlorodifluoromethane		----------	NA	----------		
8		chloromethane		----------	NA	----------		
9		vinyl chloride		----------	NA	----------		
10		1,3-Butadiene		----------	NA	----------		
11		bromomethane		----------	NA	----------		
12		chloroethane		----------	NA	----------		
13		trichlorofluoromethane		----------	NA	----------		
14		vinyl bromide		----------	NA	----------		
15		ethyl ether		----------	NA	----------		
16		2-chloropropane		----------	NA	----------		
17		acrolein		----------	NA	----------		
18		freon 113		----------	NA	----------		
19		1,1-dichloroethene		----------	NA	----------		
20		acetone		----------	NA	----------		
21		acetonitrile	0.185	0.208	-12.4	127	0.01	7.71
22		iodomethane		----------	NA	----------		
23		carbon disulfide		----------	NA	----------		
24		methylene chloride		----------	NA	----------		
25		methyl acetate		----------	NA	----------		
26		methyl tert butyl ether		----------	NA	----------		
27		trans-1,2-dichloroethene		----------	NA	----------		
28		hexane		----------	NA	----------		
29		di-isopropyl ether		----------	NA	----------		
30		2-butanone		----------	NA	----------		
31		1,1-dichloroethane		----------	NA	----------		
32		chloroprene		----------	NA	----------		
33		acrylonitrile		----------	NA	----------		
34		vinyl acetate		----------	NA	----------		
35		ethyl tert-butyl ether		----------	NA	----------		
36		ethyl acetate		----------	NA	----------		
37		2,2-dichloropropane		----------	NA	----------		
38		cis-1,2-dichloroethene		----------	NA	----------		
39		propionitrile		----------	NA	----------		
40		methyl acrylate		----------	NA	----------		
41		methacrylonitrile		----------	NA	----------		

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: V3B6447-ICV6447
Lab FileID: 3B145658.D

42		bromochloromethane		----------NA----------					
43		tetrahydrofuran		----------NA----------					
44		chloroform		----------NA----------					
45		tert-Butyl Formate		----------NA----------					
46	S	dibromofluoromethane (s)	0.456	0.483	-5.9	114	0.00	10.53	
47		1,1,1-trichloroethane		----------NA----------					
48		cyclohexane		----------NA----------					
49		isobutyl alcohol		----------NA----------					
50		1,1-dichloropropene		----------NA----------					
51		carbon tetrachloride		----------NA----------					
52		tert-amyl alcohol		----------NA----------					
53		isopropyl acetate		----------NA----------					
54	I	1,4-difluorobenzene	1.000	1.000	0.0	105	0.00	11.49	
55	S	1,2-dichloroethane-d4 (s)	0.348	0.397	-14.1	125	0.00	10.97	
56		n-butyl alcohol		----------NA----------					
57		2,2,4-Trimethylpentane		----------NA----------					
58		benzene		----------NA----------					
59		tert-amyl methyl ether		----------NA----------					
60		heptane		----------NA----------					
61		1,2-dichloroethane		----------NA----------					
62		ethyl acrylate		----------NA----------					
63		trichloroethene		----------NA----------					
64		2-chloroethyl vinyl ether		----------NA----------					
65		methyl methacrylate		----------NA----------					
66		methylcyclohexane		----------NA----------					
67		1,2-dichloropropane		----------NA----------					
68		dibromomethane		----------NA----------					
69		bromodichloromethane		----------NA----------					
70		2-nitropropane		----------NA----------					
71		epichlorohydrin		----------NA----------					
72		cis-1,3-dichloropropene		----------NA----------					
73		4-methyl-2-pentanone		----------NA----------					
74		isoamyl alcohol		----------NA----------					
75	I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00	14.82	
76	S	toluene-d8 (s)	1.248	1.271	-1.8	104	0.00	13.20	
77		toluene		----------NA----------					
78		ethyl methacrylate		----------NA----------					
79		trans-1,3-dichloropropene		----------NA----------					
80		1,1,2-trichloroethane		----------NA----------					
81		tetrachloroethene	0.339	0.332	2.1	97	0.00	13.87	
82		2-hexanone		----------NA----------					
83		1,3-dichloropropane		----------NA----------					
84		butyl acetate		----------NA----------					
85		dibromochloromethane		----------NA----------					
86		1,2-dibromoethane		----------NA----------					
87		n-butyl ether		----------NA----------					
88		chlorobenzene		----------NA----------					
89		1,1,1,2-tetrachloroethane		----------NA----------					
90		ethylbenzene		----------NA----------					
91		m,p-xylene		----------NA----------					
92		o-xylene		----------NA----------					
93		styrene		----------NA----------					
94		butyl acrylate		----------NA----------					
95		isopropylbenzene		----------NA----------					
96		bromoform		----------NA----------					
97		cis-1,4-dichloro-2-butene		----------NA----------					
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	109	0.00	17.31	

Initial Calibration Verification

Job Number: JC67175 **Sample:** V3B6447-ICV6447
Account: HSWFLTAM HSW Engineering **Lab FileID:** 3B145658.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

99	S	4-bromofluorobenzene (s)	0.823	0.826	-0.4	109	0.00	16.07
100		1,1,2,2-tetrachloroethane	----------NA----------					
101		trans-1,4-dichloro-2-bute	----------NA----------					
102		1,2,3-trichloropropane	----------NA----------					
103		bromobenzene	----------NA----------					
104		n-propylbenzene	----------NA----------					
105		2-chlorotoluene	----------NA----------					
106		4-chlorotoluene	----------NA----------					
107		1,3,5-trimethylbenzene	----------NA----------					
108		tert-butylbenzene	----------NA----------					
109		1,2,4-trimethylbenzene	----------NA----------					
110		sec-butylbenzene	----------NA----------					
111		p-isopropyltoluene	----------NA----------					
112		1,3-dichlorobenzene	----------NA----------					
113		1,4-dichlorobenzene	----------NA----------					
114		1,2-dichlorobenzene	----------NA----------					
115		Benzyl Chloride	----------NA----------					
116		n-butylbenzene	----------NA----------					
117		hexachloroethane	----------NA----------					
118		1,2-dibromo-3-chloropropa	----------NA----------					
119		1,3,5-trichlorobenzene	----------NA----------					
120		2-ethylhexyl acrylate	----------NA----------					
121		1,2,4-trichlorobenzene	----------NA----------					
122		hexachlorobutadiene	----------NA----------					
123		naphthalene	----------NA----------					
124		1,2,3-trichlorobenzene	----------NA----------					
125		2-methylnaphthalene	----------NA----------					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3b145652.D M3B6447.M Tue Apr 17 12:04:18 2018 M3B

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: V3B6447-ICV6447
Lab FileID: 3B145661.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\V3B6447\3b145661.D Vial: 3
Acq On : 17 Apr 2018 10:10 am Operator: OyinadeI
Sample : icv6447-50 Inst : MS3B
Misc : MS25425,V3B6447,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3B6447.M (RTE Integrator)
Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
Last Update : Tue Apr 17 11:55:34 2018
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	115	0.00	8.00
2		ethanol		----------	NA	----------		
3		tertiary butyl alcohol		----------	NA	----------		
4		1,4-dioxane		----------	NA	----------		
5	I	pentafluorobenzene	1.000	1.000	0.0	110	0.00	10.51
6		chlorodifluoromethane	1.285	1.255	2.3	104	0.01	4.22
7		dichlorodifluoromethane		----------	NA	----------		
8		chloromethane		----------	NA	----------		
9		vinyl chloride		----------	NA	----------		
10		1,3-Butadiene		----------	NA	----------		
11		bromomethane		----------	NA	----------		
12		chloroethane		----------	NA	----------		
13		trichlorofluoromethane		----------	NA	----------		
14		vinyl bromide		----------	NA	----------		
15		ethyl ether		----------	NA	----------		
16		2-chloropropane		----------	NA	----------		
17		acrolein	0.186	0.221	-18.8	125	0.00	6.99
18		freon 113		----------	NA	----------		
19		1,1-dichloroethene		----------	NA	----------		
20		acetone		----------	NA	----------		
21		acetonitrile		----------	NA	----------		
22		iodomethane		----------	NA	----------		
23		carbon disulfide		----------	NA	----------		
24		methylene chloride		----------	NA	----------		
25		methyl acetate		----------	NA	----------		
26		methyl tert butyl ether		----------	NA	----------		
27		trans-1,2-dichloroethene		----------	NA	----------		
28		hexane		----------	NA	----------		
29		di-isopropyl ether		----------	NA	----------		
30		2-butanone		----------	NA	----------		
31		1,1-dichloroethane		----------	NA	----------		
32		chloroprene		----------	NA	----------		
33		acrylonitrile		----------	NA	----------		
34		vinyl acetate		----------	NA	----------		
35		ethyl tert-butyl ether		----------	NA	----------		
36		ethyl acetate		----------	NA	----------		
37		2,2-dichloropropane		----------	NA	----------		
38		cis-1,2-dichloroethene		----------	NA	----------		
39		propionitrile		----------	NA	----------		
40		methyl acrylate		----------	NA	----------		
41		methacrylonitrile		----------	NA	----------		

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: V3B6447-ICV6447
Lab FileID: 3B145661.D

42		bromochloromethane			----------NA----------				
43		tetrahydrofuran			----------NA----------				
44		chloroform			----------NA----------				
45		tert-Butyl Formate			----------NA----------				
46	S	dibromofluoromethane (s)	0.456	0.461	-1.1	113	0.00	10.53	
47		1,1,1-trichloroethane			----------NA----------				
48		cyclohexane	0.949	1.110	-17.0	123	0.00	10.72	
49		isobutyl alcohol			----------NA----------				
50		1,1-dichloropropene			----------NA----------				
51		carbon tetrachloride			----------NA----------				
52		tert-amyl alcohol			----------NA----------				
53		isopropyl acetate			----------NA----------				
54	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	11.48	
55	S	1,2-dichloroethane-d4 (s)	0.348	0.364	-4.6	112	0.00	10.97	
56		n-butyl alcohol			----------NA----------				
57		2,2,4-Trimethylpentane			----------NA----------				
58		benzene			----------NA----------				
59		tert-amyl methyl ether			----------NA----------				
60		heptane			----------NA----------				
61		1,2-dichloroethane			----------NA----------				
62		ethyl acrylate			----------NA----------				
63		trichloroethene			----------NA----------				
64		2-chloroethyl vinyl ether			----------NA----------				
65		methyl methacrylate			----------NA----------				
66		methylcyclohexane			----------NA----------				
67		1,2-dichloropropane			----------NA----------				
68		dibromomethane			----------NA----------				
69		bromodichloromethane			----------NA----------				
70		2-nitropropane			----------NA----------				
71		epichlorohydrin			----------NA----------				
72		cis-1,3-dichloropropene			----------NA----------				
73		4-methyl-2-pentanone			----------NA----------				
74		isoamyl alcohol			----------NA----------				
75	I	chlorobenzene-d5	1.000	1.000	0.0	104	0.00	14.82	
76	S	toluene-d8 (s)	1.248	1.219	2.3	100	0.00	13.20	
77		toluene			----------NA----------				
78		ethyl methacrylate			----------NA----------				
79		trans-1,3-dichloropropene			----------NA----------				
80		1,1,2-trichloroethane			----------NA----------				
81		tetrachloroethene			----------NA----------				
82		2-hexanone			----------NA----------				
83		1,3-dichloropropane			----------NA----------				
84		butyl acetate			----------NA----------				
85		dibromochloromethane			----------NA----------				
86		1,2-dibromoethane			----------NA----------				
87		n-butyl ether			----------NA----------				
88		chlorobenzene			----------NA----------				
89		1,1,1,2-tetrachloroethane			----------NA----------				
90		ethylbenzene			----------NA----------				
91		m,p-xylene			----------NA----------				
92		o-xylene			----------NA----------				
93		styrene			----------NA----------				
94		butyl acrylate			----------NA----------				
95		isopropylbenzene			----------NA----------				
96		bromoform			----------NA----------				
97		cis-1,4-dichloro-2-butene			----------NA----------				
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	111	0.00	17.31	

Initial Calibration Verification

Job Number: JC67175 **Sample:** V3B6447-ICV6447
Account: HSWFLTAM HSW Engineering **Lab FileID:** 3B145661.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

99	S	4-bromofluorobenzene (s)	0.823	0.821	0.2	110	0.00	16.07
100		1,1,2,2-tetrachloroethane	----------NA----------					
101		trans-1,4-dichloro-2-bute	----------NA----------					
102		1,2,3-trichloropropane	----------NA----------					
103		bromobenzene	----------NA----------					
104		n-propylbenzene	----------NA----------					
105		2-chlorotoluene	----------NA----------					
106		4-chlorotoluene	----------NA----------					
107		1,3,5-trimethylbenzene	----------NA----------					
108		tert-butylbenzene	----------NA----------					
109		1,2,4-trimethylbenzene	----------NA----------					
110		sec-butylbenzene	----------NA----------					
111		p-isopropyltoluene	----------NA----------					
112		1,3-dichlorobenzene	----------NA----------					
113		1,4-dichlorobenzene	----------NA----------					
114		1,2-dichlorobenzene	----------NA----------					
115		Benzyl Chloride	----------NA----------					
116		n-butylbenzene	----------NA----------					
117		hexachloroethane	----------NA----------					
118		1,2-dibromo-3-chloropropa	----------NA----------					
119		1,3,5-trichlorobenzene	----------NA----------					
120		2-ethylhexyl acrylate	----------NA----------					
121		1,2,4-trichlorobenzene	----------NA----------					
122		hexachlorobutadiene	----------NA----------					
123		naphthalene	----------NA----------					
124		1,2,3-trichlorobenzene	----------NA----------					
125		2-methylnaphthalene	----------NA----------					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3b145652.D M3B6447.M Tue Apr 17 12:04:20 2018 M3B

Continuing Calibration Summary

Job Number: JC67175 **Sample:** V3B6513-CC6447
Account: HSWFLTAM HSW Engineering **Lab FileID:** 3B146939.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ma...18\v3b6513\3b146939.d Vial: 25
Acq On : 6 Jun 2018 6:57 pm Operator: jessicap
Sample : CC6447-50 Inst : MS3B
Misc : MS26902,V3B6513,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3B6447.M (RTE Integrator)
Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
Last Update : Tue Apr 17 11:55:34 2018
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	94	0.00	8.00
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.325	1.280	3.4	86	0.00	8.12
4		1,4-dioxane	0.109	0.094	13.8	78	-0.01	12.15
5	I	pentafluorobenzene	1.000	1.000	0.0	107	0.00	10.50
6		chlorodifluoromethane	1.285	0.916	28.7#	74	-0.01	4.20
7		dichlorodifluoromethane	1.100	1.091	0.8	98	0.00	4.20
8		chloromethane	1.595	1.537	3.6	100	-0.07	4.53
9		vinyl chloride	1.471	1.509	-2.6	106	-0.03	4.84
10		1,3-Butadiene		----------NA----------				
11		bromomethane	0.792	0.736	7.1	106	-0.04	5.53
12		chloroethane	0.648	0.658	-1.5	118	-0.01	5.73
13		trichlorofluoromethane	1.123	1.057	5.9	98	0.00	6.30
14		vinyl bromide	0.681	0.708	-4.0	105	-0.02	6.13
15		ethyl ether	0.325	0.338	-4.0	109	0.00	6.74
16		2-chloropropane	1.144	1.041	9.0	98	0.00	6.97
17		acrolein	0.186	0.169	9.1	93	0.00	6.98
18		freon 113	0.496	0.553	-11.5	113	0.00	7.24
19		1,1-dichloroethene	0.588	0.602	-2.4	106	0.00	7.20
20		acetone	0.089	0.083	6.7	96	0.00	7.22
21		acetonitrile	0.185	0.150	18.9	93	-0.01	7.69
22		iodomethane	0.937	0.942	-0.5	103	0.00	7.49
23		carbon disulfide	2.178	2.004	8.0	99	0.00	7.64
24		methylene chloride	0.717	0.696	2.9	104	0.00	8.02
25		methyl acetate	0.708	0.694	2.0	104	0.00	7.76
26		methyl tert butyl ether	2.008	2.047	-1.9	108	0.00	8.44
27		trans-1,2-dichloroethene	0.559	0.599	-7.2	113	0.00	8.47
28		hexane	0.403	0.372	7.7	95	0.00	8.88
29		di-isopropyl ether	2.359	2.149	8.9	97	0.00	9.13
30		2-butanone	0.111	0.098	11.7	91	-0.01	9.83
31		1,1-dichloroethane	1.096	1.102	-0.5	107	-0.01	9.11
32		chloroprene	0.904	0.822	9.1	96	0.00	9.23
33		acrylonitrile	0.332	0.325	2.1	98	-0.02	8.35
34		vinyl acetate	0.115	0.093	19.1	83	-0.01	9.06
35		ethyl tert-butyl ether	2.152	2.075	3.6	100	0.00	9.63
36		ethyl acetate	0.141	0.126	10.6	91	-0.01	9.86
37		2,2-dichloropropane	1.013	1.017	-0.4	112	0.00	9.94
38		cis-1,2-dichloroethene	0.655	0.656	-0.2	106	0.00	9.90
39		propionitrile	0.184	0.157	14.7	92	-0.02	9.91
40		methyl acrylate	0.113	0.109	3.5	96	-0.01	9.95
41		methacrylonitrile	0.327	0.293	10.4	92	-0.01	10.13

Continuing Calibration Summary

Job Number: JC67175 **Sample:** V3B6513-CC6447
Account: HSWFLTAM HSW Engineering **Lab FileID:** 3B146939.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

42		bromochloromethane	0.309	0.329	-6.5	109	-0.01	10.22
43		tetrahydrofuran	0.332	0.286	13.9	89	-0.01	10.24
44		chloroform	1.060	1.016	4.2	104	-0.01	10.32
45		tert-Butyl Formate	0.794	0.614	22.7#	80	-0.01	10.36
46	S	dibromofluoromethane (s)	0.456	0.482	-5.7	115	-0.02	10.52
47		1,1,1-trichloroethane	1.039	1.002	3.6	102	0.00	10.59
48		cyclohexane	0.949	0.901	5.1	97	0.00	10.71
49		isobutyl alcohol	0.075	0.060	20.0	86	-0.02	10.75
50		1,1-dichloropropene	0.814	0.778	4.4	101	-0.01	10.77
51		carbon tetrachloride	0.879	0.917	-4.3	110	0.00	10.80
52		tert-amyl alcohol	0.099	0.077	22.2#	77	-0.02	10.93
53		isopropyl acetate	0.157	0.154	1.9	99	-0.01	10.96
54	I	1,4-difluorobenzene	1.000	1.000	0.0	102	-0.01	11.48
55	S	1,2-dichloroethane-d4 (s)	0.348	0.357	-2.6	108	-0.01	10.96
56		n-butyl alcohol	0.031	0.026	16.1	85	-0.01	11.54
57		2,2,4-Trimethylpentane	1.672	1.727	-3.3	100	0.00	11.15
58		benzene	1.673	1.585	5.3	98	-0.01	11.03
59		tert-amyl methyl ether	1.360	1.375	-1.1	106	-0.01	11.13
60		heptane	0.301	0.282	6.3	92	0.00	11.32
61		1,2-dichloroethane	0.536	0.501	6.5	100	-0.02	11.06
62		ethyl acrylate	0.586	0.569	2.9	96	0.00	11.79
63		trichloroethene	0.390	0.398	-2.1	102	0.00	11.80
64		2-chloroethyl vinyl ether	0.274	0.258	5.8	94	-0.02	12.63
65		methyl methacrylate	0.113	0.119	-5.3	100	0.00	12.07
66		methylcyclohexane	0.817	0.804	1.6	100	0.00	12.11
67		1,2-dichloropropane	0.434	0.435	-0.2	101	-0.01	12.10
68		dibromomethane	0.250	0.265	-6.0	103	-0.02	12.21
69		bromodichloromethane	0.543	0.533	1.8	97	-0.02	12.38
70		2-nitropropane	0.134	0.126	6.0	94	-0.02	12.59
71		epichlorohydrin	0.069	0.065	5.8	96	-0.02	12.72
72		cis-1,3-dichloropropene	0.646	0.650	-0.6	98	-0.01	12.86
73		4-methyl-2-pentanone	0.251	0.250	0.4	99	-0.01	12.98
74		isoamyl alcohol	0.029	0.028	3.4	94	-0.01	12.99
75	I	chlorobenzene-d5	1.000	1.000	0.0	117	-0.01	14.81
76	S	toluene-d8 (s)	1.248	1.201	3.8	112	-0.01	13.19
77		toluene	1.068	0.943	11.7	103	-0.01	13.27
78		ethyl methacrylate	0.631	0.548	13.2	99	-0.01	13.46
79		trans-1,3-dichloropropene	0.624	0.589	5.6	109	-0.01	13.47
80		1,1,2-trichloroethane	0.327	0.310	5.2	108	-0.02	13.70
81		tetrachloroethene	0.339	0.334	1.5	111	0.00	13.87
82		2-hexanone	0.249	0.218	12.4	102	-0.01	13.88
83		1,3-dichloropropane	0.634	0.597	5.8	110	-0.01	13.90
84		butyl acetate	0.373	0.321	13.9	100	-0.01	13.97
85		dibromochloromethane	0.432	0.407	5.8	107	-0.02	14.16
86		1,2-dibromoethane	0.410	0.408	0.5	114	-0.01	14.33
87		n-butyl ether	2.216	1.795	19.0	94	-0.01	14.81
88		chlorobenzene	1.148	1.090	5.1	111	-0.01	14.84
89		1,1,1,2-tetrachloroethane	0.502	0.469	6.6	108	-0.01	14.92
90		ethylbenzene	2.107	1.855	12.0	104	-0.01	14.91
91		m,p-xylene	0.791	0.716	9.5	105	-0.01	15.04
92		o-xylene	1.874	1.640	12.5	102	-0.01	15.47
93		styrene	1.310	1.216	7.2	108	-0.02	15.48
94		butyl acrylate	1.092	0.860	21.2#	93	-0.01	15.29
95		isopropylbenzene	2.362	2.084	11.8	100	-0.01	15.85
96		bromoform	0.326	0.327	-0.3	113	-0.02	15.73
97		cis-1,4-dichloro-2-butene	0.212	0.176	17.0	96	-0.01	15.88
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	117	-0.01	17.30

Continuing Calibration Summary

Job Number: JC67175 **Sample:** V3B6513-CC6447
Account: HSWFLTAM HSW Engineering **Lab FileID:** 3B146939.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

99	S	4-bromofluorobenzene (s)	0.823	0.809	1.7	114	-0.01	16.06
100		1,1,2,2-tetrachloroethane	1.261	1.162	7.9	105	-0.01	16.15
101		trans-1,4-dichloro-2-bute	0.294	0.236	19.7	92	-0.02	16.18
102		1,2,3-trichloropropane	0.311	0.291	6.4	105	-0.02	16.24
103		bromobenzene	0.878	0.886	-0.9	114	-0.01	16.26
104		n-propylbenzene	4.516	4.031	10.7	102	-0.01	16.29
105		2-chlorotoluene	0.921	0.869	5.6	107	-0.01	16.43
106		4-chlorotoluene	2.589	2.330	10.0	105	-0.01	16.55
107		1,3,5-trimethylbenzene	3.383	3.187	5.8	104	-0.01	16.46
108		tert-butylbenzene	2.749	2.654	3.5	103	-0.01	16.82
109		1,2,4-trimethylbenzene	3.428	3.168	7.6	103	-0.01	16.87
110		sec-butylbenzene	4.397	4.179	5.0	103	-0.01	17.05
111		p-isopropyltoluene	3.716	3.579	3.7	104	-0.01	17.19
112		1,3-dichlorobenzene	1.824	1.741	4.6	110	-0.01	17.23
113		1,4-dichlorobenzene	1.832	1.745	4.7	111	-0.01	17.33
114		1,2-dichlorobenzene	1.925	1.883	2.2	110	-0.01	17.72
115		Benzyl Chloride	2.601	2.335	10.2	107	-0.01	17.42
116		n-butylbenzene	2.016	1.807	10.4	101	-0.01	17.61
117		hexachloroethane	0.604	0.672	-11.3	121	-0.02	18.02
118		1,2-dibromo-3-chloropropa	0.367	0.357	2.7	107	-0.02	18.48
119		1,3,5-trichlorobenzene	1.903	1.917	-0.7	115	-0.01	18.67
120		2-ethylhexyl acrylate	1.358	0.908	33.1#	72	-0.02	19.28
121		1,2,4-trichlorobenzene	1.799	1.835	-2.0	113	-0.01	19.30
122		hexachlorobutadiene	0.746	0.908	-21.7#	133	-0.01	19.40
123		naphthalene	5.048	4.776	5.4	103	-0.02	19.58
124		1,2,3-trichlorobenzene	1.744	1.799	-3.2	113	-0.02	19.80
125		2-methylnaphthalene	3.298	2.508	24.0#	86	-0.02	20.74
126		Bis(chloromethyl)ether		----------NA----------				
127		Ethylenimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3b145652.D M3B6447.M Thu Jun 07 22:42:48 2018

Continuing Calibration Summary

Job Number: JC67175 **Sample:** V3B6514-CC6447
Account: HSWFLTAM HSW Engineering **Lab FileID:** 3B146965.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ma...18\v3b6514\3b146965.d Vial: 2
Acq On : 7 Jun 2018 7:46 am Operator: jessicap
Sample : cc6447-20 Inst : MS3B
Misc : MS26868,V3B6514,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3B6447.M (RTE Integrator)
Title : SW846 8260C, Rxi624Sil MS 60m x 0.25mm x 1.4um
Last Update : Tue Apr 17 11:55:34 2018
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	98	-0.01	7.99
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.325	1.446	-9.1	106	0.00	8.12
4		1,4-dioxane	0.109	0.102	6.4	92	-0.01	12.15
5	I	pentafluorobenzene	1.000	1.000	0.0	102	-0.01	10.50
6		chlorodifluoromethane	1.285	1.057	17.7	90	-0.01	4.20
7		dichlorodifluoromethane	1.100	1.304	-18.5	125	0.00	4.20
8		chloromethane	1.595	1.581	0.9	112	-0.07	4.53
9		vinyl chloride	1.471	1.605	-9.1	122	-0.03	4.84
10		1,3-Butadiene		----------NA----------				
11		bromomethane	0.792	0.783	1.1	112	-0.04	5.53
12		chloroethane	0.648	0.714	-10.2	126	-0.01	5.73
13		trichlorofluoromethane	1.123	1.263	-12.5	122	0.00	6.30
14		vinyl bromide	0.681	0.763	-12.0	119	-0.03	6.13
15		ethyl ether	0.325	0.379	-16.6	118	0.00	6.74
16		2-chloropropane	1.144	1.213	-6.0	118	-0.01	6.97
17		acrolein	0.186	0.199	-7.0	109	0.00	6.99
18		freon 113	0.496	0.634	-27.8#	134	-0.01	7.23
19		1,1-dichloroethene	0.588	0.647	-10.0	116	0.00	7.20
20		acetone	0.089	0.096	-7.9	110	-0.01	7.21
21		acetonitrile	0.185	0.179	3.2	97	-0.01	7.69
22		iodomethane	0.937	1.023	-9.2	113	-0.01	7.48
23		carbon disulfide	2.178	2.245	-3.1	113	-0.01	7.64
24		methylene chloride	0.717	0.779	-8.6	116	0.00	8.02
25		methyl acetate	0.708	0.732	-3.4	109	-0.01	7.75
26		methyl tert butyl ether	2.008	2.257	-12.4	118	0.00	8.45
27		trans-1,2-dichloroethene	0.559	0.667	-19.3	124	0.00	8.47
28		hexane	0.403	0.452	-12.2	112	0.00	8.88
29		di-isopropyl ether	2.359	2.473	-4.8	111	-0.01	9.12
30		2-butanone	0.111	0.110	0.9	106	-0.01	9.83
31		1,1-dichloroethane	1.096	1.270	-15.9	123	-0.01	9.11
32		chloroprene	0.904	0.928	-2.7	108	0.00	9.23
33		acrylonitrile	0.332	0.371	-11.7	111	-0.02	8.35
34		vinyl acetate	0.115	0.116	-0.9	105	-0.01	9.06
35		ethyl tert-butyl ether	2.152	2.284	-6.1	111	0.00	9.63
36		ethyl acetate	0.141	0.149	-5.7	109	-0.01	9.86
37		2,2-dichloropropane	1.013	1.154	-13.9	126	0.00	9.94
38		cis-1,2-dichloroethene	0.655	0.745	-13.7	118	0.00	9.90
39		propionitrile	0.184	0.184	0.0	107	-0.02	9.91
40		methyl acrylate	0.113	0.121	-7.1	113	-0.02	9.94
41		methacrylonitrile	0.327	0.325	0.6	103	-0.01	10.13

Continuing Calibration Summary

Job Number: JC67175 **Sample:** V3B6514-CC6447
Account: HSWFLTAM HSW Engineering **Lab FileID:** 3B146965.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

42		bromochloromethane	0.309	0.365	-18.1	119	-0.01	10.22
43		tetrahydrofuran	0.332	0.333	-0.3	105	-0.01	10.24
44		chloroform	1.060	1.159	-9.3	115	-0.01	10.32
45		tert-Butyl Formate	0.794	0.700	11.8	91	-0.02	10.36
46	S	dibromofluoromethane (s)	0.456	0.489	-7.2	110	-0.02	10.52
47		1,1,1-trichloroethane	1.039	1.127	-8.5	118	0.00	10.59
48		cyclohexane	0.949	1.052	-10.9	114	0.00	10.71
49		isobutyl alcohol	0.075	0.073	2.7	104	-0.01	10.76
50		1,1-dichloropropene	0.814	0.881	-8.2	114	-0.01	10.77
51		carbon tetrachloride	0.879	1.013	-15.2	124	-0.01	10.80
52		tert-amyl alcohol	0.099	0.086	13.1	86	-0.01	10.93
53		isopropyl acetate	0.157	0.171	-8.9	114	-0.01	10.96
54	I	1,4-difluorobenzene	1.000	1.000	0.0	102	-0.01	11.48
55	S	1,2-dichloroethane-d4 (s)	0.348	0.369	-6.0	107	-0.01	10.96
56		n-butyl alcohol	0.031	0.030	3.2	104	-0.02	11.54
57		2,2,4-Trimethylpentane	1.672	1.921	-14.9	116	0.00	11.15
58		benzene	1.673	1.784	-6.6	113	-0.01	11.03
59		tert-amyl methyl ether	1.360	1.489	-9.5	115	-0.01	11.13
60		heptane	0.301	0.340	-13.0	115	0.00	11.32
61		1,2-dichloroethane	0.536	0.566	-5.6	113	-0.02	11.06
62		ethyl acrylate	0.586	0.618	-5.5	113	-0.01	11.79
63		trichloroethene	0.390	0.429	-10.0	115	-0.01	11.79
64		2-chloroethyl vinyl ether	0.274	0.299	-9.1	116	-0.02	12.63
65		methyl methacrylate	0.113	0.123	-8.8	114	-0.01	12.07
66		methylcyclohexane	0.817	0.916	-12.1	118	-0.01	12.11
67		1,2-dichloropropane	0.434	0.497	-14.5	118	-0.01	12.10
68		dibromomethane	0.250	0.291	-16.4	117	-0.02	12.21
69		bromodichloromethane	0.543	0.600	-10.5	114	-0.02	12.38
70		2-nitropropane	0.134	0.141	-5.2	121	-0.02	12.59
71		epichlorohydrin	0.069	0.076	-10.1	120	-0.02	12.72
72		cis-1,3-dichloropropene	0.646	0.709	-9.8	118	-0.01	12.86
73		4-methyl-2-pentanone	0.251	0.277	-10.4	114	-0.02	12.97
74		isoamyl alcohol	0.029	0.031	-6.9	110	-0.01	12.99
75	I	chlorobenzene-d5	1.000	1.000	0.0	115	-0.01	14.81
76	S	toluene-d8 (s)	1.248	1.244	0.3	115	-0.01	13.19
77		toluene	1.068	1.051	1.6	119	-0.01	13.27
78		ethyl methacrylate	0.631	0.616	2.4	112	-0.01	13.46
79		trans-1,3-dichloropropene	0.624	0.650	-4.2	124	-0.01	13.47
80		1,1,2-trichloroethane	0.327	0.349	-6.7	124	-0.02	13.70
81		tetrachloroethene	0.339	0.368	-8.6	127	0.00	13.87
82		2-hexanone	0.249	0.253	-1.6	119	-0.01	13.88
83		1,3-dichloropropane	0.634	0.678	-6.9	127	-0.01	13.90
84		butyl acetate	0.373	0.374	-0.3	114	-0.01	13.97
85		dibromochloromethane	0.432	0.454	-5.1	124	-0.02	14.16
86		1,2-dibromoethane	0.410	0.455	-11.0	130	-0.01	14.33
87		n-butyl ether	2.216	2.108	4.9	112	-0.01	14.81
88		chlorobenzene	1.148	1.209	-5.3	127	-0.01	14.84
89		1,1,1,2-tetrachloroethane	0.502	0.529	-5.4	121	-0.01	14.92
90		ethylbenzene	2.107	2.118	-0.5	121	-0.01	14.91
91		m,p-xylene	0.791	0.797	-0.8	119	-0.01	15.04
92		o-xylene	1.874	1.881	-0.4	118	-0.01	15.47
93		styrene	1.310	1.360	-3.8	122	-0.02	15.48
94		butyl acrylate	1.092	1.036	5.1	108	-0.01	15.29
95		isopropylbenzene	2.362	2.338	1.0	117	-0.01	15.85
96		bromoform	0.326	0.359	-10.1	129	-0.01	15.73
97		cis-1,4-dichloro-2-butene	0.212	0.142	33.0#	74	-0.01	15.88
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	111	-0.01	17.30

Continuing Calibration Summary

Job Number: JC67175 **Sample:** V3B6514-CC6447
Account: HSWFLTAM HSW Engineering **Lab FileID:** 3B146965.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

99	S	4-bromofluorobenzene (s)	0.823	0.845	-2.7	113	-0.01	16.06
100		1,1,2,2-tetrachloroethane	1.261	1.380	-9.4	122	-0.01	16.15
101		trans-1,4-dichloro-2-bute	0.294	0.227	22.8#	86	-0.02	16.18
102		1,2,3-trichloropropane	0.311	0.344	-10.6	121	-0.02	16.24
103		bromobenzene	0.878	1.005	-14.5	129	-0.01	16.26
104		n-propylbenzene	4.516	4.662	-3.2	117	-0.01	16.29
105		2-chlorotoluene	0.921	0.992	-7.7	122	-0.01	16.43
106		4-chlorotoluene	2.589	2.701	-4.3	119	-0.01	16.55
107		1,3,5-trimethylbenzene	3.383	3.632	-7.4	120	-0.01	16.46
108		tert-butylbenzene	2.749	2.908	-5.8	121	-0.01	16.82
109		1,2,4-trimethylbenzene	3.428	3.655	-6.6	119	-0.01	16.87
110		sec-butylbenzene	4.397	4.721	-7.4	120	-0.01	17.05
111		p-isopropyltoluene	3.716	4.000	-7.6	121	-0.01	17.19
112		1,3-dichlorobenzene	1.824	1.994	-9.3	128	-0.01	17.23
113		1,4-dichlorobenzene	1.832	1.985	-8.4	125	-0.01	17.33
114		1,2-dichlorobenzene	1.925	2.160	-12.2	128	-0.01	17.72
115		Benzyl Chloride	2.601	2.645	-1.7	116	-0.01	17.42
116		n-butylbenzene	2.016	2.072	-2.8	114	-0.01	17.61
117		hexachloroethane	0.604	0.731	-21.0#	145	-0.02	18.02
118		1,2-dibromo-3-chloropropa	0.367	0.422	-15.0	129	-0.02	18.48
119		1,3,5-trichlorobenzene	1.903	2.190	-15.1	132	-0.01	18.67
120		2-ethylhexyl acrylate	1.358	1.252	7.8	111	-0.02	19.28
121		1,2,4-trichlorobenzene	1.799	2.095	-16.5	133	-0.01	19.29
122		hexachlorobutadiene	0.746	0.993	-33.1#	154	-0.02	19.40
123		naphthalene	5.048	5.696	-12.8	124	-0.02	19.58
124		1,2,3-trichlorobenzene	1.744	2.069	-18.6	134	-0.02	19.80
125		2-methylnaphthalene	3.298	3.168	3.9	121	-0.02	20.74
126		Bis(chloromethyl)ether		----------NA----------				
127		Ethylenimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3b145651.D M3B6447.M Fri Jun 08 02:11:02 2018

Initial Calibration Summary

Job Number: JC67175 **Sample:** VL8534-ICC8534
Account: HSWFLTAM HSW Engineering **Lab FileID:** L300314.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

Response Factor Report GCMSL

Method : C:\MSDCHEM\1\METHODS\ML8534.M (RTE Integrator)
Title : SW846 Method V8260C, column ZB-624 60m x 0.25mm x 1.4 um
Last Update : Thu May 10 07:46:11 2018
Response via : Initial Calibration

Calibration Files
10 =L300312.D 0.5 =L300308.D 5 =L300311.D 50 =L300314.D
100 =L300315.D 1 =L300309.D 200 =L300316.D 20 =L300313.D
2 =L300310.D =

Compound	10	0.5	5	50	100	1	200	20	2	Avg	%RSD
1) I Tert Butyl Alcohol-d9 ----------ISTD----------											
2) 1,4-dioxane	0.097	0.096	0.100	0.092	0.097	0.091	0.097	0.090	0.093	0.095	3.41
3) ethanol	0.140	0.156	0.145	0.139	0.143	0.153		0.135	0.145	0.144	4.84
4) tertiary butyl alcohol	1.169	1.228	1.193	1.153	1.200	1.255	1.199	1.138	1.175	1.190	3.06
5) I pentafluorobenzene ----------ISTD----------											
6) chlorodifluoromethane	0.685	0.758	0.669	0.705	0.682	0.684	0.632	0.651	0.704	0.686	5.24
7) dichlorodifluoromethane	0.622	0.545	0.618	0.634	0.635	0.566	0.615	0.595	0.652	0.609	5.66
8) freon 114										0.000	-1.00
9) freon 142b										0.000	-1.00
10) chloromethane	0.653	0.697	0.660	0.692	0.699	0.665	0.669	0.631	0.679	0.672	3.35
11) 1,3-butadiene										0.000	-1.00
12) vinyl chloride	0.675	0.782	0.648	0.681	0.662	0.671	0.629	0.629	0.720	0.678	7.10
13) bromomethane	0.161		0.159	0.174	0.161	0.195		0.166	0.182	0.171	7.80
14) chloroethane	0.373	0.457	0.367	0.365	0.349	0.396		0.348	0.384	0.380	9.22
15) vinyl bromide	0.382	0.427	0.371	0.380	0.375	0.353	0.352	0.358	0.373	0.375	6.03
16) trichlorofluoromethane	0.727	0.752	0.710	0.732	0.699	0.733	0.667	0.689	0.752	0.718	4.03
17) ethyl ether	0.333	0.284	0.322	0.321	0.319	0.309	0.290	0.330	0.311	0.313	5.33
18) 2-chloropropane	0.959		0.971	0.923	0.868	1.032	0.761	0.917	1.050	0.935	9.89
19) acrolein	0.173		0.178	0.172	0.172	0.210	0.161	0.174	0.167	0.176	8.25
20) freon 113	0.316	0.322	0.316	0.306	0.297	0.343	0.281	0.310	0.330	0.313	5.84
21) 1,1-dichloroethene	0.439	0.464	0.432	0.426	0.401	0.462	0.367	0.416	0.441	0.427	7.06
22) acetone	0.079	0.102	0.087	0.081	0.080	0.083	0.074	0.083	0.084	0.084	9.53
23) acetonitrile											

```
          0.071       0.077 0.071 0.071 0.078 0.065 0.073 0.079   0.073    6.43
24)  iodomethane
          0.258       0.201 0.352 0.362       0.337 0.281 0.183   0.282   25.53
           ----- Linear regression -----  Coefficient =  0.9981
             Response Ratio = -0.00738 + 0.34471 *A

25)  iso-butyl alcohol
          0.048       0.053 0.048 0.046       0.045 0.050 0.050   0.049    5.63
26)  carbon disulfide
          1.092       1.086 1.092 1.048 1.217 0.980 1.049 1.210   1.097    7.39
27)  methylene chloride
          0.467 0.561 0.470 0.461 0.453 0.519 0.428 0.455 0.517   0.481    8.73
28)  methyl acetate
          0.148       0.151 0.144 0.147       0.136 0.146 0.136   0.144    4.08
29)  methyl tert butyl ether
          1.636 1.666 1.606 1.554 1.490 1.622 1.318 1.580 1.641   1.568    6.87
30)  trans-1,2-dichloroethene
          0.456 0.554 0.461 0.439 0.416 0.485 0.385 0.439 0.471   0.456   10.38
31)  hexane
          0.672 0.640 0.681 0.659 0.637 0.706 0.617 0.648 0.732   0.666    5.42
32)  di-isopropyl ether
          1.884 2.063 1.919 1.771 1.662 2.078 1.465 1.829 1.967   1.849   10.60
33)  ethyl tert-butyl ether
          1.777 1.829 1.788 1.695 1.640 1.818 1.489 1.719 1.775   1.726    6.23
34)  2-butanone
          0.104 0.106 0.107 0.105 0.105 0.119 0.093 0.107 0.105   0.106    6.29
35)  1,1-dichloroethane
          0.956 1.042 0.977 0.897 0.852 1.006 0.778 0.911 1.008   0.936    9.07
36)  chloroprene
          0.858 0.953 0.852 0.817 0.786 0.866 0.737 0.810 0.924   0.845    7.90
37)  acrylonitrile
          0.328 0.315 0.332 0.331 0.340 0.326 0.309 0.332 0.350   0.329    3.70
38)  vinyl acetate
          0.120       0.123 0.128 0.122 0.097 0.115 0.123 0.112   0.118    8.24
39)  ethyl acetate
          0.155       0.156 0.147 0.147       0.134 0.139 0.139   0.145    5.68
40)  2,2-dichloropropane
          0.744       0.779 0.697 0.660 0.790 0.615 0.711 0.842   0.730   10.14
41)  cis-1,2-dichloroethene
          0.501 0.567 0.508 0.478 0.456 0.577 0.421 0.494 0.527   0.503    9.88
42)  propionitrile
          0.151       0.158 0.141 0.133 0.166 0.117 0.150 0.154   0.146   10.56
43)  methyl acrylate
          0.113       0.121 0.111 0.109 0.127 0.099 0.115 0.120   0.114    7.44
44)  bromochloromethane
          0.217       0.226 0.208 0.200 0.237 0.182 0.212 0.232   0.214    8.31
45)  tetrahydrofuran
          0.123 0.122 0.121 0.120 0.119 0.121 0.111 0.123 0.116   0.120    3.12
46)  chloroform
          0.832 1.037 0.841 0.796 0.770 0.915 0.716 0.809 0.914   0.848   11.24
47)  dibromofluoromethane (s)
          0.382 0.384 0.375 0.382 0.383 0.378 0.384 0.384 0.377   0.381    0.92
48)  methacrylonitrile
          0.310 0.308 0.333 0.312 0.315 0.355 0.299 0.312 0.322   0.318    5.23
49)  1,1,1-trichloroethane
          0.684 0.761 0.673 0.667 0.658 0.745 0.634 0.639 0.733   0.688    6.79
50)  cyclohexane
          0.592 0.586 0.613 0.580 0.542 0.603 0.527 0.583 0.623   0.583    5.33
51)  1,1-dichloropropene
          0.674 0.751 0.665 0.633 0.610 0.723 0.580 0.632 0.691   0.662    8.24
```

Initial Calibration Summary

Job Number: JC67175 **Sample:** VL8534-ICC8534
Account: HSWFLTAM HSW Engineering **Lab FileID:** L300314.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

52) carbon tetrachloride
0.534 0.626 0.524 0.512 0.505 0.602 0.489 0.512 0.540 0.538 8.55
53) isopropyl acetate
0.139 0.152 0.145 0.144 0.156 0.135 0.149 0.151 0.146 4.84
54) tert amyl alcohol
0.043 0.045 0.042 0.040 0.036 0.045 0.042 0.042 7.40

55) I 1,4-difluorobenzene ----------ISTD----------
56) 1,2-dichloroethane-d4 (s)
0.333 0.341 0.328 0.313 0.302 0.335 0.300 0.343 0.335 0.326 5.06
57) tert-amyl methyl ether
1.058 1.059 0.966 0.912 1.161 0.803 1.011 1.101 1.009 11.27
58) 2,2,4-trimethylpentane
0.921 0.960 0.977 0.842 0.775 1.019 0.727 0.883 1.083 0.910 12.63
59) epichlorohydrin
0.069 0.081 0.072 0.069 0.067 0.069 0.061 0.071 0.071 0.070 7.61
60) n-butyl alcohol
0.021 0.023 0.023 0.021 0.020 0.021 0.018 0.022 0.021 0.021 7.55
61) benzene
1.328 1.602 1.335 1.198 1.118 1.434 0.982 1.241 1.419 1.295 14.27
62) heptane
0.212 0.225 0.218 0.197 0.190 0.214 0.188 0.197 0.214 0.206 6.44
63) 1,2-dichloroethane
0.484 0.496 0.440 0.427 0.592 0.396 0.457 0.504 0.474 12.67
64) trichloroethene
0.324 0.367 0.326 0.314 0.304 0.345 0.287 0.311 0.329 0.323 7.26
65) ethyl acrylate
0.664 0.736 0.676 0.659 0.642 0.736 0.569 0.675 0.682 0.671 7.47
66) 2-nitropropane
0.211 0.215 0.215 0.216 0.197 0.213 0.211 3.37
67) 2-chloroethyl vinyl ether
0.278 0.284 0.285 0.263 0.244 0.281 0.206 0.277 0.290 0.268 10.07
68) methyl methacrylate
0.119 0.123 0.119 0.113 0.117 0.101 0.121 0.117 0.116 5.82
69) 1,2-dichloropropane
0.366 0.398 0.370 0.341 0.324 0.391 0.292 0.355 0.385 0.358 9.57
70) methylcyclohexane
0.518 0.525 0.527 0.498 0.470 0.557 0.451 0.506 0.571 0.513 7.40
71) dibromomethane
0.202 0.229 0.200 0.191 0.189 0.214 0.175 0.198 0.204 0.200 7.70
72) bromodichloromethane
0.421 0.426 0.412 0.416 0.414 0.429 0.396 0.408 0.419 0.416 2.41
73) cis-1,3-dichloropropene
0.578 0.634 0.564 0.551 0.543 0.586 0.504 0.559 0.587 0.567 6.34
74) 4-methyl-2-pentanone
0.223 0.234 0.208 0.195 0.252 0.167 0.225 0.232 0.217 12.20
75) 3-methyl-1-butanol
0.019 0.021 0.020 0.018 0.017 0.021 0.016 0.019 0.019 0.019 9.07

76) I chlorobenzene-d5 ----------ISTD----------
77) toluene-d8 (s)
1.192 1.232 1.205 1.138 1.134 1.223 1.145 1.159 1.227 1.184 3.39
78) toluene
0.843 0.882 0.781 0.750 0.963 0.697 0.788 0.933 0.830 11.10
79) trans-1,3-dichloropropene
0.561 0.656 0.536 0.544 0.531 0.588 0.500 0.548 0.569 0.559 7.88
80) ethyl methacrylate
0.604 0.615 0.605 0.578 0.555 0.626 0.495 0.595 0.606 0.587 6.85
81) 1,1,2-trichloroethane
0.293 0.303 0.294 0.277 0.269 0.312 0.250 0.282 0.292 0.286 6.52

Initial Calibration Summary

Job Number: JC67175 **Sample:** VL8534-ICC8534
Account: HSWFLTAM HSW Engineering **Lab FileID:** L300314.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

82)	2-hexanone											
		0.251	0.267	0.259	0.226	0.210	0.267	0.181	0.248	0.257	0.241	12.15
83)	tetrachloroethene											
		0.347	0.390	0.354	0.323	0.315	0.358	0.303	0.323	0.371	0.343	8.38
84)	1,3-dichloropropane											
		0.595	0.671	0.590	0.548	0.525	0.666	0.478	0.564	0.608	0.583	10.76
85)	butyl acetate											
		0.368		0.377	0.340	0.332	0.387	0.303	0.359	0.392	0.357	8.52
86)	dibromochloromethane											
		0.295	0.346	0.290	0.296	0.297	0.293	0.283	0.291	0.291	0.298	6.16
87)	1,2-dibromoethane											
		0.376	0.413	0.379	0.356	0.354	0.384	0.332	0.359	0.367	0.369	6.22
88)	n-butyl ether											
		1.655	1.828	1.667	1.513	1.408	1.709	1.227	1.563	1.696	1.585	11.45
89)	chlorobenzene											
		0.863	1.014	0.888	0.824	0.800	0.964	0.746	0.821	0.940	0.873	9.87
90)	1,1,1,2-tetrachloroethane											
		0.284	0.296	0.294	0.271	0.258	0.316	0.237	0.276	0.287	0.280	8.28
91)	ethylbenzene											
		1.591	1.753	1.618	1.399	1.286	1.728	1.115	1.464	1.750	1.523	14.71
92)	m,p-xylene											
		0.581	0.699	0.603	0.523	0.489	0.646	0.442	0.541	0.622	0.572	14.15
93)	o-xylene											
		0.591	0.643	0.604	0.532	0.505	0.626	0.460	0.557	0.607	0.570	10.64
94)	butyl acrylate											
		0.920	0.957	0.913	0.888	0.858	0.930	0.786	0.900	0.868	0.891	5.62
95)	styrene											
		0.998	1.148	1.010	0.895	0.826	1.030	0.732	0.935	1.018	0.955	12.94
96)	bromoform											
		0.197	0.192	0.191	0.214	0.220	0.217	0.213	0.204	0.189	0.204	6.05
97)	isopropylbenzene											
		1.527	1.646	1.527	1.383	1.284	1.599	1.149	1.410	1.604	1.459	11.35
98)	cis-1,4-dichloro-2-butene											
		0.183	0.206	0.190	0.198	0.198	0.184	0.186	0.194	0.186	0.192	4.08
99)	I 1,4-dichlorobenzene-d ----------ISTD----------											
100)	4-bromofluorobenzene (s)											
		1.071	1.048	1.061	1.110	1.133	1.048	1.139	1.101	1.056	1.085	3.34
101)	bromobenzene											
		0.803	0.858	0.788	0.794	0.812	0.790	0.756	0.792	0.820	0.801	3.46
102)	1,1,2,2-tetrachloroethane											
		1.148	1.133	1.162	1.166	1.207	1.126	1.153	1.140	1.130	1.152	2.16
103)	trans-1,4-dichloro-2-butene											
		0.373	0.375	0.389	0.393	0.402	0.376	0.382	0.383	0.337	0.379	4.86
104)	1,2,3-trichloropropane											
		0.326	0.276	0.333	0.319	0.323	0.334	0.300	0.324	0.331	0.319	5.98
105)	n-propylbenzene											
		3.863	4.056	3.931	3.734	3.616	3.846	3.254	3.711	4.047	3.784	6.55
106)	2-chlorotoluene											
		0.758	0.843	0.755	0.749	0.760	0.776	0.723	0.739	0.756	0.762	4.41
107)	4-chlorotoluene											
		0.762	0.836	0.755	0.725	0.736	0.797	0.696	0.722	0.745	0.752	5.60
108)	4-ethyltoluene											
											0.000	-1.00
109)	1,3,5-trimethylbenzene											
		2.610	2.631	2.607	2.526	2.503	2.682	2.296	2.483	2.635	2.552	4.59
110)	tert-butylbenzene											
		2.154	2.250	2.135	2.154	2.143	2.187	2.001	2.096	2.206	2.147	3.29
111)	1,2,4-trimethylbenzene											
		2.626	2.731	2.614	2.537	2.518	2.676	2.283	2.543	2.699	2.581	5.21

Initial Calibration Summary

Job Number: JC67175 **Sample:** VL8534-ICC8534
Account: HSWFLTAM HSW Engineering **Lab FileID:** L300314.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

```
112)  sec-butylbenzene
            3.110 3.300 3.105 3.067 3.035 3.102 2.783 2.981 3.254   3.082    4.88
113)  1,3-dichlorobenzene
            1.404 1.378 1.436 1.394 1.418 1.496 1.328 1.390 1.403   1.405    3.22
114)  p-isopropyltoluene
            2.524 2.696 2.563 2.430 2.373 2.564 2.158 2.399 2.585   2.477    6.34
115)  1,4-dichlorobenzene
            1.328 1.489 1.367 1.337 1.350 1.393 1.288 1.322 1.399   1.364    4.30
116)  1,2-dichlorobenzene
            1.330 1.465 1.349 1.324 1.316 1.408 1.235 1.309 1.327   1.340    4.82
117)  1,4-diethylbenzene
                                                                    0.000   -1.00
118)  n-butylbenzene
            1.263 1.291 1.238 1.311 1.330 1.306 1.284 1.238 1.232   1.277    2.82
119)  1,2,4,5-tetramethylbenzene
                                                                    0.000   -1.00
120)  1,2-dibromo-3-chloropropane
            0.240       0.258 0.296 0.334       0.341 0.265 0.225   0.280   16.12
121)  1,3,5-trichlorobenzene
            0.942 1.052 0.956 0.995 1.054 0.895 1.015 0.948 0.946   0.978    5.54
122)  1,2,4-trichlorobenzene
            0.828 0.944 0.837 0.926 1.004 0.831 0.972 0.861 0.810   0.890    8.07
123)  hexachlorobutadiene
            0.332 0.388 0.308 0.346 0.357 0.358 0.349 0.322 0.367   0.347    6.93
124)  naphthalene
            2.950 3.249 2.955 3.172 3.293 2.830 3.008 3.044 2.878   3.042    5.34
125)  1,2,3-trichlorobenzene
            0.801 0.870 0.795 0.871 0.925 0.767 0.894 0.807 0.829   0.840    6.26
126)  hexachloroethane
            0.375 0.373 0.370 0.436 0.466 0.355 0.474 0.394 0.357   0.400   11.62
127)  Benzyl chloride
            2.018 2.159 2.013 2.167 2.256 1.951 2.135 2.079 1.886   2.074    5.66
128)  2-ethylhexyl acrylate
            0.375             0.543 0.620       0.699 0.430         0.533   24.96
             ----- Linear regression -----  Coefficient =  0.9974
               Response Ratio = -0.02612 + 0.72089 *A

129)  2-methylnaphthalene
            1.500             1.844 2.078       1.989 1.652         1.813   13.11

130) I   chlorobenzene-d5(a)   ----------------ISTD--------------------
131)  cyclohexanone
            0.026 0.031 0.027 0.027 0.025 0.027 0.026 0.026 0.028   0.027    5.90
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           ML8534.M          Thu May 10 14:13:11 2018   1
```

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: VL8534-ICV8534
Lab FileID: L300319.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\VL8534\L300319.D Vial: 13
Acq On : 16 Apr 2018 7:52 pm Operator: vidishp
Sample : icv8534-50 Inst : GCMSL
Misc : MS24791,VL8534,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\ML8534.M (RTE Integrator)
Title : SW846 Method V8260C, column ZB-624 60m x 0.25mm x 1.4 um
Last Update : Tue Apr 17 15:11:19 2018
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	95	0.00	3.13
2		1,4-dioxane	0.095	0.106	-11.6	109	0.00	5.35
3		ethanol	0.144	0.160	-11.1	109	0.00	2.55
4	M	tertiary butyl alcohol	1.190	1.345	-13.0	110	0.00	3.18
5	I	pentafluorobenzene	1.000	1.000	0.0	104	0.00	4.35
6		chlorodifluoromethane	0.686	0.469	31.6#	69	0.00	1.69
7		dichlorodifluoromethane	0.609	0.628	-3.1	103	0.00	1.67
8		freon 114		----------NA----------				
9		freon 142b		----------NA----------				
10		chloromethane	0.672	0.710	-5.7	107	0.00	1.83
11		1,3-butadiene		----------NA----------				
12		vinyl chloride	0.678	0.663	2.2	101	0.00	1.92
13		bromomethane	0.171	0.253	-48.0#	152	0.00	2.17
14		chloroethane	0.380	0.375	1.3	107	0.00	2.25
15		vinyl bromide	0.375	0.431	-14.9	118	0.00	2.39
16		trichlorofluoromethane	0.718	0.692	3.6	98	0.00	2.44
17		ethyl ether	0.313	0.314	-0.3	102	0.00	2.63
18		2-chloropropane	0.935	0.907	3.0	102	0.00	2.72
19		acrolein	0.176	0.244	-38.6#	148	0.00	2.73
20		freon 113	0.313	0.331	-5.8	113	0.00	2.81
21		1,1-dichloroethene	0.427	0.369	13.6	90	0.00	2.81
22		acetone	0.084	0.083	1.2	106	0.00	2.82
23		acetonitrile	0.073	0.085	-16.4	125	0.00	3.02
		----------	True	Calc.	% Drift	----------		
24		iodomethane	50.000	45.639	8.7	91	0.00	2.93
		----------	AvgRF	CCRF	% Dev	----------		
25		iso-butyl alcohol	0.049	0.051	-4.1	111	0.00	4.50
26		carbon disulfide	1.097	1.044	4.8	100	0.00	2.99
27		methylene chloride	0.481	0.451	6.2	102	0.00	3.15
28		methyl acetate	0.144	0.144	0.0	103	0.00	3.03
29		methyl tert butyl ether	1.568	1.515	3.8	102	0.00	3.32
30		trans-1,2-dichloroethene	0.456	0.403	11.6	96	0.00	3.33
31		hexane	0.666	0.554	16.8	87	0.00	3.51
32		di-isopropyl ether	1.849	1.830	1.0	108	0.00	3.62
33		ethyl tert-butyl ether	1.726	1.753	-1.6	108	0.00	3.87
34		2-butanone	0.106	0.106	0.0	106	0.00	4.00
35	M	1,1-dichloroethane	0.936	0.888	5.1	103	0.00	3.63
36		chloroprene	0.845	0.825	2.4	105	0.00	3.68
37		acrylonitrile	0.329	0.374	-13.7	118	0.00	3.30

Initial Calibration Verification

Job Number: JC67175 **Sample:** VL8534-ICV8534
Account: HSWFLTAM HSW Engineering **Lab FileID:** L300319.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

38		vinyl acetate	0.118	0.135	-14.4	110	0.00	3.60
39		ethyl acetate	0.145	0.155	-6.9	110	0.00	4.01
40		2,2-dichloropropane	0.730	0.689	5.6	103	0.00	4.03
41		cis-1,2-dichloroethene	0.503	0.493	2.0	107	0.00	4.02
42		propionitrile	0.146	0.144	1.4	107	0.00	4.05
43		methyl acrylate	0.114	0.116	-1.8	109	0.00	4.05
44		bromochloromethane	0.214	0.218	-1.9	109	0.00	4.19
45		tetrahydrofuran	0.120	0.123	-2.5	107	0.00	4.20
46		chloroform	0.848	0.820	3.3	107	0.00	4.24
47	S	dibromofluoromethane (s)	0.381	0.391	-2.6	106	0.00	4.35
48		methacrylonitrile	0.318	0.332	-4.4	111	0.00	4.15
49		1,1,1-trichloroethane	0.688	0.653	5.1	102	0.00	4.38
50		cyclohexane	0.583	0.738	-26.6	132	0.00	4.44
51		1,1-dichloropropene	0.662	0.630	4.8	104	0.00	4.49
52		carbon tetrachloride	0.538	0.510	5.2	104	0.00	4.49
53		isopropyl acetate	0.146	0.153	-4.8	110	0.00	4.61
54		tert amyl alcohol	0.042	0.045	-7.1	110	0.00	4.59
55	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	4.91
56	S	1,2-dichloroethane-d4 (s)	0.326	0.323	0.9	107	0.00	4.61
57		tert-amyl methyl ether	1.009	1.007	0.2	108	0.00	4.70
58		2,2,4-trimethylpentane	0.910	0.786	13.6	97	0.00	4.70
59		epichlorohydrin	0.070	0.072	-2.9	108	0.00	5.75
60		n-butyl alcohol	0.021	0.022	-4.8	109	0.00	4.98
61	M	benzene	1.295	1.225	5.4	106	0.00	4.64
62		heptane	0.206	0.207	-0.5	109	0.00	4.81
63		1,2-dichloroethane	0.474	0.463	2.3	109	0.00	4.67
64		trichloroethene	0.323	0.322	0.3	106	0.00	5.11
65		ethyl acrylate	0.671	0.707	-5.4	111	0.00	5.13
66		2-nitropropane	0.211	0.237	-12.3	114	0.00	5.66
67		2-chloroethyl vinyl ether	0.268	0.283	-5.6	111	0.00	5.69
68		methyl methacrylate	0.116	0.124	-6.9	108	0.00	5.31
69		1,2-dichloropropane	0.358	0.345	3.6	105	0.00	5.31
70		methylcyclohexane	0.513	0.436	15.0	91	0.00	5.30
71		dibromomethane	0.200	0.207	-3.5	112	0.00	5.38
72		bromodichloromethane	0.416	0.433	-4.1	108	0.00	5.49
73		cis-1,3-dichloropropene	0.567	0.591	-4.2	111	0.00	5.84
74		4-methyl-2-pentanone	0.217	0.211	2.8	105	0.00	5.94
75		3-methyl-1-butanol	0.019	0.018	5.3	107	0.00	5.96
76	I	chlorobenzene-d5	1.000	1.000	0.0	102	0.00	7.32
77	S	toluene-d8 (s)	1.184	1.146	3.2	102	0.00	6.07
78		toluene	0.830	0.832	-0.2	108	0.00	6.12
79		trans-1,3-dichloropropene	0.559	0.564	-0.9	105	0.00	6.29
80		ethyl methacrylate	0.587	0.611	-4.1	107	0.00	6.31
81		1,1,2-trichloroethane	0.286	0.298	-4.2	109	0.00	6.46
82		2-hexanone	0.241	0.238	1.2	107	0.00	6.63
83		tetrachloroethene	0.343	0.346	-0.9	109	0.00	6.56
84		1,3-dichloropropane	0.583	0.605	-3.8	112	0.00	6.61
85		butyl acetate	0.357	0.382	-7.0	114	0.00	6.71
86		dibromochloromethane	0.298	0.334	-12.1	115	0.00	6.80
87		1,2-dibromoethane	0.369	0.392	-6.2	112	0.00	6.92
88		n-butyl ether	1.585	1.608	-1.5	108	0.00	7.39
89		chlorobenzene	0.873	0.886	-1.5	109	0.00	7.34
90		1,1,1,2-tetrachloroethane	0.280	0.296	-5.7	111	0.00	7.41
91		ethylbenzene	1.523	1.499	1.6	109	0.00	7.42
92		m,p-xylene	0.572	0.563	1.6	109	0.00	7.54
93		o-xylene	0.570	0.581	-1.9	111	0.00	7.89
94		butyl acrylate	0.891	0.981	-10.1	112	0.00	7.81
95		styrene	0.955	0.976	-2.2	111	0.00	7.90

Initial Calibration Verification

Job Number: JC67175 **Sample:** VL8534-ICV8534
Account: HSWFLTAM HSW Engineering **Lab FileID:** L300319.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

96		bromoform	0.204	0.243	-19.1	115	0.00	8.08
97		isopropylbenzene	1.459	1.458	0.1	107	0.00	8.23
98		cis-1,4-dichloro-2-butene	0.192	0.205	-6.8	105	0.00	8.28
99	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	99	0.00	9.51
100	S	4-bromofluorobenzene (s)	1.085	1.117	-2.9	100	0.00	8.40
101		bromobenzene	0.801	0.888	-10.9	111	0.00	8.54
102		1,1,2,2-tetrachloroethane	1.152	1.301	-12.9	111	0.00	8.51
103		trans-1,4-dichloro-2-bute	0.379	0.468	-23.5	118	0.00	8.55
104		1,2,3-trichloropropane	0.319	0.353	-10.7	110	0.00	8.57
105		n-propylbenzene	3.784	4.079	-7.8	109	0.00	8.62
106		2-chlorotoluene	0.762	0.820	-7.6	109	0.00	8.72
107		4-chlorotoluene	0.752	0.829	-10.2	114	0.00	8.84
108		4-ethyltoluene		----------NA----------				
109		1,3,5-trimethylbenzene	2.552	2.790	-9.3	110	0.00	8.79
110		tert-butylbenzene	2.147	2.568	-19.6	118	0.00	9.10
111		1,2,4-trimethylbenzene	2.581	2.798	-8.4	110	0.00	9.16
112		sec-butylbenzene	3.082	3.365	-9.2	109	0.00	9.32
113		1,3-dichlorobenzene	1.405	1.557	-10.8	111	0.00	9.44
114		p-isopropyltoluene	2.477	2.695	-8.8	110	0.00	9.46
115		1,4-dichlorobenzene	1.364	1.488	-9.1	111	0.00	9.54
116		1,2-dichlorobenzene	1.340	1.459	-8.9	110	0.00	9.89
117		1,4-diethylbenzene		----------NA----------				
118		n-butylbenzene	1.277	1.451	-13.6	110	0.00	9.86
119		1,2,4,5-tetramethylbenzen		----------NA----------				
120		1,2-dibromo-3-chloropropa	0.280	0.330	-17.9	111	0.00	10.66
121		1,3,5-trichlorobenzene	0.978	1.119	-14.4	112	0.00	10.85
122		1,2,4-trichlorobenzene	0.890	1.043	-17.2	112	0.00	11.48
123		hexachlorobutadiene	0.347	0.370	-6.6	106	0.00	11.62
124		naphthalene	3.042	3.601	-18.4	113	0.00	11.75
125		1,2,3-trichlorobenzene	0.840	0.966	-15.0	110	0.00	11.97
126		hexachloroethane	0.400	0.496	-24.0	113	0.00	10.16
127		Benzyl chloride	2.074	1.972	4.9	90	0.00	9.65
		----------	True	Calc.	% Drift	----------		
128		2-ethylhexyl acrylate	10.000	10.797	-8.0	119	0.00	11.66
		----------	AvgRF	CCRF	% Dev	----------		
129		2-methylnaphthalene	1.813	1.862	-2.7	100	0.00	12.88

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

L300314.D ML8534.M Tue Apr 17 15:14:42 2018 1

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: VL8534-ICV8534
Lab FileID: L300320.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\VL8534\L300320.D Vial: 14
Acq On : 16 Apr 2018 8:20 pm Operator: vidishp
Sample : icv8534-50 Inst : GCMSL
Misc : MS24791,VL8534,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\ML8534.M (RTE Integrator)
Title : SW846 Method V8260C, column ZB-624 60m x 0.25mm x 1.4 um
Last Update : Tue Apr 17 15:02:10 2018
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	106	0.00	3.12
2		1,4-dioxane		----------	NA	----------		
3		ethanol		----------	NA	----------		
4	M	tertiary butyl alcohol		----------	NA	----------		
5	I	pentafluorobenzene	1.000	1.000	0.0	126	0.00	4.35
6		chlorodifluoromethane		----------	NA	----------		
7		dichlorodifluoromethane		----------	NA	----------		
8		freon 114		----------	NA	----------		
9		freon 142b		----------	NA	----------		
10		chloromethane		----------	NA	----------		
11		1,3-butadiene		----------	NA	----------		
12		vinyl chloride		----------	NA	----------		
13		bromomethane		----------	NA	----------		
14		chloroethane		----------	NA	----------		
15		vinyl bromide		----------	NA	----------		
16		trichlorofluoromethane		----------	NA	----------		
17		ethyl ether		----------	NA	----------		
18		2-chloropropane		----------	NA	----------		
19		acrolein		----------	NA	----------		
20		freon 113		----------	NA	----------		
21		1,1-dichloroethene		----------	NA	----------		
22		acetone		----------	NA	----------		
23		acetonitrile	0.073	0.066	9.6	117	0.00	3.02
		----------	True	Calc.	% Drift	----------		
24		iodomethane		----------	NA	----------		
		----------	AvgRF	CCRF	% Dev	----------		
25		iso-butyl alcohol		----------	NA	----------		
26		carbon disulfide		----------	NA	----------		
27		methylene chloride		----------	NA	----------		
28		methyl acetate		----------	NA	----------		
29		methyl tert butyl ether		----------	NA	----------		
30		trans-1,2-dichloroethene		----------	NA	----------		
31		hexane		----------	NA	----------		
32		di-isopropyl ether		----------	NA	----------		
33		ethyl tert-butyl ether		----------	NA	----------		
34		2-butanone		----------	NA	----------		
35	M	1,1-dichloroethane		----------	NA	----------		
36		chloroprene		----------	NA	----------		
37		acrylonitrile		----------	NA	----------		

Initial Calibration Verification

Job Number: JC67175 **Sample:** VL8534-ICV8534
Account: HSWFLTAM HSW Engineering **Lab FileID:** L300320.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

38		vinyl acetate		----------NA----------				
39		ethyl acetate		----------NA----------				
40		2,2-dichloropropane		----------NA----------				
41		cis-1,2-dichloroethene		----------NA----------				
42		propionitrile		----------NA----------				
43		methyl acrylate		----------NA----------				
44		bromochloromethane		----------NA----------				
45		tetrahydrofuran		----------NA----------				
46		chloroform		----------NA----------				
47	S	dibromofluoromethane (s)	0.381	0.375	1.6	123	0.00	4.35
48		methacrylonitrile		----------NA----------				
49		1,1,1-trichloroethane		----------NA----------				
50		cyclohexane		----------NA----------				
51		1,1-dichloropropene		----------NA----------				
52		carbon tetrachloride		----------NA----------				
53		isopropyl acetate		----------NA----------				
54		tert amyl alcohol		----------NA----------				
55	I	1,4-difluorobenzene	1.000	1.000	0.0	121	0.00	4.92
56	S	1,2-dichloroethane-d4 (s)	0.326	0.333	-2.1	128	0.00	4.61
57		tert-amyl methyl ether		----------NA----------				
58		2,2,4-trimethylpentane		----------NA----------				
59		epichlorohydrin		----------NA----------				
60		n-butyl alcohol		----------NA----------				
61	M	benzene		----------NA----------				
62		heptane		----------NA----------				
63		1,2-dichloroethane		----------NA----------				
64		trichloroethene		----------NA----------				
65		ethyl acrylate		----------NA----------				
66		2-nitropropane		----------NA----------				
67		2-chloroethyl vinyl ether		----------NA----------				
68		methyl methacrylate		----------NA----------				
69		1,2-dichloropropane		----------NA----------				
70		methylcyclohexane		----------NA----------				
71		dibromomethane		----------NA----------				
72		bromodichloromethane		----------NA----------				
73		cis-1,3-dichloropropene		----------NA----------				
74		4-methyl-2-pentanone		----------NA----------				
75		3-methyl-1-butanol		----------NA----------				
76	I	chlorobenzene-d5	1.000	1.000	0.0	110	0.00	7.32
77	S	toluene-d8 (s)	1.184	1.279	-8.0	124	0.00	6.07
78		toluene		----------NA----------				
79		trans-1,3-dichloropropene		----------NA----------				
80		ethyl methacrylate		----------NA----------				
81		1,1,2-trichloroethane		----------NA----------				
82		2-hexanone		----------NA----------				
83		tetrachloroethene	0.343	0.345	-0.6	118	0.00	6.56
84		1,3-dichloropropane		----------NA----------				
85		butyl acetate		----------NA----------				
86		dibromochloromethane		----------NA----------				
87		1,2-dibromoethane		----------NA----------				
88		n-butyl ether		----------NA----------				
89		chlorobenzene		----------NA----------				
90		1,1,1,2-tetrachloroethane		----------NA----------				
91		ethylbenzene		----------NA----------				
92		m,p-xylene		----------NA----------				
93		o-xylene		----------NA----------				
94		butyl acrylate		----------NA----------				
95		styrene		----------NA----------				

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: VL8534-ICV8534
Lab FileID: L300320.D

96		bromoform		----------NA----------				
97		isopropylbenzene		----------NA----------				
98		cis-1,4-dichloro-2-butene		----------NA----------				
99	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	125	0.00	9.51
100	S	4-bromofluorobenzene (s)	1.085	1.045	3.7	117	0.00	8.40
101		bromobenzene		----------NA----------				
102		1,1,2,2-tetrachloroethane		----------NA----------				
103		trans-1,4-dichloro-2-bute		----------NA----------				
104		1,2,3-trichloropropane		----------NA----------				
105		n-propylbenzene		----------NA----------				
106		2-chlorotoluene		----------NA----------				
107		4-chlorotoluene		----------NA----------				
108		4-ethyltoluene		----------NA----------				
109		1,3,5-trimethylbenzene		----------NA----------				
110		tert-butylbenzene		----------NA----------				
111		1,2,4-trimethylbenzene		----------NA----------				
112		sec-butylbenzene		----------NA----------				
113		1,3-dichlorobenzene		----------NA----------				
114		p-isopropyltoluene		----------NA----------				
115		1,4-dichlorobenzene		----------NA----------				
116		1,2-dichlorobenzene		----------NA----------				
117		1,4-diethylbenzene		----------NA----------				
118		n-butylbenzene		----------NA----------				
119		1,2,4,5-tetramethylbenzen		----------NA----------				
120		1,2-dibromo-3-chloropropa		----------NA----------				
121		1,3,5-trichlorobenzene		----------NA----------				
122		1,2,4-trichlorobenzene		----------NA----------				
123		hexachlorobutadiene		----------NA----------				
124		naphthalene		----------NA----------				
125		1,2,3-trichlorobenzene		----------NA----------				
126		hexachloroethane		----------NA----------				
127		Benzyl chloride		----------NA----------				
		---------- True	Calc.	% Drift ----------				
128		2-ethylhexyl acrylate		----------NA----------				
		---------- AvgRF	CCRF	% Dev ----------				
129		2-methylnaphthalene		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
L300314.D ML8534.M Tue Apr 17 15:05:16 2018 1

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: VL8534-ICV8534
Lab FileID: L300324.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\VL8534\L300324.D Vial: 18
Acq On : 17 Apr 2018 11:51 am Operator: vidishp
Sample : icv8534-50 Inst : GCMSL
Misc : MS24791,VL8534,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\ML8534.M (RTE Integrator)
Title : SW846 Method V8260C, column ZB-624 60m x 0.25mm x 1.4 um
Last Update : Tue Apr 17 15:02:10 2018
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	105	0.00	3.13
2		1,4-dioxane		----------NA----------				
3		ethanol		----------NA----------				
4	M	tertiary butyl alcohol		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	123	0.00	4.34
6		chlorodifluoromethane	0.686	0.615	10.3	107	0.00	1.69
7		dichlorodifluoromethane		----------NA----------				
8		freon 114		----------NA----------				
9		freon 142b		----------NA----------				
10		chloromethane		----------NA----------				
11		1,3-butadiene		----------NA----------				
12		vinyl chloride		----------NA----------				
13		bromomethane	0.171	0.155	9.4	110	0.00	2.17
14		chloroethane		----------NA----------				
15		vinyl bromide		----------NA----------				
16		trichlorofluoromethane		----------NA----------				
17		ethyl ether		----------NA----------				
18		2-chloropropane		----------NA----------				
19		acrolein	0.176	0.168	4.5	121	0.00	2.73
20		freon 113		----------NA----------				
21		1,1-dichloroethene		----------NA----------				
22		acetone		----------NA----------				
23		acetonitrile		----------NA----------				
		----------	True	Calc.	% Drift	----------		
24		iodomethane		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
25		iso-butyl alcohol		----------NA----------				
26		carbon disulfide		----------NA----------				
27		methylene chloride		----------NA----------				
28		methyl acetate		----------NA----------				
29		methyl tert butyl ether		----------NA----------				
30		trans-1,2-dichloroethene		----------NA----------				
31		hexane		----------NA----------				
32		di-isopropyl ether		----------NA----------				
33		ethyl tert-butyl ether		----------NA----------				
34		2-butanone		----------NA----------				
35	M	1,1-dichloroethane		----------NA----------				
36		chloroprene		----------NA----------				
37		acrylonitrile		----------NA----------				

Initial Calibration Verification

Job Number: JC67175 **Sample:** VL8534-ICV8534
Account: HSWFLTAM HSW Engineering **Lab FileID:** L300324.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

38		vinyl acetate		----------NA----------				
39		ethyl acetate		----------NA----------				
40		2,2-dichloropropane		----------NA----------				
41		cis-1,2-dichloroethene		----------NA----------				
42		propionitrile		----------NA----------				
43		methyl acrylate		----------NA----------				
44		bromochloromethane		----------NA----------				
45		tetrahydrofuran		----------NA----------				
46		chloroform		----------NA----------				
47	S	dibromofluoromethane (s)	0.381	0.382	-0.3	123	0.00	4.35
48		methacrylonitrile		----------NA----------				
49		1,1,1-trichloroethane		----------NA----------				
50		cyclohexane	0.583	0.598	-2.6	127	0.00	4.44
51		1,1-dichloropropene		----------NA----------				
52		carbon tetrachloride		----------NA----------				
53		isopropyl acetate		----------NA----------				
54		tert amyl alcohol		----------NA----------				
55	I	1,4-difluorobenzene	1.000	1.000	0.0	119	0.00	4.91
56	S	1,2-dichloroethane-d4 (s)	0.326	0.331	-1.5	126	0.00	4.61
57		tert-amyl methyl ether		----------NA----------				
58		2,2,4-trimethylpentane		----------NA----------				
59		epichlorohydrin		----------NA----------				
60		n-butyl alcohol		----------NA----------				
61	M	benzene		----------NA----------				
62		heptane		----------NA----------				
63		1,2-dichloroethane		----------NA----------				
64		trichloroethene		----------NA----------				
65		ethyl acrylate		----------NA----------				
66		2-nitropropane		----------NA----------				
67		2-chloroethyl vinyl ether		----------NA----------				
68		methyl methacrylate		----------NA----------				
69		1,2-dichloropropane		----------NA----------				
70		methylcyclohexane		----------NA----------				
71		dibromomethane		----------NA----------				
72		bromodichloromethane		----------NA----------				
73		cis-1,3-dichloropropene		----------NA----------				
74		4-methyl-2-pentanone		----------NA----------				
75		3-methyl-1-butanol		----------NA----------				
76	I	chlorobenzene-d5	1.000	1.000	0.0	111	0.00	7.31
77	S	toluene-d8 (s)	1.184	1.259	-6.3	123	0.00	6.06
78		toluene		----------NA----------				
79		trans-1,3-dichloropropene		----------NA----------				
80		ethyl methacrylate		----------NA----------				
81		1,1,2-trichloroethane		----------NA----------				
82		2-hexanone		----------NA----------				
83		tetrachloroethene		----------NA----------				
84		1,3-dichloropropane		----------NA----------				
85		butyl acetate		----------NA----------				
86		dibromochloromethane		----------NA----------				
87		1,2-dibromoethane		----------NA----------				
88		n-butyl ether		----------NA----------				
89		chlorobenzene		----------NA----------				
90		1,1,1,2-tetrachloroethane		----------NA----------				
91		ethylbenzene		----------NA----------				
92		m,p-xylene		----------NA----------				
93		o-xylene		----------NA----------				
94		butyl acrylate		----------NA----------				
95		styrene		----------NA----------				

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: VL8534-ICV8534
Lab FileID: L300324.D

96		bromoform		----------NA----------				
97		isopropylbenzene		----------NA----------				
98		cis-1,4-dichloro-2-butene		----------NA----------				
99	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	121	0.00	9.51
100	S	4-bromofluorobenzene (s)	1.085	1.062	2.1	116	0.00	8.40
101		bromobenzene		----------NA----------				
102		1,1,2,2-tetrachloroethane		----------NA----------				
103		trans-1,4-dichloro-2-bute		----------NA----------				
104		1,2,3-trichloropropane		----------NA----------				
105		n-propylbenzene		----------NA----------				
106		2-chlorotoluene		----------NA----------				
107		4-chlorotoluene		----------NA----------				
108		4-ethyltoluene		----------NA----------				
109		1,3,5-trimethylbenzene		----------NA----------				
110		tert-butylbenzene		----------NA----------				
111		1,2,4-trimethylbenzene		----------NA----------				
112		sec-butylbenzene		----------NA----------				
113		1,3-dichlorobenzene		----------NA----------				
114		p-isopropyltoluene		----------NA----------				
115		1,4-dichlorobenzene		----------NA----------				
116		1,2-dichlorobenzene		----------NA----------				
117		1,4-diethylbenzene		----------NA----------				
118		n-butylbenzene		----------NA----------				
119		1,2,4,5-tetramethylbenzen		----------NA----------				
120		1,2-dibromo-3-chloropropa		----------NA----------				
121		1,3,5-trichlorobenzene		----------NA----------				
122		1,2,4-trichlorobenzene		----------NA----------				
123		hexachlorobutadiene		----------NA----------				
124		naphthalene		----------NA----------				
125		1,2,3-trichlorobenzene		----------NA----------				
126		hexachloroethane		----------NA----------				
127		Benzyl chloride		----------NA----------				
		---------- True		Calc.	% Drift	----------		
128		2-ethylhexyl acrylate		----------NA----------				
		---------- AvgRF		CCRF	% Dev	----------		
129		2-methylnaphthalene		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
L300314.D ML8534.M Tue Apr 17 15:05:18 2018 1

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: VL8568-ICV8534
Lab FileID: L301070.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\VL8568\L301070.D Vial: 37
Acq On : 9 May 2018 11:05 pm Operator: sydneys
Sample : ICV8534-50 Inst : GCMSL
Misc : MS26146,VL8568,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\ML8534.M (RTE Integrator)
Title : SW846 Method V8260C, column ZB-624 60m x 0.25mm x 1.4 um
Last Update : Thu May 10 07:46:11 2018
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	125	0.00	3.12
2		1,4-dioxane		----------	NA	----------		
3		ethanol		----------	NA	----------		
4	M	tertiary butyl alcohol		----------	NA	----------		
5	I	pentafluorobenzene	1.000	1.000	0.0	122	0.00	4.34
6		chlorodifluoromethane		----------	NA	----------		
7		dichlorodifluoromethane		----------	NA	----------		
8		freon 114		----------	NA	----------		
9		freon 142b		----------	NA	----------		
10		chloromethane		----------	NA	----------		
11		1,3-butadiene		----------	NA	----------		
12		vinyl chloride		----------	NA	----------		
13		bromomethane		----------	NA	----------		
14		chloroethane		----------	NA	----------		
15		vinyl bromide		----------	NA	----------		
16		trichlorofluoromethane		----------	NA	----------		
17		ethyl ether		----------	NA	----------		
18		2-chloropropane		----------	NA	----------		
19		acrolein		----------	NA	----------		
20		freon 113		----------	NA	----------		
21		1,1-dichloroethene		----------	NA	----------		
22		acetone		----------	NA	----------		
23		acetonitrile		----------	NA	----------		
		----------	True	Calc.	% Drift	----------		
24		iodomethane		----------	NA	----------		
		----------	AvgRF	CCRF	% Dev	----------		
25		iso-butyl alcohol		----------	NA	----------		
26		carbon disulfide		----------	NA	----------		
27		methylene chloride		----------	NA	----------		
28		methyl acetate		----------	NA	----------		
29		methyl tert butyl ether		----------	NA	----------		
30		trans-1,2-dichloroethene		----------	NA	----------		
31		hexane		----------	NA	----------		
32		di-isopropyl ether		----------	NA	----------		
33		ethyl tert-butyl ether		----------	NA	----------		
34		2-butanone		----------	NA	----------		
35	M	1,1-dichloroethane		----------	NA	----------		
36		chloroprene		----------	NA	----------		
37		acrylonitrile		----------	NA	----------		

Initial Calibration Verification

Job Number: JC67175 **Sample:** VL8568-ICV8534
Account: HSWFLTAM HSW Engineering **Lab FileID:** L301070.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

38		vinyl acetate		----------NA----------				
39		ethyl acetate		----------NA----------				
40		2,2-dichloropropane		----------NA----------				
41		cis-1,2-dichloroethene		----------NA----------				
42		propionitrile		----------NA----------				
43		methyl acrylate		----------NA----------				
44		bromochloromethane		----------NA----------				
45		tetrahydrofuran		----------NA----------				
46		chloroform		----------NA----------				
47	S	dibromofluoromethane (s)	0.381	0.408	-7.1	130	0.00	4.35
48		methacrylonitrile		----------NA----------				
49		1,1,1-trichloroethane		----------NA----------				
50		cyclohexane		----------NA----------				
51		1,1-dichloropropene		----------NA----------				
52		carbon tetrachloride		----------NA----------				
53		isopropyl acetate		----------NA----------				
54		tert amyl alcohol		----------NA----------				
55	I	1,4-difluorobenzene	1.000	1.000	0.0	123	0.00	4.91
56	S	1,2-dichloroethane-d4 (s)	0.326	0.319	2.1	125	0.00	4.61
57		tert-amyl methyl ether		----------NA----------				
58		2,2,4-trimethylpentane		----------NA----------				
59		epichlorohydrin		----------NA----------				
60		n-butyl alcohol		----------NA----------				
61	M	benzene		----------NA----------				
62		heptane		----------NA----------				
63		1,2-dichloroethane		----------NA----------				
64		trichloroethene		----------NA----------				
65		ethyl acrylate		----------NA----------				
66		2-nitropropane		----------NA----------				
67		2-chloroethyl vinyl ether		----------NA----------				
68		methyl methacrylate		----------NA----------				
69		1,2-dichloropropane		----------NA----------				
70		methylcyclohexane		----------NA----------				
71		dibromomethane		----------NA----------				
72		bromodichloromethane		----------NA----------				
73		cis-1,3-dichloropropene		----------NA----------				
74		4-methyl-2-pentanone		----------NA----------				
75		3-methyl-1-butanol		----------NA----------				
76	I	chlorobenzene-d5	1.000	1.000	0.0	122	0.00	7.31
77	S	toluene-d8 (s)	1.184	1.188	-0.3	127	0.00	6.06
78		toluene		----------NA----------				
79		trans-1,3-dichloropropene		----------NA----------				
80		ethyl methacrylate		----------NA----------				
81		1,1,2-trichloroethane		----------NA----------				
82		2-hexanone		----------NA----------				
83		tetrachloroethene		----------NA----------				
84		1,3-dichloropropane		----------NA----------				
85		butyl acetate		----------NA----------				
86		dibromochloromethane		----------NA----------				
87		1,2-dibromoethane		----------NA----------				
88		n-butyl ether		----------NA----------				
89		chlorobenzene		----------NA----------				
90		1,1,1,2-tetrachloroethane		----------NA----------				
91		ethylbenzene		----------NA----------				
92		m,p-xylene		----------NA----------				
93		o-xylene		----------NA----------				
94		butyl acrylate		----------NA----------				
95		styrene		----------NA----------				

Initial Calibration Verification

Job Number: JC67175
Account: HSWFLTAM HSW Engineering
Project: Bethpage Deep Park Investigation, Bethpage, NY

Sample: VL8568-ICV8534
Lab FileID: L301070.D

96		bromoform		----------NA----------				
97		isopropylbenzene		----------NA----------				
98		cis-1,4-dichloro-2-butene		----------NA----------				
99	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	134	0.00	9.51
100	S	4-bromofluorobenzene (s)	1.085	1.027	5.3	124	0.00	8.40
101		bromobenzene		----------NA----------				
102		1,1,2,2-tetrachloroethane		----------NA----------				
103		trans-1,4-dichloro-2-bute		----------NA----------				
104		1,2,3-trichloropropane		----------NA----------				
105		n-propylbenzene		----------NA----------				
106		2-chlorotoluene		----------NA----------				
107		4-chlorotoluene		----------NA----------				
108		4-ethyltoluene		----------NA----------				
109		1,3,5-trimethylbenzene		----------NA----------				
110		tert-butylbenzene		----------NA----------				
111		1,2,4-trimethylbenzene		----------NA----------				
112		sec-butylbenzene		----------NA----------				
113		1,3-dichlorobenzene		----------NA----------				
114		p-isopropyltoluene		----------NA----------				
115		1,4-dichlorobenzene		----------NA----------				
116		1,2-dichlorobenzene		----------NA----------				
117		1,4-diethylbenzene		----------NA----------				
118		n-butylbenzene		----------NA----------				
119		1,2,4,5-tetramethylbenzen		----------NA----------				
120		1,2-dibromo-3-chloropropa		----------NA----------				
121		1,3,5-trichlorobenzene		----------NA----------				
122		1,2,4-trichlorobenzene		----------NA----------				
123		hexachlorobutadiene		----------NA----------				
124		naphthalene		----------NA----------				
125		1,2,3-trichlorobenzene		----------NA----------				
126		hexachloroethane		----------NA----------				
127		Benzyl chloride		----------NA----------				
		----------	True	Calc.	% Drift	----------		
128		2-ethylhexyl acrylate		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
129		2-methylnaphthalene		----------NA----------				
130	I	chlorobenzene-d5(a)	1.000	1.000	0.0	102	0.00	7.31
131		cyclohexanone	0.027	0.026	3.7	98	0.00	8.33

(#) = Out of Range SPCC's out = 0 CCC's out = 0
L300314.D ML8534.M Thu May 10 14:13:41 2018 1

Continuing Calibration Summary

Job Number: JC67175 **Sample:** VL8609-CC8534
Account: HSWFLTAM HSW Engineering **Lab FileID:** L301947.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ma...6-18\vl8609\l301947.d Vial: 2
Acq On : 5 Jun 2018 6:54 am Operator: sydneys
Sample : CC8534-20 Inst : GCMSL
Misc : MS26819,VL8609,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\ML8534.M (RTE Integrator)
Title : SW846 Method V8260C, column ZB-624 60m x 0.25mm x 1.4 um
Last Update : Tue Apr 17 15:11:19 2018
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	82	0.00	3.12
2		1,4-dioxane	0.095	0.112	-17.9	102	0.00	5.35
3		ethanol	0.144	0.165	-14.6	100	0.00	2.54
4	M	tertiary butyl alcohol	1.190	1.381	-16.1	100	0.00	3.17
5	I	pentafluorobenzene	1.000	1.000	0.0	98	0.00	4.34
6		chlorodifluoromethane	0.686	0.712	-3.8	107	0.00	1.69
7		dichlorodifluoromethane	0.609	0.825	-35.5#	136	0.00	1.67
8		freon 114		----------NA----------				
9		freon 142b		----------NA----------				
10		chloromethane	0.672	0.748	-11.3	116	0.00	1.83
11		1,3-butadiene		----------NA----------				
12		vinyl chloride	0.678	0.773	-14.0	120	0.00	1.92
13		bromomethane	0.171	0.156	8.8	92	0.00	2.17
14		chloroethane	0.380	0.436	-14.7	123	0.00	2.26
15		vinyl bromide	0.375	0.537	-43.2#	147	0.00	2.39
16		trichlorofluoromethane	0.718	0.813	-13.2	116	0.00	2.44
17		ethyl ether	0.313	0.361	-15.3	107	0.00	2.63
18		2-chloropropane	0.935	0.961	-2.8	103	0.00	2.72
19		acrolein	0.176	0.199	-13.1	112	0.00	2.73
20		freon 113	0.313	0.326	-4.2	103	0.00	2.81
21		1,1-dichloroethene	0.427	0.472	-10.5	111	0.00	2.81
22		acetone	0.084	0.087	-3.6	102	0.00	2.82
23		acetonitrile	0.073	0.073	0.0	99	0.00	3.02
		----------	True	Calc.	% Drift	----------		
24		iodomethane	20.000	6.020	69.9#	30	0.00	2.93
		----------	AvgRF	CCRF	% Dev	----------		
25		iso-butyl alcohol	0.049	0.049	0.0	97	0.00	4.49
26		carbon disulfide	1.097	1.160	-5.7	108	0.00	2.99
27		methylene chloride	0.481	0.524	-8.9	113	0.00	3.14
28		methyl acetate	0.144	0.156	-8.3	105	0.00	3.03
29		methyl tert butyl ether	1.568	1.695	-8.1	105	0.00	3.32
30		trans-1,2-dichloroethene	0.456	0.488	-7.0	109	0.00	3.33
31		hexane	0.666	0.699	-5.0	106	0.00	3.51
32		di-isopropyl ether	1.849	1.917	-3.7	103	0.00	3.62
33		ethyl tert-butyl ether	1.726	1.803	-4.5	103	0.00	3.87
34		2-butanone	0.106	0.111	-4.7	102	0.00	3.99
35	M	1,1-dichloroethane	0.936	0.989	-5.7	106	0.00	3.63
36		chloroprene	0.845	0.860	-1.8	104	0.00	3.68
37		acrylonitrile	0.329	0.348	-5.8	103	0.00	3.29

Continuing Calibration Summary

Job Number: JC67175 **Sample:** VL8609-CC8534
Account: HSWFLTAM HSW Engineering **Lab FileID:** L301947.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

38		vinyl acetate	0.118	0.135	-14.4	108	0.00	3.60
39		ethyl acetate	0.145	0.154	-6.2	109	0.00	4.00
40		2,2-dichloropropane	0.730	0.775	-6.2	107	0.00	4.03
41		cis-1,2-dichloroethene	0.503	0.546	-8.5	108	0.00	4.02
42		propionitrile	0.146	0.153	-4.8	100	0.00	4.04
43		methyl acrylate	0.114	0.125	-9.6	106	0.00	4.05
44		bromochloromethane	0.214	0.247	-15.4	114	0.00	4.19
45		tetrahydrofuran	0.120	0.126	-5.0	100	0.00	4.20
46		chloroform	0.848	0.880	-3.8	107	0.00	4.24
47	S	dibromofluoromethane (s)	0.381	0.409	-7.3	104	0.00	4.35
48		methacrylonitrile	0.318	0.343	-7.9	108	0.00	4.15
49		1,1,1-trichloroethane	0.688	0.707	-2.8	109	0.00	4.38
50		cyclohexane	0.583	0.616	-5.7	104	0.00	4.44
51		1,1-dichloropropene	0.662	0.698	-5.4	108	0.00	4.49
52		carbon tetrachloride	0.538	0.558	-3.7	107	0.00	4.49
53		isopropyl acetate	0.146	0.153	-4.8	101	0.00	4.61
54		tert amyl alcohol	0.042	0.045	-7.1	99	0.00	4.58
55	I	1,4-difluorobenzene	1.000	1.000	0.0	98	0.00	4.91
56	S	1,2-dichloroethane-d4 (s)	0.326	0.355	-8.9	101	0.00	4.61
57		tert-amyl methyl ether	1.009	1.053	-4.4	102	0.00	4.70
58		2,2,4-trimethylpentane	0.910	0.903	0.8	101	0.00	4.70
59		epichlorohydrin	0.070	0.070	0.0	97	0.00	5.75
60		n-butyl alcohol	0.021	0.022	-4.8	96	0.00	4.97
61	M	benzene	1.295	1.375	-6.2	109	0.00	4.64
62		heptane	0.206	0.202	1.9	101	0.00	4.81
63		1,2-dichloroethane	0.474	0.472	0.4	101	0.00	4.66
64		trichloroethene	0.323	0.341	-5.6	108	0.00	5.11
65		ethyl acrylate	0.671	0.698	-4.0	102	0.00	5.13
66		2-nitropropane	0.211	0.203	3.8	93	0.00	5.66
67		2-chloroethyl vinyl ether	0.268	0.296	-10.4	105	0.00	5.69
68		methyl methacrylate	0.116	0.127	-9.5	104	0.00	5.31
69		1,2-dichloropropane	0.358	0.378	-5.6	104	0.00	5.31
70		methylcyclohexane	0.513	0.524	-2.1	102	0.00	5.30
71		dibromomethane	0.200	0.215	-7.5	107	0.00	5.38
72		bromodichloromethane	0.416	0.460	-10.6	111	0.00	5.50
73		cis-1,3-dichloropropene	0.567	0.591	-4.2	104	0.00	5.84
74		4-methyl-2-pentanone	0.217	0.236	-8.8	103	0.00	5.94
75		3-methyl-1-butanol	0.019	0.019	0.0	97	0.00	5.95
76	I	chlorobenzene-d5	1.000	1.000	0.0	92	0.00	7.32
77	S	toluene-d8 (s)	1.184	1.283	-8.4	101	0.00	6.06
78		toluene	0.830	0.925	-11.4	107	0.00	6.12
79		trans-1,3-dichloropropene	0.559	0.612	-9.5	102	0.00	6.29
80		ethyl methacrylate	0.587	0.677	-15.3	104	0.00	6.31
81		1,1,2-trichloroethane	0.286	0.326	-14.0	106	0.00	6.46
82		2-hexanone	0.241	0.274	-13.7	101	0.00	6.63
83		tetrachloroethene	0.343	0.381	-11.1	108	0.00	6.56
84		1,3-dichloropropane	0.583	0.655	-12.3	106	0.00	6.61
85		butyl acetate	0.357	0.398	-11.5	102	0.00	6.71
86		dibromochloromethane	0.298	0.362	-21.5#	114	0.00	6.80
87		1,2-dibromoethane	0.369	0.434	-17.6	111	0.00	6.92
88		n-butyl ether	1.585	1.763	-11.2	103	0.00	7.38
89		chlorobenzene	0.873	0.965	-10.5	108	0.00	7.34
90		1,1,1,2-tetrachloroethane	0.280	0.326	-16.4	108	0.00	7.41
91		ethylbenzene	1.523	1.698	-11.5	106	0.00	7.42
92		m,p-xylene	0.572	0.633	-10.7	107	0.00	7.54
93		o-xylene	0.570	0.638	-11.9	105	0.00	7.89
94		butyl acrylate	0.891	1.008	-13.1	103	0.00	7.81
95		styrene	0.955	1.090	-14.1	107	0.00	7.90

Continuing Calibration Summary

Job Number: JC67175 **Sample:** VL8609-CC8534
Account: HSWFLTAM HSW Engineering **Lab FileID:** L301947.D
Project: Bethpage Deep Park Investigation, Bethpage, NY

96		bromoform	0.204	0.256	-25.5#	115	0.00	8.08
97		isopropylbenzene	1.459	1.627	-11.5	106	0.00	8.23
98		cis-1,4-dichloro-2-butene	0.192	0.183	4.7	86	0.00	8.28
99	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	89	0.00	9.51
100	S	4-bromofluorobenzene (s)	1.085	1.123	-3.5	90	0.00	8.40
101		bromobenzene	0.801	0.948	-18.4	106	0.00	8.54
102		1,1,2,2-tetrachloroethane	1.152	1.392	-20.8#	108	0.00	8.51
103		trans-1,4-dichloro-2-bute	0.379	0.362	4.5	84	0.00	8.55
104		1,2,3-trichloropropane	0.319	0.389	-21.9#	106	0.00	8.58
105		n-propylbenzene	3.784	4.398	-16.2	105	0.00	8.62
106		2-chlorotoluene	0.762	0.850	-11.5	102	0.00	8.72
107		4-chlorotoluene	0.752	0.864	-14.9	106	0.00	8.83
108		4-ethyltoluene		----------NA----------				
109		1,3,5-trimethylbenzene	2.552	2.932	-14.9	105	0.00	8.79
110		tert-butylbenzene	2.147	2.430	-13.2	103	0.00	9.10
111		1,2,4-trimethylbenzene	2.581	2.949	-14.3	103	0.00	9.16
112		sec-butylbenzene	3.082	3.542	-14.9	105	0.00	9.32
113		1,3-dichlorobenzene	1.405	1.615	-14.9	103	0.00	9.44
114		p-isopropyltoluene	2.477	2.779	-12.2	103	0.00	9.46
115		1,4-dichlorobenzene	1.364	1.550	-13.6	104	0.00	9.54
116		1,2-dichlorobenzene	1.340	1.537	-14.7	104	0.00	9.89
117		1,4-diethylbenzene		----------NA----------				
118		n-butylbenzene	1.277	1.435	-12.4	103	0.00	9.86
119		1,2,4,5-tetramethylbenzen		----------NA----------				
120		1,2-dibromo-3-chloropropa	0.280	0.305	-8.9	102	0.00	10.66
121		1,3,5-trichlorobenzene	0.978	1.068	-9.2	100	0.00	10.85
122		1,2,4-trichlorobenzene	0.890	0.961	-8.0	99	0.00	11.48
123		hexachlorobutadiene	0.347	0.361	-4.0	99	0.00	11.62
124		naphthalene	3.042	3.239	-6.5	94	0.00	11.75
125		1,2,3-trichlorobenzene	0.840	0.882	-5.0	97	0.00	11.97
126		hexachloroethane	0.400	0.449	-12.2	101	0.00	10.16
127		Benzyl chloride	2.074	2.319	-11.8	99	0.00	9.65
		----------	True	Calc.	% Drift	----------		
128		2-ethylhexyl acrylate	4.000	5.223	-30.6#	127	0.00	11.65
		----------	AvgRF	CCRF	% Dev	----------		
129		2-methylnaphthalene	1.813	1.445	20.3#	78	0.00	12.88
130		chlorobenzene-d5(a)	N/A	1.00	0.0	640#	-5.56#	7.32
131		cyclohexanone	N/A	1.00	0.0	2#	-4.55#	8.33

(#) = Out of Range SPCC's out = 0 CCC's out = 0
L300313.D ML8534.M Wed Jun 06 02:45:34 2018

ARCADIS
BETHPAGE
DEEP PARK INVESTIGATION
SL4878

KATAHDIN ANALYTICAL SERVICES
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

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Total number of pages: 84

SAMPLE DATA PACKAGE

NARRATIVE
KATAHDIN ANALYTICAL SERVICES
ARCADIS
BETHPAGE DEEP PARK INVESTIGATION
SL4878

Sample Receipt

The following samples were received on June 01, 2018 and were logged in under Katahdin Analytical Services work order number SL4878 for a hardcopy due date of June 13, 2018.

KATAHDIN	ARCADIS
Sample No.	Sample Identification
SL4878-1	MW-207A-1R
SL4878-2	MW-207B-1R
SL4878-3	DUP-1
SL4878-4	EB053118-DC1

The sample was logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAP standards unless otherwise noted in this narrative or in the Report of Analysis.

We certify that the test results provided in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation L2223.

Analytes which are reported but not listed on our ANAB scope of accreditation will be "^" flagged and the following language will be included in the case narrative for all DoD compliant work: "^" Indicates this analyte is not included on Katahdin Analytical Services DoD-ELAP Scope of Accreditation.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Ms. Heather Manz**. This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of work order SL4878 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, and/or for the specific methods listed below or on the Report of Analysis.

Sample SL4878-1 was used for the matrix spike (MS) and matrix spike duplicate (MSD), as per client request.

Katahdin
ANALYTICAL SERVICES

Lab. ID. 2001(non-air)
Lab. ID. 11121 (air only)

8270D 1,4-Dioxane Analysis

There were no protocol deviations or observations noted by the organics laboratory staff for this analysis.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Quality Assurance Officer, or their designee, as verified by the following signature.

S. Brewer for L. Dimond

Leslie Dimond
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin Analytical Services, LLC.

Sample Receipt Condition Report

Client: Arcadis	KAS PM:	Sampled By: Client	
Project:	KIMS Entry By:	Delivered By: Fedex	
KAS Work Order#: SL48878	KIMS Review By: AMH	Received By: JAB	
SDG #:	Cooler: 1 of 2	Date/Time Rec.: 6.1.18 1000	

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 4.1
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles:					
Aqueous: No bubble larger than a pea?				✓	
Soil/Sediment:					
Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
Air: Refer to KAS COC for canister/flow controller requirements.	√ if air included				
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin Analytical Services, LLC.

Sample Receipt Condition Report

Client: Arcadis	KAS PM:	Sampled By: Client
Project:	KIMS Entry By:	Delivered By: Fedex
KAS Work Order#: SL4878	KIMS Review By: AMH	Received By: JAB
SDG #:	Cooler: 2 of 2	Date/Time Rec.: 6.1.18 1000

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?					
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.					Temp (°C): 5.5
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles:					
Aqueous: No bubble larger than a pea?					
Soil/Sediment:					
Received in airtight container?					
Received in methanol?					
Methanol covering soil?					
D.I. Water - Received within 48 hour HT?					
Air: Refer to KAS COC for canister/flow controller requirements.	√ if air included				
7. Trip Blank present in cooler?					
8. Proper sample containers and volume?					
9. Samples within hold time upon receipt?					
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2					
Sulfide - >9					
Cyanide – pH >12					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

ARCADIS

ID#: SCH878

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #: MSA 3601

Send Results to:

Contact & Company Name: Rich Poff (EMAGIN)	Telephone: 813-549-1018
Address: 15711 Mapledale Blvd, Suite B	Fax:
City: Tampa State: FL Zip: 33624	E-mail Address: rpoff@hsweng.com
Project Name/Location (City, State): Bethpage Deep Park Investigation	Project #: NY001496.3601.GWMI3
Sampler's Printed Name: Pat Prazak	Sampler's Signature: Pat Prazak

Preservative	None						
Filtered (✓)							
# of Containers	12						
Container Information	1 L Amber						

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	1,4-Dioxane 8270D-SIM							REMARKS
MW-207A-1R	5/31/18	1405		✓	GW	✓							MS/MSD X3 volume
MW-207B-1R	5/31/18	1405		✓	GW	✓							
DUP-1	5/31/18	—		✓	GW	✓							
~~TB~~ DC					~~TB~~								
EB053118DC1	5/31/18	1100		✓	EB	✓							

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil, W - Water, SL - Sludge, SW - Sample Wipe, T - Tissue, A - Air, Other: GW

Special Instructions/Comments:
SVOC extracted by CCLE
EDD-ARCADIS_EQUIS (EQuIS6-4 file format)

☐ Special QA/QC Instructions(✓):
****MW-207A-1R MS/MSD****

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Katahdin Analytical Labs	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Pat Prazak	Printed Name:	Printed Name:	Printed Name: Jacob Bruce
☐ Cooler packed with ice (✓)		Signature: Pat Prazak	Signature:	Signature:	Signature: J Bruce
Specify Turnaround Requirements: Normal TAT-10 business days	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm: KAS
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 5-31-18 1845	Date/Time:	Date/Time:	Date/Time: 6.1.18 1000

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Jun. 01, 2018
07:01 PM

Login Number: SL4878

Account: ARCADIS002
ARCADIS

Project: ARCADIS-BETHPAGE

NoWeb

Quote/Incoming: ARCADIS-BETHPAC

Primary Report Address:
Lisa Horton
Arcadis
Two Huntington Quadrangle
Suite 1S10
Melville,NY 11747
Lisa.Horton@arcadis.com

Primary Invoice Address:
Accounts Payable Attn: Accounts Payable
ARCADIS U.S., Inc.
630 Plaza Drive
Suite 100
Highlands Ranch,CO 80129

Report CC Addresses:
Invoice CC Addresses:

Login Information:

ANALYSIS INSTRUCTIONS	:	1,4-Dioxane (3520 CLLE / 8270D SIM). VOC (8260C) list of 36 compounds WITH 10ML PURGE. Benzene, Chloroethane, Chloromethane, Methylal chloride, & Vinyl chloride. Not DOD. ND to PQL w/ J flags.
CHECK NO.	:	
CLIENT PO#	:	NY001496.3601.GWMI3; MSA 3601
CLIENT PROJECT MANAGE	:	TM: Soma Das
CONTRACT	:	23TM.NAVI3-050918
COOLER TEMPERATURE	:	4.1, 5.5
DELIVERY SERVICES	:	FedEx
EDD FORMAT	:	ARCADIS_EQUIS
LOGIN INITIALS	:	JCB
PM	:	HHM
PROJECT NAME	:	Bethpage Deep Park Investigation
QC LEVEL	:	IV
REPORT INSTRUCTIONS	:	Report to Rich (rpoff@hsweng.com) and Doug (dsmolensky@emagin-inc.com). Invoice to accountspayable.administration@arcadis.com & include "Accounts Payable Attn: Accounts Payable" in subject line AND CC Soma.Das@arcadis.com
SDG ID	:	
SDG STATUS	:	
VERBAL TAT	:	

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Due Date	Due Date	Mailed
SL4878-1	MW-207A-1R	31-MAY-18 14:15	01-JUN-18			13-JUN-18	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8270SIM-DIOXANE	07-JUN-18	1L N-Amber Glass		MS/MSD

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Due Date	Due Date	Mailed
SL4878-2	MW-207B-1R	31-MAY-18 14:00	01-JUN-18			13-JUN-18	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8270SIM-DIOXANE	07-JUN-18	1L N-Amber Glass		

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Due Date	Due Date	Mailed
SL4878-3	DUP-1	31-MAY-18 00:00	01-JUN-18			13-JUN-18	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8270SIM-DIOXANE	07-JUN-18	1L N-Amber Glass		

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Due Date	Due Date	Mailed
SL4878-4	EB053118-DC1	31-MAY-18 11:00	01-JUN-18			13-JUN-18	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8270SIM-DIOXANE	07-JUN-18	1L N-Amber Glass		

Total Samples: *4* ***Total Analyses:*** *4*

AMH 6/1/18

SAMPLE DATA SUMMARY PACKAGE

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: ARCADIS
Lab ID: SL4878-1
Client ID: MW-207A-1R
Project: Bethpage Deep Park Investigation
SDG: SL4878
Lab File ID: G3315.D

Sample Date: 31-MAY-18
Received Date: 01-JUN-18
Extract Date: 05-JUN-18
Extracted By: KF
Extraction Method: SW846 3520C
Lab Prep Batch: WG229718

Analysis Date: 08-JUN-18
Analyst: JCG
Analysis Method: SW846 8270D SIM
Matrix: AQ
% Solids: NA
Report Date: 13-JUN-18

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane		0.64	ug/L	1	.25	0.24	0.082
1,4-Dioxane-D8		69.8	%				

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

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ANALYTICAL SERVICES

Report of Analytical Results

Client: ARCADIS
Lab ID: SL4878-2
Client ID: MW-207B-1R
Project: Bethpage Deep Park Investigation
SDG: SL4878
Lab File ID: G3318.D

Sample Date: 31-MAY-18
Received Date: 01-JUN-18
Extract Date: 05-JUN-18
Extracted By: KF
Extraction Method: SW846 3520C
Lab Prep Batch: WG229718

Analysis Date: 08-JUN-18
Analyst: JCG
Analysis Method: SW846 8270D SIM
Matrix: AQ
% Solids: NA
Report Date: 13-JUN-18

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane		1.3	ug/L	1	.25	0.24	0.080
1,4-Dioxane-D8		66.0	%				

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Report of Analytical Results

Client: ARCADIS
Lab ID: SL4878-3
Client ID: DUP-1
Project: Bethpage Deep Park Investigation
SDG: SL4878
Lab File ID: G3319.D

Sample Date: 31-MAY-18
Received Date: 01-JUN-18
Extract Date: 05-JUN-18
Extracted By: KF
Extraction Method: SW846 3520C
Lab Prep Batch: WG229718

Analysis Date: 08-JUN-18
Analyst: JCG
Analysis Method: SW846 8270D SIM
Matrix: AQ
% Solids: NA
Report Date: 13-JUN-18

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane		1.2	ug/L	1	.25	0.24	0.080
1,4-Dioxane-D8		61.7	%				

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ANALYTICAL SERVICES

Report of Analytical Results

Client: ARCADIS
Lab ID: SL4878-4
Client ID: EB053118-DC1
Project: Bethpage Deep Park Investigation
SDG: SL4878
Lab File ID: G3320.D

Sample Date: 31-MAY-18
Received Date: 01-JUN-18
Extract Date: 05-JUN-18
Extracted By: KF
Extraction Method: SW846 3520C
Lab Prep Batch: WG229718

Analysis Date: 08-JUN-18
Analyst: JCG
Analysis Method: SW846 8270D SIM
Matrix: AQ
% Solids: NA
Report Date: 13-JUN-18

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane	U	0.24	ug/L	1	.25	0.24	0.080
1,4-Dioxane-D8		56.6	%				

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8270SIM
1,4-DIOXANE DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Bethpage Deep Park Investigation **Matrix:** AQ
Lab Code: KAS **SDG:** SL4878

Client Sample ID	Lab Sample ID	Col. ID	14D	#
MW-207A-1R	SL4878-1		69.8	
MW-207B-1R	SL4878-2		66.0	
DUP-1	SL4878-3		61.7	
EB053118-DC1	SL4878-4		56.6	
Method Blank Sample	WG229718-1		64.8	
Laboratory Control S	WG229718-2		53.3	
Matrix Spike	WG229718-5		48.4	
Matrix Spike Duplica	WG229718-6		51.8	

		QC Limits
14D	1,4-DIOXANE-D8	30-115

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

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Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Bethpage Deep Park Investigation
Lab File ID : G3298.D
Instrument ID : GCMS-G
Matrix : AQ

SDG : SL4878
Lab Sample ID : WG229718-1
Date Extracted : 05-JUN-18
Date Analyzed : 08-JUN-18
Time Analyzed : 11:32

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG229718-2	G3299.D	06/08/18	11:53
MW-207A-1R	SL4878-1	G3315.D	06/08/18	17:25
Matrix Spike	WG229718-5	G3316.D	06/08/18	17:46
Matrix Spike Duplica	WG229718-6	G3317.D	06/08/18	18:07
MW-207B-1R	SL4878-2	G3318.D	06/08/18	18:28
DUP-1	SL4878-3	G3319.D	06/08/18	18:50
EB053118-DC1	SL4878-4	G3320.D	06/08/18	19:11

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Tel:(207) 874-2400 Fax:(207) 775-4029

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Katahdin
ANALYTICAL SERVICES

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Bethpage Deep Park Investigation
Lab File ID : GD501.D
Instrument ID : GCMS-G

SDG : SL4878
Date Analyzed : 22-MAY-18
Time Analyzed : 11:39

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	31.1		
68	Less than 2.0% of mass 69	0.4	1.21	1
69	Less than 100.0% of mass 198	36.4		
70	Less than 2.0% of mass 69	0.2	0.46	1
127	40.0 - 60.0% of mass 198	52.3		
197	Less than 1.0% of mass 198	0.1		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.8		
275	10.0 - 30.0% of mass 198	22.0		
365	1.0 - 100.0% of mass 198	2.4		
441	0.0 - 100.0% of mass 443	9.9	75.55	2
442	40.0 - 100.0% of mass 198	67.6		
443	17.0 - 23.0% of mass 442	13.1	19.33	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG228757-4	G3048.D	05/22/18	11:56
Initial Calibration	WG228757-2	G3049.D	05/22/18	12:16
Initial Calibration	WG228757-3	G3050.D	05/22/18	12:37
Initial Calibration	WG228757-5	G3051.D	05/22/18	12:58
Initial Calibration	WG228757-6	G3052.D	05/22/18	13:19
Initial Calibration	WG228757-7	G3053.D	05/22/18	13:39
Independent Source	WG228757-8	G3054.D	05/22/18	14:00

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P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Bethpage Deep Park Investigation
Lab File ID : GD513.D
Instrument ID : GCMS-G

SDG : SL4878
Date Analyzed : 08-JUN-18
Time Analyzed : 10:54

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	38.4		
68	Less than 2.0% of mass 69	0.5	1.30	1
69	Less than 100.0% of mass 198	41.6		
70	Less than 2.0% of mass 69	0.2	0.42	1
127	40.0 - 60.0% of mass 198	57.3		
197	Less than 1.0% of mass 198	0.2		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.6		
275	10.0 - 30.0% of mass 198	19.1		
365	1.0 - 100.0% of mass 198	2.3		
441	0.0 - 100.0% of mass 443	7.9	73.50	2
442	40.0 - 100.0% of mass 198	52.1		
443	17.0 - 23.0% of mass 442	10.8	20.72	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG229961-2	G3297.D	06/08/18	11:11
Method Blank Sample	WG229718-1	G3298.D	06/08/18	11:32
Laboratory Control S	WG229718-2	G3299.D	06/08/18	11:53
MW-207A-1R	SL4878-1	G3315.D	06/08/18	17:25
Matrix Spike	WG229718-5	G3316.D	06/08/18	17:46
Matrix Spike Duplica	WG229718-6	G3317.D	06/08/18	18:07
MW-207B-1R	SL4878-2	G3318.D	06/08/18	18:28
DUP-1	SL4878-3	G3319.D	06/08/18	18:50
EB053118-DC1	SL4878-4	G3320.D	06/08/18	19:11

Katahdin
ANALYTICAL SERVICES

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Bethpage Deep Park Investigatio
Lab ID : WG229961-2
Lab File ID : G3297.D

SDG: SL4878
Analytical Date: 06/08/18 11:11
Instrument ID: GCMS-G

		1,4-DICHLOROBENZENE-D4			
		Area	#	RT	#
	Std .	79444		7.01	
	Upper Limit	158888		7.17	
	Lower Limit	39722		6.84	
Client Sample ID	Lab Sample ID				
Method Blank Sample	WG229718-1	72687		7.00	
Laboratory Control S	WG229718-2	85263		6.99	
MW-207A-1R	SL4878-1	70564		6.99	
Matrix Spike	WG229718-5	95900		6.99	
Matrix Spike Duplica	WG229718-6	85855		6.98	
MW-207B-1R	SL4878-2	76867		7.00	
DUP-1	SL4878-3	73238		7.00	
EB053118-DC1	SL4878-4	75540		6.99	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: ARCADIS
Lab ID: SL4878-1
Client ID: MW-207A-1R
Project: Bethpage Deep Park Investigation
SDG: SL4878
Lab File ID: G3315.D

Sample Date: 31-MAY-18
Received Date: 01-JUN-18
Extract Date: 05-JUN-18
Extracted By: KF
Extraction Method: SW846 3520C
Lab Prep Batch: WG229718

Analysis Date: 08-JUN-18
Analyst: JCG
Analysis Method: SW846 8270D SIM
Matrix: AQ
% Solids: NA
Report Date: 13-JUN-18

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane		0.64	ug/L	1	.25	0.24	0.082
1,4-Dioxane-D8		69.8	%				

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Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3315.D
Report Date: 13-Jun-2018 13:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G060818.b\G3315.D
Lab Smp Id: SL4878-1 Client Smp ID: MW-207A-1R
Inj Date : 08-JUN-2018 17:25 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : SL4878-1
Misc Info : WG229961,WG229718,WG229961-2
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G060818.b\GDIOXN91.m
Meth Date : 11-Jun-2018 07:47 cgomez Quant Type: ISTD
Cal Date : 22-MAY-2018 12:37 Cal File: G3050.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

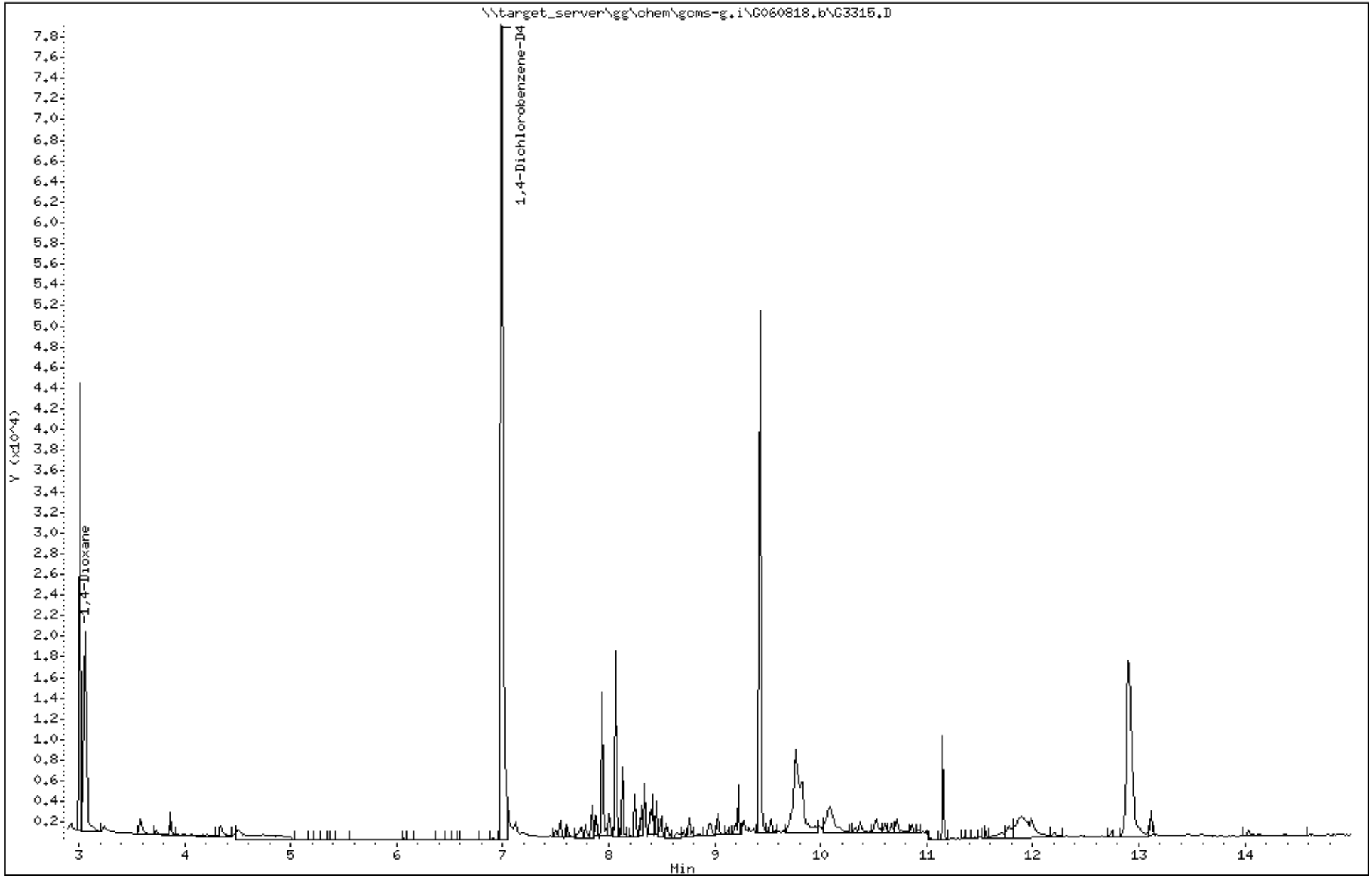
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.040	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
	1 1,4-Dioxane	88	3.061	3.062	(0.438)	16960	0.66256	0.637	
$	2 1,4-Dioxane-D8	96	3.006	3.018	(0.430)	33517	1.39680	1.34	
*	3 1,4-Dichlorobenzene-D4	150	6.985	6.996	(1.000)	70564	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3315.D
Date : 08-JUN-2018 17:25
Client ID: MW-207A-1R
Instrument: gcms-g.i
Sample Info: SL4878-1
Purge Volume: 1.0
Operator: JCG
Column phase: RTX5-MS
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3315.D

Date : 08-JUN-2018 17:25

Client ID: MW-207A-1R

Instrument: gcms-g.i

Sample Info: SL4878-1

Purge Volume: 1.0

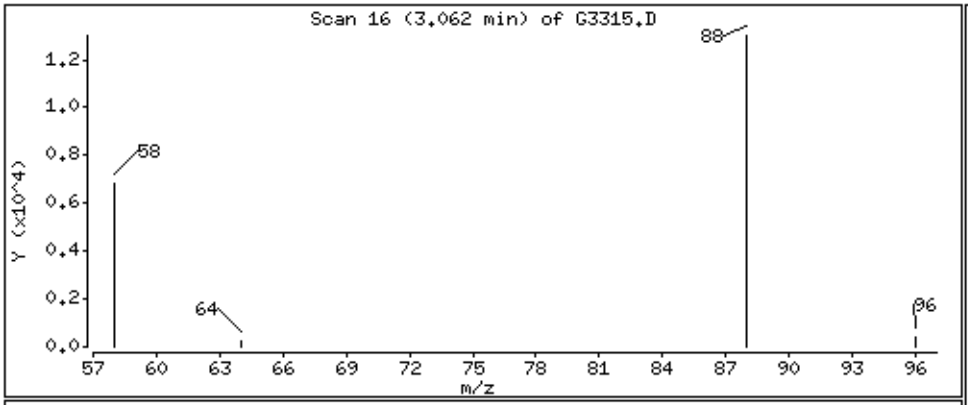
Operator: JCG

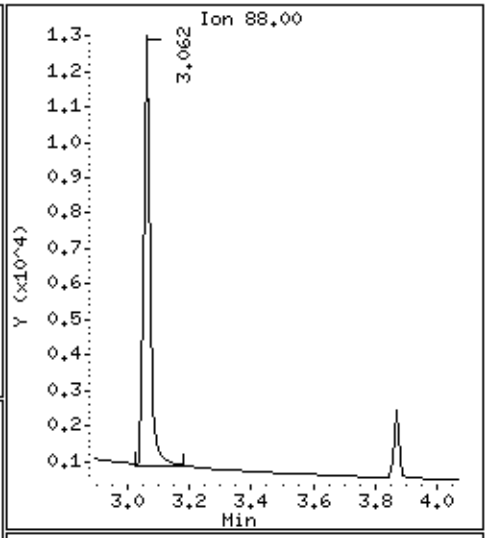
Column phase: RTX5-MS

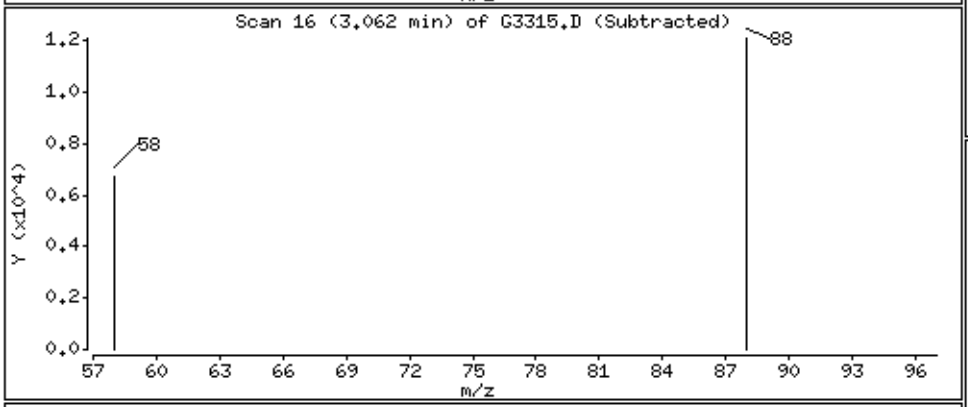
Column diameter: 0.25

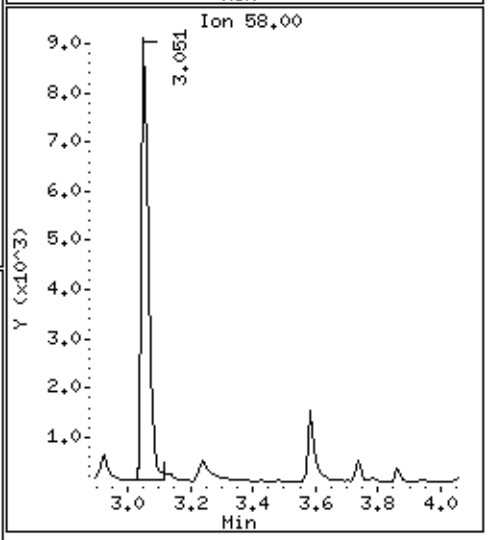
1 1,4-Dioxane

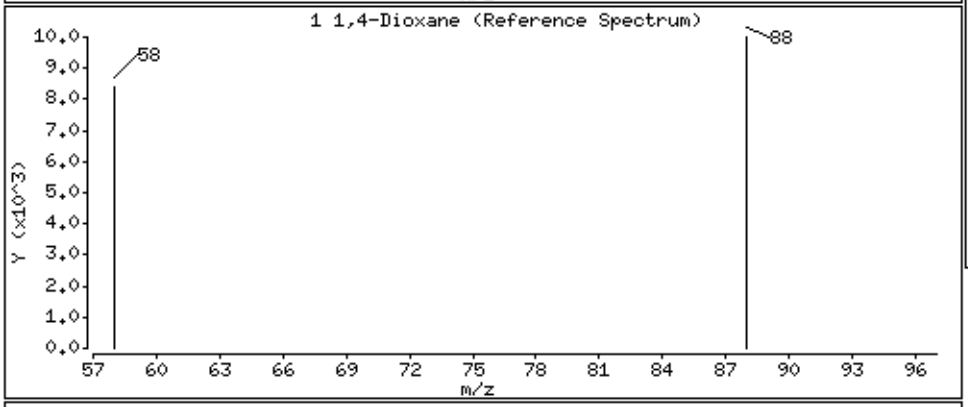
Concentration: 0.637 ug/L

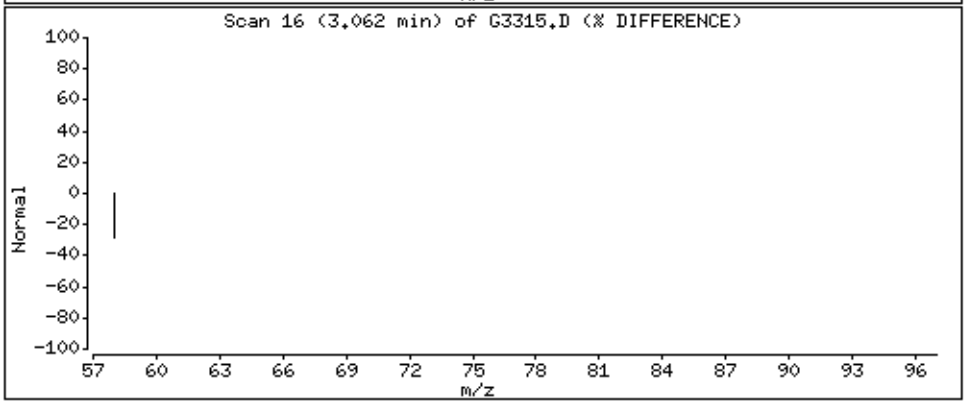












Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: ARCADIS
Lab ID: SL4878-2
Client ID: MW-207B-1R
Project: Bethpage Deep Park Investigation
SDG: SL4878
Lab File ID: G3318.D

Sample Date: 31-MAY-18
Received Date: 01-JUN-18
Extract Date: 05-JUN-18
Extracted By: KF
Extraction Method: SW846 3520C
Lab Prep Batch: WG229718

Analysis Date: 08-JUN-18
Analyst: JCG
Analysis Method: SW846 8270D SIM
Matrix: AQ
% Solids: NA
Report Date: 13-JUN-18

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane		1.3	ug/L	1	.25	0.24	0.080
1,4-Dioxane-D8		66.0	%				

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Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3318.D
Report Date: 13-Jun-2018 13:49

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Data file : \\target_server\gg\chem\gcms-g.i\G060818.b\G3318.D
Lab Smp Id: SL4878-2 Client Smp ID: MW-207B-1R
Inj Date : 08-JUN-2018 18:28 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : SL4878-2
Misc Info : WG229961,WG229718,WG229961-2
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G060818.b\GDIOXN91.m
Meth Date : 11-Jun-2018 07:47 cgomez Quant Type: ISTD
Cal Date : 22-MAY-2018 12:37 Cal File: G3050.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

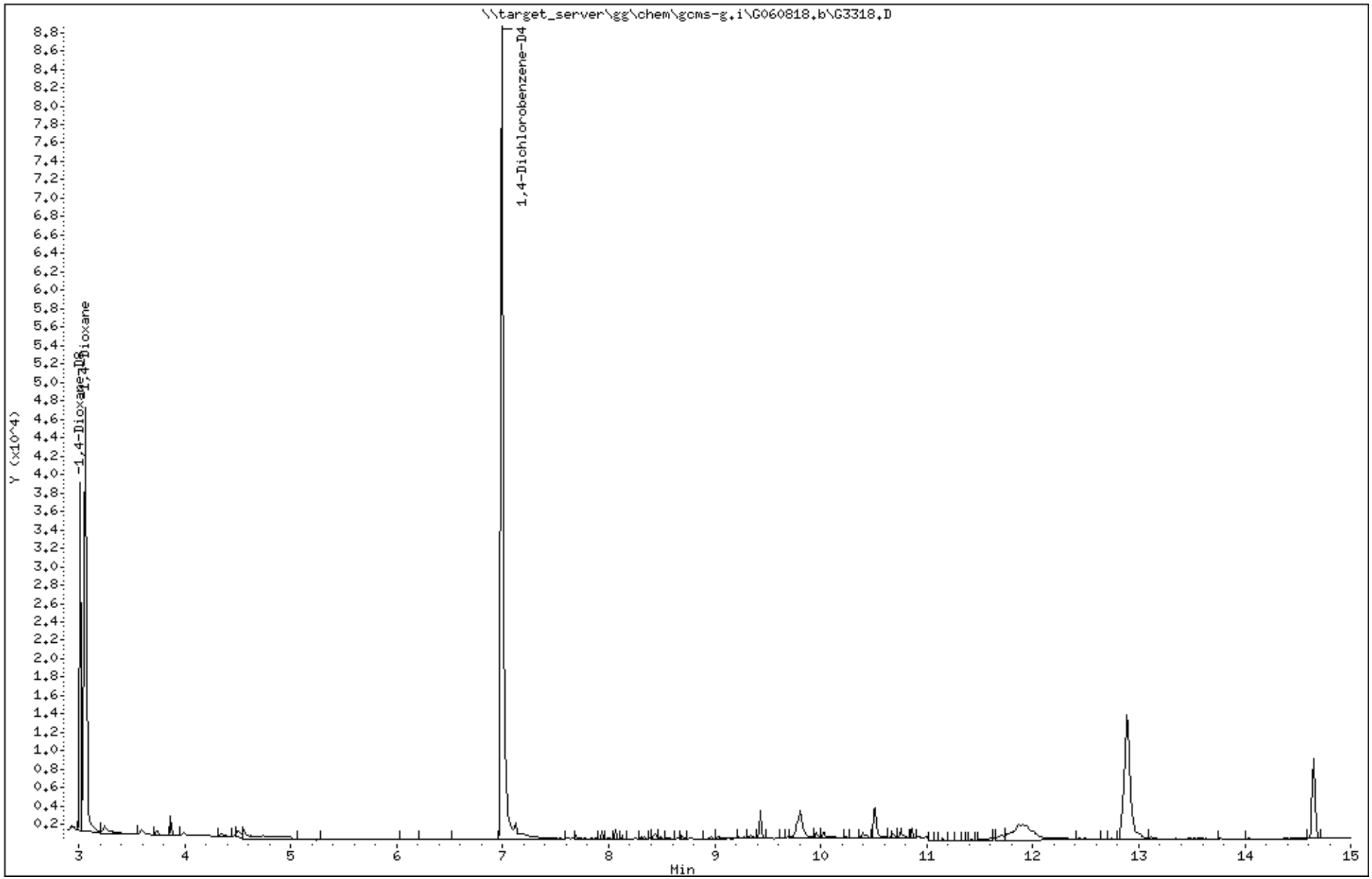
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
	1 1,4-Dioxane	88	3.062	3.062	(0.438)	39411	1.41339	1.33	
$	2 1,4-Dioxane-D8	96	3.018	3.018	(0.431)	34514	1.32041	1.24	
*	3 1,4-Dichlorobenzene-D4	150	6.996	6.996	(1.000)	76867	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3318.D
Date : 08-JUN-2018 18:28
Client ID: MW-207B-1R
Instrument: gcms-g.i
Sample Info: SL4878-2
Purge Volume: 1.1
Operator: JCG
Column phase: RTX5-MS
Column diameter: 0.25



Katahdin Analytical Services 1000017

Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3318.D

Date : 08-JUN-2018 18:28

Client ID: MW-207B-1R

Instrument: gcms-g.i

Sample Info: SL4878-2

Purge Volume: 1.1

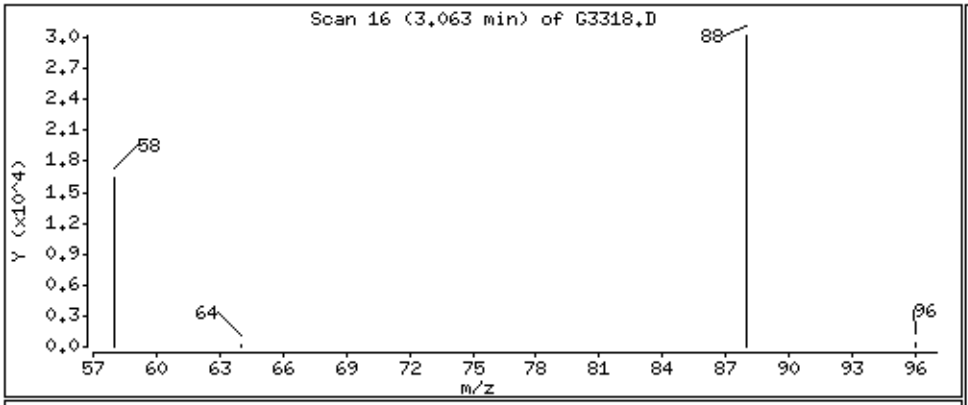
Operator: JCG

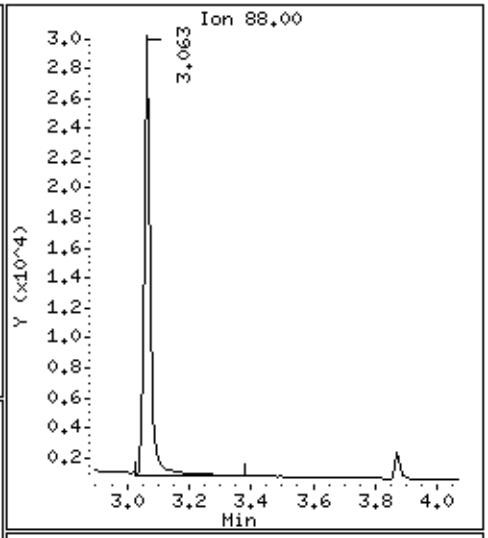
Column phase: RTX5-MS

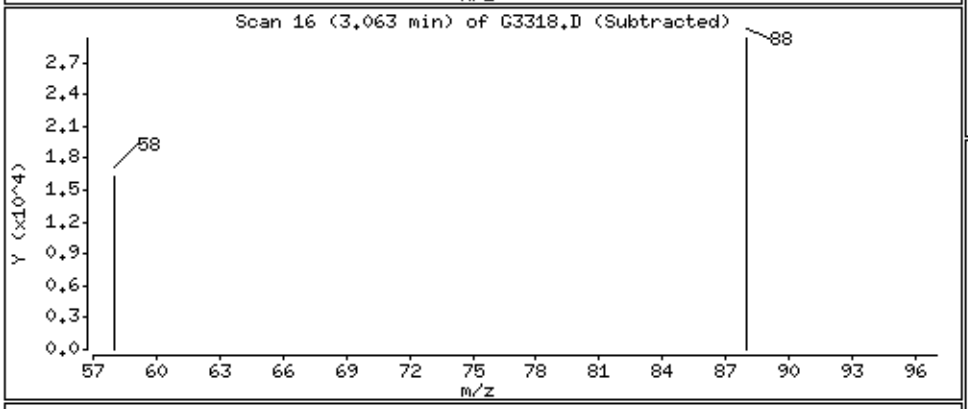
Column diameter: 0.25

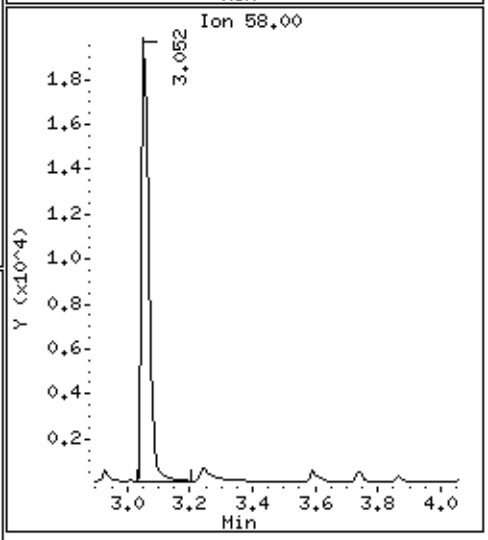
1 1,4-Dioxane

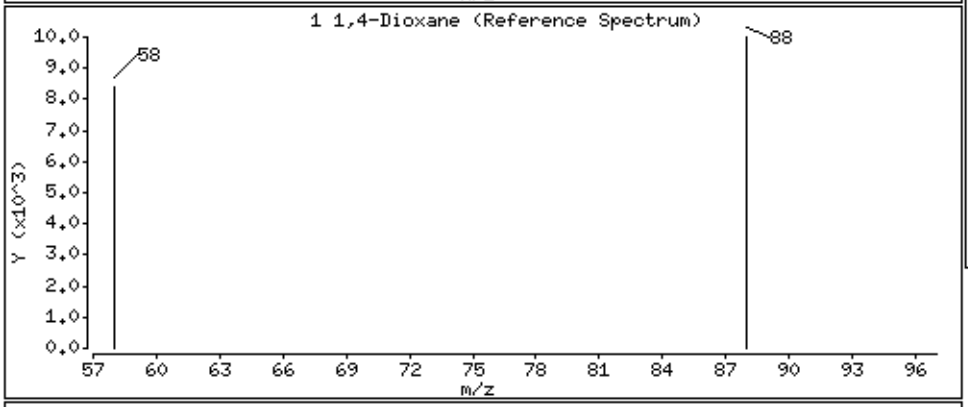
Concentration: 1.33 ug/L

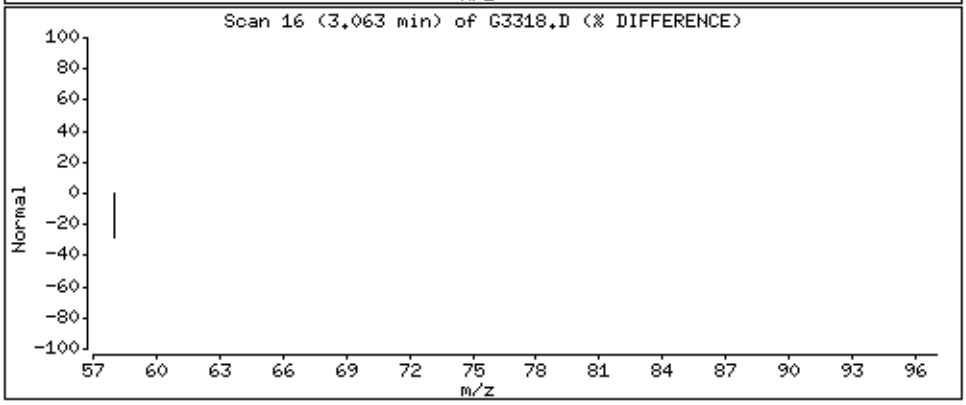












Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: ARCADIS
Lab ID: SL4878-3
Client ID: DUP-1
Project: Bethpage Deep Park Investigation
SDG: SL4878
Lab File ID: G3319.D

Sample Date: 31-MAY-18
Received Date: 01-JUN-18
Extract Date: 05-JUN-18
Extracted By: KF
Extraction Method: SW846 3520C
Lab Prep Batch: WG229718

Analysis Date: 08-JUN-18
Analyst: JCG
Analysis Method: SW846 8270D SIM
Matrix: AQ
% Solids: NA
Report Date: 13-JUN-18

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane		1.2	ug/L	1	.25	0.24	0.080
1,4-Dioxane-D8		61.7	%				

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Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3319.D
Report Date: 13-Jun-2018 13:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G060818.b\G3319.D
Lab Smp Id: SL4878-3 Client Smp ID: DUP-1
Inj Date : 08-JUN-2018 18:50 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : SL4878-3
Misc Info : WG229961,WG229718,WG229961-2
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G060818.b\GDIOXN91.m
Meth Date : 11-Jun-2018 07:47 cgomez Quant Type: ISTD
Cal Date : 22-MAY-2018 12:37 Cal File: G3050.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

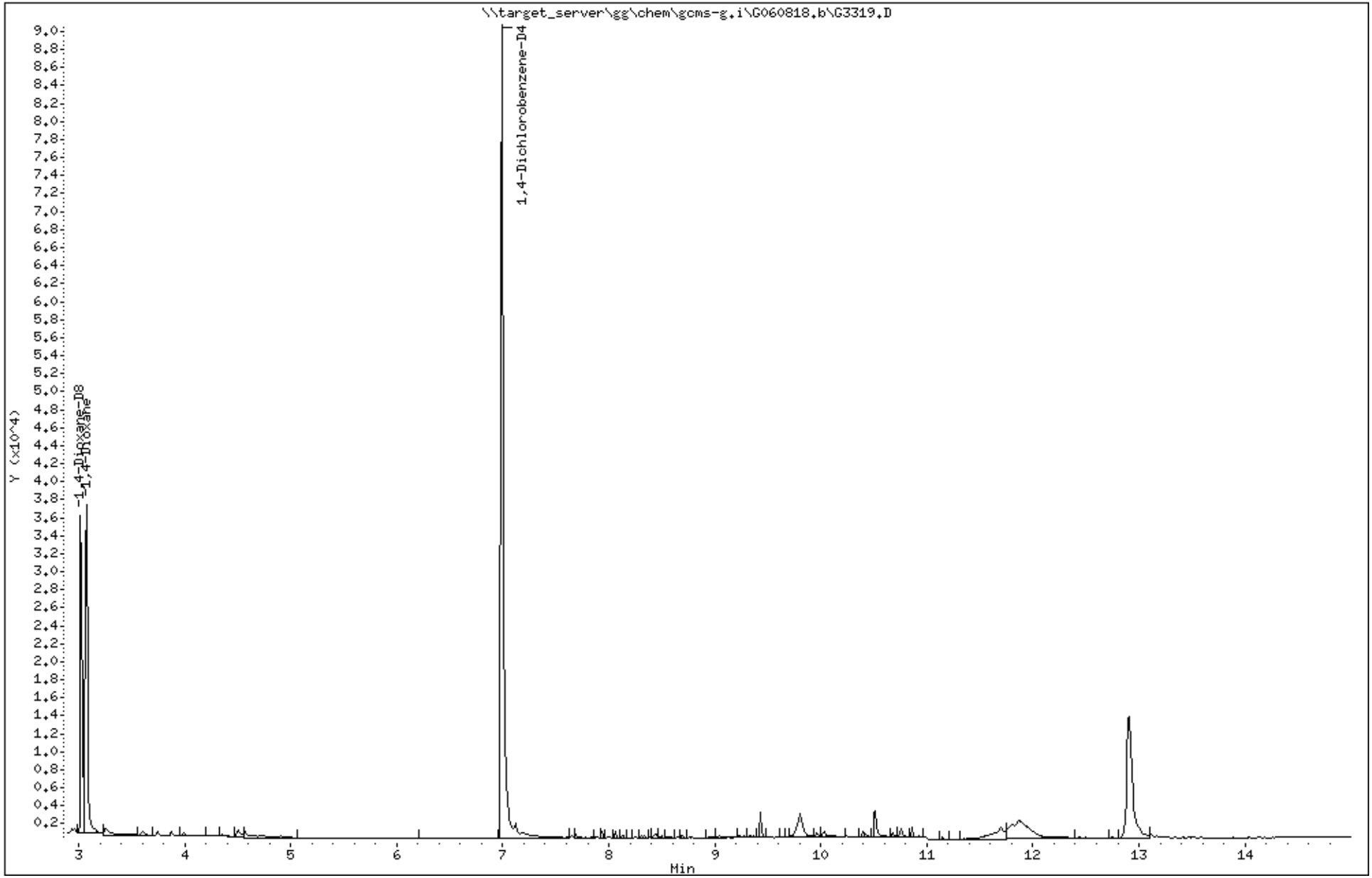
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
	1 1,4-Dioxane	88	3.073	3.062	(0.439)	33834	1.27351	1.20	
$	2 1,4-Dioxane-D8	96	3.029	3.018	(0.433)	30713	1.23322	1.16	
*	3 1,4-Dichlorobenzene-D4	150	6.997	6.996	(1.000)	73238	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3319.D
Date : 08-JUN-2018 18:50
Client ID: DUP-1
Instrument: gcms-g.i
Sample Info: SL4878-3
Purge Volume: 1.1
Operator: JCG
Column phase: RTX5-MS
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3319.D

Date : 08-JUN-2018 18:50

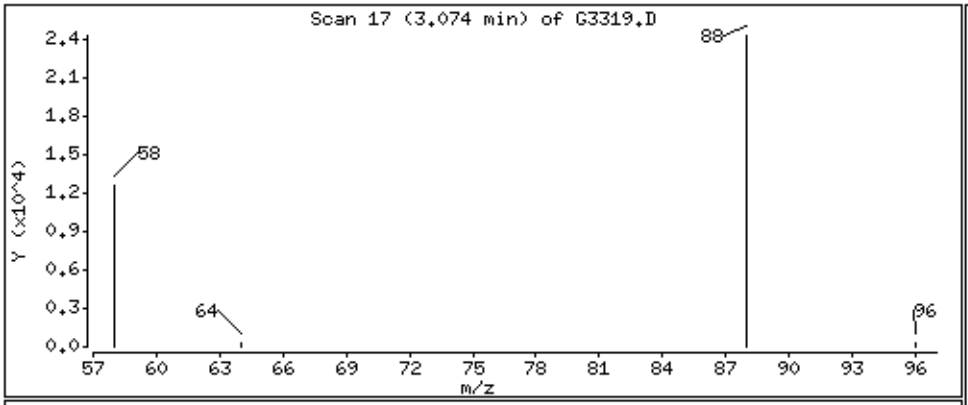
Client ID: DUP-1 Instrument: gcms-g.i

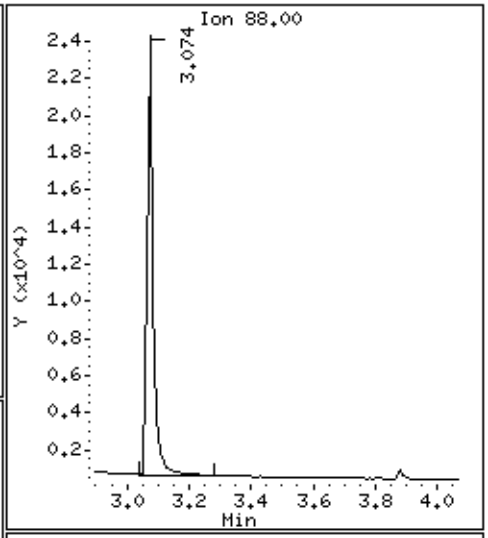
Sample Info: SL4878-3

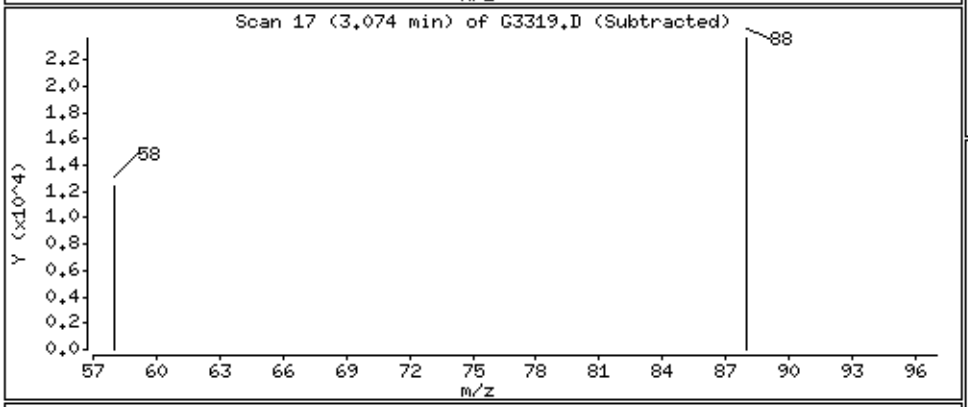
Purge Volume: 1.1 Operator: JCG

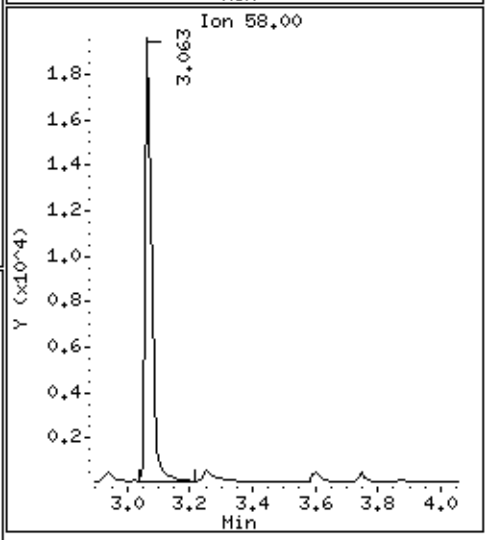
Column phase: RTX5-MS Column diameter: 0.25

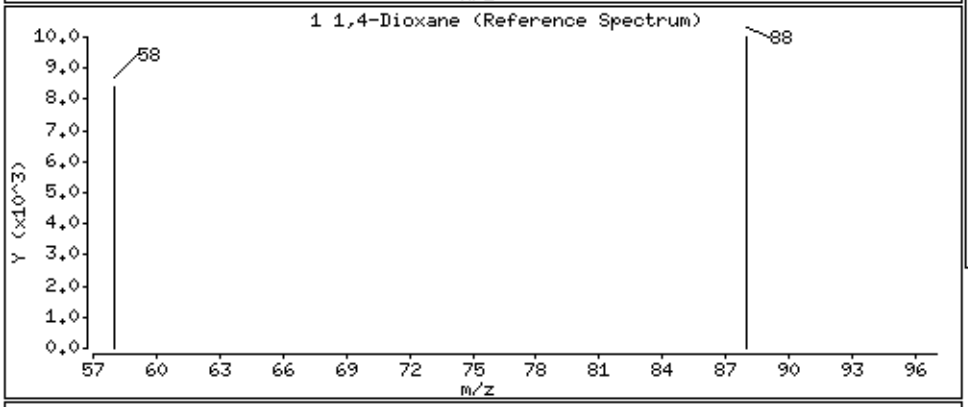
1 1,4-Dioxane Concentration: 1.20 ug/L

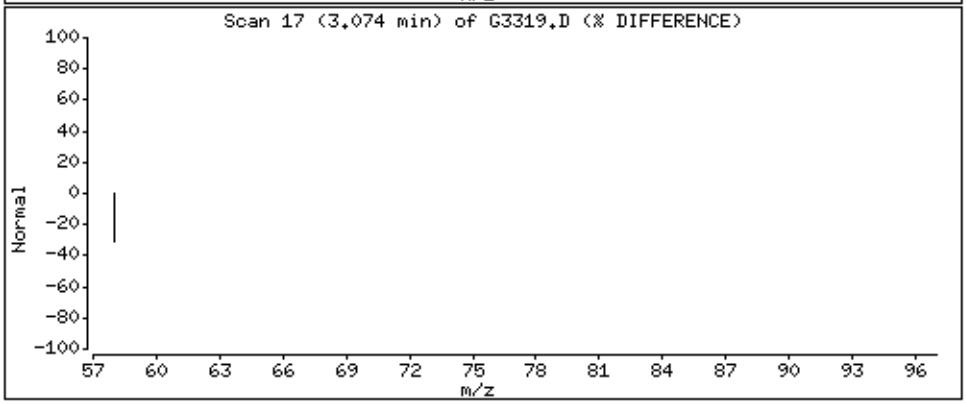












Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: ARCADIS
Lab ID: SL4878-4
Client ID: EB053118-DC1
Project: Bethpage Deep Park Investigation
SDG: SL4878
Lab File ID: G3320.D

Sample Date: 31-MAY-18
Received Date: 01-JUN-18
Extract Date: 05-JUN-18
Extracted By: KF
Extraction Method: SW846 3520C
Lab Prep Batch: WG229718

Analysis Date: 08-JUN-18
Analyst: JCG
Analysis Method: SW846 8270D SIM
Matrix: AQ
% Solids: NA
Report Date: 13-JUN-18

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane	U	0.24	ug/L	1	.25	0.24	0.080
1,4-Dioxane-D8		56.6	%				

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3320.D
Report Date: 13-Jun-2018 13:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G060818.b\G3320.D
Lab Smp Id: SL4878-4 Client Smp ID: EB053118-DC1
Inj Date : 08-JUN-2018 19:11 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : SL4878-4
Misc Info : WG229961,WG229718,WG229961-2
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G060818.b\GDIOXN91.m
Meth Date : 11-Jun-2018 07:47 cgomez Quant Type: ISTD
Cal Date : 22-MAY-2018 12:37 Cal File: G3050.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

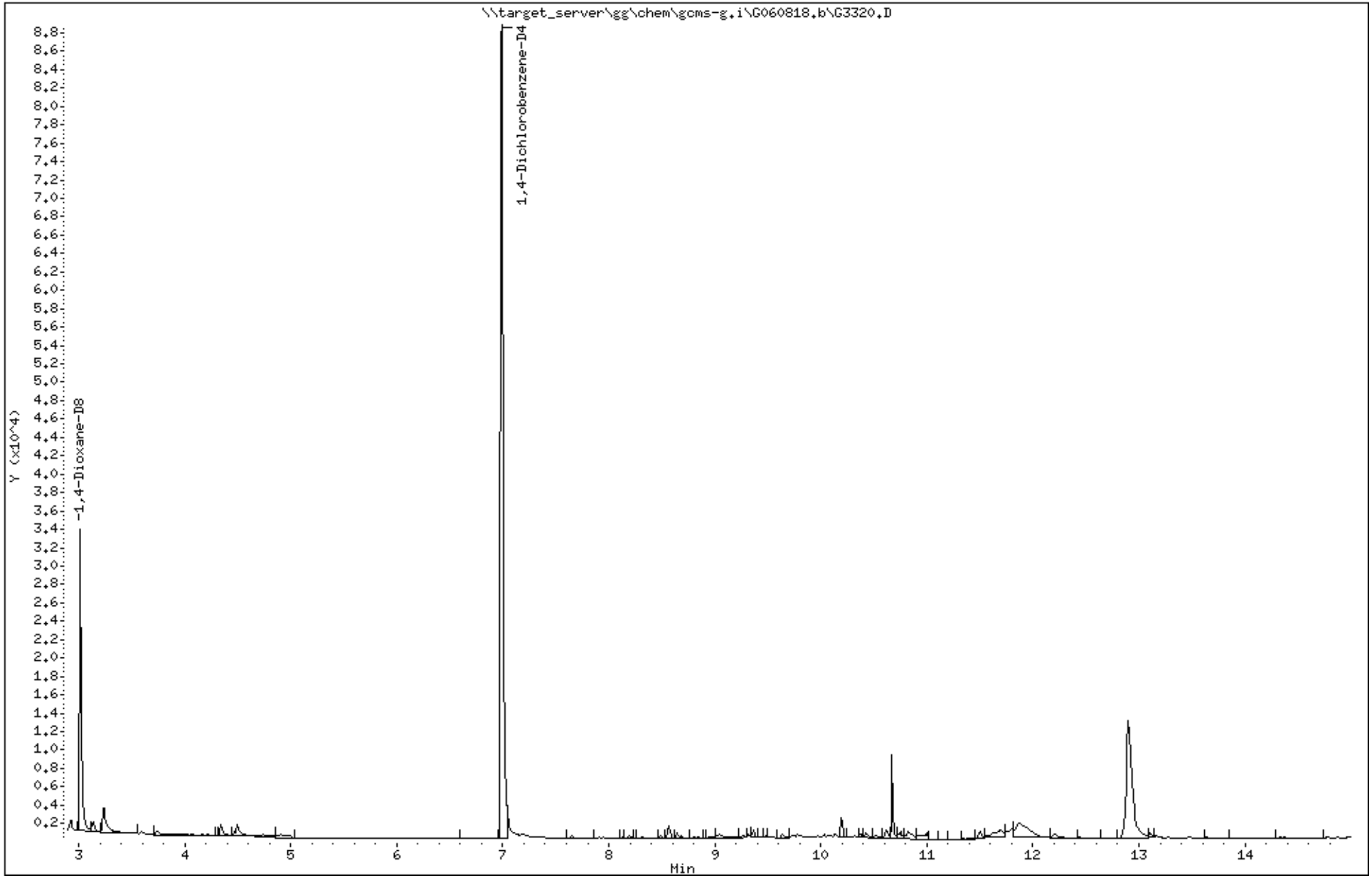
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 2 1,4-Dioxane-D8	96	3.017	3.018	(0.432)	29071	1.13171	1.07	
* 3 1,4-Dichlorobenzene-D4	150	6.985	6.996	(1.000)	75540	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3320.D
Date : 08-JUN-2018 19:11
Client ID: EB053118-DC1
Instrument: gcms-g.i
Sample Info: SL4878-4
Purge Volume: 1.1
Operator: JCG
Column phase: RTX5-MS
Column diameter: 0.25



Standards Data Section

Katahdin
ANALYTICAL SERVICES

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services
SDG: SL4878
Project : Bethpage Deep Park Investigation
Instrument ID: GCMS-G
Lab File IDs : G3049.D G3050.D G3048.D G3051.D G3052.D G3053.D
Column ID:
Calibration Date(s): 22-MAY-18 11:56 22-MAY-18 13:39

	0.250000(Level 1	0.500000(Level 2	2.0000 Level 3	7.0000 Level 4	10.0000 Level 5	15.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
1,4-Dioxane	0.26212	0.26959	0.29208	0.30008	0.31699	0.30037	AVG		0.29021		7.12150	15.00000	O
1,4-Dioxane-D8	0.26817	0.26457	0.26460	0.26364	0.29454	0.27674	AVG		0.27204		4.42605	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\G3054.D
Report Date: 24-May-2018 12:55

Katahdin Analytical Services

RECOVERY REPORT

Client Name: Client SDG: 021497
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: WG228757-8
Level: LOW Operator: JCG
Data Type: MS DATA SampleType: INDCHECK
SpikeList File: INDaq.spk Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-g.i\G052218.b\GDIOXN91.m
Misc Info: WG228757,WG228757,WG228757-4

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 1,4-Dioxane	2.00	2.03	101.52	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 2 1,4-Dioxane-D8	2.00	0.000	*	30-115

Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\G3048.D
Report Date: 23-May-2018 07:48

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G052218.b\G3048.D
Lab Smp Id: WG228757-4
Inj Date : 22-MAY-2018 11:56 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG228757-4
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-g.i\G052218.b\GDIOXN91.m
Meth Date : 22-May-2018 14:02 gcms-g.i Quant Type: ISTD
Cal Date : 27-MAR-2018 10:14 Cal File: G2660.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

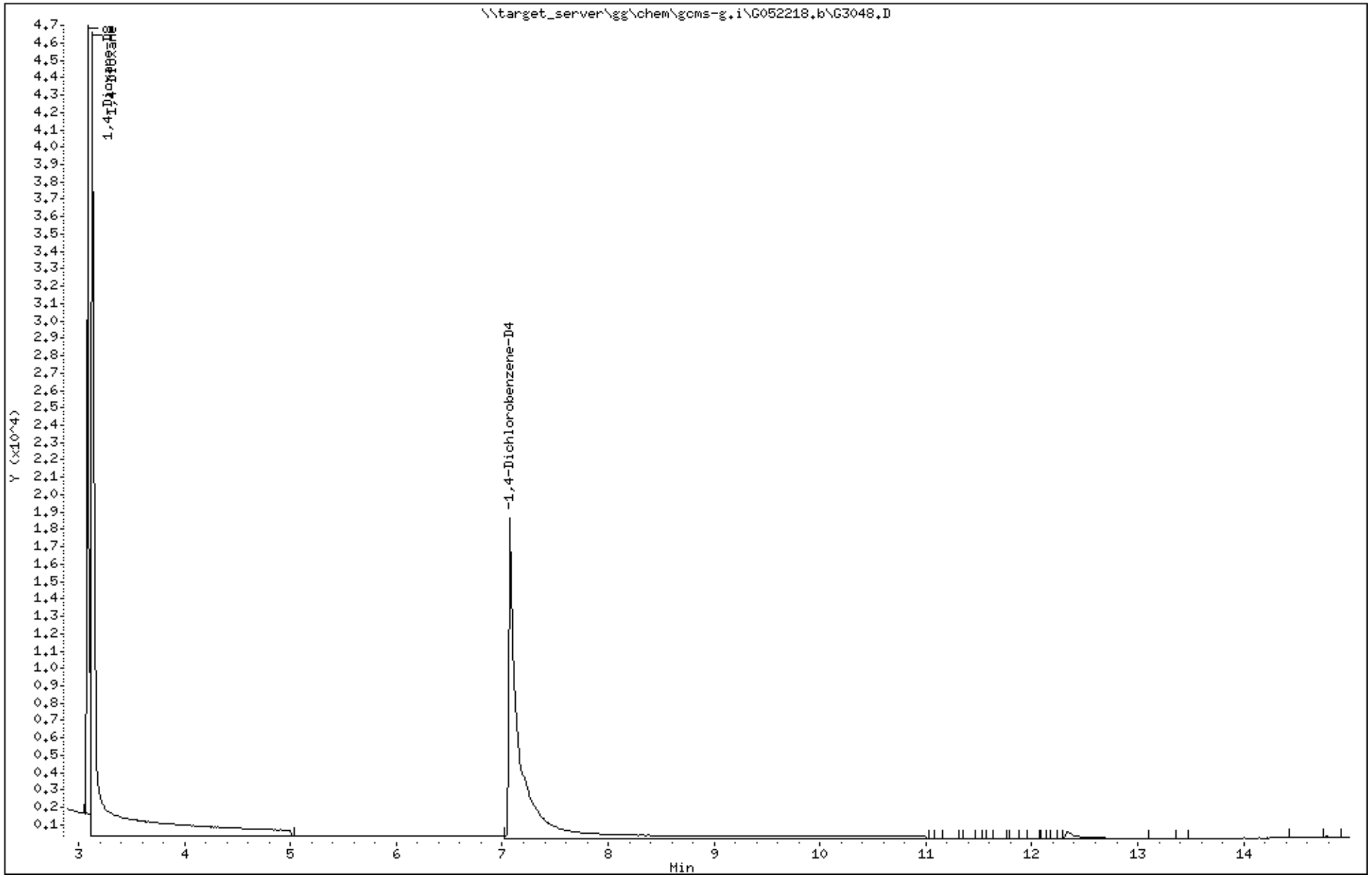
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
1	1,4-Dioxane	88	3.127	3.105	(0.443)	41327	2.00000	2.01	
$ 2	1,4-Dioxane-D8	96	3.083	3.061	(0.436)	37439	2.00000	1.94	
* 3	1,4-Dichlorobenzene-D4	150	7.064	7.065	(1.000)	56597	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\G3048.D
Date : 22-MAY-2018 11:56
Client ID:
Instrument: gcms-g.i
Sample Info: WG228757-4
Purge Volume: 1.0
Operator: JCG
Column phase: RTX5-MS
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\G3049.D
Report Date: 23-May-2018 07:48

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G052218.b\G3049.D
Lab Smp Id: WG228757-2
Inj Date : 22-MAY-2018 12:16 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG228757-2
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-g.i\G052218.b\GDIOXN91.m
Meth Date : 22-May-2018 14:02 gcms-g.i Quant Type: ISTD
Cal Date : 22-MAY-2018 12:16 Cal File: G3049.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

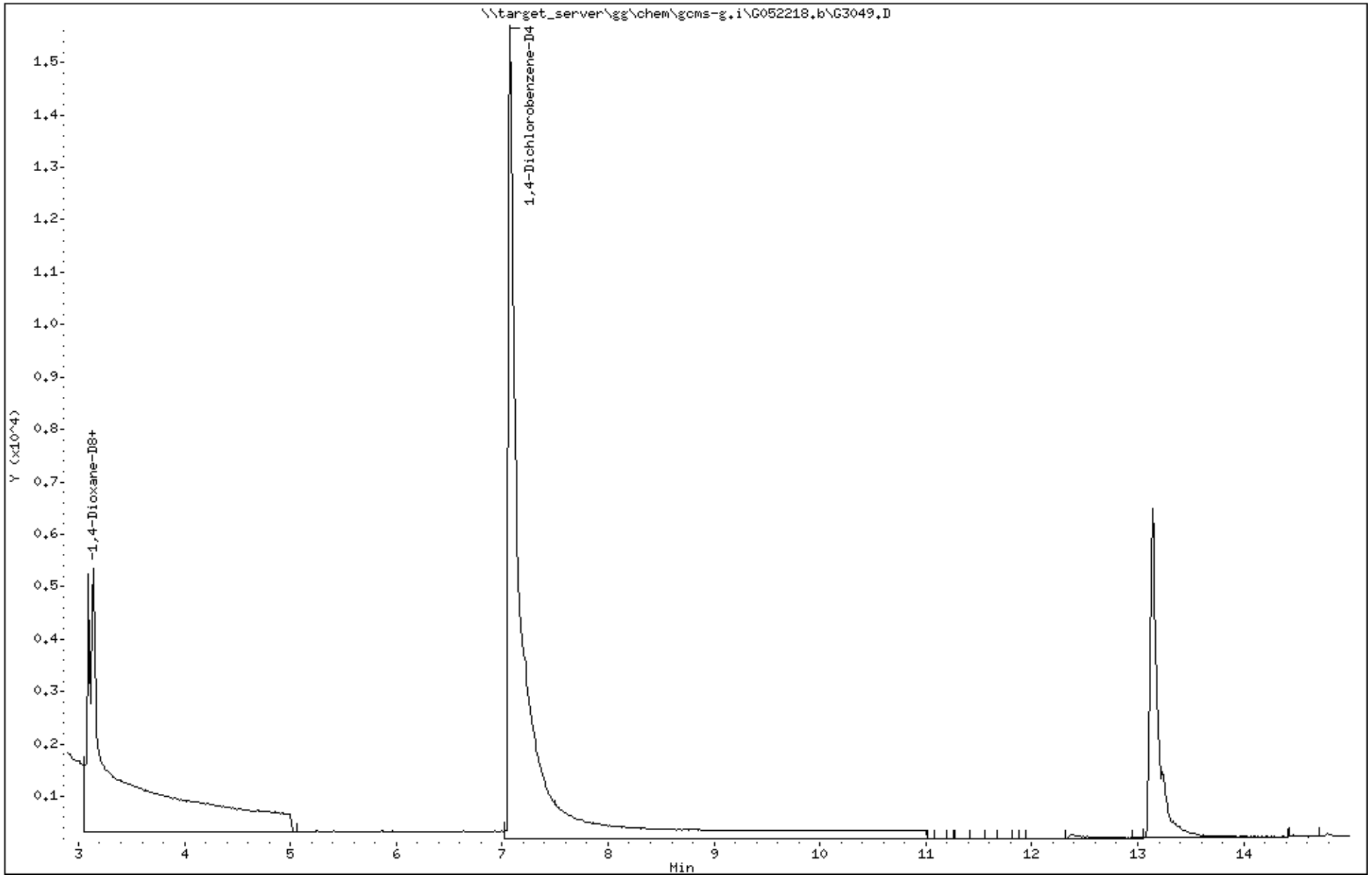
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
1	1,4-Dioxane	88	3.140	3.105	(0.444)	4293	0.25000	0.226(aM)	M3
$ 2	1,4-Dioxane-D8	96	3.096	3.061	(0.438)	4392	0.25000	0.246	
* 3	1,4-Dichlorobenzene-D4	150	7.075	7.065	(1.000)	52409	0.80000	(a)	

QC Flag Legend

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

WAS
2:09 pm, Jun 13, 2018

Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\G3049.D
Date : 22-MAY-2018 12:16
Client ID:
Instrument: gcms-g.i
Sample Info: WG228757-2
Purge Volume: 1.0
Operator: JCG
Column phase: RTX5-MS
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\G3050.D
Report Date: 23-May-2018 07:48

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G052218.b\G3050.D
Lab Smp Id: WG228757-3
Inj Date : 22-MAY-2018 12:37 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG228757-3
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G052218.b\GDIOXN91.m
Meth Date : 22-May-2018 14:02 gcms-g.i Quant Type: ISTD
Cal Date : 22-MAY-2018 12:37 Cal File: G3050.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

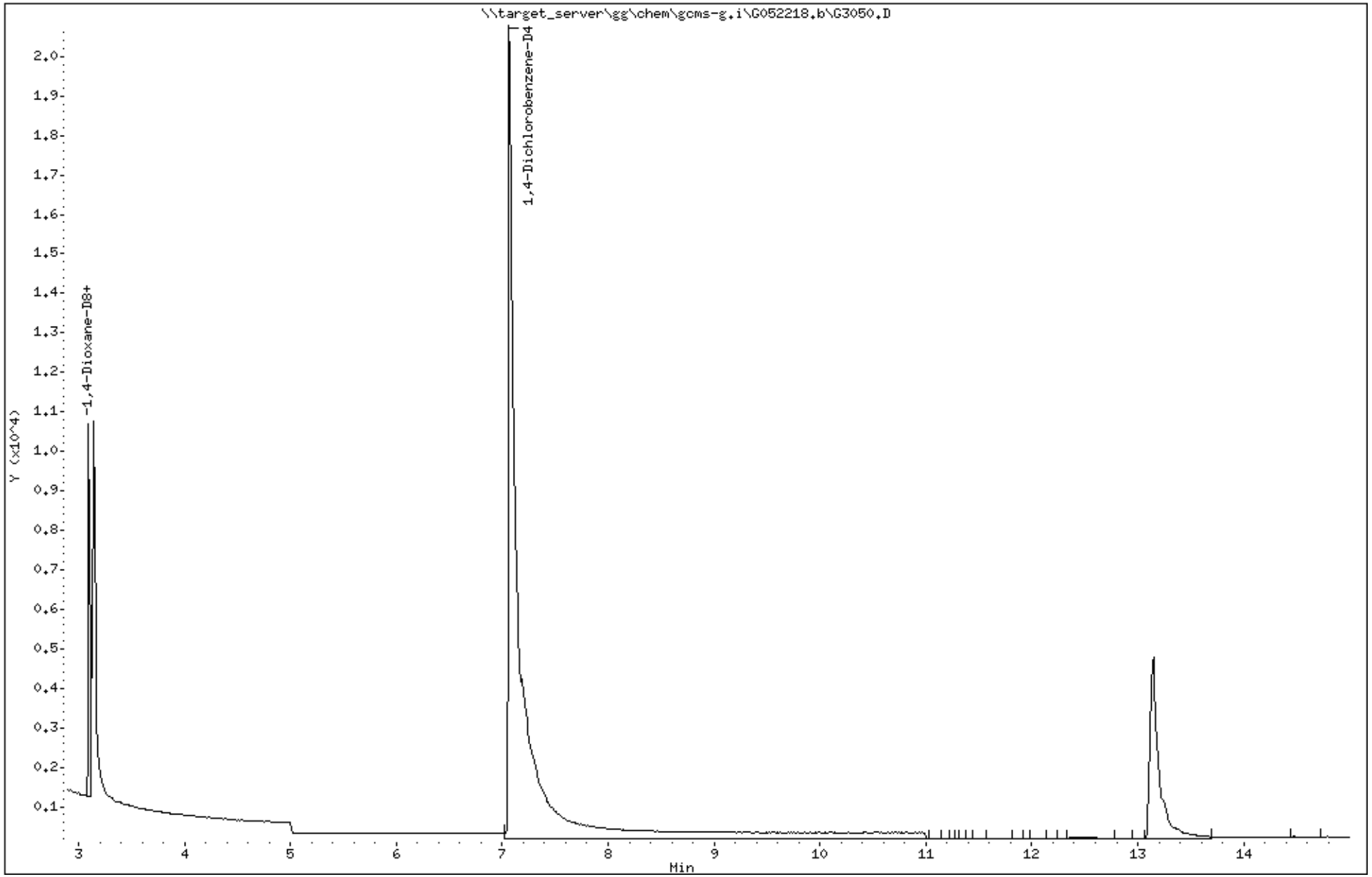
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
1	1,4-Dioxane	88	3.139	3.105	(0.444)	9943	0.50000	0.464(M)	M3
$ 2	1,4-Dioxane-D8	96	3.095	3.061	(0.438)	9758	0.50000	0.486	
* 3	1,4-Dichlorobenzene-D4	150	7.064	7.065	(1.000)	59012	0.80000	(a)	

QC Flag Legend

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

WKS
2:09 pm, Jun 13, 2018

Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\G3050.D
Date : 22-MAY-2018 12:37
Client ID:
Instrument: gcms-g.i
Sample Info: WG228757-3
Purge Volume: 1.0
Operator: JCG
Column phase: RTX5-MS
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\G3051.D
Report Date: 23-May-2018 07:48

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Data file : \\target_server\gg\chem\gcms-g.i\G052218.b\G3051.D
Lab Smp Id: WG228757-5
Inj Date : 22-MAY-2018 12:58 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG228757-5
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-g.i\G052218.b\GDIOXN91.m
Meth Date : 22-May-2018 14:02 gcms-g.i Quant Type: ISTD
Cal Date : 22-MAY-2018 12:58 Cal File: G3051.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

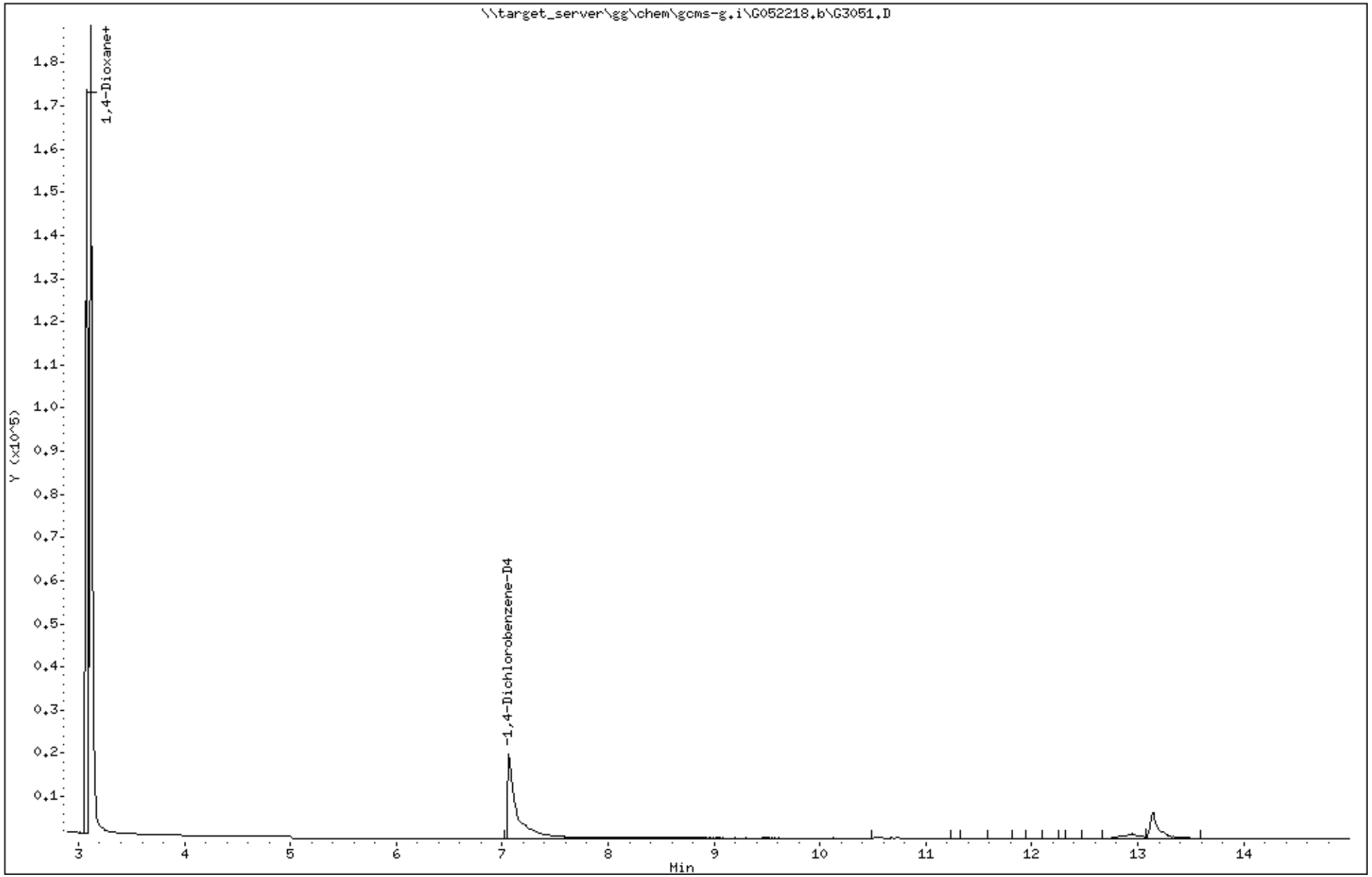
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	1 1,4-Dioxane	88	3.118	3.105	(0.441)	146833	7.00000	7.24	
$	2 1,4-Dioxane-D8	96	3.073	3.061	(0.435)	129002	7.00000	6.78	
*	3 1,4-Dichlorobenzene-D4	150	7.063	7.065	(1.000)	55921	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\G3051.D
Date : 22-MAY-2018 12:58
Client ID:
Instrument: gcms-g.i
Sample Info: WG228757-5
Purge Volume: 1.0
Operator: JCG
Column phase: RTX5-MS
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\G3052.D
Report Date: 23-May-2018 07:48

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G052218.b\G3052.D
Lab Smp Id: WG228757-6
Inj Date : 22-MAY-2018 13:19 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG228757-6
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-g.i\G052218.b\GDIOXN91.m
Meth Date : 22-May-2018 14:02 gcms-g.i Quant Type: ISTD
Cal Date : 22-MAY-2018 13:19 Cal File: G3052.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

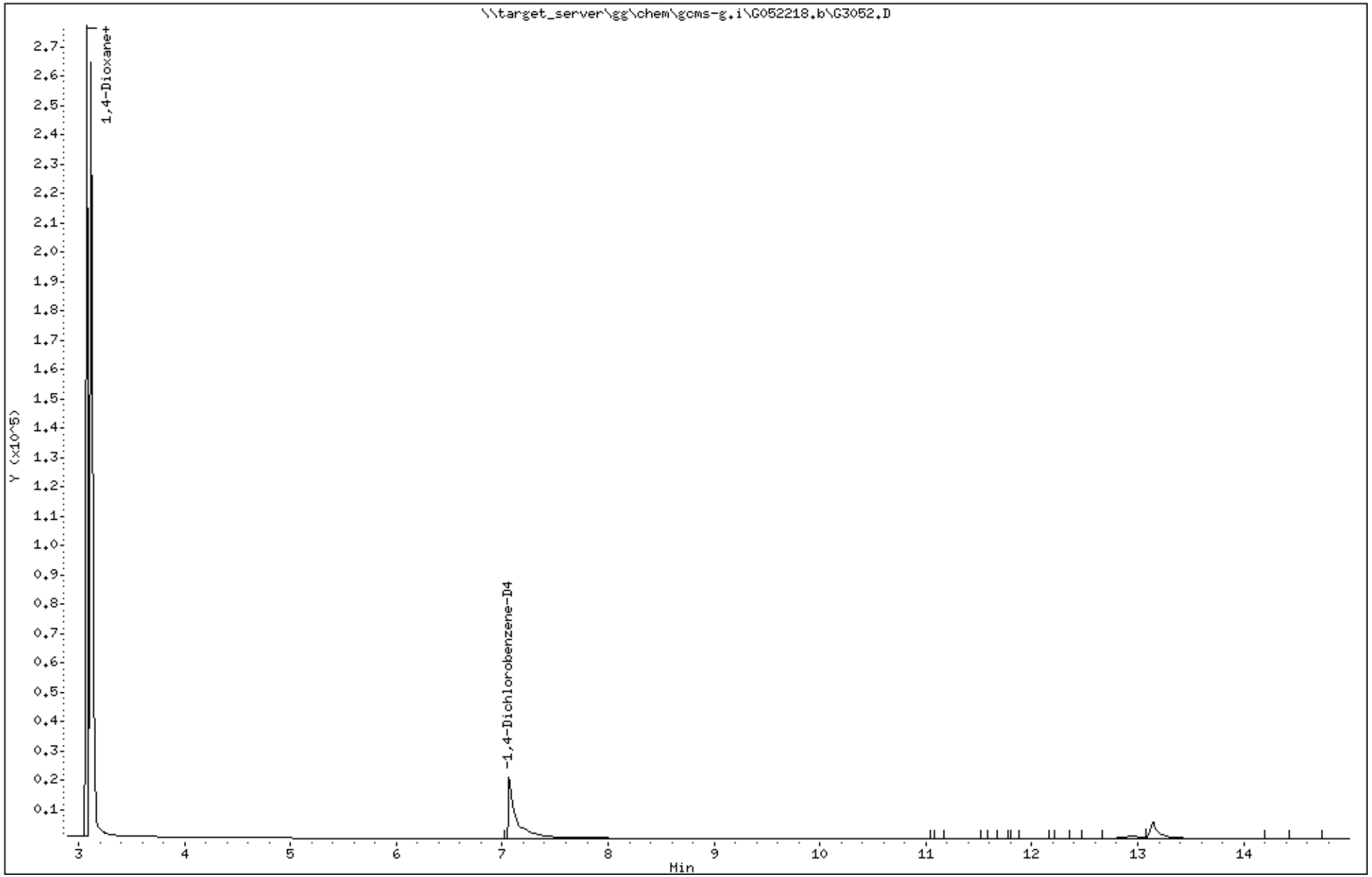
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
1	1,4-Dioxane	88	3.117	3.105	(0.441)	224790	10.0000	10.9	
$ 2	1,4-Dioxane-D8	96	3.072	3.061	(0.435)	208868	10.0000	10.8	
* 3	1,4-Dichlorobenzene-D4	150	7.063	7.065	(1.000)	56731	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\G3052.D
Date : 22-MAY-2018 13:19
Client ID:
Instrument: gcms-g.i
Sample Info: WG228757-6
Purge Volume: 1.0
Operator: JCG
Column phase: RTX5-MS
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\G3053.D
Report Date: 23-May-2018 07:48

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G052218.b\G3053.D
Lab Smp Id: WG228757-7
Inj Date : 22-MAY-2018 13:39 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG228757-7
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-g.i\G052218.b\GDIOXN91.m
Meth Date : 22-May-2018 14:02 gcms-g.i Quant Type: ISTD
Cal Date : 22-MAY-2018 13:39 Cal File: G3053.D
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

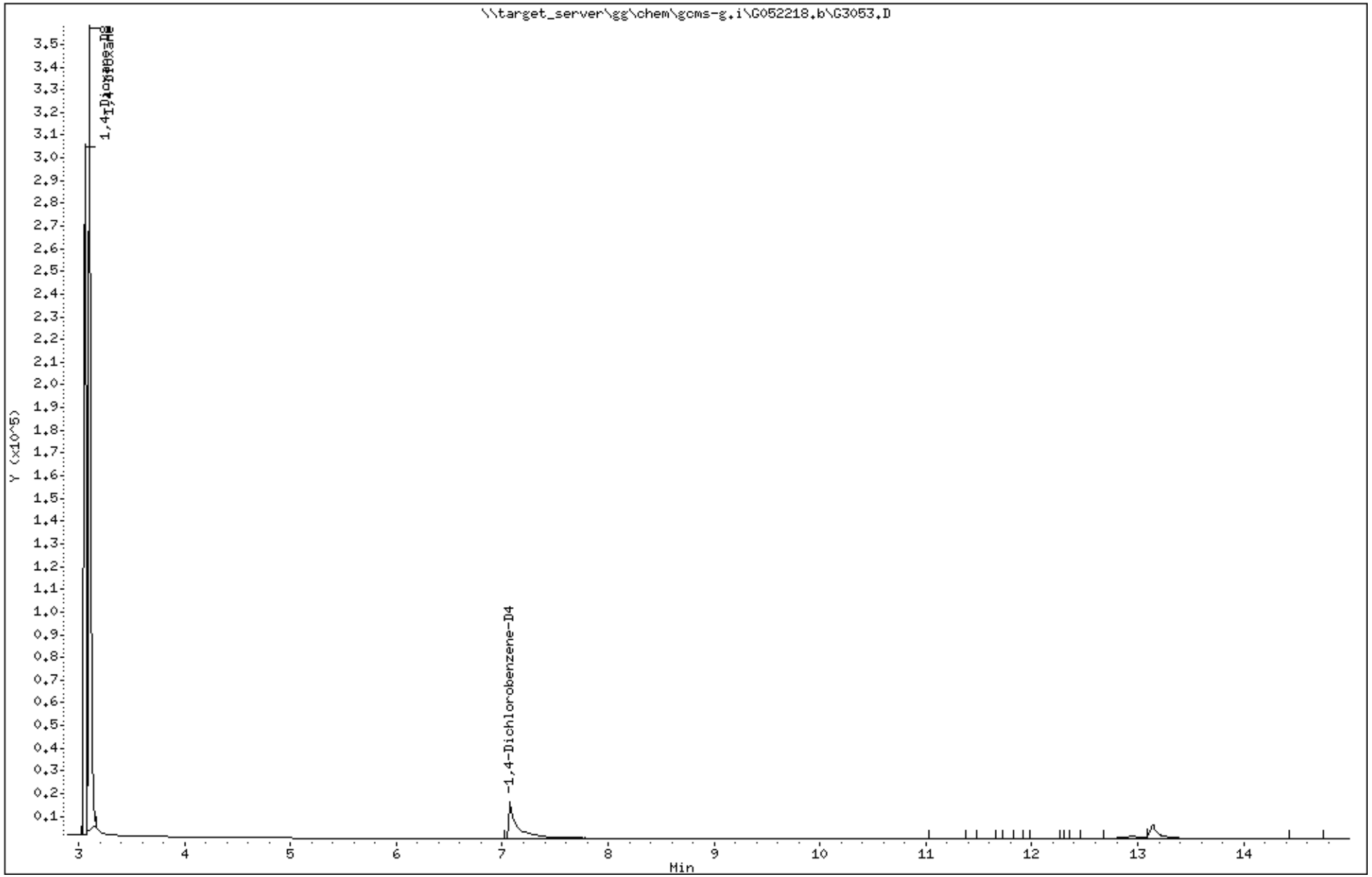
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
1	1,4-Dioxane	88	3.105	3.105	(0.440)	280616	15.0000	15.5(A)	
$ 2	1,4-Dioxane-D8	96	3.061	3.061	(0.433)	258537	15.0000	15.2(A)	
* 3	1,4-Dichlorobenzene-D4	150	7.065	7.065	(1.000)	49826	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
    exceeded maximum amount.

Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\G3053.D
Date : 22-MAY-2018 13:39
Client ID:
Instrument: gcms-g.i
Sample Info: WG228757-7
Purge Volume: 1.0
Operator: JCG
Column phase: RTX5-MS
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\G3054.D
Report Date: 24-May-2018 12:55

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G052218.b\G3054.D
Lab Smp Id: WG228757-8
Inj Date : 22-MAY-2018 14:00 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG228757-8
Misc Info : WG228757,WG228757,WG228757-4
Comment   :
Method   : \\target_server\gg\chem\gcms-g.i\G052218.b\GDIOXN91.m
Meth Date : 22-May-2018 14:02 gcms-g.i Quant Type: ISTD
Cal Date : 22-MAY-2018 13:39 Cal File: G3053.D
Als bottle: 8 QC Sample: INDCHECK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: KATHADIN-50E985

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

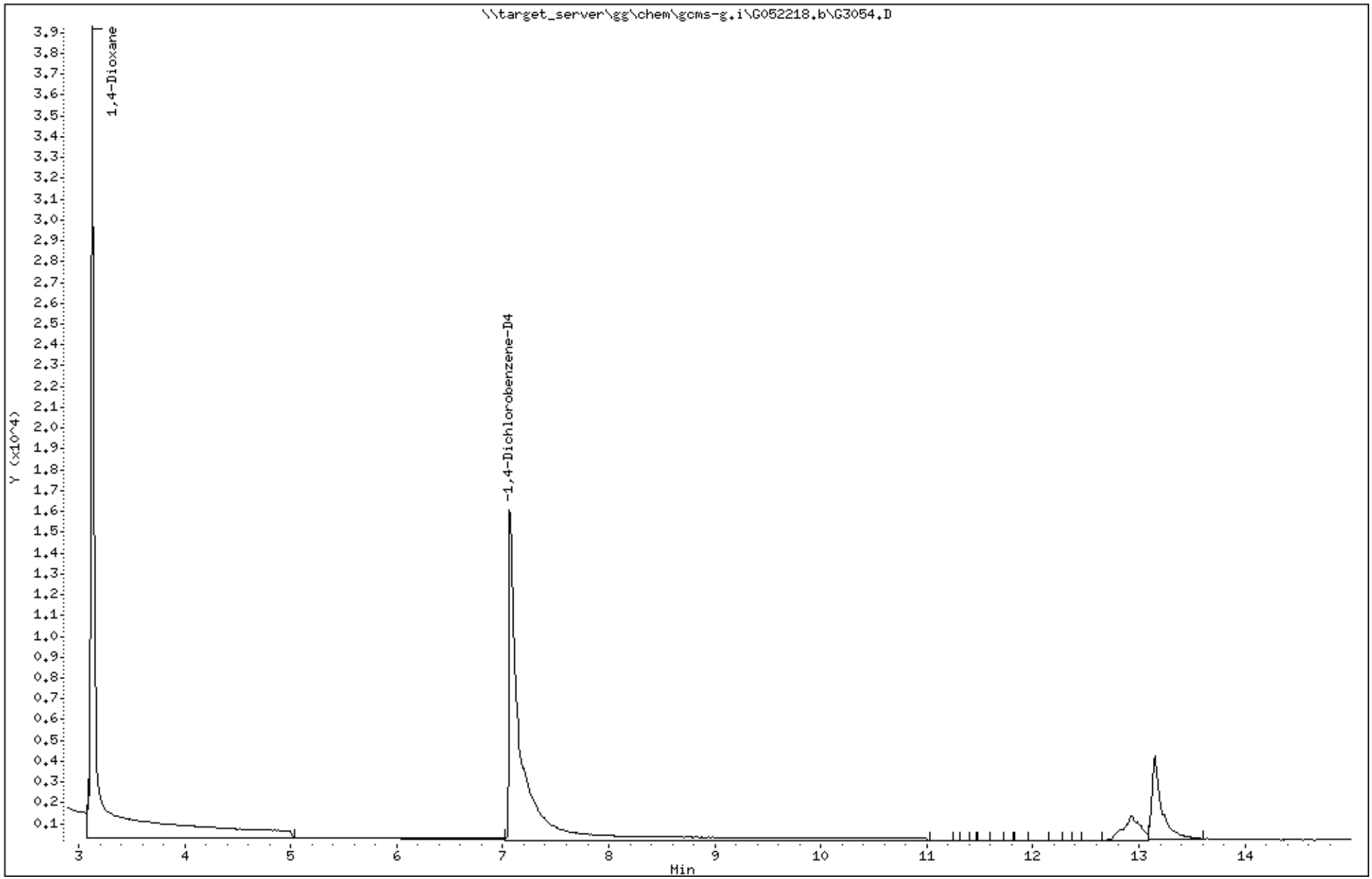
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
	1 1,4-Dioxane	88	3.128	3.105	(0.443)	38260	2.03046	2.03	
*	3 1,4-Dichlorobenzene-D4	150	7.064	7.065	(1.000)	51944	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\G3054.D
Date : 22-MAY-2018 14:00
Client ID:
Instrument: gcms-g.i
Sample Info: WG228757-8
Purge Volume: 1.0
Operator: JCG
Column phase: RTX5-MS
Column diameter: 0.25



Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Bethpage Deep Park Investigatio
SDG: SL4878
Lab ID : WG229961-2
Analytical Date: 06/08/18 11:11
Lab File ID : G3297.D
Instrument ID: GCMS-G
Initial Calibration Date(s): 05/22/18 11:56 05/22/18 13:39
Column ID:

	Compound	$\overline{RRF}$/Amount	RF2	Min RRF	%D/ %Drift	Max %D/ %Drift	Curve Type
10	1,4-Dioxane	0.29021	0.30418	0.010	4.81522	20.00000	Averaged
2	1,4-Dioxane-D8	0.27204	0.28684	0.010	5.44082	20.00000	Averaged

*** = Compound out of QC criteria**

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P.O. Box 540, Scarborough, ME 04070
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http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3297.D
Report Date: 13-Jun-2018 13:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G060818.b\G3297.D
Lab Smp Id: WG229961-2
Inj Date : 08-JUN-2018 11:11 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG229961-2,SL4878
Misc Info : WG229961,WG229961,WG228757-4,SL4878-1
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G060818.b\GDIOXN91.m
Meth Date : 11-Jun-2018 07:47 cgomez Quant Type: ISTD
Cal Date : 22-MAY-2018 12:37 Cal File: G3050.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

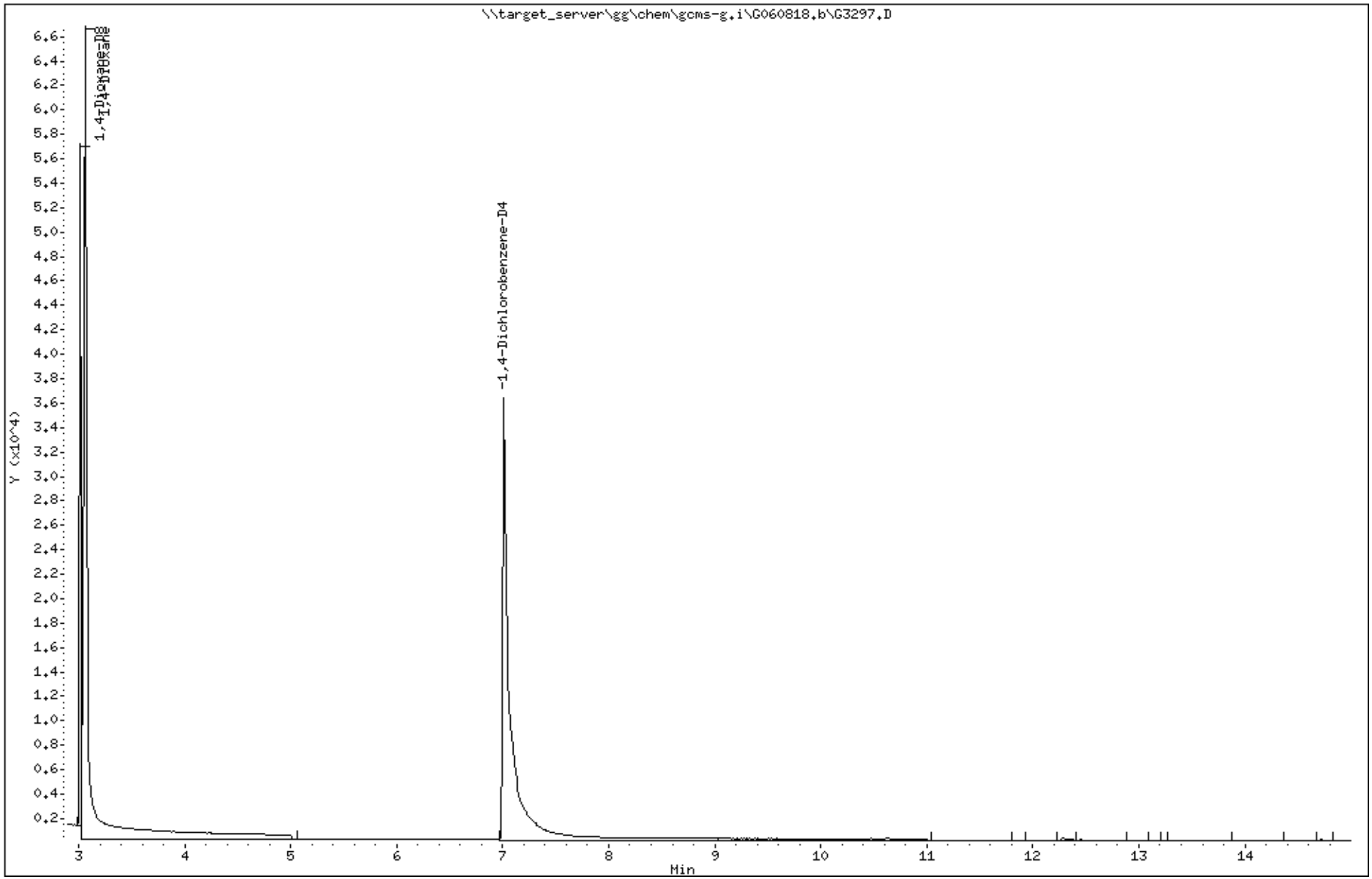
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	1 1,4-Dioxane	88	3.062	3.062	(0.437)	60413	2.00000	2.10	
$	2 1,4-Dioxane-D8	96	3.018	3.018	(0.431)	56970	2.00000	2.11	
*	3 1,4-Dichlorobenzene-D4	150	7.007	6.996	(1.000)	79444	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3297.D
Date : 08-JUN-2018 11:11
Client ID:
Instrument: gcms-g.i
Sample Info: WG229961-2,SL4878
Purge Volume: 1.0
Operator: JCG
Column phase: RTX5-MS
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\GD501.D

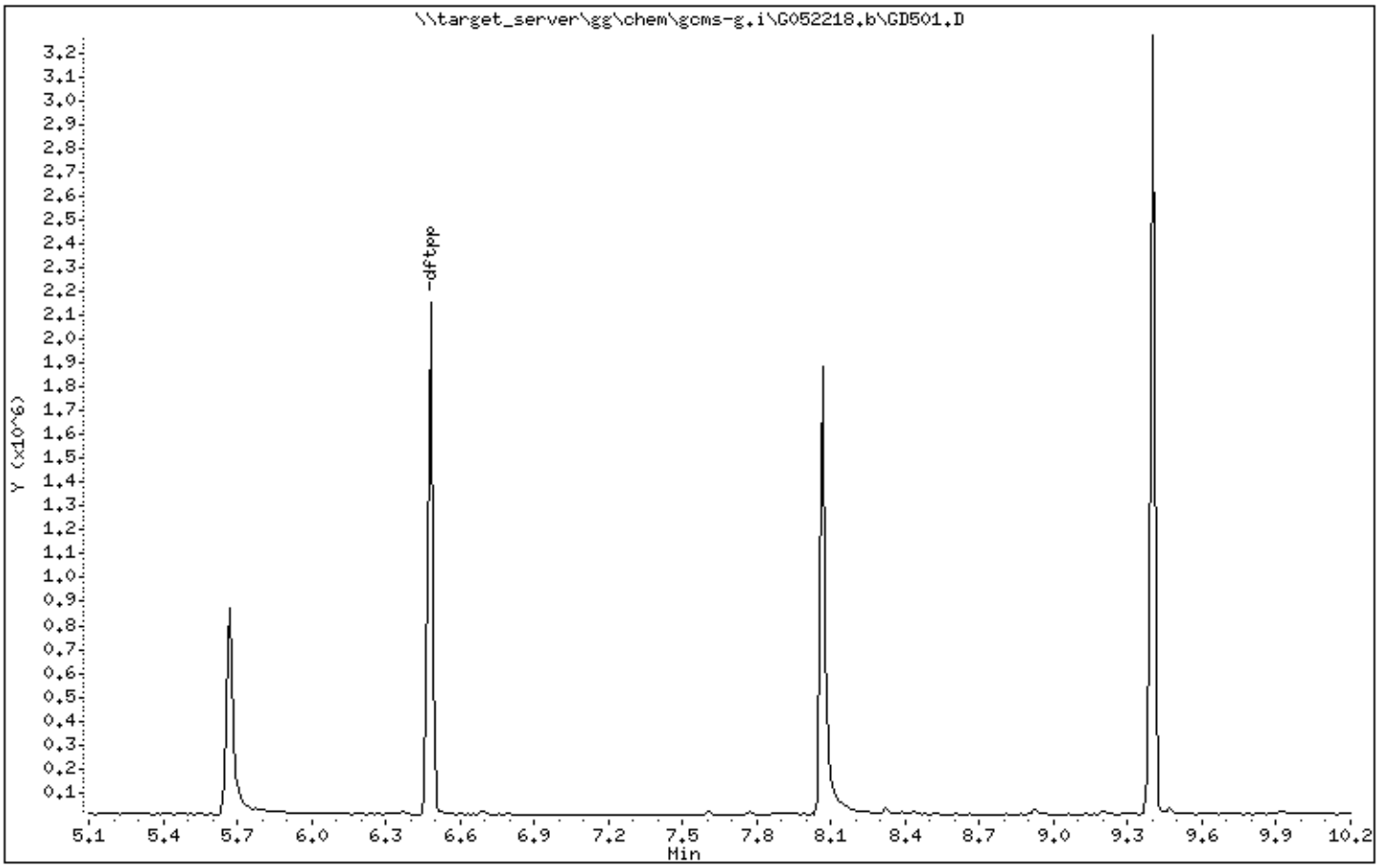
Date : 22-MAY-2018 11:39

Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG228757-1,SL4878

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\GD501.D

Date : 22-MAY-2018 11:39

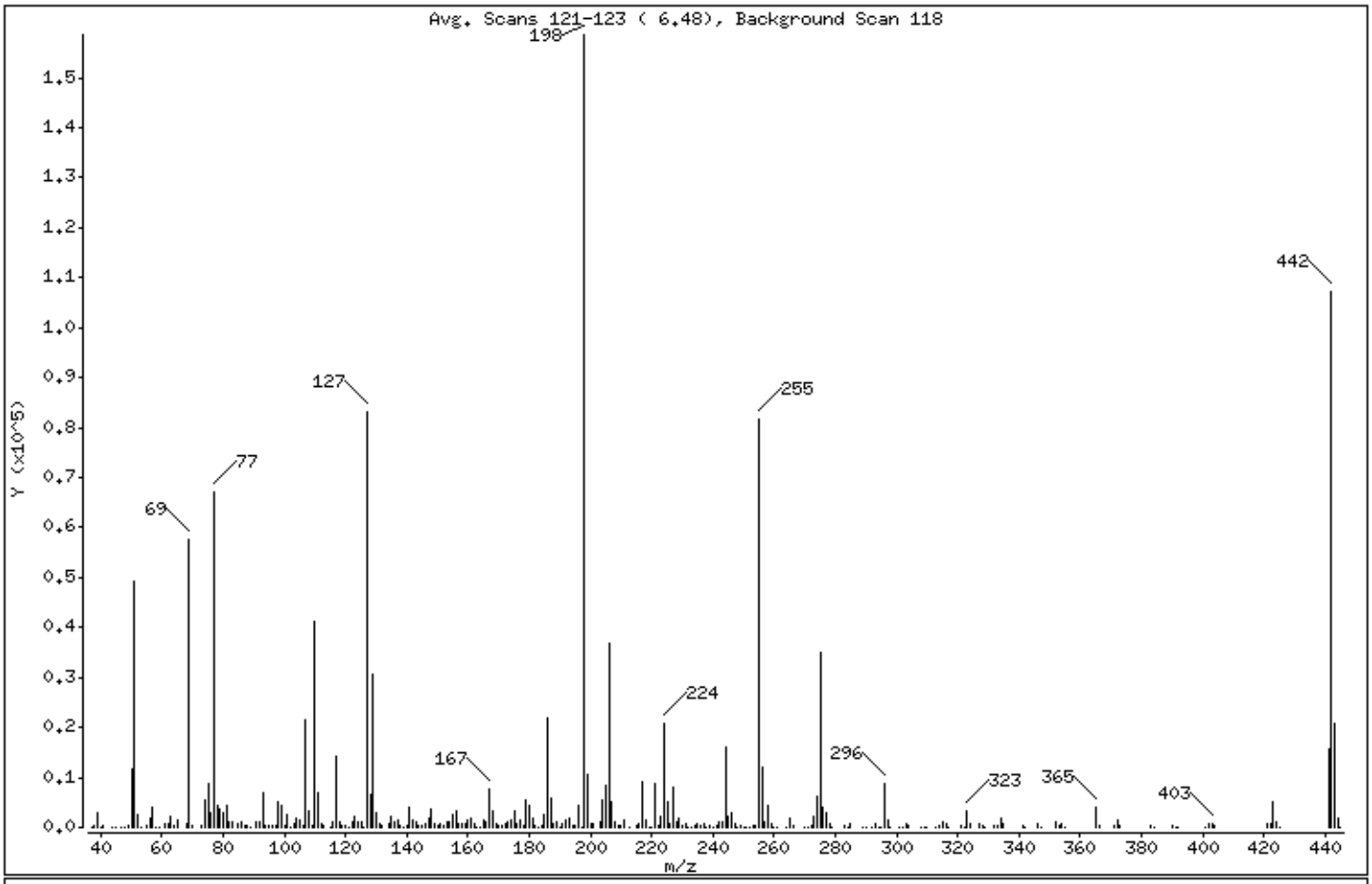
Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG228757-1,SL4878

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	31.09
68	Less than 2.00% of mass 69	0.44 (1.21)
69	Less than 100.00% of mass 198	36.40
70	Less than 2.00% of mass 69	0.17 (0.46)
127	40.00 - 60.00% of mass 198	52.31
197	Less than 1.00% of mass 198	0.06
199	5.00 - 9.00% of mass 198	6.77
275	10.00 - 30.00% of mass 198	21.97
365	1.00 - 100.00% of mass 198	2.43
441	0.01 - 100.00% of mass 443	9.87 (75.55)
442	40.00 - 100.00% of mass 198	67.63
443	17.00 - 23.00% of mass 442	13.07 (19.33)

Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\GD501.D

Date : 22-MAY-2018 11:39

Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG228757-1,SL4878

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: GD501.D
Spectrum: Avg. Scans 121-123 (6.48), Background Scan 118
Location of Maximum: 198.00
Number of points: 289

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	144	122.00	1246	196.00	4506	277.00	2766
38.00	461	123.00	2043	197.00	91	278.00	557
39.00	2921	124.00	1101	198.00	158592	279.00	62
40.00	149	125.00	1029	199.00	10733	283.00	409
41.00	297	126.00	143	200.00	777	284.00	128
44.00	170	127.00	82952	201.00	823	285.00	612
45.00	121	128.00	6554	203.00	1038	289.00	91
47.00	41	129.00	30576	204.00	5468	290.00	64
48.00	59	130.00	2753	205.00	8243	292.00	109
49.00	390	131.00	548	206.00	36728	293.00	605
50.00	11658	132.00	351	207.00	5019	294.00	133
51.00	49304	134.00	819	208.00	1194	295.00	82
52.00	2666	135.00	2247	209.00	388	296.00	8709
53.00	123	136.00	1060	210.00	414	297.00	1376
55.00	357	137.00	1306	211.00	1377	298.00	69
56.00	1717	138.00	339	213.00	58	301.00	59
57.00	4057	139.00	125	215.00	351	302.00	132
58.00	182	140.00	418	216.00	635	303.00	862
59.00	52	141.00	3854	217.00	9200	304.00	306
61.00	685	142.00	1600	218.00	1281	308.00	79
62.00	790	143.00	915	219.00	85	309.00	77
63.00	2364	144.00	258	220.00	93	310.00	107
64.00	311	145.00	200	221.00	8695	313.00	53
65.00	1390	146.00	669	222.00	222	314.00	473
68.00	697	147.00	1962	223.00	2192	315.00	922
69.00	57720	148.00	3639	224.00	20952	316.00	568
70.00	266	149.00	862	225.00	5246	317.00	96
73.00	344	150.00	297	226.00	562	321.00	384
74.00	5373	151.00	601	227.00	8147	322.00	121
75.00	8710	152.00	325	228.00	1098	323.00	3374
76.00	2751	153.00	1013	229.00	1777	324.00	577
77.00	67192	154.00	927	230.00	202	327.00	691
78.00	4257	155.00	2424	231.00	729	328.00	204
79.00	3616	156.00	3220	232.00	73	329.00	58
80.00	2801	157.00	681	233.00	91	332.00	225

Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\GD501.D

Date : 22-MAY-2018 11:39

Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG228757-1,SL4878

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: GD501.D
Spectrum: Avg. Scans 121-123 (6.48), Background Scan 118
Location of Maximum: 198.00
Number of points: 289

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	4312	158.00	701	234.00	474	333.00	236
82.00	1158	159.00	736	235.00	583	334.00	1829
83.00	1021	160.00	1346	236.00	473	335.00	550
85.00	728	161.00	1799	237.00	759	341.00	489
86.00	1060	162.00	559	238.00	58	342.00	108
87.00	368	163.00	88	239.00	309	346.00	662
88.00	201	164.00	165	240.00	139	347.00	83
89.00	105	165.00	1345	241.00	439	352.00	1000
91.00	1048	166.00	1115	242.00	1052	353.00	530
92.00	958	167.00	7572	243.00	984	354.00	911
93.00	6751	168.00	3293	244.00	16084	355.00	141
94.00	531	169.00	601	245.00	2175	365.00	3859
95.00	296	170.00	315	246.00	2802	366.00	423
96.00	387	171.00	311	247.00	644	371.00	256
97.00	215	172.00	660	248.00	101	372.00	1557
98.00	4926	173.00	933	249.00	533	373.00	377
99.00	4323	174.00	1435	250.00	70	383.00	466
100.00	406	175.00	3334	251.00	76	384.00	120
101.00	2666	176.00	720	252.00	85	390.00	246
102.00	89	177.00	1511	253.00	325	391.00	100
103.00	868	178.00	433	254.00	509	392.00	116
104.00	1799	179.00	5440	255.00	81672	401.00	60
105.00	1595	180.00	4220	256.00	11964	402.00	761
106.00	544	181.00	1756	257.00	965	403.00	847
107.00	21464	182.00	297	258.00	4535	404.00	288
108.00	3360	183.00	83	259.00	673	421.00	747
109.00	441	184.00	474	260.00	159	422.00	784
110.00	41040	185.00	2475	261.00	85	423.00	5246
111.00	6802	186.00	21840	264.00	84	424.00	1058
112.00	721	187.00	5901	265.00	1767	425.00	178
113.00	248	188.00	698	266.00	477	441.00	15660
115.00	84	189.00	1219	270.00	140	442.00	107248
116.00	1226	190.00	151	271.00	107	443.00	20728
117.00	14223	191.00	665	272.00	183	444.00	1904
118.00	1161	192.00	1406	273.00	2309	445.00	100

Data File: \\target_server\gg\chem\gcms-g.i\G052218.b\GD501.D

Date : 22-MAY-2018 11:39

Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG228757-1,SL4878

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: GD501.D
Spectrum: Avg. Scans 121-123 (6.48), Background Scan 118
Location of Maximum: 198.00
Number of points: 289

m/z	Y	m/z	Y	m/z	Y	m/z	Y
119.00	268	193.00	1877	274.00	6125		
120.00	277	194.00	502	275.00	34848		
121.00	132	195.00	207	276.00	3959		

Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\GD513.D

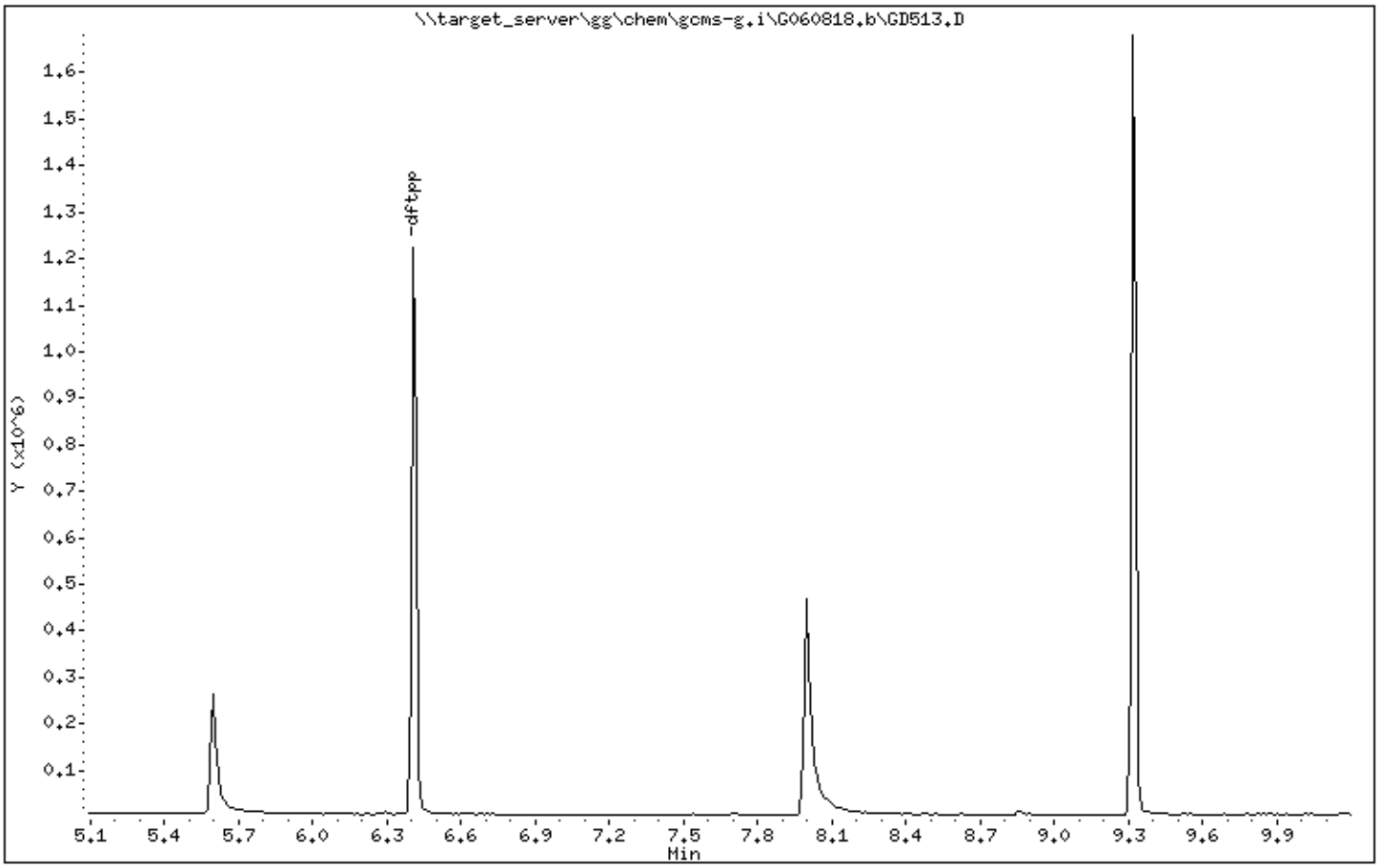
Date : 08-JUN-2018 10:54

Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG229961-1,SL4878

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\GD513.D

Date : 08-JUN-2018 10:54

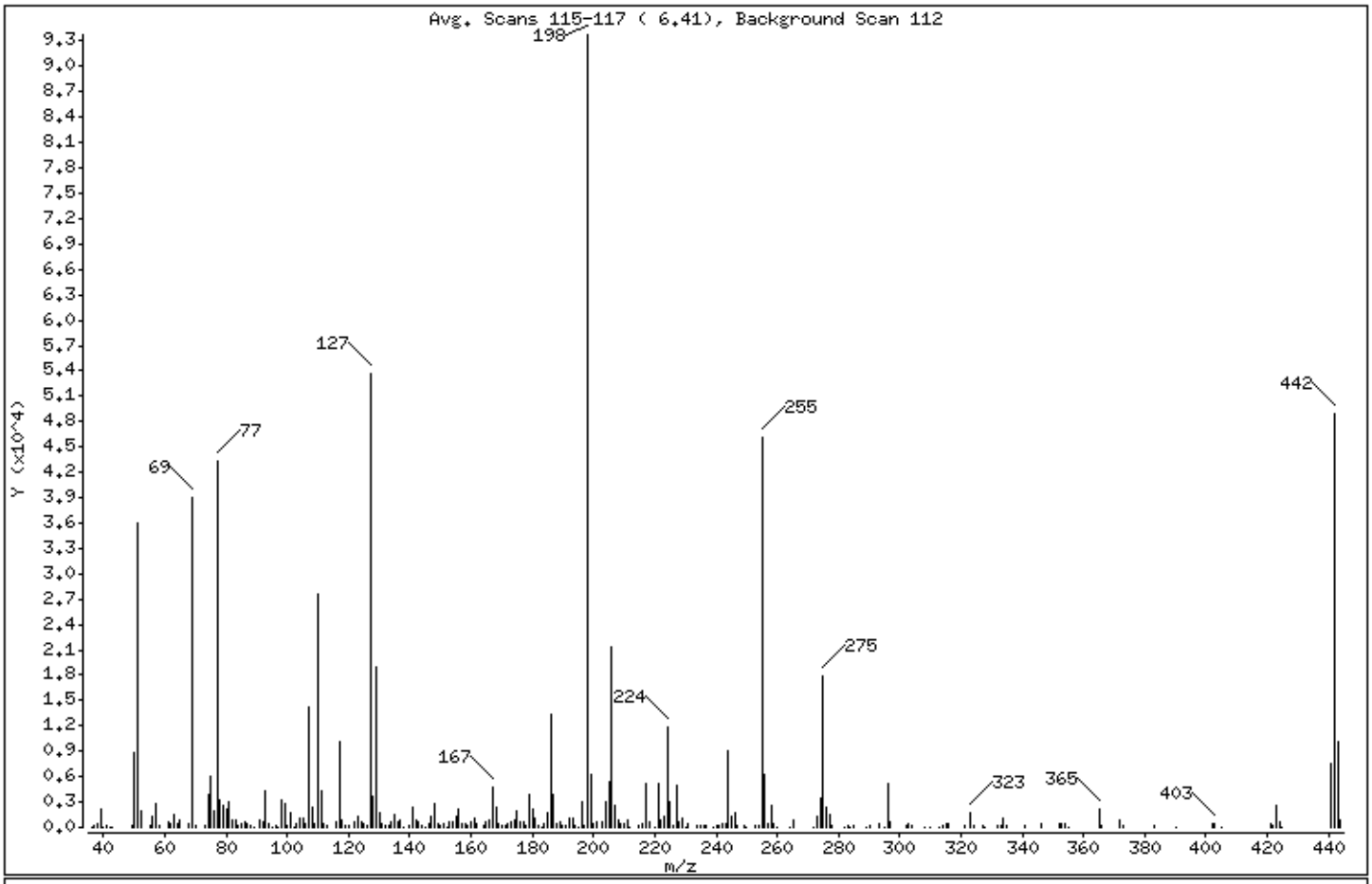
Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG229961-1,SL4878

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	38.45
68	Less than 2.00% of mass 69	0.54 (1.30)
69	Less than 100.00% of mass 198	41.56
70	Less than 2.00% of mass 69	0.17 (0.42)
127	40.00 - 60.00% of mass 198	57.34
197	Less than 1.00% of mass 198	0.23
199	5.00 - 9.00% of mass 198	6.63
275	10.00 - 30.00% of mass 198	19.14
365	1.00 - 100.00% of mass 198	2.26
441	0.01 - 100.00% of mass 443	7.94 (73.50)
442	40.00 - 100.00% of mass 198	52.13
443	17.00 - 23.00% of mass 442	10.80 (20.72)

Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\GD513.D

Date : 08-JUN-2018 10:54

Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG229961-1,SL4878

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: GD513.D
Spectrum: Avg. Scans 115-117 (6.41), Background Scan 112
Location of Maximum: 198.00
Number of points: 257

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	56	117.00	10156	185.00	1701	260.00	57
37.00	120	118.00	823	186.00	13319	264.00	75
38.00	421	119.00	150	187.00	3847	265.00	948
39.00	2208	120.00	195	188.00	415	272.00	67
40.00	80	122.00	715	189.00	679	273.00	1303
41.00	186	123.00	1281	190.00	191	274.00	3489
42.00	52	124.00	576	191.00	321	275.00	17944
43.00	64	125.00	516	192.00	1117	276.00	2346
49.00	124	126.00	125	193.00	980	277.00	1562
50.00	8797	127.00	53752	194.00	246	278.00	280
51.00	36040	128.00	3762	195.00	81	282.00	53
52.00	1899	129.00	19056	196.00	2929	283.00	126
55.00	176	130.00	1808	197.00	216	284.00	92
56.00	1289	131.00	424	198.00	93744	285.00	181
57.00	2840	132.00	160	199.00	6213	289.00	54
58.00	151	133.00	116	200.00	500	290.00	134
61.00	553	134.00	627	201.00	581	293.00	393
62.00	492	135.00	1573	203.00	701	295.00	67
63.00	1449	136.00	703	204.00	3119	296.00	5119
64.00	343	137.00	827	205.00	5453	297.00	546
65.00	952	138.00	81	206.00	21264	302.00	121
68.00	506	140.00	254	207.00	2580	303.00	523
69.00	38960	141.00	2287	208.00	764	304.00	172
70.00	162	142.00	850	209.00	330	308.00	57
73.00	185	143.00	614	210.00	366	310.00	52
74.00	3845	144.00	210	211.00	933	313.00	52
75.00	6033	145.00	96	212.00	61	314.00	242
76.00	1914	146.00	438	215.00	216	315.00	472
77.00	43400	147.00	1217	216.00	350	316.00	338
78.00	3214	148.00	2722	217.00	5115	321.00	170
79.00	2601	149.00	537	218.00	617	323.00	1666
80.00	2074	150.00	148	220.00	59	324.00	247
81.00	2940	151.00	466	221.00	5074	327.00	271
82.00	875	152.00	92	222.00	873	328.00	89
83.00	937	153.00	681	223.00	1376	332.00	142

Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\GD513.D

Date : 08-JUN-2018 10:54

Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG229961-1,SL4878

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: GD513.D
Spectrum: Avg. Scans 115-117 (6.41), Background Scan 112
Location of Maximum: 198.00
Number of points: 257

m/z	Y	m/z	Y	m/z	Y	m/z	Y
84.00	109	154.00	681	224.00	11802	333.00	188
85.00	534	155.00	1389	225.00	2958	334.00	1039
86.00	579	156.00	2204	226.00	297	335.00	268
87.00	448	157.00	501	227.00	5032	341.00	188
88.00	145	158.00	448	228.00	636	346.00	349
89.00	95	159.00	290	229.00	1005	352.00	437
91.00	767	160.00	646	230.00	76	353.00	364
92.00	667	161.00	1049	231.00	395	354.00	396
93.00	4372	162.00	377	234.00	239	355.00	52
94.00	366	164.00	111	235.00	298	365.00	2117
95.00	73	165.00	735	236.00	206	366.00	307
96.00	233	166.00	828	237.00	284	372.00	888
97.00	72	167.00	4689	239.00	69	373.00	163
98.00	3257	168.00	2317	240.00	226	383.00	221
99.00	2826	169.00	489	241.00	252	390.00	74
100.00	302	170.00	150	242.00	537	402.00	416
101.00	1675	171.00	153	243.00	534	403.00	515
102.00	105	172.00	427	244.00	9056	405.00	54
103.00	502	173.00	630	245.00	1245	421.00	400
104.00	983	174.00	878	246.00	1655	422.00	275
105.00	975	175.00	1885	247.00	249	423.00	2669
106.00	373	176.00	610	249.00	241	424.00	571
107.00	14245	177.00	717	250.00	54	425.00	60
108.00	2293	178.00	261	253.00	168	441.00	7443
109.00	349	179.00	3831	254.00	196	442.00	48872
110.00	27600	180.00	2240	255.00	46176	443.00	10126
111.00	4234	181.00	1121	256.00	6302	444.00	956
112.00	499	182.00	249	257.00	500		
113.00	163	183.00	55	258.00	2519		
116.00	638	184.00	355	259.00	400		

Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client:
Lab ID: WG229718-1
Client ID: Method Blank Sample
Project:
SDG: SL4878
Lab File ID: G3298.D

Sample Date:
Received Date:
Extract Date: 05-JUN-18
Extracted By: KF
Extraction Method: SW846 3520C
Lab Prep Batch: WG229718

Analysis Date: 08-JUN-18
Analyst: JCG
Analysis Method: SW846 8270D SIM
Matrix: AQ
% Solids: NA
Report Date: 13-JUN-18

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane	U	0.25	ug/L	1	.25	0.25	0.085
1,4-Dioxane-D8		64.8	%				

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3298.D
Report Date: 13-Jun-2018 13:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G060818.b\G3298.D
Lab Smp Id: WG229718-1 Client Smp ID: WG229718-Blank
Inj Date : 08-JUN-2018 11:32 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG229718-1,SL4878
Misc Info : WG229961,WG229718,WG229961-2,SL4878-1
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G060818.b\GDIOXN91.m
Meth Date : 11-Jun-2018 07:47 cgomez Quant Type: ISTD
Cal Date : 22-MAY-2018 12:37 Cal File: G3050.D
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

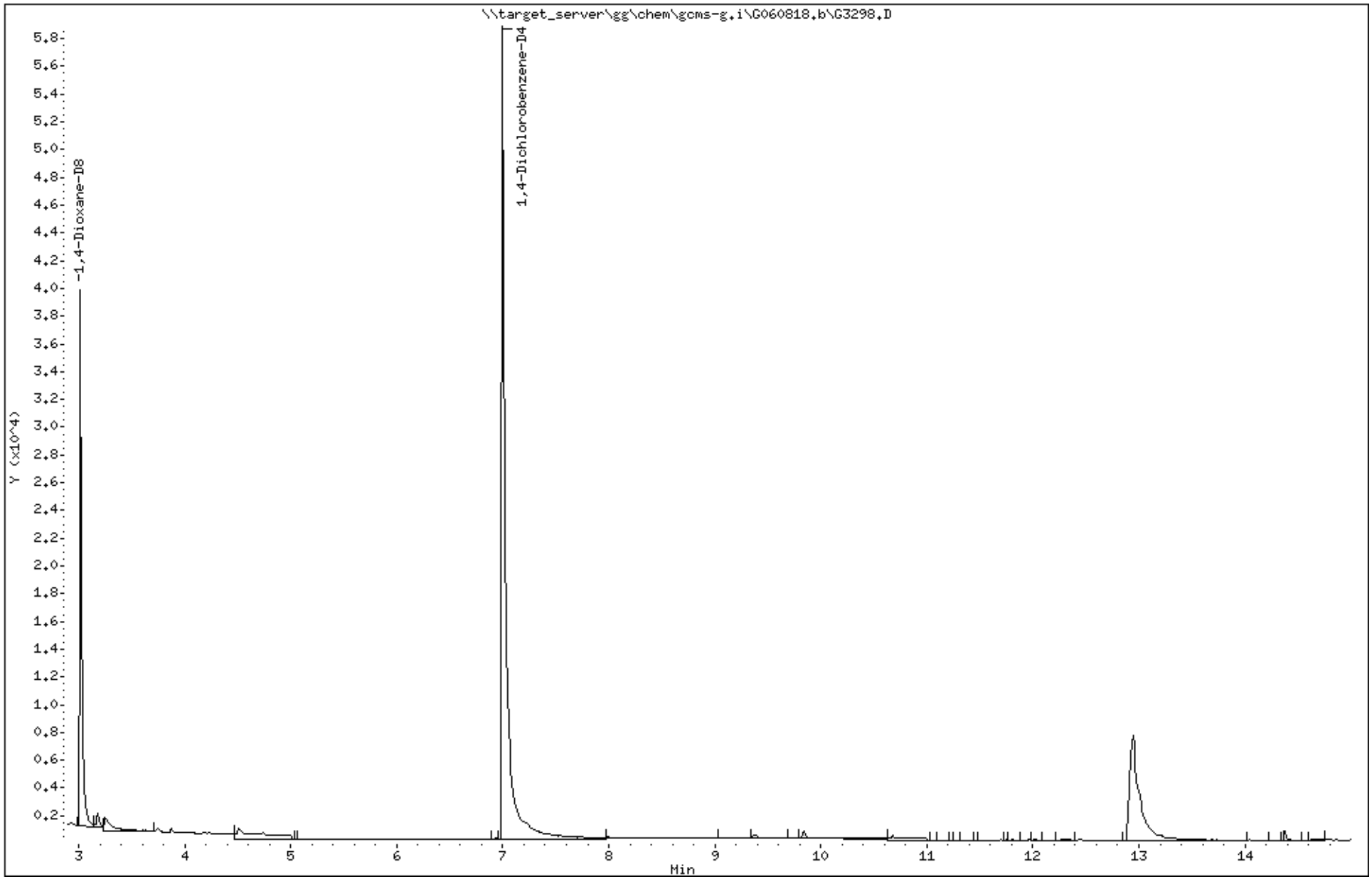
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 2 1,4-Dioxane-D8	96	3.017	3.018	(0.431)	32060	1.29706	1.30	
* 3 1,4-Dichlorobenzene-D4	150	6.997	6.996	(1.000)	72687	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3298.D
Date : 08-JUN-2018 11:32
Client ID: WG229718-Blank
Instrument: gcms-g.i
Sample Info: WG229718-1,SL4878
Purge Volume: 1.0
Operator: JCG
Column phase: RTX5-MS
Column diameter: 0.25



Katahdin
ANALYTICAL SERVICES

LCS Recovery Report

Client:
Lab ID: WG229718-2
Client ID: LCS
Project:
SDG: SL4878
LCS File ID: G3299.D

Sample Date:
Received Date:
Extract Date: 05-JUN-18
Extracted By: KF
Extraction Method: SW846 3520C
Lab Prep Batch: WG229718

Analysis Date: 08-JUN-18
Analyst: JCG
Analysis Method: SW846 8270D SIM
Matrix: AQ
% Solids: NA
Report Date: 13-JUN-18

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
1,4-Dioxane	59.5	2.00	1.19	ug/L	26-106
1,4-Dioxane-D8	53.3				30-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3299.D
Report Date: 13-Jun-2018 13:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G060818.b\G3299.D
Lab Smp Id: WG229718-2 Client Smp ID: WG229718-LCS
Inj Date : 08-JUN-2018 11:53 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG229718-2,SL4878
Misc Info : WG229961,WG229718,WG229961-2,SL4878-1
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G060818.b\GDIOXN91.m
Meth Date : 11-Jun-2018 07:47 cgomez Quant Type: ISTD
Cal Date : 22-MAY-2018 12:37 Cal File: G3050.D
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

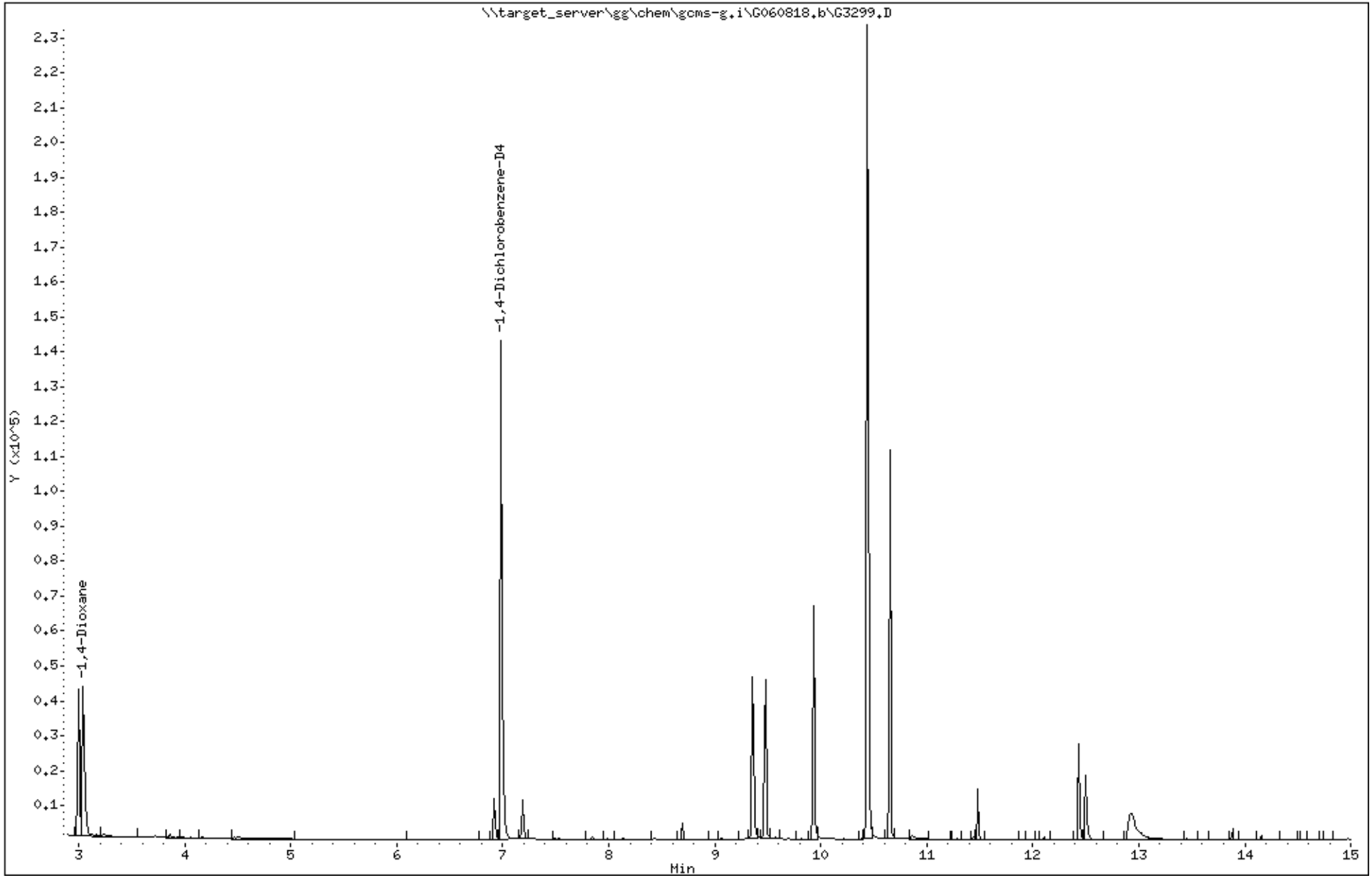
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
	1 1,4-Dioxane	88	3.040	3.062	(0.435)	36884	1.19251	1.19	
$	2 1,4-Dioxane-D8	96	2.995	3.018	(0.429)	30920	1.06643	1.07	
*	3 1,4-Dichlorobenzene-D4	150	6.985	6.996	(1.000)	85263	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3299.D
Date : 08-JUN-2018 11:53
Client ID: WG229718-LCS
Instrument: gcms-g.i
Sample Info: WG229718-2,SL4878
Purge Volume: 1.0
Operator: JCG
Column phase: RTX5-MS
Column diameter: 0.25



Katahdin
ANALYTICAL SERVICES

MS/MSD Recovery Report

MS ID: WG229718-5
MSD ID: WG229718-6
Sample ID: SL4878-1
Client ID: MW-207A-1R
Project:
SDG: SL4878
MS File ID: G3316.D

Received Date:
Extract Date: 05-JUN-18
Extracted By: KF
Extraction Method: SW846 3520C
Lab Prep Batch: WG229718
Report Date: 14-JUN-18
MSD File ID: G3317.D

Analysis Date: 08-JUN-18
Analyst: JCG
Analysis Method: SW846 8270D SIM
Matrix: AQ
% Solids: NA

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
1,4-Dioxane	1.89	1.89	ug/L	0.64	1.5	1.6	45.2	49.4	5	30	26-106
1,4-Dioxane-D8							48.4	51.8			30-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3316.D
Report Date: 13-Jun-2018 13:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G060818.b\G3316.D
Lab Smp Id: WG229718-5 Client Smp ID: MW-207A-1RMS
Inj Date : 08-JUN-2018 17:46 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG229718-5,SL4878
Misc Info : WG229961,WG229718,WG229961-2,SL4878-1
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G060818.b\GDIOXN91.m
Meth Date : 11-Jun-2018 07:47 cgomez Quant Type: ISTD
Cal Date : 22-MAY-2018 12:37 Cal File: G3050.D
Als bottle: 21 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

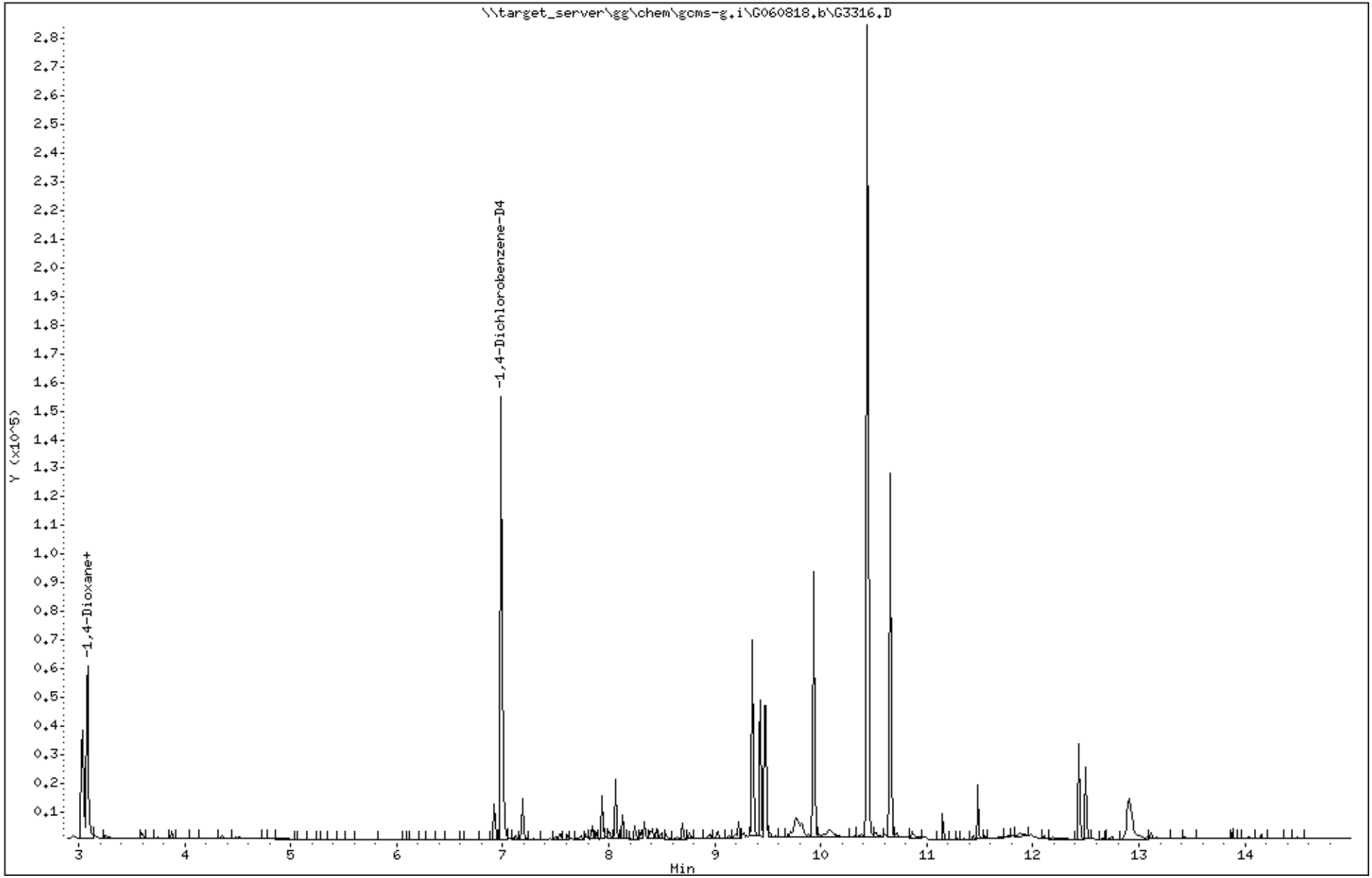
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
	1 1,4-Dioxane	88	3.084	3.062	(0.442)	54854	1.57679	1.49	
$	2 1,4-Dioxane-D8	96	3.039	3.018	(0.435)	31561	0.96780	0.913	
*	3 1,4-Dichlorobenzene-D4	150	6.985	6.996	(1.000)	95900	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3316.D
Date : 08-JUN-2018 17:46
Client ID: MW-207A-1RMS
Instrument: gcms-g.i
Sample Info: WG229718-5,SL4878
Purge Volume: 1.1
Operator: JCG
Column phase: RTX5-MS
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3317.D
Report Date: 13-Jun-2018 13:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G060818.b\G3317.D
Lab Smp Id: WG229718-6 Client Smp ID: MW-207A-1RMSD
Inj Date : 08-JUN-2018 18:07 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG229718-6,SL4878
Misc Info : WG229961,WG229718,WG229961-2,SL4878-1
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G060818.b\GDIOXN91.m
Meth Date : 11-Jun-2018 07:47 cgomez Quant Type: ISTD
Cal Date : 22-MAY-2018 12:37 Cal File: G3050.D
Als bottle: 22 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

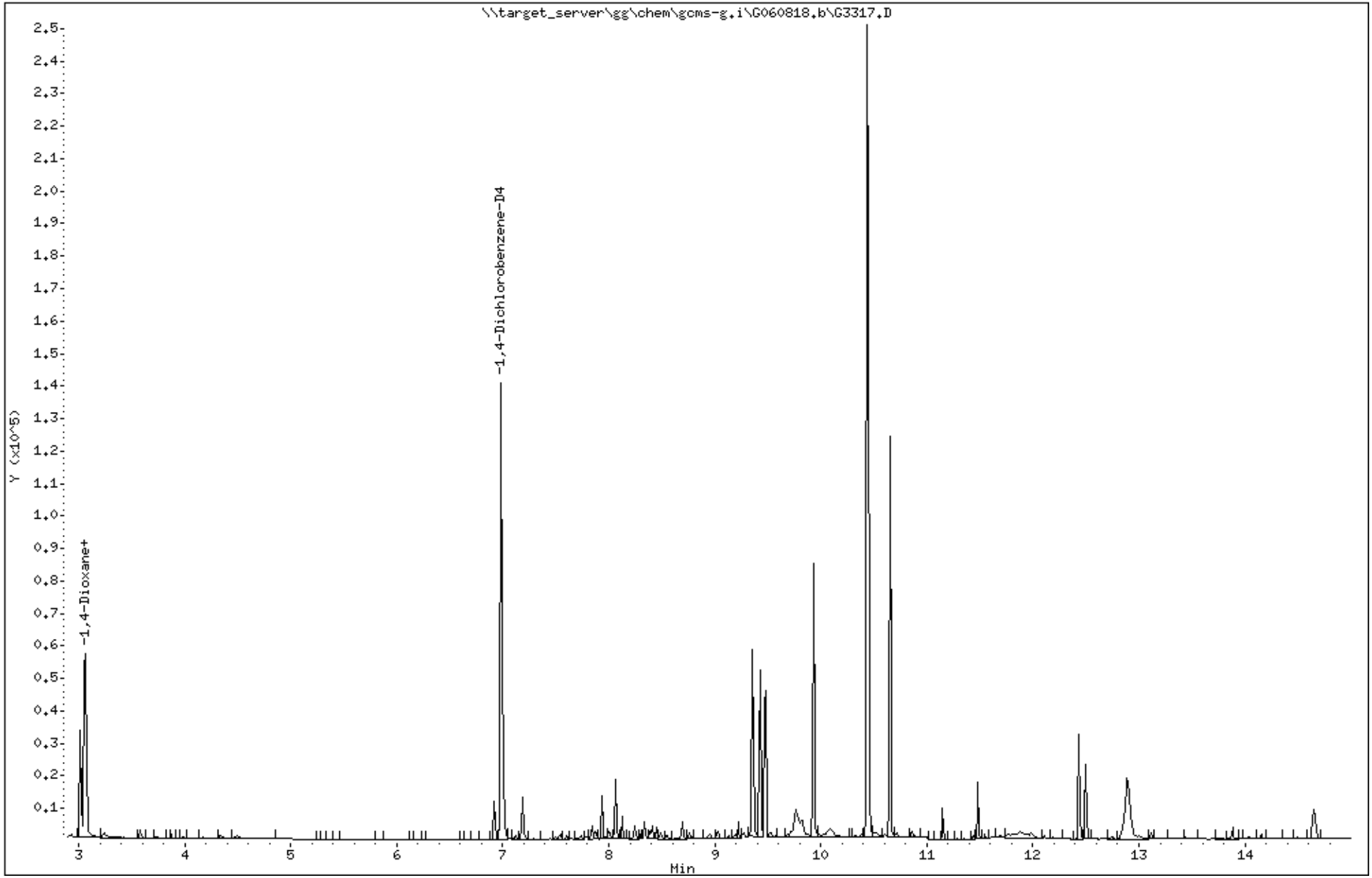
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
	1 1,4-Dioxane	88	3.062	3.062	(0.438)	51747	1.66152	1.57	
$	2 1,4-Dioxane-D8	96	3.018	3.018	(0.432)	30275	1.03698	0.978	
*	3 1,4-Dichlorobenzene-D4	150	6.984	6.996	(1.000)	85855	0.80000		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-g.i\G060818.b\G3317.D
Date : 08-JUN-2018 18:07
Client ID: MW-207A-1RMSD
Instrument: gcms-g.i
Sample Info: WG229718-6,SL4878
Purge Volume: 1.1
Operator: JCG
Column phase: RTX5-MS
Column diameter: 0.25



Logbooks and Supporting Documents

1,4 Dioxane
CLLE

KATAHDIN ANALYTICAL SERVICES, LLC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP)	SW846 3520 (CLLE) ✓	SW846 3535 (SPE)
Analytical Method:(check one)	SW846 8270	SW846 8270 SIM ✓	EPA 625 (mark meniscus w/ marker to determine IV)
Surrogate ID: SV2850	Surrogate ID: —	Spike ID: SIM:SV2856	Spike ID: —
Methylene Chloride Lot #: DT486	pH Paper Lot # HC727135	KI Starch Paper ID: ~~102017~~ #45 102017	Note samples requiring TRC neutralization in comments section.
pH (1st Extraction) 3|1	H_2SO_4 Lot # —	pH (2nd Extraction) NR	NaOH Lot # 190393
$NaSO_4$ Lot # 2796800	Filter Paper Lot #: 140810417	Boiling Stones ID: 3-22-2019	Vial Lot #: 393232
Nitrogen Bath Temperature: 36°C			
Prep Start Time: 1100	Prep End Time: 1230	CLLE Start Time: 45@1230	CLLE End Date & Time: 6/6 @ 0630

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV 318	Initials	Comments R476972
6-5-18	KF	WG229718-1	1000	1mL	NR		✓	1mL	6-6-18	A9	DP	
		-2	1000		1mL					A10		
		-3	1040							B1		MS SL4724-3L
		-4	1030							B2		MSD " -3M
		-5	1060							B3		MS SL4878-1A
		-6	1060							B4		MSD " -1B
									KF	6-6-18		

EX-007 – Revision 5 – 11/08/2017

QAEX356

0000028

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location	Initials	Comments
6-5-18	KF	SL4724-1D	1040	1mL	NR		✓	1mL	6-6-18	B5	DP	
		-2D	1050							6		
		-3N	1000							7		MSD
		-4D	1050							8		
		SL4778-2D	1010							9		
		-3D	~~1030~~ 1060							B10		
		SL4803-1D	KF ~~1020~~ 1060							C1		
		SL4835-1J	6/6 ~~1010~~ 1050							2		
		-2J	1030							3		
		-3J	1020							4		
		-4J	1010							5		
		-5M	1010							6		
		-6J	990							7		
		SL4878-1C	1040							8		MS/D
		-2A	1060							9		
		-3A	1060							C10		
		-4A	1060							D1		
		SL4913-2D	970							D2		
		-3D	1060							D3		
									KF	6-6-18		

Reviewed By_____ Date_____

EX-007 – Revision 5 – 11/08/2017

QAEX356

0000029

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-G

DATE OF DFTPP INJECTION: 05 22 18

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG228757-1	50 ng DFTPP	GD501	1	1	DFTPPSIM	20	JLG	OK
-4	SSTD 2.0 GC522	G3048		2	GD10XN91			✓
-2	0.25	49		3				✓
-3	0.5	50		4				✓
-5	7.0	51		5				✓
-6	10	52		6				✓
-7	15	53		7				✓
-8	(MD)	54		8				OK 53025

STANDARD	CODE
DFTPP	53064
CAL. STD.	53103
IS MIX	53097

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-G

DATE OF DFTPP INJECTION: 060818

JOB	SAMPLE	DATAFILE	DF	VIAL #	METHOD	UL INJ	CHEMIST	COMMENTS
WG229961-1	50 ng DFTPP	G7513	1	1	DFTPSM	2.0	ICK	OK
-2	SSTD 2.0 G0608	G3297		2	GDUGXW91			OK
	WG229718-1	98		3				OK
	↓ -2	99		4				OK
	SL4724-1	G3300		5				OK
	↓ -2	01		6				OK
	↓ -3	02		7				OK
	WG229718-3	03		8				OK
	↓ -4	04		9				OK
	SL4724-4	05		10				OK
	SL4778-2	06		11				OK
	↓ -3	07		12				OK
	SL4803-1	08		13				OK
	SL4835-1	09		14				OK
	-2	10		15				OK
	-3	11		16				OK
	-4	12		17				OK
	-5	13		18				OK
	↓ -6	14		19				OK
	SL4878-1	15		20				OK
	WG229718-5	16		21				OK
	↓ -6	17		22				OK
	SL4878-2	18		23				OK
	-3	19		24				OK
	↓ -4	20		25				OK
	SL4913-2	21		26				OK
	↓ -3	22		27				OK
	SSTD 2.0 G0608	↓ 23-25	1	28	↓	↓	↓	OK

STANDARD	CODE
DFTPP	53102
CAL. STD.	53103
ICV. STD.	—
IS MIX	53115

REVIEWED AND APPROVED BY: _____
DATE: _____

Attachment 6
Monitoring Well Abandonment

FIGURE 3

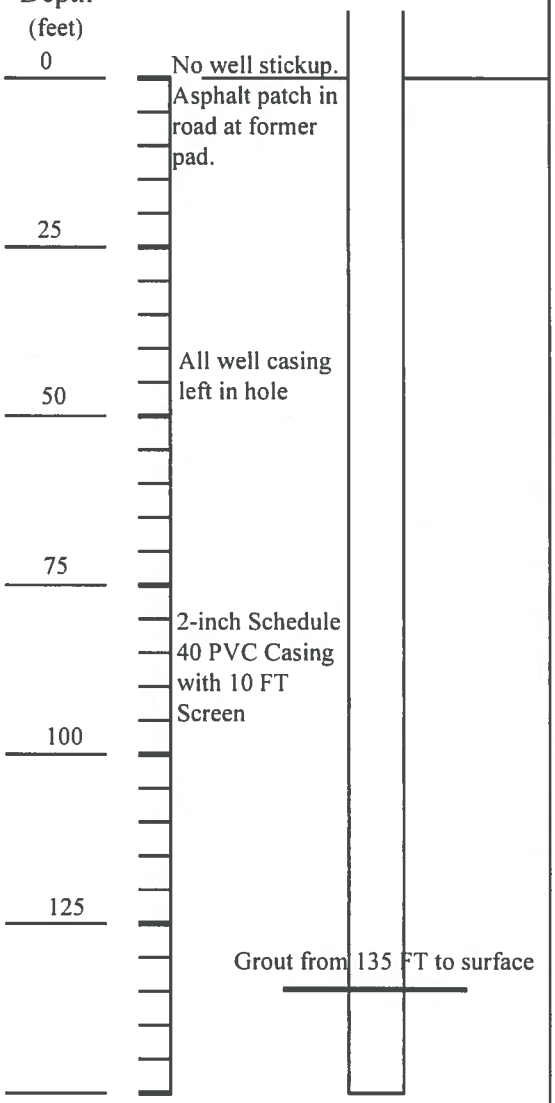
WELL DECOMMISSIONING RECORD

Site Name: Former Grumman Settling Ponds, OU3	Well I.D.: MW-207A-1
Site Location: N. 5th Street, S. of Sycamore Ave, Bethpage, NY	Driller: Keith Butcher
Drilling Co.: SGS North America, Inc.	Inspector: Chad Thompson
	Date: 5/10/2018

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	135
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	14
Quantity of cement used (lbs.)	160
Cement type	Portland Type 1
Quantity of bentonite used (lbs.)	6
Quantity of calcium chloride used (lbs.)	0
Volume of grout prepared (gal.)	22
Volume of grout used (gal.)	22

WELL SCHEMATIC*



COMMENTS:
Grouting in-place
Northing: 214031.8, Easting: 1126519.5

* Sketch in all relevant decommissioning data, including interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Drilling Contractor

Department Representative

FIGURE 3

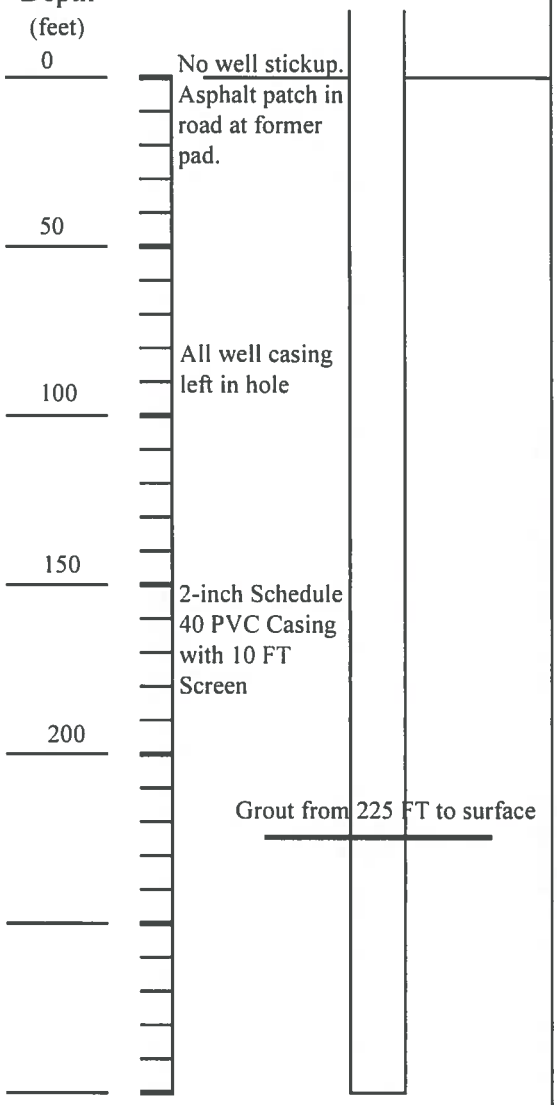
WELL DECOMMISSIONING RECORD

Site Name: Former Grumman Settling Ponds, OU3	Well I.D.: MW-207B-1
Site Location: N. 5th Street, S. of Sycamore Ave, Bethpage, NY	Driller: Keith Butcher
Drilling Co.: SGS North America, Inc.	Inspector: Chad Thompson
	Date: 5/14/2018

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	225
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	25
Quantity of cement used (lbs.)	300
Cement type	Portland Type 1
Quantity of bentonite used (lbs.)	10
Quantity of calcium chloride used (lbs.)	0
Volume of grout prepared (gal.)	38
Volume of grout used (gal.)	38

WELL SCHEMATIC*



COMMENTS:
Grouting in-place
Northing: 214031.8, Easting: 1126519.5

* Sketch in all relevant decommissioning data, including interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Keith Butcher
Drilling Contractor

Department Representative

SGS

Date 5-10-15 Day Thur. Start Time 7:00 Finish Time 4:00

☐ MOB ☐ DEMOB Drill Hours Reg: 8 OT: 1

☒ CONTINUE Travel Hours Reg: _____ Standby Hours: _____

JOB # 6141

RIG # Schramm Driller: Butler Helper(s): PK, Sanzo, Hartman

Daily Drill Log

☐ Boring ☒ Well # MW-207A-1R

Well # _____

Well # _____

Client: Emagine

Job Name and Address: Long Island NY

No. of wells/borings installed today: _____

Total footage drilled today: _____

Dia. of borehole(s): _____

Depth of borehole(s): _____

BORING LOG

Depth	Formation

Drilling method: ☐ Other: _____

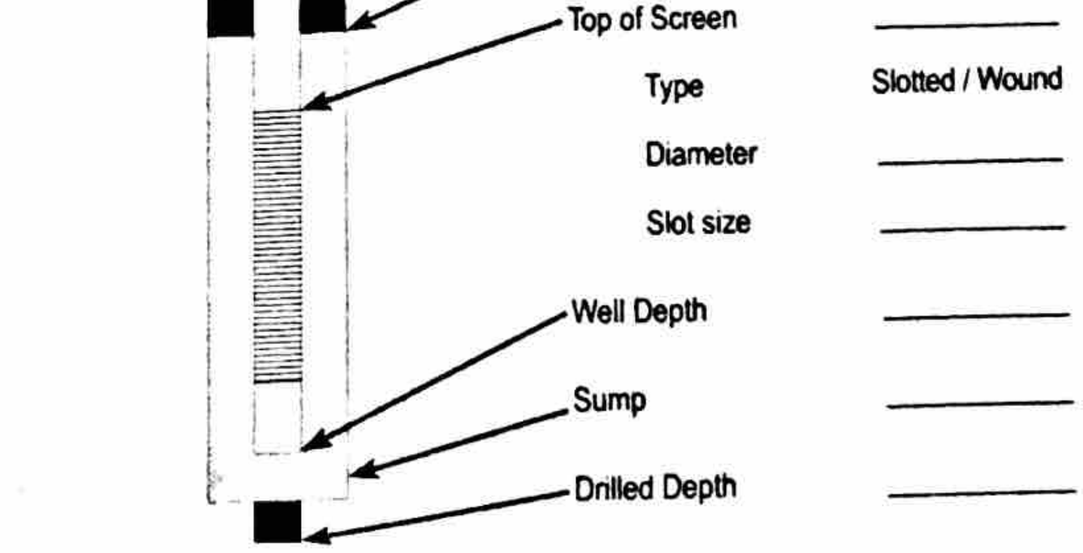
☐ HSA ☐ Mud Rotary ☐ Air Rotary ☐ DPT

☐ Vacuum Excavation ☐ Development

☐ Rental Equipment _____

Comments/delays - explain: pick up drum tipper from WES - safety meeting - dump 12 drums into rolloff - load up materials for grouting - pump out mud tub - start out mud tub - dump drums to rolloff - grout up MW-207A to surface - pump mud tub again - load up Schramm - back up to rd and clean up the street - dump drums again

WELL DESCRIPTION



MATERIALS USED

Quantity	Description	Size
	Filter Pack Sand	1 2 3
	Choker Sand	00 0
26	Cement	
1	Bentonite	Plug / Gran / Gel
	Surface Casing	PVC / Steel
	Blank Casing	
	Screen	
	Surface Protection	FM ____" ST ____"
	Concrete Mix	
	MC5 Liners	
	DT Liner	2.25" / 3.25"
4	Bar Drum	
4 hrs	IDW	

SGS

Date 5-14-13 Day Tu Start Time 7:00 Finish Time 2:00

☐ MOB ☐ DEMOB Drill Hours Reg 8 OT

☐ CONTINUE Travel Hours Reg Standby Hours

JOB # L-

RIG # Diedrich Driller Ed Helper(s) Jr Jorge

Daily Drill Log

☐ Boring ☐ Well # _____

Well # _____

Well # _____

Client: Empire

Job Name and Address: Ler Jerard NY

_____

No. of wells/borings installed today: _____

Total footage drilled today: _____

Dia. of borehole(s): _____

Depth of borehole(s): _____

BORING LOG

Depth	Formation

Drilling method: ☐ Other: _____

☐ HSA ☐ Mud Rotary ☐ Air Rotary ☐ DPT

☐ Vacuum Excavation ☐ Development

☐ Rental Equipment _____

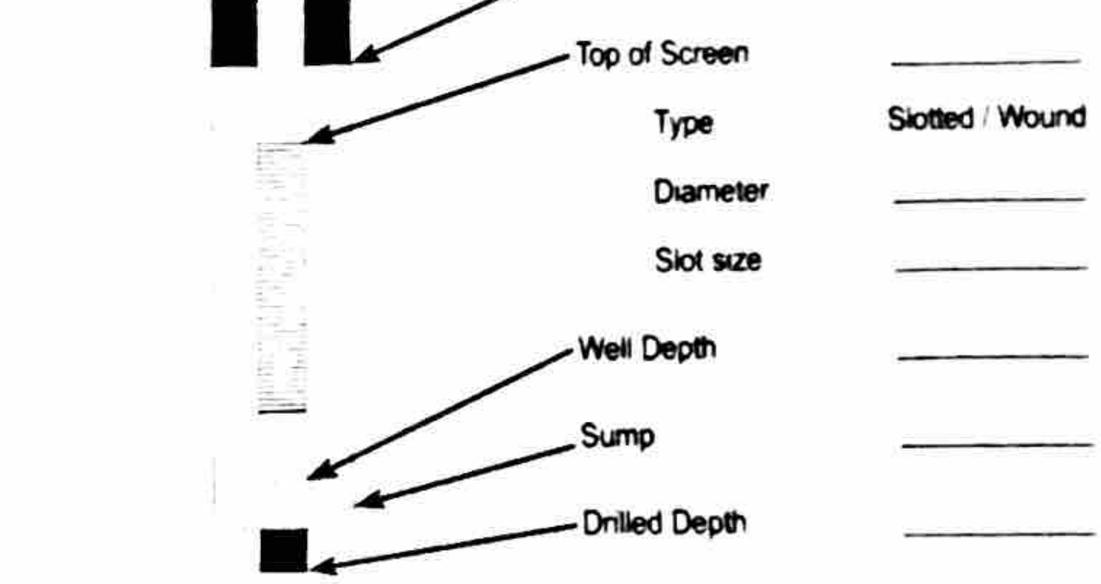
Comments/delays - explain: Safety meeting - locate for well appurtenances - pump 6x20 well pt elevation w/ pump rises and turns pre-set up or staged trailer to be drilled - review boring - team up and set up 6" hammer - turn rear mast on - rig will not start - will stop - attempt to troubleshoot - not working - remain the site for the weekend -

Weather Conditions: _____

Driller

Verified Contractor

WELL DESCRIPTION



MATERIALS USED

Quantity	Description	Size
	Filter Pack Sand	1 2 3
	Choker Sand	00 0
2	Cement	
1	Bentonite	Plug / Gran / Gel
	Surface Casing	PVC / Steel
	Blank Casing	
	Screen	
	Surface Protection	FM ____' ST ____'
	Concrete Mix	
	MC5 Liners	
	DT Liner	2.25" / 3.25"
370	Ft. 2" well encasement	
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

☐ TAILGATE SAFETY MEETING PERFORMED

TOPIC COVERED H&F

Attachment 7
Community Air Monitoring Plan Data

Timestamp (UTC)	Temperatu	Pressure (h	Batt. Volta	Current (m	VOC (ppm)	VOC (Peak	VOC (Low)	VOC (STEL)	VOC (TWA)	Mass Conc	VOC (ppm)	VOC (Peak)	VOC (Low)	VOC (STEL)	VOC (TWA)	Location	Altitude	Mass Conc. Total (mg/m³)	Device
10/3/2017 19:30			13.1	82												40.75426;-	5	0.005	
10/3/2017 19:31																		0.008	
10/3/2017 19:32																		0.012	
10/3/2017 19:33					0	0.323	0	0	0.058									0.009	
10/3/2017 19:34					0	0.323	0	0	0.058									0.008	
10/3/2017 19:35			14.3	77.9	0	0.323	0	0	0.058							40.75426;-	5	0.007	
10/3/2017 19:36					0	0.323	0	0	0.058									0.006	
10/3/2017 19:37					0	0.323	0	0	0.058									0.006	
10/3/2017 19:38					0	0.323	0	0	0.058									0.005	
10/3/2017 19:39					0	0.323	0	0	0.058									0.005	
10/3/2017 19:40			14.3	85	0	0.323	0	0	0.058							40.75423;-	7	0.005	
10/3/2017 19:41					0	0.323	0	0	0.058									0.005	
10/3/2017 19:42					0	0.323	0	0	0.058									0.005	
10/3/2017 19:43					0	0.323	0	0	0.058									0.005	
10/3/2017 19:44					0	0.323	0	0	0.058									0.005	
10/3/2017 19:45			14.1	118.4	0	0.323	0	0	0.058									0.005	
10/3/2017 19:45																40.75421;-	3		
10/3/2017 19:46					0	0.323	0	0	0.058									0.005	
10/3/2017 19:47					0	0.323	0	0	0.058									0.005	
10/3/2017 19:48					0	0.323	0	0	0.058									0.005	
10/3/2017 19:49					0	0.323	0	0	0.058									0.005	
10/3/2017 19:50			14.2	76.9	0	0.323	0	0	0.058									0.005	
10/3/2017 19:50																40.75423;-	5		
10/3/2017 19:51					0	0.323	0	0	0.058									0.008	
10/3/2017 19:52					0	0.323	0	0	0.058									0.012	
10/3/2017 19:53					0	0.323	0	0	0.058									0.01	
10/3/2017 19:54					0	0.323	0	0	0.058									0.008	
10/3/2017 19:55			13.4	81	0	0.323	0	0	0.058									0.007	
10/3/2017 19:55																40.75426;-	9		
10/3/2017 19:56					0	0.323	0	0	0.058									0.006	
10/3/2017 19:57					0	0.323	0	0	0.058									0.006	
10/3/2017 19:58					0	0.323	0	0	0.058									0.005	
10/3/2017 19:59					0	0.323	0	0	0.058									0.005	
10/3/2017 20:00			13.1	87	0	0.323	0	0	0.058									0.004	
10/3/2017 20:00																40.75428;-	12		
10/3/2017 20:01					0	0.323	0	0	0.058									0.004	
10/3/2017 20:02					0	0.323	0	0	0.058									0.004	
10/3/2017 20:03					0	0.323	0	0	0.058									0.004	
10/3/2017 20:04					0	0.323	0	0	0.058									0.004	
10/3/2017 20:05			13	82	0	0.323	0	0	0.058									0.004	
10/3/2017 20:05																40.75425;-	11		
10/3/2017 20:06					0	0.323	0	0	0.058									0.004	
10/3/2017 20:07					0	0.323	0	0	0.058									0.004	
10/3/2017 20:08					0	0.323	0	0	0.058									0.004	
10/3/2017 20:09					0	0.323	0	0	0.058									0.004	
10/3/2017 20:10			12.9	90.1	0	0.323	0	0	0.058									0.004	
10/3/2017 20:10																40.75425;-	10		
10/3/2017 20:11					0	0.323	0	0	0.058									0.004	
10/3/2017 20:12					0	0.323	0	0	0.058									0.004	
10/3/2017 20:13					0	0.323	0	0	0.058									0.004	
10/3/2017 20:14					0	0.323	0	0	0.058									0.004	
10/3/2017 20:15			12.9	83	0	0.323	0	0	0.058									0.004	
10/3/2017 20:15																40.75426;-	13		
10/3/2017 20:16					0	0.323	0	0	0.058									0.004	

10/3/2017 20:17			0	0.323	0	0	0.058			0.004
10/3/2017 20:18			0	0.323	0	0	0.058			0.004
10/3/2017 20:19			0	0.323	0	0	0.058			0.004
10/3/2017 20:20	12.9	84	0	0.323	0	0	0.058			0.004
10/3/2017 20:20								40.75423;-	17	
10/3/2017 20:21			0	0.323	0	0	0.058			0.004
10/3/2017 20:22			0	0.323	0	0	0.058			0.004
10/3/2017 20:23			0	0.323	0	0	0.058			0.004
10/3/2017 20:24			0	0.323	0	0	0.058			0.004
10/3/2017 20:25	12.9	83	0	0.323	0	0	0.058			0.004
10/3/2017 20:25								40.75426;-	11	
10/3/2017 20:26			0	0.323	0	0	0.058			0.004
10/3/2017 20:27			0	0.323	0	0	0.058			0.004
10/3/2017 20:28			0	0.323	0	0	0.058			0.004
10/3/2017 20:29			0	0.323	0	0	0.058			0.004
10/3/2017 20:30	12.9	86	0	0.323	0	0	0.058			0.004
10/3/2017 20:30								40.75426;-	13	
10/3/2017 20:31			0	0.323	0	0	0.058			0.004
10/3/2017 20:32			0	0.323	0	0	0.058			0.004
10/3/2017 20:33			0	0.323	0	0	0.058			0.004
10/3/2017 20:34			0	0.323	0	0	0.058			0.004
10/3/2017 20:35	12.9	93.1	0	0.323	0	0	0.058			0.004
10/3/2017 20:35								40.7543;-7	8	
10/3/2017 20:36			0	0.323	0	0	0.058			0.004
10/3/2017 20:37			0	0.323	0	0	0.058			0.004
10/3/2017 20:38			0	0.323	0	0	0.058			0.004
10/3/2017 20:39			0	0.323	0	0	0.058			0.004
10/3/2017 20:40	12.9	87	0	0.323	0	0	0.058			0.004
10/3/2017 20:40								40.75429;-	10	
10/3/2017 20:41			0	0.323	0	0	0.058			0.004
10/3/2017 20:42			0	0.323	0	0	0.058			0.004
10/3/2017 20:43			0	0.323	0	0	0.058			0.004
10/3/2017 20:44			0	0.323	0	0	0.058			0.004
10/3/2017 20:45	12.9	93.1	0	0.323	0	0	0.058			0.004
10/3/2017 20:45								40.75426;-	13	
10/3/2017 20:46			0	0.323	0	0	0.058			0.004
10/3/2017 20:47										0.011
10/4/2017 12:15	13.1	84								0.015
10/4/2017 12:15								40.75425;-	19	
10/4/2017 12:16										0.033
10/4/2017 12:17										0.016
10/4/2017 12:18										0.036
10/4/2017 12:19										0.038
10/4/2017 12:20	13.2	89.1	0	0	0	0	0			0.032
10/4/2017 12:20								40.75425;-	11	
10/4/2017 12:21			0	0	0	0	0			0.026
10/4/2017 12:22			0	0	0	0	0			0.021
10/4/2017 12:23			0	0	0	0	0			0.017
10/4/2017 12:24			0	0	0	0	0			0.015
10/4/2017 12:25	13.2	122.5	0	0	0	0	0	40.75431;-	6	0.015
10/4/2017 12:26			0	0	0	0	0			0.015
10/4/2017 12:27			0	0	0	0	0			0.014
10/4/2017 12:28			0	0	0	0	0			0.013
10/4/2017 12:29			0	0	0	0	0			0.015
10/4/2017 12:30	13	80	0	0	0	0	0	40.75429;-	9	0.017
10/4/2017 12:31			0	0	0	0	0			0.015

10/4/2017 12:32			0	0	0	0	0			0.014
10/4/2017 12:33			0	0	0	0	0			0.013
10/4/2017 12:34			0	0	0	0	0			0.011
10/4/2017 12:35	12.9	89.1	0	0	0	0	0			0.011
10/4/2017 12:35								40.7543;-7	13	
10/4/2017 12:36			0	0	0	0	0			0.01
10/4/2017 12:37			0	0	0	0	0			0.01
10/4/2017 12:38			0	0	0	0	0			0.01
10/4/2017 12:39			0	0	0	0	0			0.011
10/4/2017 12:40	12.8	81	0	0	0	0	0			0.012
10/4/2017 12:40								40.75426;-	18	
10/4/2017 12:41			0	0	0	0	0			0.011
10/4/2017 12:42			0	0	0	0	0			0.011
10/4/2017 12:43			0	0	0	0	0			0.01
10/4/2017 12:44			0	0	0	0	0			0.01
10/4/2017 12:45	12.7	82	0	0	0	0	0	40.75426;-	12	0.009
10/4/2017 12:46			0	0	0	0	0			0.008
10/4/2017 12:47			0	0	0	0	0			0.009
10/4/2017 12:48			0	0	0	0	0			0.011
10/4/2017 12:49			0	0	0	0	0			0.011
10/4/2017 12:50	12.7	82	0	0	0	0	0			0.011
10/4/2017 12:50								40.75428;-	13	
10/4/2017 12:51			0	0	0	0	0			0.011
10/4/2017 12:52			0	0	0	0	0			0.01
10/4/2017 12:53			0	0	0	0	0			0.018
10/4/2017 12:54			0	0	0	0	0			0.014
10/4/2017 12:55	12.7	88.1	0	0	0	0	0	40.75426;-	13	0.012
10/4/2017 12:56			0	0	0	0	0			0.012
10/4/2017 12:57			0	0	0	0	0			0.012
10/4/2017 12:58			0	0	0	0	0			0.011
10/4/2017 12:59			0	0	0	0	0			0.01
10/4/2017 13:00	12.7	94.1	0	0	0	0	0			0.011
10/4/2017 13:00								40.75423;-	19	
10/4/2017 13:01			0	0	0	0	0			0.011
10/4/2017 13:02			0	0	0	0	0			0.01
10/4/2017 13:03			0	0	0	0	0			0.01
10/4/2017 13:04			0	0	0	0	0			0.01
10/4/2017 13:05	12.7	85	0	0	0	0	0			0.011
10/4/2017 13:05								40.75421;-	17	
10/4/2017 13:06			0	0	0	0	0			0.01
10/4/2017 13:07			0	0	0	0	0			0.01
10/4/2017 13:08			0	0	0	0	0			0.01
10/4/2017 13:09			0	0	0	0	0			0.018
10/4/2017 13:10	12.7	88.1	0	0	0	0	0	40.75426;-	18	0.025
10/4/2017 13:11			0	0	0	0	0			0.015
10/4/2017 13:12			0	0	0	0	0			0.013
10/4/2017 13:13			0	0	0	0	0			0.012
10/4/2017 13:14			0	0	0	0	0			0.011
10/4/2017 13:15	12.8	83	0	0	0	0	0			0.01
10/4/2017 13:15								40.75425;-	24	
10/4/2017 13:16			0	0	0	0	0			0.01
10/4/2017 13:17			0	0	0	0	0			0.009
10/4/2017 13:18			0	0	0	0	0			0.011
10/4/2017 13:19			0	0	0	0	0			0.012
10/4/2017 13:20	12.8	88.1	0	0	0	0	0			0.012
10/4/2017 13:20								40.75426;-	14	

10/4/2017 13:21			0	0	0	0	0			0.012
10/4/2017 13:22			0	0	0	0	0			0.011
10/4/2017 13:23			0	0	0	0	0			0.01
10/4/2017 13:24			0	0	0	0	0			0.011
10/4/2017 13:25	12.9	91.1	0	0	0	0	0			0.01
10/4/2017 13:25								40.75426;-	12	
10/4/2017 13:26			0	0	0	0	0			0.011
10/4/2017 13:27			0	0	0	0	0			0.012
10/4/2017 13:28			0	0	0	0	0			0.012
10/4/2017 13:29			0	0	0	0	0			0.013
10/4/2017 13:30	13.2	79	0	0	0	0	0	40.75426;-	2	0.014
10/4/2017 13:31			0	0	0	0	0			0.012
10/4/2017 13:32			0	0	0	0	0			0.011
10/4/2017 13:33			0	0	0	0	0			0.01
10/4/2017 13:34			0	0	0	0	0			0.011
10/4/2017 13:35	14.3	75.9	0	0	0	0	0			0.011
10/4/2017 13:35								40.75426;-	4	
10/4/2017 13:36			0	0	0	0	0			0.011
10/4/2017 13:37			0	0	0	0	0			0.011
10/4/2017 13:38			0	0	0	0	0			0.01
10/4/2017 13:39			0	0	0	0	0			0.01
10/4/2017 13:40	14.5	72.9	0	0	0	0	0			0.01
10/4/2017 13:40								40.75426;-	4	
10/4/2017 13:41			0	0	0	0	0			0.01
10/4/2017 13:42			0	0	0	0	0			0.012
10/4/2017 13:43			0	0	0	0	0			0.057
10/4/2017 13:44			0	0	0	0	0			0.065
10/4/2017 13:45	13.5	77.9	0	0	0	0	0	40.75422;-	12	0.029
10/4/2017 13:46			0	0	0	0	0			0.019
10/4/2017 13:47			0	0	0	0	0			0.013
10/4/2017 13:48			0	0	0	0	0			0.011
10/4/2017 13:49			0	0	0	0	0			0.009
10/4/2017 13:50	13.3	87	0	0	0	0	0	40.75422;-	10	0.008
10/4/2017 13:51			0	0	0	0	0			0.008
10/4/2017 13:52			0	0	0	0	0			0.008
10/4/2017 13:53			0	0	0	0	0			0.007
10/4/2017 13:54			0	0	0	0	0			0.007
10/4/2017 13:55	14.2	74.9	0	0	0	0	0	40.75425;-	7	0.008
10/4/2017 13:56			0	0	0	0	0			0.008
10/4/2017 13:57			0	0	0	0	0			0.008
10/4/2017 13:58			0	0	0	0	0			0.007
10/4/2017 13:59			0	0	0	0	0			0.007
10/4/2017 14:00	14.2	82	0	0	0	0	0	40.75422;-	14	0.008
10/4/2017 14:01			0	0	0	0	0			0.007
10/4/2017 14:02			0	0	0	0	0			0.008
10/4/2017 14:03			0	0	0	0	0			0.007
10/4/2017 14:04			0	0	0	0	0			0.007
10/4/2017 14:05	14.5	73.9	0	0	0	0	0	40.75422;-	17	0.008
10/4/2017 14:06			0	0	0	0	0			0.008
10/4/2017 14:07			0	0	0	0	0			0.008
10/4/2017 14:08			0	0	0	0	0			0.009
10/4/2017 14:09			0	0	0	0	0			0.008
10/4/2017 14:10	14.6	74.9	0	0	0	0	0	40.75422;-	9	0.008
10/4/2017 14:11			0	0	0	0	0			0.008
10/4/2017 14:12			0	0	0	0	0			0.008
10/4/2017 14:13			0	0	0	0	0			0.008

10/4/2017 14:14			0	0	0	0	0			0.008
10/4/2017 14:15	14.6	79	0	0	0	0	0	40.75423;-	3	0.008
10/4/2017 14:16			0	0	0	0	0			0.009
10/4/2017 14:17			0	0	0	0	0			0.009
10/4/2017 14:18			0	0	0	0	0			0.008
10/4/2017 14:19			0	0	0	0	0			0.009
10/4/2017 14:20	14.2	79	0	0	0	0	0	40.75419;-	11	0.009
10/4/2017 14:21			0	0	0	0	0			0.008
10/4/2017 14:22			0	0	0	0	0			0.007
10/4/2017 14:23			0	0	0	0	0			0.007
10/4/2017 14:24			0	0	0	0	0			0.006
10/4/2017 14:25	14.5	84	0	0	0	0	0	40.75426;-	7	0.008
10/4/2017 14:26			0	0	0	0	0			0.007
10/4/2017 14:27			0	0	0	0	0			0.007
10/4/2017 14:28			0	0	0	0	0			0.008
10/4/2017 14:29			0	0	0	0	0			0.007
10/4/2017 14:30	14.5	80	0	0	0	0	0			0.007
10/4/2017 14:30								40.75426;-	9	
10/4/2017 14:31			0	0	0	0	0			0.007
10/4/2017 14:32			0	0	0	0	0			0.007
10/4/2017 14:33			0	0	0	0	0			0.007
10/4/2017 14:34			0	0	0	0	0			0.007
10/4/2017 14:35	14.1	80	0	0	0	0	0	40.75426;-	13	0.008
10/4/2017 14:36			0	0	0	0	0			0.008
10/4/2017 14:37			0	0	0	0	0			0.008
10/4/2017 14:38			0	0	0	0	0			0.008
10/4/2017 14:39			0	0	0	0	0			0.008
10/4/2017 14:40	14.7	79	0	0	0	0	0	40.75428;-	12	0.009
10/4/2017 14:41			0	0	0	0	0			0.008
10/4/2017 14:42			0	0	0	0	0			0.008
10/4/2017 14:43			0	0	0	0	0			0.008
10/4/2017 14:44			0	0	0	0	0			0.008
10/4/2017 14:45	14.6	83	0	0	0	0	0	40.75421;-	7	0.008
10/4/2017 14:46			0	0	0	0	0			0.008
10/4/2017 14:47			0	0	0	0	0			0.008
10/4/2017 14:48			0	0	0	0	0			0.009
10/4/2017 14:49			0	0	0	0	0			0.008
10/4/2017 14:50	14.2	75.9	0	0	0	0	0	40.75426;-	6	0.008
10/4/2017 14:51			0	0	0	0	0			0.008
10/4/2017 14:52			0	0	0	0	0			0.008
10/4/2017 14:53			0	0	0	0	0			0.008
10/4/2017 14:54			0	0	0	0	0			0.008
10/4/2017 14:55	14.6	92.1	0	0	0	0	0	40.75421;-	4	0.008
10/4/2017 14:56			0	0	0	0	0			0.007
10/4/2017 14:57			0	0	0	0	0			0.007
10/4/2017 14:58			0	0	0	0	0			0.008
10/4/2017 14:59			0	0	0	0	0			0.008
10/4/2017 15:00	14.2	83	0	0	0	0	0	40.75417;-	4	0.007
10/4/2017 15:01			0	0	0	0	0			0.007
10/4/2017 15:02			0	0	0	0	0			0.007
10/4/2017 15:03			0	0	0	0	0			0.007
10/4/2017 15:04			0	0	0	0	0			0.008
10/4/2017 15:05	14.1	76.9	0	0	0	0	0	40.75419;-	7	0.008
10/4/2017 15:06			0	0	0	0	0			0.008
10/4/2017 15:07			0	0	0	0	0			0.008
10/4/2017 15:08			0	0	0	0	0			0.008

10/4/2017 15:09			0	0	0	0	0			0.007
10/4/2017 15:10	14.2	80	0	0	0	0	0	40.75425;-	11	0.008
10/4/2017 15:11			0	0	0	0	0			0.008
10/4/2017 15:12			0	0	0	0	0			0.007
10/4/2017 15:13			0.003	0.004	0	0	0			0.007
10/4/2017 15:14			0.004	0.004	0	0	0			0.007
10/4/2017 15:15	14.6	92.1	0	0.004	0	0	0	40.75425;-	0	0.007
10/4/2017 15:16			0	0.004	0	0	0			0.008
10/4/2017 15:17			0	0.004	0	0	0			0.007
10/4/2017 15:18			0	0.004	0	0	0			0.007
10/4/2017 15:19			0	0.004	0	0	0			0.008
10/4/2017 15:20	14.2	76.9	0	0.004	0	0	0	40.75417;-	1	0.008
10/4/2017 15:21			0	0.004	0	0	0			0.008
10/4/2017 15:22			0	0.004	0	0	0			0.008
10/4/2017 15:23			0	0.004	0	0	0			0.009
10/4/2017 15:24			0	0.004	0	0	0			0.009
10/4/2017 15:25	14.2	119.4	0	0.004	0	0	0			0.008
10/4/2017 15:25								40.75413;-	4	
10/4/2017 15:26			0	0.004	0	0	0			0.008
10/4/2017 15:27			0	0.004	0	0	0			0.008
10/4/2017 15:28			0	0.004	0	0	0			0.008
10/4/2017 15:29			0	0.004	0	0	0			0.009
10/4/2017 15:30	14.1	110.3	0	0.004	0	0	0			0.009
10/4/2017 15:30								40.75416;-	1	
10/4/2017 15:31			0	0.004	0	0	0			0.009
10/4/2017 15:32			0	0.004	0	0	0			0.009
10/4/2017 15:33			0	0.004	0	0	0			0.008
10/4/2017 15:34			0	0.004	0	0	0			0.008
10/4/2017 15:35	14.1	80	0	0.004	0	0	0			0.009
10/4/2017 15:35								40.75416;-	10	
10/4/2017 15:36			0	0.004	0	0	0			0.009
10/4/2017 15:37			0	0.004	0	0	0			0.009
10/4/2017 15:38			0	0.004	0	0	0			0.01
10/4/2017 15:39			0	0.004	0	0	0			0.038
10/4/2017 15:40	14.6	76.9	0	0.004	0	0	0			0.026
10/4/2017 15:40								40.75419;-	0	
10/4/2017 15:41			0	0.004	0	0	0			0.015
10/4/2017 15:42			0	0.004	0	0	0			0.012
10/4/2017 15:43			0	0.004	0	0	0			0.012
10/4/2017 15:44			0	0.004	0	0	0			0.054
10/4/2017 15:45	14.2	76.9	0	0.004	0	0	0			0.025
10/4/2017 15:45								40.75419;-	11	
10/4/2017 15:46			0	0.004	0	0	0			0.017
10/4/2017 15:47			0	0.004	0	0	0			0.013
10/4/2017 15:48			0	0.004	0	0	0			0.021
10/4/2017 15:49			0	0.004	0	0	0			0.023
10/4/2017 15:50	14.2	81	0	0.004	0	0	0			0.02
10/4/2017 15:50								40.75414;-	23	
10/4/2017 15:51			0	0.004	0	0	0			0.017
10/4/2017 15:52			0	0.004	0	0	0			0.04
10/4/2017 15:53			0	0.004	0	0	0			0.029
10/4/2017 15:54			0	0.004	0	0	0			0.018
10/4/2017 15:55	13.6	84	0	0.004	0	0	0			0.014
10/4/2017 15:55								40.75421;-	8	
10/4/2017 15:56			0	0.004	0	0	0			0.012
10/4/2017 15:57			0	0.004	0	0	0			0.01

10/4/2017 15:58			0	0.004	0	0	0			0.011
10/4/2017 15:59			0	0.004	0	0	0			0.01
10/4/2017 16:00	13.6	80	0	0.004	0	0	0	40.75423;-	1	0.009
10/4/2017 16:01			0	0.004	0	0	0			0.018
10/4/2017 16:02			0	0.004	0	0	0			0.017
10/4/2017 16:03			0	0.004	0	0	0			0.014
10/4/2017 16:04			0	0.004	0	0	0			0.013
10/4/2017 16:05	13.6	81	0	0.004	0	0	0	40.75425;-	1	0.012
10/4/2017 16:06			0	0.004	0	0	0			0.012
10/4/2017 16:07			0	0.004	0	0	0			0.012
10/4/2017 16:08			0	0.004	0	0	0			0.014
10/4/2017 16:09			0	0.004	0	0	0			0.012
10/4/2017 16:10	14.1	83	0	0.004	0	0	0	40.75425;-	-6	0.012
10/4/2017 16:11			0	0.004	0	0	0			0.012
10/4/2017 16:12			0	0.004	0	0	0			0.011
10/4/2017 16:13			0	0.004	0	0	0			0.011
10/4/2017 16:14			0	0.004	0	0	0			0.01
10/4/2017 16:15	13.6	79	0	0.004	0	0	0	40.75428;-	-3	0.01
10/4/2017 16:16			0	0.004	0	0	0			0.01
10/4/2017 16:17			0	0.004	0	0	0			0.01
10/4/2017 16:18			0	0.004	0	0	0			0.022
10/4/2017 16:19			0	0.004	0	0	0			0.013
10/4/2017 16:20	14	87	0	0.004	0	0	0	40.75426;-	5	0.009
10/4/2017 16:21			0	0.004	0	0	0			0.008
10/4/2017 16:22			0	0.004	0	0	0			0.008
10/4/2017 16:23			0	0.004	0	0	0			0.007
10/4/2017 16:24			0	0.004	0	0	0			0.007
10/4/2017 16:25	13.7	94.1	0	0.004	0	0	0	40.75423;-	12	0.007
10/4/2017 16:26			0	0.004	0	0	0			0.007
10/4/2017 16:27			0	0.004	0	0	0			0.007
10/4/2017 16:28			0	0.004	0	0	0			0.007
10/4/2017 16:29			0	0.004	0	0	0			0.008
10/4/2017 16:30	13.5	82	0	0.004	0	0	0	40.75421;-	15	0.007
10/4/2017 16:31			0	0.004	0	0	0			0.008
10/4/2017 16:32			0	0.004	0	0	0			0.008
10/4/2017 16:33			0	0.004	0	0	0			0.007
10/4/2017 16:34			0	0.004	0	0	0			0.007
10/4/2017 16:35	13.5	90.1	0	0.004	0	0	0	40.75421;-	16	0.006
10/4/2017 16:36			0	0.004	0	0	0			0.007
10/4/2017 16:37			0	0.004	0	0	0			0.007
10/4/2017 16:38			0	0.004	0	0	0			0.007
10/4/2017 16:39			0	0.004	0	0	0			0.007
10/4/2017 16:40	13.5	80	0	0.004	0	0	0	40.75422;-	21	0.007
10/4/2017 16:41			0	0.004	0	0	0			0.007
10/4/2017 16:42			0	0.004	0	0	0			0.007
10/4/2017 16:43			0	0.004	0	0	0			0.007
10/4/2017 16:44			0	0.004	0	0	0			0.007
10/4/2017 16:45	14	84	0	0.004	0	0	0	40.75425;-	21	0.008
10/4/2017 16:46			0	0.004	0	0	0			0.008
10/4/2017 16:47			0	0.004	0	0	0			0.009
10/4/2017 16:48			0	0.004	0	0	0			0.009
10/4/2017 16:49			0	0.004	0	0	0			0.008
10/4/2017 16:50	13.6	85	0	0.004	0	0	0	40.75425;-	13	0.008
10/4/2017 16:51			0	0.004	0	0	0			0.008
10/4/2017 16:52			0	0.004	0	0	0			0.008
10/4/2017 16:53			0	0.004	0	0	0			0.008

10/4/2017 16:54			0	0.004	0	0	0			0.007
10/4/2017 16:55	13.5	84	0	0.004	0	0	0	40.75423;-	15	0.008
10/4/2017 16:56			0	0.004	0	0	0			0.008
10/4/2017 16:57			0	0.004	0	0	0			0.008
10/4/2017 16:58			0	0.004	0	0	0			0.007
10/4/2017 16:59			0	0.004	0	0	0			0.007
10/4/2017 17:00	13.5	80	0	0.004	0	0	0	40.75425;-	13	0.007
10/4/2017 17:01			0	0.004	0	0	0			0.007
10/4/2017 17:02			0	0.004	0	0	0			0.006
10/4/2017 17:03			0	0.004	0	0	0			0.006
10/4/2017 17:04			0	0.004	0	0	0			0.006
10/4/2017 17:05	13.5	85	0	0.004	0	0	0			0.006
10/4/2017 17:05								40.75423;-	12	
10/4/2017 17:06			0	0.004	0	0	0			0.007
10/4/2017 17:07			0	0.004	0	0	0			0.007
10/4/2017 17:08			0	0.004	0	0	0			0.007
10/4/2017 17:09			0	0.004	0	0	0			0.007
10/4/2017 17:10	14	81	0	0.004	0	0	0			0.006
10/4/2017 17:10								40.75422;-	13	
10/4/2017 17:11			0	0.004	0	0	0			0.006
10/4/2017 17:12			0	0.004	0	0	0			0.007
10/4/2017 17:13			0	0.004	0	0	0			0.007
10/4/2017 17:14			0	0.004	0	0	0			0.008
10/4/2017 17:15	14	81	0	0.004	0	0	0			0.009
10/4/2017 17:15								40.75426;-	10	
10/4/2017 17:16			0	0.004	0	0	0			0.008
10/4/2017 17:17			0	0.004	0	0	0			0.008
10/4/2017 17:18			0	0.004	0	0	0			0.008
10/4/2017 17:19			0	0.004	0	0	0			0.007
10/4/2017 17:20	13.5	84	0	0.004	0	0	0			0.006
10/4/2017 17:20								40.7543;-7	7	
10/4/2017 17:21			0	0.004	0	0	0			0.007
10/4/2017 17:22			0	0.004	0	0	0			0.007
10/4/2017 17:23			0	0.004	0	0	0			0.007
10/4/2017 17:24			0	0.004	0	0	0			0.007
10/4/2017 17:25	13.5	82	0	0.004	0	0	0	40.75426;-	8	0.007
10/4/2017 17:26			0	0.004	0	0	0			0.007
10/4/2017 17:27			0	0.004	0	0	0			0.007
10/4/2017 17:28			0	0.004	0	0	0			0.006
10/4/2017 17:29			0	0.004	0	0	0			0.007
10/4/2017 17:30	13.5	85	0	0.004	0	0	0			0.01
10/4/2017 17:30								40.75426;-	15	
10/4/2017 17:31			0	0.004	0	0	0			0.021
10/4/2017 17:32			0	0.004	0	0	0			0.015
10/4/2017 17:33			0	0.004	0	0	0			0.01
10/4/2017 17:34			0	0.004	0	0	0			0.013
10/4/2017 17:35	13.5	82	0	0.004	0	0	0			0.011
10/4/2017 17:35								40.75425;-	14	
10/4/2017 17:36			0	0.004	0	0	0			0.01
10/4/2017 17:37			0	0.004	0	0	0			0.009
10/4/2017 17:38			0	0.004	0	0	0			0.009
10/4/2017 17:39			0	0.004	0	0	0			0.009
10/4/2017 17:40	13.5	89.1	0	0.004	0	0	0	40.75423;-	5	0.01
10/4/2017 17:41			0	0.004	0	0	0			0.009
10/4/2017 17:42			0	0.004	0	0	0			0.008
10/4/2017 17:43			0	0.004	0	0	0			0.007

10/4/2017 17:44			0	0.004	0	0	0			0.008
10/4/2017 17:45	13.6	87	0	0.004	0	0	0			0.009
10/4/2017 17:45								40.75422;-[illegible]	12	
10/4/2017 17:46			0	0.004	0	0	0			0.01
10/4/2017 17:47			0	0.004	0	0	0			0.01
10/4/2017 17:48			0	0.004	0	0	0			0.012
10/4/2017 17:49			0	0.004	0	0	0			0.011
10/4/2017 17:50	13.6	87	0	0.004	0	0	0	40.75422;-[illegible]	18	0.009
10/4/2017 17:51			0	0.004	0	0	0			0.008
10/4/2017 17:52			0	0.004	0	0	0			0.011
10/4/2017 17:53			0	0.004	0	0	0			0.013
10/4/2017 17:54			0	0.004	0	0	0			0.02
10/4/2017 17:55	13.6	82	0	0.004	0	0	0	40.75419;-[illegible]	17	0.014
10/4/2017 17:56			0	0.004	0	0	0			0.01
10/4/2017 17:57			0	0.004	0	0	0			0.008
10/4/2017 17:58			0	0.004	0	0	0			0.007
10/4/2017 17:59			0	0.004	0	0	0			0.007
10/4/2017 18:00	14	81	0	0.004	0	0	0	40.75415;-[illegible]	22	0.007
10/4/2017 18:01			0	0.004	0	0	0			0.006
10/4/2017 18:02			0	0.004	0	0	0			0.006
10/4/2017 18:03			0	0.004	0	0	0			0.006
10/4/2017 18:04			0	0.004	0	0	0			0.006
10/4/2017 18:05	13.5	86	0	0.004	0	0	0	40.75418;-[illegible]	23	0.005
10/4/2017 18:06			0	0.004	0	0	0			0.006
10/4/2017 18:07			0	0.004	0	0	0			0.007
10/4/2017 18:08			0	0.004	0	0	0			0.008
10/4/2017 18:09			0	0.004	0	0	0			0.007
10/4/2017 18:10	14	83	0	0.004	0	0	0	40.75419;-[illegible]	24	0.007
10/4/2017 18:11			0	0.004	0	0	0			0.007
10/4/2017 18:12			0	0.004	0	0	0			0.007
10/4/2017 18:13			0	0.004	0	0	0			0.006
10/4/2017 18:14			0	0.004	0	0	0			0.007
10/4/2017 18:15	13.5	77.9	0	0.004	0	0	0	40.75417;-[illegible]	25	0.007
10/4/2017 18:16			0	0.004	0	0	0			0.007
10/4/2017 18:17			0	0.004	0	0	0			0.006
10/4/2017 18:18			0	0.004	0	0	0			0.006
10/4/2017 18:19			0	0.004	0	0	0			0.006
10/4/2017 18:20	13.5	90.1	0	0.004	0	0	0	40.75419;-[illegible]	25	0.007
10/4/2017 18:21			0	0.004	0	0	0			0.007
10/4/2017 18:22			0	0.004	0	0	0			0.006
10/4/2017 18:23			0	0.004	0	0	0			0.005
10/4/2017 18:24			0	0.004	0	0	0			0.006
10/4/2017 18:25	13.5	83	0	0.004	0	0	0	40.75417;-[illegible]	25	0.006
10/4/2017 18:26			0	0.004	0	0	0			0.006
10/4/2017 18:27			0	0.004	0	0	0			0.007
10/4/2017 18:28			0	0.004	0	0	0			0.007
10/4/2017 18:29			0	0.004	0	0	0			0.007
10/4/2017 18:30	13.5	83	0	0.004	0	0	0	40.75418;-[illegible]	27	0.009
10/4/2017 18:31										0.011
10/4/2017 18:31			0	0.004	0	0	0			
10/4/2017 18:32			0	0.004	0	0	0			0.009
10/4/2017 18:33			0	0.004	0	0	0			0.009
10/4/2017 18:34			0	0.004	0	0	0			0.012
10/4/2017 18:35	13.6	88.1	0	0.004	0	0	0			0.01
10/4/2017 18:35								40.75421;-[illegible]	12	
10/4/2017 18:36			0	0.004	0	0	0			0.009

10/4/2017 18:37			0	0.004	0	0	0			0.008
10/4/2017 18:38			0	0.004	0	0	0			0.008
10/4/2017 18:39			0	0.004	0	0	0			0.008
10/4/2017 18:40	13.5	85	0	0.004	0	0	0			0.008
10/4/2017 18:40								40.75422;-	10	
10/4/2017 18:41			0	0.004	0	0	0			0.007
10/4/2017 18:42			0	0.004	0	0	0			0.006
10/4/2017 18:43			0	0.004	0	0	0			0.008
10/4/2017 18:44			0	0.004	0	0	0			0.009
10/4/2017 18:45	13.6	94.1	0	0.004	0	0	0			0.009
10/4/2017 18:45								40.75422;-	2	
10/4/2017 18:46			0	0.004	0	0	0			0.009
10/4/2017 18:47			0	0.004	0	0	0			0.008
10/4/2017 18:48			0	0.004	0	0	0			0.008
10/4/2017 18:49			0	0.004	0	0	0			0.007
10/4/2017 18:50	13.7	83	0	0	0	0	0			0.048
10/4/2017 18:50								40.75422;-	-8	
10/4/2017 18:51			0	0	0	0	0			0.047
10/4/2017 18:52			0	0	0	0	0			0.035
10/4/2017 18:53			0	0	0	0	0			0.023
10/4/2017 18:54			0	0	0	0	0			0.015
10/4/2017 18:55	13.6	81	0	0	0	0	0			0.011
10/4/2017 18:55								40.7542;-7	8	
10/4/2017 18:56			0	0	0	0	0			0.012
10/4/2017 18:57			0	0	0	0	0			0.01
10/4/2017 18:58			0	0	0	0	0			0.009
10/4/2017 18:59			0	0	0	0	0			0.008
10/4/2017 19:00	13.9	89.1	0	0	0	0	0			0.007
10/4/2017 19:00								40.75422;-	9	
10/4/2017 19:01			0	0	0	0	0			0.009
10/4/2017 19:02			0	0	0	0	0			0.008
10/4/2017 19:03			0	0	0	0	0			0.007
10/4/2017 19:04			0	0	0	0	0			0.007
10/4/2017 19:05	13.8	81	0	0	0	0	0			0.007
10/4/2017 19:05								40.75426;-	6	
10/4/2017 19:06			0	0	0	0	0			0.006
10/4/2017 19:07			0	0	0	0	0			0.006
10/4/2017 19:08			0	0	0	0	0			0.006
10/4/2017 19:09			0	0	0	0	0			0.006
10/4/2017 19:10	13.6	80	0	0	0	0	0			0.006
10/4/2017 19:10								40.75423;-	13	
10/4/2017 19:11			0	0	0	0	0			0.006
10/4/2017 19:12			0	0	0	0	0			0.006
10/4/2017 19:13			0	0	0	0	0			0.006
10/4/2017 19:14			0	0	0	0	0			0.008
10/4/2017 19:15	13.5	83	0	0	0	0	0			0.008
10/4/2017 19:15								40.75421;-	13	
10/4/2017 19:16			0	0	0	0	0			0.007
10/4/2017 19:17			0	0	0	0	0			0.008
10/4/2017 19:18			0	0	0	0	0			0.009
10/4/2017 19:19			0	0	0	0	0			0.008
10/4/2017 19:20										0.007
10/4/2017 19:20	13.2	124.5	0	0	0	0	0			
10/4/2017 19:20								40.75426;-	7	
10/4/2017 19:21			0	0	0	0	0			0.007
10/4/2017 19:22			0	0	0	0	0			0.008

10/4/2017 19:23			0	0	0	0	0			0.007
10/4/2017 19:24			0	0	0	0	0			0.007
10/4/2017 19:25	13.1	132.6	0	0	0	0	0	40.75423;-	12	0.006
10/4/2017 19:26			0	0	0	0	0			0.006
10/4/2017 19:27			0	0	0	0	0			0.006
10/4/2017 19:28			0	0	0	0	0			0.006
10/4/2017 19:29			0	0	0	0	0			0.007
10/4/2017 19:30	13.1	102.2	0	0	0	0	0			0.006
10/4/2017 19:30								40.75425;-	10	
10/4/2017 19:31			0	0	0	0	0			0.006
10/4/2017 19:32			0	0	0	0	0			0.007
10/4/2017 19:33			0	0	0	0	0			0.006
10/4/2017 19:34			0	0	0	0	0			0.007
10/4/2017 19:35	14.5	75.9	0	0	0	0	0			0.008
10/4/2017 19:35								40.75422;-	11	
10/4/2017 19:36			0	0	0	0	0			0.008
10/4/2017 19:37			0	0	0	0	0			0.007
10/4/2017 19:38			0	0	0	0	0			0.007
10/4/2017 19:39			0	0	0	0	0			0.006
10/4/2017 19:40	14.2	75.9	0	0	0	0	0			0.006
10/4/2017 19:40								40.75423;-	11	
10/4/2017 19:41			0	0	0	0	0			0.006
10/4/2017 19:42			0	0	0	0	0			0.008
10/4/2017 19:43			0	0	0	0	0			0.007
10/4/2017 19:44			0	0	0	0	0			0.006
10/4/2017 19:45	14.4	80	0	0	0	0	0	40.75425;-	6	0.006
10/4/2017 19:46			0	0	0	0	0			0.006
10/4/2017 19:47			0	0	0	0	0			0.006
10/4/2017 19:48			0	0	0	0	0			0.006
10/4/2017 19:49			0	0	0	0	0			0.006
10/4/2017 19:50	14.4	90.1	0	0	0	0	0	40.75426;-	9	0.006
10/4/2017 19:51			0	0	0	0	0			0.006
10/4/2017 19:52			0	0	0	0	0			0.006
10/4/2017 19:53			0	0	0	0	0			0.006
10/4/2017 19:54			0	0	0	0	0			0.006
10/4/2017 19:55	14.4	77.9	0	0	0	0	0	40.75425;-	13	0.006
10/4/2017 19:56			0	0	0	0	0			0.005
10/4/2017 19:57			0	0	0	0	0			0.005
10/4/2017 19:58			0	0	0	0	0			0.005
10/4/2017 19:59			0	0	0	0	0			0.005
10/4/2017 20:00	14.4	74.9	0	0	0	0	0	40.75425;-	12	0.005
10/4/2017 20:01			0	0	0	0	0			0.005
10/4/2017 20:02			0	0	0	0	0			0.005
10/4/2017 20:03			0	0	0	0	0			0.005
10/4/2017 20:04			0	0	0	0	0			0.006
10/4/2017 20:05	14.2	86	0	0	0	0	0			0.005
10/4/2017 20:05								40.75426;-	7	
10/4/2017 20:06			0	0	0	0	0			0.006
10/4/2017 20:07			0	0	0	0	0			0.005
10/4/2017 20:08			0	0	0	0	0			0.005
10/4/2017 20:09			0	0	0	0	0			0.006
10/4/2017 20:10	14.4	82	0	0	0	0	0			0.006
10/4/2017 20:10								40.75426;-	8	
10/4/2017 20:11			0	0	0	0	0			0.006
10/4/2017 20:12			0	0	0	0	0			0.008
10/4/2017 20:13			0	0	0	0	0			0.008

10/4/2017 20:14			0	0	0	0	0			0.009
10/4/2017 20:15	14.4	74.9	0	0	0	0	0			0.007
10/4/2017 20:15								40.75426;-	11	
10/4/2017 20:16			0	0	0	0	0			0.007
10/4/2017 20:17			0	0	0	0	0			0.007
10/4/2017 20:18			0	0	0	0	0			0.007
10/4/2017 20:19			0	0	0	0	0			0.006
10/4/2017 20:20	14.1	76.9	0	0	0	0	0	40.75428;-	6	0.006
10/4/2017 20:21			0	0	0	0	0			0.006
10/4/2017 20:22			0	0	0	0	0			0.007
10/4/2017 20:23			0	0	0	0	0			0.007
10/4/2017 20:24			0	0	0	0	0			0.007
10/4/2017 20:25	13.8	83	0	0	0	0	0	40.75428;-	5	0.007
10/4/2017 20:26			0	0	0	0	0			0.006
10/4/2017 20:27			0	0	0	0	0			0.006
10/4/2017 20:28			0	0	0	0	0			0.007
10/4/2017 20:29			0	0	0	0	0			0.007
10/4/2017 20:30	13.5	82	0	0	0	0	0	40.75426;-	4	0.006
10/4/2017 20:31			0	0	0	0	0			0.012
10/4/2017 20:32			0	0	0	0	0			0.01
10/4/2017 20:33			0	0	0	0	0			0.009
10/4/2017 20:34			0	0	0	0	0			0.008
10/4/2017 20:35	13.2	81	0	0	0	0	0			0.011
10/4/2017 20:35								40.75426;-	9	
10/4/2017 20:36			0	0	0	0	0			0.008
10/4/2017 20:37			0	0	0	0	0			0.007
10/4/2017 20:38			0	0	0	0	0			0.007
10/4/2017 20:39			0	0	0	0	0			0.006
10/4/2017 20:40	13	87	0	0	0	0	0			0.006
10/4/2017 20:40								40.75425;-	7	
10/4/2017 20:41			0	0	0	0	0			0.006
10/4/2017 20:42			0	0	0	0	0			0.008
10/4/2017 20:43			0	0	0	0	0			0.009
10/4/2017 20:44			0	0	0	0	0			0.008
10/4/2017 20:45	13	84	0	0	0	0	0			0.007
10/4/2017 20:45								40.75429;-	10	
10/4/2017 20:46			0	0	0	0	0			0.007
10/4/2017 20:47			0	0	0	0	0			0.006
10/4/2017 20:48			0	0	0	0	0			0.007
10/4/2017 20:49			0	0	0	0	0			0.006
10/4/2017 20:50				0	0					0.006
10/5/2017 12:24	13.1	82								
10/5/2017 12:24								40.7537387;-73.48520239999999		
10/5/2017 12:25	13.1	103.2								
10/5/2017 12:25								40.75429;-	9	
10/5/2017 12:27			0	0	0	0	0			0.031
10/5/2017 12:28			0	0	0	0	0			0.026
10/5/2017 12:29			0	0	0	0	0			0.02
10/5/2017 12:30	13	81	0	0	0	0	0			0.019
10/5/2017 12:30								40.75426;-	12	
10/5/2017 12:31			0	0	0	0	0			0.018
10/5/2017 12:32			0	0	0	0	0			0.016
10/5/2017 12:33			0	0	0	0	0			0.022
10/5/2017 12:34			0	0	0	0	0			0.022
10/5/2017 12:35	13.1	86	0	0	0	0	0			0.018
10/5/2017 12:35								40.75425;-	12	

10/5/2017 12:36			0	0	0	0	0			0.02
10/5/2017 12:37			0	0	0	0	0			0.018
10/5/2017 12:38			0	0	0	0	0			0.018
10/5/2017 12:39			0	0	0	0	0			0.035
10/5/2017 12:40	13.1	89.1	0	0	0	0	0			0.025
10/5/2017 12:40								40.75426;-	13	
10/5/2017 12:41			0	0	0	0	0			0.018
10/5/2017 12:42			0	0	0	0	0			0.017
10/5/2017 12:43			0	0	0	0	0			0.015
10/5/2017 12:44			0	0	0	0	0			0.014
10/5/2017 12:45	13.1	80	0	0	0	0	0			0.014
10/5/2017 12:45								40.75426;-	14	
10/5/2017 12:46			0	0	0	0	0			0.013
10/5/2017 12:47			0	0	0	0	0			0.013
10/5/2017 12:48			0	0	0	0	0			0.015
10/5/2017 12:49			0	0	0	0	0			0.015
10/5/2017 12:50	13	90.1	0	0	0	0	0			0.014
10/5/2017 12:50								40.75426;-	19	
10/5/2017 12:51			0	0	0	0	0			0.014
10/5/2017 12:52			0	0	0	0	0			0.013
10/5/2017 12:53			0	0	0	0	0			0.012
10/5/2017 12:54			0	0	0	0	0			0.012
10/5/2017 12:55	13	81	0	0	0	0	0			0.012
10/5/2017 12:55								40.75425;-	24	
10/5/2017 12:56			0	0	0	0	0			0.012
10/5/2017 12:57			0	0	0	0	0			0.012
10/5/2017 12:58			0	0	0	0	0			0.012
10/5/2017 12:59			0	0	0	0	0			0.012
10/5/2017 13:00	13	92.1	0	0	0	0	0			0.012
10/5/2017 13:00								40.75426;-	22	
10/5/2017 13:01			0	0	0	0	0			0.014
10/5/2017 13:02			0	0	0	0	0			0.015
10/5/2017 13:03			0	0	0	0	0			0.014
10/5/2017 13:04			0	0	0	0	0			0.015
10/5/2017 13:05	13	84	0	0	0	0	0			0.013
10/5/2017 13:05								40.75426;-	20	
10/5/2017 13:06			0	0	0	0	0			0.013
10/5/2017 13:07			0	0	0	0	0			0.012
10/5/2017 13:08			0	0	0	0	0			0.011
10/5/2017 13:09			0	0	0	0	0			0.011
10/5/2017 13:10	12.9	81	0	0	0	0	0			0.01
10/5/2017 13:10								40.75425;-	26	
10/5/2017 13:11			0	0	0	0	0			0.011
10/5/2017 13:12			0	0	0	0	0			0.01
10/5/2017 13:13			0	0	0	0	0			0.012
10/5/2017 13:14			0	0	0	0	0			0.02
10/5/2017 13:15	12.9	81	0	0	0	0	0			0.017
10/5/2017 13:15								40.75423;-	22	
10/5/2017 13:16			0	0	0	0	0			0.015
10/5/2017 13:17			0	0	0	0	0			0.013
10/5/2017 13:18			0	0	0	0	0			0.012
10/5/2017 13:19			0	0	0	0	0			0.01
10/5/2017 13:20	12.9	88.1	0	0	0	0	0			0.01
10/5/2017 13:20								40.75425;-	19	
10/5/2017 13:21			0	0	0	0	0			0.01
10/5/2017 13:22			0	0	0	0	0			0.011

10/5/2017 13:23			0	0	0	0	0			0.01
10/5/2017 13:24			0	0	0	0	0			0.01
10/5/2017 13:25	13	81	0	0	0	0	0			0.009
10/5/2017 13:25								40.75425;-[illegible]	18	
10/5/2017 13:26			0	0	0	0	0			0.009
10/5/2017 13:27			0	0	0	0	0			0.009
10/5/2017 13:28			0	0	0	0	0			0.011
10/5/2017 13:29			0	0	0	0	0			0.014
10/5/2017 13:30	13.5	81	0	0	0	0	0			0.014
10/5/2017 13:30								40.75426;-[illegible]	17	
10/5/2017 13:31			0	0	0	0	0			0.013
10/5/2017 13:32			0	0	0	0	0			0.012
10/5/2017 13:33			0	0	0	0	0			0.01
10/5/2017 13:34			0	0	0	0	0			0.01
10/5/2017 13:35	14.4	84	0	0	0	0	0			0.013
10/5/2017 13:35								40.75425;-[illegible]	16	
10/5/2017 13:36			0	0	0	0	0			0.013
10/5/2017 13:37			0	0	0	0	0			0.01
10/5/2017 13:38			0	0	0	0	0			0.009
10/5/2017 13:39			0	0	0	0	0			0.009
10/5/2017 13:40	14.4	77.9	0	0	0	0	0			0.009
10/5/2017 13:40								40.75423;-[illegible]	12	
10/5/2017 13:41			0	0	0	0	0			0.009
10/5/2017 13:42			0	0	0	0	0			0.01
10/5/2017 13:43			0	0	0	0	0			0.011
10/5/2017 13:44			0	0	0	0	0			0.01
10/5/2017 13:45	14	79	0	0	0	0	0			0.012
10/5/2017 13:45								40.75425;-[illegible]	14	
10/5/2017 13:46			0	0	0	0	0			0.01
10/5/2017 13:47			0	0	0	0	0			0.009
10/5/2017 13:48			0	0	0	0	0			0.008
10/5/2017 13:49			0	0	0	0	0			0.008
10/5/2017 13:50	14.1	84	0	0	0	0	0			0.007
10/5/2017 13:50								40.75426;-[illegible]	10	
10/5/2017 13:51			0	0	0	0	0			0.006
10/5/2017 13:52			0	0	0	0	0			0.006
10/5/2017 13:53			0	0	0	0	0			0.007
10/5/2017 13:54			0	0	0	0	0			0.007
10/5/2017 13:55	14.2	84	0	0	0	0	0			0.007
10/5/2017 13:55								40.75426;-[illegible]	8	
10/5/2017 13:56			0	0	0	0	0			0.007
10/5/2017 13:57			0	0	0	0	0			0.007
10/5/2017 13:58			0	0	0	0	0			0.007
10/5/2017 13:59			0	0	0	0	0			0.007
10/5/2017 14:00	14.3	77.9	0	0	0	0	0			0.007
10/5/2017 14:00								40.75428;-[illegible]	4	
10/5/2017 14:01			0	0	0	0	0			0.008
10/5/2017 14:02			0	0	0	0	0			0.007
10/5/2017 14:03			0	0	0	0	0			0.007
10/5/2017 14:04			0	0	0	0	0			0.007
10/5/2017 14:05	14.3	80	0	0	0	0	0			0.007
10/5/2017 14:05								40.75423;-[illegible]	0	
10/5/2017 14:06			0	0	0	0	0			0.007
10/5/2017 14:07			0	0	0	0	0			0.007
10/5/2017 14:08			0	0	0	0	0			0.008
10/5/2017 14:09			0	0	0	0	0			0.011

10/5/2017 14:10	14.1	83	0	0	0	0	0			0.011
10/5/2017 14:10								40.75421;-	4	
10/5/2017 14:11			0	0	0	0	0			0.009
10/5/2017 14:12			0	0	0	0	0			0.007
10/5/2017 14:13			0	0	0	0	0			0.007
10/5/2017 14:14			0	0	0	0	0			0.007
10/5/2017 14:15	14	76.9	0	0	0	0	0			0.008
10/5/2017 14:15								40.75421;-	9	
10/5/2017 14:16			0	0	0	0	0			0.007
10/5/2017 14:17			0	0	0	0	0			0.007
10/5/2017 14:18			0	0	0	0	0			0.007
10/5/2017 14:19			0	0	0	0	0			0.006
10/5/2017 14:20	14	81	0	0	0	0	0			0.008
10/5/2017 14:20								40.75425;-	8	
10/5/2017 14:21			0	0	0	0	0			0.007
10/5/2017 14:22			0	0	0	0	0			0.007
10/5/2017 14:23			0	0	0	0	0			0.007
10/5/2017 14:24			0	0	0	0	0			0.007
10/5/2017 14:25	14	87	0	0	0	0	0			0.008
10/5/2017 14:25								40.75425;-	8	
10/5/2017 14:26			0	0	0	0	0			0.008
10/5/2017 14:27			0	0	0	0	0			0.007
10/5/2017 14:28			0	0	0	0	0			0.008
10/5/2017 14:29			0	0	0	0	0			0.008
10/5/2017 14:30	14	79	0	0	0	0	0			0.008
10/5/2017 14:30								40.75423;-	8	
10/5/2017 14:31			0	0	0	0	0			0.007
10/5/2017 14:32			0	0	0	0	0			0.007
10/5/2017 14:33			0	0	0	0	0			0.007
10/5/2017 14:34			0	0	0	0	0			0.007
10/5/2017 14:35	14.4	76.9	0	0	0	0	0			0.006
10/5/2017 14:35								40.75426;-	8	
10/5/2017 14:36			0	0	0	0	0			0.006
10/5/2017 14:37			0	0	0	0	0			0.006
10/5/2017 14:38			0	0	0	0	0			0.006
10/5/2017 14:39			0	0	0	0	0			0.006
10/5/2017 14:40	14	83	0	0	0	0	0			0.006
10/5/2017 14:40								40.75423;-	7	
10/5/2017 14:41			0	0	0	0	0			0.006
10/5/2017 14:42			0	0	0	0	0			0.006
10/5/2017 14:43			0	0	0	0	0			0.006
10/5/2017 14:44			0	0	0	0	0			0.006
10/5/2017 14:45	13.9	76.9	0	0	0	0	0			0.019
10/5/2017 14:45								40.75417;-	8	
10/5/2017 14:46			0	0	0	0	0			0.016
10/5/2017 14:47			0	0	0	0	0			0.014
10/5/2017 14:48			0	0	0	0	0			0.012
10/5/2017 14:49			0	0	0	0	0			0.011
10/5/2017 14:50	14	122.5	0	0	0	0	0			0.009
10/5/2017 14:50								40.75417;-	8	
10/5/2017 14:51			0	0	0	0	0			0.008
10/5/2017 14:52			0	0	0	0	0			0.008
10/5/2017 14:53			0	0	0	0	0			0.008
10/5/2017 14:54			0	0	0	0	0			0.008
10/5/2017 14:55	14.4	76.9	0	0	0	0	0	40.75418;-	6	0.008
10/5/2017 14:56			0	0	0	0	0			0.007

10/5/2017 14:57			0	0	0	0	0			0.007
10/5/2017 14:58			0	0	0	0	0			0.007
10/5/2017 14:59			0	0	0	0	0			0.007
10/5/2017 15:00	14	109.3	0	0	0	0	0	40.75414;-	4	0.007
10/5/2017 15:01			0	0	0	0	0			0.007
10/5/2017 15:02			0	0	0	0	0			0.007
10/5/2017 15:03			0	0	0	0	0			0.007
10/5/2017 15:04			0	0	0	0	0			0.007
10/5/2017 15:05	14	79	0	0	0	0	0	40.75414;-	3	0.007
10/5/2017 15:06			0	0	0	0	0			0.007
10/5/2017 15:07			0	0	0	0	0			0.008
10/5/2017 15:08			0	0	0	0	0			0.008
10/5/2017 15:09			0	0	0	0	0			0.007
10/5/2017 15:10	14	77.9	0	0	0	0	0	40.75418;-	2	0.007
10/5/2017 15:11			0	0	0	0	0			0.007
10/5/2017 15:12			0	0	0	0	0			0.007
10/5/2017 15:13			0	0	0	0	0			0.007
10/5/2017 15:14			0	0	0	0	0			0.007
10/5/2017 15:15	14.4	79	0	0	0	0	0	40.7542;-7	2	0.009
10/5/2017 15:16			0	0	0	0	0			0.008
10/5/2017 15:17			0	0	0	0	0			0.008
10/5/2017 15:18			0	0	0	0	0			0.008
10/5/2017 15:19			0	0	0	0	0			0.008
10/5/2017 15:20	13.9	82	0	0	0	0	0	40.75422;-	6	0.008
10/5/2017 15:21			0	0	0	0	0			0.008
10/5/2017 15:22			0	0	0	0	0			0.007
10/5/2017 15:23			0	0	0	0	0			0.007
10/5/2017 15:24			0	0	0	0	0			0.007
10/5/2017 15:25	13.9	88.1	0	0	0	0	0			0.007
10/5/2017 15:25								40.75421;-	11	
10/5/2017 15:26			0	0	0	0	0			0.007
10/5/2017 15:27			0	0	0	0	0			0.008
10/5/2017 15:28			0	0	0	0	0			0.008
10/5/2017 15:29			0	0	0	0	0			0.008
10/5/2017 15:30	13.9	79	0	0	0	0	0			0.008
10/5/2017 15:30								40.75418;-	11	
10/5/2017 15:31			0	0	0	0	0			0.009
10/5/2017 15:32			0	0	0	0	0			0.009
10/5/2017 15:33			0	0	0	0	0			0.011
10/5/2017 15:34			0	0	0	0	0			0.019
10/5/2017 15:35	13.4	82	0	0	0	0	0			0.024
10/5/2017 15:35								40.7542;-7	8	
10/5/2017 15:36			0	0	0	0	0			0.018
10/5/2017 15:37			0	0	0	0	0			0.014
10/5/2017 15:38			0	0	0	0	0			0.012
10/5/2017 15:39			0	0	0	0	0			0.011
10/5/2017 15:40	13.4	98.2	0	0	0	0	0			0.012
10/5/2017 15:40								40.75419;-	10	
10/5/2017 15:41			0	0	0	0	0			0.017
10/5/2017 15:42			0	0	0	0	0			0.014
10/5/2017 15:43			0	0	0	0	0			0.013
10/5/2017 15:44			0	0	0	0	0			0.015
10/5/2017 15:45	13.9	94.1	0	0	0	0	0			0.018
10/5/2017 15:45								40.75419;-	13	
10/5/2017 15:46			0	0	0	0	0			0.021
10/5/2017 15:47			0	0	0	0	0			0.015

10/5/2017 15:48			0	0	0	0	0			0.013
10/5/2017 15:49			0	0	0	0	0			0.012
10/5/2017 15:50	13.9	81	0	0	0	0	0			0.012
10/5/2017 15:50								40.75422;-[illegible]	2	
10/5/2017 15:51			0	0	0	0	0			0.012
10/5/2017 15:52			0	0	0	0	0			0.012
10/5/2017 15:53			0	0	0	0	0			0.012
10/5/2017 15:54			0	0	0	0	0			0.01
10/5/2017 15:55	13.4	82	0	0	0	0	0			0.01
10/5/2017 15:55								40.75421;-[illegible]	9	
10/5/2017 15:56			0	0	0	0	0			0.009
10/5/2017 15:57			0	0	0	0	0			0.009
10/5/2017 15:58			0	0	0	0	0			0.008
10/5/2017 15:59			0	0	0	0	0			0.008
10/5/2017 16:00	13.4	91.1	0	0	0	0	0			0.008
10/5/2017 16:00								40.75423;-[illegible]	9	
10/5/2017 16:01			0	0	0	0	0			0.01
10/5/2017 16:02			0	0	0	0	0			0.012
10/5/2017 16:03			0	0	0	0	0			0.012
10/5/2017 16:04			0	0	0	0	0			0.01
10/5/2017 16:05	13.4	91.1	0	0	0	0	0			0.011
10/5/2017 16:05								40.75415;-[illegible]	26	
10/5/2017 16:06			0	0	0	0	0			0.011
10/5/2017 16:07			0	0	0	0	0			0.012
10/5/2017 16:08			0	0	0	0	0			0.013
10/5/2017 16:09			0	0	0	0	0			0.013
10/5/2017 16:10	13.9	83	0	0	0	0	0			0.013
10/5/2017 16:10								40.75425;-[illegible]	17	
10/5/2017 16:11			0	0	0	0	0			0.013
10/5/2017 16:12			0	0	0	0	0			0.014
10/5/2017 16:13			0	0	0	0	0			0.015
10/5/2017 16:14			0	0	0	0	0			0.015
10/5/2017 16:15	13.3	84	0	0	0	0	0			0.015
10/5/2017 16:15								40.75426;-[illegible]	10	
10/5/2017 16:16			0	0	0	0	0			0.014
10/5/2017 16:17			0	0	0	0	0			0.015
10/5/2017 16:18			0	0	0	0	0			0.014
10/5/2017 16:19			0	0	0	0	0			0.017
10/5/2017 16:20	13.9	129.6	0	0	0	0	0	40.75428;-[illegible]	5	0.055
10/5/2017 16:21			0	0	0	0	0			0.073
10/5/2017 16:22			0	0	0	0	0			0.04
10/5/2017 16:23			0	0	0	0	0			0.023
10/5/2017 16:24			0	0	0	0	0			0.015
10/5/2017 16:25	14	82	0	0	0	0	0	40.75423;-[illegible]	11	0.013
10/5/2017 16:26			0	0	0	0	0			0.011
10/5/2017 16:27			0	0	0	0	0			0.01
10/5/2017 16:28			0	0	0	0	0			0.009
10/5/2017 16:29			0	0	0	0	0			0.009
10/5/2017 16:30	13.3	99.2	0	0	0	0	0	40.75426;-[illegible]	9	0.009
10/5/2017 16:31			0	0	0	0	0			0.008
10/5/2017 16:32			0	0	0	0	0			0.008
10/5/2017 16:33			0	0	0	0	0			0.008
10/5/2017 16:34			0	0	0	0	0			0.008
10/5/2017 16:35	13.9	130.6	0	0	0	0	0			0.008
10/5/2017 16:35								40.75422;-[illegible]	18	
10/5/2017 16:36			0	0	0	0	0			0.008

10/5/2017 16:37			0	0	0	0	0			0.007
10/5/2017 16:38			0	0	0	0	0			0.008
10/5/2017 16:39			0	0	0	0	0			0.008
10/5/2017 16:40	13.3	82	0	0	0	0	0			0.009
10/5/2017 16:40								40.75423;-[illegible]	16	
10/5/2017 16:41			0	0	0	0	0			0.009
10/5/2017 16:42			0	0	0	0	0			0.008
10/5/2017 16:43			0	0	0	0	0			0.008
10/5/2017 16:44			0	0	0	0	0			0.008
10/5/2017 16:45	13.3	84	0	0	0	0	0			0.008
10/5/2017 16:45								40.75425;-[illegible]	19	
10/5/2017 16:46			0	0	0	0	0			0.015
10/5/2017 16:47			0	0	0	0	0			0.015
10/5/2017 16:48			0	0	0	0	0			0.011
10/5/2017 16:49			0	0	0	0	0			0.009
10/5/2017 16:50	13.3	89.1	0	0	0	0	0			0.009
10/5/2017 16:50								40.75428;-[illegible]	12	
10/5/2017 16:51			0	0	0	0	0			0.01
10/5/2017 16:52			0	0	0	0	0			0.01
10/5/2017 16:53			0	0	0	0	0			0.009
10/5/2017 16:54			0	0	0	0	0			0.009
10/5/2017 16:55	13.3	88.1	0	0	0	0	0			0.009
10/5/2017 16:55								40.75426;-[illegible]	10	
10/5/2017 16:56			0	0	0	0	0			0.008
10/5/2017 16:57			0	0	0	0	0			0.007
10/5/2017 16:58			0	0	0	0	0			0.007
10/5/2017 16:59			0	0	0	0	0			0.007
10/5/2017 17:00	13.4	84	0	0	0	0	0			0.008
10/5/2017 17:00								40.75426;-[illegible]	9	
10/5/2017 17:01			0	0	0	0	0			0.007
10/5/2017 17:02			0	0	0	0	0			0.008
10/5/2017 17:03			0	0	0	0	0			0.007
10/5/2017 17:04			0	0	0	0	0			0.009
10/5/2017 17:05	13.4	92.1	0	0	0	0	0			0.009
10/5/2017 17:05								40.75422;-[illegible]	11	
10/5/2017 17:06			0	0	0	0	0			0.008
10/5/2017 17:07			0	0	0	0	0			0.008
10/5/2017 17:08			0	0	0	0	0			0.008
10/5/2017 17:09			0	0	0	0	0			0.008
10/5/2017 17:10	13.6	83	0	0	0	0	0	40.75423;-[illegible]	15	0.008
10/5/2017 17:11			0	0	0	0	0			0.008
10/5/2017 17:12			0	0	0	0	0			0.008
10/5/2017 17:13			0	0	0	0	0			0.007
10/5/2017 17:14			0	0	0	0	0			0.007
10/5/2017 17:15	13.6	82	0	0	0	0	0	40.75428;-[illegible]	10	0.007
10/5/2017 17:16			0	0	0	0	0			0.007
10/5/2017 17:17			0	0	0	0	0			0.007
10/5/2017 17:18			0	0	0	0	0			0.007
10/5/2017 17:19			0	0	0	0	0			0.007
10/5/2017 17:20	13.4	83	0	0	0	0	0	40.75426;-[illegible]	13	0.007
10/5/2017 17:21			0	0	0	0	0			0.007
10/5/2017 17:22			0	0	0	0	0			0.008
10/5/2017 17:23			0	0	0	0	0			0.007
10/5/2017 17:24			0	0	0	0	0			0.008
10/5/2017 17:25	13.4	87	0	0	0	0	0	40.75426;-[illegible]	16	0.008
10/5/2017 17:26			0	0	0	0	0			0.007

10/5/2017 17:27			0	0	0	0	0			0.007
10/5/2017 17:28			0	0	0	0	0			0.007
10/5/2017 17:29			0	0	0	0	0			0.007
10/5/2017 17:30	13.4	82	0	0	0	0	0	40.75423;-	10	0.007
10/5/2017 17:31			0	0	0	0	0			0.007
10/5/2017 17:32			0	0	0	0	0			0.007
10/5/2017 17:33			0	0	0	0	0			0.007
10/5/2017 17:34			0	0	0	0	0			0.007
10/5/2017 17:35	13.9	85	0	0	0	0	0	40.75422;-	15	0.007
10/5/2017 17:36			0	0	0	0	0			0.007
10/5/2017 17:37			0	0	0	0	0			0.007
10/5/2017 17:38			0	0	0	0	0			0.009
10/5/2017 17:39			0	0	0	0	0			0.01
10/5/2017 17:40	13.6	97.2	0	0	0	0	0	40.75423;-	15	0.008
10/5/2017 17:41			0	0	0	0	0			0.008
10/5/2017 17:42			0	0	0	0	0			0.008
10/5/2017 17:43			0	0	0	0	0			0.01
10/5/2017 17:44			0	0	0	0	0			0.012
10/5/2017 17:45	14	84	0	0	0	0	0	40.75425;-	10	0.01
10/5/2017 17:46			0	0	0	0	0			0.009
10/5/2017 17:47			0	0	0	0	0			0.01
10/5/2017 17:48			0	0	0	0	0			0.011
10/5/2017 17:49			0	0	0	0	0			0.01
10/5/2017 17:50	13.4	92.1	0	0	0	0	0	40.7542;-7	18	0.012
10/5/2017 17:51			0	0	0	0	0			0.011
10/5/2017 17:52			0	0	0	0	0			0.012
10/5/2017 17:53			0	0	0	0	0			0.01
10/5/2017 17:54			0	0	0	0	0			0.012
10/5/2017 17:55	13.4	85	0	0	0	0	0	40.7542;-7	22	0.012
10/5/2017 17:56			0	0	0	0	0			0.014
10/5/2017 17:57			0	0	0	0	0			0.013
10/5/2017 17:58			0	0	0	0	0			0.014
10/5/2017 17:59			0	0	0	0	0			0.016
10/5/2017 18:00	13.8	83	0	0	0	0	0	40.75425;-	18	0.015
10/5/2017 18:01			0	0	0	0	0			0.014
10/5/2017 18:02			0	0	0	0	0			0.013
10/5/2017 18:03			0	0	0	0	0			0.019
10/5/2017 18:04			0	0	0	0	0			0.015
10/5/2017 18:05	13.4	82	0	0	0	0	0			0.017
10/5/2017 18:05								40.75422;-	22	
10/5/2017 18:06			0	0	0	0	0			0.018
10/5/2017 18:07			0	0	0	0	0			0.018
10/5/2017 18:08			0	0	0	0	0			0.014
10/5/2017 18:09			0	0	0	0	0			0.012
10/5/2017 18:10	13.4	86	0	0	0	0	0			0.012
10/5/2017 18:10								40.75422;-	22	
10/5/2017 18:11			0	0	0	0	0			0.013
10/5/2017 18:12			0	0	0	0	0			0.013
10/5/2017 18:13			0	0	0	0	0			0.012
10/5/2017 18:14			0	0	0	0	0			0.011
10/5/2017 18:15	13.9	91.1	0	0	0	0	0			0.011
10/5/2017 18:15								40.7542;-7	23	
10/5/2017 18:16			0	0	0	0	0			0.014
10/5/2017 18:17			0	0	0	0	0			0.018
10/5/2017 18:18			0	0	0	0	0			0.017
10/5/2017 18:19			0	0	0	0	0			0.016

10/5/2017 18:20	13.4	87	0	0	0	0	0	40.75422;-	24	0.016
10/5/2017 18:21			0	0	0	0	0			0.022
10/5/2017 18:22			0	0	0	0	0			0.018
10/5/2017 18:23			0	0	0	0	0			0.017
10/5/2017 18:24			0	0	0	0	0			0.018
10/5/2017 18:25	13.4	120.5	0	0	0	0	0	40.75426;-	8	0.017
10/5/2017 18:26			0	0	0	0	0			0.017
10/5/2017 18:27			0	0	0	0	0			0.016
10/5/2017 18:28			0	0	0	0	0			0.015
10/5/2017 18:29			0	0	0	0	0			0.013
10/5/2017 18:30	13.3	95.1	0	0	0	0	0	40.75426;-	-3	0.013
10/5/2017 18:31			0	0	0	0	0			0.143
10/5/2017 18:32			0	0	0	0	0			0.094
10/5/2017 18:33			0	0	0	0	0			0.082
10/5/2017 18:34			0	0	0	0	0			0.053
10/5/2017 18:35	13.3	85	0	0	0	0	0	40.75426;-	-8	0.038
10/5/2017 18:36			0	0	0	0	0			0.022
10/5/2017 18:37			0	0	0	0	0			0.017
10/5/2017 18:38			0	0	0	0	0			0.017
10/5/2017 18:39			0	0	0	0	0			0.018
10/5/2017 18:40	13.3	85	0	0	0	0	0	40.75426;-	-8	0.014
10/5/2017 18:41			0	0	0	0	0			0.013
10/5/2017 18:42			0	0	0	0	0			0.014
10/5/2017 18:43			0	0	0	0	0			0.015
10/5/2017 18:44			0	0	0	0	0			0.015
10/5/2017 18:45	13.6	82	0	0	0	0	0	40.75423;-	3	0.014
10/5/2017 18:46			0	0	0	0	0			0.012
10/5/2017 18:47			0	0	0	0	0			0.012
10/5/2017 18:48			0	0	0	0	0			0.013
10/5/2017 18:49			0	0	0	0	0			0.013
10/5/2017 18:50	13.3	90.1	0	0	0	0	0	40.75423;-	0	0.015
10/5/2017 18:51			0	0	0	0	0			0.015
10/5/2017 18:52			0	0	0	0	0			0.015
10/5/2017 18:53			0	0	0	0	0			0.019
10/5/2017 18:54			0	0	0	0	0			0.019
10/5/2017 18:55	13.4	86	0	0	0	0	0	40.75428;-	1	0.02
10/5/2017 18:56			0	0	0	0	0			0.044
10/5/2017 18:57			0	0	0	0	0			0.023
10/5/2017 18:58			0	0	0	0	0			0.017
10/5/2017 18:59			0	0	0	0	0			0.016
10/5/2017 19:00	13.4	84	0	0	0	0	0	40.75426;-	1	0.015
10/5/2017 19:01			0	0	0	0	0			0.013
10/5/2017 19:02			0	0	0	0	0			0.013
10/5/2017 19:03			0	0	0	0	0			0.014
10/5/2017 19:04			0	0	0	0	0			0.013
10/5/2017 19:05	13.4	81	0	0	0	0	0	40.75422;-	16	0.013
10/5/2017 19:06			0	0	0	0	0			0.012
10/6/2017 12:09	13	84								
10/6/2017 12:09								40.753641099999996;-73.4865027		
10/6/2017 12:10	13	79								
10/6/2017 12:10								40.75425;-	13	
10/6/2017 12:13										0.013
10/6/2017 12:14										0.04
10/6/2017 12:15	12.8	90.1	0	0	0	0	0			0.032
10/6/2017 12:15								40.75423;-	6	
10/6/2017 12:16			0	0	0	0	0			0.024

10/6/2017 12:17			0	0	0	0	0			0.019
10/6/2017 12:18			0	0	0	0	0			0.016
10/6/2017 12:19			0	0	0	0	0			0.014
10/6/2017 12:20	12.8	86	0	0	0	0	0			0.012
10/6/2017 12:20								40.75428;-	9	
10/6/2017 12:21			0	0	0	0	0			0.01
10/6/2017 12:22			0	0	0	0	0			0.009
10/6/2017 12:23			0	0	0	0	0			0.008
10/6/2017 12:24			0	0	0	0	0			0.008
10/6/2017 12:25	12.8	93.1	0	0	0	0	0			0.008
10/6/2017 12:25								40.75426;-	10	
10/6/2017 12:26			0	0	0	0	0			0.007
10/6/2017 12:27			0	0	0	0	0			0.007
10/6/2017 12:28			0	0	0	0	0			0.007
10/6/2017 12:29			0	0	0	0	0			0.006
10/6/2017 12:30	12.8	81	0	0	0	0	0			0.007
10/6/2017 12:30								40.75426;-	11	
10/6/2017 12:31			0	0	0	0	0			0.006
10/6/2017 12:32			0	0	0	0	0			0.006
10/6/2017 12:33			0	0	0	0	0			0.006
10/6/2017 12:34			0	0	0	0	0			0.006
10/6/2017 12:35	12.8	92.1	0	0	0	0	0			0.006
10/6/2017 12:35								40.75428;-	10	
10/6/2017 12:36			0	0	0	0	0			0.007
10/6/2017 12:37			0	0	0	0	0			0.006
10/6/2017 12:38			0	0	0	0	0			0.006
10/6/2017 12:39			0	0	0	0	0			0.007
10/6/2017 12:40	12.9	87	0	0	0	0	0			0.007
10/6/2017 12:40								40.75428;-	8	
10/6/2017 12:41			0	0	0	0	0			0.007
10/6/2017 12:42			0	0	0	0	0			0.007
10/6/2017 12:43			0	0	0	0	0			0.007
10/6/2017 12:44			0	0	0	0	0			0.007
10/6/2017 12:45	13	85	0	0	0	0	0			0.007
10/6/2017 12:45								40.75428;-	13	
10/6/2017 12:46			0	0	0	0	0			0.006
10/6/2017 12:47			0	0	0	0	0			0.006
10/6/2017 12:48			0	0	0	0	0			0.006
10/6/2017 12:49			0	0	0	0	0			0.006
10/6/2017 12:50	13.1	82	0	0	0	0	0			0.006
10/6/2017 12:50								40.75426;-	14	
10/6/2017 12:51			0	0	0	0	0			0.007
10/6/2017 12:52			0	0	0	0	0			0.007
10/6/2017 12:53			0	0	0	0	0			0.007
10/6/2017 12:54			0	0	0	0	0			0.006
10/6/2017 12:55	13.1	82	0	0	0	0	0			0.006
10/6/2017 12:55								40.75428;-	16	
10/6/2017 12:56			0	0	0	0	0			0.007
10/6/2017 12:57			0	0	0	0	0			0.007
10/6/2017 12:58			0	0	0	0	0			0.007
10/6/2017 12:59			0	0	0	0	0			0.007
10/6/2017 13:00	13	83	0	0	0	0	0			0.006
10/6/2017 13:00								40.75426;-	20	
10/6/2017 13:01			0	0	0	0	0			0.006
10/6/2017 13:02			0	0	0	0	0			0.006
10/6/2017 13:03			0	0	0	0	0			0.006

10/6/2017 13:04			0	0	0	0	0				0.005
10/6/2017 13:05	12.9	82	0	0	0	0	0				0.005
10/6/2017 13:05								40.75428;-[illegible]	20		
10/6/2017 13:06			0	0	0	0	0				0.005
10/6/2017 13:07			0	0	0	0	0				0.005
10/6/2017 13:08			0	0	0	0	0				0.006
10/6/2017 13:09			0	0	0	0	0				0.006
10/6/2017 13:10	12.9	83	0	0	0	0	0				0.006
10/6/2017 13:10								40.75423;-[illegible]	22		
10/6/2017 13:11			0	0	0	0	0				0.006
10/6/2017 13:12			0	0	0	0	0				0.006
10/6/2017 13:13			0	0	0	0	0				0.006
10/6/2017 13:14			0	0	0	0	0				0.006
10/6/2017 13:15	12.9	86	0	0	0	0	0				0.006
10/6/2017 13:15								40.75422;-[illegible]	16		
10/6/2017 13:16			0	0	0	0	0				0.006
10/6/2017 13:17			0	0	0	0	0				0.006
10/6/2017 13:18			0	0	0	0	0				0.009
10/6/2017 13:19			0	0	0	0	0				0.009
10/6/2017 13:20	13.1	81	0	0	0	0	0				0.007
10/6/2017 13:20								40.75422;-[illegible]	21		
10/6/2017 13:21			0	0	0	0	0				0.007
10/6/2017 13:22			0	0	0	0	0				0.008
10/6/2017 13:23			0	0	0	0	0				0.009
10/6/2017 13:24			0	0	0	0	0				0.008
10/6/2017 13:25	13.5	81	0	0	0	0	0				0.007
10/6/2017 13:25								40.75426;-[illegible]	13		
10/6/2017 13:26			0	0	0	0	0				0.006
10/6/2017 13:27			0	0	0	0	0				0.006
10/6/2017 13:28			0	0	0	0	0				0.006
10/6/2017 14:14	12.9	86									
10/6/2017 14:14								40.753668999999995;-73.48649			
10/6/2017 14:15	13.1	124.5	0	0	0	0	0				
10/6/2017 14:15								40.75421;-[illegible]	13		
10/6/2017 14:16			0	0	0	0	0				
10/6/2017 14:17			0	0	0	0	0				
10/6/2017 14:18			0	0	0	0	0				
10/6/2017 14:19			0	0	0	0	0				0.008
10/6/2017 14:20	13.1	80	0	0	0	0	0				0.008
10/6/2017 14:20								40.75421;-[illegible]	18		
10/6/2017 14:21			0	0	0	0	0				0.01
10/6/2017 14:22			0	0	0	0	0				0.017
10/6/2017 14:23			0	0	0	0	0				0.018
10/6/2017 14:24			0	0	0	0	0				0.017
10/6/2017 14:25	13.1	81	0	0	0	0	0				0.016
10/6/2017 14:25								40.75426;-[illegible]	9		
10/6/2017 14:26			0	0	0	0	0				0.014
10/11/2017 12:55	12.8	90.1									
10/11/2017 12:55								40.7538689;-73.48798479999999			
10/11/2017 13:05	12.6	121.5									
10/11/2017 13:05								40.7536145;-73.4865695			
10/11/2017 13:07											0.025
10/11/2017 13:08											0.026
10/11/2017 13:09											0.025
10/11/2017 13:10	12.7	89.1						40.75423;-[illegible]	25		0.025
10/11/2017 13:11											0.024

10/11/2017 13:12										0.024
10/11/2017 13:13										0.024
10/11/2017 13:14										0.025
10/11/2017 13:15	12.7	98.2						40.75426;-	9	0.025
10/11/2017 13:16										0.025
10/11/2017 13:17										0.024
10/11/2017 13:18										0.025
10/11/2017 13:19										0.026
10/11/2017 13:20	12.7	86						40.75425;-	20	0.026
10/11/2017 13:21										0.024
10/11/2017 13:22										0.025
10/11/2017 13:23										0.024
10/11/2017 13:24										0.025
10/11/2017 13:25	12.7	85						40.75428;-	1	0.026
10/11/2017 13:26										0.024
10/11/2017 13:27										0.024
10/11/2017 13:28										0.024
10/11/2017 13:29										0.025
10/11/2017 13:30	12.7	98.2						40.75426;-	10	0.025
10/11/2017 13:31										0.026
10/11/2017 13:32										0.026
10/11/2017 13:33										0.025
10/11/2017 13:34										0.025
10/11/2017 13:35	12.7	88.1						40.75429;-	11	0.025
10/11/2017 13:36										0.025
10/11/2017 13:37										0.025
10/11/2017 13:38										0.025
10/11/2017 13:39										0.026
10/11/2017 13:40	12.7	82						40.75416;-	10	0.025
10/11/2017 13:41										0.025
10/11/2017 13:42										0.025
10/11/2017 13:43										0.025
10/11/2017 13:44										0.024
10/11/2017 13:45	12.7	93.1						40.75426;-	13	0.024
10/11/2017 13:46										0.024
10/11/2017 13:47										0.024
10/11/2017 13:48										0.023
10/11/2017 13:49										0.023
10/11/2017 13:50	12.7	92.1						40.7543;-7	5	0.024
10/11/2017 13:51										0.024
10/11/2017 13:52										0.023
10/11/2017 13:53										0.024
10/11/2017 13:54										0.022
10/11/2017 13:55	12.7	96.2						40.75428;-	-3	0.023
10/11/2017 13:56										0.023
10/11/2017 13:57										0.023
10/11/2017 13:59	12.7	148.8								
10/11/2017 13:59								40.753708499999995;-73.4864734		
10/11/2017 14:00	12.7	91.1	0.024	0.031	0	0	0			0.023
10/11/2017 14:01			0.029	0.031	0	0	0			0.018
10/11/2017 14:02			0.038	0.038	0	0	0			0.016
10/11/2017 14:03			0.043	0.043	0	0	0			0.013
10/11/2017 14:04			0.052	0.053	0	0	0			0.012
10/11/2017 14:05	12.7	91.1	0.058	0.058	0	0	0	40.75429;-	7	0.01
10/11/2017 14:06			0.062	0.062	0	0	0			0.009
10/11/2017 14:07			0.068	0.068	0	0	0			0.009

10/11/2017 14:08			0.072	0.074	0	0	0			0.008
10/11/2017 14:09			0.077	0.079	0	0	0			0.008
10/11/2017 14:10	12.7	85	0.081	0.082	0	0	0.001	40.75429;-	6	0.007
10/11/2017 14:11			0.088	0.088	0	0	0.001			0.007
10/11/2017 14:12			0.094	0.094	0	0	0.001			0.007
10/11/2017 14:13			0.098	0.099	0	0	0.001			0.006
10/11/2017 14:14			0.102	0.102	0	0.059	0.001			0.006
10/11/2017 14:15	12.7	89.1	0.106	0.107	0	0.065	0.002	40.75428;-	10	0.006
10/11/2017 14:16			0.111	0.111	0	0.071	0.002			0.006
10/11/2017 14:17			0.114	0.114	0	0.076	0.002			0.006
10/11/2017 14:18			0.117	0.118	0	0.081	0.002			0.005
10/11/2017 14:19			0.121	0.122	0	0.086	0.003			0.005
10/11/2017 14:20	12.8	87	0.127	0.127	0	0.091	0.003	40.7543;-7	10	0.005
10/11/2017 14:21			0.13	0.131	0	0.095	0.003			0.005
10/11/2017 14:22			0.133	0.133	0	0.1	0.003			0.005
10/11/2017 14:23			0.137	0.137	0	0.104	0.004			0.005
10/11/2017 14:24			0.14	0.141	0	0.109	0.004			0.005
10/11/2017 14:25	12.8	92.1	0.144	0.145	0	0.113	0.004	40.75416;-	11	0.005
10/11/2017 14:26			0.149	0.15	0	0.117	0.004			0.005
10/11/2017 14:27			0.152	0.153	0	0.121	0.005			0.005
10/11/2017 14:28			0.155	0.156	0	0.125	0.005			0.005
10/11/2017 14:29			0.158	0.159	0	0.129	0.005			0.005
10/11/2017 14:30	12.8	84	0.161	0.161	0	0.133	0.006	40.75423;-	4	0.005
10/11/2017 14:31			0.165	0.165	0	0.136	0.006			0.005
10/11/2017 14:32			0.168	0.169	0	0.14	0.006			0.005
10/11/2017 14:33			0.17	0.172	0	0.144	0.007			0.005
10/11/2017 14:34			0.174	0.174	0	0.147	0.007			0.005
10/11/2017 14:35	12.9	83	0.178	0.178	0	0.151	0.007	40.75415;-	4	0.005
10/11/2017 14:36			0.18	0.181	0	0.154	0.008			0.005
10/11/2017 14:37			0.184	0.185	0	0.157	0.008			0.005
10/11/2017 14:38			0.187	0.187	0	0.161	0.009			0.005
10/11/2017 14:39			0.189	0.191	0	0.164	0.009			0.005
10/11/2017 14:40	13	83	0.193	0.194	0	0.167	0.009	40.75418;-	8	0.005
10/11/2017 14:41			0.195	0.196	0	0.17	0.01			0.005
10/11/2017 14:42			0.2	0.201	0	0.174	0.01			0.005
10/11/2017 14:43			0.203	0.204	0	0.177	0.011			0.005
10/11/2017 14:44			0.207	0.207	0	0.18	0.011			0.005
10/11/2017 14:45	12.9	88.1	0.209	0.21	0	0.183	0.011	40.75416;-	6	0.005
10/11/2017 14:46			0.212	0.212	0	0.186	0.012			0.005
10/11/2017 14:47			0.212	0.214	0	0.189	0.012			0.005
10/11/2017 14:48			0.217	0.217	0	0.192	0.013			0.005
10/11/2017 14:49			0.219	0.221	0	0.195	0.013			0.005
10/11/2017 14:50	12.9	88.1	0.221	0.223	0	0.198	0.014	40.75409;-	6	0.005
10/11/2017 14:51			0.223	0.224	0	0.201	0.014			0.005
10/11/2017 14:52			0.226	0.227	0	0.204	0.015			0.005
10/11/2017 14:53			0.228	0.229	0	0.207	0.015			0.005
10/11/2017 14:54			0.231	0.232	0	0.21	0.016			0.005
10/11/2017 14:55	13.9	121.5	0.237	0.237	0	0.212	0.016			0.005
10/11/2017 14:56			0.243	0.243	0	0.215	0.017			0.005
10/11/2017 14:57			0.247	0.248	0	0.218	0.017			0.005
10/11/2017 14:58			0.252	0.252	0	0.222	0.018			0.005
10/11/2017 14:59			0.26	0.26	0	0.225	0.018			0.005
10/11/2017 15:00	13.5	84	0.264	0.264	0	0.228	0.019	40.75416;-	7	0.005
10/11/2017 15:01			0.268	0.268	0	0.232	0.019			0.005
10/11/2017 15:02			0.273	0.273	0	0.236	0.02			0.005
10/11/2017 15:03			0.277	0.277	0	0.24	0.02			0.005

10/11/2017 15:04			0.284	0.284	0	0.244	0.021			0.005
10/11/2017 15:05	13.7	82	0.289	0.289	0	0.248	0.021	40.75417;-	3	0.005
10/11/2017 15:06			0.296	0.296	0	0.253	0.022			0.005
10/11/2017 15:07			0.302	0.302	0	0.258	0.023			0.005
10/11/2017 15:08			0.302	0.305	0	0.262	0.023			0.005
10/11/2017 15:09			0.304	0.306	0	0.267	0.024			0.005
10/11/2017 15:10	13.5	81	0.308	0.31	0	0.272	0.025	40.75419;-	14	0.005
10/11/2017 15:11			0.313	0.314	0	0.277	0.025			0.005
10/11/2017 15:12			0.317	0.317	0	0.282	0.026			0.005
10/11/2017 15:13			0.322	0.323	0	0.287	0.027			0.005
10/11/2017 15:14			0.327	0.327	0	0.291	0.027			0.005
10/11/2017 15:15	13.5	80	0.331	0.332	0	0.296	0.028	40.75421;-	4	0.006
10/11/2017 15:16			0.337	0.338	0	0.3	0.029			0.005
10/11/2017 15:17			0.338	0.34	0	0.305	0.029			0.005
10/11/2017 15:18			0.34	0.34	0	0.309	0.03			0.005
10/11/2017 15:19			0.343	0.344	0	0.314	0.031			0.005
10/11/2017 15:20	13.4	91.1	0.345	0.346	0	0.317	0.031	40.75417;-	19	0.005
10/11/2017 15:21			0.348	0.348	0	0.321	0.032			0.005
10/11/2017 15:22			0.347	0.348	0	0.324	0.033			0.005
10/11/2017 15:23			0.345	0.348	0	0.327	0.034			0.005
10/11/2017 15:24			0.347	0.349	0	0.33	0.034			0.006
10/11/2017 15:25	13.1	82	0.348	0.35	0	0.333	0.035	40.75416;-	21	0.006
10/11/2017 15:26			0.347	0.35	0	0.335	0.036			0.005
10/11/2017 15:27			0.349	0.351	0	0.338	0.036			0.005
10/11/2017 15:28			0.347	0.352	0	0.34	0.037			0.005
10/11/2017 15:29			0.347	0.352	0	0.341	0.038			0.005
10/11/2017 15:30	13.1	130.6	0.346	0.352	0	0.343	0.039	40.75423;-	9	0.005
10/11/2017 15:31			0.347	0.352	0	0.344	0.039			0.005
10/11/2017 15:32			0.344	0.352	0	0.344	0.04			0.005
10/11/2017 15:33			0.345	0.352	0	0.345	0.041			0.005
10/11/2017 15:34			0.21	0.352	0	0.344	0.041			0.014
10/11/2017 15:35	13	128.6	0.23	0.352	0	0.335	0.042	40.75426;-	14	0.017
10/11/2017 15:36			0.242	0.352	0	0.328	0.042			0.014
10/11/2017 15:37			0.258	0.352	0	0.321	0.043			0.012
10/11/2017 15:38			0.267	0.352	0	0.315	0.043			0.011
10/11/2017 15:39			0.272	0.352	0	0.31	0.044			0.01
10/11/2017 15:40	13.1	84	0.275	0.352	0	0.305	0.045	40.75418;-	24	0.009
10/11/2017 15:41			0.28	0.352	0	0.3	0.045			0.008
10/11/2017 15:42			0.286	0.352	0	0.296	0.046			0.007
10/11/2017 15:43			0.288	0.352	0	0.292	0.046			0.007
10/11/2017 15:44			0.29	0.352	0	0.288	0.047			0.007
10/11/2017 15:45	14	77.9	0.291	0.352	0	0.284	0.047	40.75423;-	16	0.006
10/11/2017 15:46			0.296	0.352	0	0.28	0.048			0.006
10/11/2017 15:47			0.301	0.352	0	0.277	0.049			0.006
10/11/2017 15:48			0.305	0.352	0	0.274	0.049			0.006
10/11/2017 15:49			0.311	0.352	0	0.273	0.05			0.006
10/11/2017 15:50	14.4	80	0.312	0.352	0	0.279	0.051	40.75421;-	20	0.006
10/11/2017 15:51			0.317	0.352	0	0.284	0.051			0.006
10/11/2017 15:52			0.322	0.352	0	0.289	0.052			0.006
10/11/2017 15:53			0.328	0.352	0	0.293	0.053			0.005
10/11/2017 15:54			0.331	0.352	0	0.297	0.053			0.005
10/11/2017 15:55	14.2	87	0.334	0.352	0	0.301	0.054	40.75425;-	17	0.005
10/11/2017 15:56			0.333	0.352	0	0.305	0.055			0.005
10/11/2017 15:57			0.331	0.352	0	0.309	0.055			0.006
10/11/2017 15:58			0.339	0.352	0	0.312	0.056			0.006
10/11/2017 15:59			0.339	0.352	0	0.315	0.057			0.006

10/11/2017 16:00	14	77.9	0.342	0.352	0	0.319	0.057	40.75422;-	18	0.006
10/11/2017 16:01			0.342	0.352	0	0.322	0.058			0.006
10/11/2017 16:02			0.343	0.352	0	0.325	0.059			0.006
10/11/2017 16:03			0.343	0.352	0	0.328	0.06			0.006
10/11/2017 16:04			0.342	0.352	0	0.33	0.06			0.006
10/11/2017 16:05	14.1	79	0.344	0.352	0	0.332	0.061	40.75423;-	18	0.006
10/11/2017 16:06			0.345	0.352	0	0.335	0.062			0.006
10/11/2017 16:07			0.343	0.352	0	0.336	0.062			0.006
10/11/2017 16:08			0.343	0.352	0	0.338	0.063			0.006
10/11/2017 16:09			0.346	0.352	0	0.339	0.064			0.006
10/11/2017 16:10	14	77.9	0.346	0.352	0	0.34	0.065	40.75426;-	25	0.006
10/11/2017 16:11			0.347	0.352	0	0.341	0.065			0.005
10/11/2017 16:12			0.347	0.352	0	0.342	0.066			0.006
10/11/2017 16:13			0.347	0.352	0	0.343	0.067			0.006
10/11/2017 16:14			0.348	0.352	0	0.343	0.067			0.006
10/11/2017 16:15	14.1	120.5	0.347	0.352	0	0.344	0.068	40.75426;-	18	0.006
10/11/2017 16:16			0.349	0.352	0	0.344	0.069			0.006
10/11/2017 16:17			0.349	0.352	0	0.345	0.07			0.006
10/11/2017 16:18			0.342	0.352	0	0.345	0.07			0.006
10/11/2017 16:19			0.343	0.352	0	0.345	0.071			0.006
10/11/2017 16:20	14.2	120.5	0.34	0.352	0	0.345	0.072	40.75426;-	20	0.006
10/11/2017 16:21			0.342	0.352	0	0.345	0.073			0.006
10/11/2017 16:22			0.344	0.352	0	0.345	0.073			0.006
10/11/2017 16:23			0.338	0.352	0	0.345	0.074			0.006
10/11/2017 16:24			0.334	0.352	0	0.344	0.075			0.006
10/11/2017 16:25	14.1	83	0.333	0.352	0	0.343	0.075	40.75426;-	26	0.006
10/11/2017 16:26			0.335	0.352	0	0.343	0.076			0.006
10/11/2017 16:27			0.335	0.352	0	0.342	0.077			0.006
10/11/2017 16:28			0.333	0.352	0	0.341	0.077			0.006
10/11/2017 16:29			0.33	0.352	0	0.34	0.078			0.006
10/11/2017 16:30	13.4	81	0.332	0.352	0	0.339	0.079	40.75426;-	23	0.006
10/11/2017 16:31			0.331	0.352	0	0.338	0.08			0.006
10/11/2017 16:32			0.328	0.352	0	0.337	0.08			0.006
10/11/2017 16:33			0.329	0.352	0	0.335	0.081			0.006
10/11/2017 16:34			0.331	0.352	0	0.334	0.082			0.006
10/11/2017 16:35	14.1	81	0.331	0.352	0	0.333	0.082	40.75428;-	17	0.006
10/11/2017 16:36			0.334	0.352	0	0.333	0.083			0.006
10/11/2017 16:37			0.336	0.352	0	0.332	0.084			0.006
10/11/2017 16:38			0.338	0.352	0	0.332	0.084			0.005
10/11/2017 16:39			0.338	0.352	0	0.332	0.085			0.005
10/11/2017 16:40	14.3	83	0.341	0.352	0	0.332	0.086	40.75428;-	19	0.006
10/11/2017 16:41			0.342	0.352	0	0.332	0.086			0.006
10/11/2017 16:42			0.343	0.352	0	0.333	0.087			0.006
10/11/2017 16:43			0.347	0.352	0	0.333	0.088			0.006
10/11/2017 16:44			0.349	0.352	0	0.334	0.089			0.006
10/11/2017 16:45	14	77.9	0.351	0.353	0	0.335	0.089	40.75426;-	20	0.005
10/11/2017 16:46			0.352	0.353	0	0.337	0.09			0.006
10/11/2017 16:47			0.354	0.354	0	0.338	0.091			0.006
10/11/2017 16:48			0.355	0.356	0	0.34	0.092			0.006
10/11/2017 16:49			0.356	0.359	0	0.342	0.092			0.005
10/11/2017 16:50	13.9	112.4	0.354	0.359	0	0.344	0.093	40.75426;-	15	0.006
10/11/2017 16:51			0.352	0.359	0	0.345	0.094			0.006
10/11/2017 16:52			0.35	0.359	0	0.346	0.094			0.006
10/11/2017 16:53			0.35	0.359	0	0.347	0.095			0.006
10/11/2017 16:54			0.355	0.359	0	0.348	0.096			0.006
10/11/2017 16:55	14.1	111.3	0.349	0.359	0	0.349	0.097	40.75425;-	13	0.006

10/11/2017 16:56			0.347	0.359	0	0.35	0.097			0.007
10/11/2017 16:57			0.344	0.359	0	0.35	0.098			0.007
10/11/2017 16:58			0.345	0.359	0	0.35	0.099			0.007
10/11/2017 16:59			0.34	0.359	0	0.35	0.1			0.007
10/11/2017 17:00	14	127.5	0.341	0.359	0	0.349	0.1			0.007
10/11/2017 17:00								40.75423;-	17	
10/11/2017 17:01			0.345	0.359	0	0.349	0.101			0.007
10/11/2017 17:02			0.335	0.359	0	0.348	0.102			0.007
10/11/2017 17:03			0.329	0.359	0	0.347	0.102			0.007
10/11/2017 17:04			0.33	0.359	0	0.345	0.103			0.008
10/11/2017 17:05	14.1	83	0.332	0.359	0	0.343	0.104	40.75428;-	17	0.007
10/11/2017 17:06			0.332	0.359	0	0.342	0.104			0.007
10/11/2017 17:07			0.33	0.359	0	0.341	0.105			0.007
10/11/2017 17:08			0.328	0.359	0	0.339	0.106			0.006
10/11/2017 17:09			0.325	0.359	0	0.338	0.106			0.007
10/11/2017 17:10	14	79	0.323	0.359	0	0.336	0.107	40.75425;-	20	0.007
10/11/2017 17:11			0.325	0.359	0	0.334	0.108			0.006
10/11/2017 17:12			0.317	0.359	0	0.333	0.109			0.006
10/11/2017 17:13			0.305	0.359	0	0.331	0.109			0.007
10/11/2017 17:14			0.304	0.359	0	0.328	0.11			0.007
10/11/2017 17:15	14.1	88.1	0.305	0.359	0	0.326	0.11	40.75422;-	22	0.007
10/11/2017 17:16			0.303	0.359	0	0.323	0.111			0.007
10/11/2017 17:17			0.295	0.359	0	0.321	0.112			0.007
10/11/2017 17:18			0.294	0.359	0	0.318	0.112			0.007
10/11/2017 17:19			0.288	0.359	0	0.315	0.113			0.007
10/11/2017 17:20	14.1	93.1	0.282	0.359	0	0.312	0.114	40.7542;-7	24	0.007
10/11/2017 17:21			0.282	0.359	0	0.309	0.114			0.007
10/11/2017 17:22			0.276	0.359	0	0.306	0.115			0.007
10/11/2017 17:23			0.271	0.359	0	0.302	0.115			0.007
10/11/2017 17:24			0.266	0.359	0	0.298	0.116			0.008
10/11/2017 17:25	14	88.1	0.264	0.359	0	0.294	0.116	40.75417;-	26	0.008
10/11/2017 17:26			0.261	0.359	0	0.29	0.117			0.008
10/11/2017 17:27			0.262	0.359	0	0.286	0.117			0.008
10/11/2017 17:28			0.254	0.359	0	0.283	0.118			0.007
10/11/2017 17:29			0.251	0.359	0	0.279	0.119			0.008
10/11/2017 17:30	14.1	77.9	0.247	0.359	0	0.276	0.119	40.75418;-	22	0.007
10/11/2017 17:31			0.251	0.359	0	0.272	0.12			0.007
10/11/2017 17:32			0.25	0.359	0	0.268	0.12			0.007
10/11/2017 17:33			0.251	0.359	0	0.265	0.121			0.007
10/11/2017 17:34			0.251	0.359	0	0.263	0.121			0.007
10/11/2017 17:35	14.1	91.1	0.247	0.359	0	0.26	0.122	40.75418;-	26	0.006
10/11/2017 17:36			0.246	0.359	0	0.258	0.122			0.006
10/11/2017 17:37			0.247	0.359	0	0.256	0.123			0.007
10/11/2017 17:38			0.243	0.359	0	0.253	0.123			0.007
10/11/2017 17:39			0.243	0.359	0	0.252	0.124			0.007
10/11/2017 17:40	14.1	82	0.244	0.359	0	0.25	0.124	40.75417;-	31	0.007
10/11/2017 17:41			0.239	0.359	0	0.249	0.125			0.007
10/11/2017 17:42			0.242	0.359	0	0.247	0.125			0.007
10/11/2017 17:43			0.243	0.359	0	0.246	0.126			0.007
10/11/2017 17:44			0.244	0.359	0	0.246	0.126			0.007
10/11/2017 17:45	13.9	91.1	0.243	0.359	0	0.245	0.127	40.7542;-7	25	0.007
10/11/2017 17:46			0.242	0.359	0	0.245	0.127			0.007
10/11/2017 17:47			0.243	0.359	0	0.244	0.128			0.007
10/11/2017 17:48			0.243	0.359	0	0.244	0.128			0.007
10/11/2017 17:49			0.247	0.359	0	0.243	0.129			0.007
10/11/2017 17:50	14.2	120.5	0.247	0.359	0	0.243	0.129	40.75422;-	24	0.006

10/11/2017 17:51			0.249	0.359	0	0.243	0.13				0.006
10/11/2017 17:52			0.253	0.359	0	0.243	0.13				0.007
10/11/2017 17:53			0.256	0.359	0	0.244	0.131				0.007
10/11/2017 17:54			0.261	0.359	0	0.244	0.131				0.008
10/11/2017 17:55	13.9	80	0.265	0.359	0	0.245	0.132		40.75419;-	29	0.008
10/11/2017 17:56			0.26	0.359	0	0.247	0.132				0.008
10/11/2017 17:57			0.261	0.359	0	0.248	0.133				0.008
10/11/2017 17:58			0.264	0.359	0	0.249	0.134				0.008
10/11/2017 17:59			0.269	0.359	0	0.251	0.134				0.008
10/11/2017 18:00	14	81	0.272	0.359	0	0.252	0.135		40.75417;-	28	0.008
10/11/2017 18:01			0.274	0.359	0	0.254	0.135				0.008
10/11/2017 18:02			0.272	0.359	0	0.256	0.136				0.008
10/11/2017 18:03			0.269	0.359	0	0.258	0.136				0.008
10/11/2017 18:04			0.272	0.359	0	0.26	0.137				0.008
10/11/2017 18:05	14	87	0.272	0.359	0	0.262	0.137		40.75417;-	28	0.008
10/11/2017 18:06			0.272	0.359	0	0.263	0.138				0.008
10/11/2017 18:07			0.273	0.359	0	0.265	0.139				0.007
10/11/2017 18:08			0.277	0.359	0	0.266	0.139				0.008
10/11/2017 18:09			0.283	0.359	0	0.268	0.14				0.007
10/11/2017 18:10			0.285								0.007
10/12/2017 13:11	12.9	120.5									
10/12/2017 13:11									40.7538924;-73.4879811		
10/12/2017 13:12			0	0.011	0	0	0				
10/12/2017 13:13			0	0.011	0	0	0				
10/12/2017 13:14			0	0.011	0	0	0				0.009
10/12/2017 13:15	13.2	79	0.009	0.011	0	0	0		40.75439;-	-24	0.008
10/12/2017 13:16			0.016	0.016	0	0	0				0.007
10/12/2017 13:17			0.022	0.022	0	0	0				0.005
10/12/2017 13:18			0.029	0.029	0	0	0				0.005
10/12/2017 13:19			0.035	0.036	0	0	0				0.004
10/12/2017 13:20	12.8	80	0.04	0.04	0	0	0		40.75433;-	0	0.004
10/12/2017 13:21			0.044	0.044	0	0	0				0.004
10/12/2017 13:22			0.046	0.046	0	0	0				0.004
10/12/2017 13:23			0.051	0.051	0	0	0				0.004
10/12/2017 13:24			0.053	0.054	0	0	0				0.004
10/12/2017 13:25	12.8	91.1	0.056	0.056	0	0	0		40.7543;-7	4	0.003
10/12/2017 13:26			0.058	0.058	0	0	0				0.003
10/12/2017 13:27			0.061	0.061	0	0.029	0				0.003
10/12/2017 13:28			0.062	0.062	0	0.033	0.001				0.003
10/12/2017 13:29			0.065	0.066	0	0.037	0.001				0.003
10/12/2017 13:30	12.8	82	0.067	0.067	0	0.041	0.001		40.75426;-	5	0.003
10/12/2017 13:31			0.069	0.069	0	0.045	0.001				0.003
10/12/2017 13:32			0.071	0.072	0	0.049	0.001				0.003
10/12/2017 13:33			0.073	0.075	0	0.052	0.001				0.003
10/12/2017 13:34			0.077	0.078	0	0.055	0.001				0.003
10/12/2017 13:35	12.7	85	0.079	0.079	0	0.058	0.002		40.75423;-	8	0.003
10/12/2017 13:36			0.081	0.081	0	0.061	0.002				0.003
10/12/2017 13:37			0.084	0.084	0	0.063	0.002				0.003
10/12/2017 13:38			0.086	0.086	0	0.066	0.002				0.003
10/12/2017 13:39			0.089	0.089	0	0.068	0.002				0.003
10/12/2017 13:40	12.7	88.1	0.089	0.089	0	0.07	0.002		40.75422;-	4	0.003
10/12/2017 13:41			0.092	0.093	0	0.073	0.003				0.003
10/12/2017 13:42			0.095	0.095	0	0.075	0.003				0.003
10/12/2017 13:43			0.095	0.095	0	0.077	0.003				0.003
10/12/2017 13:44			0.098	0.099	0	0.079	0.003				0.003
10/12/2017 13:45	12.7	83	0.099	0.099	0	0.082	0.003		40.75425;-	2	0.003

10/12/2017 13:46			0.099	0.1	0	0.084	0.004			0.003
10/12/2017 13:47			0.102	0.102	0	0.086	0.004			0.003
10/12/2017 13:48			0.102	0.103	0	0.088	0.004			0.003
10/12/2017 13:49			0.105	0.106	0	0.09	0.004			0.003
10/12/2017 13:50	12.7	93.1	0.107	0.109	0	0.091	0.004	40.75426;-	2	0.003
10/12/2017 13:51			0.109	0.109	0	0.093	0.005			0.003
10/12/2017 13:52			0.111	0.111	0	0.095	0.005			0.004
10/12/2017 13:53			0.112	0.112	0	0.097	0.005			0.004
10/12/2017 13:54			0.112	0.113	0	0.099	0.005			0.004
10/12/2017 13:55	12.7	83	0.114	0.115	0	0.1	0.006	40.7543;-7	0	0.004
10/12/2017 13:56			0.114	0.116	0	0.102	0.006			0.004
10/12/2017 13:57			0.116	0.116	0	0.103	0.006			0.004
10/12/2017 13:58			0.117	0.118	0	0.105	0.006			0.004
10/12/2017 13:59			0.118	0.119	0	0.107	0.007			0.004
10/12/2017 14:00	12.7	83	0.12	0.121	0	0.108	0.007	40.75426;-	11	0.004
10/12/2017 14:01			0.121	0.122	0	0.109	0.007			0.004
10/12/2017 14:02			0.123	0.123	0	0.111	0.007			0.004
10/12/2017 14:03			0.124	0.125	0	0.112	0.008			0.004
10/12/2017 14:04			0.125	0.125	0	0.114	0.008			0.004
10/12/2017 14:05	12.7	81	0.126	0.126	0	0.115	0.008	40.75429;-	10	0.004
10/12/2017 14:06			0.128	0.128	0	0.116	0.008			0.004
10/12/2017 14:07			0.128	0.129	0	0.118	0.009			0.004
10/12/2017 14:08			0.129	0.129	0	0.119	0.009			0.004
10/12/2017 14:09			0.131	0.131	0	0.12	0.009			0.004
10/12/2017 14:10	12.7	89.1	0.132	0.133	0	0.121	0.009	40.75428;-	4	0.004
10/12/2017 14:11			0.133	0.133	0	0.122	0.01			0.004
10/12/2017 14:12			0.133	0.134	0	0.124	0.01			0.004
10/12/2017 14:13			0.134	0.136	0	0.125	0.01			0.004
10/12/2017 14:14			0.135	0.136	0	0.126	0.01			0.004
10/12/2017 14:15	12.7	87	0.135	0.137	0	0.127	0.011	40.75426;-	10	0.004
10/12/2017 14:16			0.136	0.137	0	0.128	0.011			0.004
10/12/2017 14:17			0.138	0.138	0	0.129	0.011			0.004
10/12/2017 14:18			0.139	0.14	0	0.13	0.012			0.004
10/12/2017 14:19			0.139	0.14	0	0.131	0.012			0.004
10/12/2017 14:20	12.6	82	0.14	0.141	0	0.132	0.012	40.75421;-	2	0.004
10/12/2017 14:21			0.141	0.142	0	0.133	0.012			0.004
10/12/2017 14:22			0.141	0.142	0	0.134	0.013			0.004
10/12/2017 14:23			0.143	0.143	0	0.135	0.013			0.004
10/12/2017 14:24			0.142	0.143	0	0.136	0.013			0.004
10/12/2017 14:25	12.6	83	0.143	0.144	0	0.136	0.014	40.75417;-	0	0.004
10/12/2017 14:26			0.144	0.144	0	0.137	0.014			0.004
10/12/2017 14:27			0.143	0.145	0	0.138	0.014			0.004
10/12/2017 14:28			0.144	0.146	0	0.139	0.015			0.004
10/12/2017 14:29			0.145	0.146	0	0.139	0.015			0.004
10/12/2017 14:30	12.6	92.1	0.145	0.146	0	0.14	0.015	40.75416;-	2	0.004
10/12/2017 14:31			0.145	0.147	0	0.14	0.015			0.004
10/12/2017 14:32			0.146	0.147	0	0.141	0.016			0.004
10/12/2017 14:33			0.145	0.147	0	0.142	0.016			0.004
10/12/2017 14:34			0.146	0.147	0	0.142	0.016			0.004
10/12/2017 14:35	12.7	135.6	0.146	0.147	0	0.142	0.017	40.75417;-	-1	0.004
10/12/2017 14:36			0.147	0.149	0	0.143	0.017			0.004
10/12/2017 14:37			0.149	0.15	0	0.143	0.017			0.004
10/12/2017 14:38			0.15	0.15	0	0.144	0.018			0.004
10/12/2017 14:39			0.15	0.152	0	0.144	0.018			0.004
10/12/2017 14:40	12.8	130.6	0.151	0.152	0	0.145	0.018	40.75423;-	1	0.004
10/12/2017 14:41			0.153	0.154	0	0.146	0.018			0.004

10/12/2017 14:42			0.154	0.154	0	0.146	0.019			0.004
10/12/2017 14:43			0.153	0.154	0	0.147	0.019			0.004
10/12/2017 14:44			0.153	0.154	0	0.147	0.019			0.004
10/12/2017 14:45	12.8	92.1	0.155	0.156	0	0.148	0.02	40.75413;-	7	0.004
10/12/2017 14:46			0.156	0.157	0	0.149	0.02			0.004
10/12/2017 14:47			0.157	0.157	0	0.149	0.02			0.004
10/12/2017 14:48			0.156	0.157	0	0.15	0.021			0.004
10/12/2017 14:49			0.156	0.158	0	0.151	0.021			0.004
10/12/2017 14:50	12.8	82	0.157	0.158	0	0.151	0.021	40.75422;-	12	0.004
10/12/2017 14:51			0.157	0.158	0	0.152	0.022			0.004
10/12/2017 14:52			0.157	0.159	0	0.153	0.022			0.004
10/12/2017 14:53			0.157	0.159	0	0.153	0.022			0.004
10/12/2017 14:54			0.158	0.159	0	0.154	0.023			0.004
10/12/2017 14:55	12.9	84	0.157	0.159	0	0.154	0.023	40.75416;-	33	0.004
10/12/2017 14:56			0.158	0.159	0	0.155	0.023			0.004
10/12/2017 14:57			0.16	0.16	0	0.155	0.024			0.004
10/12/2017 14:58			0.159	0.162	0	0.155	0.024			0.004
10/12/2017 14:59			0.16	0.162	0	0.156	0.024			0.004
10/12/2017 15:00	12.9	83	0.162	0.163	0	0.156	0.025	40.7542;-7	12	0.004
10/12/2017 15:01			0.162	0.163	0	0.157	0.025			0.004
10/12/2017 15:02			0.163	0.163	0	0.157	0.025			0.004
10/12/2017 15:03			0.164	0.165	0	0.158	0.026			0.004
10/12/2017 15:04			0.163	0.165	0	0.158	0.026			0.004
10/12/2017 15:05	14.2	79	0.163	0.165	0	0.159	0.026	40.75421;-	14	0.004
10/12/2017 15:06			0.162	0.165	0	0.159	0.027			0.004
10/12/2017 15:07			0.163	0.165	0	0.159	0.027			0.004
10/12/2017 15:08			0.163	0.165	0	0.16	0.027			0.004
10/12/2017 15:09			0.165	0.165	0	0.16	0.028			0.004
10/12/2017 15:10	14.5	86	0.163	0.166	0	0.161	0.028	40.75421;-	13	0.004
10/12/2017 15:11			0.165	0.166	0	0.161	0.028			0.004
10/12/2017 15:12			0.167	0.168	0	0.162	0.029			0.004
10/12/2017 15:13			0.168	0.168	0	0.162	0.029			0.004
10/12/2017 15:14			0.17	0.172	0	0.163	0.029			0.004
10/12/2017 15:15	13.6	82	0.171	0.172	0	0.163	0.03	40.7542;-7	8	0.004
10/12/2017 15:16			0.172	0.174	0	0.164	0.03			0.004
10/12/2017 15:17			0.173	0.175	0	0.165	0.03			0.004
10/12/2017 15:18			0.174	0.175	0	0.165	0.031			0.004
10/12/2017 15:19			0.176	0.176	0	0.166	0.031			0.004
10/12/2017 15:20	13.4	83	0.176	0.177	0	0.167	0.032	40.75422;-	0	0.004
10/12/2017 15:21			0.177	0.177	0	0.168	0.032			0.005
10/12/2017 15:22			0.176	0.177	0	0.169	0.032			0.004
10/12/2017 15:23			0.176	0.177	0	0.17	0.033			0.004
10/12/2017 15:24			0.178	0.179	0	0.17	0.033			0.004
10/12/2017 15:25	14.5	84	0.179	0.179	0	0.171	0.033	40.75422;-	1	0.004
10/12/2017 15:26			0.179	0.179	0	0.172	0.034			0.004
10/12/2017 15:27			0.179	0.18	0	0.173	0.034			0.004
10/12/2017 15:28			0.18	0.18	0	0.174	0.035			0.004
10/12/2017 15:29			0.181	0.182	0	0.175	0.035			0.004
10/12/2017 15:30	14.4	76.9	0.179	0.182	0	0.175	0.035	40.7542;-7	8	0.004
10/12/2017 15:31			0.181	0.182	0	0.176	0.036			0.004
10/12/2017 15:32			0.181	0.182	0	0.177	0.036			0.004
10/12/2017 15:33			0.183	0.183	0	0.177	0.036			0.004
10/12/2017 15:34			0.185	0.187	0	0.178	0.037			0.004
10/12/2017 15:35	13.2	89.1	0.184	0.187	0	0.178	0.037	40.75421;-	12	0.004
10/12/2017 15:36			0.185	0.187	0	0.179	0.038			0.004
10/12/2017 15:37			0.185	0.187	0	0.179	0.038			0.004

10/12/2017 15:38			0.185	0.187	0	0.18	0.038			0.004
10/12/2017 15:39			0.185	0.187	0	0.18	0.039			0.004
10/12/2017 15:40	14.4	77.9	0.186	0.187	0	0.181	0.039	40.75421;-	14	0.004
10/12/2017 15:41			0.149	0.187	0	0.182	0.039			0.006
10/12/2017 15:42			0.161	0.187	0	0.181	0.04			0.016
10/12/2017 15:43			0.166	0.187	0	0.18	0.04			0.012
10/12/2017 15:44			0.172	0.187	0	0.179	0.041			0.009
10/12/2017 15:45	14.5	74.9	0.175	0.187	0	0.178	0.041	40.75421;-	14	0.008
10/12/2017 15:46			0.178	0.187	0	0.178	0.041			0.007
10/12/2017 15:47			0.179	0.187	0	0.178	0.042			0.006
10/12/2017 15:48			0.18	0.187	0	0.178	0.042			0.006
10/12/2017 15:49			0.183	0.187	0	0.177	0.042			0.006
10/12/2017 15:50	13.7	88.1	0.185	0.187	0	0.177	0.043	40.75421;-	16	0.005
10/12/2017 15:51			0.185	0.187	0	0.177	0.043			0.005
10/12/2017 15:52			0.185	0.187	0	0.177	0.043			0.005
10/12/2017 15:53			0.186	0.187	0	0.177	0.044			0.005
10/12/2017 15:54			0.185	0.189	0	0.177	0.044			0.005
10/12/2017 15:55	14.3	74.9	0.187	0.189	0	0.177	0.045	40.7542;-7	17	0.005
10/12/2017 15:56			0.188	0.189	0	0.177	0.045			0.005
10/12/2017 15:57			0.19	0.19	0	0.178	0.045			0.005
10/12/2017 15:58			0.189	0.19	0	0.18	0.046			0.004
10/12/2017 15:59			0.189	0.192	0	0.182	0.046			0.004
10/12/2017 16:00	14.6	75.9	0.191	0.192	0	0.183	0.047	40.75421;-	24	0.005
10/12/2017 16:01			0.19	0.192	0	0.184	0.047			0.004
10/12/2017 16:02			0.191	0.192	0	0.185	0.047			0.004
10/12/2017 16:03			0.191	0.192	0	0.186	0.048			0.004
10/12/2017 16:04			0.191	0.192	0	0.186	0.048			0.004
10/12/2017 16:05	13.1	92.1	0.192	0.192	0	0.187	0.049	40.75423;-	16	0.004
10/12/2017 16:06			0.191	0.194	0	0.188	0.049			0.004
10/12/2017 16:07			0.194	0.194	0	0.188	0.049			0.004
10/12/2017 16:08			0.197	0.197	0	0.189	0.05			0.004
10/12/2017 16:09			0.195	0.198	0	0.189	0.05			0.004
10/12/2017 16:10	13.7	77.9	0.196	0.198	0	0.19	0.051	40.75422;-	18	0.004
10/12/2017 16:11			0.197	0.198	0	0.191	0.051			0.004
10/12/2017 16:12			0.197	0.198	0	0.191	0.051			0.004
10/12/2017 16:13			0.195	0.198	0	0.192	0.052			0.005
10/12/2017 16:14			0.194	0.198	0	0.192	0.052			0.005
10/12/2017 16:15	14.3	75.9	0.193	0.198	0	0.192	0.053	40.75423;-	25	0.005
10/12/2017 16:16			0.196	0.198	0	0.193	0.053			0.004
10/12/2017 16:17			0.199	0.2	0	0.193	0.053			0.004
10/12/2017 16:18			0.201	0.201	0	0.193	0.054			0.005
10/12/2017 16:19			0.203	0.203	0	0.194	0.054			0.004
10/12/2017 16:20	14.5	83	0.205	0.206	0	0.195	0.055	40.75423;-	20	0.004
10/12/2017 16:21			0.206	0.207	0	0.196	0.055			0.004
10/12/2017 16:22			0.207	0.208	0	0.197	0.056			0.005
10/12/2017 16:23			0.208	0.208	0	0.198	0.056			0.004
10/12/2017 16:24			0.208	0.208	0	0.198	0.056			0.004
10/12/2017 16:25	14.5	80	0.208	0.209	0	0.199	0.057	40.75417;-	23	0.004
10/12/2017 16:26			0.209	0.209	0	0.2	0.057			0.004
10/12/2017 16:27			0.207	0.209	0	0.201	0.058			0.005
10/12/2017 16:28			0.208	0.21	0	0.201	0.058			0.005
10/12/2017 16:29			0.21	0.21	0	0.202	0.059			0.004
10/12/2017 16:30	14.4	75.9	0.21	0.21	0	0.203	0.059	40.75419;-	15	0.004
10/12/2017 16:31			0.211	0.211	0	0.204	0.059			0.004
10/12/2017 16:32			0.211	0.212	0	0.205	0.06			0.004
10/12/2017 16:33			0.21	0.213	0	0.206	0.06			0.004

10/12/2017 16:34			0.212	0.213	0	0.207	0.061			0.004
10/12/2017 16:35	14.4	73.9	0.21	0.213	0	0.207	0.061	40.7542;-7	13	0.004
10/12/2017 16:36			0.21	0.213	0	0.208	0.062			0.004
10/12/2017 16:37			0.211	0.213	0	0.208	0.062			0.005
10/12/2017 16:38			0.21	0.213	0	0.208	0.062			0.004
10/12/2017 16:39			0.212	0.213	0	0.209	0.063			0.005
10/12/2017 16:40	14.3	84	0.213	0.215	0	0.209	0.063	40.7542;-7	10	0.004
10/12/2017 16:41			0.214	0.215	0	0.209	0.064			0.004
10/12/2017 16:42			0.215	0.216	0	0.21	0.064			0.004
10/12/2017 16:43			0.218	0.218	0	0.21	0.065			0.004
10/12/2017 16:44			0.22	0.22	0	0.211	0.065			0.004
10/12/2017 16:45	14.3	76.9	0.22	0.221	0	0.212	0.066	40.75423;-	5	0.004
10/12/2017 16:46			0.219	0.221	0	0.212	0.066			0.004
10/12/2017 16:47			0.22	0.221	0	0.213	0.067			0.004
10/12/2017 16:48			0.221	0.221	0	0.213	0.067			0.004
10/12/2017 16:49			0.221	0.222	0	0.214	0.067			0.004
10/12/2017 16:50	14.3	81	0.221	0.222	0	0.215	0.068	40.75426;-	4	0.004
10/12/2017 16:51			0.22	0.222	0	0.215	0.068			0.004
10/12/2017 16:52			0.222	0.222	0	0.216	0.069			0.005
10/12/2017 16:53			0.222	0.223	0	0.217	0.069			0.005
10/12/2017 16:54			0.223	0.223	0	0.217	0.07			0.004
10/12/2017 16:55	14.4	75.9	0.224	0.224	0	0.218	0.07	40.75419;-	13	0.004
10/12/2017 16:56			0.221	0.224	0	0.219	0.071			0.004
10/12/2017 16:57			0.22	0.224	0	0.219	0.071			0.005
10/12/2017 16:58			0.219	0.224	0	0.22	0.072			0.005
10/12/2017 16:59			0.217	0.224	0	0.22	0.072			0.004
10/12/2017 17:00	14.4	84	0.216	0.224	0	0.22	0.072	40.75413;-	23	0.005
10/12/2017 17:01			0.215	0.224	0	0.219	0.073			0.005
10/12/2017 17:02			0.214	0.224	0	0.219	0.073			0.005
10/12/2017 17:03			0.212	0.224	0	0.219	0.074			0.005
10/12/2017 17:04			0.213	0.224	0	0.218	0.074			0.005
10/12/2017 17:05	14.5	77.9	0.213	0.224	0	0.218	0.075	40.75416;-	20	0.004
10/12/2017 17:06			0.211	0.224	0	0.217	0.075			0.005
10/12/2017 17:07			0.212	0.224	0	0.217	0.076			0.004
10/12/2017 17:08			0.212	0.224	0	0.216	0.076			0.004
10/12/2017 17:09			0.211	0.224	0	0.215	0.076			0.004
10/12/2017 17:10	14.8	114.4	0.213	0.224	0	0.215	0.077	40.75415;-	14	0.004
10/12/2017 17:11			0.214	0.224	0	0.214	0.077			0.004
10/12/2017 17:12			0.215	0.224	0	0.213	0.078			0.004
10/12/2017 17:13			0.217	0.224	0	0.213	0.078			0.004
10/12/2017 17:14			0.221	0.224	0	0.213	0.079			0.004
10/12/2017 17:15	14.3	84	0.223	0.224	0	0.213	0.079	40.75414;-	18	0.004
10/12/2017 17:16			0.226	0.227	0	0.213	0.08			0.004
10/12/2017 17:17			0.231	0.231	0	0.214	0.08			0.004
10/12/2017 17:18			0.233	0.233	0	0.215	0.081			0.004
10/12/2017 17:19			0.236	0.236	0	0.216	0.081			0.004
10/12/2017 17:20	14.5	75.9	0.237	0.237	0	0.218	0.082	40.75416;-	15	0.004
10/12/2017 17:21			0.237	0.238	0	0.219	0.082			0.004
10/12/2017 17:22			0.236	0.238	0	0.221	0.083			0.004
10/12/2017 17:23			0.236	0.238	0	0.223	0.083			0.004
10/12/2017 17:24			0.234	0.238	0	0.224	0.083			0.004
10/12/2017 17:25	14.3	97.2	0.233	0.238	0	0.226	0.084	40.75408;-	33	0.004
10/12/2017 17:26			0.234	0.238	0	0.227	0.084			0.004
10/12/2017 17:27			0.234	0.238	0	0.229	0.085			0.004
10/12/2017 17:28			0.238	0.238	0	0.23	0.085			0.004
10/12/2017 17:29			0.24	0.24	0	0.231	0.086			0.004

10/12/2017 17:30	14.3	77.9	0.243	0.243	0	0.232	0.086	40.75412;-	33	0.004
10/12/2017 17:31			0.244	0.246	0	0.234	0.087			0.005
10/12/2017 17:32			0.25	0.251	0	0.235	0.087			0.004
10/12/2017 17:33			0.256	0.256	0	0.236	0.088			0.004
10/12/2017 17:34			0.26	0.26	0	0.238	0.088			0.004
10/12/2017 17:35	14.3	117.4	0.262	0.262	0	0.239	0.089	40.75415;-	24	0.004
10/12/2017 17:36			0.267	0.267	0	0.241	0.09			0.004
10/12/2017 17:37			0.268	0.269	0	0.243	0.09			0.004
10/12/2017 17:38			0.272	0.273	0	0.245	0.091			0.004
10/12/2017 17:39			0.275	0.276	0	0.247	0.091			0.004
10/12/2017 17:40	14.4	75.9	0.277	0.278	0	0.25	0.092	40.75414;-	27	0.004
10/12/2017 17:41			0.277	0.278	0	0.253	0.092			0.004
10/12/2017 17:42			0.278	0.278	0	0.256	0.093			0.004
10/12/2017 17:43			0.277	0.278	0	0.259	0.094			0.004
10/12/2017 17:44			0.274	0.278	0	0.261	0.094			0.004
10/12/2017 17:45	14.4	88.1	0.272	0.278	0	0.264	0.095	40.75418;-	22	0.004
10/12/2017 17:46			0.272	0.278	0	0.266	0.095			0.004
10/12/2017 17:47			0.268	0.278	0	0.268	0.096			0.004
10/12/2017 17:48			0.261	0.278	0	0.269	0.096			0.005
10/12/2017 17:49			0.257	0.278	0	0.269	0.097			0.005
10/12/2017 17:50	14.6	85	0.258	0.278	0	0.269	0.097	40.75418;-	21	0.004
10/12/2017 17:51			0.256	0.278	0	0.269	0.098			0.004
10/12/2017 17:52			0.255	0.278	0	0.269	0.099			0.004
10/12/2017 17:53			0.257	0.278	0	0.268	0.099			0.004
10/12/2017 17:54			0.259	0.278	0	0.267	0.1			0.004
10/12/2017 17:55	14.3	77.9	0.258	0.278	0	0.266	0.1	40.75415;-	40	0.004
10/12/2017 17:56			0.262	0.278	0	0.264	0.101			0.004
10/12/2017 17:57			0.263	0.278	0	0.263	0.101			0.004
10/12/2017 17:58			0.265	0.278	0	0.262	0.102			0.004
10/12/2017 17:59			0.266	0.278	0	0.262	0.102			0.004
10/12/2017 18:00	14.3	79	0.269	0.278	0	0.261	0.103	40.75419;-	11	0.004
10/12/2017 18:01			0.267	0.278	0	0.261	0.103			0.004
10/12/2017 18:02			0.271	0.278	0	0.26	0.104			0.004
10/12/2017 18:03			0.272	0.278	0	0.26	0.105			0.004
10/12/2017 18:04			0.273	0.278	0	0.261	0.105			0.004
10/12/2017 18:05	14.3	89.1	0.277	0.278	0	0.262	0.106	40.75419;-	14	0.004
10/12/2017 18:06			0.277	0.278	0	0.263	0.106			0.004
10/12/2017 18:07			0.279	0.279	0	0.264	0.107			0.004
10/12/2017 18:08			0.282	0.283	0	0.266	0.107			0.004
10/12/2017 18:09			0.283	0.283	0	0.267	0.108			0.004
10/12/2017 18:10	14.2	120.5	0.283	0.285	0	0.269	0.109	40.7542;-7	11	0.004
10/12/2017 18:11			0.284	0.286	0	0.271	0.109			0.004
10/12/2017 18:12			0.284	0.286	0	0.272	0.11			0.004
10/12/2017 18:13			0.281	0.286	0	0.274	0.11			0.004
10/12/2017 18:14			0.281	0.286	0	0.275	0.111			0.004
10/12/2017 18:15	14.4	118.4	0.279	0.286	0	0.276	0.111	40.75422;-	5	0.004
10/12/2017 18:16			0.275	0.286	0	0.277	0.112			0.004
10/12/2017 18:17			0.275	0.286	0	0.277	0.113			0.004
10/12/2017 18:18			0.271	0.286	0	0.278	0.113			0.004
10/12/2017 18:19			0.269	0.286	0	0.278	0.114			0.005
10/12/2017 18:20	14.3	80	0.268	0.286	0	0.278	0.114	40.75422;-	16	0.005
10/12/2017 18:21			0.263	0.286	0	0.277	0.115			0.005
10/12/2017 18:22			0.261	0.286	0	0.276	0.115			0.005
10/12/2017 18:23			0.258	0.286	0	0.275	0.116			0.005
10/12/2017 18:24			0.255	0.286	0	0.274	0.117			0.005
10/12/2017 18:25	14.3	76.9	0.255	0.286	0	0.272	0.117	40.75422;-	20	0.005

10/12/2017 18:26			0.251	0.286	0	0.27	0.118			0.005
10/12/2017 18:27			0.253	0.286	0	0.268	0.118			0.005
10/12/2017 18:28			0.252	0.286	0	0.266	0.119			0.005
10/12/2017 18:29			0.252	0.286	0	0.264	0.119			0.005
10/12/2017 18:30	13.7	79	0.252	0.286	0	0.262	0.12	40.75422;-	15	0.005
10/12/2017 18:31			0.248	0.286	0	0.26	0.12			0.005
10/12/2017 18:32			0.248	0.286	0	0.258	0.121			0.005
10/12/2017 18:33			0.249	0.286	0	0.256	0.121			0.005
10/12/2017 18:34			0.248	0.286	0	0.255	0.122			0.005
10/12/2017 18:35	13.7	77.9	0.248	0.286	0	0.253	0.122	40.75422;-	17	0.005
10/12/2017 18:36			0.249	0.286	0	0.252	0.123			0.005
10/12/2017 18:37			0.248	0.286	0	0.251	0.123			0.004
10/12/2017 18:38			0.251	0.286	0	0.25	0.124			0.005
10/12/2017 18:39			0.247	0.286	0	0.25	0.124			0.004
10/12/2017 18:40	14	76.9	0.251	0.286	0	0.249	0.125	40.75421;-	5	0.004
10/12/2017 18:41			0.251	0.286	0	0.249	0.125			0.004
10/12/2017 18:42			0.195	0.286	0	0.249	0.126			0.007
10/12/2017 18:43			0.205	0.286	0	0.246	0.126			0.01
10/12/2017 18:44			0.211	0.286	0	0.243	0.127			0.009
10/12/2017 18:45	13.7	87	0.215	0.286	0	0.24	0.127	40.75421;-	3	0.007
10/12/2017 18:46			0.219	0.286	0	0.238	0.128			0.007
10/12/2017 18:47			0.221	0.286	0	0.236	0.128			0.006
10/12/2017 18:48			0.225	0.286	0	0.234	0.129			0.006
10/12/2017 18:49			0.226	0.286	0	0.232	0.129			0.005
10/12/2017 18:50	13.7	80	0.228	0.286	0	0.231	0.13	40.75423;-	5	0.005
10/12/2017 18:51			0.231	0.286	0	0.23	0.13			0.005
10/12/2017 18:52			0.231	0.286	0	0.228	0.13			0.005
10/12/2017 18:53			0.232	0.286	0	0.227	0.131			0.005
10/12/2017 18:54			0.233	0.286	0	0.226	0.131			0.005
10/12/2017 18:55	13.7	79	0.235	0.286	0	0.225	0.132	40.75425;-	5	0.005
10/12/2017 18:56			0.236	0.286	0	0.224	0.132			0.004
10/12/2017 18:57			0.237	0.286	0	0.223	0.133			0.004
10/12/2017 18:58			0.238	0.286	0	0.224	0.133			0.004
10/12/2017 18:59			0.239	0.286	0	0.226	0.134			0.004
10/12/2017 19:00	13.6	89.1	0.234	0.286	0	0.228	0.134	40.75426;-	0	0.004
10/12/2017 19:01			0.235	0.286	0	0.23	0.135			0.005
10/12/2017 19:02			0.238	0.286	0	0.231	0.135			0.005
10/12/2017 19:03			0.238	0.286	0	0.232	0.136			0.004
10/12/2017 19:04			0.24	0.286	0	0.233	0.136			0.004
10/12/2017 19:05	13.6	81	0.238	0.286	0	0.234	0.137	40.75426;-	4	0.004
10/12/2017 19:06			0.238	0.286	0	0.234	0.137			0.004
10/12/2017 19:07			0.237	0.286	0	0.235	0.138			0.005
10/12/2017 19:08			0.237	0.286	0	0.235	0.138			0.005
10/12/2017 19:09			0.236	0.286	0	0.236	0.139			0.004
10/12/2017 19:10	13.8	84	0.236	0.286	0	0.236	0.139	40.75425;-	7	0.005
10/12/2017 19:11			0.236	0.286	0	0.236	0.14			0.005
10/12/2017 19:12			0.235	0.286	0	0.236	0.14			0.005
10/12/2017 19:13			0.235	0.286	0	0.236	0.141			0.005
10/12/2017 19:14			0.234	0.286	0	0.236	0.141			0.005
10/12/2017 19:15	13.8	77.9	0.235	0.286	0	0.236	0.142	40.75425;-	4	0.004
10/12/2017 19:16			0.233	0.286	0	0.236	0.142			0.004
10/12/2017 19:17			0.233	0.286	0	0.235	0.143			0.004
10/12/2017 19:18			0.231	0.286	0	0.235	0.143			0.004
10/12/2017 19:19			0.231	0.286	0	0.235	0.144			0.004
10/12/2017 19:20	13.7	79	0.23	0.286	0	0.234	0.144	40.75429;-	5	0.004
10/12/2017 19:21			0.229	0.286	0	0.234	0.145			0.004

10/12/2017 19:22			0.231	0.286	0	0.233	0.145			0.004
10/12/2017 19:23			0.231	0.286	0	0.233	0.146			0.004
10/12/2017 19:24			0.229	0.286	0	0.232	0.146			0.004
10/12/2017 19:25	13.6	80	0.227	0.286	0	0.232	0.147	40.75428;-	0	0.004
10/12/2017 19:26			0.228	0.286	0	0.231	0.147			0.004
10/12/2017 19:27			0.227	0.286	0	0.23	0.147			0.004
10/12/2017 19:28			0.228	0.286	0	0.23	0.148			0.004
10/12/2017 19:29			0.225	0.286	0	0.229	0.148			0.004
10/12/2017 19:30	13.7	79	0.225	0.286	0	0.229	0.149	40.75428;-	3	0.004
10/12/2017 19:31			0.226	0.286	0	0.228	0.149			0.004
10/12/2017 19:32			0.225	0.286	0	0.228	0.15			0.004
10/12/2017 19:33			0.224	0.286	0	0.227	0.15			0.004
10/12/2017 19:34			0.222	0.286	0	0.227	0.151			0.004
10/12/2017 19:35	13.7	79	0.222	0.286	0	0.226	0.151	40.75425;-	7	0.004
10/12/2017 19:36			0.221	0.286	0	0.226	0.152			0.004
10/12/2017 19:37			0.223	0.286	0	0.225	0.152			0.004
10/12/2017 19:38			0.221	0.286	0	0.225	0.153			0.004
10/12/2017 19:39			0.221	0.286	0	0.224	0.153			0.004
10/12/2017 19:40	13.7	79	0.22	0.286	0	0.223	0.154	40.75425;-	4	0.004
10/12/2017 19:41			0.218	0.286	0	0.223	0.154			0.004
10/12/2017 19:42			0.217	0.286	0	0.222	0.154			0.004
10/12/2017 19:43			0.215	0.286	0	0.222	0.155			0.004
10/12/2017 19:44			0.215	0.286	0	0.221	0.155			0.004
10/12/2017 19:45	13.6	81	0.213	0.286	0	0.22	0.156	40.75426;-	2	0.004
10/12/2017 19:46			0.21	0.286	0	0.22	0.156			0.005
10/12/2017 19:47			0.21	0.286	0	0.219	0.157			0.004
10/12/2017 19:48			0.209	0.286	0	0.218	0.157			0.004
10/12/2017 19:49			0.207	0.286	0	0.217	0.158			0.004
10/12/2017 19:50	13.2	94.1	0.206	0.286	0	0.216	0.158	40.75426;-	7	0.004
10/12/2017 19:51			0.204	0.286	0	0.215	0.158			0.004
10/12/2017 19:52			0.202	0.286	0	0.213	0.159			0.004
10/12/2017 19:53			0.2	0.286	0	0.212	0.159			0.004
10/12/2017 19:54			0.197	0.286	0	0.211	0.16			0.004
10/12/2017 19:55	13.1	83	0.193	0.286	0	0.209	0.16	40.75429;-	3	0.004
10/12/2017 19:56			0.191	0.286	0	0.208	0.161			0.004
10/12/2017 19:57			0.187	0.286	0	0.206	0.161			0.005
10/12/2017 19:58			0.184	0.286	0	0.204	0.161			0.004
10/12/2017 19:59			0.18	0.286	0	0.202	0.162			0.004
10/12/2017 20:00	13	92.1	0.177	0.286	0	0.199	0.162	40.75428;-	2	0.005
10/12/2017 20:01			0.173	0.286	0	0.197	0.162			0.005
10/12/2017 20:02			0.171	0.286	0	0.195	0.163			0.004
10/12/2017 20:03			0.168	0.286	0	0.192	0.163			0.004
10/12/2017 20:04			0.165	0.286	0	0.189	0.163			0.004
10/12/2017 20:05	12.9	83	0.162	0.286	0	0.186	0.164	40.75426;-	2	0.004
10/12/2017 20:06			0.16	0.286	0	0.184	0.164			0.004
10/12/2017 20:07			0.159	0.286	0	0.181	0.165			0.004
10/12/2017 20:08			0.156	0.286	0	0.178	0.165			0.004
10/12/2017 20:09			0.156	0.286	0	0.175	0.165			0.004
10/12/2017 20:10	12.8	97.2	0.155	0.286	0	0.172	0.165	40.7543;-7	3	0.004
10/12/2017 20:11			0.153	0.286	0	0.169	0.166			0.004
10/12/2017 20:12			0.154	0.286	0	0.167	0.166			0.004
10/12/2017 20:13			0.154	0.286	0	0.165	0.166			0.004
10/12/2017 20:14			0.155	0.286	0	0.163	0.167			0.004
10/12/2017 20:15	12.8	92.1	0.153	0.286	0	0.161	0.167	40.75426;-	5	0.004
10/12/2017 20:16			0.153	0.286	0	0.159	0.167			0.004
10/12/2017 20:17			0.153	0.286	0	0.158	0.168			0.004

10/12/2017 20:18			0.152	0.286	0	0.157	0.168			0.004
10/12/2017 20:19			0.151	0.286	0	0.156	0.168			0.004
10/12/2017 20:20	12.8	108.3	0.151	0.286	0	0.155	0.169	40.75429;-	7	0.004
10/12/2017 20:21			0.152	0.286	0	0.154	0.169			0.004
10/12/2017 20:22			0.152	0.286	0	0.153	0.169			0.004
10/12/2017 20:23			0.151	0.286	0	0.153	0.17			0.004
10/12/2017 20:24			0.151	0.286	0	0.152	0.17			0.004
10/12/2017 20:25	12.8	87	0.151	0.286	0	0.152	0.17	40.75426;-	7	0.004
10/12/2017 20:26			0.151	0.286	0	0.152	0.171			0.004
10/12/2017 20:27			0.151	0.286	0	0.151	0.171			0.004
10/12/2017 20:28			0.151	0.286	0	0.151	0.171			0.004
10/12/2017 20:29			0.15	0.286	0	0.151	0.171			0.004
10/12/2017 20:30	12.8	85	0.151	0.286	0	0.151	0.172	40.75428;-	3	0.004
10/12/2017 20:31			0.151	0.286	0	0.15	0.172			0.004
10/12/2017 20:32			0.15	0.286	0	0.15	0.172			0.004
10/12/2017 20:33			0.15	0.286	0	0.15	0.173			0.004
10/12/2017 20:34			0.15	0.286	0	0.15	0.173			0.004
10/12/2017 20:35	12.8	84	0.151	0.286	0	0.15	0.173	40.75432;-	-2	0.004
10/12/2017 20:36			0.15	0.286	0	0.15	0.174			0.004
10/12/2017 20:37			0.15	0.286	0	0.15	0.174			0.004
10/12/2017 20:38			0.15	0.286	0	0.15	0.174			0.004
10/12/2017 20:39			0.15	0.286	0	0.15	0.175			0.004
10/12/2017 20:40	12.7	84	0.149	0.286	0	0.149	0.175	40.7543;-7	6	0.004
10/12/2017 20:41			0.149	0.286	0	0.149	0.175			0.004
10/12/2017 20:42			0.146	0.286	0	0.149	0.176			0.004
10/12/2017 20:43			0.146	0.286	0	0.149	0.176			0.004
10/12/2017 20:44			0.147	0.286	0	0.149	0.176			0.004
10/12/2017 20:45	12.7	83	0.146	0.286	0	0.148	0.176	40.7543;-7	6	0.004
10/12/2017 20:46			0.146	0.286	0	0.148	0.177			0.004
10/12/2017 20:47			0.146	0.286	0	0.148	0.177			0.004
10/12/2017 20:48										0.008
10/13/2017 12:46	14.4	107.3								
10/13/2017 12:46								40.753860499999995;-73.4879871		
10/13/2017 12:47			0.008	0.011	0	0	0			
10/13/2017 12:48			0.014	0.021	0	0	0			
10/13/2017 12:49			0.015	0.04	0	0	0			0.012
10/13/2017 12:50	14.4	74.9	0.021	0.04	0	0	0	40.75441;-	-83	0.011
10/13/2017 12:51			0.03	0.04	0	0	0			0.008
10/13/2017 12:52			0.039	0.04	0	0	0			0.007
10/13/2017 12:53			0.046	0.046	0	0	0			0.006
10/13/2017 12:54			0.051	0.052	0	0	0			0.005
10/13/2017 12:55	14.4	82	0.062	0.08	0	0	0	40.7542;-7	19	0.004
10/13/2017 12:56			0.064	0.08	0	0	0			0.004
10/13/2017 12:57			0.07	0.08	0	0.024	0			0.004
10/13/2017 12:58			0.074	0.08	0	0.028	0			0.004
10/13/2017 12:59			0.079	0.08	0	0.033	0.001			0.003
10/13/2017 13:00	14.3	74.9	0.084	0.084	0	0.038	0.001	40.75423;-	19	0.003
10/13/2017 13:01			0.09	0.09	0	0.044	0.001			0.003
10/13/2017 13:02			0.095	0.095	0	0.05	0.001			0.003
10/13/2017 13:03			0.098	0.098	0	0.055	0.001			0.003
10/13/2017 13:04			0.101	0.101	0	0.061	0.001			0.004
10/13/2017 13:05	14.4	84	0.105	0.107	0	0.066	0.002	40.75425;-	9	0.003
10/13/2017 13:06			0.108	0.108	0	0.072	0.002			0.003
10/13/2017 13:07			0.111	0.112	0	0.077	0.002			0.003
10/13/2017 13:08			0.114	0.114	0	0.082	0.002			0.003
10/13/2017 13:09			0.117	0.118	0	0.086	0.003			0.003

10/13/2017 13:10	14.4	73.9	0.12	0.12	0	0.091	0.003	40.75425;-	11	0.003
10/13/2017 13:11			0.122	0.122	0	0.094	0.003			0.003
10/13/2017 13:12			0.126	0.126	0	0.098	0.003			0.003
10/13/2017 13:13			0.128	0.128	0	0.102	0.004			0.003
10/13/2017 13:14			0.13	0.131	0	0.106	0.004			0.003
10/13/2017 13:15	14.4	79	0.133	0.133	0	0.109	0.004	40.75423;-	10	0.004
10/13/2017 13:16			0.135	0.135	0	0.112	0.004			0.004
10/13/2017 13:17			0.139	0.14	0	0.115	0.005			0.003
10/13/2017 13:18			0.14	0.141	0	0.118	0.005			0.003
10/13/2017 13:19			0.141	0.142	0	0.121	0.005			0.004
10/13/2017 13:20	14.3	74.9	0.143	0.143	0	0.124	0.006	40.75426;-	10	0.004
10/13/2017 13:21			0.144	0.145	0	0.127	0.006			0.004
10/13/2017 13:22			0.148	0.148	0	0.129	0.006			0.004
10/13/2017 13:23			0.149	0.15	0	0.131	0.006			0.004
10/13/2017 13:24			0.15	0.156	0	0.134	0.007			0.004
10/13/2017 13:25	14.7	76.9	0.154	0.156	0	0.136	0.007	40.75426;-	8	0.004
10/13/2017 13:26			0.155	0.156	0	0.138	0.007			0.004
10/13/2017 13:27			0.156	0.157	0	0.14	0.008			0.004
10/13/2017 13:28			0.156	0.157	0	0.142	0.008			0.003
10/13/2017 13:29			0.159	0.159	0	0.144	0.008			0.003
10/13/2017 13:30	14.3	79	0.159	0.16	0	0.146	0.009	40.75421;-	13	0.003
10/13/2017 13:31			0.161	0.161	0	0.148	0.009			0.003
10/13/2017 13:32			0.163	0.164	0	0.15	0.009			0.004
10/13/2017 13:33			0.165	0.166	0	0.151	0.01			0.004
10/13/2017 13:34			0.168	0.168	0	0.153	0.01			0.004
10/13/2017 13:35	14.3	84	0.167	0.168	0	0.154	0.01	40.75426;-	16	0.004
10/13/2017 13:36			0.17	0.17	0	0.156	0.011			0.004
10/13/2017 13:37			0.17	0.171	0	0.158	0.011			0.004
10/13/2017 13:38			0.171	0.172	0	0.159	0.011			0.004
10/13/2017 13:39			0.171	0.172	0	0.161	0.012			0.004
10/13/2017 13:40	14.3	76.9	0.174	0.174	0	0.162	0.012	40.75422;-	18	0.004
10/13/2017 13:41			0.175	0.175	0	0.163	0.013			0.004
10/13/2017 13:42			0.177	0.177	0	0.165	0.013			0.004
10/13/2017 13:43			0.178	0.179	0	0.166	0.013			0.004
10/13/2017 13:44			0.179	0.179	0	0.168	0.014			0.005
10/13/2017 13:45	14.7	74.9	0.18	0.18	0	0.169	0.014	40.75425;-	-5	0.004
10/13/2017 13:46			0.182	0.182	0	0.17	0.014			0.004
10/13/2017 13:47			0.183	0.183	0	0.172	0.015			0.004
10/13/2017 13:48			0.184	0.186	0	0.173	0.015			0.004
10/13/2017 13:49			0.184	0.187	0	0.174	0.016			0.005
10/13/2017 13:50	14.3	89.1	0.188	0.189	0	0.175	0.016	40.7542;-7	-4	0.005
10/13/2017 13:51			0.191	0.191	0	0.177	0.016			0.004
10/13/2017 13:52			0.192	0.192	0	0.178	0.017			0.004
10/13/2017 13:53			0.193	0.194	0	0.18	0.017			0.004
10/13/2017 13:54			0.197	0.197	0	0.181	0.017			0.004
10/13/2017 13:55	14.3	74.9	0.199	0.199	0	0.183	0.018	40.75423;-	4	0.004
10/13/2017 13:56			0.202	0.202	0	0.185	0.018			0.004
10/13/2017 13:57			0.204	0.204	0	0.186	0.019			0.004
10/13/2017 13:58			0.206	0.207	0	0.188	0.019			0.004
10/13/2017 13:59			0.209	0.209	0	0.19	0.02			0.004
10/13/2017 14:00	14.3	77.9	0.214	0.214	0	0.192	0.02	40.75422;-	5	0.004
10/13/2017 14:01			0.214	0.214	0	0.194	0.02			0.004
10/13/2017 14:02			0.213	0.215	0	0.196	0.021			0.004
10/13/2017 14:03			0.217	0.217	0	0.198	0.021			0.004
10/13/2017 14:04			0.218	0.22	0	0.2	0.022			0.004
10/13/2017 14:05	14.3	87	0.22	0.22	0	0.203	0.022	40.75432;-	6	0.004

10/13/2017 14:06			0.221	0.222	0	0.205	0.023			0.004
10/13/2017 14:07			0.223	0.224	0	0.207	0.023			0.004
10/13/2017 14:08			0.226	0.226	0	0.209	0.024			0.004
10/13/2017 14:09			0.224	0.226	0	0.211	0.024			0.004
10/13/2017 14:10	14.3	74.9	0.223	0.226	0	0.213	0.025	40.75438;-	1	0.005
10/13/2017 14:11			0.224	0.226	0	0.215	0.025			0.005
10/13/2017 14:12			0.224	0.226	0	0.216	0.026			0.005
10/13/2017 14:13			0.223	0.226	0	0.217	0.026			0.005
10/13/2017 14:14			0.226	0.226	0	0.218	0.026			0.005
10/13/2017 14:15	14.5	113.4	0.227	0.228	0	0.22	0.027	40.7542;-7	1	0.005
10/13/2017 14:16			0.225	0.228	0	0.221	0.027			0.005
10/13/2017 14:17			0.225	0.228	0	0.221	0.028			0.005
10/13/2017 14:18			0.225	0.228	0	0.222	0.028			0.005
10/13/2017 14:19			0.223	0.228	0	0.223	0.029			0.005
10/13/2017 14:20	14.3	88.1	0.221	0.228	0	0.223	0.029	40.75419;-	0	0.005
10/13/2017 14:21			0.219	0.228	0	0.223	0.03			0.005
10/13/2017 14:22			0.219	0.228	0	0.223	0.03			0.005
10/13/2017 14:23			0.219	0.228	0	0.223	0.031			0.004
10/13/2017 14:24			0.218	0.228	0	0.222	0.031			0.004
10/13/2017 14:25	14.4	75.9	0.216	0.228	0	0.222	0.032	40.75417;-	1	0.004
10/13/2017 14:26			0.216	0.228	0	0.221	0.032			0.005
10/13/2017 14:27			0.217	0.228	0	0.221	0.032			0.005
10/13/2017 14:28			0.215	0.228	0	0.22	0.033			0.005
10/13/2017 14:29			0.216	0.228	0	0.22	0.033			0.005
10/13/2017 14:30	14.3	75.9	0.218	0.228	0	0.219	0.034	40.75414;-	3	0.005
10/13/2017 14:31			0.219	0.228	0	0.219	0.034			0.004
10/13/2017 14:32			0.22	0.228	0	0.218	0.035			0.004
10/13/2017 14:33			0.222	0.228	0	0.218	0.035			0.004
10/13/2017 14:34			0.224	0.228	0	0.218	0.036			0.004
10/13/2017 14:35	14.3	92.1	0.228	0.229	0	0.218	0.036	40.75413;-	8	0.004
10/13/2017 14:36			0.228	0.229	0	0.218	0.037			0.005
10/13/2017 14:37			0.23	0.231	0	0.219	0.037			0.005
10/13/2017 14:38			0.23	0.232	0	0.22	0.037			0.005
10/13/2017 14:39			0.23	0.232	0	0.22	0.038			0.005
10/13/2017 14:40	14.4	76.9	0.23	0.232	0	0.221	0.038	40.75418;-	5	0.005
10/13/2017 14:41			0.231	0.232	0	0.222	0.039			0.005
10/13/2017 14:42			0.231	0.232	0	0.223	0.039			0.005
10/13/2017 14:43			0.233	0.235	0	0.224	0.04			0.004
10/13/2017 14:44			0.234	0.235	0	0.225	0.04			0.004
10/13/2017 14:45	13.8	79	0.236	0.236	0	0.226	0.041	40.75412;-	10	0.004
10/13/2017 14:46			0.236	0.237	0	0.228	0.041			0.004
10/13/2017 14:47			0.238	0.238	0	0.229	0.042			0.004
10/13/2017 14:48			0.239	0.241	0	0.23	0.042			0.004
10/13/2017 14:49			0.24	0.241	0	0.231	0.043			0.004
10/13/2017 14:50	13.6	80	0.24	0.242	0	0.232	0.043	40.75422;-	8	0.004
10/13/2017 14:51			0.24	0.242	0	0.233	0.044			0.004
10/13/2017 14:52			0.241	0.244	0	0.234	0.044			0.004
10/13/2017 14:53			0.244	0.245	0	0.235	0.045			0.004
10/13/2017 14:54			0.248	0.248	0	0.235	0.045			0.004
10/13/2017 14:55	13.7	81	0.248	0.25	0	0.237	0.046	40.75435;-	-13	0.004
10/13/2017 14:56			0.248	0.251	0	0.238	0.046			0.004
10/13/2017 14:57			0.253	0.253	0	0.239	0.047			0.004
10/13/2017 14:58			0.222	0.257	0	0.24	0.047			0.004
10/13/2017 14:59			0.211	0.257	0	0.24	0.048			0.011
10/13/2017 15:00	13.7	87	0.223	0.257	0	0.239	0.048	40.75423;-	0	0.008
10/13/2017 15:01			0.228	0.257	0	0.238	0.049			0.007

10/13/2017 15:02			0.234	0.257	0	0.237	0.049			0.006
10/13/2017 15:03			0.239	0.257	0	0.237	0.05			0.006
10/13/2017 15:04			0.24	0.257	0	0.237	0.05			0.006
10/13/2017 15:05	13.6	93.1	0.245	0.257	0	0.237	0.051	40.75426;-	6	0.005
10/13/2017 15:06			0.247	0.257	0	0.237	0.051			0.005
10/13/2017 15:07			0.249	0.257	0	0.238	0.052			0.005
10/13/2017 15:08			0.246	0.257	0	0.238	0.052			0.005
10/13/2017 15:09			0.245	0.257	0	0.239	0.053			0.005
10/13/2017 15:10	14.1	76.9	0.243	0.257	0	0.239	0.053	40.75417;-	17	0.005
10/13/2017 15:11			0.241	0.257	0	0.238	0.054			0.006
10/13/2017 15:12			0.242	0.257	0	0.238	0.054			0.006
10/13/2017 15:13			0.241	0.257	0	0.237	0.055			0.006
10/13/2017 15:14			0.244	0.257	0	0.238	0.055			0.005
10/13/2017 15:15	13.7	79	0.246	0.257	0	0.24	0.056	40.75419;-	11	0.005
10/13/2017 15:16			0.243	0.257	0	0.241	0.056			0.005
10/13/2017 15:17			0.245	0.257	0	0.243	0.057			0.005
10/13/2017 15:18			0.245	0.257	0	0.243	0.057			0.005
10/13/2017 15:19			0.246	0.257	0	0.244	0.058			0.005
10/13/2017 15:20	13.7	77.9	0.248	0.257	0	0.244	0.058	40.75421;-	0	0.004
10/13/2017 15:21			0.25	0.257	0	0.244	0.059			0.004
10/13/2017 15:22			0.253	0.257	0	0.244	0.059			0.004
10/13/2017 15:23			0.256	0.257	0	0.245	0.06			0.005
10/13/2017 15:24			0.257	0.257	0	0.245	0.06			0.004
10/13/2017 15:25	13.7	88.1	0.257	0.257	0	0.246	0.061	40.75421;-	10	0.004
10/13/2017 15:26			0.258	0.258	0	0.247	0.062			0.004
10/13/2017 15:27			0.261	0.261	0	0.248	0.062			0.004
10/13/2017 15:28			0.262	0.263	0	0.249	0.063			0.004
10/13/2017 15:29			0.265	0.265	0	0.25	0.063			0.004
10/13/2017 15:30	13.6	80	0.258	0.265	0	0.252	0.064	40.75426;-	1	0.004
10/13/2017 15:31			0.259	0.265	0	0.253	0.064			0.005
10/13/2017 15:32			0.259	0.265	0	0.253	0.065			0.005
10/13/2017 15:33			0.258	0.265	0	0.254	0.065			0.005
10/13/2017 15:34			0.254	0.265	0	0.255	0.066			0.005
10/13/2017 15:35	13.6	82	0.253	0.265	0	0.256	0.066	40.75422;-	8	0.005
10/13/2017 15:36			0.255	0.265	0	0.256	0.067			0.005
10/13/2017 15:37			0.256	0.265	0	0.257	0.067			0.005
10/13/2017 15:38			0.252	0.265	0	0.257	0.068			0.005
10/13/2017 15:39			0.254	0.265	0	0.257	0.069			0.005
10/13/2017 15:40	13.6	79	0.254	0.265	0	0.257	0.069	40.75426;-	-5	0.005
10/13/2017 15:41			0.255	0.265	0	0.256	0.07			0.005
10/13/2017 15:42			0.254	0.265	0	0.256	0.07			0.005
10/13/2017 15:43			0.191	0.265	0	0.256	0.071			0.009
10/13/2017 15:44			0.201	0.265	0	0.251	0.071			0.01
10/13/2017 15:45	13.6	79	0.212	0.265	0	0.247	0.071	40.75423;-	5	0.008
10/13/2017 15:46			0.217	0.265	0	0.244	0.072			0.007
10/13/2017 15:47			0.221	0.265	0	0.241	0.072			0.006
10/13/2017 15:48			0.226	0.265	0	0.238	0.073			0.006
10/13/2017 15:49			0.228	0.265	0	0.236	0.073			0.005
10/13/2017 15:50	13.8	88.1	0.23	0.265	0	0.234	0.074	40.75421;-	11	0.006
10/13/2017 15:51			0.229	0.265	0	0.233	0.074			0.005
10/13/2017 15:52			0.229	0.265	0	0.231	0.075			0.005
10/13/2017 15:53			0.23	0.265	0	0.229	0.075			0.005
10/13/2017 15:54			0.233	0.265	0	0.228	0.076			0.005
10/13/2017 15:55	13.6	86	0.235	0.265	0	0.226	0.076	40.75423;-	14	0.005
10/13/2017 15:56			0.236	0.265	0	0.225	0.077			0.005
10/13/2017 15:57			0.237	0.265	0	0.224	0.077			0.004

10/13/2017 15:58			0.242	0.265	0	0.223	0.078			0.004
10/13/2017 15:59			0.242	0.265	0	0.226	0.078			0.005
10/13/2017 16:00	13.6	88.1	0.236	0.265	0	0.229	0.079	40.75423;-	20	0.005
10/13/2017 16:01			0.237	0.265	0	0.23	0.079			0.006
10/13/2017 16:02			0.237	0.265	0	0.232	0.08			0.005
10/13/2017 16:03			0.24	0.265	0	0.233	0.08			0.005
10/13/2017 16:04			0.235	0.265	0	0.233	0.081			0.005
10/13/2017 16:05	13.6	80	0.239	0.265	0	0.234	0.081	40.75422;-	21	0.005
10/13/2017 16:06			0.241	0.265	0	0.235	0.082			0.005
10/13/2017 16:07			0.242	0.265	0	0.235	0.082			0.005
10/13/2017 16:08			0.241	0.265	0	0.236	0.083			0.005
10/13/2017 16:09			0.241	0.265	0	0.237	0.083			0.005
10/13/2017 16:10	13.8	77.9	0.238	0.265	0	0.237	0.084	40.75425;-	23	0.005
10/13/2017 16:11			0.238	0.265	0	0.238	0.084			0.005
10/13/2017 16:12			0.234	0.265	0	0.238	0.085			0.005
10/13/2017 16:13			0.232	0.265	0	0.237	0.085			0.005
10/13/2017 16:14			0.23	0.265	0	0.237	0.086			0.005
10/13/2017 16:15	13.6	86	0.229	0.265	0	0.236	0.086	40.75422;-	22	0.005
10/13/2017 16:16			0.226	0.265	0	0.236	0.086			0.005
10/13/2017 16:17			0.225	0.265	0	0.235	0.087			0.005
10/13/2017 16:18			0.224	0.265	0	0.234	0.087			0.005
10/13/2017 16:19			0.218	0.265	0	0.233	0.088			0.005
10/13/2017 16:20	13.6	79	0.219	0.265	0	0.232	0.088	40.75419;-	26	0.006
10/13/2017 16:21			0.218	0.265	0	0.231	0.089			0.005
10/13/2017 16:22			0.218	0.265	0	0.229	0.089			0.005
10/13/2017 16:23			0.218	0.265	0	0.228	0.09			0.005
10/13/2017 16:24			0.216	0.265	0	0.226	0.09			0.005
10/13/2017 16:25	13.6	83	0.217	0.265	0	0.225	0.091	40.75423;-	19	0.005
10/13/2017 16:26			0.221	0.265	0	0.223	0.091			0.005
10/13/2017 16:27			0.222	0.265	0	0.222	0.092			0.005
10/13/2017 16:28			0.222	0.265	0	0.222	0.092			0.004
10/13/2017 16:29			0.222	0.265	0	0.221	0.092			0.004
10/13/2017 16:30	13.6	80	0.223	0.265	0	0.22	0.093	40.7542;-7	18	0.004
10/13/2017 16:31			0.227	0.265	0	0.22	0.093			0.005
10/13/2017 16:32			0.227	0.265	0	0.22	0.094			0.005
10/13/2017 16:33			0.228	0.265	0	0.22	0.094			0.004
10/13/2017 16:34			0.231	0.265	0	0.221	0.095			0.004
10/13/2017 16:35	13.5	97.2	0.233	0.265	0	0.221	0.095	40.75429;-	8	0.004
10/13/2017 16:36			0.235	0.265	0	0.222	0.096			0.004
10/13/2017 16:37			0.237	0.265	0	0.223	0.096			0.004
10/13/2017 16:38			0.237	0.265	0	0.224	0.097			0.004
10/13/2017 16:39			0.24	0.265	0	0.226	0.097			0.005
10/13/2017 16:40	13.6	83	0.229	0.265	0	0.227	0.098	40.75431;-	14	0.005
10/13/2017 16:41			0.226	0.265	0	0.228	0.098			0.005
10/13/2017 16:42			0.222	0.265	0	0.228	0.099			0.005
10/13/2017 16:43			0.222	0.265	0	0.229	0.099			0.005
10/13/2017 16:44			0.22	0.265	0	0.229	0.1			0.005
10/13/2017 16:45	13.6	79	0.223	0.265	0	0.228	0.1	40.75428;-	15	0.005
10/13/2017 16:46			0.221	0.265	0	0.228	0.101			0.005
10/13/2017 16:47			0.219	0.265	0	0.228	0.101			0.005
10/13/2017 16:48			0.215	0.265	0	0.227	0.101			0.005
10/13/2017 16:49			0.211	0.265	0	0.226	0.102			0.005
10/13/2017 16:50	13.5	84	0.211	0.265	0	0.225	0.102	40.75432;-	12	0.005
10/13/2017 16:51			0.207	0.265	0	0.223	0.103			0.005
10/13/2017 16:52			0.202	0.265	0	0.221	0.103			0.005
10/13/2017 16:53			0.203	0.265	0	0.219	0.104			0.005

10/13/2017 16:54			0.203	0.265	0	0.217	0.104			0.005
10/13/2017 16:55	13.6	127.5	0.204	0.265	0	0.214	0.104	40.75428;-	17	0.005
10/13/2017 16:56			0.199	0.265	0	0.213	0.105			0.005
10/13/2017 16:57			0.202	0.265	0	0.211	0.105			0.005
10/13/2017 16:58			0.195	0.265	0	0.209	0.106			0.005
10/13/2017 16:59			0.198	0.265	0	0.207	0.106			0.005
10/13/2017 17:00	13.5	113.4	0.197	0.265	0	0.206	0.107	40.75429;-	6	0.005
10/13/2017 17:01			0.194	0.265	0	0.204	0.107			0.005
10/13/2017 17:02			0.198	0.265	0	0.203	0.107			0.005
10/13/2017 17:03			0.198	0.265	0	0.201	0.108			0.005
10/13/2017 17:04			0.197	0.265	0	0.2	0.108			0.005
10/13/2017 17:05	13.6	89.1	0.193	0.265	0	0.199	0.109	40.75426;-	15	0.005
10/13/2017 17:06			0.192	0.265	0	0.198	0.109			0.005
10/13/2017 17:07			0.191	0.265	0	0.197	0.109			0.005
10/13/2017 17:08			0.19	0.265	0	0.196	0.11			0.005
10/13/2017 17:09			0.191	0.265	0	0.196	0.11			0.005
10/13/2017 17:10	13.6	81	0.187	0.265	0	0.195	0.111	40.75423;-	17	0.004
10/13/2017 17:11			0.19	0.265	0	0.194	0.111			0.004
10/13/2017 17:12			0.188	0.265	0	0.193	0.111			0.004
10/13/2017 17:13			0.188	0.265	0	0.192	0.112			0.004
10/13/2017 17:14			0.186	0.265	0	0.192	0.112			0.004
10/13/2017 17:15	14	90.1	0.186	0.265	0	0.191	0.112	40.75425;-	17	0.004
10/13/2017 17:16			0.186	0.265	0	0.19	0.113			0.004
10/13/2017 17:17			0.188	0.265	0	0.19	0.113			0.005
10/13/2017 17:18			0.19	0.265	0	0.189	0.114			0.004
10/13/2017 17:19			0.191	0.265	0	0.189	0.114			0.004
10/13/2017 17:20	13.5	82	0.191	0.265	0	0.188	0.114	40.75423;-	22	0.004
10/13/2017 17:21			0.189	0.265	0	0.188	0.115			0.004
10/13/2017 17:22			0.192	0.265	0	0.188	0.115			0.005
10/13/2017 17:23			0.194	0.265	0	0.188	0.116			0.004
10/13/2017 17:24			0.196	0.265	0	0.188	0.116			0.005
10/13/2017 17:25	13.5	80	0.194	0.265	0	0.189	0.116	40.7542;-7	20	0.005
10/13/2017 17:26			0.195	0.265	0	0.189	0.117			0.005
10/13/2017 17:27			0.193	0.265	0	0.189	0.117			0.005
10/13/2017 17:28			0.195	0.265	0	0.19	0.118			0.004
10/13/2017 17:29			0.196	0.265	0	0.19	0.118			0.005
10/13/2017 17:30	13.5	133.6	0.198	0.265	0	0.191	0.118			0.004
10/13/2017 17:30								40.75419;-	18	
10/13/2017 17:31			0.2	0.265	0	0.192	0.119			0.005
10/13/2017 17:32			0.199	0.265	0	0.192	0.119			0.004
10/13/2017 17:33			0.193	0.265	0	0.193	0.12			0.005
10/13/2017 17:34			0.195	0.265	0	0.193	0.12			0.005
10/13/2017 17:35	13.5	114.4	0.196	0.265	0	0.193	0.121	40.75436;-	4	0.005
10/13/2017 17:36			0.194	0.265	0	0.193	0.121			0.005
10/13/2017 17:37			0.192	0.265	0	0.194	0.121			0.006
10/13/2017 17:38			0.194	0.265	0	0.194	0.122			0.005
10/13/2017 17:39			0.194	0.265	0	0.193	0.122			0.005
10/13/2017 17:40	13.7	80	0.188	0.265	0	0.193	0.123	40.75423;-	24	0.005
10/13/2017 17:41			0.191	0.265	0	0.193	0.123			0.005
10/13/2017 17:42			0.191	0.265	0	0.193	0.123			0.005
10/13/2017 17:43			0.189	0.265	0	0.192	0.124			0.005
10/13/2017 17:44			0.19	0.265	0	0.192	0.124			0.005
10/13/2017 17:45	13.6	80	0.182	0.265	0	0.192	0.124	40.75419;-	22	0.005
10/13/2017 17:46			0.184	0.265	0	0.191	0.125			0.005
10/13/2017 17:47			0.186	0.265	0	0.19	0.125			0.005
10/13/2017 17:48			0.183	0.265	0	0.189	0.126			0.005

10/13/2017 17:49			0.182	0.265	0	0.189	0.126			0.005
10/13/2017 17:50	13.5	91.1	0.179	0.265	0	0.188	0.126	40.75417;-	25	0.005
10/13/2017 17:51			0.178	0.265	0	0.187	0.127			0.005
10/13/2017 17:52			0.178	0.265	0	0.186	0.127			0.005
10/13/2017 17:53			0.171	0.265	0	0.185	0.127			0.005
10/13/2017 17:54			0.174	0.265	0	0.183	0.128			0.005
10/13/2017 17:55	13.5	80	0.171	0.265	0	0.182	0.128	40.75422;-	17	0.005
10/13/2017 17:56			0.174	0.265	0	0.181	0.129			0.005
10/13/2017 17:57			0.176	0.265	0	0.18	0.129			0.005
10/13/2017 17:58			0.174	0.265	0	0.179	0.129			0.005
10/13/2017 17:59			0.174	0.265	0	0.178	0.13			0.005
10/13/2017 18:00	13.7	80	0.169	0.265	0	0.177	0.13	40.75418;-	25	0.005
10/13/2017 18:01			0.134	0.265	0	0.176	0.13			0.006
10/16/2017 14:48	13	121.5								
10/16/2017 14:48								40.7537519;-73.4867309		
10/16/2017 14:50	13.2	81								
10/16/2017 14:51			0	0.068	0	0	0			0.004
10/16/2017 14:52			0.001	0.068	0	0	0			0.004
10/16/2017 14:53			0.004	0.068	0	0	0			0.004
10/16/2017 14:54			0.007	0.068	0	0	0			0.003
10/16/2017 14:55	13.3	81	0.011	0.068	0	0	0	40.7542;-7	9	0.003
10/16/2017 14:56			0.017	0.068	0	0	0			0.003
10/16/2017 14:57			0.018	0.068	0	0	0			0.002
10/16/2017 14:58			0.022	0.068	0	0	0			0.002
10/16/2017 14:59			0.025	0.068	0	0	0			0.004
10/16/2017 15:00	13.3	88.1	0.028	0.068	0	0	0	40.75419;-	9	0.002
10/16/2017 15:01			0.03	0.068	0	0	0			0.002
10/16/2017 15:02			0.033	0.068	0	0	0			0.002
10/16/2017 15:03			0.035	0.068	0	0.016	0			0.002
10/16/2017 15:04			0.037	0.068	0	0.016	0			0.002
10/16/2017 15:05	14.1	74.9	0.04	0.068	0	0.018	0	40.75423;-	10	0.002
10/16/2017 15:06			0.042	0.068	0	0.02	0			0.002
10/16/2017 15:07			0.044	0.068	0	0.023	0			0.002
10/16/2017 15:08			0.047	0.068	0	0.026	0			0.002
10/16/2017 15:09			0.049	0.068	0	0.029	0.001			0.002
10/16/2017 15:10	14.3	79	0.051	0.068	0	0.032	0.001	40.7542;-7	12	0.002
10/16/2017 15:11			0.055	0.068	0	0.035	0.001			0.002
10/16/2017 15:12			0.055	0.068	0	0.037	0.001			0.002
10/16/2017 15:13			0.057	0.068	0	0.039	0.001			0.003
10/16/2017 15:14			0.058	0.068	0	0.042	0.001			0.002
10/16/2017 15:15	14.1	77.9	0.061	0.068	0	0.044	0.001	40.75421;-	8	0.002
10/16/2017 15:16			0.062	0.068	0	0.046	0.001			0.002
10/16/2017 15:17			0.064	0.068	0	0.048	0.001			0.002
10/16/2017 15:18			0.064	0.068	0	0.05	0.002			0.002
10/16/2017 15:19			0.065	0.068	0	0.052	0.002			0.002
10/16/2017 15:20	14.2	87	0.067	0.068	0	0.054	0.002	40.75423;-	3	0.002
10/16/2017 15:21			0.07	0.07	0	0.056	0.002			0.002
10/16/2017 15:22			0.072	0.072	0	0.058	0.002			0.002
10/16/2017 15:23			0.075	0.075	0	0.059	0.002			0.002
10/16/2017 15:24			0.077	0.078	0	0.061	0.002			0.002
10/16/2017 15:25	14.1	75.9	0.079	0.08	0	0.063	0.003	40.75422;-	11	0.002
10/16/2017 15:26			0.083	0.083	0	0.065	0.003			0.002
10/16/2017 15:27			0.084	0.084	0	0.067	0.003			0.002
10/16/2017 15:28			0.085	0.085	0	0.069	0.003			0.002
10/16/2017 15:29			0.086	0.086	0	0.071	0.003			0.002
10/16/2017 15:30	14.1	76.9	0.089	0.09	0	0.072	0.003	40.75421;-	20	0.002

10/16/2017 15:31			0.093	0.093	0	0.074	0.004			0.002
10/16/2017 15:32			0.094	0.095	0	0.076	0.004			0.002
10/16/2017 15:33			0.097	0.097	0	0.078	0.004			0.002
10/16/2017 15:34			0.097	0.097	0	0.08	0.004			0.002
10/16/2017 15:35	14.2	77.9	0.098	0.099	0	0.083	0.004	40.75421;-	18	0.002
10/16/2017 15:36			0.098	0.099	0	0.084	0.005			0.002
10/16/2017 15:37			0.101	0.101	0	0.086	0.005			0.002
10/16/2017 15:38			0.103	0.104	0	0.088	0.005			0.002
10/16/2017 15:39			0.104	0.105	0	0.09	0.005			0.002
10/16/2017 15:40	13.9	77.9	0.103	0.106	0	0.092	0.006	40.75422;-	21	0.003
10/16/2017 15:41			0.104	0.106	0	0.093	0.006			0.003
10/16/2017 15:42			0.104	0.106	0	0.095	0.006			0.003
10/16/2017 15:43			0.105	0.106	0	0.096	0.006			0.003
10/16/2017 15:44			0.104	0.106	0	0.097	0.006			0.004
10/16/2017 15:45	14	85	0.106	0.109	0	0.099	0.007	40.75421;-	20	0.006
10/16/2017 15:46			0.107	0.11	0	0.1	0.007			0.005
10/16/2017 15:47			0.109	0.11	0	0.101	0.007			0.004
10/16/2017 15:48			0.106	0.111	0	0.102	0.007			0.003
10/16/2017 15:49			0.108	0.111	0	0.103	0.007			0.003
10/16/2017 15:50	13.4	83	0.105	0.111	0	0.103	0.008	40.75421;-	19	0.003
10/16/2017 15:51			0.106	0.111	0	0.104	0.008			0.003
10/16/2017 15:52			0.109	0.111	0	0.105	0.008			0.003
10/16/2017 15:53			0.108	0.111	0	0.105	0.008			0.003
10/16/2017 15:54			0.108	0.111	0	0.105	0.009			0.002
10/16/2017 15:55	13.1	90.1	0.11	0.111	0	0.106	0.009	40.75425;-	16	0.002
10/16/2017 15:56			0.11	0.111	0	0.106	0.009			0.002
10/16/2017 15:57			0.111	0.111	0	0.107	0.009			0.002
10/16/2017 15:58			0.111	0.113	0	0.107	0.01			0.002
10/16/2017 15:59			0.113	0.115	0	0.107	0.01			0.002
10/16/2017 16:00	13.4	80	0.11	0.115	0	0.108	0.01	40.75425;-	14	0.003
10/16/2017 16:01			0.114	0.115	0	0.108	0.01			0.003
10/16/2017 16:02			0.113	0.115	0	0.109	0.01			0.003
10/16/2017 16:03			0.115	0.116	0	0.109	0.011			0.003
10/16/2017 16:04			0.114	0.117	0	0.109	0.011			0.003
10/16/2017 16:05	13.3	80	0.115	0.117	0	0.11	0.011	40.75421;-	16	0.003
10/16/2017 16:06			0.114	0.117	0	0.11	0.011			0.003
10/16/2017 16:07			0.114	0.118	0	0.111	0.012			0.003
10/16/2017 16:08			0.115	0.118	0	0.111	0.012			0.003
10/16/2017 16:09			0.116	0.118	0	0.112	0.012			0.003
10/16/2017 16:10	13.2	84	0.114	0.118	0	0.112	0.012	40.75422;-	13	0.003
10/16/2017 16:11			0.116	0.118	0	0.113	0.013			0.003
10/16/2017 16:12			0.117	0.118	0	0.113	0.013			0.003
10/16/2017 16:13			0.119	0.119	0	0.113	0.013			0.003
10/16/2017 16:14			0.118	0.119	0	0.113	0.013			0.003
10/16/2017 16:15	13.1	81	0.118	0.119	0	0.114	0.014	40.75422;-	12	0.002
10/16/2017 16:16			0.117	0.119	0	0.114	0.014			0.002
10/16/2017 16:17			0.117	0.119	0	0.114	0.014			0.002
10/16/2017 16:18			0.116	0.119	0	0.114	0.014			0.002
10/16/2017 16:19			0.118	0.121	0	0.115	0.015			0.002
10/16/2017 16:20	13	81	0.117	0.121	0	0.115	0.015	40.75423;-	14	0.002
10/16/2017 16:21			0.116	0.121	0	0.115	0.015			0.003
10/16/2017 16:22			0.117	0.121	0	0.115	0.015			0.003
10/16/2017 16:23			0.117	0.121	0	0.115	0.015			0.003
10/16/2017 16:24			0.115	0.121	0	0.115	0.016			0.002
10/16/2017 16:25	13	81	0.114	0.121	0	0.115	0.016	40.75429;-	18	0.003
10/16/2017 16:26			0.114	0.121	0	0.115	0.016			0.003

10/16/2017 16:27			0.114	0.121	0	0.115	0.016			0.003
10/16/2017 16:28			0.115	0.121	0	0.115	0.017			0.003
10/16/2017 16:29			0.114	0.121	0	0.115	0.017			0.003
10/16/2017 16:30	12.9	91.1	0.115	0.121	0	0.115	0.017	40.75425;-	16	0.003
10/16/2017 16:31			0.114	0.121	0	0.114	0.017			0.003
10/16/2017 16:32			0.114	0.121	0	0.114	0.018			0.002
10/16/2017 16:33			0.112	0.121	0	0.114	0.018			0.002
10/16/2017 16:34			0.113	0.121	0	0.114	0.018			0.003
10/16/2017 16:35	13	83	0.113	0.121	0	0.113	0.018	40.75425;-	12	0.003
10/16/2017 16:36			0.112	0.121	0	0.113	0.019			0.003
10/16/2017 16:37			0.11	0.121	0	0.113	0.019			0.003
10/16/2017 16:38			0.115	0.121	0	0.112	0.019			0.002
10/16/2017 16:39			0.11	0.121	0	0.112	0.019			0.002
10/16/2017 16:40	13.2	85	0.114	0.121	0	0.112	0.019	40.75421;-	14	0.003
10/16/2017 16:41			0.11	0.121	0	0.112	0.02			0.003
10/16/2017 16:42			0.111	0.121	0	0.112	0.02			0.003
10/16/2017 16:43			0.111	0.121	0	0.111	0.02			0.003
10/16/2017 16:44			0.114	0.121	0	0.111	0.02			0.003
10/16/2017 16:45	14.4	85	0.114	0.121	0	0.111	0.021	40.75421;-	16	0.003
10/16/2017 16:46			0.112	0.121	0	0.111	0.021			0.002
10/16/2017 16:47			0.111	0.121	0	0.111	0.021			0.002
10/16/2017 16:48			0.114	0.121	0	0.111	0.021			0.003
10/16/2017 16:49			0.113	0.121	0	0.111	0.022			0.002
10/16/2017 16:50	14.1	77.9	0.112	0.121	0	0.111	0.022	40.75423;-	16	0.003
10/16/2017 16:51			0.114	0.121	0	0.111	0.022			0.003
10/16/2017 16:52			0.113	0.121	0	0.111	0.022			0.003
10/16/2017 16:53			0.113	0.121	0	0.111	0.023			0.003
10/16/2017 16:54			0.113	0.121	0	0.112	0.023			0.002
10/16/2017 16:55	14.2	75.9	0.114	0.121	0	0.112	0.023	40.75418;-	25	0.003
10/16/2017 16:56			0.114	0.123	0	0.112	0.023			0.003
10/16/2017 16:57			0.113	0.125	0	0.112	0.023			0.003
10/16/2017 16:58			0.117	0.125	0	0.113	0.024			0.003
10/16/2017 16:59			0.121	0.125	0	0.113	0.024			0.002
10/16/2017 17:00	14.3	75.9	0.118	0.125	0	0.113	0.024	40.75419;-	20	0.003
10/16/2017 17:01			0.117	0.125	0	0.114	0.024			0.004
10/16/2017 17:02			0.116	0.125	0	0.114	0.025			0.004
10/16/2017 17:03			0.118	0.125	0	0.114	0.025			0.003
10/16/2017 17:04			0.117	0.125	0	0.114	0.025			0.003
10/16/2017 17:05	14.2	75.9	0.123	0.125	0	0.115	0.025	40.75422;-	17	0.003
10/16/2017 17:06			0.121	0.126	0	0.115	0.026			0.003
10/16/2017 17:07			0.122	0.126	0	0.116	0.026			0.003
10/16/2017 17:08			0.118	0.126	0	0.116	0.026			0.003
10/16/2017 17:09			0.12	0.126	0	0.116	0.026			0.003
10/16/2017 17:10	13.2	127.5	0.12	0.126	0	0.117	0.027			0.003
10/16/2017 17:10								40.75419;-	20	
10/16/2017 17:11			0.09	0.126	0	0.116	0.027			0.007
10/16/2017 17:12			0.097	0.126	0	0.115	0.027			0.006
10/16/2017 17:13			0.102	0.126	0	0.114	0.027			0.004
10/16/2017 17:14			0.101	0.126	0	0.112	0.027			0.003
10/16/2017 17:15	13.1	85	0.103	0.126	0	0.111	0.028	40.75414;-	26	0.003
10/16/2017 17:16			0.104	0.126	0	0.11	0.028			0.003
10/16/2017 17:17			0.106	0.126	0	0.109	0.028			0.003
10/16/2017 17:18			0.108	0.126	0	0.109	0.028			0.003
10/16/2017 17:19			0.107	0.126	0	0.108	0.029			0.003
10/16/2017 17:20	13.1	91.1	0.105	0.126	0	0.107	0.029	40.75426;-	14	0.003
10/16/2017 17:21			0.104	0.126	0	0.106	0.029			0.003

10/16/2017 17:22			0.105	0.126	0	0.105	0.029			0.003
10/16/2017 17:23			0.105	0.126	0	0.104	0.029			0.003
10/16/2017 17:24			0.105	0.126	0	0.103	0.03			0.003
10/16/2017 17:25	13.1	86	0.104	0.126	0	0.102	0.03	40.75422;-	15	0.003
10/16/2017 17:26			0.105	0.126	0	0.102	0.03			0.003
10/16/2017 17:27			0.106	0.126	0	0.103	0.03			0.003
10/16/2017 17:28			0.106	0.126	0	0.104	0.031			0.003
10/16/2017 17:29			0.111	0.126	0	0.105	0.031			0.003
10/16/2017 17:30	14.2	75.9	0.11	0.126	0	0.105	0.031	40.75421;-	16	0.003
10/16/2017 17:31			0.106	0.126	0	0.105	0.031			0.003
10/16/2017 17:32			0.109	0.126	0	0.105	0.031			0.003
10/16/2017 17:33			0.109	0.126	0	0.106	0.032			0.003
10/16/2017 17:34			0.108	0.126	0	0.106	0.032			0.003
10/16/2017 17:35	13.1	82	0.112	0.126	0	0.106	0.032	40.75422;-	9	0.003
10/16/2017 17:36			0.107	0.126	0	0.106	0.032			0.003
10/16/2017 17:37			0.111	0.126	0	0.106	0.033			0.003
10/16/2017 17:38			0.111	0.126	0	0.107	0.033			0.003
10/16/2017 17:39			0.108	0.126	0	0.107	0.033			0.003
10/16/2017 17:40	12.9	85	0.11	0.126	0	0.107	0.033	40.75419;-	22	0.003
10/16/2017 17:41			0.11	0.126	0	0.108	0.033			0.003
10/16/2017 17:42			0.108	0.126	0	0.108	0.034			0.003
10/16/2017 17:43			0.106	0.126	0	0.108	0.034			0.003
10/16/2017 17:44			0.107	0.126	0	0.108	0.034			0.003
10/16/2017 17:45	12.9	84	0.107	0.126	0	0.107	0.034	40.75423;-	16	0.003
10/16/2017 17:46			0.106	0.126	0	0.107	0.035			0.003
10/16/2017 17:47			0.108	0.126	0	0.107	0.035			0.003
10/16/2017 17:48			0.105	0.126	0	0.107	0.035			0.003
10/16/2017 17:49			0.105	0.126	0	0.107	0.035			0.003
10/16/2017 17:50	12.9	85	0.104	0.126	0	0.107	0.035	40.75423;-	19	0.004
10/16/2017 17:51			0.103	0.126	0	0.106	0.036			0.004
10/16/2017 17:52			0.105	0.126	0	0.106	0.036			0.004
10/16/2017 17:53			0.105	0.126	0	0.106	0.036			0.004
10/16/2017 17:54			0.104	0.126	0	0.106	0.036			0.004
10/16/2017 17:55	12.9	94.1	0.105	0.126	0	0.105	0.037	40.75422;-	15	0.004
10/16/2017 17:56			0.105	0.126	0	0.105	0.037			0.004
10/16/2017 17:57			0.104	0.126	0	0.105	0.037			0.003
10/16/2017 17:58			0.104	0.126	0	0.104	0.037			0.003
10/16/2017 17:59			0.103	0.126	0	0.104	0.037			0.003
10/16/2017 18:00	12.9	86	0.103	0.126	0	0.104	0.038	40.75426;-	12	0.003
10/16/2017 18:01			0.106	0.126	0	0.104	0.038			0.003
10/16/2017 18:02			0.104	0.126	0	0.104	0.038			0.003
10/16/2017 18:03			0.103	0.126	0	0.103	0.038			0.003
10/16/2017 18:04			0.102	0.126	0	0.103	0.038			0.003
10/16/2017 18:05	12.9	97.2	0.102	0.126	0	0.103	0.039	40.75422;-	16	0.003
10/16/2017 18:06			0.102	0.126	0	0.103	0.039			0.003
10/16/2017 18:07			0.101	0.126	0	0.103	0.039			0.003
10/16/2017 18:08			0.101	0.126	0	0.102	0.039			0.003
10/16/2017 18:09			0.101	0.126	0	0.102	0.04			0.003
10/16/2017 18:10	12.9	93.1	0.1	0.126	0	0.102	0.04	40.75426;-	-4	0.003
10/16/2017 18:11			0.098	0.126	0	0.102	0.04			0.003
10/16/2017 18:12			0.101	0.126	0	0.101	0.04			0.003
10/16/2017 18:13			0.1	0.126	0	0.101	0.04			0.003
10/16/2017 18:14			0.1	0.126	0	0.101	0.041			0.003
10/16/2017 18:15	12.9	83	0.099	0.126	0	0.101	0.041	40.75426;-	14	0.003
10/16/2017 18:16			0.1	0.126	0	0.1	0.041			0.003
10/16/2017 18:17			0.1	0.126	0	0.1	0.041			0.003

10/16/2017 18:18			0.1	0.126	0	0.1	0.041			0.003
10/16/2017 18:19			0.099	0.126	0	0.099	0.042			0.003
10/16/2017 18:20	12.8	85	0.099	0.126	0	0.099	0.042	40.75423;-	8	0.003
10/16/2017 18:21			0.099	0.126	0	0.099	0.042			0.003
10/16/2017 18:22			0.099	0.126	0	0.099	0.042			0.002
10/16/2017 18:23			0.098	0.126	0	0.099	0.042			0.003
10/16/2017 18:24			0.098	0.126	0	0.099	0.043			0.003
10/16/2017 18:25	12.8	82	0.097	0.126	0	0.099	0.043	40.75426;-	4	0.003
10/16/2017 18:26			0.098	0.126	0	0.098	0.043			0.003
10/16/2017 18:27			0.095	0.126	0	0.098	0.043			0.003
10/16/2017 18:28			0.096	0.126	0	0.098	0.043			0.003
10/16/2017 18:29			0.096	0.126	0	0.097	0.044			0.003
10/16/2017 18:30	12.8	87	0.098	0.126	0	0.097	0.044	40.75426;-	2	0.003
10/16/2017 18:31			0.097	0.126	0	0.097	0.044			0.003
10/16/2017 18:32			0.096	0.126	0	0.097	0.044			0.003
10/16/2017 18:33			0.097	0.126	0	0.096	0.044			0.003
10/16/2017 18:34			0.096	0.126	0	0.096	0.045			0.003
10/16/2017 18:35	12.9	90.1	0.096	0.126	0	0.096	0.045	40.75425;-	1	0.003
10/16/2017 18:36			0.096	0.126	0	0.096	0.045			0.003
10/16/2017 18:37			0.096	0.126	0	0.095	0.045			0.003
10/16/2017 18:38			0.094	0.126	0	0.095	0.045			0.003
10/16/2017 18:39			0.096	0.126	0	0.095	0.046			0.003
10/16/2017 18:40	13	81	0.096	0.126	0	0.095	0.046	40.75425;-	4	0.003
10/16/2017 18:41			0.095	0.126	0	0.095	0.046			0.003
10/16/2017 18:42			0.096	0.126	0	0.094	0.046			0.003
10/16/2017 18:43			0.096	0.126	0	0.095	0.046			0.003
10/16/2017 18:44			0.095	0.126	0	0.095	0.047			0.003
10/16/2017 18:45	13.2	93.1	0.096	0.126	0	0.095	0.047	40.75426;-	2	0.003
10/16/2017 18:46			0.096	0.126	0	0.095	0.047			0.003
10/16/2017 18:47			0.096	0.126	0	0.095	0.047			0.003
10/16/2017 18:48			0.098	0.126	0	0.095	0.047			0.003
10/16/2017 18:49			0.098	0.126	0	0.095	0.048			0.003
10/16/2017 18:50	13.2	81	0.098	0.126	0	0.095	0.048	40.75425;-	3	0.003
10/16/2017 18:51			0.098	0.126	0	0.095	0.048			0.003
10/16/2017 18:52			0.1	0.126	0	0.096	0.048			0.003
10/16/2017 18:53			0.101	0.126	0	0.096	0.048			0.003
10/16/2017 18:54			0.102	0.126	0	0.097	0.049			0.003
10/16/2017 18:55	13.3	86	0.102	0.126	0	0.097	0.049	40.75426;-	0	0.004
10/16/2017 18:56			0.104	0.126	0	0.098	0.049			0.003
10/16/2017 18:57			0.104	0.126	0	0.098	0.049			0.003
10/16/2017 18:58			0.104	0.126	0	0.099	0.049			0.003
10/16/2017 18:59			0.105	0.126	0	0.099	0.05			0.003
10/16/2017 19:00	13.3	80	0.105	0.126	0	0.1	0.05	40.75425;-	2	0.003
10/16/2017 19:01			0.103	0.126	0	0.1	0.05			0.003
10/16/2017 19:02			0.101	0.126	0	0.101	0.05			0.003
10/16/2017 19:03			0.103	0.126	0	0.101	0.051			0.003
10/16/2017 19:04			0.082	0.126	0	0.101	0.051			0.003
10/16/2017 19:05	13.6	79	0.068	0.126	0	0.1	0.051	40.75425;-	6	0.004
10/16/2017 19:06			0.074	0.126	0	0.098	0.051			0.004
10/16/2017 19:07			0.079	0.126	0	0.096	0.051			0.003
10/16/2017 19:08			0.084	0.126	0	0.095	0.051			0.003
10/16/2017 19:09			0.087	0.126	0	0.094	0.052			0.003
10/16/2017 19:10	14.1	75.9	0.088	0.126	0	0.093	0.052	40.75423;-	3	0.003
10/16/2017 19:11			0.091	0.126	0	0.092	0.052			0.003
10/16/2017 19:12			0.092	0.126	0	0.091	0.052			0.003
10/16/2017 19:13			0.095	0.126	0	0.09	0.052			0.003

10/16/2017 19:14			0.098	0.126	0	0.09	0.053			0.002
10/16/2017 19:15	13.4	86	0.098	0.126	0	0.089	0.053	40.75423;-	5	0.003
10/16/2017 19:16			0.098	0.126	0	0.089	0.053			0.003
10/16/2017 19:17			0.101	0.126	0	0.089	0.053			0.002
10/16/2017 19:18			0.103	0.126	0	0.088	0.053			0.003
10/16/2017 19:19			0.103	0.126	0	0.088	0.054			0.003
10/16/2017 19:20	14.2	74.9	0.105	0.126	0	0.09	0.054	40.75423;-	8	0.003
10/16/2017 19:21			0.104	0.126	0	0.093	0.054			0.003
10/16/2017 19:22			0.104	0.126	0	0.095	0.054			0.003
10/16/2017 19:23			0.106	0.126	0	0.096	0.054			0.003
10/16/2017 19:24			0.105	0.126	0	0.098	0.055			0.003
10/16/2017 19:25	13.2	129.6	0.105	0.126	0	0.099	0.055	40.75421;-	5	0.003
10/16/2017 19:26			0.106	0.126	0	0.1	0.055			0.003
10/16/2017 19:27			0.105	0.126	0	0.101	0.055			0.003
10/16/2017 19:28			0.106	0.126	0	0.102	0.056			0.003
10/16/2017 19:29			0.107	0.126	0	0.103	0.056			0.003
10/16/2017 19:30	13.3	81	0.107	0.126	0	0.103	0.056	40.75425;-	3	0.003
10/16/2017 19:31			0.108	0.126	0	0.104	0.056			0.003
10/16/2017 19:32			0.108	0.126	0	0.104	0.056			0.003
10/16/2017 19:33			0.108	0.126	0	0.105	0.057			0.003
10/16/2017 19:34			0.109	0.126	0	0.105	0.057			0.003
10/16/2017 19:35	13	81	0.108	0.126	0	0.105	0.057	40.75425;-	8	0.003
10/16/2017 19:36			0.106	0.126	0	0.106	0.057			0.003
10/16/2017 19:37			0.107	0.126	0	0.106	0.058			0.003
10/16/2017 19:38			0.106	0.126	0	0.106	0.058			0.003
10/16/2017 19:39			0.105	0.126	0	0.106	0.058			0.003
10/16/2017 19:40	13.1	82	0.104	0.126	0	0.106	0.058	40.75428;-	6	0.003
10/16/2017 19:41			0.106	0.126	0	0.106	0.058			0.003
10/16/2017 19:42			0.107	0.126	0	0.106	0.059			0.003
10/16/2017 19:43			0.108	0.126	0	0.106	0.059			0.003
10/16/2017 19:44			0.108	0.126	0	0.106	0.059			0.003
10/16/2017 19:45	13	132.6	0.11	0.126	0	0.106	0.059	40.75426;-	9	0.003
10/16/2017 19:46			0.111	0.126	0	0.106	0.06			0.003
10/16/2017 19:47			0.109	0.126	0	0.106	0.06			0.003
10/16/2017 19:48			0.109	0.126	0	0.106	0.06			0.003
10/16/2017 19:49			0.107	0.126	0	0.106	0.06			0.003
10/16/2017 19:50	12.9	125.5	0.108	0.126	0	0.106	0.06	40.75426;-	4	0.003
10/16/2017 19:51			0.109	0.126	0	0.106	0.061			0.003
10/16/2017 19:52			0.106	0.126	0	0.106	0.061			0.003
10/16/2017 19:53			0.107	0.126	0	0.106	0.061			0.003
10/16/2017 19:54			0.107	0.126	0	0.106	0.061			0.003
10/16/2017 19:55	12.9	83	0.106	0.126	0	0.107	0.062	40.75426;-	10	0.003
10/16/2017 19:56			0.105	0.126	0	0.107	0.062			0.003
10/16/2017 19:57			0.107	0.126	0	0.107	0.062			0.003
10/16/2017 19:58			0.103	0.126	0	0.106	0.062			0.003
10/16/2017 19:59			0.105	0.126	0	0.106	0.062			0.003
10/16/2017 20:00	12.8	91.1	0.104	0.126	0	0.106	0.063	40.75426;-	14	0.003
10/16/2017 20:01			0.103	0.126	0	0.106	0.063			0.003
10/16/2017 20:02			0.103	0.126	0	0.105	0.063			0.003
10/16/2017 20:03			0.102	0.126	0	0.105	0.063			0.003
10/16/2017 20:04			0.101	0.126	0	0.104	0.063			0.003
10/16/2017 20:05	12.8	87	0.099	0.126	0	0.104	0.064	40.75423;-	20	0.003
10/16/2017 20:06			0.099	0.126	0	0.103	0.064			0.003
10/16/2017 20:07			0.097	0.126	0	0.103	0.064			0.003
10/16/2017 20:08			0.074	0.126	0	0.102	0.064			0.007
10/17/2017 12:10	14.7	108.3								

10/17/2017 12:10								40.7536212;-73.4863986			
10/17/2017 12:13			0	0	0	0	0				
10/17/2017 12:14			0.001	0.001	0	0	0				
10/17/2017 12:15	14.7	73.9	0.005	0.005	0	0	0	40.75428;-	12		
10/17/2017 12:16			0.009	0.009	0	0	0				0.003
10/17/2017 12:17			0.013	0.014	0	0	0				0.003
10/17/2017 12:18			0.017	0.018	0	0	0				0.002
10/17/2017 12:19			0.021	0.021	0	0	0				0.002
10/17/2017 12:20	14.8	73.9	0.023	0.023	0	0	0	40.75426;-	18		0.002
10/17/2017 12:21			0.026	0.026	0	0	0				0.002
10/17/2017 12:22			0.028	0.028	0	0	0				0.002
10/17/2017 12:23			0.031	0.031	0	0	0				0.002
10/17/2017 12:24			0.033	0.033	0	0	0				0.002
10/17/2017 12:25	14.4	77.9	0.034	0.035	0	0	0	40.75426;-	13		0.002
10/17/2017 12:26			0.037	0.037	0	0.014	0				0.002
10/17/2017 12:27			0.04	0.04	0	0.017	0				0.002
10/17/2017 12:28			0.043	0.043	0	0.019	0				0.002
10/17/2017 12:29			0.044	0.044	0	0.022	0				0.002
10/17/2017 12:30	14.4	82	0.047	0.047	0	0.025	0	40.75426;-	16		0.002
10/17/2017 12:31			0.048	0.049	0	0.028	0				0.002
10/17/2017 12:32			0.049	0.05	0	0.03	0				0.002
10/17/2017 12:33			0.051	0.051	0	0.033	0.001				0.002
10/17/2017 12:34			0.056	0.069	0	0.035	0.001				0.002
10/17/2017 12:35	14.4	79	0.057	0.069	0	0.037	0.001	40.75426;-	14		0.002
10/17/2017 12:36			0.058	0.069	0	0.04	0.001				0.002
10/17/2017 12:37			0.06	0.069	0	0.042	0.001				0.002
10/17/2017 12:38			0.061	0.069	0	0.044	0.001				0.002
10/17/2017 12:39			0.064	0.069	0	0.046	0.001				0.002
10/17/2017 12:40	14.8	73.9	0.065	0.069	0	0.048	0.001	40.75429;-	6		0.002
10/17/2017 12:41			0.065	0.069	0	0.05	0.002				0.002
10/17/2017 12:42			0.068	0.069	0	0.052	0.002				0.002
10/17/2017 12:43			0.071	0.071	0	0.054	0.002				0.002
10/17/2017 12:44			0.07	0.071	0	0.056	0.002				0.002
10/17/2017 12:45	14.3	95.1	0.072	0.072	0	0.058	0.002	40.75426;-	9		0.002
10/17/2017 12:46			0.072	0.072	0	0.06	0.002				0.002
10/17/2017 12:47			0.074	0.075	0	0.061	0.002				0.002
10/17/2017 12:48			0.075	0.076	0	0.063	0.003				0.002
10/17/2017 12:49			0.075	0.076	0	0.064	0.003				0.002
10/17/2017 12:50	14.4	106.3	0.076	0.077	0	0.066	0.003	40.75428;-	10		0.002
10/17/2017 12:51			0.079	0.08	0	0.067	0.003				0.002
10/17/2017 12:52			0.08	0.082	0	0.068	0.003				0.002
10/17/2017 12:53			0.079	0.082	0	0.069	0.003				0.002
10/17/2017 12:54			0.079	0.083	0	0.071	0.004				0.002
10/17/2017 12:55	14.4	76.9	0.08	0.083	0	0.072	0.004	40.75426;-	7		0.002
10/17/2017 12:56			0.081	0.083	0	0.073	0.004				0.002
10/17/2017 12:57			0.081	0.083	0	0.074	0.004				0.003
10/17/2017 12:58			0.084	0.084	0	0.075	0.004				0.003
10/17/2017 12:59			0.084	0.085	0	0.076	0.004				0.002
10/17/2017 13:00	14.4	73.9	0.085	0.085	0	0.076	0.005	40.75423;-	9		0.002
10/17/2017 13:01			0.085	0.086	0	0.077	0.005				0.002
10/17/2017 13:02			0.085	0.087	0	0.078	0.005				0.003
10/17/2017 13:03			0.085	0.087	0	0.079	0.005				0.003
10/17/2017 13:04			0.086	0.09	0	0.08	0.005				0.003
10/17/2017 13:05	14.4	83	0.089	0.091	0	0.081	0.005	40.75426;-	2		0.003
10/17/2017 13:06			0.089	0.092	0	0.082	0.006				0.003
10/17/2017 13:07			0.09	0.093	0	0.082	0.006				0.003

10/17/2017 13:08			0.091	0.093	0	0.083	0.006			0.003
10/17/2017 13:09			0.094	0.096	0	0.084	0.006			0.003
10/17/2017 13:10	14.4	110.3	0.094	0.096	0	0.085	0.006	40.75423;-	5	0.003
10/17/2017 13:11			0.094	0.096	0	0.086	0.007			0.003
10/17/2017 13:12			0.095	0.098	0	0.087	0.007			0.003
10/17/2017 13:13			0.098	0.099	0	0.088	0.007			0.003
10/17/2017 13:14			0.098	0.099	0	0.088	0.007			0.002
10/17/2017 13:15	14.8	83	0.099	0.101	0	0.089	0.007	40.75423;-	12	0.002
10/17/2017 13:16			0.096	0.101	0	0.09	0.008			0.002
10/17/2017 13:17			0.099	0.101	0	0.091	0.008			0.002
10/17/2017 13:18			0.099	0.102	0	0.092	0.008			0.003
10/17/2017 13:19			0.1	0.102	0	0.093	0.008			0.003
10/17/2017 13:20	14.4	73.9	0.1	0.102	0	0.094	0.008	40.75426;-	9	0.003
10/17/2017 13:21			0.099	0.102	0	0.094	0.009			0.003
10/17/2017 13:22			0.1	0.102	0	0.095	0.009			0.003
10/17/2017 13:23			0.102	0.102	0	0.096	0.009			0.003
10/17/2017 13:24			0.094	0.102	0	0.096	0.009			0.006
10/17/2017 13:25	14.4	70.9	0.096	0.102	0	0.096	0.009	40.75422;-	9	0.004
10/17/2017 13:26			0.096	0.102	0	0.097	0.01			0.003
10/17/2017 13:27			0.097	0.102	0	0.097	0.01			0.003
10/17/2017 13:28			0.098	0.102	0	0.097	0.01			0.003
10/17/2017 13:29			0.098	0.102	0	0.097	0.01			0.003
10/17/2017 13:30	14.4	82	0.099	0.102	0	0.097	0.01	40.75426;-	7	0.003
10/17/2017 13:31			0.098	0.102	0	0.097	0.011			0.003
10/17/2017 13:32			0.098	0.102	0	0.097	0.011			0.003
10/17/2017 13:33			0.098	0.102	0	0.097	0.011			0.003
10/17/2017 13:34			0.1	0.102	0	0.097	0.011			0.003
10/17/2017 13:35	14.8	73.9	0.101	0.102	0	0.097	0.011	40.75428;-	6	0.003
10/17/2017 13:36			0.102	0.102	0	0.097	0.012			0.003
10/17/2017 13:37			0.102	0.103	0	0.098	0.012			0.003
10/17/2017 13:38			0.102	0.103	0	0.098	0.012			0.003
10/17/2017 13:39			0.103	0.103	0	0.098	0.012			0.003
10/17/2017 13:40	14.4	83	0.107	0.109	0	0.098	0.012	40.75429;-	6	0.003
10/17/2017 13:41			0.109	0.112	0	0.099	0.013			0.006
10/17/2017 13:42			0.11	0.112	0	0.1	0.013			0.006
10/17/2017 13:43			0.111	0.113	0	0.101	0.013			0.005
10/17/2017 13:44			0.11	0.113	0	0.102	0.013			0.007
10/17/2017 13:45	14.3	75.9	0.11	0.113	0	0.103	0.014	40.75426;-	7	0.006
10/17/2017 13:46			0.111	0.113	0	0.104	0.014			0.005
10/17/2017 13:47			0.111	0.113	0	0.104	0.014			0.004
10/17/2017 13:48			0.111	0.113	0	0.105	0.014			0.004
10/17/2017 13:49			0.112	0.113	0	0.106	0.015			0.003
10/17/2017 13:50	14.3	74.9	0.111	0.113	0	0.107	0.015	40.75423;-	10	0.003
10/17/2017 13:51			0.114	0.114	0	0.107	0.015			0.003
10/17/2017 13:52			0.113	0.114	0	0.108	0.015			0.003
10/17/2017 13:53			0.113	0.114	0	0.109	0.015			0.003
10/17/2017 13:54			0.113	0.114	0	0.11	0.016			0.003
10/17/2017 13:55	14.4	84	0.114	0.115	0	0.11	0.016	40.75423;-	5	0.003
10/17/2017 13:56			0.114	0.116	0	0.111	0.016			0.003
10/17/2017 13:57			0.115	0.117	0	0.111	0.016			0.003
10/17/2017 13:58			0.115	0.117	0	0.111	0.017			0.003
10/17/2017 13:59			0.114	0.117	0	0.112	0.017			0.003
10/17/2017 14:00	14.4	80	0.115	0.117	0	0.112	0.017	40.75426;-	0	0.003
10/17/2017 14:01			0.115	0.117	0	0.112	0.017			0.003
10/17/2017 14:02			0.116	0.117	0	0.112	0.018			0.003
10/17/2017 14:03			0.115	0.117	0	0.113	0.018			0.003

10/17/2017 14:04			0.116	0.117	0	0.113	0.018			0.003
10/17/2017 14:05	14.3	75.9	0.116	0.117	0	0.113	0.018	40.75415;-	0	0.003
10/17/2017 14:06			0.116	0.117	0	0.114	0.019			0.003
10/17/2017 14:07			0.115	0.117	0	0.114	0.019			0.003
10/17/2017 14:08			0.115	0.117	0	0.114	0.019			0.003
10/17/2017 14:09			0.116	0.117	0	0.114	0.019			0.003
10/17/2017 14:10	14.4	79	0.115	0.117	0	0.114	0.02	40.75415;-	4	0.003
10/17/2017 14:11			0.118	0.118	0	0.114	0.02			0.003
10/17/2017 14:12			0.117	0.118	0	0.114	0.02			0.003
10/17/2017 14:13			0.117	0.118	0	0.115	0.02			0.003
10/17/2017 14:14			0.117	0.119	0	0.115	0.02			0.003
10/17/2017 14:15	13.7	87	0.119	0.12	0	0.115	0.021	40.75415;-	0	0.003
10/17/2017 14:16			0.119	0.12	0	0.115	0.021			0.003
10/17/2017 14:17			0.119	0.12	0	0.115	0.021			0.003
10/17/2017 14:18			0.119	0.12	0	0.116	0.021			0.003
10/17/2017 14:19			0.119	0.12	0	0.116	0.022			0.003
10/17/2017 14:20	13.6	119.4	0.119	0.122	0	0.116	0.022			0.003
10/17/2017 14:20								40.75412;-	8	
10/17/2017 14:21			0.118	0.125	0	0.116	0.022			0.003
10/17/2017 14:22			0.119	0.125	0	0.117	0.022			0.003
10/17/2017 14:23			0.121	0.125	0	0.117	0.023			0.003
10/17/2017 14:24			0.121	0.125	0	0.117	0.023			0.003
10/17/2017 14:25	13.7	119.4	0.12	0.125	0	0.118	0.023	40.75418;-	-2	0.003
10/17/2017 14:26			0.123	0.125	0	0.118	0.023			0.003
10/17/2017 14:27			0.121	0.125	0	0.118	0.024			0.003
10/17/2017 14:28			0.12	0.125	0	0.119	0.024			0.003
10/17/2017 14:29			0.122	0.125	0	0.119	0.024			0.003
10/17/2017 14:30	13.7	79	0.12	0.125	0	0.119	0.024	40.75418;-	5	0.003
10/17/2017 14:31			0.121	0.125	0	0.119	0.025			0.003
10/17/2017 14:32			0.123	0.125	0	0.119	0.025			0.003
10/17/2017 14:33			0.122	0.125	0	0.12	0.025			0.003
10/17/2017 14:34			0.121	0.125	0	0.12	0.025			0.003
10/17/2017 14:35	13.7	87	0.121	0.125	0	0.12	0.026	40.75414;-	9	0.003
10/17/2017 14:36			0.123	0.125	0	0.12	0.026			0.003
10/17/2017 14:37			0.104	0.125	0	0.12	0.026			0.006
10/17/2017 14:38			0.107	0.125	0	0.119	0.026			0.005
10/17/2017 14:39			0.112	0.125	0	0.118	0.027			0.004
10/17/2017 14:40	14.3	75.9	0.114	0.125	0	0.118	0.027	40.7542;-7	0	0.004
10/17/2017 14:41			0.116	0.125	0	0.117	0.027			0.004
10/17/2017 14:42			0.117	0.125	0	0.117	0.027			0.004
10/17/2017 14:43			0.12	0.125	0	0.117	0.028			0.003
10/17/2017 14:44			0.12	0.125	0	0.117	0.028			0.003
10/17/2017 14:45	13.7	77.9	0.122	0.125	0	0.117	0.028	40.7542;-7	10	0.003
10/17/2017 14:46			0.122	0.125	0	0.117	0.028			0.003
10/17/2017 14:47			0.12	0.125	0	0.117	0.029			0.003
10/17/2017 14:48			0.122	0.125	0	0.117	0.029			0.003
10/17/2017 14:49			0.124	0.125	0	0.116	0.029			0.003
10/17/2017 14:50	13.7	120.5	0.123	0.126	0	0.117	0.029	40.75417;-	13	0.003
10/17/2017 14:51			0.124	0.128	0	0.117	0.03			0.003
10/17/2017 14:52			0.125	0.128	0	0.117	0.03			0.003
10/17/2017 14:53			0.125	0.128	0	0.118	0.03			0.003
10/17/2017 14:54			0.127	0.128	0	0.119	0.03			0.003
10/17/2017 14:55	14.2	120.5	0.126	0.128	0	0.12	0.031	40.75416;-	28	0.003
10/17/2017 14:56			0.127	0.129	0	0.121	0.031			0.003
10/17/2017 14:57			0.128	0.129	0	0.122	0.031			0.003
10/17/2017 14:58			0.129	0.13	0	0.122	0.031			0.003

10/17/2017 14:59			0.13	0.13	0	0.123	0.032			0.003
10/17/2017 15:00	13.7	82	0.131	0.131	0	0.124	0.032	40.75423;-	17	0.003
10/17/2017 15:01			0.128	0.131	0	0.124	0.032			0.003
10/17/2017 15:02			0.128	0.131	0	0.125	0.033			0.003
10/17/2017 15:03			0.129	0.131	0	0.125	0.033			0.003
10/17/2017 15:04			0.13	0.132	0	0.126	0.033			0.003
10/17/2017 15:05	13.7	121.5	0.132	0.133	0	0.126	0.033	40.75419;-	19	0.003
10/17/2017 15:06			0.131	0.133	0	0.127	0.034			0.003
10/17/2017 15:07			0.13	0.133	0	0.127	0.034			0.003
10/17/2017 15:08			0.131	0.133	0	0.128	0.034			0.003
10/17/2017 15:09			0.129	0.133	0	0.128	0.034			0.003
10/17/2017 15:10	13.6	125.5	0.13	0.133	0	0.128	0.035	40.75418;-	23	0.003
10/17/2017 15:11			0.131	0.133	0	0.128	0.035			0.003
10/17/2017 15:12			0.13	0.133	0	0.129	0.035			0.003
10/17/2017 15:13			0.131	0.133	0	0.129	0.036			0.003
10/17/2017 15:14			0.131	0.133	0	0.129	0.036			0.003
10/17/2017 15:15	13.7	96.2	0.132	0.133	0	0.129	0.036	40.75423;-	14	0.003
10/17/2017 15:16			0.132	0.133	0	0.129	0.036			0.003
10/17/2017 15:17			0.132	0.133	0	0.129	0.037			0.003
10/17/2017 15:18			0.133	0.133	0	0.13	0.037			0.003
10/17/2017 15:19			0.134	0.134	0	0.13	0.037			0.003
10/17/2017 15:20	13.7	79	0.133	0.134	0	0.13	0.037	40.7542;-7	21	0.003
10/17/2017 15:21			0.133	0.135	0	0.13	0.038			0.003
10/17/2017 15:22			0.133	0.135	0	0.13	0.038			0.003
10/17/2017 15:23			0.135	0.136	0	0.131	0.038			0.003
10/17/2017 15:24			0.136	0.137	0	0.131	0.039			0.003
10/17/2017 15:25	13.7	79	0.134	0.137	0	0.131	0.039	40.75421;-	20	0.003
10/17/2017 15:26			0.136	0.137	0	0.131	0.039			0.003
10/17/2017 15:27			0.136	0.137	0	0.132	0.039			0.003
10/17/2017 15:28			0.136	0.137	0	0.132	0.04			0.003
10/17/2017 15:29			0.136	0.138	0	0.132	0.04			0.003
10/17/2017 15:30	13.6	122.5	0.137	0.139	0	0.133	0.04	40.75423;-	16	0.003
10/17/2017 15:31			0.138	0.139	0	0.133	0.04			0.003
10/17/2017 15:32			0.137	0.139	0	0.134	0.041			0.003
10/17/2017 15:33			0.138	0.139	0	0.134	0.041			0.003
10/17/2017 15:34			0.139	0.139	0	0.134	0.041			0.003
10/17/2017 15:35	14.2	100.2	0.136	0.14	0	0.135	0.042	40.75425;-	21	0.003
10/17/2017 15:36			0.138	0.14	0	0.135	0.042			0.003
10/17/2017 15:37			0.137	0.14	0	0.135	0.042			0.003
10/17/2017 15:38			0.138	0.14	0	0.135	0.042			0.003
10/17/2017 15:39			0.138	0.14	0	0.136	0.043			0.003
10/17/2017 15:40	13.6	76.9	0.137	0.14	0	0.136	0.043	40.75425;-	19	0.003
10/17/2017 15:41			0.139	0.14	0	0.136	0.043			0.003
10/17/2017 15:42			0.139	0.14	0	0.136	0.044			0.003
10/17/2017 15:43			0.14	0.141	0	0.137	0.044			0.003
10/17/2017 15:44			0.14	0.141	0	0.137	0.044			0.003
10/17/2017 15:45	13.7	82	0.141	0.141	0	0.137	0.045	40.75422;-	14	0.003
10/17/2017 15:46			0.142	0.142	0	0.137	0.045			0.003
10/17/2017 15:47			0.142	0.142	0	0.137	0.045			0.003
10/17/2017 15:48			0.14	0.142	0	0.138	0.045			0.003
10/17/2017 15:49			0.134	0.142	0	0.138	0.046			0.004
10/17/2017 15:50	13.6	87	0.135	0.142	0	0.138	0.046	40.75426;-	17	0.004
10/17/2017 15:51			0.134	0.142	0	0.138	0.046			0.004
10/17/2017 15:52			0.136	0.142	0	0.138	0.047			0.003
10/17/2017 15:53			0.137	0.142	0	0.137	0.047			0.003
10/17/2017 15:54			0.137	0.142	0	0.137	0.047			0.003

10/17/2017 15:55	13.7	84	0.136	0.142	0	0.137	0.047	40.75426;-	14	0.003
10/17/2017 15:56			0.137	0.142	0	0.137	0.048			0.003
10/17/2017 15:57			0.139	0.142	0	0.137	0.048			0.003
10/17/2017 15:58			0.14	0.142	0	0.137	0.048			0.003
10/17/2017 15:59			0.137	0.142	0	0.137	0.049			0.003
10/17/2017 16:00	13.7	77.9	0.141	0.142	0	0.137	0.049	40.75423;-	15	0.003
10/17/2017 16:01			0.141	0.143	0	0.137	0.049			0.003
10/17/2017 16:02			0.139	0.143	0	0.137	0.049			0.003
10/17/2017 16:03			0.141	0.143	0	0.137	0.05			0.004
10/17/2017 16:04			0.14	0.143	0	0.137	0.05			0.004
10/17/2017 16:05	13.7	87	0.14	0.143	0	0.137	0.05	40.7542;-7	17	0.004
10/17/2017 16:06			0.14	0.143	0	0.138	0.051			0.004
10/17/2017 16:07			0.139	0.143	0	0.138	0.051			0.004
10/17/2017 16:08			0.141	0.143	0	0.138	0.051			0.004
10/17/2017 16:09			0.139	0.143	0	0.138	0.051			0.004
10/17/2017 16:10	13.6	79	0.139	0.143	0	0.139	0.052	40.75426;-	12	0.004
10/17/2017 16:11			0.14	0.143	0	0.139	0.052			0.004
10/17/2017 16:12			0.14	0.143	0	0.139	0.052			0.003
10/17/2017 16:13			0.14	0.143	0	0.139	0.053			0.003
10/17/2017 16:14			0.139	0.143	0	0.139	0.053			0.004
10/17/2017 16:15	13.7	87	0.14	0.143	0	0.139	0.053	40.75426;-	18	0.003
10/17/2017 16:16			0.141	0.143	0	0.139	0.053			0.003
10/17/2017 16:17			0.139	0.143	0	0.139	0.054			0.003
10/17/2017 16:18			0.139	0.143	0	0.139	0.054			0.003
10/17/2017 16:19			0.139	0.143	0	0.139	0.054			0.004
10/17/2017 16:20	14.1	80	0.138	0.143	0	0.139	0.055	40.75425;-	12	0.003
10/17/2017 16:21			0.139	0.143	0	0.139	0.055			0.003
10/17/2017 16:22			0.138	0.143	0	0.139	0.055			0.003
10/17/2017 16:23			0.14	0.143	0	0.139	0.055			0.004
10/17/2017 16:24			0.14	0.143	0	0.139	0.056			0.003
10/17/2017 16:25	13.6	80	0.139	0.143	0	0.139	0.056	40.75426;-	10	0.004
10/17/2017 16:26			0.14	0.143	0	0.139	0.056			0.003
10/17/2017 16:27			0.112	0.143	0	0.139	0.057			0.005
10/17/2017 16:28			0.117	0.143	0	0.137	0.057			0.005
10/17/2017 16:29			0.119	0.143	0	0.136	0.057			0.005
10/17/2017 16:30	13.6	80	0.122	0.143	0	0.134	0.057	40.75426;-	9	0.004
10/17/2017 16:31			0.123	0.143	0	0.133	0.058			0.005
10/17/2017 16:32			0.118	0.143	0	0.132	0.058			0.005
10/17/2017 16:33			0.115	0.143	0	0.131	0.058			0.005
10/17/2017 16:34			0.117	0.143	0	0.129	0.058			0.005
10/17/2017 16:35	14.1	79	0.117	0.143	0	0.128	0.059	40.75422;-	16	0.004
10/17/2017 16:36			0.119	0.143	0	0.126	0.059			0.005
10/17/2017 16:37			0.117	0.143	0	0.125	0.059			0.005
10/17/2017 16:38			0.119	0.143	0	0.123	0.059			0.004
10/17/2017 16:39			0.119	0.143	0	0.122	0.06			0.004
10/17/2017 16:40	13.6	88.1	0.119	0.143	0	0.12	0.06	40.75423;-	12	0.004
10/17/2017 16:41			0.119	0.143	0	0.119	0.06			0.004
10/17/2017 16:42			0.119	0.143	0	0.118	0.06			0.006
10/17/2017 16:43			0.12	0.143	0	0.118	0.061			0.008
10/17/2017 16:44			0.119	0.143	0	0.118	0.061			0.006
10/17/2017 16:45	14.1	86	0.12	0.143	0	0.118	0.061	40.75422;-	18	0.005
10/17/2017 16:46			0.12	0.143	0	0.118	0.061			0.004
10/17/2017 16:47			0.122	0.143	0	0.118	0.062			0.004
10/17/2017 16:48			0.123	0.143	0	0.118	0.062			0.004
10/17/2017 16:49			0.123	0.143	0	0.118	0.062			0.004
10/17/2017 16:50	13.6	83	0.124	0.143	0	0.119	0.062	40.75421;-	17	0.004

10/17/2017 16:51			0.124	0.143	0	0.119	0.063				0.004
10/17/2017 16:52			0.125	0.143	0	0.119	0.063				0.004
10/17/2017 16:53			0.125	0.143	0	0.12	0.063				0.004
10/17/2017 16:54			0.126	0.143	0	0.12	0.063				0.004
10/17/2017 16:55	13.6	79	0.126	0.143	0	0.121	0.064	40.75418;-	26		0.004
10/17/2017 16:56			0.125	0.143	0	0.121	0.064				0.004
10/17/2017 16:57			0.112	0.143	0	0.122	0.064				0.004
10/18/2017 12:47	14.2	116.4						40.7538276;-73.48766189999999			
10/18/2017 12:48			0.012	0.041	0	0	0				
10/18/2017 12:49			0.009	0.041	0	0	0				
10/18/2017 12:50	14.6	91.1	0.012	0.041	0	0	0	40.75426;-	9		
10/18/2017 12:51			0.014	0.041	0	0	0				
10/18/2017 12:52			0.016	0.041	0	0	0				
10/18/2017 12:53			0.018	0.041	0	0	0				
10/18/2017 12:54			0.021	0.041	0	0	0				
10/18/2017 12:55	14.2	74.9	0.023	0.041	0	0	0	40.75426;-	9		
10/18/2017 12:56			0.026	0.041	0	0	0				
10/18/2017 12:57			0.028	0.041	0	0	0				
10/18/2017 12:58			0.031	0.041	0	0	0				
10/18/2017 12:59			0.033	0.041	0	0	0				
10/18/2017 13:00	14.2	82	0.034	0.041	0	0	0	40.75426;-	9		
10/18/2017 13:01			0.035	0.041	0	0	0				
10/18/2017 13:02			0.037	0.041	0	0.021	0				
10/18/2017 13:03			0.021	0.041	0	0.022	0				
10/18/2017 13:04			0.016	0.041	0	0.023	0				
10/18/2017 13:05	14.2	72.9	0.016	0.041	0	0.023	0	40.75432;-	6		
10/18/2017 13:06			0.015	0.041	0	0.023	0				
10/18/2017 13:07			0.016	0.041	0	0.023	0				0.001
10/18/2017 13:08			0.021	0.041	0	0.024	0				-0.003
10/18/2017 13:09			0.028	0.041	0	0.024	0				-0.009
10/18/2017 13:10	14.2	85	0.03	0.041	0	0.024	0.001	40.7543;-7	7		-0.012
10/18/2017 13:11			0.033	0.041	0	0.025	0.001				-0.007
10/18/2017 13:12			0.037	0.041	0	0.025	0.001				-0.012
10/18/2017 13:13			0.039	0.041	0	0.026	0.001				-0.014
10/18/2017 13:14			0.041	0.041	0	0.027	0.001				-0.012
10/18/2017 13:15	14.2	74.9	0.044	0.045	0	0.027	0.001	40.75431;-	7		-0.012
10/18/2017 13:16			0.045	0.046	0	0.028	0.001				-0.013
10/18/2017 13:17			0.047	0.049	0	0.028	0.001				-0.014
10/18/2017 13:18			0.041	0.049	0	0.029	0.001				-0.005
10/18/2017 13:19			0.045	0.049	0	0.031	0.001				-0.007
10/18/2017 13:20	14.2	76.9	0.048	0.049	0	0.033	0.001	40.75421;-	12		-0.01
10/18/2017 13:21			0.049	0.05	0	0.035	0.001				-0.012
10/18/2017 13:22			0.052	0.052	0	0.037	0.002				-0.012
10/18/2017 13:23			0.053	0.053	0	0.039	0.002				-0.014
10/18/2017 13:24			0.056	0.056	0	0.041	0.002				-0.015
10/18/2017 13:25	14.2	89.1	0.057	0.058	0	0.043	0.002	40.75414;-	2		-0.016
10/18/2017 13:26			0.058	0.059	0	0.045	0.002				-0.015
10/18/2017 13:27			0.059	0.06	0	0.047	0.002				-0.015
10/18/2017 13:28			0.061	0.061	0	0.048	0.002				-0.013
10/18/2017 13:29			0.062	0.062	0	0.05	0.002				-0.012
10/18/2017 13:30	14.6	74.9	0.062	0.063	0	0.051	0.002	40.75425;-	5		-0.012
10/18/2017 13:31			0.062	0.063	0	0.052	0.003				-0.012
10/18/2017 13:32			0.063	0.064	0	0.053	0.003				-0.013
10/18/2017 13:33			0.064	0.065	0	0.054	0.003				-0.012
10/18/2017 13:34			0.066	0.067	0	0.056	0.003				-0.011
10/18/2017 13:35	14.2	79	0.066	0.067	0	0.057	0.003	40.75426;-	7		-0.01

10/18/2017 13:36			0.068	0.068	0	0.059	0.003			-0.01
10/18/2017 13:37			0.07	0.07	0	0.06	0.003			-0.011
10/18/2017 13:38			0.072	0.072	0	0.061	0.004			-0.011
10/18/2017 13:39			0.072	0.072	0	0.062	0.004			-0.011
10/18/2017 13:40	14.5	76.9	0.072	0.074	0	0.063	0.004	40.75426;-	9	-0.01
10/18/2017 13:41			0.073	0.074	0	0.064	0.004			-0.012
10/18/2017 13:42			0.074	0.075	0	0.065	0.004			-0.012
10/18/2017 13:43			0.076	0.076	0	0.066	0.004			-0.012
10/18/2017 13:44			0.078	0.079	0	0.067	0.004			-0.014
10/18/2017 13:45	14.2	76.9	0.078	0.08	0	0.069	0.005	40.75428;-	6	-0.014
10/18/2017 13:46			0.079	0.08	0	0.07	0.005			-0.014
10/18/2017 13:47			0.084	0.084	0	0.071	0.005			-0.016
10/18/2017 13:48			0.083	0.086	0	0.072	0.005			-0.015
10/18/2017 13:49			0.085	0.086	0	0.073	0.005			-0.015
10/18/2017 13:50	14.1	93.1	0.085	0.088	0	0.075	0.006	40.75425;-	2	-0.016
10/18/2017 13:51			0.083	0.088	0	0.076	0.006			-0.014
10/18/2017 13:52			0.085	0.088	0	0.077	0.006			-0.013
10/18/2017 13:53			0.086	0.088	0	0.078	0.006			-0.013
10/18/2017 13:54			0.086	0.088	0	0.079	0.006			-0.015
10/18/2017 13:55	14.2	82	0.09	0.09	0	0.08	0.006	40.7542;-7	-3	-0.016
10/18/2017 13:56			0.09	0.09	0	0.081	0.007			-0.014
10/18/2017 13:57			0.091	0.092	0	0.082	0.007			-0.016
10/18/2017 13:58			0.092	0.094	0	0.083	0.007			-0.016
10/18/2017 13:59			0.092	0.094	0	0.084	0.007			-0.015
10/18/2017 14:00	14.6	86	0.092	0.094	0	0.085	0.007	40.75429;-	5	-0.016
10/18/2017 14:01			0.096	0.096	0	0.086	0.008			-0.017
10/18/2017 14:02			0.095	0.098	0	0.087	0.008			-0.018
10/18/2017 14:03			0.098	0.099	0	0.088	0.008			-0.018
10/18/2017 14:04			0.101	0.101	0	0.089	0.008			-0.019
10/18/2017 14:05	14.1	75.9	0.102	0.103	0	0.09	0.008	40.75423;-	6	-0.019
10/18/2017 14:06			0.102	0.103	0	0.091	0.009			-0.018
10/18/2017 14:07			0.106	0.106	0	0.093	0.009			-0.018
10/18/2017 14:08			0.105	0.106	0	0.094	0.009			-0.018
10/18/2017 14:09			0.108	0.108	0	0.095	0.009			-0.018
10/18/2017 14:10	14.1	75.9	0.109	0.109	0	0.097	0.009	40.75418;-	3	-0.019
10/18/2017 14:11			0.112	0.112	0	0.098	0.01			-0.019
10/18/2017 14:12			0.114	0.114	0	0.1	0.01			-0.019
10/18/2017 14:13			0.114	0.114	0	0.101	0.01			-0.019
10/18/2017 14:14			0.11	0.114	0	0.102	0.01			-0.016
10/18/2017 14:15	14.1	79	0.11	0.114	0	0.104	0.011	40.75425;-	2	-0.016
10/18/2017 14:16			0.112	0.114	0	0.105	0.011			-0.017
10/18/2017 14:17			0.114	0.116	0	0.106	0.011			-0.018
10/18/2017 14:18			0.116	0.116	0	0.107	0.011			-0.019
10/18/2017 14:19			0.118	0.12	0	0.108	0.012			-0.019
10/18/2017 14:20	14.1	76.9	0.121	0.123	0	0.109	0.012	40.75413;-	7	-0.019
10/18/2017 14:21			0.122	0.123	0	0.11	0.012			-0.019
10/18/2017 14:22			0.123	0.124	0	0.112	0.012			-0.018
10/18/2017 14:23			0.119	0.124	0	0.113	0.013			-0.017
10/18/2017 14:24			0.118	0.124	0	0.114	0.013			-0.016
10/18/2017 14:25	14.1	88.1	0.12	0.124	0	0.114	0.013	40.75426;-	-7	-0.017
10/18/2017 14:26			0.124	0.124	0	0.115	0.013			-0.018
10/18/2017 14:27			0.12	0.124	0	0.116	0.014			-0.017
10/18/2017 14:28			0.121	0.124	0	0.116	0.014			-0.018
10/18/2017 14:29			0.122	0.124	0	0.117	0.014			-0.018
10/18/2017 14:30	14.1	80	0.124	0.125	0	0.118	0.014	40.75417;-	7	-0.018
10/18/2017 14:31			0.125	0.125	0	0.119	0.015			-0.019

10/18/2017 14:32			0.127	0.127	0	0.12	0.015				-0.019
10/18/2017 14:33			0.128	0.128	0	0.12	0.015				-0.019
10/18/2017 14:34			0.129	0.13	0	0.121	0.015				-0.019
10/18/2017 14:35	14.6	83	0.128	0.13	0	0.122	0.016		40.75421;-	2	-0.02
10/18/2017 14:36			0.128	0.13	0	0.122	0.016				-0.019
10/18/2017 14:37			0.127	0.13	0	0.123	0.016				-0.019
10/18/2017 14:38			0.129	0.13	0	0.123	0.016				-0.019
10/18/2017 14:39			0.13	0.133	0	0.124	0.017				-0.019
10/19/2017 13:15	14.4	113.4							40.7537022;-73.4865319		
10/19/2017 13:17			0	0	0	0	0				
10/19/2017 13:18			0	0	0	0	0				
10/19/2017 13:19			0	0	0	0	0				
10/19/2017 13:20	14.3	77.9	0	0	0	0	0		40.75426;-	-9	-0.001
10/19/2017 13:21			0	0	0	0	0				-0.008
10/19/2017 13:22			0	0	0	0	0				-0.012
10/19/2017 13:23			0	0	0	0	0				-0.014
10/19/2017 13:24			0	0	0	0	0				-0.015
10/19/2017 13:25	14.3	76.9	0	0	0	0	0		40.75426;-	0	-0.015
10/19/2017 13:26			0	0	0	0	0				-0.014
10/19/2017 13:27			0	0	0	0	0				-0.015
10/19/2017 13:28			0	0	0	0	0				-0.015
10/19/2017 13:29			0	0	0	0	0				-0.016
10/19/2017 13:30	14.7	85	0	0	0	0	0		40.75429;-	0	-0.015
10/19/2017 13:31			0	0	0	0	0				-0.017
10/19/2017 13:32			0	0	0	0	0				-0.018
10/19/2017 13:33			0	0	0	0	0				-0.018
10/19/2017 13:34			0	0	0	0	0				-0.018
10/19/2017 13:35	14.3	74.9	0	0	0	0	0		40.75423;-	7	-0.018
10/19/2017 13:36			0	0	0	0	0				-0.018
10/19/2017 13:37			0	0.001	0	0	0				-0.018
10/19/2017 13:38			0	0.001	0	0	0				-0.016
10/19/2017 13:39			0.002	0.002	0	0	0				-0.016
10/19/2017 13:40	14.7	75.9	0.002	0.003	0	0	0		40.75426;-	6	-0.016
10/19/2017 13:41			0.005	0.005	0	0	0				-0.015
10/19/2017 13:42			0.006	0.007	0	0	0				-0.015
10/19/2017 13:43			0.008	0.008	0	0	0				-0.014
10/19/2017 13:44			0.01	0.012	0	0.001	0				-0.015
10/19/2017 13:45	14.3	74.9	0.012	0.012	0	0.001	0		40.75421;-	6	-0.015
10/19/2017 13:46			0.013	0.013	0	0.002	0				-0.016
10/19/2017 13:47			0.015	0.015	0	0.003	0				-0.017
10/19/2017 13:48			0.014	0.016	0	0.004	0				-0.016
10/19/2017 13:49			0.014	0.017	0	0.005	0				-0.014
10/19/2017 13:50	14.7	77.9	0.017	0.018	0	0.006	0		40.75419;-	6	-0.015
10/19/2017 13:51			0.019	0.021	0	0.007	0				-0.016
10/19/2017 13:52			0.013	0.021	0	0.008	0				-0.015
10/19/2017 13:53			0.02	0.033	0	0.009	0				-0.015
10/19/2017 13:54			0.022	0.033	0	0.011	0				-0.016
10/19/2017 13:55	14.3	80	0.024	0.033	0	0.012	0		40.75418;-	4	-0.018
10/19/2017 13:56			0.027	0.033	0	0.013	0				-0.018
10/19/2017 13:57			0.027	0.033	0	0.015	0				-0.017
10/19/2017 13:58			0.027	0.033	0	0.016	0				-0.017
10/19/2017 13:59			0.03	0.033	0	0.017	0				-0.018
10/19/2017 14:00	14.3	79	0.033	0.033	0	0.019	0		40.75414;-	6	-0.019
10/19/2017 14:01			0.035	0.037	0	0.02	0				-0.02
10/19/2017 14:02			0.037	0.037	0	0.022	0				-0.02
10/19/2017 14:03			0.037	0.038	0	0.023	0				-0.019

10/19/2017 14:04			0.037	0.039	0	0.025	0				-0.019
10/19/2017 14:05	14.3	77.9	0.037	0.039	0	0.026	0.001		40.75414;-	7	-0.018
10/19/2017 14:06			0.04	0.04	0	0.028	0.001				-0.018
10/19/2017 14:07			0.04	0.042	0	0.029	0.001				-0.018
10/19/2017 14:08			0.041	0.042	0	0.031	0.001				-0.018
10/19/2017 14:09			0.042	0.043	0	0.032	0.001				-0.017
10/19/2017 14:10	14.2	119.4	0.041	0.043	0	0.033	0.001		40.75415;-	4	-0.017
10/19/2017 14:11			0.042	0.043	0	0.034	0.001				-0.017
10/19/2017 14:12			0.041	0.043	0	0.035	0.001				-0.017
10/19/2017 14:13			0.041	0.043	0	0.036	0.001				-0.017
10/19/2017 14:14			0.041	0.043	0	0.037	0.001				-0.017
10/19/2017 14:15	14.2	75.9	0.042	0.043	0	0.038	0.001		40.75413;-	0	-0.017
10/19/2017 14:16			0.041	0.044	0	0.039	0.001				-0.017
10/19/2017 14:17			0.044	0.044	0	0.039	0.002				-0.018
10/19/2017 14:18			0.048	0.048	0	0.039	0.002				-0.019
10/19/2017 14:19			0.049	0.05	0	0.04	0.002				-0.019
10/19/2017 14:20	14.3	76.9	0.049	0.05	0	0.041	0.002		40.75417;-	5	-0.018
10/19/2017 14:21			0.05	0.051	0	0.042	0.002				-0.018
10/19/2017 14:22			0.054	0.054	0	0.042	0.002				-0.019
10/19/2017 14:23			0.057	0.057	0	0.043	0.002				-0.02
10/19/2017 14:24			0.057	0.058	0	0.044	0.002				-0.02
10/19/2017 14:25	14.2	75.9	0.048	0.059	0	0.045	0.002		40.75418;-	5	-0.02
10/19/2017 14:26			0.036	0.059	0	0.046	0.002				-0.012
10/19/2017 14:27			0.041	0.059	0	0.046	0.003				-0.015
10/19/2017 14:28			0.046	0.059	0	0.045	0.003				-0.017
10/19/2017 14:29			0.046	0.059	0	0.046	0.003				-0.017
10/19/2017 14:30	14.3	75.9	0.048	0.059	0	0.046	0.003		40.75418;-	11	-0.017
10/19/2017 14:31			0.049	0.059	0	0.046	0.003				-0.018
10/19/2017 14:32			0.049	0.059	0	0.047	0.003				-0.018
10/19/2017 14:33			0.05	0.059	0	0.047	0.003				-0.017
10/19/2017 14:34			0.05	0.059	0	0.048	0.003				-0.018
10/19/2017 14:35	14.3	74.9	0.051	0.059	0	0.048	0.003		40.75419;-	6	-0.008
10/19/2017 14:36			0.051	0.059	0	0.048	0.003				-0.013
10/19/2017 14:37			0.05	0.059	0	0.048	0.004				-0.014
10/19/2017 14:38			0.05	0.059	0	0.048	0.004				-0.016
10/19/2017 14:39			0.051	0.059	0	0.047	0.004				-0.017
10/19/2017 14:40	14.3	79	0.054	0.059	0	0.047	0.004		40.75421;-	14	-0.017
10/19/2017 14:41			0.054	0.059	0	0.047	0.004				-0.018
10/19/2017 14:42			0.054	0.059	0	0.048	0.004				-0.018
10/19/2017 14:43			0.054	0.059	0	0.049	0.004				-0.018
10/19/2017 14:44			0.054	0.059	0	0.05	0.004				-0.018
10/19/2017 14:45	14.3	77.9	0.054	0.059	0	0.05	0.004		40.75415;-	20	-0.018
10/19/2017 14:46			0.054	0.059	0	0.051	0.005				-0.016
10/19/2017 14:47			0.056	0.059	0	0.051	0.005				-0.018
10/19/2017 14:48			0.057	0.059	0	0.052	0.005				-0.018
10/19/2017 14:49			0.059	0.059	0	0.052	0.005				-0.019
10/19/2017 14:50	14.2	91.1	0.06	0.06	0	0.053	0.005		40.7542;-7	15	-0.019
10/19/2017 14:51			0.06	0.06	0	0.053	0.005				-0.019
10/19/2017 14:52			0.062	0.062	0	0.054	0.005				-0.019
10/19/2017 14:53			0.063	0.064	0	0.054	0.005				-0.02
10/19/2017 14:54			0.063	0.064	0	0.055	0.005				-0.02
10/19/2017 14:55	14.2	79	0.062	0.064	0	0.056	0.006		40.75419;-	20	-0.019
10/19/2017 14:56			0.066	0.066	0	0.057	0.006				-0.02
10/19/2017 14:57			0.067	0.068	0	0.058	0.006				-0.02
10/19/2017 14:58			0.068	0.069	0	0.058	0.006				-0.02
10/19/2017 14:59			0.069	0.07	0	0.059	0.006				-0.019

10/19/2017 15:00	14.2	75.9	0.07	0.071	0	0.06	0.006	40.75419;-	18	-0.02
10/19/2017 15:01			0.07	0.071	0	0.061	0.006			-0.02
10/19/2017 15:02			0.067	0.071	0	0.062	0.007			-0.019
10/19/2017 15:03			0.072	0.072	0	0.063	0.007			-0.02
10/19/2017 15:04			0.073	0.074	0	0.064	0.007			-0.02
10/19/2017 15:05	14.3	81	0.071	0.074	0	0.065	0.007	40.75425;-	8	-0.019
10/19/2017 15:06			0.071	0.074	0	0.066	0.007			-0.018
10/19/2017 15:07			0.071	0.074	0	0.067	0.007			-0.017
10/19/2017 15:08			0.069	0.074	0	0.067	0.007			-0.017
10/19/2017 15:09			0.067	0.074	0	0.068	0.008			-0.016
10/19/2017 15:10	14.3	85	0.067	0.074	0	0.068	0.008	40.7542;-7	18	-0.017
10/19/2017 15:11			0.066	0.074	0	0.068	0.008			-0.018
10/19/2017 15:12			0.067	0.074	0	0.068	0.008			-0.019
10/19/2017 15:13			0.066	0.074	0	0.068	0.008			-0.018
10/19/2017 15:14			0.062	0.074	0	0.068	0.008			-0.017
10/19/2017 15:15	14.7	82	0.062	0.074	0	0.068	0.008	40.75422;-	20	-0.016
10/19/2017 15:16			0.061	0.074	0	0.067	0.009			-0.017
10/19/2017 15:17			0.06	0.074	0	0.067	0.009			-0.017
10/19/2017 15:18			0.062	0.074	0	0.066	0.009			-0.018
10/19/2017 15:19			0.062	0.074	0	0.065	0.009			-0.018
10/19/2017 15:20	13.6	98.2	0.061	0.074	0	0.065	0.009	40.75422;-	19	-0.019
10/19/2017 15:21			0.06	0.074	0	0.064	0.009			-0.018
10/19/2017 15:22			0.063	0.074	0	0.063	0.009			-0.018
10/19/2017 15:23			0.063	0.074	0	0.063	0.009			-0.019
10/19/2017 15:24			0.06	0.074	0	0.062	0.01			-0.008
10/19/2017 15:25	13.7	81	0.062	0.074	0	0.062	0.01	40.75425;-	23	-0.011
10/19/2017 15:26			0.061	0.074	0	0.062	0.01			-0.015
10/19/2017 15:27			0.061	0.074	0	0.061	0.01			-0.016
10/19/2017 15:28			0.06	0.074	0	0.061	0.01			-0.017
10/19/2017 15:29			0.06	0.074	0	0.06	0.01			-0.016
10/19/2017 15:30	13.7	80	0.06	0.074	0	0.06	0.01	40.75426;-	20	-0.018
10/19/2017 15:31			0.061	0.074	0	0.06	0.01			-0.018
10/19/2017 15:32			0.062	0.074	0	0.06	0.011			-0.019
10/19/2017 15:33			0.062	0.074	0	0.06	0.011			-0.019
10/19/2017 15:34			0.062	0.074	0	0.06	0.011			-0.018
10/19/2017 15:35	13.7	86	0.064	0.074	0	0.06	0.011	40.75422;-	16	-0.02
10/19/2017 15:36			0.063	0.074	0	0.06	0.011			-0.019
10/19/2017 15:37			0.06	0.074	0	0.061	0.011			-0.017
10/19/2017 15:38			0.058	0.074	0	0.06	0.011			-0.017
10/19/2017 15:39			0.059	0.074	0	0.06	0.011			-0.018
10/19/2017 15:40	14.1	91.1	0.06	0.074	0	0.06	0.012	40.75422;-	16	-0.018
10/19/2017 15:41			0.059	0.074	0	0.06	0.012			-0.018
10/19/2017 15:42			0.062	0.074	0	0.06	0.012			-0.019
10/19/2017 15:43			0.06	0.074	0	0.06	0.012			-0.018
10/19/2017 15:44			0.061	0.074	0	0.06	0.012			-0.018
10/19/2017 15:45	13.7	80	0.06	0.074	0	0.06	0.012	40.75423;-	15	-0.019
10/19/2017 15:46			0.061	0.074	0	0.06	0.012			-0.02
10/19/2017 15:47			0.063	0.074	0	0.06	0.012			-0.02
10/19/2017 15:48			0.063	0.074	0	0.06	0.013			-0.019
10/19/2017 15:49			0.06	0.074	0	0.06	0.013			-0.018
10/19/2017 15:50	13.6	83	0.061	0.074	0	0.06	0.013	40.75418;-	24	-0.019
10/19/2017 15:51			0.062	0.074	0	0.06	0.013			-0.018
10/19/2017 15:52			0.061	0.074	0	0.06	0.013			-0.018
10/19/2017 15:53			0.058	0.074	0	0.06	0.013			-0.011
10/19/2017 15:54			0.058	0.074	0	0.06	0.013			-0.013
10/19/2017 15:55	14.1	77.9	0.058	0.074	0	0.06	0.013	40.75421;-	24	-0.015

10/19/2017 15:56			0.054	0.074	0	0.059	0.014			-0.014
10/19/2017 15:57			0.047	0.074	0	0.059	0.014			-0.011
10/19/2017 15:58			0.046	0.074	0	0.059	0.014			-0.014
10/19/2017 15:59			0.047	0.074	0	0.058	0.014			-0.015
10/19/2017 16:00	13.7	77.9	0.048	0.074	0	0.057	0.014	40.75426;-	19	-0.016
10/19/2017 16:01			0.05	0.074	0	0.056	0.014			-0.016
10/19/2017 16:02			0.049	0.074	0	0.055	0.014			-0.017
10/19/2017 16:03			0.049	0.074	0	0.054	0.014			-0.016
10/19/2017 16:04			0.047	0.074	0	0.053	0.014			-0.016
10/19/2017 16:05	13.6	88.1	0.046	0.074	0	0.052	0.015	40.75426;-	17	-0.014
10/19/2017 16:06			0.047	0.074	0	0.051	0.015			-0.015
10/19/2017 16:07			0.047	0.074	0	0.05	0.015			-0.017
10/19/2017 16:08			0.048	0.074	0	0.049	0.015			-0.018
10/19/2017 16:09			0.05	0.074	0	0.049	0.015			-0.018
10/19/2017 16:10	13.6	81	0.051	0.074	0	0.048	0.015	40.75429;-	18	-0.019
10/19/2017 16:11			0.051	0.074	0	0.048	0.015			-0.018
10/19/2017 16:12			0.053	0.074	0	0.048	0.015			-0.019
10/19/2017 16:13			0.055	0.074	0	0.048	0.015			-0.019
10/19/2017 16:14			0.052	0.074	0	0.048	0.015			-0.016
10/19/2017 16:15	13.6	82	0.05	0.074	0	0.049	0.016	40.75428;-	20	-0.016
10/19/2017 16:16			0.051	0.074	0	0.049	0.016			-0.016
10/19/2017 16:17			0.052	0.074	0	0.049	0.016			-0.019
10/19/2017 16:18			0.051	0.074	0	0.049	0.016			-0.017
10/19/2017 16:19			0.049	0.074	0	0.049	0.016			-0.017
10/19/2017 16:20	13.6	81	0.048	0.074	0	0.049	0.016	40.75426;-	17	-0.007
10/19/2017 16:21			0.049	0.074	0	0.049	0.016			0.001
10/19/2017 16:22			0.049	0.074	0	0.049	0.016			-0.01
10/19/2017 16:23			0.049	0.074	0	0.05	0.016			-0.015
10/19/2017 16:24			0.049	0.074	0	0.05	0.016			-0.016
10/19/2017 16:25	14	83	0.048	0.074	0	0.049	0.017	40.75422;-	16	-0.016
10/19/2017 16:26			0.049	0.074	0	0.049	0.017			-0.017
10/19/2017 16:27			0.048	0.074	0	0.049	0.017			-0.016
10/19/2017 16:28			0.047	0.074	0	0.049	0.017			-0.017
10/19/2017 16:29			0.046	0.074	0	0.048	0.017			-0.017
10/19/2017 16:30	13.6	77.9	0.047	0.074	0	0.048	0.017	40.75425;-	18	-0.018
10/19/2017 16:31			0.046	0.074	0	0.048	0.017			-0.017
10/19/2017 16:32			0.048	0.074	0	0.048	0.017			-0.018
10/19/2017 16:33			0.05	0.074	0	0.047	0.017			-0.019
10/19/2017 16:34			0.05	0.074	0	0.047	0.017			-0.018
10/19/2017 16:35	14	84	0.049	0.074	0	0.047	0.018	40.75418;-	21	-0.018
10/19/2017 16:36			0.05	0.074	0	0.047	0.018			-0.019
10/19/2017 16:37			0.048	0.074	0	0.047	0.018			-0.018
10/19/2017 16:38			0.049	0.074	0	0.047	0.018			-0.018
10/19/2017 16:39			0.048	0.074	0	0.047	0.018			-0.017
10/19/2017 16:40	13.6	128.6	0.047	0.074	0	0.047	0.018	40.75425;-	19	-0.018
10/19/2017 16:41			0.048	0.074	0	0.047	0.018			-0.017
10/19/2017 16:42			0.049	0.074	0	0.047	0.018			-0.017
10/19/2017 16:43			0.047	0.074	0	0.047	0.018			-0.018
10/19/2017 16:44			0.047	0.074	0	0.047	0.018			-0.018
10/19/2017 16:45	13.7	80	0.047	0.074	0	0.047	0.019	40.75423;-	13	-0.017
10/19/2017 16:46			0.047	0.074	0	0.047	0.019			-0.018
10/19/2017 16:47			0.048							-0.018
10/19/2017 16:47				0.074	0	0.047	0.019			
10/19/2017 16:48			0.048	0.074	0	0.047	0.019			-0.018
10/19/2017 16:49			0.048	0.074	0	0.047	0.019			-0.018
10/19/2017 16:50	13.7	79	0.051	0.074	0	0.047	0.019	40.75422;-	15	-0.019

10/19/2017 16:51			0.049	0.074	0	0.047	0.019			-0.018
10/19/2017 16:52			0.049	0.074	0	0.047	0.019			-0.018
10/19/2017 16:53			0.048	0.074	0	0.047	0.019			-0.018
10/19/2017 16:54			0.05	0.074	0	0.047	0.019			-0.019
10/19/2017 16:55	13.7	77.9	0.053	0.074	0	0.047	0.02	40.75421;-	22	-0.019
10/19/2017 16:56			0.053	0.074	0	0.047	0.02			-0.02
10/19/2017 16:57			0.053	0.074	0	0.048	0.02			-0.019
10/19/2017 16:58			0.055	0.074	0	0.048	0.02			-0.019
10/19/2017 16:59			0.055	0.074	0	0.049	0.02			-0.019
10/19/2017 17:00	13.6	80	0.056	0.074	0	0.049	0.02	40.75418;-	26	-0.02
10/19/2017 17:01			0.057	0.074	0	0.05	0.02			-0.02
10/19/2017 17:02			0.055	0.074	0	0.051	0.02			-0.019
10/19/2017 17:03			0.054	0.074	0	0.051	0.02			-0.018
10/19/2017 17:04			0.053	0.074	0	0.051	0.021			-0.018
10/19/2017 17:05	13.6	119.4	0.054	0.074	0	0.052	0.021	40.75418;-	22	-0.017
10/19/2017 17:06			0.055	0.074	0	0.052	0.021			-0.018
10/19/2017 17:07			0.057	0.074	0	0.052	0.021			-0.02
10/19/2017 17:08			0.056	0.074	0	0.053	0.021			-0.019
10/19/2017 17:09			0.055	0.074	0	0.053	0.021			-0.019
10/19/2017 17:10	13.6	126.5	0.058	0.074	0	0.054	0.021	40.75418;-	23	-0.019
10/19/2017 17:11			0.054	0.074	0	0.054	0.021			-0.019
10/19/2017 17:12			0.055	0.074	0	0.054	0.021			-0.019
10/19/2017 17:13			0.056	0.074	0	0.054	0.022			-0.02
10/19/2017 17:14			0.056	0.074	0	0.054	0.022			-0.02
10/19/2017 17:15	13.6	90.1	0.056	0.074	0	0.054	0.022	40.75419;-	23	-0.019
10/19/2017 17:16			0.056	0.074	0	0.054	0.022			-0.02
10/19/2017 17:17			0.057	0.074	0	0.054	0.022			-0.02
10/19/2017 17:18			0.059	0.074	0	0.054	0.022			-0.021
10/19/2017 17:19			0.056	0.074	0	0.054	0.022			-0.02
10/19/2017 17:20	13.6	84	0.054	0.074	0	0.055	0.022	40.7542;-7	24	-0.019
10/19/2017 17:21			0.055	0.074	0	0.055	0.023			-0.019
10/19/2017 17:22			0.057	0.074	0	0.055	0.023			-0.019
10/19/2017 17:23			0.054	0.074	0	0.055	0.023			-0.02
10/19/2017 17:24			0.057	0.074	0	0.055	0.023			-0.02
10/19/2017 17:25	13.6	82	0.058	0.074	0	0.055	0.023	40.75421;-	21	-0.02
10/19/2017 17:26			0.057	0.074	0	0.055	0.023			-0.02
10/19/2017 17:27			0.058	0.074	0	0.055	0.023			-0.02
10/19/2017 17:28			0.059	0.074	0	0.055	0.023			-0.02
10/19/2017 17:29			0.059	0.074	0	0.055	0.023			-0.02
10/19/2017 17:30	13.6	80	0.06	0.074	0	0.056	0.024	40.75428;-	7	-0.021
10/19/2017 17:31			0.06	0.074	0	0.056	0.024			-0.02
10/19/2017 17:32			0.06	0.074	0	0.056	0.024			-0.004
10/19/2017 17:33			0.057	0.074	0	0.056	0.024			-0.014
10/19/2017 17:34			0.055	0.074	0	0.056	0.024			-0.017
10/19/2017 17:35	13.6	90.1	0.056	0.074	0	0.056	0.024	40.75429;-	-4	-0.018
10/19/2017 17:36			0.057	0.074	0	0.056	0.024			-0.019
10/19/2017 17:37			0.059	0.074	0	0.056	0.024			-0.02
10/19/2017 17:38			0.059	0.074	0	0.057	0.025			-0.02
10/19/2017 17:39			0.058	0.074	0	0.057	0.025			-0.02
10/19/2017 17:40	14	83	0.058	0.074	0	0.057	0.025	40.75428;-	0	-0.02
10/19/2017 17:41			0.058	0.074	0	0.057	0.025			-0.018
10/19/2017 17:42			0.057	0.074	0	0.057	0.025			-0.014
10/19/2017 17:43			0.056	0.074	0	0.057	0.025			-0.019
10/19/2017 17:44			0.057	0.074	0	0.057	0.025			-0.02
10/19/2017 17:45	13.6	81	0.058	0.074	0	0.057	0.025	40.75422;-	-2	-0.02
10/19/2017 17:46			0.058	0.074	0	0.057	0.025			-0.019

10/19/2017 17:47			0.058	0.074	0	0.057	0.026			-0.019
10/19/2017 17:48			0.056	0.074	0	0.056	0.026			-0.018
10/19/2017 17:49			0.054	0.074	0	0.056	0.026			-0.018
10/19/2017 17:50	13.7	87	0.053	0.074	0	0.056	0.026	40.75421;-	11	-0.017
10/19/2017 17:51			0.051	0.074	0	0.056	0.026			-0.018
10/19/2017 17:52			0.052	0.074	0	0.056	0.026			-0.018
10/19/2017 17:53			0.051	0.074	0	0.055	0.026			-0.017
10/19/2017 17:54			0.052	0.074	0	0.055	0.026			-0.019
10/19/2017 17:55	13.9	79	0.053	0.074	0	0.054	0.026	40.75425;-	4	-0.019
10/19/2017 17:56			0.055	0.074	0	0.054	0.027			-0.019
10/19/2017 17:57			0.055	0.074	0	0.054	0.027			-0.02
10/19/2017 17:58			0.053	0.074	0	0.054	0.027			-0.018
10/19/2017 17:59			0.053	0.074	0	0.053	0.027			-0.018
10/19/2017 18:00	13.9	79	0.054	0.074	0	0.053	0.027	40.75423;-	17	-0.018
10/19/2017 18:01			0.053	0.074	0	0.053	0.027			-0.019
10/19/2017 18:02			0.054	0.074	0	0.053	0.027			-0.019
10/19/2017 18:03			0.056	0.074	0	0.052	0.027			-0.02
10/19/2017 18:04			0.058	0.074	0	0.052	0.027			-0.02
10/19/2017 18:05	13.6	80	0.057	0.074	0	0.053	0.028	40.75425;-	13	-0.02
10/19/2017 18:06			0.057	0.074	0	0.053	0.028			-0.019
10/19/2017 18:07			0.058	0.074	0	0.053	0.028			-0.019
10/19/2017 18:08			0.054	0.074	0	0.054	0.028			-0.019
10/19/2017 18:09			0.055	0.074	0	0.054	0.028			-0.019
10/19/2017 18:10	13.6	80	0.052	0.074	0	0.054	0.028	40.75423;-	17	-0.016
10/19/2017 18:11			0.054	0.074	0	0.054	0.028			-0.016
10/19/2017 18:12			0.055	0.074	0	0.054	0.028			-0.018
10/19/2017 18:13			0.055	0.074	0	0.054	0.028			-0.018
10/19/2017 18:14			0.057	0.074	0	0.054	0.029			-0.019
10/19/2017 18:15	13.5	123.5	0.056	0.074	0	0.054	0.029	40.75425;-	10	-0.019
10/19/2017 18:16			0.056	0.074	0	0.054	0.029			-0.02
10/19/2017 18:17			0.058	0.074	0	0.055	0.029			-0.02
10/19/2017 18:18			0.058	0.074	0	0.055	0.029			-0.021
10/19/2017 18:19			0.059	0.074	0	0.055	0.029			-0.02
10/19/2017 18:20	13.6	80	0.059	0.074	0	0.055	0.029	40.75426;-	11	-0.02
10/19/2017 18:21			0.058	0.074	0	0.055	0.029			-0.017
10/19/2017 18:22			0.058	0.074	0	0.055	0.03			-0.02
10/19/2017 18:23			0.058	0.074	0	0.055	0.03			-0.02
10/19/2017 18:24			0.057	0.074	0	0.056	0.03			-0.02
10/19/2017 18:25	13.6	79	0.057	0.074	0	0.056	0.03	40.75425;-	14	-0.02
10/19/2017 18:26			0.056	0.074	0	0.056	0.03			-0.02
10/19/2017 18:27			0.056	0.074	0	0.056	0.03			-0.021
10/19/2017 18:28			0.057	0.074	0	0.056	0.03			-0.021
10/19/2017 18:29			0.057	0.074	0	0.057	0.03			-0.021
10/19/2017 18:30	13.5	124.5	0.054	0.074	0	0.057	0.031	40.75426;-	13	-0.02
10/19/2017 18:31			0.054	0.074	0	0.057	0.031			-0.02
10/19/2017 18:32			0.054	0.074	0	0.056	0.031			-0.02
10/19/2017 18:33			0.054	0.074	0	0.056	0.031			-0.02
10/19/2017 18:34			0.054	0.074	0	0.056	0.031			-0.02
10/19/2017 18:35	13.6	122.5	0.054	0.074	0	0.056	0.031	40.75426;-	13	-0.021
10/19/2017 18:36			0.055	0.074	0	0.055	0.031			-0.021
10/19/2017 18:37			0.052	0.074	0	0.055	0.031			-0.02
10/19/2017 18:38			0.05	0.074	0	0.055	0.031			-0.018
10/19/2017 18:39			0.052	0.074	0	0.054	0.032			-0.02
10/19/2017 18:40	13.6	128.6	0.054	0.074	0	0.054	0.032	40.75423;-	14	-0.02
10/19/2017 18:41			0.056	0.074	0	0.054	0.032			-0.021
10/19/2017 18:42										-0.012

10/20/2017 14:07	14.4	105.3								
10/20/2017 14:07								40.753927499999996;-73.4877173		
10/20/2017 14:08			0	0.015	0	0	0			
10/20/2017 14:09			0	0.015	0	0	0			
10/20/2017 14:10	14.4	84	0	0.015	0	0	0	40.75397;-	-23	-0.018
10/20/2017 14:11			0	0.015	0	0	0			-0.019
10/20/2017 14:12			0	0.015	0	0	0			-0.02
10/20/2017 14:13			0	0.015	0	0	0			-0.022
10/20/2017 14:14			0	0.015	0	0	0			-0.023
10/20/2017 14:15	14.3	116.4	0	0.015	0	0	0	40.75411;-	0	-0.023
10/20/2017 14:16			0	0.015	0	0	0			-0.022
10/20/2017 14:17			0	0.015	0	0	0			-0.022
10/20/2017 14:18			0	0.015	0	0	0			-0.023
10/20/2017 14:19			0.003	0.015	0	0	0			-0.023
10/20/2017 14:20	14.3	75.9	0.007	0.015	0	0	0	40.75412;-	4	-0.023
10/20/2017 14:21			0.009	0.015	0	0	0			-0.023
10/20/2017 14:22			0.011	0.015	0	0.001	0			-0.023
10/20/2017 14:23			0.013	0.015	0	0.001	0			-0.023
10/20/2017 14:24			0.016	0.016	0	0.002	0			-0.023
10/20/2017 14:25	14.3	83	0.017	0.018	0	0.003	0	40.75413;-	20	-0.023
10/20/2017 14:26			0.021	0.022	0	0.004	0			-0.023
10/20/2017 14:27			0.023	0.023	0	0.006	0			-0.023
10/20/2017 14:28			0.024	0.025	0	0.007	0			-0.023
10/20/2017 14:29			0.026	0.028	0	0.009	0			-0.023
10/20/2017 14:30	14.3	76.9	0.028	0.029	0	0.011	0	40.7542;-7	15	-0.023
10/20/2017 14:31			0.03	0.03	0	0.012	0			-0.023
10/20/2017 14:32			0.032	0.032	0	0.014	0			-0.023
10/20/2017 14:33			0.034	0.034	0	0.016	0			-0.023
10/20/2017 14:34			0.036	0.037	0	0.019	0			-0.023
10/20/2017 14:35	14.3	117.4	0.038	0.038	0	0.021	0	40.75418;-	11	-0.023
10/20/2017 14:36			0.041	0.041	0	0.023	0			-0.023
10/20/2017 14:37			0.043	0.043	0	0.025	0			-0.023
10/20/2017 14:38			0.045	0.045	0	0.027	0			-0.023
10/20/2017 14:39			0.047	0.047	0	0.03	0.001			-0.023
10/20/2017 14:40	14.2	82	0.048	0.049	0	0.032	0.001	40.75419;-	12	-0.023
10/20/2017 14:41			0.033	0.05	0	0.034	0.001			-0.022
10/20/2017 14:42			0.011	0.05	0	0.035	0.001			-0.005
10/20/2017 14:43			0.004	0.05	0	0.034	0.001			-0.013
10/20/2017 14:44			0.001	0.05	0	0.033	0.001			-0.013
10/20/2017 14:45	14.3	75.9	0	0.05	0	0.031	0.001	40.75421;-	8	-0.011
10/20/2017 14:46										-0.014
10/20/2017 14:47										-0.014
10/20/2017 14:48			0	0	0	0	0			-0.013
10/20/2017 14:49			0	0	0	0	0			-0.013
10/20/2017 14:50	14.2	115.4	0	0	0	0	0	40.75419;-	4	-0.015
10/20/2017 14:51			0	0	0	0	0			-0.014
10/20/2017 14:52			0	0	0	0	0			-0.001
10/20/2017 14:53			0	0	0	0	0			-0.012
10/20/2017 14:54			0	0	0	0	0			-0.013
10/20/2017 14:55	14.8	75.9	0	0	0	0	0	40.75428;-	13	0.066
10/20/2017 14:56			0	0	0	0	0			0.068
10/20/2017 14:57			0	0	0	0	0			0.021
10/20/2017 14:58			0	0	0	0	0			0.026
10/20/2017 14:59			0	0	0	0	0			0.078
10/20/2017 15:00	14.2	85	0	0	0	0	0	40.75426;-	10	0.044
10/20/2017 15:01			0	0	0	0	0			-0.013

10/20/2017 15:02			0	0	0	0	0			-0.014
10/20/2017 15:03			0	0	0	0	0			-0.013
10/20/2017 15:04			0	0	0	0	0			-0.015
10/20/2017 15:05	14.2	77.9	0	0	0	0	0	40.75426;-	8	-0.014
10/20/2017 15:06			0	0	0	0	0			-0.015
10/20/2017 15:07			0	0	0	0	0			-0.015
10/20/2017 15:08			0	0	0	0	0			-0.014
10/20/2017 15:09			0	0	0	0	0			-0.013
10/20/2017 15:10	14.2	75.9	0	0	0	0	0	40.75423;-	9	-0.014
10/20/2017 15:11			0	0	0	0	0			0.4
10/20/2017 15:12			0	0	0	0	0			0.012
10/20/2017 15:13			0	0	0	0	0			-0.01
10/20/2017 15:14			0	0	0	0	0			-0.007
10/20/2017 15:15	14.2	82	0	0	0	0	0	40.7543;-7	21	-0.003
10/20/2017 15:16			0	0	0	0	0			-0.005
10/20/2017 15:17			0	0	0	0	0			-0.01
10/20/2017 15:18			0	0	0	0	0			-0.014
10/20/2017 15:19			0	0	0	0	0			-0.001
10/20/2017 15:20	14.8	88.1	0	0	0	0	0	40.75426;-	12	0.002
10/20/2017 15:21			0	0	0	0	0			-0.013
10/20/2017 15:22			0	0	0	0	0			-0.012
10/20/2017 15:23			0	0	0	0	0			-0.002
10/20/2017 15:24			0	0	0	0	0			0.003
10/20/2017 15:25	14.2	77.9	0	0	0	0	0	40.75433;-	14	-0.007
10/20/2017 15:26			0	0.01	0	0	0			0.011
10/20/2017 15:27			0	0.01	0	0	0			-0.006
10/20/2017 15:28			0	0.01	0	0	0			-0.009
10/20/2017 15:29			0	0.01	0	0	0			-0.003
10/20/2017 15:30	14.2	75.9	0	0.01	0	0	0	40.75428;-	22	-0.013
10/20/2017 15:31			0	0.01	0	0	0			-0.013
10/20/2017 15:32			0	0.01	0	0	0			-0.014
10/20/2017 15:33			0	0.01	0	0	0			-0.016
10/20/2017 15:34			0	0.01	0	0	0			-0.015
10/20/2017 15:35	14.2	77.9	0	0.01	0	0	0	40.75425;-	16	-0.015
10/20/2017 15:36			0	0.01	0	0	0			-0.011
10/20/2017 15:37			0	0.01	0	0	0			-0.015
10/20/2017 15:38			0	0.01	0	0	0			-0.015
10/20/2017 15:39			0	0.01	0	0	0			-0.016
10/20/2017 15:40	14.2	77.9	0	0.01	0	0	0	40.75426;-	20	-0.009
10/20/2017 15:41			0	0.01	0	0	0			-0.014
10/20/2017 15:42			0	0.01	0	0	0			-0.013
10/20/2017 15:43			0	0.01	0	0	0			-0.014
10/20/2017 15:44			0	0.01	0	0	0			-0.015
10/20/2017 15:45	14.2	77.9	0	0.01	0	0	0	40.75431;-	19	-0.014
10/20/2017 15:46			0	0.01	0	0	0			-0.01
10/20/2017 15:47			0	0.01	0	0	0			-0.01
10/20/2017 15:48			0	0.01	0	0	0			-0.011
10/20/2017 15:49			0	0.01	0	0	0			-0.013
10/20/2017 15:50	14.2	80	0	0.01	0	0	0	40.75421;-	13	-0.015
10/20/2017 15:51			0	0.01	0	0	0			-0.004
10/20/2017 15:52			0	0.01	0	0	0			-0.011
10/20/2017 15:53			0	0.01	0	0	0			-0.011
10/20/2017 15:54			0	0.01	0	0	0			-0.002
10/20/2017 15:55	14.2	77.9	0	0.01	0	0	0	40.75425;-	7	-0.014
10/20/2017 15:56			0	0.01	0	0	0			-0.015
10/20/2017 15:57			0	0.01	0	0	0			-0.016

10/20/2017 15:58			0	0.01	0	0	0			-0.014
10/20/2017 15:59			0	0.01	0	0	0			-0.012
10/20/2017 16:00	14.2	84	0	0.01	0	0	0	40.75429;-	16	-0.011
10/20/2017 16:01			0	0.01	0	0	0			-0.013
10/20/2017 16:02			0	0.01	0	0	0			-0.012
10/20/2017 16:03			0	0.01	0	0	0			-0.014
10/20/2017 16:04			0	0.01	0	0	0			-0.015
10/20/2017 16:05	14.2	79	0	0.01	0	0	0	40.75428;-	12	-0.015
10/20/2017 16:06			0	0.01	0	0	0			-0.014
10/20/2017 16:07			0	0.01	0	0	0			-0.016
10/20/2017 16:08			0	0.01	0	0	0			-0.016
10/20/2017 16:09			0	0.01	0	0	0			-0.012
10/20/2017 16:10	13.6	79	0	0.01	0	0	0	40.75432;-	4	-0.008
10/20/2017 16:11			0	0.01	0	0	0			-0.013
10/20/2017 16:12			0	0.01	0	0	0			-0.011
10/20/2017 16:13			0	0.01	0	0	0			-0.016
10/20/2017 16:14			0	0.01	0	0	0			-0.015
10/20/2017 16:15	13.6	83	0	0.01	0	0	0	40.75429;-	15	-0.015
10/20/2017 16:16			0	0.01	0	0	0			-0.013
10/20/2017 16:17			0	0.01	0	0	0			-0.015
10/20/2017 16:18			0	0.01	0	0	0			-0.01
10/20/2017 16:19			0	0.01	0	0	0			-0.014
10/20/2017 16:20	13.5	90.1	0	0.01	0	0	0	40.75426;-	25	-0.014
10/20/2017 16:21			0	0.01	0	0	0			0.005
10/20/2017 16:22			0	0.01	0	0	0			-0.014
10/20/2017 16:23			0	0.01	0	0	0			-0.014
10/20/2017 16:24			0	0.01	0	0	0			-0.014
10/20/2017 16:25	13.5	90.1	0	0.01	0	0	0	40.75416;-	68	-0.015
10/20/2017 16:26			0	0.01	0	0	0			-0.014
10/20/2017 16:27			0	0.01	0	0	0			-0.013
10/20/2017 16:28			0	0.01	0	0	0			-0.002
10/20/2017 16:29			0	0.01	0	0	0			-0.013
10/20/2017 16:30	13.6	84	0	0.01	0	0	0	40.75426;-	21	-0.001
10/20/2017 16:31			0	0.01	0	0	0			-0.012
10/20/2017 16:32			0	0.01	0	0	0			-0.01
10/20/2017 16:33			0	0.01	0	0	0			-0.014
10/20/2017 16:34			0	0.01	0	0	0			-0.01
10/20/2017 16:35	13.6	88.1	0	0.01	0	0	0	40.75426;-	16	-0.015
10/20/2017 16:36			0	0.01	0	0	0			-0.013
10/20/2017 16:37			0	0.01	0	0	0			-0.011
10/20/2017 16:38			0	0.01	0	0	0			-0.015
10/20/2017 16:39			0	0.01	0	0	0			-0.015
10/20/2017 16:40	13.6	94.1	0	0.01	0	0	0	40.75415;-	35	-0.014
10/20/2017 16:41			0	0.01	0	0	0			-0.015
10/20/2017 16:42			0	0.01	0	0	0			-0.015
10/20/2017 16:43			0	0.01	0	0	0			-0.016
10/20/2017 16:44			0	0.01	0	0	0			-0.015
10/20/2017 16:45	13.5	97.2	0	0.01	0	0	0	40.7542;-7	23	-0.016
10/20/2017 16:46			0	0.01	0	0	0			-0.017
10/20/2017 16:47			0	0.01	0	0	0			-0.017
10/20/2017 16:48			0	0.01	0	0	0			-0.011
10/20/2017 16:49			0	0.01	0	0	0			-0.017
10/20/2017 16:50	13.6	81	0	0.01	0	0	0	40.75423;-	29	-0.016
10/20/2017 16:51			0	0.01	0	0	0			-0.015
10/20/2017 16:52			0	0.01	0	0	0			-0.004
10/20/2017 16:53			0	0.01	0	0	0			-0.015

10/20/2017 16:54			0	0.01	0	0	0			-0.016
10/20/2017 16:55	13.5	125.5	0	0.01	0	0	0	40.75422;-	37	-0.014
10/20/2017 16:56			0	0.01	0	0	0			-0.01
10/20/2017 16:57			0	0.01	0	0	0			-0.014
10/20/2017 16:58			0	0.01	0	0	0			-0.016
10/20/2017 16:59			0	0.01	0	0	0			-0.005
10/20/2017 17:00	13.6	123.5	0	0.01	0	0	0	40.75423;-	18	-0.015
10/20/2017 17:01			0	0.01	0	0	0			-0.016
10/20/2017 17:02			0	0.01	0	0	0			-0.016
10/20/2017 17:03			0	0.01	0	0	0			-0.015
10/20/2017 17:04			0	0.01	0	0	0			-0.016
10/20/2017 17:05	13.5	87	0	0.01	0	0	0	40.75432;-	25	-0.016
10/20/2017 17:06			0	0.01	0	0	0			-0.016
10/20/2017 17:07			0	0.01	0	0	0			-0.016
10/20/2017 17:08			0	0.01	0	0	0			-0.016
10/20/2017 17:09			0	0.01	0	0	0			-0.015
10/20/2017 17:10	13.5	83	0	0.01	0	0	0	40.75421;-	30	-0.016
10/20/2017 17:11			0	0.01	0	0	0			-0.01
10/20/2017 17:12			0	0.01	0	0	0			-0.004
10/20/2017 17:13			0	0.01	0	0	0			-0.011
10/20/2017 17:14			0	0.01	0	0	0			-0.011
10/20/2017 17:15	13.5	82	0	0.01	0	0	0	40.75422;-	25	-0.016
10/20/2017 17:16			0	0.01	0	0	0			-0.015
10/20/2017 17:17			0	0.01	0	0	0			-0.01
10/20/2017 17:18			0	0.01	0	0	0			-0.014
10/20/2017 17:19			0	0.01	0	0	0			-0.016
10/20/2017 17:20	13.5	128.6	0	0.01	0	0	0	40.75437;-	9	-0.013
10/20/2017 17:21			0	0.01	0	0	0			-0.01
10/20/2017 17:22			0	0.01	0	0	0			-0.015
10/20/2017 17:23			0	0.01	0	0	0			-0.016
10/20/2017 17:24			0	0.01	0	0	0			-0.015
10/20/2017 17:25	13.5	114.4	0	0.01	0	0	0	40.75429;-	6	-0.016
10/20/2017 17:26			0	0.01	0	0	0			-0.016
10/20/2017 17:27			0	0.01	0	0	0			-0.015
10/20/2017 17:28			0	0.01	0	0	0			-0.016
10/20/2017 17:29			0	0.01	0	0	0			-0.017
10/20/2017 17:30	13.6	94.1	0	0.01	0	0	0	40.75426;-	20	-0.016
10/20/2017 17:31			0	0.01	0	0	0			-0.013
10/20/2017 17:32			0	0.01	0	0	0			-0.018
10/20/2017 17:33			0	0.01	0	0	0			-0.011
10/20/2017 17:34			0	0.01	0	0	0			-0.016
10/20/2017 17:35	13.6	80	0	0.01	0	0	0	40.7542;-7	30	-0.017
10/20/2017 17:36			0	0.01	0	0	0			-0.018
10/20/2017 17:37			0	0.01	0	0	0			-0.018
10/20/2017 17:38			0	0.01	0	0	0			-0.018
10/20/2017 17:39			0	0.01	0	0	0			-0.014
10/20/2017 17:40	13.5	86	0	0.01	0	0	0	40.75426;-	13	-0.017
10/20/2017 17:41			0	0.01	0	0	0			-0.014
10/20/2017 17:42			0	0.01	0	0	0			-0.014
10/20/2017 17:43			0	0.01	0	0	0			-0.016
10/20/2017 17:44			0	0.01	0	0	0			-0.017
10/20/2017 17:45	14.1	94.1	0	0.01	0	0	0	40.75432;-	20	-0.001
10/20/2017 17:46			0	0.01	0	0	0			-0.017
10/20/2017 17:47			0	0.01	0	0	0			-0.014
10/20/2017 17:48			0	0.01	0	0	0			-0.015
10/20/2017 17:49			0	0.01	0	0	0			-0.016

10/20/2017 17:50	13.5	83	0	0.01	0	0	0	40.7543;-7	19	-0.017
10/20/2017 17:51			0	0.01	0	0	0			-0.016
10/20/2017 17:52			0	0.01	0	0	0			-0.017
10/20/2017 17:53			0	0.01	0	0	0			-0.007
10/20/2017 17:54			0	0.01	0	0	0			-0.006
10/20/2017 17:55	13.6	81	0	0.01	0	0	0	40.75428;-	13	0.003
10/20/2017 17:56			0	0.01	0	0	0			0.049
10/20/2017 17:57			0	0.01	0	0	0			0.252
10/20/2017 17:58			0	0.01	0	0	0			0.038
10/20/2017 17:59			0	0.01	0	0	0			0.019
10/20/2017 18:00	14.1	83	0	0.01	0	0	0	40.75429;-	17	0.094
10/20/2017 18:01			0	0.01	0	0	0			0.086
10/20/2017 18:02			0	0.01	0	0	0			-0.001
10/20/2017 18:03			0	0.01	0	0	0			-0.012
10/20/2017 18:04			0	0.01	0	0	0			-0.015
10/20/2017 18:05	13.6	81	0	0.01	0	0	0	40.75425;-	9	-0.011
10/20/2017 18:06			0	0.01	0	0	0			-0.01
10/20/2017 18:07			0	0.01	0	0	0			-0.015
10/20/2017 18:08			0	0.01	0	0	0			-0.009
10/20/2017 18:09			0	0.01	0	0	0			-0.003
10/20/2017 18:10	13.6	99.2	0	0.01	0	0	0	40.75431;-	9	-0.006
10/20/2017 18:11			0	0.01	0	0	0			-0.009
10/20/2017 18:12			0	0.01	0	0	0			-0.008
10/20/2017 18:13			0	0.01	0	0	0			0.014
10/20/2017 18:14			0	0.01	0	0	0			-0.014
10/20/2017 18:15	13.5	90.1	0	0.01	0	0	0	40.7543;-7	19	-0.016
10/20/2017 18:16			0	0.01	0	0	0			-0.016
10/20/2017 18:17			0	0.01	0	0	0			-0.016
10/20/2017 18:18			0	0.01	0	0	0			-0.011
10/20/2017 18:19			0	0.01	0	0	0			-0.016
10/20/2017 18:20	13.5	81	0	0.01	0	0	0	40.7543;-7	24	-0.017
10/20/2017 18:21			0	0.01	0	0	0			-0.016
10/20/2017 18:22			0	0.01	0	0	0			0.028
10/20/2017 18:23			0	0.01	0	0	0			0.045
10/20/2017 18:24			0	0.01	0	0	0			0.015
10/20/2017 18:25	13.5	83	0	0.01	0	0	0	40.75431;-	11	-0.007
10/20/2017 18:26			0	0.01	0	0	0			-0.006
10/20/2017 18:27			0	0.01	0	0	0			0.009
10/20/2017 18:28			0	0.01	0	0	0			0.008
10/20/2017 18:29			0	0.01	0	0	0			0.001
10/20/2017 18:30	14	83	0	0.01	0	0	0	40.75423;-	14	-0.012
10/20/2017 18:31			0	0.01	0	0	0			-0.012
10/20/2017 18:32			0	0.01	0	0	0			-0.011
10/20/2017 18:33			0	0.01	0	0	0			-0.017
10/20/2017 18:34			0	0.01	0	0	0			0.122
10/20/2017 18:35	13.5	82	0	0.01	0	0	0	40.75426;-	8	0.095
10/20/2017 18:36			0	0.01	0	0	0			-0.009
10/20/2017 18:37			0	0.01	0	0	0			-0.016
10/20/2017 18:38			0	0.01	0	0	0			-0.016
10/20/2017 18:39			0	0.01	0	0	0			-0.012
10/20/2017 18:40	13.5	80	0	0.01	0	0	0	40.75426;-	21	-0.014
10/20/2017 18:41			0	0.01	0	0	0			-0.016
10/20/2017 18:42			0	0.01	0	0	0			-0.016
10/20/2017 18:43			0	0.01	0	0	0			-0.017
10/20/2017 18:44			0	0.01	0	0	0			-0.015
10/20/2017 18:45	13.5	80	0	0.01	0	0	0	40.75426;-	16	-0.016

10/20/2017 18:46			0	0.01	0	0	0			-0.016
10/20/2017 18:47			0	0.01	0	0	0			0.017
10/20/2017 18:48			0	0.01	0	0	0			-0.007
10/20/2017 18:49			0	0.01	0	0	0			-0.015
10/20/2017 18:50	13.5	79	0	0.01	0	0	0	40.7543;-7	16	-0.017
10/20/2017 18:51			0	0.01	0	0	0			-0.015
10/20/2017 18:52			0	0.01	0	0	0			-0.016
10/20/2017 18:53			0	0.01	0	0	0			-0.017
10/20/2017 18:54			0	0.01	0	0	0			-0.017
10/20/2017 18:55	13.9	127.5	0	0.01	0	0	0			-0.013
10/20/2017 18:55								40.75426;-	10	
10/20/2017 18:56			0	0.01	0	0	0			-0.017
10/20/2017 18:57			0	0.01	0	0	0			-0.016
10/20/2017 18:58			0	0.01	0	0	0			-0.017
10/23/2017 12:54	14.2	117.4								
10/23/2017 12:54								40.7534284;-73.4872261		
10/23/2017 12:55	14.1	101.2	0	0	0	0	0			
10/23/2017 12:56			0	0	0	0	0			
10/23/2017 12:57			0	0	0	0	0			
10/23/2017 12:58			0	0	0	0	0			
10/23/2017 12:59			0	0	0	0	0			
10/23/2017 13:00	14.1	74.9	0	0	0	0	0	40.75414;-	7	-0.011
10/23/2017 13:01			0	0	0	0	0			-0.017
10/23/2017 13:02			0	0	0	0	0			-0.02
10/23/2017 13:03			0	0	0	0	0			-0.021
10/23/2017 13:04			0	0	0	0	0			-0.022
10/23/2017 13:05	14.1	82	0	0	0	0	0	40.75423;-	-2	-0.021
10/23/2017 13:06			0	0	0	0	0			-0.022
10/23/2017 13:07			0	0	0	0	0			-0.023
10/23/2017 13:08			0	0	0	0	0			-0.023
10/23/2017 13:09			0	0	0	0	0			-0.024
10/23/2017 13:10	14.1	75.9	0	0	0	0	0	40.75418;-	4	-0.024
10/23/2017 13:11			0	0	0	0	0			-0.024
10/23/2017 13:12			0	0	0	0	0			-0.024
10/23/2017 13:13			0	0	0	0	0			-0.023
10/23/2017 13:14			0	0	0	0	0			-0.023
10/23/2017 13:15	14.1	85	0	0	0	0	0	40.75422;-	12	-0.023
10/23/2017 13:16			0	0	0	0	0			-0.023
10/23/2017 13:17			0	0	0	0	0			-0.023
10/23/2017 13:18			0	0	0	0	0			-0.023
10/23/2017 13:19			0	0	0	0	0			-0.023
10/23/2017 13:20	14.4	83	0	0	0	0	0	40.75428;-	7	-0.023
10/23/2017 13:21			0	0	0	0	0			-0.023
10/23/2017 13:22			0	0	0	0	0			-0.023
10/23/2017 13:23			0	0	0	0	0			-0.023
10/23/2017 13:24			0	0	0	0	0			-0.023
10/23/2017 13:25	14.1	79	0	0	0	0	0	40.75425;-	2	-0.023
10/23/2017 13:26			0	0	0	0	0			-0.022
10/23/2017 13:27			0	0	0	0	0			-0.022
10/23/2017 13:28			0	0	0	0	0			-0.022
10/23/2017 13:29			0	0	0	0	0			-0.022
10/23/2017 13:30	14	85	0	0	0	0	0	40.75426;-	5	-0.023
10/23/2017 13:31			0	0	0	0	0			-0.023
10/23/2017 13:32			0	0	0	0	0			-0.022
10/23/2017 13:33			0	0	0	0	0			-0.022
10/23/2017 13:34			0	0	0	0	0			-0.022

10/23/2017 13:35	14	76.9	0	0	0	0	0	40.75428;-	9	-0.022
10/23/2017 13:36			0	0	0	0	0			-0.022
10/23/2017 13:37			0	0	0	0	0			-0.021
10/23/2017 13:38			0	0	0	0	0			-0.022
10/23/2017 13:39			0	0	0	0	0			-0.022
10/23/2017 13:40	14.5	76.9	0	0	0	0	0	40.75419;-	1	-0.022
10/23/2017 13:41			0	0	0	0	0			-0.022
10/23/2017 13:42			0	0	0	0	0			-0.022
10/23/2017 13:43			0	0	0	0	0			-0.021
10/23/2017 13:44			0	0	0	0	0			-0.021
10/23/2017 13:45	14.1	86	0	0	0	0	0	40.75413;-	-9	-0.022
10/23/2017 13:46			0	0	0	0	0			-0.021
10/23/2017 13:47			0	0	0	0	0			-0.022
10/23/2017 13:48			0	0	0	0	0			-0.022
10/23/2017 13:49			0	0	0	0	0			-0.022
10/23/2017 13:50	14	76.9	0	0	0	0	0	40.75418;-	-7	-0.022
10/23/2017 13:51			0	0	0	0	0			-0.022
10/23/2017 13:52			0	0	0	0	0			-0.022
10/23/2017 13:53			0	0.001	0	0	0			-0.022
10/23/2017 13:54			0.001	0.002	0	0	0			-0.022
10/23/2017 13:55	14	75.9	0.002	0.004	0	0	0	40.75418;-	4	-0.022
10/23/2017 13:56			0.002	0.004	0	0	0			-0.023
10/23/2017 13:57			0	0.004	0	0	0			-0.023
10/23/2017 13:58			0.001	0.004	0	0	0			-0.023
10/23/2017 13:59			0.003	0.004	0	0	0			-0.023
10/23/2017 14:00	14.1	79	0.005	0.005	0	0	0	40.75399;-	-6	-0.023
10/23/2017 14:01			0.006	0.006	0	0	0			-0.023
10/23/2017 14:02			0.009	0.009	0	0	0			-0.023
10/23/2017 14:03			0.009	0.009	0	0.001	0			-0.023
10/23/2017 14:04			0.016	0.016	0	0.001	0			-0.023
10/23/2017 14:05	14	76.9	0.011	0.017	0	0.002	0	40.75397;-	-12	-0.023
10/23/2017 14:06			0.016	0.017	0	0.003	0			-0.023
10/23/2017 14:07			0.018	0.019	0	0.004	0			-0.023
10/23/2017 14:08			0.02	0.02	0	0.005	0			-0.023
10/23/2017 14:09			0.018	0.02	0	0.006	0			-0.023
10/23/2017 14:10	14	86	0.02	0.02	0	0.007	0	40.75414;-	1	-0.023
10/23/2017 14:11			0.022	0.022	0	0.008	0			-0.023
10/23/2017 14:12			0.026	0.026	0	0.009	0			-0.023
10/23/2017 14:13			0.026	0.027	0	0.013	0			-0.022
10/23/2017 14:14			0.026	0.03	0	0.014	0			-0.023
10/23/2017 14:15	14.2	79	0.031	0.031	0	0.014	0	40.75417;-	4	-0.023
10/23/2017 14:16			0.033	0.034	0	0.016	0			-0.023
10/23/2017 14:17			0.033	0.035	0	0.018	0			-0.023
10/23/2017 14:18			0.035	0.037	0	0.02	0			-0.023
10/23/2017 14:19			0.036	0.037	0	0.022	0			-0.023
10/23/2017 14:20	14.1	79	0.041	0.041	0	0.023	0	40.75425;-	8	-0.023
10/23/2017 14:21			0.044	0.044	0	0.025	0			-0.023
10/23/2017 14:22			0.047	0.048	0	0.027	0			-0.024
10/23/2017 14:23			0.048	0.051	0	0.029	0.001			-0.023
10/23/2017 14:24			0.048	0.051	0	0.031	0.001			-0.023
10/23/2017 14:25	14	79	0.049	0.051	0	0.033	0.001	40.75422;-	19	-0.023
10/23/2017 14:26			0.051	0.052	0	0.037	0.001			-0.023
10/23/2017 14:27			0.049	0.053	0	0.038	0.001			-0.023
10/23/2017 14:28			0.054	0.054	0	0.04	0.001			-0.023
10/23/2017 14:29			0.055	0.055	0	0.042	0.001			-0.023
10/23/2017 14:30	14.4	79	0.056	0.058	0	0.042	0.001	40.75421;-	15	-0.023

10/23/2017 14:31			0.06	0.06	0	0.044	0.001			-0.023
10/23/2017 14:32			0.062	0.062	0	0.046	0.002			-0.023
10/23/2017 14:33			0.061	0.062	0	0.049	0.002			-0.023
10/23/2017 14:34			0.062	0.062	0	0.051	0.002			-0.023
10/23/2017 14:35	14	95.1	0.064	0.064	0	0.051	0.002	40.75419;-	11	-0.023
10/23/2017 14:36			0.067	0.068	0	0.052	0.002			-0.023
10/23/2017 14:37			0.067	0.069	0	0.054	0.002			-0.022
10/23/2017 14:38			0.069	0.07	0	0.056	0.002			-0.023
10/23/2017 14:39			0.074	0.074	0	0.057	0.002			-0.023
10/23/2017 14:40	14	77.9	0.075	0.075	0	0.059	0.003	40.75419;-	15	-0.023
10/23/2017 14:41			0.076	0.078	0	0.06	0.003			-0.023
10/23/2017 14:42			0.078	0.078	0	0.062	0.003			-0.023
10/23/2017 14:43			0.081	0.081	0	0.064	0.003			-0.023
10/23/2017 14:44			0.082	0.083	0	0.066	0.003			-0.023
10/23/2017 14:45	14	81	0.085	0.085	0	0.067	0.003	40.75417;-	8	-0.023
10/23/2017 14:46			0.086	0.088	0	0.069	0.004			-0.024
10/23/2017 14:47			0.087	0.088	0	0.073	0.004			-0.023
10/23/2017 14:48			0.09	0.09	0	0.074	0.004			-0.023
10/23/2017 14:49			0.092	0.092	0	0.076	0.004			-0.023
10/23/2017 14:50	14	92.1	0.095	0.095	0	0.076	0.004	40.75418;-	10	-0.024
10/23/2017 14:51			0.097	0.097	0	0.078	0.005			-0.024
10/23/2017 14:52			0.096	0.097	0	0.08	0.005			-0.023
10/23/2017 14:53			0.096	0.097	0	0.084	0.005			-0.023
10/23/2017 14:54			0.099	0.099	0	0.086	0.005			-0.023
10/23/2017 14:55	13.9	77.9	0.102	0.102	0	0.086	0.005	40.75416;-	6	-0.023
10/23/2017 14:56			0.054	0.103	0	0.087	0.006			-0.021
10/23/2017 14:57			0.056	0.103	0	0.088	0.006			-0.014
10/23/2017 14:58			0.064	0.103	0	0.087	0.006			-0.02
10/23/2017 14:59			0.071	0.103	0	0.085	0.006			-0.021
10/23/2017 15:00	14.4	80	0.076	0.103	0	0.084	0.006	40.7542;-7	11	-0.021
10/23/2017 15:01			0.077	0.103	0	0.083	0.006			-0.022
10/23/2017 15:02			0.079	0.103	0	0.083	0.007			-0.022
10/23/2017 15:03			0.081	0.103	0	0.082	0.007			-0.022
10/23/2017 15:04			0.084	0.103	0	0.082	0.007			-0.022
10/23/2017 15:05	14	75.9	0.085	0.103	0	0.082	0.007	40.75422;-	15	-0.023
10/23/2017 15:06			0.088	0.103	0	0.08	0.007			-0.023
10/23/2017 15:07			0.088	0.103	0	0.08	0.007			-0.023
10/23/2017 15:08			0.088	0.103	0	0.079	0.008			-0.023
10/23/2017 15:09			0.092	0.103	0	0.079	0.008			-0.023
10/23/2017 15:10	14	80	0.093	0.103	0	0.078	0.008	40.75421;-	17	-0.023
10/23/2017 15:11			0.094	0.103	0	0.078	0.008			-0.023
10/23/2017 15:12			0.101	0.103	0	0.078	0.008			-0.023
10/23/2017 15:13			0.096	0.103	0	0.084	0.009			-0.023
10/23/2017 15:14			0.098	0.103	0	0.086	0.009			-0.023
10/23/2017 15:15	13.9	76.9	0.094	0.103	0	0.088	0.009	40.75421;-	13	-0.022
10/23/2017 15:16			0.101	0.103	0	0.088	0.009			-0.022
10/23/2017 15:17			0.103	0.107	0	0.089	0.009			-0.023
10/23/2017 15:18			0.104	0.108	0	0.091	0.009			-0.023
10/23/2017 15:19			0.107	0.109	0	0.094	0.01			-0.023
10/23/2017 15:20	14.4	86	0.107	0.109	0	0.096	0.01	40.75418;-	15	-0.023
10/23/2017 15:21			0.113	0.113	0	0.097	0.01			-0.023
10/23/2017 15:22			0.109	0.114	0	0.099	0.011			-0.023
10/23/2017 15:23			0.107	0.114	0	0.1	0.011			-0.023
10/23/2017 15:24			0.109	0.114	0	0.101	0.011			-0.023
10/23/2017 15:25	14.1	84	0.111	0.114	0	0.103	0.011	40.75416;-	16	-0.023
10/23/2017 15:26			0.112	0.114	0	0.104	0.011			-0.023

10/23/2017 15:27			0.108	0.114	0	0.105	0.012			-0.023
10/23/2017 15:28			0.103	0.114	0	0.105	0.012			-0.023
10/23/2017 15:29			0.105	0.114	0	0.105	0.012			-0.023
10/23/2017 15:30	14	88.1	0.108	0.114	0	0.106	0.012	40.75423;-	14	-0.023
10/23/2017 15:31			0.106	0.114	0	0.106	0.012			-0.023
10/23/2017 15:32			0.105	0.114	0	0.107	0.013			-0.023
10/23/2017 15:33			0.102	0.114	0	0.107	0.013			-0.023
10/23/2017 15:34			0.101	0.114	0	0.106	0.013			-0.022
10/23/2017 15:35	14.2	79	0.1	0.114	0	0.106	0.013	40.7542;-7	9	-0.023
10/23/2017 15:36			0.097	0.114	0	0.106	0.013			-0.023
10/23/2017 15:37			0.099	0.114	0	0.105	0.014			-0.022
10/23/2017 15:38			0.096	0.114	0	0.104	0.014			-0.022
10/23/2017 15:39			0.099	0.114	0	0.103	0.014			-0.023
10/23/2017 15:40	14	77.9	0.098	0.114	0	0.102	0.014	40.75419;-	2	-0.023
10/23/2017 15:41			0.102	0.114	0	0.101	0.015			-0.023
10/23/2017 15:42			0.102	0.114	0	0.101	0.015			-0.023
10/23/2017 15:43			0.099	0.114	0	0.1	0.015			-0.023
10/23/2017 15:44			0.1	0.114	0	0.1	0.015			-0.023
10/23/2017 15:45	14	80	0.102	0.114	0	0.1	0.015	40.75419;-	8	-0.023
10/23/2017 15:46			0.1	0.114	0	0.099	0.016			-0.022
10/23/2017 15:47			0.098	0.114	0	0.099	0.016			-0.022
10/23/2017 15:48			0.099	0.114	0	0.099	0.016			-0.022
10/23/2017 15:49			0.096	0.114	0	0.098	0.016			-0.022
10/23/2017 15:50	14	90.1	0.096	0.114	0	0.098	0.016	40.7542;-7	5	-0.022
10/23/2017 15:51			0.098	0.114	0	0.098	0.016			-0.022
10/23/2017 15:52			0.101	0.114	0	0.098	0.017			-0.022
10/23/2017 15:53			0.1	0.114	0	0.098	0.017			-0.022
10/23/2017 15:54			0.102	0.114	0	0.099	0.017			-0.022
10/23/2017 15:55	14	81	0.105	0.114	0	0.099	0.018	40.75417;-	9	-0.023
10/23/2017 15:56			0.105	0.114	0	0.099	0.018			-0.023
10/23/2017 15:57			0.102	0.114	0	0.099	0.018			-0.023
10/23/2017 15:58			0.104	0.114	0	0.1	0.018			-0.023
10/23/2017 15:59			0.105	0.114	0	0.1	0.018			-0.023
10/23/2017 16:00	13.4	81	0.107	0.114	0	0.1	0.019	40.75417;-	16	-0.022
10/23/2017 16:01			0.107	0.114	0	0.101	0.019			-0.023
10/23/2017 16:02			0.109	0.114	0	0.101	0.019			-0.023
10/23/2017 16:03			0.112	0.114	0	0.102	0.019			-0.023
10/23/2017 16:04			0.105	0.114	0	0.103	0.019			-0.023
10/23/2017 16:05	13.7	82	0.108	0.114	0	0.104	0.02	40.75425;-	8	-0.023
10/23/2017 16:06			0.107	0.114	0	0.104	0.02			-0.023
10/23/2017 16:07			0.109	0.114	0	0.105	0.02			-0.023
10/23/2017 16:08			0.106	0.114	0	0.105	0.02			-0.023
10/23/2017 16:09			0.109	0.114	0	0.106	0.021			-0.023
10/23/2017 16:10	13.3	86	0.112	0.114	0	0.106	0.021	40.75419;-	16	-0.023
10/23/2017 16:11			0.113	0.114	0	0.107	0.021			-0.023
10/23/2017 16:12			0.113	0.114	0	0.107	0.021			-0.023
10/23/2017 16:13			0.111	0.114	0	0.108	0.022			-0.023
10/23/2017 16:14			0.109	0.114	0	0.108	0.022			-0.023
10/23/2017 16:15	13.5	82	0.11	0.114	0	0.108	0.022	40.7542;-7	20	-0.023
10/23/2017 16:16			0.107	0.114	0	0.108	0.022			-0.023
10/23/2017 16:17			0.102	0.114	0	0.108	0.022			-0.023
10/23/2017 16:18			0.102	0.114	0	0.108	0.023			-0.023
10/23/2017 16:19			0.098	0.114	0	0.107	0.023			-0.022
10/23/2017 16:20	13.6	80	0.099	0.114	0	0.106	0.023	40.7542;-7	12	-0.022
10/23/2017 16:21			0.098	0.114	0	0.106	0.023			-0.023
10/23/2017 16:22			0.098	0.114	0	0.105	0.023			-0.023

10/23/2017 16:23			0.097	0.114	0	0.105	0.024			-0.022
10/23/2017 16:24			0.094	0.114	0	0.104	0.024			-0.023
10/23/2017 16:25	13.6	128.6	0.092	0.114	0	0.103	0.024			-0.022
10/23/2017 16:25								40.75419;-	16	
10/23/2017 16:26			0.092	0.114	0	0.101	0.024			-0.022
10/23/2017 16:27			0.096	0.114	0	0.1	0.024			-0.023
10/23/2017 16:28			0.098	0.114	0	0.099	0.025			-0.023
10/23/2017 16:29			0.099	0.114	0	0.099	0.025			-0.023
10/23/2017 16:30	13.6	80	0.098	0.114	0	0.098	0.025	40.75417;-	26	-0.023
10/23/2017 16:31			0.098	0.114	0	0.097	0.025			-0.023
10/23/2017 16:32			0.094	0.114	0	0.097	0.025			-0.023
10/23/2017 16:33			0.096	0.114	0	0.096	0.026			-0.023
10/23/2017 16:34			0.095	0.114	0	0.096	0.026			-0.023
10/23/2017 16:35	13.7	84	0.095	0.114	0	0.096	0.026	40.75417;-	23	-0.023
10/23/2017 16:36			0.098	0.114	0	0.096	0.026			-0.023
10/23/2017 16:37			0.097	0.114	0	0.095	0.026			-0.023
10/23/2017 16:38			0.1	0.114	0	0.095	0.027			-0.023
10/23/2017 16:39			0.097	0.114	0	0.096	0.027			-0.023
10/23/2017 16:40	13.7	80	0.097	0.114	0	0.096	0.027	40.75419;-	16	-0.023
10/23/2017 16:41			0.097	0.114	0	0.096	0.027			-0.023
10/23/2017 16:42			0.099	0.114	0	0.096	0.027			-0.023
10/23/2017 16:43			0.096	0.114	0	0.096	0.028			-0.023
10/23/2017 16:44			0.094	0.114	0	0.096	0.028			-0.023
10/23/2017 16:45	13.7	82	0.094	0.114	0	0.096	0.028	40.75416;-	32	-0.022
10/23/2017 16:46			0.094	0.114	0	0.096	0.028			-0.023
10/23/2017 16:47			0.092	0.114	0	0.095	0.028			-0.023
10/23/2017 16:48			0.091	0.114	0	0.095	0.029			-0.022
10/23/2017 16:49			0.091	0.114	0	0.095	0.029			-0.022
10/23/2017 16:50	13.5	81	0.092	0.114	0	0.095	0.029	40.75417;-	30	-0.022
10/23/2017 16:51			0.092	0.114	0	0.094	0.029			-0.022
10/23/2017 16:52			0.093	0.114	0	0.094	0.029			-0.022
10/23/2017 16:53			0.094	0.114	0	0.093	0.03			-0.023
10/23/2017 16:54			0.093	0.114	0	0.093	0.03			-0.023
10/23/2017 16:55	13.6	80	0.093	0.114	0	0.093	0.03	40.75414;-	27	-0.022
10/23/2017 16:56			0.091	0.114	0	0.093	0.03			-0.023
10/23/2017 16:57			0.092	0.114	0	0.092	0.03			-0.023
10/23/2017 16:58			0.091	0.114	0	0.092	0.031			-0.023
10/23/2017 16:59			0.09	0.114	0	0.091	0.031			-0.023
10/23/2017 17:00	13.5	118.4	0.091	0.114	0	0.091	0.031	40.75413;-	25	-0.023
10/23/2017 17:01			0.089	0.114	0	0.091	0.031			-0.023
10/23/2017 17:02			0.09	0.114	0	0.091	0.031			-0.023
10/23/2017 17:03			0.089	0.114	0	0.091	0.031			-0.023
10/23/2017 17:04			0.087	0.114	0	0.09	0.032			-0.023
10/23/2017 17:05	13.4	95.1	0.089	0.114	0	0.09	0.032	40.75417;-	21	-0.023
10/23/2017 17:06			0.087	0.114	0	0.09	0.032			-0.023
10/23/2017 17:07			0.085	0.114	0	0.089	0.032			-0.023
10/23/2017 17:08			0.084	0.114	0	0.089	0.032			-0.018
10/23/2017 17:09			0.083	0.114	0	0.088	0.033			-0.018
10/23/2017 17:10	13.3	82	0.082	0.114	0	0.087	0.033	40.75415;-	20	-0.021
10/23/2017 17:11			0.082	0.114	0	0.087	0.033			-0.022
10/23/2017 17:12			0.082	0.114	0	0.086	0.033			-0.022
10/23/2017 17:13			0.081	0.114	0	0.085	0.033			-0.022
10/23/2017 17:14			0.081	0.114	0	0.085	0.033			-0.023
10/23/2017 17:15	13.1	84	0.081	0.114	0	0.084	0.034	40.75417;-	12	-0.023
10/23/2017 17:16			0.08	0.114	0	0.084	0.034			-0.022
10/23/2017 17:17			0.08	0.114	0	0.083	0.034			-0.023

10/23/2017 17:18			0.08	0.114	0	0.082	0.034			-0.023
10/23/2017 17:19			0.08	0.114	0	0.082	0.034			-0.023
10/23/2017 17:20	13.1	82	0.08	0.114	0	0.081	0.034	40.75421;-	15	-0.023
10/23/2017 17:21			0.079	0.114	0	0.081	0.035			-0.023
10/23/2017 17:22			0.079	0.114	0	0.08	0.035			-0.023
10/23/2017 17:23			0.078	0.114	0	0.08	0.035			-0.023
10/23/2017 17:24			0.077	0.114	0	0.079	0.035			-0.023
10/23/2017 17:25	13	97.2	0.077	0.114	0	0.079	0.035	40.7542;-7	16	-0.023
10/23/2017 17:26			0.055	0.114	0	0.078	0.035			-0.02
10/23/2017 17:27			0.059	0.114	0	0.076	0.035			-0.019
10/23/2017 17:28			0.062	0.114	0	0.075	0.036			-0.02
10/23/2017 17:29			0.065	0.114	0	0.074	0.036			-0.021
10/23/2017 17:30	12.9	102.2	0.065	0.114	0	0.073	0.036	40.75418;-	25	-0.021
10/23/2017 17:31			0.067	0.114	0	0.072	0.036			-0.022
10/23/2017 17:32			0.068	0.114	0	0.071	0.036			-0.022
10/23/2017 17:33			0.067	0.114	0	0.07	0.036			-0.022
10/23/2017 17:34			0.068	0.114	0	0.069	0.036			-0.022
10/23/2017 17:35	12.9	96.2	0.068	0.114	0	0.068	0.037	40.75414;-	0	-0.022
10/23/2017 17:36			0.069	0.114	0	0.067	0.037			-0.022
10/23/2017 17:37			0.068	0.114	0	0.067	0.037			-0.023
10/23/2017 17:38			0.07	0.114	0	0.066	0.037			-0.023
10/23/2017 17:39			0.07	0.114	0	0.066	0.037			-0.023
10/23/2017 17:40	12.9	87	0.07	0.114	0	0.065	0.037	40.75419;-	6	-0.023
10/23/2017 17:41			0.071	0.114	0	0.066	0.037			-0.023
10/23/2017 17:42			0.071	0.114	0	0.066	0.038			-0.023
10/23/2017 17:43			0.071	0.114	0	0.067	0.038			-0.023
10/23/2017 17:44			0.071	0.114	0	0.068	0.038			-0.023
10/23/2017 17:45	12.9	91.1	0.071	0.114	0	0.068	0.038	40.7542;-7	18	-0.023
10/23/2017 17:46			0.071	0.114	0	0.068	0.038			-0.023
10/23/2017 17:47			0.071	0.114	0	0.069	0.038			-0.023
10/23/2017 17:48			0.072	0.114	0	0.069	0.038			-0.023
10/23/2017 17:49			0.071	0.114	0	0.069	0.039			-0.023
10/23/2017 17:50	12.9	87	0.073	0.114	0	0.07	0.039	40.75418;-	14	-0.023
10/23/2017 17:51			0.071	0.114	0	0.07	0.039			-0.023
10/23/2017 17:52			0.07	0.114	0	0.07	0.039			-0.022
10/23/2017 17:53			0.071	0.114	0	0.07	0.039			-0.023
10/23/2017 17:54			0.072	0.114	0	0.07	0.039			-0.023
10/23/2017 17:55	12.9	81	0.072	0.114	0	0.07	0.039	40.7542;-7	3	-0.023
10/23/2017 17:56			0.072	0.114	0	0.07	0.04			-0.023
10/23/2017 17:57			0.074	0.114	0	0.07	0.04			-0.023
10/23/2017 17:58			0.074	0.114	0	0.071	0.04			-0.023
10/23/2017 17:59			0.074	0.114	0	0.071	0.04			-0.023
10/23/2017 18:00	13.2	87	0.076	0.114	0	0.071	0.04	40.75416;-	3	-0.023
10/23/2017 18:01			0.075	0.114	0	0.071	0.04			-0.023
10/23/2017 18:02			0.074	0.114	0	0.072	0.041			-0.023
10/23/2017 18:03			0.076	0.114	0	0.072	0.041			-0.023
10/23/2017 18:04			0.076	0.114	0	0.072	0.041			-0.023
10/23/2017 18:05	13.2	85	0.075	0.114	0	0.072	0.041	40.75419;-	5	-0.022
10/23/2017 18:06			0.075	0.114	0	0.073	0.041			-0.022
10/23/2017 18:07			0.076	0.114	0	0.073	0.041			-0.022
10/23/2017 18:08			0.078	0.114	0	0.073	0.041			-0.022
10/23/2017 18:09			0.078	0.114	0	0.074	0.042			-0.023
10/23/2017 18:10	13.2	90.1	0.078	0.114	0	0.074	0.042	40.75418;-	7	-0.022
10/23/2017 18:11			0.078	0.114	0	0.075	0.042			-0.023
10/23/2017 18:12			0.08	0.114	0	0.075	0.042			-0.023
10/23/2017 18:13			0.08	0.114	0	0.076	0.042			-0.023

10/23/2017 18:14			0.08	0.114	0	0.076	0.042			-0.023
10/23/2017 18:15	13.1	85	0.081	0.114	0	0.076	0.043	40.75417;-	9	-0.023
10/23/2017 18:16			0.081	0.114	0	0.077	0.043			-0.023
10/23/2017 18:17			0.081	0.114	0	0.077	0.043			-0.023
10/23/2017 18:18			0.081	0.114	0	0.078	0.043			-0.023
10/23/2017 18:19			0.082	0.114	0	0.078	0.043			-0.023
10/23/2017 18:20	13.2	80	0.083	0.114	0	0.079	0.043	40.75421;-	11	-0.023
10/23/2017 18:21			0.084	0.114	0	0.079	0.044			-0.023
10/23/2017 18:22			0.083	0.114	0	0.08	0.044			-0.023
10/23/2017 18:23			0.083	0.114	0	0.08	0.044			-0.023
10/23/2017 18:24			0.084	0.114	0	0.08	0.044			-0.023
10/23/2017 18:25	13.2	89.1	0.085	0.114	0	0.081	0.044	40.75421;-	4	-0.023
10/23/2017 18:26			0.084	0.114	0	0.081	0.045			-0.023
10/23/2017 18:27			0.084	0.114	0	0.082	0.045			-0.022
10/23/2017 18:28			0.086	0.114	0	0.082	0.045			-0.023
10/23/2017 18:29			0.086	0.114	0	0.082	0.045			-0.023
10/23/2017 18:30	13.3	80	0.085	0.114	0	0.083	0.045	40.75421;-	10	-0.022
10/23/2017 18:31			0.084	0.114	0	0.083	0.045			-0.022
10/23/2017 18:32			0.083	0.114	0	0.083	0.046			-0.022
10/23/2017 18:33			0.085	0.114	0	0.083	0.046			-0.022
10/23/2017 18:34			0.085	0.114	0	0.084	0.046			-0.022
10/23/2017 18:35	13.2	84	0.084	0.114	0	0.084	0.046	40.75423;-	15	-0.022
10/23/2017 18:36			0.084	0.114	0	0.084	0.046			-0.023
10/23/2017 18:37			0.083	0.114	0	0.084	0.046			-0.023
10/23/2017 18:38			0.082	0.114	0	0.084	0.047			-0.022
10/23/2017 18:39			0.082	0.114	0	0.084	0.047			-0.022
10/23/2017 18:40	13.2	82	0.083	0.114	0	0.083	0.047	40.75422;-	4	-0.022
10/23/2017 18:41			0.082	0.114	0	0.083	0.047			-0.022
10/23/2017 18:42			0.083	0.114	0	0.083	0.047			-0.022
10/23/2017 18:43			0.084	0.114	0	0.083	0.047			-0.022
10/23/2017 18:44			0.082	0.114	0	0.083	0.048			-0.022
10/23/2017 18:45	13.2	80	0.082	0.114	0	0.082	0.048	40.75422;-	11	-0.022
10/23/2017 18:46			0.082	0.114	0	0.082	0.048			-0.022
10/23/2017 18:47			0.081	0.114	0	0.082	0.048			-0.022
10/23/2017 18:48			0.082	0.114	0	0.082	0.048			-0.022
10/23/2017 18:49			0.083	0.114	0	0.082	0.049			-0.022
10/23/2017 18:50	13.2	81	0.083	0.114	0	0.082	0.049	40.75421;-	14	-0.023
10/23/2017 18:51			0.085	0.114	0	0.082	0.049			-0.022
10/23/2017 18:52			0.083	0.114	0	0.082	0.049			-0.022
10/23/2017 18:53			0.085	0.114	0	0.082	0.049			-0.023
10/23/2017 18:54			0.086	0.114	0	0.082	0.049			-0.022
10/23/2017 18:55	13.2	85	0.087	0.114	0	0.082	0.05	40.75422;-	11	-0.023
10/23/2017 18:56			0.087	0.114	0	0.082	0.05			-0.023
10/23/2017 18:57			0.087	0.114	0	0.083	0.05			-0.023
10/23/2017 18:58			0.087	0.114	0	0.083	0.05			-0.023
10/23/2017 18:59			0.086	0.114	0	0.083	0.05			-0.023
10/23/2017 19:00	13.1	86	0.087	0.114	0	0.084	0.05	40.75422;-	7	-0.023
10/23/2017 19:01			0.087	0.114	0	0.084	0.051			-0.023
10/23/2017 19:02			0.086	0.114	0	0.084	0.051			-0.022
10/23/2017 19:03			0.085	0.114	0	0.084	0.051			-0.023
10/23/2017 19:04			0.085	0.114	0	0.085	0.051			-0.022
10/23/2017 19:05	13	122.5	0.087	0.114	0	0.085	0.051	40.75422;-	13	-0.023
10/23/2017 19:06			0.086	0.114	0	0.085	0.052			-0.023
10/23/2017 19:07			0.086	0.114	0	0.085	0.052			-0.023
10/23/2017 19:08			0.087	0.114	0	0.085	0.052			-0.023
10/23/2017 19:09			0.088	0.114	0	0.085	0.052			-0.023

10/23/2017 19:10	12.9	125.5	0.087	0.114	0	0.085	0.052	40.7542;-7	22	-0.023
10/23/2017 19:11			0.087	0.114	0	0.085	0.052			-0.023
10/23/2017 19:12			0.086	0.114	0	0.085	0.053			-0.023
10/23/2017 19:13			0.084	0.114	0	0.085	0.053			-0.022
10/23/2017 19:14			0.086	0.114	0	0.085	0.053			-0.022
10/23/2017 19:15	12.9	124.5	0.087	0.114	0	0.085	0.053	40.75425;-	13	-0.023
10/23/2017 19:16			0.087	0.114	0	0.085	0.053			-0.023
10/23/2017 19:17			0.087	0.114	0	0.085	0.054			-0.023
10/23/2017 19:18			0.089	0.114	0	0.086	0.054			-0.023
10/23/2017 19:19			0.088	0.114	0	0.086	0.054			-0.023
10/23/2017 19:20	13	82	0.088	0.114	0	0.086	0.054	40.75422;-	12	-0.023
10/23/2017 19:21			0.088	0.114	0	0.086	0.054			-0.023
10/23/2017 19:22			0.089	0.114	0	0.086	0.054			-0.023
10/23/2017 19:23			0.09	0.114	0	0.086	0.055			-0.023
10/23/2017 19:24			0.089	0.114	0	0.086	0.055			-0.023
10/23/2017 19:25	13	91.1	0.089	0.114	0	0.087	0.055	40.75426;-	12	-0.023
10/23/2017 19:26			0.089	0.114	0	0.087	0.055			-0.023
10/23/2017 19:27			0.09	0.114	0	0.087	0.055			-0.022
10/23/2017 19:28			0.091	0.114	0	0.087	0.056			-0.023
10/23/2017 19:29			0.092	0.114	0	0.088	0.056			-0.023
10/23/2017 19:30	12.9	83	0.091	0.114	0	0.088	0.056	40.75423;-	12	-0.023
10/23/2017 19:31			0.092	0.114	0	0.088	0.056			-0.023
10/23/2017 19:32			0.092	0.114	0	0.089	0.056			-0.023
10/23/2017 19:33			0.093	0.114	0	0.089	0.056			-0.023
10/23/2017 19:34			0.092	0.114	0	0.089	0.057			-0.023
10/23/2017 19:35	12.9	83	0.092	0.114	0	0.09	0.057	40.75425;-	1	-0.023
10/23/2017 19:36			0.091	0.114	0	0.09	0.057			-0.023
10/23/2017 19:37			0.091	0.114	0	0.09	0.057			-0.023
10/23/2017 19:38			0.091	0.114	0	0.09	0.057			-0.023
10/23/2017 19:39			0.092	0.114	0	0.09	0.058			-0.023
10/23/2017 19:40	12.8	84	0.09	0.114	0	0.091	0.058	40.75425;-	5	-0.023
10/23/2017 19:41			0.091	0.114	0	0.091	0.058			-0.023
10/23/2017 19:42			0.09	0.114	0	0.091	0.058			-0.023
10/23/2017 19:43			0.092	0.114	0	0.091	0.058			-0.023
10/23/2017 19:44			0.091	0.114	0	0.091	0.059			-0.023
10/23/2017 19:45	12.8	84	0.092	0.114	0	0.091	0.059	40.75422;-	16	-0.023
10/23/2017 19:46			0.092	0.114	0	0.091	0.059			-0.023
10/23/2017 19:47			0.091	0.114	0	0.091	0.059			-0.023
10/23/2017 19:48			0.092	0.114	0	0.091	0.059			-0.023
10/23/2017 19:49			0.092	0.114	0	0.091	0.06			-0.023
10/23/2017 19:50	12.8	93.1	0.092	0.114	0	0.09	0.06	40.75422;-	18	-0.023
10/23/2017 19:51			0.092	0.114	0	0.09	0.06			-0.024
10/23/2017 19:52			0.091	0.114	0	0.09	0.06			-0.023
10/23/2017 19:53			0.089	0.114	0	0.09	0.06			-0.023
10/23/2017 19:54			0.091	0.114	0	0.09	0.06			-0.023
10/23/2017 19:55	12.8	130.6	0.092	0.114	0	0.09	0.061	40.75425;-	13	-0.023
10/23/2017 19:56			0.092	0.114	0	0.09	0.061			-0.023
10/23/2017 19:57			0.089	0.114	0	0.09	0.061			-0.023
10/23/2017 19:58			0.09	0.114	0	0.09	0.061			-0.023
10/23/2017 19:59			0.092	0.114	0	0.09	0.061			-0.023
10/23/2017 20:00	12.8	130.6	0.092	0.114	0	0.09	0.062	40.75421;-	10	-0.023
10/23/2017 20:01			0.092	0.114	0	0.09	0.062			-0.024
10/23/2017 20:02			0.093	0.114	0	0.09	0.062			-0.023
10/23/2017 20:03			0.091	0.114	0	0.09	0.062			-0.023
10/23/2017 20:04			0.09	0.114	0	0.09	0.062			-0.023
10/23/2017 20:05	12.8	84	0.091	0.114	0	0.09	0.063	40.75423;-	11	-0.023

10/23/2017 20:06			0.09	0.114	0	0.09	0.063			-0.023
10/23/2017 20:07			0.089	0.114	0	0.09	0.063			-0.024
10/23/2017 20:08			0.089	0.114	0	0.09	0.063			-0.024
10/23/2017 20:09			0.068	0.114	0	0.089	0.063			-0.022
10/24/2017 12:49	12.9	100.2								
10/24/2017 12:49								40.753605799999995;-73.4872872		
10/24/2017 12:50	12.8	148.8								
10/24/2017 12:51			0	0	0	0	0			
10/24/2017 12:52			0	0	0	0	0			
10/24/2017 12:53			0	0	0	0	0			
10/24/2017 12:54			0	0	0	0	0			
10/24/2017 12:55	12.8	85	0	0	0	0	0			
10/24/2017 12:56			0	0	0	0	0			0.003
10/24/2017 12:57			0	0	0	0	0			0.005
10/24/2017 12:58			0	0	0	0	0			-0.002
10/24/2017 12:59			0	0	0	0	0			-0.009
10/24/2017 13:00	12.7	83	0	0	0	0	0	40.75418;-	12	-0.015
10/24/2017 13:01			0	0	0	0	0			-0.017
10/24/2017 13:02			0	0	0	0	0			-0.019
10/24/2017 13:03			0	0	0	0	0			-0.021
10/24/2017 13:04			0	0	0	0	0			-0.021
10/24/2017 13:05	12.7	83	0	0	0	0	0	40.75425;-	0	-0.022
10/24/2017 13:06			0	0	0	0	0			-0.022
10/24/2017 13:07			0	0	0	0	0			-0.022
10/24/2017 13:08			0	0	0	0	0			-0.023
10/24/2017 13:09			0	0	0	0	0			-0.023
10/24/2017 13:10	12.7	86	0	0	0	0	0	40.75426;-	-2	-0.026
10/24/2017 13:11			0	0	0	0	0			-0.025
10/24/2017 13:12			0	0	0	0	0			-0.025
10/24/2017 13:13			0	0	0	0	0			-0.025
10/24/2017 13:14			0	0	0	0	0			-0.023
10/24/2017 13:15	12.8	98.2	0	0	0	0	0	40.75422;-	10	-0.023
10/24/2017 13:16			0	0	0	0	0			-0.024
10/24/2017 13:17			0	0	0	0	0			-0.024
10/24/2017 13:18			0	0	0	0	0			-0.024
10/24/2017 13:19			0	0	0	0	0			-0.024
10/24/2017 13:20	12.8	83	0	0	0	0	0	40.75421;-	-5	-0.024
10/24/2017 13:21			0	0	0	0	0			-0.024
10/24/2017 13:22			0	0	0	0	0			-0.023
10/24/2017 13:23			0	0	0	0	0			-0.023
10/24/2017 13:24			0	0	0	0	0			-0.023
10/24/2017 13:25	12.9	86	0	0	0	0	0	40.75418;-	0	-0.025
10/24/2017 13:26			0	0	0	0	0			-0.024
10/24/2017 13:27			0	0	0	0	0			-0.024
10/24/2017 13:28			0	0	0	0	0			-0.024
10/24/2017 13:29			0	0	0	0	0			-0.024
10/24/2017 13:30	13.1	82	0	0	0	0	0	40.75417;-	5	-0.023
10/24/2017 13:31			0	0	0	0	0			-0.024
10/24/2017 13:32			0	0	0	0	0			-0.024
10/24/2017 13:33			0	0	0	0	0			-0.024
10/24/2017 13:34			0	0	0	0	0			-0.024
10/24/2017 13:35	13.2	83	0.002	0.003	0	0	0	40.75425;-	3	-0.025
10/24/2017 13:36			0.004	0.004	0	0	0			-0.025
10/24/2017 13:37			0.008	0.009	0	0	0			-0.024
10/24/2017 13:38			0.01	0.011	0	0	0			-0.026
10/24/2017 13:39			0.013	0.013	0	0.001	0			-0.026

10/24/2017 13:40	13.1	91.1	0.016	0.016	0	0.002	0	40.75417;-	13	-0.025
10/24/2017 13:41			0.018	0.019	0	0.003	0			-0.025
10/24/2017 13:42			0.02	0.023	0	0.004	0			-0.025
10/24/2017 13:43			0.023	0.023	0	0.005	0			-0.024
10/24/2017 13:44			0.027	0.027	0	0.007	0			-0.024
10/24/2017 13:45	13	85	0.028	0.03	0	0.009	0	40.75403;-	-4	-0.024
10/24/2017 13:46			0.031	0.032	0	0.011	0			-0.025
10/24/2017 13:47			0.033	0.034	0	0.013	0			-0.025
10/24/2017 13:48			0.034	0.034	0	0.015	0			-0.025
10/24/2017 13:49			0.037	0.038	0	0.017	0			-0.026
10/24/2017 13:50	12.8	81	0.037	0.039	0	0.019	0	40.75408;-	-1	-0.026
10/24/2017 13:51			0.04	0.041	0	0.022	0			-0.026
10/24/2017 13:52			0.041	0.041	0	0.024	0			-0.026
10/24/2017 13:53			0.041	0.041	0	0.026	0			-0.025
10/24/2017 13:54			0.044	0.044	0	0.028	0			-0.025
10/24/2017 13:55	12.8	86	0.044	0.044	0	0.03	0.001	40.75411;-	11	-0.025
10/24/2017 13:56			0.045	0.046	0	0.032	0.001			-0.024
10/24/2017 13:57			0.045	0.046	0	0.034	0.001			-0.025
10/24/2017 13:58			0.046	0.047	0	0.036	0.001			-0.024
10/24/2017 13:59			0.046	0.047	0	0.037	0.001			-0.024
10/24/2017 14:00	12.8	93.1	0.046	0.047	0	0.038	0.001	40.75415;-	-6	-0.024
10/24/2017 14:01			0.045	0.047	0	0.039	0.001			-0.024
10/24/2017 14:02			0.046	0.047	0	0.04	0.001			-0.024
10/24/2017 14:03			0.046	0.048	0	0.041	0.001			-0.024
10/24/2017 14:04			0.046	0.048	0	0.042	0.001			-0.024
10/24/2017 14:05	12.8	121.5	0.049	0.049	0	0.043	0.001	40.75417;-	-3	-0.024
10/24/2017 14:06			0.051	0.051	0	0.043	0.002			-0.025
10/24/2017 14:07			0.051	0.053	0	0.044	0.002			-0.025
10/24/2017 14:08			0.048	0.053	0	0.045	0.002			-0.025
10/24/2017 14:09			0.048	0.053	0	0.045	0.002			-0.024
10/24/2017 14:10	12.7	127.5	0.048	0.053	0	0.046	0.002	40.75417;-	20	-0.025
10/24/2017 14:11			0.048	0.053	0	0.046	0.002			-0.024
10/24/2017 14:12			0.048	0.053	0	0.046	0.002			-0.024
10/24/2017 14:13			0.047	0.053	0	0.046	0.002			-0.024
10/24/2017 14:14			0.048	0.053	0	0.046	0.002			-0.024
10/24/2017 14:15	12.7	84	0.048	0.053	0	0.047	0.002	40.75418;-	0	-0.024
10/24/2017 14:16			0.048	0.053	0	0.047	0.003			-0.024
10/24/2017 14:17			0.048	0.053	0	0.047	0.003			-0.024
10/24/2017 14:18			0.048	0.053	0	0.047	0.003			-0.025
10/24/2017 14:19			0.046	0.053	0	0.047	0.003			-0.024
10/24/2017 14:20	12.7	96.2	0.045	0.053	0	0.047	0.003	40.75416;-	2	-0.024
10/24/2017 14:21			0.046	0.053	0	0.047	0.003			-0.024
10/24/2017 14:22			0.046	0.053	0	0.047	0.003			-0.024
10/24/2017 14:23			0.046	0.053	0	0.046	0.003			-0.024
10/24/2017 14:24			0.044	0.053	0	0.046	0.003			-0.024
10/24/2017 14:25	12.7	82	0.041	0.053	0	0.046	0.003	40.75407;-	6	-0.024
10/24/2017 14:26			0.041	0.053	0	0.045	0.004			-0.023
10/24/2017 14:27			0.043	0.053	0	0.045	0.004			-0.023
10/24/2017 14:28			0.044	0.053	0	0.045	0.004			-0.023
10/24/2017 14:29			0.041	0.053	0	0.044	0.004			-0.024
10/24/2017 14:30	12.8	83	0.041	0.053	0	0.044	0.004	40.7542;-7	21	-0.025
10/24/2017 14:31			0.041	0.053	0	0.043	0.004			-0.025
10/24/2017 14:32			0.041	0.053	0	0.043	0.004			-0.026
10/24/2017 14:33			0.041	0.053	0	0.043	0.004			-0.024
10/24/2017 14:34			0.043	0.053	0	0.042	0.004			-0.024
10/24/2017 14:35	12.9	92.1	0.041	0.053	0	0.042	0.004	40.75418;-	20	-0.024

10/24/2017 14:36			0.039	0.053	0	0.042	0.004			-0.023
10/24/2017 14:37			0.039	0.053	0	0.041	0.004			-0.023
10/24/2017 14:38			0.04	0.053	0	0.041	0.005			-0.023
10/24/2017 14:39			0.041	0.053	0	0.041	0.005			-0.024
10/24/2017 14:40	13.1	81	0.041	0.053	0	0.04	0.005	40.75415;-	14	-0.023
10/24/2017 14:41			0.041	0.053	0	0.04	0.005			-0.023
10/24/2017 14:42			0.039	0.053	0	0.04	0.005			-0.023
10/24/2017 14:43			0.04	0.053	0	0.04	0.005			-0.023
10/24/2017 14:44			0.04	0.053	0	0.04	0.005			-0.023
10/24/2017 14:45	13.7	77.9	0.039	0.053	0	0.04	0.005	40.75419;-	12	-0.023
10/24/2017 14:46			0.038	0.053	0	0.039	0.005			-0.022
10/24/2017 14:47			0.038	0.053	0	0.039	0.005			-0.023
10/24/2017 14:48			0.039	0.053	0	0.039	0.005			-0.023
10/24/2017 14:49			0.032	0.053	0	0.039	0.005			-0.01
10/24/2017 14:50	13.5	81	0.034	0.053	0	0.038	0.005	40.75418;-	14	-0.016
10/24/2017 14:51			0.037	0.053	0	0.038	0.006			-0.019
10/24/2017 14:52			0.037	0.053	0	0.037	0.006			-0.021
10/24/2017 14:53			0.039	0.053	0	0.037	0.006			-0.022
10/24/2017 14:54			0.04	0.053	0	0.037	0.006			-0.023
10/24/2017 14:55	13.7	79	0.039	0.053	0	0.037	0.006	40.75423;-	6	-0.023
10/24/2017 14:56			0.04	0.053	0	0.037	0.006			-0.024
10/24/2017 14:57			0.04	0.053	0	0.037	0.006			-0.023
10/24/2017 14:58			0.039	0.053	0	0.037	0.006			-0.022
10/24/2017 14:59			0.04	0.053	0	0.037	0.006			-0.022
10/24/2017 15:00	14	82	0.04	0.053	0	0.037	0.006	40.75415;-	5	-0.024
10/24/2017 15:01			0.039	0.053	0	0.037	0.006			-0.025
10/24/2017 15:02			0.039	0.053	0	0.037	0.006			-0.024
10/24/2017 15:03			0.038	0.053	0	0.037	0.007			-0.025
10/24/2017 15:04			0.038	0.053	0	0.037	0.007			-0.024
10/24/2017 15:05	14.1	79	0.04	0.053	0	0.038	0.007	40.75414;-	16	-0.023
10/24/2017 15:06			0.039	0.053	0	0.038	0.007			-0.024
10/24/2017 15:07			0.041	0.053	0	0.038	0.007			-0.024
10/24/2017 15:08			0.04	0.053	0	0.039	0.007			-0.024
10/24/2017 15:09			0.042	0.053	0	0.039	0.007			-0.025
10/24/2017 15:10	13.9	80	0.043	0.053	0	0.039	0.007	40.75416;-	14	-0.024
10/24/2017 15:11			0.044	0.053	0	0.039	0.007			-0.024
10/24/2017 15:12			0.044	0.053	0	0.039	0.007			-0.025
10/24/2017 15:13			0.043	0.053	0	0.039	0.007			-0.025
10/24/2017 15:14			0.043	0.053	0	0.04	0.007			-0.024
10/24/2017 15:15	13.7	89.1	0.044	0.053	0	0.04	0.008	40.7542;-7	14	-0.024
10/24/2017 15:16			0.045	0.053	0	0.04	0.008			-0.023
10/24/2017 15:17			0.045	0.053	0	0.04	0.008			-0.023
10/24/2017 15:18			0.046	0.053	0	0.041	0.008			-0.023
10/24/2017 15:19			0.044	0.053	0	0.041	0.008			-0.023
10/24/2017 15:20	13.5	98.2	0.046	0.053	0	0.042	0.008	40.75419;-	15	-0.023
10/24/2017 15:21			0.046	0.053	0	0.042	0.008			-0.023
10/24/2017 15:22			0.047	0.053	0	0.042	0.008			-0.023
10/24/2017 15:23			0.045	0.053	0	0.043	0.008			-0.023
10/24/2017 15:24			0.046	0.053	0	0.043	0.008			-0.024
10/24/2017 15:25	13.3	90.1	0.048	0.053	0	0.043	0.008	40.75418;-	8	-0.024
10/24/2017 15:26			0.048	0.053	0	0.044	0.009			-0.024
10/24/2017 15:27			0.046	0.053	0	0.044	0.009			-0.023
10/24/2017 15:28			0.048	0.053	0	0.044	0.009			-0.023
10/24/2017 15:29			0.048	0.053	0	0.045	0.009			-0.023
10/24/2017 15:30	14.1	79	0.048	0.053	0	0.045	0.009	40.75421;-	7	-0.024
10/24/2017 15:31			0.048	0.053	0	0.045	0.009			-0.025

10/24/2017 15:32			0.048	0.053	0	0.046	0.009			-0.025
10/24/2017 15:33			0.048	0.053	0	0.046	0.009			-0.025
10/24/2017 15:34			0.048	0.053	0	0.046	0.009			-0.024
10/24/2017 15:35	14	75.9	0.048	0.053	0	0.046	0.009	40.75417;-	13	-0.024
10/24/2017 15:36			0.05	0.053	0	0.046	0.01			-0.023
10/24/2017 15:37			0.048	0.053	0	0.047	0.01			-0.023
10/24/2017 15:38			0.05	0.053	0	0.047	0.01			-0.024
10/24/2017 15:39			0.048	0.053	0	0.047	0.01			-0.024
10/24/2017 15:40	14.4	88.1	0.05	0.053	0	0.047	0.01	40.75417;-	13	-0.025
10/24/2017 15:41			0.05	0.053	0	0.047	0.01			-0.024
10/24/2017 15:42			0.051	0.053	0	0.048	0.01			-0.024
10/24/2017 15:43			0.051	0.053	0	0.048	0.01			-0.024
10/24/2017 15:44			0.052	0.053	0	0.048	0.01			-0.024
10/24/2017 15:45	14	76.9	0.054	0.055	0	0.048	0.01	40.75421;-	14	-0.025
10/24/2017 15:46			0.053	0.056	0	0.049	0.011			-0.025
10/24/2017 15:47			0.055	0.056	0	0.049	0.011			-0.024
10/24/2017 15:48			0.054	0.056	0	0.05	0.011			-0.024
10/24/2017 15:49			0.056	0.056	0	0.05	0.011			-0.02
10/24/2017 15:50	14	111.3	0.055	0.058	0	0.05	0.011	40.75421;-	12	-0.024
10/24/2017 15:51			0.058	0.058	0	0.051	0.011			-0.023
10/24/2017 15:52			0.06	0.06	0	0.052	0.011			-0.023
10/24/2017 15:53			0.06	0.06	0	0.052	0.011			-0.024
10/24/2017 15:54			0.059	0.06	0	0.053	0.012			-0.024
10/24/2017 15:55	13.9	101.2	0.061	0.062	0	0.054	0.012	40.75425;-	12	-0.024
10/24/2017 15:56			0.06	0.062	0	0.054	0.012			-0.024
10/24/2017 15:57			0.062	0.062	0	0.055	0.012			-0.024
10/24/2017 15:58			0.063	0.064	0	0.056	0.012			-0.024
10/24/2017 15:59			0.062	0.064	0	0.056	0.012			-0.024
10/24/2017 16:00	14.1	82	0.055	0.064	0	0.057	0.012	40.75419;-	12	-0.018
10/24/2017 16:01			0.058	0.064	0	0.057	0.012			-0.016
10/24/2017 16:02			0.06	0.064	0	0.057	0.013			-0.019
10/24/2017 16:03			0.06	0.064	0	0.058	0.013			-0.021
10/24/2017 16:04			0.062	0.064	0	0.058	0.013			-0.021
10/24/2017 16:05	13.3	81	0.064	0.064	0	0.059	0.013	40.75421;-	14	-0.023
10/24/2017 16:06			0.064	0.065	0	0.059	0.013			-0.023
10/24/2017 16:07			0.065	0.067	0	0.06	0.013			-0.023
10/24/2017 16:08			0.067	0.067	0	0.06	0.013			-0.024
10/24/2017 16:09			0.067	0.069	0	0.06	0.013			-0.023
10/24/2017 16:10	13.1	86	0.068	0.069	0	0.061	0.014	40.75422;-	13	-0.023
10/24/2017 16:11			0.068	0.069	0	0.061	0.014			-0.023
10/24/2017 16:12			0.069	0.069	0	0.062	0.014			-0.023
10/24/2017 16:13			0.069	0.071	0	0.062	0.014			-0.024
10/24/2017 16:14			0.069	0.071	0	0.063	0.014			-0.024
10/24/2017 16:15	13.3	89.1	0.069	0.071	0	0.063	0.014	40.75422;-	15	-0.024
10/24/2017 16:16			0.069	0.071	0	0.064	0.014			-0.022
10/24/2017 16:17			0.069	0.071	0	0.065	0.015			-0.023
10/24/2017 16:18			0.069	0.071	0	0.066	0.015			-0.023
10/24/2017 16:19			0.069	0.071	0	0.066	0.015			-0.023
10/24/2017 16:20	14.2	75.9	0.069	0.071	0	0.067	0.015	40.75417;-	19	-0.023
10/24/2017 16:21			0.069	0.071	0	0.067	0.015			-0.023
10/24/2017 16:22			0.069	0.071	0	0.068	0.015			-0.023
10/24/2017 16:23			0.071	0.071	0	0.068	0.015			-0.023
10/24/2017 16:24			0.07	0.071	0	0.068	0.016			-0.024
10/24/2017 16:25	13.6	89.1	0.07	0.071	0	0.068	0.016	40.75415;-	35	-0.024
10/24/2017 16:26			0.069	0.071	0	0.069	0.016			-0.024
10/24/2017 16:27			0.071	0.071	0	0.069	0.016			-0.024

10/24/2017 16:28			0.071	0.074	0	0.069	0.016			-0.024
10/24/2017 16:29			0.071	0.074	0	0.069	0.016			-0.025
10/24/2017 16:30	13.7	93.1	0.073	0.074	0	0.069	0.016	40.75416;-	27	-0.025
10/24/2017 16:31			0.073	0.075	0	0.069	0.017			-0.024
10/24/2017 16:32			0.074	0.075	0	0.07	0.017			-0.023
10/24/2017 16:33			0.071	0.075	0	0.07	0.017			-0.023
10/24/2017 16:34			0.074	0.075	0	0.07	0.017			-0.023
10/24/2017 16:35	13.4	88.1	0.074	0.076	0	0.07	0.017	40.75417;-	24	-0.024
10/24/2017 16:36			0.075	0.076	0	0.071	0.017			-0.024
10/24/2017 16:37			0.074	0.076	0	0.071	0.018			-0.023
10/24/2017 16:38			0.074	0.076	0	0.071	0.018			-0.023
10/24/2017 16:39			0.074	0.076	0	0.072	0.018			-0.023
10/24/2017 16:40	13.2	82	0.075	0.076	0	0.072	0.018	40.75416;-	22	-0.024
10/24/2017 16:41			0.076	0.077	0	0.072	0.018			-0.023
10/24/2017 16:42			0.076	0.078	0	0.073	0.018			-0.024
10/24/2017 16:43			0.077	0.078	0	0.073	0.018			-0.024
10/24/2017 16:44			0.078	0.078	0	0.073	0.019			-0.024
10/24/2017 16:45	13.1	85	0.076	0.078	0	0.074	0.019	40.75416;-	9	-0.023
10/24/2017 16:46			0.077	0.078	0	0.074	0.019			-0.023
10/24/2017 16:47			0.078	0.078	0	0.074	0.019			-0.025
10/24/2017 16:48			0.078	0.08	0	0.074	0.019			-0.024
10/24/2017 16:49			0.078	0.08	0	0.075	0.019			-0.025
10/24/2017 16:50	13.1	87	0.078	0.08	0	0.075	0.02	40.75414;-	23	-0.024
10/24/2017 16:51			0.077	0.08	0	0.075	0.02			-0.025
10/24/2017 16:52			0.077	0.08	0	0.075	0.02			-0.024
10/24/2017 16:53			0.078	0.08	0	0.076	0.02			-0.022
10/24/2017 16:54			0.078	0.08	0	0.076	0.02			-0.021
10/24/2017 16:55	13	83	0.078	0.08	0	0.076	0.02	40.75417;-	28	-0.016
10/24/2017 16:56			0.076	0.08	0	0.076	0.021			-0.02
10/24/2017 16:57			0.078	0.08	0	0.076	0.021			-0.021
10/24/2017 16:58			0.078	0.08	0	0.076	0.021			-0.023
10/24/2017 16:59			0.079	0.081	0	0.076	0.021			-0.025
10/24/2017 17:00	12.9	96.2	0.078	0.081	0	0.077	0.021	40.75416;-	21	-0.024
10/24/2017 17:01			0.078	0.081	0	0.077	0.021			-0.023
10/24/2017 17:02			0.078	0.081	0	0.077	0.022			-0.023
10/24/2017 17:03			0.078	0.081	0	0.077	0.022			-0.022
10/24/2017 17:04			0.079	0.081	0	0.077	0.022			-0.023
10/24/2017 17:05	12.9	90.1	0.079	0.081	0	0.077	0.022	40.75416;-	23	-0.024
10/24/2017 17:06			0.078	0.081	0	0.077	0.022			-0.021
10/24/2017 17:07			0.078	0.081	0	0.077	0.022			-0.023
10/24/2017 17:08			0.08	0.081	0	0.077	0.022			-0.024
10/24/2017 17:09			0.08	0.081	0	0.077	0.023			-0.023
10/24/2017 17:10	12.9	84	0.076	0.081	0	0.077	0.023	40.75402;-	41	-0.021
10/24/2017 17:11			0.078	0.081	0	0.077	0.023			-0.022
10/24/2017 17:12			0.078	0.081	0	0.077	0.023			-0.022
10/24/2017 17:13			0.079	0.081	0	0.077	0.023			-0.023
10/24/2017 17:14			0.077	0.081	0	0.077	0.023			-0.023
10/24/2017 17:15	12.9	101.2	0.076	0.081	0	0.077	0.024	40.75421;-	18	-0.023
10/24/2017 17:16			0.076	0.081	0	0.077	0.024			-0.024
10/24/2017 17:17			0.077	0.081	0	0.077	0.024			-0.022
10/24/2017 17:18			0.076	0.081	0	0.077	0.024			-0.021
10/24/2017 17:19			0.076	0.081	0	0.077	0.024			-0.02
10/24/2017 17:20	13	88.1	0.075	0.081	0	0.077	0.024	40.75421;-	2	-0.019
10/24/2017 17:21			0.076	0.081	0	0.077	0.025			-0.022
10/24/2017 17:22			0.076	0.081	0	0.076	0.025			-0.021
10/24/2017 17:23			0.074	0.081	0	0.076	0.025			-0.021

10/24/2017 17:24			0.074	0.081	0	0.076	0.025			-0.022
10/24/2017 17:25	12.9	91.1	0.076	0.081	0	0.076	0.025	40.7542;-7	11	-0.022
10/24/2017 17:26			0.075	0.081	0	0.075	0.025			-0.023
10/24/2017 17:27			0.075	0.081	0	0.075	0.025			-0.022
10/24/2017 17:28			0.077	0.081	0	0.075	0.026			-0.022
10/24/2017 17:29			0.076	0.081	0	0.075	0.026			-0.024
10/24/2017 17:30	12.9	110.3	0.078	0.081	0	0.075	0.026	40.75419;-	12	-0.023
10/24/2017 17:31			0.078	0.081	0	0.075	0.026			-0.023
10/24/2017 17:32			0.079	0.081	0	0.075	0.026			-0.023
10/24/2017 17:33			0.077	0.081	0	0.075	0.026			-0.023
10/24/2017 17:34			0.078	0.081	0	0.075	0.027			-0.023
10/24/2017 17:35	12.8	107.3	0.079	0.081	0	0.075	0.027	40.75428;-	-29	-0.024
10/24/2017 17:36			0.078	0.081	0	0.075	0.027			-0.024
10/24/2017 17:37			0.078	0.081	0	0.076	0.027			-0.024
10/24/2017 17:38			0.078	0.081	0	0.076	0.027			-0.025
10/24/2017 17:39			0.078	0.081	0	0.076	0.027			-0.024
10/24/2017 17:40	12.8	83	0.078	0.081	0	0.076	0.028	40.75422;-	0	-0.024
10/24/2017 17:41			0.08	0.081	0	0.076	0.028			-0.024
10/24/2017 17:42			0.078	0.081	0	0.077	0.028			-0.024
10/24/2017 17:43			0.078	0.081	0	0.077	0.028			-0.023
10/24/2017 17:44			0.081	0.082	0	0.077	0.028			-0.023
10/24/2017 17:45	12.7	84	0.081	0.082	0	0.077	0.028	40.75419;-	17	-0.024
10/24/2017 17:46			0.08	0.082	0	0.078	0.029			-0.024
10/24/2017 17:47			0.081	0.082	0	0.078	0.029			-0.023
10/24/2017 17:48			0.081	0.082	0	0.078	0.029			-0.023
10/24/2017 17:49			0.079	0.082	0	0.078	0.029			-0.022
10/24/2017 17:50	12.7	94.1	0.083	0.083	0	0.078	0.029	40.75418;-	15	-0.022
10/24/2017 17:51			0.082	0.083	0	0.078	0.029			-0.023
10/24/2017 17:52			0.083	0.083	0	0.078	0.03			-0.02
10/24/2017 17:53			0.082	0.083	0	0.079	0.03			-0.021
10/24/2017 17:54			0.082	0.083	0	0.079	0.03			-0.023
10/24/2017 17:55	12.7	100.2	0.081	0.083	0	0.079	0.03	40.75419;-	18	-0.023
10/24/2017 17:56			0.083	0.083	0	0.079	0.03			-0.024
10/24/2017 17:57			0.082	0.084	0	0.08	0.03			-0.024
10/24/2017 17:58			0.083	0.084	0	0.08	0.031			-0.024
10/24/2017 17:59			0.083	0.084	0	0.08	0.031			-0.025
10/24/2017 18:00	12.7	85	0.084	0.085	0	0.08	0.031	40.75414;-	16	-0.025
10/24/2017 18:01			0.084	0.085	0	0.081	0.031			-0.025
10/24/2017 18:02			0.081	0.085	0	0.081	0.031			-0.024
10/24/2017 18:03			0.082	0.085	0	0.081	0.031			-0.023
10/24/2017 18:04			0.083	0.085	0	0.081	0.032			-0.024
10/24/2017 18:05	12.7	88.1	0.083	0.085	0	0.081	0.032	40.75421;-	7	-0.024
10/24/2017 18:06			0.081	0.085	0	0.082	0.032			-0.025
10/24/2017 18:07			0.081	0.085	0	0.082	0.032			-0.023
10/24/2017 18:08			0.081	0.085	0	0.082	0.032			-0.024
10/24/2017 18:09			0.081	0.085	0	0.081	0.032			-0.024
10/24/2017 18:10	12.7	89.1	0.081	0.085	0	0.081	0.033	40.75418;-	10	-0.024
10/24/2017 18:11			0.081	0.085	0	0.081	0.033			-0.024
10/24/2017 18:12			0.081	0.085	0	0.081	0.033			-0.024
10/24/2017 18:13			0.076	0.085	0	0.081	0.033			-0.023
10/24/2017 18:14			0.077	0.085	0	0.081	0.033			-0.022
10/24/2017 18:15	12.7	83	0.078	0.085	0	0.08	0.033	40.75418;-	7	-0.023
10/24/2017 18:16			0.075	0.085	0	0.08	0.034			-0.022
10/24/2017 18:17			0.075	0.085	0	0.079	0.034			-0.021
10/24/2017 18:18			0.074	0.085	0	0.079	0.034			-0.021
10/24/2017 18:19			0.076	0.085	0	0.078	0.034			-0.02

10/24/2017 18:20	12.7	91.1	0.077	0.085	0	0.078	0.034	40.75422;-	12	-0.021
10/24/2017 18:21			0.077	0.085	0	0.077	0.034			-0.022
10/24/2017 18:22			0.076	0.085	0	0.077	0.035			-0.021
10/24/2017 18:23			0.076	0.085	0	0.077	0.035			-0.02
10/24/2017 18:24			0.076	0.085	0	0.076	0.035			-0.021
10/24/2017 18:25	12.7	89.1	0.075	0.085	0	0.076	0.035	40.75421;-	11	-0.022
10/24/2017 18:26			0.077	0.085	0	0.076	0.035			-0.023
10/24/2017 18:27			0.076	0.085	0	0.076	0.035			-0.023
10/24/2017 18:28			0.076	0.085	0	0.075	0.035			-0.022
10/24/2017 18:29			0.076	0.085	0	0.075	0.036			-0.024
10/24/2017 18:30	12.7	92.1	0.074	0.085	0	0.075	0.036	40.75422;-	16	-0.022
10/24/2017 18:31			0.074	0.085	0	0.075	0.036			-0.023
10/24/2017 18:32			0.075	0.085	0	0.075	0.036			-0.023
10/24/2017 18:33			0.074	0.085	0	0.075	0.036			-0.023
10/24/2017 18:34			0.071	0.085	0	0.075	0.036			-0.023
10/24/2017 18:35	12.7	89.1	0.071	0.085	0	0.075	0.037	40.7542;-7	13	-0.022
10/24/2017 18:36			0.073	0.085	0	0.074	0.037			-0.023
10/24/2017 18:37			0.073	0.085	0	0.074	0.037			-0.022
10/24/2017 18:38			0.072	0.085	0	0.074	0.037			-0.023
10/24/2017 18:39			0.073	0.085	0	0.073	0.037			-0.022
10/24/2017 18:40	12.8	82	0.072	0.085	0	0.073	0.037	40.75418;-	28	-0.023
10/24/2017 18:41			0.071	0.085	0	0.073	0.037			-0.022
10/24/2017 18:42			0.071	0.085	0	0.073	0.038			-0.022
10/24/2017 18:43			0.071	0.085	0	0.072	0.038			-0.023
10/24/2017 18:44			0.071	0.085	0	0.072	0.038			-0.023
10/24/2017 18:45	12.7	95.1	0.071	0.085	0	0.072	0.038	40.75425;-	20	-0.021
10/24/2017 18:46			0.069	0.085	0	0.072	0.038			-0.02
10/24/2017 18:47			0.071	0.085	0	0.071	0.038			-0.021
10/24/2017 18:48			0.071	0.085	0	0.071	0.039			-0.023
10/24/2017 18:49			0.074	0.085	0	0.071	0.039			-0.023
10/24/2017 18:50	12.7	82	0.071	0.085	0	0.071	0.039	40.7542;-7	18	-0.024
10/24/2017 18:51			0.071	0.085	0	0.071	0.039			-0.024
10/24/2017 18:52			0.072	0.085	0	0.071	0.039			-0.023
10/24/2017 18:53			0.071	0.085	0	0.071	0.039			-0.023
10/24/2017 18:54			0.073	0.085	0	0.071	0.039			-0.022
10/24/2017 18:55	12.7	127.5	0.071	0.085	0	0.071	0.04	40.75423;-	12	-0.022
10/24/2017 18:56			0.071	0.085	0	0.071	0.04			-0.022
10/24/2017 18:57			0.071	0.085	0	0.071	0.04			-0.022
10/24/2017 18:58			0.073	0.085	0	0.071	0.04			-0.023
10/24/2017 18:59			0.073	0.085	0	0.071	0.04			-0.023
10/24/2017 19:00	12.7	92.1	0.074	0.085	0	0.071	0.04	40.75421;-	11	-0.024
10/24/2017 19:01			0.074	0.085	0	0.071	0.04			-0.025
10/24/2017 19:02			0.073	0.085	0	0.071	0.041			-0.023
10/24/2017 19:03			0.074	0.085	0	0.071	0.041			-0.023
10/24/2017 19:04			0.074	0.085	0	0.071	0.041			-0.023
10/24/2017 19:05	12.7	135.6	0.074	0.085	0	0.072	0.041			-0.024
10/24/2017 19:05								40.75426;-	18	
10/24/2017 19:06			0.074	0.085	0	0.072	0.041			-0.024
10/24/2017 19:07			0.074	0.085	0	0.072	0.041			-0.024
10/24/2017 19:08			0.075	0.085	0	0.072	0.042			-0.024
10/24/2017 19:09			0.072	0.085	0	0.072	0.042			-0.025
10/24/2017 19:10	12.7	82	0.072	0.085	0	0.072	0.042	40.75422;-	20	-0.024
10/24/2017 19:11			0.074	0.085	0	0.072	0.042			-0.024
10/24/2017 19:12			0.073	0.085	0	0.072	0.042			-0.024
10/24/2017 19:13			0.072	0.085	0	0.072	0.042			-0.024
10/24/2017 19:14			0.072	0.085	0	0.072	0.042			-0.025

10/24/2017 19:15	12.7	94.1	0.073	0.085	0	0.072	0.043	40.75426;-	11	-0.025
10/24/2017 19:16			0.074	0.085	0	0.072	0.043			-0.025
10/24/2017 19:17			0.074	0.085	0	0.072	0.043			-0.026
10/24/2017 19:18			0.071	0.085	0	0.072	0.043			-0.027
10/24/2017 19:19			0.071	0.085	0	0.072	0.043			-0.028
10/24/2017 19:20	12.7	83	0.069	0.085	0	0.072	0.043	40.75426;-	-3	-0.028
10/24/2017 19:21			0.071	0.085	0	0.072	0.043			-0.029
10/24/2017 19:22			0.074	0.085	0	0.071	0.044			-0.029
10/24/2017 19:23			0.072	0.085	0	0.071	0.044			-0.029
10/24/2017 19:24			0.071	0.085	0	0.071	0.044			-0.03
10/24/2017 19:25	12.6	90.1	0.071	0.085	0	0.071	0.044	40.75426;-	8	-0.029
10/24/2017 19:26			0.071	0.085	0	0.071	0.044			-0.029
10/24/2017 19:27			0.07	0.085	0	0.071	0.044			-0.028
10/24/2017 19:28			0.069	0.085	0	0.07	0.044			-0.027
10/24/2017 19:29			0.069	0.085	0	0.07	0.045			-0.028
10/24/2017 19:30	12.6	93.1	0.069	0.085	0	0.07	0.045	40.75423;-	14	-0.028
10/24/2017 19:31			0.069	0.085	0	0.07	0.045			-0.029
10/24/2017 19:32			0.07	0.085	0	0.069	0.045			-0.029
10/24/2017 19:33			0.07	0.085	0	0.069	0.045			-0.029
10/24/2017 19:34			0.071	0.085	0	0.069	0.045			-0.028
10/24/2017 19:35	12.7	89.1	0.071	0.085	0	0.069	0.045	40.75426;-	6	-0.028
10/24/2017 19:36			0.069	0.085	0	0.069	0.046			-0.028
10/24/2017 19:37			0.07	0.085	0	0.069	0.046			-0.027
10/24/2017 19:38			0.069	0.085	0	0.069	0.046			-0.026
10/24/2017 19:39			0.07	0.085	0	0.069	0.046			-0.027
10/24/2017 19:40	12.6	89.1	0.068	0.085	0	0.069	0.046	40.7542;-7	0	-0.027
10/24/2017 19:41			0.069	0.085	0	0.068	0.046			-0.027
10/24/2017 19:42			0.069	0.085	0	0.068	0.046			-0.028
10/24/2017 19:43			0.069	0.085	0	0.068	0.047			-0.028
10/24/2017 19:44			0.069	0.085	0	0.068	0.047			-0.028
10/24/2017 19:45	12.6	83	0.069	0.085	0	0.068	0.047	40.75423;-	2	-0.029
10/24/2017 19:46			0.071	0.085	0	0.069	0.047			-0.029
10/24/2017 19:47			0.07	0.085	0	0.069	0.047			-0.028
10/24/2017 19:48			0.069	0.085	0	0.069	0.047			-0.028
10/24/2017 19:49			0.069	0.085	0	0.069	0.048			-0.027
10/24/2017 19:50	12.6	95.1	0.069	0.085	0	0.068	0.048	40.75418;-	12	-0.028
10/24/2017 19:51			0.069	0.085	0	0.068	0.048			-0.027
10/24/2017 19:52			0.069	0.085	0	0.068	0.048			-0.027
10/24/2017 19:53			0.07	0.085	0	0.068	0.048			-0.028
10/24/2017 19:54			0.069	0.085	0	0.068	0.048			-0.028
10/24/2017 19:55	12.6	83	0.071	0.085	0	0.068	0.048	40.75419;-	19	-0.027
10/24/2017 19:56			0.069	0.085	0	0.068	0.049			-0.028
10/24/2017 19:57			0.071	0.085	0	0.068	0.049			-0.028
10/24/2017 19:58			0.071	0.085	0	0.069	0.049			-0.029
10/24/2017 19:59			0.07	0.085	0	0.069	0.049			-0.029
10/24/2017 20:00	12.6	93.1	0.058	0.085	0	0.069	0.049	40.75423;-	16	-0.027
10/24/2017 20:01			0.062	0.085	0	0.068	0.049			-0.019
10/24/2017 20:02			0.064	0.085	0	0.068	0.049			-0.023
10/24/2017 20:03			0.064	0.085	0	0.067	0.049			-0.025
10/24/2017 20:04			0.067	0.085	0	0.067	0.05			-0.027
10/24/2017 20:05	12.6	84	0.066	0.085	0	0.067	0.05	40.75423;-	21	-0.028
10/24/2017 20:06			0.066	0.085	0	0.067	0.05			-0.029
10/24/2017 20:07			0.066	0.085	0	0.067	0.05			-0.029
10/24/2017 20:08			0.067	0.085	0	0.066	0.05			-0.029
10/24/2017 20:09			0.064	0.085	0	0.066	0.05			-0.028
10/24/2017 20:10	12.6	88.1	0.067	0.085	0	0.066	0.05	40.75419;-	35	-0.028

10/24/2017 20:11			0.067	0.085	0	0.066	0.051			-0.028
10/24/2017 20:12			0.067	0.085	0	0.065	0.051			-0.028
10/24/2017 20:13			0.067	0.085	0	0.065	0.051			-0.028
10/24/2017 20:14			0.067	0.085	0	0.065	0.051			-0.029
10/24/2017 20:15	12.6	87	0.067	0.085	0	0.065	0.051	40.75418;-	4	-0.03
10/24/2017 20:16			0.066	0.085	0	0.065	0.051			-0.028
10/24/2017 20:17			0.065	0.085	0	0.065	0.051			-0.029
10/24/2017 20:18			0.067	0.085	0	0.065	0.052			-0.029
10/24/2017 20:19			0.064	0.085	0	0.065	0.052			-0.03
10/24/2017 20:20	12.6	84	0.065	0.085	0	0.065	0.052	40.75423;-	12	-0.03
10/24/2017 20:21			0.066	0.085	0	0.065	0.052			-0.029
10/24/2017 20:22			0.065	0.085	0	0.065	0.052			-0.029
10/24/2017 20:23			0.067	0.085	0	0.065	0.052			-0.029
10/24/2017 20:24			0.068	0.085	0	0.065	0.052			-0.029
10/24/2017 20:25	12.7	82	0.067	0.085	0	0.065	0.052	40.75417;-	-1	-0.029
10/24/2017 20:26			0.068	0.085	0	0.065	0.053			-0.029
10/24/2017 20:27			0.067	0.085	0	0.066	0.053			-0.029
10/24/2017 20:28			0.067	0.085	0	0.066	0.053			-0.029
10/24/2017 20:29			0.067	0.085	0	0.065	0.053			-0.028
10/24/2017 20:30	12.7	95.1	0.068	0.085	0	0.065	0.053	40.75421;-	12	-0.028
10/24/2017 20:31			0.068	0.085	0	0.066	0.053			-0.028
10/24/2017 20:32			0.067	0.085	0	0.066	0.053			-0.028
10/24/2017 20:33			0.067	0.085	0	0.066	0.054			-0.027
10/24/2017 20:34			0.066	0.085	0	0.066	0.054			-0.027
10/24/2017 20:35	12.7	91.1	0.067	0.085	0	0.066	0.054	40.7542;-7	24	-0.027
10/24/2017 20:36			0.066	0.085	0	0.066	0.054			-0.026
10/24/2017 20:37			0.067	0.085	0	0.066	0.054			-0.026
10/24/2017 20:38			0.064	0.085	0	0.066	0.054			-0.026
10/24/2017 20:39			0.067	0.085	0	0.066	0.054			-0.026
10/24/2017 20:40	12.7	83	0.068	0.085	0	0.066	0.055	40.75439;-	64	-0.025
10/24/2017 20:41			0.067	0.085	0	0.066	0.055			-0.026
10/24/2017 20:42			0.067	0.085	0	0.066	0.055			-0.026
10/24/2017 20:43			0.067	0.085	0	0.066	0.055			-0.025
10/25/2017 13:48			0	0	0	0	0			
10/25/2017 13:49			0	0	0	0	0			
10/25/2017 13:50	12.8	93.1	0	0	0	0	0	40.75406;-	-20	-0.026
10/25/2017 13:51			0	0	0	0	0			-0.028
10/25/2017 13:52			0	0	0	0	0			-0.031
10/25/2017 13:53			0	0	0	0	0			-0.032
10/25/2017 13:54			0	0	0	0	0			-0.033
10/25/2017 13:55	12.7	80	0	0	0	0	0	40.75406;-	-12	-0.033
10/25/2017 13:56			0	0	0	0	0			-0.034
10/25/2017 13:57			0	0	0	0	0			-0.034
10/25/2017 13:58			0	0	0	0	0			-0.035
10/25/2017 13:59			0	0.002	0	0	0			-0.035
10/25/2017 14:00	12.7	98.2	0.004	0.005	0	0	0	40.75415;-	-11	-0.035
10/25/2017 14:01			0.01	0.01	0	0	0			-0.035
10/25/2017 14:02			0.017	0.017	0	0.001	0			-0.036
10/25/2017 14:03			0.023	0.023	0	0.002	0			-0.035
10/25/2017 14:04			0.025	0.026	0	0.004	0			-0.035
10/25/2017 14:05	12.7	86	0.032	0.032	0	0.005	0	40.75417;-	7	-0.036
10/25/2017 14:06			0.037	0.037	0	0.008	0			-0.036
10/25/2017 14:07			0.039	0.039	0	0.01	0			-0.036
10/25/2017 14:08			0.043	0.043	0	0.013	0			-0.036
10/25/2017 14:09			0.047	0.048	0	0.016	0			-0.036
10/25/2017 14:10	12.8	85	0.052	0.053	0	0.019	0	40.75418;-	1	-0.036

10/25/2017 14:11			0.055	0.056	0	0.023	0			-0.036
10/25/2017 14:12			0.06	0.06	0	0.027	0			-0.036
10/25/2017 14:13			0.064	0.064	0	0.031	0			-0.036
10/25/2017 14:14			0.069	0.069	0	0.035	0.001			-0.036
10/25/2017 14:15	12.7	130.6	0.071	0.071	0	0.039	0.001			-0.036
10/25/2017 14:15								40.7542;-7	12	
10/25/2017 14:16			0.074	0.074	0	0.044	0.001			-0.036
10/25/2017 14:17			0.076	0.076	0	0.048	0.001			-0.035
10/25/2017 14:18			0.077	0.079	0	0.052	0.001			-0.035
10/25/2017 14:19			0.08	0.081	0	0.056	0.001			-0.036
10/25/2017 14:20	12.9	123.5	0.081	0.082	0	0.059	0.002	40.75425;-	7	-0.036
10/25/2017 14:21			0.083	0.084	0	0.062	0.002			-0.035
10/25/2017 14:22			0.084	0.085	0	0.065	0.002			-0.035
10/25/2017 14:23			0.087	0.088	0	0.068	0.002			-0.036
10/25/2017 14:24			0.089	0.09	0	0.071	0.002			-0.036
10/25/2017 14:25	12.8	82	0.09	0.09	0	0.074	0.002	40.75419;-	15	-0.035
10/25/2017 14:26			0.092	0.092	0	0.076	0.003			-0.035
10/25/2017 14:27			0.094	0.095	0	0.078	0.003			-0.036
10/25/2017 14:28			0.095	0.096	0	0.081	0.003			-0.036
10/25/2017 14:29			0.097	0.097	0	0.083	0.003			-0.036
10/25/2017 14:30	12.7	89.1	0.097	0.098	0	0.085	0.003	40.75418;-	19	-0.035
10/25/2017 14:31			0.104	0.109	0	0.086	0.004			-0.036
10/25/2017 14:32			0.104	0.109	0	0.088	0.004			-0.035
10/25/2017 14:33			0.106	0.109	0	0.09	0.004			-0.036
10/25/2017 14:34			0.107	0.109	0	0.092	0.004			-0.035
10/25/2017 14:35	12.7	83	0.106	0.109	0	0.094	0.004	40.75421;-	2	-0.035
10/25/2017 14:36			0.109	0.109	0	0.095	0.005			-0.035
10/25/2017 14:37			0.109	0.11	0	0.097	0.005			-0.035
10/25/2017 14:38			0.109	0.111	0	0.099	0.005			-0.035
10/25/2017 14:39			0.109	0.111	0	0.1	0.005			-0.035
10/25/2017 14:40	12.7	93.1	0.109	0.111	0	0.102	0.006	40.75418;-	17	-0.035
10/25/2017 14:41			0.109	0.111	0	0.103	0.006			-0.035
10/25/2017 14:42			0.111	0.111	0	0.104	0.006			-0.035
10/25/2017 14:43			0.11	0.111	0	0.105	0.006			-0.035
10/25/2017 14:44			0.111	0.112	0	0.106	0.007			-0.035
10/25/2017 14:45	12.7	85	0.111	0.112	0	0.107	0.007	40.75425;-	4	-0.035
10/25/2017 14:46			0.11	0.112	0	0.108	0.007			-0.035
10/25/2017 14:47			0.111	0.112	0	0.108	0.007			-0.036
10/25/2017 14:48			0.11	0.112	0	0.108	0.007			-0.036
10/25/2017 14:49			0.111	0.112	0	0.109	0.008			-0.035
10/25/2017 14:50	12.7	83	0.111	0.112	0	0.109	0.008	40.75419;-	11	-0.035
10/25/2017 14:51			0.11	0.112	0	0.109	0.008			-0.035
10/25/2017 14:52			0.111	0.112	0	0.109	0.008			-0.035
10/25/2017 14:53			0.11	0.112	0	0.109	0.009			-0.035
10/25/2017 14:54			0.108	0.112	0	0.109	0.009			-0.035
10/25/2017 14:55	12.6	83	0.11	0.112	0	0.109	0.009	40.75422;-	12	-0.035
10/25/2017 14:56			0.106	0.112	0	0.109	0.009			-0.035
10/25/2017 14:57			0.106	0.112	0	0.109	0.009			-0.035
10/25/2017 14:58			0.106	0.112	0	0.109	0.01			-0.035
10/25/2017 14:59			0.106	0.112	0	0.108	0.01			-0.035
10/25/2017 15:00	12.7	87	0.105	0.112	0	0.108	0.01	40.75421;-	9	-0.035
10/25/2017 15:01			0.104	0.112	0	0.108	0.01			-0.035
10/25/2017 15:02			0.105	0.112	0	0.107	0.011			-0.035
10/25/2017 15:03			0.104	0.112	0	0.107	0.011			-0.035
10/25/2017 15:04			0.103	0.112	0	0.107	0.011			-0.036
10/25/2017 15:05	12.8	83	0.106	0.112	0	0.106	0.011	40.75418;-	12	-0.036

10/25/2017 15:06			0.105	0.112	0	0.106	0.011			-0.036
10/25/2017 15:07			0.104	0.112	0	0.105	0.012			-0.036
10/25/2017 15:08			0.104	0.112	0	0.105	0.012			-0.036
10/25/2017 15:09			0.104	0.112	0	0.105	0.012			-0.036
10/25/2017 15:10	12.8	92.1	0.104	0.112	0	0.104	0.012	40.75422;-	-7	-0.036
10/25/2017 15:11			0.104	0.112	0	0.104	0.013			-0.036
10/25/2017 15:12			0.104	0.112	0	0.104	0.013			-0.036
10/25/2017 15:13			0.104	0.112	0	0.104	0.013			-0.036
10/25/2017 15:14			0.102	0.112	0	0.103	0.013			-0.035
10/25/2017 15:15	13	85	0.103	0.112	0	0.103	0.013	40.75417;-	2	-0.035
10/25/2017 15:16			0.102	0.112	0	0.103	0.014			-0.035
10/25/2017 15:17			0.102	0.112	0	0.103	0.014			-0.035
10/25/2017 15:18			0.099	0.112	0	0.103	0.014			-0.035
10/25/2017 15:19			0.099	0.112	0	0.102	0.014			-0.035
10/25/2017 15:20	13	85	0.101	0.112	0	0.102	0.014	40.75411;-	31	-0.035
10/25/2017 15:21			0.098	0.112	0	0.102	0.015			-0.035
10/25/2017 15:22			0.099	0.112	0	0.101	0.015			-0.035
10/25/2017 15:23			0.098	0.112	0	0.101	0.015			-0.035
10/25/2017 15:24			0.098	0.112	0	0.1	0.015			-0.035
10/25/2017 15:25	13	84	0.097	0.112	0	0.1	0.015	40.75412;-	28	-0.035
10/25/2017 15:26			0.097	0.112	0	0.099	0.016			-0.035
10/25/2017 15:27			0.096	0.112	0	0.099	0.016			-0.035
10/25/2017 15:28			0.096	0.112	0	0.098	0.016			-0.035
10/25/2017 15:29			0.094	0.112	0	0.098	0.016			-0.035
10/25/2017 15:30	14.5	76.9	0.093	0.112	0	0.097	0.016	40.75421;-	7	-0.035
10/25/2017 15:31			0.092	0.112	0	0.096	0.017			-0.036
10/25/2017 15:32			0.092	0.112	0	0.096	0.017			-0.036
10/25/2017 15:33			0.093	0.112	0	0.095	0.017			-0.035
10/25/2017 15:34			0.095	0.112	0	0.095	0.017			-0.035
10/25/2017 15:35	14.2	74.9	0.097	0.112	0	0.095	0.017	40.75418;-	14	-0.036
10/25/2017 15:36			0.098	0.112	0	0.095	0.018			-0.036
10/25/2017 15:37			0.101	0.112	0	0.095	0.018			-0.036
10/25/2017 15:38			0.101	0.112	0	0.095	0.018			-0.035
10/25/2017 15:39			0.104	0.112	0	0.096	0.018			-0.035
10/25/2017 15:40	14	76.9	0.103	0.112	0	0.096	0.018	40.75418;-	17	-0.035
10/25/2017 15:41			0.106	0.112	0	0.096	0.019			-0.035
10/25/2017 15:42			0.11	0.112	0	0.097	0.019			-0.035
10/25/2017 15:43			0.111	0.112	0	0.098	0.019			-0.035
10/25/2017 15:44			0.113	0.113	0	0.099	0.019			-0.035
10/25/2017 15:45	13.7	80	0.113	0.116	0	0.101	0.02	40.75425;-	6	-0.035
10/25/2017 15:46			0.115	0.116	0	0.102	0.02			-0.036
10/25/2017 15:47			0.106	0.116	0	0.103	0.02			-0.036
10/25/2017 15:48			0.106	0.116	0	0.104	0.02			-0.035
10/25/2017 15:49			0.109	0.116	0	0.105	0.021			-0.035
10/25/2017 15:50	13.7	83	0.109	0.116	0	0.106	0.021	40.75421;-	8	-0.036
10/25/2017 15:51			0.108	0.116	0	0.107	0.021			-0.036
10/25/2017 15:52			0.108	0.116	0	0.107	0.021			-0.036
10/25/2017 15:53			0.106	0.116	0	0.108	0.021			-0.036
10/25/2017 15:54			0.107	0.116	0	0.108	0.022			-0.036
10/25/2017 15:55	13.5	82	0.106	0.116	0	0.108	0.022	40.75421;-	5	-0.036
10/25/2017 15:56			0.105	0.116	0	0.108	0.022			-0.036
10/25/2017 15:57			0.106	0.116	0	0.108	0.022			-0.035
10/25/2017 15:58			0.104	0.116	0	0.108	0.023			-0.035
10/25/2017 15:59			0.103	0.116	0	0.107	0.023			-0.036
10/25/2017 16:00	13.3	81	0.104	0.116	0	0.107	0.023	40.75417;-	9	-0.036
10/25/2017 16:01			0.102	0.116	0	0.106	0.023			-0.035

10/25/2017 16:02			0.099	0.116	0	0.105	0.023			-0.036
10/25/2017 16:03			0.099	0.116	0	0.105	0.024			-0.036
10/25/2017 16:04			0.099	0.116	0	0.104	0.024			-0.035
10/25/2017 16:05	13.2	81	0.102	0.116	0	0.104	0.024	40.75425;-	9	-0.034
10/25/2017 16:06			0.097	0.116	0	0.103	0.024			-0.034
10/25/2017 16:07			0.099	0.116	0	0.102	0.024			-0.035
10/25/2017 16:08			0.099	0.116	0	0.102	0.025			-0.035
10/25/2017 16:09			0.099	0.116	0	0.101	0.025			-0.035
10/25/2017 16:10	13.1	84	0.096	0.116	0	0.101	0.025	40.75426;-	11	-0.035
10/25/2017 16:11			0.095	0.116	0	0.1	0.025			-0.035
10/25/2017 16:12			0.094	0.116	0	0.099	0.025			-0.035
10/25/2017 16:13			0.094	0.116	0	0.098	0.026			-0.035
10/25/2017 16:14			0.096	0.116	0	0.098	0.026			-0.036
10/25/2017 16:15	13	81	0.095	0.116	0	0.097	0.026	40.75422;-	9	-0.036
10/25/2017 16:16			0.095	0.116	0	0.097	0.026			-0.036
10/25/2017 16:17			0.094	0.116	0	0.096	0.026			-0.035
10/25/2017 16:18			0.094	0.116	0	0.096	0.027			-0.036
10/25/2017 16:19			0.095	0.116	0	0.096	0.027			-0.036
10/25/2017 16:20	12.9	103.2	0.095	0.116	0	0.095	0.027	40.75418;-	18	-0.035
10/25/2017 16:21			0.092	0.116	0	0.095	0.027			-0.036
10/25/2017 16:22			0.092	0.116	0	0.095	0.027			-0.036
10/25/2017 16:23			0.095	0.116	0	0.094	0.028			-0.036
10/25/2017 16:24			0.094	0.116	0	0.094	0.028			-0.036
10/25/2017 16:25	12.9	91.1	0.092	0.116	0	0.093	0.028	40.75417;-	16	-0.036
10/25/2017 16:26			0.092	0.116	0	0.093	0.028			-0.036
10/25/2017 16:27			0.091	0.116	0	0.093	0.028			-0.036
10/25/2017 16:28			0.096	0.116	0	0.093	0.029			-0.03
10/25/2017 16:29			0.093	0.116	0	0.093	0.029			-0.031
10/25/2017 16:30	12.9	86	0.092	0.116	0	0.093	0.029	40.7542;-7	5	-0.032
10/25/2017 16:31			0.092	0.116	0	0.093	0.029			-0.034
10/25/2017 16:32			0.092	0.116	0	0.093	0.029			-0.034
10/25/2017 16:33			0.093	0.116	0	0.093	0.03			-0.035
10/25/2017 16:34			0.091	0.116	0	0.092	0.03			-0.035
10/25/2017 16:35	12.8	82	0.091	0.116	0	0.092	0.03	40.75417;-	17	-0.035
10/25/2017 16:36			0.092	0.116	0	0.092	0.03			-0.035
10/25/2017 16:37			0.092	0.116	0	0.092	0.03			-0.035
10/25/2017 16:38			0.092	0.116	0	0.092	0.03			-0.036
10/25/2017 16:39			0.092	0.116	0	0.092	0.031			-0.036
10/25/2017 16:40	12.8	96.2	0.091	0.116	0	0.092	0.031	40.75418;-	10	-0.036
10/25/2017 16:41			0.091	0.116	0	0.092	0.031			-0.036
10/25/2017 16:42			0.091	0.116	0	0.092	0.031			-0.036
10/25/2017 16:43			0.092	0.116	0	0.091	0.031			-0.036
10/25/2017 16:44			0.091	0.116	0	0.091	0.032			-0.036
10/25/2017 16:45	12.7	140.7	0.092	0.116	0	0.091	0.032			-0.036
10/25/2017 16:45								40.75415;-	22	
10/25/2017 16:46			0.091	0.116	0	0.091	0.032			-0.036
10/25/2017 16:47			0.092	0.116	0	0.091	0.032			-0.036
10/25/2017 16:48			0.094	0.116	0	0.091	0.032			-0.036
10/25/2017 16:49			0.092	0.116	0	0.09	0.033			-0.036
10/25/2017 16:50	12.7	126.5	0.091	0.116	0	0.09	0.033	40.75426;-	-9	-0.036
10/25/2017 16:51			0.091	0.116	0	0.09	0.033			-0.037
10/25/2017 16:52			0.092	0.116	0	0.09	0.033			-0.036
10/25/2017 16:53			0.092	0.116	0	0.09	0.033			-0.036
10/25/2017 16:54			0.091	0.116	0	0.09	0.033			-0.036
10/25/2017 16:55	12.7	88.1	0.091	0.116	0	0.09	0.034	40.75419;-	16	-0.036
10/25/2017 16:56			0.091	0.116	0	0.09	0.034			-0.036

10/25/2017 16:57			0.092	0.116	0	0.09	0.034			-0.036
10/25/2017 16:58			0.093	0.116	0	0.09	0.034			-0.036
10/25/2017 16:59			0.092	0.116	0	0.09	0.034			-0.036
10/25/2017 17:00	12.7	82	0.094	0.116	0	0.09	0.035	40.75417;-	14	-0.036
10/25/2017 17:01			0.092	0.116	0	0.09	0.035			-0.036
10/25/2017 17:02			0.093	0.116	0	0.09	0.035			-0.036
10/25/2017 17:03			0.092	0.116	0	0.091	0.035			-0.036
10/25/2017 17:04			0.095	0.116	0	0.091	0.035			-0.036
10/25/2017 17:05	12.8	82	0.091	0.116	0	0.091	0.036	40.75415;-	22	-0.035
10/25/2017 17:06			0.093	0.116	0	0.091	0.036			-0.035
10/25/2017 17:07			0.094	0.116	0	0.091	0.036			-0.036
10/25/2017 17:08			0.094	0.116	0	0.091	0.036			-0.035
10/25/2017 17:09			0.094	0.116	0	0.091	0.036			-0.035
10/25/2017 17:10	12.8	91.1	0.092	0.116	0	0.092	0.037	40.75423;-	0	-0.035
10/25/2017 17:11			0.095	0.116	0	0.092	0.037			-0.035
10/25/2017 17:12			0.096	0.116	0	0.092	0.037			-0.035
10/25/2017 17:13			0.095	0.116	0	0.092	0.037			-0.035
10/25/2017 17:14			0.095	0.116	0	0.093	0.037			-0.035
10/25/2017 17:15	12.8	90.1	0.095	0.116	0	0.093	0.038	40.75426;-	7	-0.035
10/25/2017 17:16			0.095	0.116	0	0.093	0.038			-0.035
10/25/2017 17:17			0.095	0.116	0	0.093	0.038			-0.035
10/25/2017 17:18			0.095	0.116	0	0.093	0.038			-0.036
10/25/2017 17:19			0.094	0.116	0	0.093	0.038			-0.036
10/25/2017 17:20	12.9	88.1	0.095	0.116	0	0.093	0.039	40.7542;-7	10	-0.036
10/25/2017 17:21			0.095	0.116	0	0.094	0.039			-0.036
10/25/2017 17:22			0.095	0.116	0	0.094	0.039			-0.035
10/25/2017 17:23			0.095	0.116	0	0.094	0.039			-0.035
10/25/2017 17:24			0.095	0.116	0	0.094	0.039			-0.035
10/25/2017 17:25	12.9	130.6	0.096	0.116	0	0.094	0.04	40.7542;-7	20	-0.036
10/25/2017 17:26			0.095	0.116	0	0.094	0.04			-0.035
10/25/2017 17:27			0.095	0.116	0	0.094	0.04			-0.035
10/25/2017 17:28			0.096	0.116	0	0.094	0.04			-0.036
10/25/2017 17:29			0.096	0.116	0	0.094	0.04			-0.036
10/25/2017 17:30	12.8	129.6	0.097	0.116	0	0.094	0.04	40.75417;-	21	-0.036
10/25/2017 17:31			0.097	0.116	0	0.094	0.041			-0.036
10/25/2017 17:32			0.097	0.116	0	0.095	0.041			-0.035
10/25/2017 17:33			0.098	0.116	0	0.095	0.041			-0.036
10/25/2017 17:34			0.097	0.116	0	0.095	0.041			-0.035
10/25/2017 17:35	12.8	110.3	0.099	0.116	0	0.095	0.042	40.75423;-	-20	-0.036
10/25/2017 17:36			0.099	0.116	0	0.096	0.042			-0.036
10/25/2017 17:37			0.099	0.116	0	0.096	0.042			-0.036
10/25/2017 17:38			0.099	0.116	0	0.096	0.042			-0.036
10/25/2017 17:39			0.101	0.116	0	0.096	0.042			-0.036
10/25/2017 17:40	12.7	89.1	0.102	0.116	0	0.097	0.043	40.75417;-	3	-0.036
10/25/2017 17:41			0.102	0.116	0	0.097	0.043			-0.036
10/25/2017 17:42			0.101	0.116	0	0.097	0.043			-0.036
10/25/2017 17:43			0.102	0.116	0	0.098	0.043			-0.036
10/25/2017 17:44			0.102	0.116	0	0.098	0.043			-0.036
10/25/2017 17:45	12.7	83	0.102	0.116	0	0.098	0.044	40.75433;-	-61	-0.036
10/25/2017 17:46			0.103	0.116	0	0.099	0.044			-0.036
10/25/2017 17:47			0.103	0.116	0	0.099	0.044			-0.036
10/25/2017 17:48			0.103	0.116	0	0.1	0.044			-0.036
10/25/2017 17:49			0.104	0.116	0	0.1	0.044			-0.036
10/25/2017 17:50	12.7	83	0.104	0.116	0	0.1	0.045	40.75418;-	3	-0.036
10/25/2017 17:51			0.104	0.116	0	0.101	0.045			-0.036
10/25/2017 17:52			0.104	0.116	0	0.101	0.045			-0.036

10/25/2017 17:53			0.104	0.116	0	0.101	0.045			-0.036
10/25/2017 17:54			0.105	0.116	0	0.102	0.046			-0.036
10/25/2017 17:55	12.7	83	0.104	0.116	0	0.102	0.046	40.75418;-	3	-0.037
10/25/2017 17:56			0.104	0.116	0	0.102	0.046			-0.037
10/25/2017 17:57			0.104	0.116	0	0.103	0.046			-0.037
10/25/2017 17:58			0.104	0.116	0	0.103	0.046			-0.037
10/25/2017 17:59			0.106	0.116	0	0.103	0.047			-0.036
10/25/2017 18:00	12.7	82	0.106	0.116	0	0.103	0.047	40.75415;-	-4	-0.037
10/25/2017 18:01			0.106	0.116	0	0.103	0.047			-0.037
10/25/2017 18:02			0.105	0.116	0	0.103	0.047			-0.036
10/25/2017 18:03			0.106	0.116	0	0.104	0.047			-0.037
10/25/2017 18:04			0.107	0.116	0	0.104	0.048			-0.037
10/25/2017 18:05	12.7	84	0.109	0.116	0	0.104	0.048	40.7542;-7	7	-0.037
10/25/2017 18:06			0.109	0.116	0	0.104	0.048			-0.037
10/25/2017 18:07			0.106	0.116	0	0.104	0.048			-0.037
10/25/2017 18:08			0.106	0.116	0	0.105	0.049			-0.037
10/25/2017 18:09			0.106	0.116	0	0.105	0.049			-0.037
10/25/2017 18:10	12.7	84	0.109	0.116	0	0.105	0.049	40.75421;-	8	-0.037
10/25/2017 18:11			0.105	0.116	0	0.105	0.049			-0.037
10/25/2017 18:12			0.108	0.116	0	0.105	0.049			-0.037
10/25/2017 18:13			0.107	0.116	0	0.105	0.05			-0.037
10/25/2017 18:14			0.108	0.116	0	0.106	0.05			-0.037
10/25/2017 18:15	12.7	85	0.109	0.116	0	0.106	0.05	40.75418;-	5	-0.037
10/25/2017 18:16			0.109	0.116	0	0.106	0.05			-0.037
10/25/2017 18:17			0.106	0.116	0	0.106	0.051			-0.037
10/25/2017 18:18			0.106	0.116	0	0.106	0.051			-0.037
10/25/2017 18:19			0.107	0.116	0	0.106	0.051			-0.037
10/25/2017 18:20	12.8	94.1	0.106	0.116	0	0.106	0.051	40.75421;-	0	-0.037
10/25/2017 18:21			0.106	0.116	0	0.106	0.051			-0.037
10/25/2017 18:22			0.107	0.116	0	0.106	0.052			-0.037
10/25/2017 18:23			0.105	0.116	0	0.106	0.052			-0.037
10/25/2017 18:24			0.106	0.116	0	0.106	0.052			-0.037
10/25/2017 18:25	12.9	83	0.106	0.116	0	0.106	0.052	40.75426;-	2	-0.037
10/25/2017 18:26			0.108	0.116	0	0.106	0.053			-0.037
10/25/2017 18:27			0.106	0.116	0	0.106	0.053			-0.037
10/25/2017 18:28			0.106	0.116	0	0.106	0.053			-0.037
10/25/2017 18:29			0.105	0.116	0	0.106	0.053			-0.038
10/25/2017 18:30	13	82	0.108	0.116	0	0.106	0.053	40.75425;-	4	-0.038
10/25/2017 18:31			0.107	0.116	0	0.106	0.054			-0.037
10/25/2017 18:32			0.106	0.116	0	0.106	0.054			-0.037
10/25/2017 18:33			0.106	0.116	0	0.106	0.054			-0.037
10/25/2017 18:34			0.106	0.116	0	0.106	0.054			-0.037
10/25/2017 18:35	13.1	91.1	0.106	0.116	0	0.106	0.055	40.75425;-	5	-0.037
10/25/2017 18:36			0.106	0.116	0	0.106	0.055			-0.037
10/25/2017 18:37			0.109	0.116	0	0.106	0.055			-0.037
10/25/2017 18:38			0.108	0.116	0	0.106	0.055			-0.037
10/25/2017 18:39			0.111	0.116	0	0.106	0.055			-0.037
10/25/2017 18:40	13	122.5	0.111	0.116	0	0.106	0.056	40.75425;-	7	-0.037
10/25/2017 18:41			0.111	0.116	0	0.106	0.056			-0.037
10/25/2017 18:42			0.111	0.116	0	0.107	0.056			-0.038
10/25/2017 18:43			0.111	0.116	0	0.107	0.056			-0.038
10/25/2017 18:44			0.113	0.116	0	0.107	0.057			-0.038
10/25/2017 18:45	12.9	82	0.113	0.116	0	0.108	0.057	40.75421;-	13	-0.038
10/25/2017 18:46			0.112	0.116	0	0.108	0.057			-0.038
10/25/2017 18:47			0.112	0.116	0	0.108	0.057			-0.038
10/25/2017 18:48			0.113	0.116	0	0.109	0.058			-0.037

10/25/2017 18:49			0.113	0.116	0	0.109	0.058			-0.037
10/25/2017 18:50	12.8	96.2	0.112	0.116	0	0.11	0.058	40.75422;-	6	-0.037
10/25/2017 18:51			0.113	0.116	0	0.11	0.058			-0.038
10/25/2017 18:52			0.113	0.116	0	0.111	0.058			-0.037
10/25/2017 18:53			0.114	0.116	0	0.111	0.059			-0.038
10/25/2017 18:54			0.115	0.116	0	0.111	0.059			-0.037
10/25/2017 18:55	12.7	82	0.116	0.116	0	0.112	0.059	40.75423;-	6	-0.037
10/25/2017 18:56			0.117	0.118	0	0.112	0.059			-0.037
10/25/2017 18:57			0.117	0.118	0	0.113	0.06			-0.037
10/25/2017 18:58			0.118	0.119	0	0.113	0.06			-0.038
10/25/2017 18:59			0.118	0.119	0	0.113	0.06			-0.037
10/25/2017 19:00	12.7	84	0.118	0.119	0	0.114	0.06	40.75423;-	7	-0.038
10/25/2017 19:01			0.119	0.12	0	0.114	0.061			-0.038
10/25/2017 19:02			0.12	0.12	0	0.115	0.061			-0.038
10/25/2017 19:03			0.12	0.12	0	0.115	0.061			-0.038
10/25/2017 19:04			0.12	0.121	0	0.116	0.061			-0.038
10/25/2017 19:05	12.7	90.1	0.119	0.122	0	0.116	0.062	40.75425;-	7	-0.038
10/25/2017 19:06			0.12	0.122	0	0.117	0.062			-0.038
10/25/2017 19:07			0.12	0.122	0	0.117	0.062			-0.038
10/25/2017 19:08			0.12	0.122	0	0.117	0.062			-0.038
10/25/2017 19:09			0.12	0.122	0	0.118	0.063			-0.038
10/25/2017 19:10	12.6	82	0.122	0.123	0	0.118	0.063	40.75429;-	5	-0.038
10/25/2017 19:11			0.122	0.123	0	0.119	0.063			-0.038
10/25/2017 19:12			0.121	0.123	0	0.119	0.063			-0.038
10/25/2017 19:13			0.121	0.123	0	0.119	0.064			-0.038
10/25/2017 19:14			0.121	0.123	0	0.119	0.064			-0.038
10/25/2017 19:15	12.6	84	0.122	0.123	0	0.12	0.064	40.75421;-	-4	-0.037
10/25/2017 19:16			0.121	0.123	0	0.12	0.064			-0.037
10/25/2017 19:17			0.122	0.123	0	0.12	0.065			-0.037
10/25/2017 19:18			0.124	0.125	0	0.12	0.065			-0.037
10/25/2017 19:19			0.122	0.125	0	0.12	0.065			-0.037
10/25/2017 19:20	12.6	88.1	0.122	0.125	0	0.12	0.065	40.75422;-	-1	-0.037
10/25/2017 19:21			0.123	0.125	0	0.12	0.066			-0.037
10/25/2017 19:22			0.123	0.125	0	0.121	0.066			-0.037
10/25/2017 19:23			0.122	0.125	0	0.121	0.066			-0.038
10/25/2017 19:24			0.122	0.125	0	0.121	0.066			-0.037
10/25/2017 19:25	12.6	85	0.122	0.125	0	0.121	0.067	40.75422;-	21	-0.037
10/25/2017 19:26			0.121	0.125	0	0.121	0.067			-0.038
10/25/2017 19:27			0.12	0.125	0	0.121	0.067			-0.038
10/25/2017 19:28			0.122	0.125	0	0.121	0.067			-0.038
10/25/2017 19:29			0.121	0.125	0	0.121	0.068			-0.038
10/25/2017 19:30	12.6	83	0.121	0.125	0	0.121	0.068	40.75422;-	10	-0.037
10/25/2017 19:31			0.121	0.125	0	0.121	0.068			-0.037
10/25/2017 19:32			0.119	0.125	0	0.121	0.068			-0.037
10/25/2017 19:33			0.119	0.125	0	0.12	0.069			-0.037
10/25/2017 19:34			0.119	0.125	0	0.12	0.069			-0.037
10/25/2017 19:35	12.6	85	0.117	0.125	0	0.12	0.069	40.75419;-	10	-0.037
10/25/2017 19:36			0.119	0.125	0	0.12	0.069			-0.038
10/25/2017 19:37			0.119	0.125	0	0.12	0.07			-0.038
10/25/2017 19:38			0.104	0.125	0	0.119	0.07			-0.037
10/25/2017 19:39			0.103	0.125	0	0.118	0.07			-0.033
10/25/2017 19:40	12.6	84	0.105	0.125	0	0.117	0.07	40.75421;-	7	-0.035
10/25/2017 19:41			0.11	0.125	0	0.116	0.071			-0.036
10/25/2017 19:42			0.11	0.125	0	0.115	0.071			-0.037
10/25/2017 19:43			0.11	0.125	0	0.114	0.071			-0.037
10/25/2017 19:44			0.112	0.125	0	0.114	0.071			-0.037

10/25/2017 19:45	12.6	84	0.113	0.125	0	0.113	0.072	40.75425;-	16	-0.037
10/25/2017 19:46			0.112	0.125	0	0.113	0.072			-0.037
10/25/2017 19:47			0.113	0.125	0	0.112	0.072			-0.037
10/25/2017 19:48			0.112	0.125	0	0.112	0.072			-0.038
10/25/2017 19:49			0.112	0.125	0	0.111	0.072			-0.038
10/25/2017 19:50	12.6	132.6	0.113	0.125	0	0.111	0.073	40.75416;-	16	-0.038
10/25/2017 19:51			0.113	0.125	0	0.11	0.073			-0.038
10/25/2017 19:52			0.115	0.125	0	0.11	0.073			-0.038
10/25/2017 19:53			0.113	0.125	0	0.11	0.073			-0.038
10/25/2017 19:54			0.114	0.125	0	0.11	0.074			-0.038
10/25/2017 19:55	12.6	129.6	0.112	0.125	0	0.111	0.074	40.75419;-	5	-0.038
10/25/2017 19:56			0.114	0.125	0	0.111	0.074			-0.038
10/25/2017 19:57			0.114	0.125	0	0.112	0.074			-0.038
10/25/2017 19:58			0.114	0.125	0	0.112	0.075			-0.038
10/25/2017 19:59			0.114	0.125	0	0.112	0.075			-0.038
10/25/2017 20:00	12.6	128.6	0.115	0.125	0	0.112	0.075	40.75421;-	12	-0.038
10/25/2017 20:01			0.112	0.125	0	0.112	0.075			-0.038
10/25/2017 20:02			0.112	0.125	0	0.112	0.075			-0.038
10/25/2017 20:03			0.112	0.125	0	0.112	0.076			-0.038
10/25/2017 20:04			0.111	0.125	0	0.112	0.076			-0.038
10/25/2017 20:05	12.6	130.6	0.113	0.125	0	0.112	0.076	40.75425;-	10	-0.038
10/25/2017 20:06			0.113	0.125	0	0.112	0.076			-0.038
10/25/2017 20:07			0.112	0.125	0	0.112	0.077			-0.038
10/25/2017 20:08			0.111	0.125	0	0.112	0.077			-0.038
10/25/2017 20:09			0.113	0.125	0	0.112	0.077			-0.038
10/25/2017 20:10	12.6	131.6	0.111	0.125	0	0.112	0.077	40.75425;-	15	-0.038
10/25/2017 20:11			0.111	0.125	0	0.112	0.078			-0.038
10/25/2017 20:12			0.111	0.125	0	0.111	0.078			-0.037
10/25/2017 20:13			0.11	0.125	0	0.111	0.078			-0.037
10/25/2017 20:14			0.11	0.125	0	0.111	0.078			-0.037
10/25/2017 20:15	12.6	82	0.11	0.125	0	0.111	0.079	40.75423;-	13	-0.037
10/25/2017 20:16			0.11	0.125	0	0.111	0.079			-0.037
10/25/2017 20:17			0.111	0.125	0	0.11	0.079			-0.038
10/25/2017 20:18			0.11	0.125	0	0.11	0.079			-0.038
10/25/2017 20:19			0.11	0.125	0	0.11	0.079			-0.038
10/25/2017 20:20	12.6	100.2	0.11	0.125	0	0.11	0.08	40.75426;-	19	-0.037
10/25/2017 20:21			0.108	0.125	0	0.11	0.08			-0.037
10/25/2017 20:22			0.109	0.125	0	0.11	0.08			-0.037
10/25/2017 20:23			0.107	0.125	0	0.109	0.08			-0.037
10/25/2017 20:24			0.108	0.125	0	0.109	0.081			-0.037
10/25/2017 20:25	12.6	83	0.109	0.125	0	0.109	0.081	40.75426;-	20	-0.038
10/25/2017 20:26			0.109	0.125	0	0.109	0.081			-0.038
10/25/2017 20:27			0.109	0.125	0	0.109	0.081			-0.038
10/25/2017 20:28			0.108	0.125	0	0.109	0.081			-0.038
10/25/2017 20:29			0.108	0.125	0	0.108	0.082			-0.037
10/25/2017 20:30	12.6	85	0.108	0.125	0	0.108	0.082	40.75429;-	38	-0.037
10/25/2017 20:31			0.107	0.125	0	0.108	0.082			-0.037
10/25/2017 20:32			0.107	0.125	0	0.108	0.082			-0.037
10/25/2017 20:33			0.106	0.125	0	0.108	0.083			-0.037
10/25/2017 20:34			0.107	0.125	0	0.107	0.083			-0.037
10/25/2017 20:35	12.6	135.6	0.107	0.125	0	0.107	0.083	40.75423;-	34	-0.037
10/25/2017 20:36			0.106	0.125	0	0.107	0.083			-0.037
10/25/2017 20:37			0.107	0.125	0	0.107	0.083			-0.038
10/25/2017 20:38			0.107							-0.038
10/26/2017 12:30	12.9	72.9								
10/26/2017 12:30								40.7535823;-73.4839988		

10/26/2017 12:32			0	0	0	0	0			
10/26/2017 12:33			0	0	0	0	0			-0.023
10/26/2017 12:34			0	0	0	0	0			-0.031
10/26/2017 12:35	12.7	82	0	0	0	0	0			-0.033
10/26/2017 12:36			0	0	0	0	0			-0.034
10/26/2017 12:37			0	0.001	0	0	0			-0.035
10/26/2017 12:38			0.004	0.006	0	0	0			-0.036
10/26/2017 12:39			0.007	0.007	0	0	0			-0.036
10/26/2017 12:40	12.7	81	0.01	0.01	0	0	0	40.75426;-	-16	-0.036
10/26/2017 12:41			0.012	0.012	0	0	0			-0.037
10/26/2017 12:42			0.015	0.015	0	0	0			-0.037
10/26/2017 12:43			0.016	0.016	0	0	0			-0.037
10/26/2017 12:44			0.018	0.018	0	0	0			-0.037
10/26/2017 12:45	12.7	83	0.019	0.019	0	0	0	40.75423;-	-5	-0.037
10/26/2017 12:46			0.021	0.021	0	0.006	0			-0.037
10/26/2017 12:47			0.02	0.022	0	0.008	0			-0.037
10/26/2017 12:48			0.023	0.024	0	0.009	0			-0.037
10/26/2017 12:49			0.024	0.025	0	0.011	0			-0.037
10/26/2017 12:50	12.9	86	0.025	0.026	0	0.012	0	40.75426;-	-11	-0.037
10/26/2017 12:51			0.026	0.027	0	0.014	0			-0.037
10/26/2017 12:52			0.027	0.028	0	0.016	0			-0.037
10/26/2017 12:53			0.027	0.028	0	0.017	0			-0.037
10/26/2017 12:54			0.027	0.028	0	0.019	0			-0.037
10/26/2017 12:55	12.9	81	0.028	0.029	0	0.02	0	40.75423;-	-3	-0.037
10/26/2017 12:56			0.031	0.031	0	0.021	0			-0.037
10/26/2017 12:57			0.032	0.032	0	0.022	0			-0.037
10/26/2017 12:58			0.031	0.032	0	0.023	0			-0.037
10/26/2017 12:59			0.032	0.033	0	0.024	0			-0.037
10/26/2017 13:00	12.7	94.1	0.032	0.033	0	0.025	0	40.75423;-	6	-0.037
10/26/2017 13:01			0.035	0.041	0	0.026	0.001			-0.037
10/26/2017 13:02			0.036	0.041	0	0.027	0.001			-0.037
10/26/2017 13:03			0.036	0.041	0	0.028	0.001			-0.037
10/26/2017 13:04			0.036	0.041	0	0.029	0.001			-0.037
10/26/2017 13:05	12.7	85	0.036	0.041	0	0.03	0.001	40.75425;-	12	-0.037
10/26/2017 13:06			0.038	0.041	0	0.031	0.001			-0.037
10/26/2017 13:07			0.039	0.041	0	0.031	0.001			-0.037
10/26/2017 13:08			0.04	0.041	0	0.032	0.001			-0.037
10/26/2017 13:09			0.042	0.042	0	0.033	0.001			-0.037
10/26/2017 13:10	12.8	87	0.042	0.043	0	0.034	0.001	40.75426;-	4	-0.037
10/26/2017 13:11			0.041	0.043	0	0.035	0.001			-0.037
10/26/2017 13:12			0.042	0.043	0	0.036	0.001			-0.037
10/26/2017 13:13			0.042	0.043	0	0.036	0.002			-0.037
10/26/2017 13:14			0.043	0.043	0	0.037	0.002			-0.037
10/26/2017 13:15	12.9	80	0.042	0.043	0	0.038	0.002	40.75425;-	18	-0.037
10/26/2017 13:16			0.043	0.045	0	0.039	0.002			-0.037
10/26/2017 13:17			0.043	0.045	0	0.039	0.002			-0.037
10/26/2017 13:18			0.045	0.045	0	0.04	0.002			-0.037
10/26/2017 13:19			0.046	0.046	0	0.04	0.002			-0.037
10/26/2017 13:20	12.9	90.1	0.047	0.047	0	0.041	0.002	40.75419;-	18	-0.037
10/26/2017 13:21			0.047	0.047	0	0.041	0.002			-0.037
10/26/2017 13:22			0.046	0.047	0	0.042	0.002			-0.037
10/26/2017 13:23			0.048	0.048	0	0.042	0.002			-0.037
10/26/2017 13:24			0.048	0.05	0	0.043	0.003			-0.037
10/26/2017 13:25	12.8	110.3	0.049	0.05	0	0.043	0.003	40.75414;-	19	-0.037
10/26/2017 13:26			0.05	0.05	0	0.044	0.003			-0.037
10/26/2017 13:27			0.05	0.051	0	0.044	0.003			-0.037

10/26/2017 13:28			0.051	0.052	0	0.045	0.003			-0.037
10/26/2017 13:29			0.053	0.054	0	0.046	0.003			-0.037
10/26/2017 13:30	12.7	83	0.052	0.054	0	0.046	0.003	40.75419;-	0	-0.037
10/26/2017 13:31			0.053	0.054	0	0.047	0.003			-0.037
10/26/2017 13:32			0.053	0.055	0	0.048	0.003			-0.037
10/26/2017 13:33			0.052	0.055	0	0.048	0.003			-0.037
10/26/2017 13:34			0.054	0.055	0	0.049	0.004			-0.037
10/26/2017 13:35	12.7	95.1	0.054	0.056	0	0.049	0.004	40.75416;-	17	-0.037
10/26/2017 13:36			0.054	0.056	0	0.05	0.004			-0.037
10/26/2017 13:37			0.056	0.057	0	0.051	0.004			-0.037
10/26/2017 13:38			0.057	0.057	0	0.051	0.004			-0.037
10/26/2017 13:39			0.058	0.058	0	0.052	0.004			-0.037
10/26/2017 13:40	12.6	84	0.056	0.058	0	0.052	0.004	40.75421;-	10	-0.037
10/26/2017 13:41			0.057	0.058	0	0.053	0.004			-0.037
10/26/2017 13:42			0.056	0.058	0	0.053	0.005			-0.037
10/26/2017 13:43			0.058	0.059	0	0.054	0.005			-0.037
10/26/2017 13:44			0.06	0.06	0	0.054	0.005			-0.037
10/26/2017 13:45	12.7	82	0.058	0.06	0	0.055	0.005	40.75426;-	20	-0.036
10/26/2017 13:46			0.058	0.061	0	0.055	0.005			-0.036
10/26/2017 13:47			0.061	0.061	0	0.056	0.005			-0.036
10/26/2017 13:48			0.06	0.061	0	0.056	0.005			-0.036
10/26/2017 13:49			0.06	0.061	0	0.057	0.005			-0.036
10/26/2017 13:50	12.6	91.1	0.062	0.062	0	0.057	0.005	40.75423;-	1	-0.037
10/26/2017 13:51			0.06	0.062	0	0.057	0.006			-0.037
10/26/2017 13:52			0.062	0.065	0	0.058	0.006			-0.037
10/26/2017 13:53			0.057	0.065	0	0.058	0.006			-0.037
10/26/2017 13:54			0.059	0.065	0	0.058	0.006			-0.037
10/26/2017 13:55	12.6	82	0.059	0.065	0	0.058	0.006	40.75431;-	-30	-0.037
10/26/2017 13:56			0.06	0.065	0	0.058	0.006			-0.036
10/26/2017 13:57			0.061	0.065	0	0.058	0.006			-0.036
10/26/2017 13:58			0.059	0.065	0	0.058	0.006			-0.036
10/26/2017 13:59			0.061	0.065	0	0.058	0.007			-0.036
10/26/2017 14:00	12.6	84	0.055	0.065	0	0.058	0.007	40.75426;-	-11	-0.036
10/26/2017 14:01			0.056	0.065	0	0.058	0.007			-0.036
10/26/2017 14:02			0.056	0.065	0	0.057	0.007			-0.036
10/26/2017 14:03			0.054	0.065	0	0.057	0.007			-0.036
10/26/2017 14:04			0.055	0.065	0	0.057	0.007			-0.036
10/26/2017 14:05	12.6	102.2	0.057	0.065	0	0.056	0.007	40.75417;-	15	-0.037
10/26/2017 14:06			0.056	0.065	0	0.056	0.007			-0.037
10/26/2017 14:07			0.056	0.065	0	0.056	0.007			-0.037
10/26/2017 14:08			0.056	0.065	0	0.056	0.008			-0.037
10/26/2017 14:09			0.056	0.065	0	0.056	0.008			-0.037
10/26/2017 14:10	12.7	96.2	0.057	0.065	0	0.056	0.008	40.75421;-	16	-0.037
10/26/2017 14:11			0.057	0.065	0	0.055	0.008			-0.037
10/26/2017 14:12			0.057	0.065	0	0.055	0.008			-0.037
10/26/2017 14:13			0.056	0.065	0	0.055	0.008			-0.037
10/26/2017 14:14			0.057	0.065	0	0.055	0.008			-0.037
10/26/2017 14:15	12.7	82	0.057	0.065	0	0.055	0.008	40.75421;-	10	-0.037
10/26/2017 14:16			0.057	0.065	0	0.055	0.009			-0.037
10/26/2017 14:17			0.055	0.065	0	0.055	0.009			-0.037
10/26/2017 14:18			0.057	0.065	0	0.055	0.009			-0.038
10/26/2017 14:19			0.057	0.065	0	0.055	0.009			-0.038
10/26/2017 14:20	12.7	82	0.057	0.065	0	0.056	0.009	40.75416;-	16	-0.038
10/26/2017 14:21			0.057	0.065	0	0.056	0.009			-0.038
10/26/2017 14:22			0.057	0.065	0	0.056	0.009			-0.037
10/26/2017 14:23			0.057	0.065	0	0.056	0.009			-0.038

10/26/2017 14:24			0.056	0.065	0	0.056	0.009			-0.037
10/26/2017 14:25	12.7	85	0.057	0.065	0	0.056	0.01	40.75418;-	14	-0.037
10/26/2017 14:26			0.057	0.065	0	0.056	0.01			-0.037
10/26/2017 14:27			0.057	0.065	0	0.056	0.01			-0.037
10/26/2017 14:28			0.057	0.065	0	0.056	0.01			-0.037
10/26/2017 14:29			0.057	0.065	0	0.056	0.01			-0.037
10/26/2017 14:30	12.7	82	0.057	0.065	0	0.056	0.01	40.75414;-	7	-0.037
10/26/2017 14:31			0.057	0.065	0	0.056	0.01			-0.037
10/26/2017 14:32			0.058	0.065	0	0.056	0.01			-0.038
10/26/2017 14:33			0.058	0.065	0	0.056	0.011			-0.038
10/26/2017 14:34			0.058	0.065	0	0.056	0.011			-0.038
10/26/2017 14:35	12.7	131.6	0.063	0.08	0	0.056	0.011			-0.038
10/26/2017 14:35								40.75415;-	4	
10/26/2017 14:36			0.064	0.08	0	0.057	0.011			-0.038
10/26/2017 14:37			0.065	0.08	0	0.057	0.011			-0.038
10/26/2017 14:38			0.065	0.08	0	0.058	0.011			-0.038
10/26/2017 14:39			0.066	0.08	0	0.059	0.011			-0.038
10/26/2017 14:40	12.7	89.1	0.066	0.08	0	0.059	0.011	40.75416;-	8	-0.037
10/26/2017 14:41			0.066	0.08	0	0.06	0.012			-0.037
10/26/2017 14:42			0.065	0.08	0	0.06	0.012			-0.037
10/26/2017 14:43			0.066	0.08	0	0.061	0.012			-0.037
10/26/2017 14:44			0.067	0.08	0	0.062	0.012			-0.037
10/26/2017 14:45	12.7	133.6	0.065	0.08	0	0.062	0.012	40.7542;-7	19	-0.037
10/26/2017 14:46			0.066	0.08	0	0.063	0.012			-0.037
10/26/2017 14:47			0.066	0.08	0	0.063	0.012			-0.037
10/26/2017 14:48			0.067	0.08	0	0.064	0.013			-0.037
10/26/2017 14:49			0.066	0.08	0	0.064	0.013			-0.037
10/26/2017 14:50	12.8	90.1	0.066	0.08	0	0.065	0.013	40.75421;-	17	-0.038
10/26/2017 14:51			0.066	0.08	0	0.065	0.013			-0.038
10/26/2017 14:52			0.066	0.08	0	0.065	0.013			-0.038
10/26/2017 14:53			0.065	0.08	0	0.065	0.013			-0.038
10/26/2017 14:54			0.067	0.08	0	0.065	0.013			-0.038
10/26/2017 14:55	12.9	84	0.067	0.08	0	0.065	0.014	40.75418;-	19	-0.038
10/26/2017 14:56			0.065	0.08	0	0.065	0.014			-0.038
10/26/2017 14:57			0.066	0.08	0	0.065	0.014			-0.038
10/26/2017 14:58			0.067	0.08	0	0.065	0.014			-0.038
10/26/2017 14:59			0.067	0.08	0	0.065	0.014			-0.038
10/26/2017 15:00	12.9	81	0.068	0.08	0	0.065	0.014	40.75416;-	16	-0.038
10/26/2017 15:01			0.068	0.08	0	0.065	0.014			-0.038
10/26/2017 15:02			0.068	0.08	0	0.065	0.014			-0.038
10/26/2017 15:03			0.067	0.08	0	0.066	0.015			-0.038
10/26/2017 15:04			0.068	0.08	0	0.066	0.015			-0.037
10/26/2017 15:05	13.2	81	0.067	0.08	0	0.066	0.015	40.7542;-7	12	-0.037
10/26/2017 15:06			0.067	0.08	0	0.066	0.015			-0.037
10/26/2017 15:07			0.067	0.08	0	0.066	0.015			-0.037
10/26/2017 15:08			0.067	0.08	0	0.066	0.015			-0.037
10/26/2017 15:09			0.065	0.08	0	0.066	0.015			-0.037
10/26/2017 15:10	13.2	82	0.067	0.08	0	0.066	0.016	40.7542;-7	14	-0.037
10/26/2017 15:11			0.056	0.08	0	0.066	0.016			-0.035
10/26/2017 15:12			0.058	0.08	0	0.065	0.016			-0.031
10/26/2017 15:12	13.3	143.7								
10/26/2017 15:12								40.7534972;-73.48715399999999		
10/26/2017 15:13			0.061	0.08	0	0.065	0.016			
10/26/2017 15:14			0.064	0.08	0	0.065	0.016			
10/26/2017 15:15	13.4	66.8	0.062	0.08	0	0.064	0.016	40.7542;-7	14	
10/26/2017 15:16			0.065	0.08	0	0.064	0.016			

10/26/2017 15:17			0.065	0.08	0	0.064	0.016		
10/26/2017 15:18			0.065	0.08	0	0.064	0.017		
10/26/2017 15:19			0.065	0.08	0	0.064	0.017		
10/26/2017 15:20	13.2	113.4	0.067	0.08	0	0.063	0.017	40.7542;-7	14
10/26/2017 15:21			0.065	0.08	0	0.063	0.017		
10/26/2017 15:22			0.067	0.08	0	0.063	0.017		
10/26/2017 15:23			0.068	0.08	0	0.063	0.017		
10/26/2017 15:24			0.068	0.08	0	0.063	0.017		
10/26/2017 15:25	13.1	111.3	0.068	0.08	0	0.063	0.018	40.7542;-7	14
10/26/2017 15:26			0.068	0.08	0	0.063	0.018		
10/26/2017 15:27			0.066	0.08	0	0.064	0.018		
10/26/2017 15:28			0.067	0.08	0	0.064	0.018		
10/26/2017 15:29			0.068	0.08	0	0.065	0.018		
10/26/2017 15:30	12.9	115.4	0.066	0.08	0	0.065	0.018	40.7542;-7	14
10/26/2017 15:31			0.068	0.08	0	0.065	0.018		
10/26/2017 15:32			0.067	0.08	0	0.065	0.019		
10/26/2017 15:33			0.067	0.08	0	0.065	0.019		
10/26/2017 15:34			0.068	0.08	0	0.066	0.019		
10/26/2017 15:35	12.8	116.4	0.067	0.08	0	0.066	0.019	40.7542;-7	14
10/26/2017 15:36			0.066	0.08	0	0.066	0.019		
10/26/2017 15:37			0.069	0.08	0	0.066	0.019		
10/26/2017 15:38			0.067	0.08	0	0.066	0.019		
10/26/2017 15:39			0.068	0.08	0	0.066	0.02		
10/26/2017 15:40	12.7	114.4	0.066	0.08	0	0.066	0.02	40.7542;-7	14
10/26/2017 15:41			0.066	0.08	0	0.066	0.02		
10/26/2017 15:42			0.065	0.08	0	0.066	0.02		
10/26/2017 15:43			0.065	0.08	0	0.066	0.02		
10/26/2017 15:44			0.064	0.08	0	0.066	0.02		
10/26/2017 15:45	12.7	68.8	0.063	0.08	0	0.065	0.02	40.7542;-7	14
10/26/2017 15:46			0.064	0.08	0	0.065	0.02		
10/26/2017 15:47			0.065	0.08	0	0.065	0.021		
10/26/2017 15:48			0.066	0.08	0	0.065	0.021		
10/26/2017 15:49			0.065	0.08	0	0.065	0.021		
10/26/2017 15:50	12.7	68.8	0.064	0.08	0	0.065	0.021	40.7542;-7	14
10/26/2017 15:51			0.065	0.08	0	0.064	0.021		
10/26/2017 15:52			0.064	0.08	0	0.064	0.021		
10/26/2017 15:53			0.065	0.08	0	0.064	0.021		
10/26/2017 15:54			0.065	0.08	0	0.064	0.022		
10/26/2017 15:55	12.7	70.9	0.065	0.08	0	0.064	0.022	40.7542;-7	14
10/26/2017 15:56			0.067	0.08	0	0.064	0.022		
10/26/2017 15:56	12.7	131.6							
10/26/2017 15:56								40.754016299999996;-73.4865082	
10/26/2017 15:57			0.065	0.08	0	0.064	0.022		
10/26/2017 15:58			0.067	0.08	0	0.064	0.022		
10/26/2017 15:59			0.066	0.08	0	0.064	0.022		
10/26/2017 16:00	12.7	136.6	0.064	0.08	0	0.064	0.022	40.75425;-	9
10/26/2017 16:01			0.065	0.08	0	0.064	0.022		
10/26/2017 16:02			0.064	0.08	0	0.064	0.023		
10/26/2017 16:03			0.063	0.08	0	0.064	0.023		
10/26/2017 16:04			0.064	0.08	0	0.064	0.023		
10/26/2017 16:05	12.7	127.5	0.063	0.08	0	0.064	0.023	40.75416;-	15
10/26/2017 16:06			0.064	0.08	0	0.064	0.023		
10/26/2017 16:07			0.062	0.08	0	0.064	0.023		
10/26/2017 16:08			0.065	0.08	0	0.064	0.023		
10/26/2017 16:09			0.064	0.08	0	0.064	0.024		
10/26/2017 16:10	12.7	124.5	0.064	0.08	0	0.064	0.024	40.75418;-	20

10/26/2017 16:11			0.062	0.08	0	0.064	0.024			
10/26/2017 16:12			0.063	0.08	0	0.063	0.024			
10/26/2017 16:13			0.063	0.08	0	0.063	0.024			
10/26/2017 16:14			0.064	0.08	0	0.063	0.024			
10/26/2017 16:15	12.6	132.6	0.064	0.08	0	0.063	0.024			
10/26/2017 16:15								40.75417;-	19	
10/26/2017 16:16			0.063	0.08	0	0.063	0.024			
10/26/2017 16:17			0.063	0.08	0	0.063	0.025			
10/26/2017 16:18			0.064	0.08	0	0.063	0.025			
10/26/2017 16:19			0.063	0.08	0	0.062	0.025			
10/26/2017 16:20	12.6	135.6						40.7536955;-73.4865203		
10/26/2017 16:21			0.062	0.08	0	0.062	0.025			
10/26/2017 16:22			0.063	0.08	0	0.062	0.025			-0.035
10/26/2017 16:23			0.061	0.08	0	0.062	0.025			-0.037
10/26/2017 16:24			0.062	0.08	0	0.062	0.025			-0.037
10/26/2017 16:25	12.6	69.8	0.061	0.08	0	0.062	0.026	40.75415;-	24	-0.037
10/26/2017 16:26			0.062	0.08	0	0.062	0.026			-0.037
10/26/2017 16:27			0.062	0.08	0	0.062	0.026			-0.037
10/26/2017 16:28			0.062	0.08	0	0.062	0.026			-0.038
10/26/2017 16:29			0.062	0.08	0	0.061	0.026			-0.038
10/26/2017 16:30	12.6	68.8	0.061	0.08	0	0.061	0.026	40.75415;-	24	-0.038
10/26/2017 16:31			0.061	0.08	0	0.061	0.026			-0.038
10/26/2017 16:32			0.06	0.08	0	0.061	0.027			-0.038
10/26/2017 16:33			0.061	0.08	0	0.061	0.027			-0.038
10/26/2017 16:34			0.061	0.08	0	0.061	0.027			-0.038
10/26/2017 16:35	12.6	115.4	0.062	0.08	0	0.061	0.027	40.75415;-	24	-0.038
10/26/2017 16:36			0.062	0.08	0	0.061	0.027			-0.038
10/26/2017 16:37			0.061	0.08	0	0.061	0.027			-0.038
10/26/2017 16:38			0.062	0.08	0	0.061	0.027			-0.038
10/26/2017 16:39			0.062	0.08	0	0.061	0.027			-0.038
10/26/2017 16:40	12.6	115.4	0.062	0.08	0	0.061	0.028	40.75415;-	24	-0.038
10/26/2017 16:41			0.06	0.08	0	0.061	0.028			-0.038
10/26/2017 16:46	12.6	122.5								
10/26/2017 16:46								40.753679399999996;-73.4863867		
10/26/2017 16:47			0.06	0.08	0	0.06	0.028			-0.036
10/26/2017 16:48			0.059	0.08	0	0.06	0.029			-0.038
10/26/2017 16:49			0.06	0.08	0	0.06	0.029			-0.038
10/26/2017 16:50	12.6	88.1	0.06	0.08	0	0.06	0.029	40.75422;-	3	-0.038
10/26/2017 16:51			0.059	0.08	0	0.06	0.029			-0.038
10/26/2017 16:52			0.059	0.08	0	0.06	0.029			-0.037
10/26/2017 16:53			0.059	0.08	0	0.059	0.029			-0.038
10/26/2017 16:54			0.059	0.08	0	0.059	0.029			-0.038
10/26/2017 16:55	12.6	113.4	0.06	0.08	0	0.059	0.029	40.75419;-	9	-0.038
10/26/2017 16:56			0.059	0.08	0	0.059	0.03			-0.038
10/26/2017 16:57			0.06	0.08	0	0.059	0.03			-0.038
10/26/2017 16:58			0.059	0.08	0	0.059	0.03			-0.038
10/26/2017 16:59			0.059	0.08	0	0.059	0.03			-0.038
10/26/2017 17:00	12.6	88.1	0.058	0.08	0	0.058	0.03	40.7542;-7	10	-0.038
10/26/2017 17:01			0.059	0.08	0	0.058	0.03			-0.038
10/26/2017 17:02			0.059	0.08	0	0.058	0.03			-0.038
10/26/2017 17:03			0.058	0.08	0	0.058	0.03			-0.038
10/26/2017 17:04			0.058	0.08	0	0.058	0.03			-0.038
10/26/2017 17:05	12.7	83	0.057	0.08	0	0.058	0.031	40.75419;-	10	-0.038
10/26/2017 17:06			0.058	0.08	0	0.058	0.031			-0.038
10/26/2017 17:07			0.059	0.08	0	0.058	0.031			-0.038
10/26/2017 17:08			0.058	0.08	0	0.058	0.031			-0.038

10/26/2017 17:09			0.059	0.08	0	0.058	0.031			-0.037
10/26/2017 17:10	12.7	99.2	0.058	0.08	0	0.058	0.031	40.7542;-7	5	-0.038
10/26/2017 17:11			0.058	0.08	0	0.058	0.031			-0.038
10/26/2017 17:12			0.06	0.08	0	0.058	0.031			-0.038
10/26/2017 17:13			0.059	0.08	0	0.057	0.032			-0.038
10/26/2017 17:14			0.06	0.08	0	0.058	0.032			-0.038
10/26/2017 17:15	12.7	83	0.057	0.08	0	0.058	0.032	40.75417;-	14	-0.038
10/26/2017 17:16			0.059	0.08	0	0.058	0.032			-0.038
10/26/2017 17:17			0.058	0.08	0	0.058	0.032			-0.038
10/26/2017 17:18			0.058	0.08	0	0.058	0.032			-0.038
10/26/2017 17:19			0.057	0.08	0	0.058	0.032			-0.038
10/26/2017 17:20	12.7	87	0.058	0.08	0	0.058	0.032	40.75418;-	2	-0.038
10/26/2017 17:21			0.058	0.08	0	0.058	0.033			-0.038
10/26/2017 17:22			0.059	0.08	0	0.058	0.033			-0.038
10/26/2017 17:23			0.059	0.08	0	0.058	0.033			-0.038
10/26/2017 17:24			0.058	0.08	0	0.058	0.033			-0.038
10/26/2017 17:25	12.7	82	0.059	0.08	0	0.057	0.033	40.75419;-	14	-0.038
10/26/2017 17:26			0.059	0.08	0	0.057	0.033			-0.038
10/26/2017 17:27			0.059	0.08	0	0.057	0.033			-0.038
10/26/2017 17:28			0.059	0.08	0	0.057	0.033			-0.038
10/26/2017 17:29			0.058	0.08	0	0.057	0.033			-0.038
10/26/2017 17:30	12.7	82	0.057	0.08	0	0.057	0.034	40.75419;-	14	-0.037
10/26/2017 17:31			0.057	0.08	0	0.057	0.034			-0.037
10/26/2017 17:32			0.057	0.08	0	0.057	0.034			-0.037
10/26/2017 17:33			0.059	0.08	0	0.057	0.034			-0.037
10/26/2017 17:34			0.057	0.08	0	0.057	0.034			-0.037
10/26/2017 17:35	12.6	140.7	0.058	0.08	0	0.057	0.034	40.75422;-	12	-0.037
10/26/2017 17:36			0.059	0.08	0	0.057	0.034			-0.037
10/26/2017 17:37			0.058	0.08	0	0.057	0.034			-0.037
10/26/2017 17:38			0.059	0.08	0	0.057	0.035			-0.037
10/26/2017 17:39			0.058	0.08	0	0.057	0.035			-0.037
10/26/2017 17:40	12.7	129.6	0.058	0.08	0	0.057	0.035	40.75422;-	6	-0.037
10/26/2017 17:41			0.058	0.08	0	0.057	0.035			-0.037
10/26/2017 17:42			0.058	0.08	0	0.057	0.035			-0.037
10/26/2017 17:43			0.059	0.08	0	0.057	0.035			-0.037
10/26/2017 17:44			0.06	0.08	0	0.057	0.035			-0.037
10/26/2017 17:45	12.7	89.1	0.058	0.08	0	0.057	0.035	40.7542;-7	5	-0.038
10/26/2017 17:46			0.058	0.08	0	0.057	0.036			-0.037
10/26/2017 17:47			0.058	0.08	0	0.057	0.036			-0.036
10/26/2017 17:48			0.059	0.08	0	0.057	0.036			-0.036
10/26/2017 17:49			0.059	0.08	0	0.057	0.036			-0.037
10/26/2017 17:50	12.8	91.1	0.059	0.08	0	0.058	0.036	40.75422;-	7	-0.037
10/26/2017 17:51			0.06	0.08	0	0.058	0.036			-0.037
10/26/2017 17:52			0.06	0.08	0	0.058	0.036			-0.037
10/26/2017 17:53			0.061	0.08	0	0.058	0.036			-0.037
10/26/2017 17:54			0.06	0.08	0	0.058	0.037			-0.037
10/26/2017 17:55	12.9	81	0.061	0.08	0	0.058	0.037	40.7542;-7	9	-0.038
10/26/2017 17:56			0.06	0.08	0	0.058	0.037			-0.037
10/26/2017 17:57			0.06	0.08	0	0.058	0.037			-0.037
10/26/2017 17:58			0.062	0.08	0	0.059	0.037			-0.036
10/26/2017 17:59			0.062	0.08	0	0.059	0.037			-0.035
10/26/2017 18:00	12.8	82	0.062	0.08	0	0.059	0.037	40.75418;-	-3	-0.035
10/26/2017 18:01			0.061	0.08	0	0.059	0.037			-0.036
10/26/2017 18:02			0.061	0.08	0	0.059	0.038			-0.037
10/26/2017 18:03			0.061	0.08	0	0.059	0.038			-0.037
10/26/2017 18:04			0.061	0.08	0	0.06	0.038			-0.037

10/26/2017 18:05	12.7	82	0.061	0.08	0	0.06	0.038	40.7542;-7	3	-0.037
10/26/2017 18:06			0.062	0.08	0	0.06	0.038			-0.037
10/26/2017 18:07			0.061	0.08	0	0.06	0.038			-0.037
10/26/2017 18:08			0.062	0.08	0	0.06	0.038			-0.036
10/26/2017 18:09			0.062	0.08	0	0.06	0.038			-0.034
10/26/2017 18:10	12.7	92.1	0.061	0.08	0	0.06	0.039	40.75417;-	8	-0.034
10/26/2017 18:11			0.061	0.08	0	0.06	0.039			-0.035
10/26/2017 18:12			0.061	0.08	0	0.06	0.039			-0.036
10/26/2017 18:13			0.061	0.08	0	0.06	0.039			-0.037
10/26/2017 18:14			0.062	0.08	0	0.06	0.039			-0.037
10/26/2017 18:15	12.6	82	0.061	0.08	0	0.06	0.039	40.7542;-7	7	-0.037
10/26/2017 18:16			0.062	0.08	0	0.06	0.039			-0.037
10/26/2017 18:17			0.062	0.08	0	0.061	0.039			-0.037
10/26/2017 18:18			0.062	0.08	0	0.061	0.04			-0.037
10/26/2017 18:19			0.061	0.08	0	0.061	0.04			-0.037
10/26/2017 18:20	12.6	82	0.062	0.08	0	0.061	0.04	40.75422;-	12	-0.037
10/26/2017 18:21			0.062	0.08	0	0.06	0.04			-0.036
10/26/2017 18:22			0.062	0.08	0	0.06	0.04			-0.035
10/26/2017 18:23			0.061	0.08	0	0.061	0.04			-0.034
10/26/2017 18:24			0.062	0.08	0	0.06	0.04			-0.035
10/26/2017 18:25	12.6	80	0.06	0.08	0	0.06	0.04	40.75423;-	10	-0.036
10/26/2017 18:26			0.06	0.08	0	0.06	0.041			-0.036
10/26/2017 18:27			0.06	0.08	0	0.06	0.041			-0.037
10/26/2017 18:28			0.06	0.08	0	0.06	0.041			-0.037
10/26/2017 18:29			0.061	0.08	0	0.06	0.041			-0.037
10/26/2017 18:30	12.6	92.1	0.06	0.08	0	0.06	0.041	40.75425;-	5	-0.037
10/26/2017 18:31			0.06	0.08	0	0.06	0.041			-0.037
10/26/2017 18:32			0.061	0.08	0	0.06	0.041			-0.036
10/26/2017 18:33			0.059	0.08	0	0.06	0.041			-0.035
10/26/2017 18:34			0.061	0.08	0	0.06	0.042			-0.035
10/26/2017 18:35	12.6	128.6	0.059	0.08	0	0.06	0.042	40.75423;-	5	-0.034
10/26/2017 18:36			0.06	0.08	0	0.06	0.042			-0.035
10/26/2017 18:37			0.06	0.08	0	0.06	0.042			-0.036
10/26/2017 18:38			0.059	0.08	0	0.059	0.042			-0.036
10/26/2017 18:39			0.058	0.08	0	0.059	0.042			-0.036
10/26/2017 18:40	12.6	130.6	0.057	0.08	0	0.059	0.042	40.75426;-	5	-0.036
10/26/2017 18:41			0.058	0.08	0	0.059	0.042			-0.036
10/26/2017 18:42			0.057	0.08	0	0.059	0.043			-0.035
10/26/2017 18:43			0.056	0.08	0	0.058	0.043			-0.036
10/26/2017 18:44			0.056	0.08	0	0.058	0.043			-0.037
10/26/2017 18:45	12.6	85	0.057	0.08	0	0.058	0.043	40.7542;-7	8	-0.037
10/26/2017 18:46			0.056	0.08	0	0.058	0.043			-0.037
10/26/2017 18:47			0.057	0.08	0	0.057	0.043			-0.037
10/26/2017 18:48			0.057	0.08	0	0.057	0.043			-0.037
10/26/2017 18:49			0.057	0.08	0	0.057	0.043			-0.037
10/26/2017 18:50	12.6	86	0.057	0.08	0	0.057	0.043	40.75419;-	17	-0.037
10/26/2017 18:51			0.055	0.08	0	0.056	0.044			-0.036
10/26/2017 18:52			0.057	0.08	0	0.056	0.044			-0.032
10/26/2017 18:53			0.055	0.08	0	0.056	0.044			-0.033
10/26/2017 18:54			0.056	0.08	0	0.055	0.044			-0.033
10/26/2017 18:55	12.6	88.1	0.055	0.08	0	0.055	0.044	40.75419;-	11	-0.032
10/26/2017 18:56			0.055	0.08	0	0.055	0.044			-0.034
10/26/2017 18:57			0.056	0.08	0	0.055	0.044			-0.035
10/26/2017 18:58			0.054	0.08	0	0.055	0.044			-0.036
10/26/2017 18:59			0.055	0.08	0	0.055	0.045			-0.036
10/26/2017 19:00	12.6	92.1	0.055	0.08	0	0.055	0.045	40.75418;-	18	-0.036

10/26/2017 19:01			0.055	0.08	0	0.055	0.045			-0.036
10/26/2017 19:02			0.053	0.08	0	0.055	0.045			-0.036
10/26/2017 19:03			0.055	0.08	0	0.054	0.045			-0.036
10/26/2017 19:04			0.055	0.08	0	0.054	0.045			-0.035
10/26/2017 19:05	12.6	83	0.055	0.08	0	0.054	0.045	40.7542;-7	13	-0.035
10/26/2017 19:06			0.055	0.08	0	0.054	0.045			-0.036
10/26/2017 19:07			0.055	0.08	0	0.054	0.045			-0.036
10/26/2017 19:08			0.053	0.08	0	0.054	0.046			-0.037
10/26/2017 19:09			0.055	0.08	0	0.054	0.046			-0.037
10/26/2017 19:10	12.6	88.1	0.054	0.08	0	0.054	0.046	40.75412;-	34	-0.037
10/26/2017 19:11			0.055	0.08	0	0.054	0.046			-0.037
10/26/2017 19:12			0.055	0.08	0	0.054	0.046			-0.037
10/26/2017 19:13			0.054	0.08	0	0.053	0.046			-0.037
10/26/2017 19:14			0.054	0.08	0	0.053	0.046			-0.037
10/26/2017 19:15	12.6	83	0.055	0.08	0	0.053	0.046	40.75426;-	9	-0.037
10/26/2017 19:16			0.054	0.08	0	0.053	0.046			-0.037
10/26/2017 19:17			0.054	0.08	0	0.053	0.047			-0.037
10/26/2017 19:18			0.055	0.08	0	0.053	0.047			-0.037
10/26/2017 19:19			0.054	0.08	0	0.053	0.047			-0.037
10/26/2017 19:20	12.6	83	0.054	0.08	0	0.053	0.047	40.7542;-7	17	-0.037
10/26/2017 19:21			0.054	0.08	0	0.053	0.047			-0.037
10/26/2017 19:22			0.054	0.08	0	0.053	0.047			-0.037
10/26/2017 19:23			0.049	0.08	0	0.053	0.047			-0.036
10/26/2017 19:24			0.048	0.08	0	0.053	0.047			-0.034
10/26/2017 19:25	12.6	83	0.05	0.08	0	0.053	0.047	40.75421;-	10	-0.035
10/26/2017 19:26			0.05	0.08	0	0.052	0.048			-0.035
10/26/2017 19:27			0.051	0.08	0	0.052	0.048			-0.036
10/26/2017 19:28			0.052	0.08	0	0.052	0.048			-0.036
10/26/2017 19:29			0.051	0.08	0	0.052	0.048			-0.036
10/26/2017 19:30	12.6	82	0.052	0.08	0	0.051	0.048	40.75419;-	20	-0.037
10/26/2017 19:31			0.051	0.08	0	0.051	0.048			-0.037
10/26/2017 19:32			0.052	0.08	0	0.051	0.048			-0.037
10/26/2017 19:33			0.052	0.08	0	0.051	0.048			-0.037
10/26/2017 19:34			0.051	0.08	0	0.051	0.048			-0.037
10/26/2017 19:35	12.6	93.1	0.051	0.08	0	0.05	0.048	40.75418;-	16	-0.037
10/26/2017 19:36			0.051	0.08	0	0.05	0.049			-0.037
10/26/2017 19:37			0.05	0.08	0	0.05	0.049			-0.037
10/26/2017 19:38			0.051	0.08	0	0.05	0.049			-0.037
10/26/2017 19:39			0.052	0.08	0	0.05	0.049			-0.037
10/26/2017 19:40	12.6	87	0.052	0.08	0	0.05	0.049	40.75421;-	2	-0.037
10/26/2017 19:41			0.052	0.08	0	0.05	0.049			-0.037
10/26/2017 19:42			0.052	0.08	0	0.05	0.049			-0.037
10/26/2017 19:43			0.051	0.08	0	0.05	0.049			-0.037
10/26/2017 19:44			0.052	0.08	0	0.05	0.049			-0.037
10/26/2017 19:45	12.6	86	0.05	0.08	0	0.05	0.05	40.75422;-	7	-0.037
10/26/2017 19:46			0.051	0.08	0	0.05	0.05			-0.037
10/26/2017 19:47			0.052	0.08	0	0.05	0.05			-0.037
10/26/2017 19:48			0.051	0.08	0	0.05	0.05			-0.031
10/26/2017 19:49			0.052	0.08	0	0.05	0.05			-0.032
10/26/2017 19:50	12.6	93.1	0.052	0.08	0	0.05	0.05	40.75419;-	15	-0.034
10/26/2017 19:51			0.052	0.08	0	0.05	0.05			-0.035
10/26/2017 19:52			0.051	0.08	0	0.05	0.05			-0.036
10/26/2017 19:53			0.052	0.08	0	0.05	0.05			-0.037
10/26/2017 19:54			0.051	0.08	0	0.05	0.05			-0.037
10/26/2017 19:55	12.6	86	0.051	0.08	0	0.05	0.051	40.75419;-	14	-0.037
10/26/2017 19:56			0.051	0.08	0	0.05	0.051			-0.037

10/26/2017 19:57			0.051	0.08	0	0.05	0.051			-0.033
10/26/2017 19:58			0.051	0.08	0	0.05	0.051			-0.032
10/26/2017 19:59			0.052	0.08	0	0.05	0.051			-0.035
10/26/2017 20:00	12.6	91.1	0.052	0.08	0	0.05	0.051	40.7542;-7	8	-0.035
10/26/2017 20:01			0.051	0.08	0	0.05	0.051			-0.033
10/26/2017 20:02			0.05	0.08	0	0.05	0.051			-0.035
10/26/2017 20:03			0.052	0.08	0	0.05	0.051			-0.036
10/26/2017 20:04			0.052	0.08	0	0.051	0.052			-0.037
10/26/2017 20:05	12.6	88.1	0.053	0.08	0	0.051	0.052	40.75425;-	14	-0.037
10/26/2017 20:06			0.052	0.08	0	0.051	0.052			-0.037
10/26/2017 20:07			0.052	0.08	0	0.051	0.052			-0.037
10/26/2017 20:08			0.052	0.08	0	0.051	0.052			-0.037
10/26/2017 20:09			0.053	0.08	0	0.051	0.052			-0.037
10/26/2017 20:10	12.6	85	0.053	0.08	0	0.051	0.052	40.75421;-	7	-0.037
10/26/2017 20:11			0.052	0.08	0	0.051	0.052			-0.037
10/26/2017 20:12			0.051	0.08	0	0.051	0.052			-0.037
10/26/2017 20:13			0.052	0.08	0	0.051	0.052			-0.035
10/26/2017 20:14			0.051	0.08	0	0.051	0.053			-0.035
10/26/2017 20:15	12.6	83	0.051	0.08	0	0.051	0.053	40.75426;-	8	-0.036
10/26/2017 20:16			0.052	0.08	0	0.051	0.053			-0.037
10/26/2017 20:17			0.052	0.08	0	0.051	0.053			-0.037
10/26/2017 20:18			0.051	0.08	0	0.051	0.053			-0.037
10/26/2017 20:19			0.052	0.08	0	0.051	0.053			-0.037
10/26/2017 20:20	12.6	88.1	0.051	0.08	0	0.051	0.053	40.75425;-	9	-0.037
10/26/2017 20:21			0.052	0.08	0	0.051	0.053			-0.037
10/26/2017 20:22			0.052	0.08	0	0.051	0.053			-0.037
10/26/2017 20:23			0.052	0.08	0	0.051	0.054			-0.037
10/26/2017 20:24			0.052	0.08	0	0.051	0.054			-0.037
10/26/2017 20:25	12.6	93.1	0.052	0.08	0	0.051	0.054	40.75423;-	9	-0.037
10/26/2017 20:26			0.052	0.08	0	0.051	0.054			-0.036
10/26/2017 20:27			0.052	0.08	0	0.051	0.054			-0.036
10/26/2017 20:30	12.6	91.1	0.052	0.08	0	0.051	0.054	40.75417;-	-4	-0.036
10/26/2017 20:31			0.051	0.08	0	0.051	0.054			-0.037
10/26/2017 20:32			0.053	0.08	0	0.051	0.055			-0.037
10/26/2017 20:33			0.052	0.08	0	0.051	0.055			-0.037
10/26/2017 20:34			0.052	0.08	0	0.051	0.055			-0.037
10/26/2017 20:35	12.6	128.6	0.051	0.08	0	0.051	0.055	40.75418;-	0	-0.037
10/26/2017 20:36			0.051	0.08	0	0.051	0.055			-0.037
10/26/2017 20:37			0.053	0.08	0	0.051	0.055			-0.037
10/26/2017 20:38			0.053	0.08	0	0.051	0.055			-0.037
10/26/2017 20:39			0.052	0.08	0	0.051	0.055			-0.037
10/26/2017 20:40	12.5	127.5	0.053	0.08	0	0.051	0.055	40.75418;-	10	-0.037
10/26/2017 20:41			0.052	0.08	0	0.051	0.055			-0.037
10/26/2017 20:42			0.051	0.08	0	0.051	0.056			-0.037
10/26/2017 20:43			0.053	0.08	0	0.051	0.056			-0.037
10/26/2017 20:44			0.052	0.08	0	0.051	0.056			-0.037
10/26/2017 20:45	12.6	83	0.052	0.08	0	0.051	0.056	40.75426;-	0	-0.037
10/26/2017 20:46			0.052	0.08	0	0.051	0.056			-0.037
10/26/2017 20:47			0.053	0.08	0	0.051	0.056			-0.037
10/26/2017 20:48			0.052	0.08	0	0.051	0.056			-0.037
10/26/2017 20:49			0.051	0.08	0	0.051	0.056			-0.037
10/26/2017 20:50	12.6	101.2	0.051	0.08	0	0.051	0.056	40.75416;-	7	-0.037
10/26/2017 20:51			0.051	0.08	0	0.051	0.057			-0.037
10/26/2017 20:52			0.052	0.08	0	0.051	0.057			-0.037
10/26/2017 20:53			0.051	0.08	0	0.051	0.057			-0.037
10/26/2017 20:54			0.052	0.08	0	0.051	0.057			-0.037

10/26/2017 20:55	12.6	84	0.052	0.08	0	0.051	0.057	40.7542;-7	11	-0.037
10/26/2017 20:56			0.051	0.08	0	0.051	0.057			-0.037
10/26/2017 20:57			0.051	0.08	0	0.051	0.057			-0.036
10/26/2017 20:58			0.051	0.08	0	0.051	0.057			-0.036
10/27/2017 14:08	14.5	112.4								
10/27/2017 14:09			0	0	0	0	0	40.7539302;-73.487679		
10/27/2017 14:10	14.2	76.9	0	0	0	0	0			
10/27/2017 14:11			0	0	0	0	0			
10/27/2017 14:12			0	0	0	0	0			
10/27/2017 14:13			0	0	0	0	0			-0.026
10/27/2017 14:14			0	0	0	0	0			-0.029
10/27/2017 14:15	13.7	90.1	0	0	0	0	0	40.75426;-	4	-0.031
10/27/2017 14:16			0	0	0	0	0			-0.032
10/27/2017 14:17			0	0	0	0	0			-0.033
10/27/2017 14:18			0	0	0	0	0			-0.034
10/27/2017 14:19			0	0	0	0	0			-0.035
10/27/2017 14:20	14.4	75.9	0	0	0	0	0	40.75425;-	3	-0.035
10/27/2017 14:21			0	0	0	0	0			-0.035
10/27/2017 14:22			0	0	0	0	0			-0.034
10/27/2017 14:23			0	0	0	0	0			-0.035
10/27/2017 14:24			0	0	0	0	0			-0.034
10/27/2017 14:25	13.7	77.9	0	0	0	0	0	40.75422;-	-1	-0.034
10/27/2017 14:26			0	0	0	0	0			-0.034
10/27/2017 14:27			0	0	0	0	0			-0.034
10/27/2017 14:28			0	0	0	0	0			-0.034
10/27/2017 14:29			0.003	0.003	0	0	0			-0.035
10/27/2017 14:30	14.2	117.4	0	0.003	0	0	0	40.75419;-	15	-0.034
10/27/2017 14:31			0	0.003	0	0	0			-0.034
10/27/2017 14:32			0.003	0.003	0	0	0			-0.034
10/27/2017 14:33			0.003	0.005	0	0	0			-0.035
10/27/2017 14:34			0.007	0.007	0	0	0			-0.035
10/27/2017 14:35	13.8	79	0.012	0.022	0	0	0	40.75421;-	6	-0.035
10/27/2017 14:36			0.012	0.022	0	0.001	0			-0.035
10/27/2017 14:37			0.013	0.022	0	0.002	0			-0.035
10/27/2017 14:38			0.016	0.022	0	0.003	0			-0.035
10/27/2017 14:39			0.018	0.022	0	0.004	0			-0.035
10/27/2017 14:40	13.8	84	0.018	0.022	0	0.005	0	40.75421;-	9	-0.036
10/27/2017 14:41			0.021	0.022	0	0.006	0			-0.036
10/27/2017 14:42			0.021	0.022	0	0.007	0			-0.036
10/27/2017 14:43			0.009	0.022	0	0.009	0			-0.029
10/27/2017 14:44			0.004	0.022	0	0.009	0			-0.03
10/27/2017 14:45	13.8	76.9	0.016	0.022	0	0.01	0	40.75419;-	8	-0.033
10/27/2017 14:46			0.018	0.022	0	0.011	0			-0.034
10/27/2017 14:47			0.021	0.022	0	0.012	0			-0.035
10/27/2017 14:48			0.02	0.022	0	0.013	0			-0.035
10/27/2017 14:49			0.021	0.022	0	0.014	0			-0.036
10/27/2017 14:50	13.9	74.9	0.022	0.023	0	0.015	0	40.75423;-	9	-0.036
10/27/2017 14:51			0.023	0.024	0	0.016	0			-0.036
10/27/2017 14:52			0.026	0.026	0	0.017	0			-0.036
10/27/2017 14:53			0.027	0.027	0	0.017	0			-0.035
10/27/2017 14:54			0.027	0.028	0	0.018	0			-0.036
10/27/2017 14:55	14.5	75.9	0.032	0.045	0	0.019	0	40.75423;-	13	-0.036
10/27/2017 14:56			0.032	0.045	0	0.02	0			-0.036
10/27/2017 14:57			0.035	0.045	0	0.021	0			-0.037
10/27/2017 14:58			0.038	0.045	0	0.021	0			-0.037
10/27/2017 14:59			0.037	0.045	0	0.023	0.001			-0.037

10/27/2017 15:00	14.3	76.9	0.039	0.045	0	0.025	0.001	40.75421;-	16	-0.036
10/27/2017 15:01			0.039	0.045	0	0.026	0.001			-0.037
10/27/2017 15:02			0.042	0.045	0	0.028	0.001			-0.037
10/27/2017 15:03			0.044	0.045	0	0.029	0.001			-0.037
10/27/2017 15:04			0.043	0.045	0	0.031	0.001			-0.036
10/27/2017 15:05	14.3	75.9	0.043	0.045	0	0.032	0.001	40.75423;-	13	-0.036
10/27/2017 15:06			0.045	0.046	0	0.034	0.001			-0.036
10/27/2017 15:07			0.047	0.048	0	0.035	0.001			-0.036
10/27/2017 15:08			0.048	0.048	0	0.037	0.001			-0.036
10/27/2017 15:09			0.049	0.05	0	0.038	0.001			-0.036
10/27/2017 15:10	14.2	76.9	0.05	0.051	0	0.039	0.002	40.75418;-	11	-0.036
10/27/2017 15:11			0.051	0.052	0	0.041	0.002			-0.036
10/27/2017 15:12			0.055	0.055	0	0.042	0.002			-0.036
10/27/2017 15:13			0.051	0.056	0	0.043	0.002			-0.037
10/27/2017 15:14			0.053	0.056	0	0.044	0.002			-0.037
10/27/2017 15:15	14.6	83	0.054	0.056	0	0.045	0.002	40.75422;-	10	-0.037
10/27/2017 15:16			0.056	0.057	0	0.046	0.002			-0.037
10/27/2017 15:17			0.057	0.058	0	0.047	0.002			-0.037
10/27/2017 15:18			0.058	0.059	0	0.048	0.002			-0.037
10/27/2017 15:19			0.059	0.06	0	0.049	0.003			-0.037
10/27/2017 15:20	14.2	79	0.063	0.063	0	0.05	0.003	40.75419;-	2	-0.037
10/27/2017 15:21			0.065	0.066	0	0.052	0.003			-0.037
10/27/2017 15:22			0.067	0.068	0	0.053	0.003			-0.037
10/27/2017 15:23			0.067	0.068	0	0.054	0.003			-0.037
10/27/2017 15:24			0.063	0.068	0	0.056	0.003			-0.036
10/27/2017 15:25	13.8	81	0.063	0.068	0	0.057	0.003	40.75422;-	3	-0.036
10/27/2017 15:26			0.062	0.068	0	0.057	0.003			-0.036
10/27/2017 15:27			0.063	0.068	0	0.058	0.004			-0.036
10/27/2017 15:28			0.062	0.068	0	0.059	0.004			-0.036
10/27/2017 15:29			0.06	0.068	0	0.06	0.004			-0.035
10/27/2017 15:30	14.2	77.9	0.063	0.068	0	0.06	0.004	40.75423;-	9	-0.036
10/27/2017 15:31			0.065	0.068	0	0.061	0.004			-0.036
10/27/2017 15:32			0.062	0.068	0	0.061	0.004			-0.035
10/27/2017 15:33			0.064	0.068	0	0.062	0.004			-0.036
10/27/2017 15:34			0.066	0.068	0	0.062	0.004			-0.037
10/27/2017 15:35	14.2	90.1	0.068	0.068	0	0.062	0.005	40.75421;-	12	-0.037
10/27/2017 15:36			0.071	0.071	0	0.063	0.005			-0.037
10/27/2017 15:37			0.071	0.072	0	0.063	0.005			-0.037
10/27/2017 15:38			0.073	0.074	0	0.064	0.005			-0.037
10/27/2017 15:39			0.066	0.074	0	0.064	0.005			-0.036
10/27/2017 15:40	14.1	122.5	0.064	0.074	0	0.064	0.005			-0.035
10/27/2017 15:40								40.75415;-	16	
10/27/2017 15:41			0.066	0.074	0	0.064	0.005			-0.036
10/27/2017 15:42			0.063	0.074	0	0.064	0.006			-0.036
10/27/2017 15:43			0.061	0.074	0	0.065	0.006			-0.034
10/27/2017 15:44			0.061	0.074	0	0.065	0.006			-0.034
10/27/2017 15:45	14.1	118.4	0.059	0.074	0	0.065	0.006	40.7542;-7	13	-0.034
10/27/2017 15:46			0.059	0.074	0	0.064	0.006			-0.033
10/27/2017 15:47			0.059	0.074	0	0.064	0.006			-0.034
10/27/2017 15:48			0.059	0.074	0	0.064	0.006			-0.034
10/27/2017 15:49			0.057	0.074	0	0.064	0.006			-0.034
10/27/2017 15:50	14.1	77.9	0.057	0.074	0	0.063	0.007	40.75423;-	12	-0.034
10/27/2017 15:51			0.058	0.074	0	0.062	0.007			-0.034
10/27/2017 15:52			0.058	0.074	0	0.062	0.007			-0.035
10/27/2017 15:53			0.058	0.074	0	0.061	0.007			-0.035
10/27/2017 15:54			0.059	0.074	0	0.06	0.007			-0.035

10/27/2017 15:55	13.7	89.1	0.06	0.074	0	0.059	0.007	40.75425;-	14	-0.035
10/27/2017 15:56			0.06	0.074	0	0.059	0.007			-0.035
10/27/2017 15:57			0.061	0.074	0	0.058	0.007			-0.036
10/27/2017 15:58			0.06	0.074	0	0.058	0.008			-0.035
10/27/2017 15:59			0.058	0.074	0	0.058	0.008			-0.034
10/27/2017 16:00	14.1	122.5	0.056	0.074	0	0.058	0.008	40.75423;-	17	-0.034
10/27/2017 16:01			0.056	0.074	0	0.057	0.008			-0.034
10/27/2017 16:02			0.054	0.074	0	0.057	0.008			-0.034
10/27/2017 16:03			0.052	0.074	0	0.057	0.008			-0.033
10/27/2017 16:04			0.05	0.074	0	0.057	0.008			-0.033
10/27/2017 16:05	14.2	86	0.049	0.074	0	0.056	0.008	40.75425;-	11	-0.032
10/27/2017 16:06			0.049	0.074	0	0.056	0.008			-0.032
10/27/2017 16:07			0.049	0.074	0	0.055	0.009			-0.033
10/27/2017 16:08			0.049	0.074	0	0.054	0.009			-0.034
10/27/2017 16:09			0.049	0.074	0	0.054	0.009			-0.033
10/27/2017 16:10	13.3	106.3	0.052	0.074	0	0.053	0.009	40.75425;-	11	-0.035
10/27/2017 16:11			0.051	0.074	0	0.053	0.009			-0.035
10/27/2017 16:12			0.05	0.074	0	0.052	0.009			-0.035
10/27/2017 16:13			0.05	0.074	0	0.051	0.009			-0.035
10/27/2017 16:14			0.05	0.074	0	0.051	0.009			-0.034
10/27/2017 16:15	13.6	86	0.05	0.074	0	0.05	0.009	40.75426;-	11	-0.034
10/27/2017 16:16			0.05	0.074	0	0.05	0.009			-0.035
10/27/2017 16:17			0.05	0.074	0	0.049	0.01			-0.035
10/27/2017 16:18			0.049	0.074	0	0.049	0.01			-0.034
10/27/2017 16:19			0.049	0.074	0	0.049	0.01			-0.035
10/27/2017 16:20	13.6	90.1	0.047	0.074	0	0.049	0.01	40.75422;-	14	-0.034
10/27/2017 16:21			0.048	0.074	0	0.048	0.01			-0.035
10/27/2017 16:22			0.05	0.074	0	0.048	0.01			-0.036
10/27/2017 16:23			0.048	0.074	0	0.048	0.01			-0.035
10/27/2017 16:24			0.049	0.074	0	0.048	0.01			-0.036
10/27/2017 16:25	13.3	89.1	0.048	0.074	0	0.048	0.01	40.75419;-	18	-0.034
10/27/2017 16:26			0.047	0.074	0	0.048	0.01			-0.034
10/27/2017 16:27			0.046	0.074	0	0.048	0.011			-0.033
10/27/2017 16:28			0.048	0.074	0	0.048	0.011			-0.034
10/27/2017 16:29			0.046	0.074	0	0.047	0.011			-0.034
10/27/2017 16:30	13.3	79	0.045	0.074	0	0.047	0.011	40.75419;-	16	-0.033
10/27/2017 16:31			0.045	0.074	0	0.047	0.011			-0.032
10/27/2017 16:32			0.043	0.074	0	0.046	0.011			-0.032
10/27/2017 16:33			0.044	0.074	0	0.046	0.011			-0.033
10/27/2017 16:34			0.043	0.074	0	0.046	0.011			-0.033
10/27/2017 16:35	13.4	79	0.045	0.074	0	0.045	0.011	40.75418;-	22	-0.034
10/27/2017 16:36			0.045	0.074	0	0.045	0.011			-0.034
10/27/2017 16:37			0.045	0.074	0	0.045	0.011			-0.033
10/27/2017 16:38			0.044	0.074	0	0.045	0.012			-0.033
10/27/2017 16:39			0.045	0.074	0	0.045	0.012			-0.034
10/27/2017 16:40	13.3	84	0.045	0.074	0	0.044	0.012	40.75417;-	20	-0.035
10/27/2017 16:41			0.045	0.074	0	0.044	0.012			-0.036
10/27/2017 16:42			0.048	0.074	0	0.044	0.012			-0.036
10/27/2017 16:43			0.048	0.074	0	0.044	0.012			-0.035
10/27/2017 16:44			0.047	0.074	0	0.044	0.012			-0.034
10/27/2017 16:45	13.2	91.1	0.03	0.074	0	0.044	0.012	40.7542;-7	16	-0.027
10/27/2017 16:46			0.029	0.074	0	0.044	0.012			-0.022
10/27/2017 16:47			0.032	0.074	0	0.042	0.012			-0.028
10/27/2017 16:48			0.035	0.074	0	0.042	0.012			-0.03
10/27/2017 16:49			0.038	0.074	0	0.041	0.013			-0.032
10/27/2017 16:50	13.3	87	0.039	0.074	0	0.041	0.013	40.7542;-7	18	-0.034

10/27/2017 16:51			0.041	0.074	0	0.04	0.013			-0.035
10/27/2017 16:52			0.041	0.074	0	0.04	0.013			-0.035
10/27/2017 16:53			0.042	0.074	0	0.04	0.013			-0.035
10/27/2017 16:54			0.044	0.074	0	0.039	0.013			-0.035
10/27/2017 16:55	13.5	80	0.045	0.074	0	0.039	0.013	40.75422;-	18	-0.035
10/27/2017 16:56			0.046	0.074	0	0.039	0.013			-0.036
10/27/2017 16:57			0.046	0.074	0	0.039	0.013			-0.036
10/27/2017 16:58			0.046	0.074	0	0.039	0.013			-0.036
10/27/2017 16:59			0.047	0.074	0	0.039	0.013			-0.036
10/27/2017 17:00	13.3	98.2	0.047	0.074	0	0.039	0.013	40.75419;-	15	-0.036
10/27/2017 17:01			0.048	0.074	0	0.04	0.014			-0.036
10/27/2017 17:02			0.049	0.074	0	0.041	0.014			-0.036
10/27/2017 17:03			0.047	0.074	0	0.042	0.014			-0.037
10/27/2017 17:04			0.049	0.074	0	0.043	0.014			-0.036
10/27/2017 17:05	13.2	86	0.048	0.074	0	0.044	0.014	40.75421;-	6	-0.036
10/27/2017 17:06			0.048	0.074	0	0.045	0.014			-0.036
10/27/2017 17:07			0.047	0.074	0	0.045	0.014			-0.036
10/27/2017 17:08			0.047	0.074	0	0.046	0.014			-0.036
10/27/2017 17:09			0.046	0.074	0	0.046	0.014			-0.036
10/27/2017 17:10	13.2	84	0.047	0.074	0	0.046	0.014	40.75417;-	21	-0.036
10/27/2017 17:11			0.048	0.074	0	0.046	0.015			-0.036
10/27/2017 17:12			0.047	0.074	0	0.047	0.015			-0.036
10/27/2017 17:13			0.047	0.074	0	0.047	0.015			-0.036
10/27/2017 17:14			0.047	0.074	0	0.047	0.015			-0.036
10/27/2017 17:15	13.5	81	0.046	0.074	0	0.047	0.015	40.75419;-	14	-0.036
10/27/2017 17:16			0.047	0.074	0	0.047	0.015			-0.036
10/27/2017 17:17			0.046	0.074	0	0.046	0.015			-0.036
10/27/2017 17:18			0.046	0.074	0	0.046	0.015			-0.035
10/27/2017 17:19			0.045	0.074	0	0.046	0.015			-0.036
10/27/2017 17:20	13.4	91.1	0.045	0.074	0	0.046	0.015	40.75419;-	13	-0.036
10/27/2017 17:21			0.045	0.074	0	0.046	0.016			-0.036
10/27/2017 17:22			0.046	0.074	0	0.046	0.016			-0.036
10/27/2017 17:23			0.044	0.074	0	0.045	0.016			-0.036
10/27/2017 17:24			0.044	0.074	0	0.045	0.016			-0.036
10/27/2017 17:25	13.4	82	0.043	0.074	0	0.045	0.016	40.75419;-	4	-0.036
10/27/2017 17:26										-0.035
10/30/2017 14:02	12.9	120.5								
10/30/2017 14:02								40.7564248;-73.4870237		
10/30/2017 14:03			0	0	0	0	0			
10/30/2017 14:04			0	0	0	0	0			
10/30/2017 14:05	13	122.5	0	0	0	0	0	40.75421;-	-3	
10/30/2017 14:06			0	0	0	0	0			-0.037
10/30/2017 14:07			0	0	0	0	0			-0.037
10/30/2017 14:08			0	0	0	0	0			-0.038
10/30/2017 14:09			0	0	0	0	0			-0.038
10/30/2017 14:10	14.5	74.9	0	0	0	0	0	40.75422;-	6	-0.038
10/30/2017 14:11			0	0	0	0	0			-0.039
10/30/2017 14:12			0	0	0	0	0			-0.039
10/30/2017 14:13			0	0	0	0	0			-0.039
10/30/2017 14:14			0	0	0	0	0			-0.039
10/30/2017 14:15	14.4	73.9	0	0	0	0	0	40.75421;-	2	-0.039
10/30/2017 14:16			0	0	0	0	0			-0.039
10/30/2017 14:17			0	0	0	0	0			-0.039
10/30/2017 14:18			0	0	0	0	0			-0.039
10/30/2017 14:19			0	0	0	0	0			-0.039
10/30/2017 14:20	13.3	79	0	0	0	0	0	40.75419;-	-4	-0.039

10/30/2017 14:21			0	0	0	0	0			-0.039
10/30/2017 14:22			0	0	0	0	0			-0.039
10/30/2017 14:23			0	0	0	0	0			-0.039
10/30/2017 14:24			0	0	0	0	0			-0.039
10/30/2017 14:25	13.5	81	0	0	0	0	0	40.75417;-	9	-0.039
10/30/2017 14:26			0	0	0	0	0			-0.039
10/30/2017 14:27			0	0	0	0	0			-0.039
10/30/2017 14:28			0	0	0	0	0			-0.039
10/30/2017 14:29			0	0	0	0	0			-0.039
10/30/2017 14:30	14.2	73.9	0	0	0	0	0	40.7542;-7	4	-0.039
10/30/2017 14:31			0	0	0	0	0			-0.039
10/30/2017 14:32			0	0.001	0	0	0			-0.039
10/30/2017 14:33			0.003	0.003	0	0	0			-0.039
10/30/2017 14:34			0.004	0.004	0	0	0			-0.039
10/30/2017 14:35	14	101.2	0.006	0.006	0	0	0	40.75421;-	0	-0.039
10/30/2017 14:36			0.006	0.006	0	0	0			-0.039
10/30/2017 14:37			0.009	0.017	0	0	0			-0.039
10/30/2017 14:38			0.011	0.017	0	0.001	0			-0.039
10/30/2017 14:39			0.013	0.017	0	0.002	0			-0.039
10/30/2017 14:40	14	74.9	0.013	0.017	0	0.002	0	40.75421;-	-1	-0.039
10/30/2017 14:41			0.014	0.017	0	0.003	0			-0.039
10/30/2017 14:42			0.014	0.017	0	0.004	0			-0.039
10/30/2017 14:43			0.016	0.017	0	0.005	0			-0.039
10/30/2017 14:44			0.016	0.017	0	0.006	0			-0.039
10/30/2017 14:45	14.3	74.9	0.016	0.017	0	0.007	0	40.75419;-	10	-0.039
10/30/2017 14:46			0.017	0.018	0	0.008	0			-0.039
10/30/2017 14:47			0.019	0.019	0	0.009	0			-0.039
10/30/2017 14:48			0.021	0.021	0	0.01	0			-0.039
10/30/2017 14:49			0.021	0.022	0	0.011	0			-0.039
10/30/2017 14:50	14	76.9	0.021	0.022	0	0.013	0	40.75418;-	12	-0.039
10/30/2017 14:51			0.022	0.023	0	0.014	0			-0.039
10/30/2017 14:52			0.021	0.023	0	0.015	0			-0.039
10/30/2017 14:53			0.022	0.023	0	0.016	0			-0.039
10/30/2017 14:54			0.023	0.023	0	0.016	0			-0.039
10/30/2017 14:55	14.2	75.9	0.023	0.025	0	0.017	0	40.75419;-	9	-0.039
10/30/2017 14:56			0.023	0.025	0	0.018	0			-0.039
10/30/2017 14:57			0.024	0.026	0	0.019	0			-0.039
10/30/2017 14:58			0.023	0.026	0	0.019	0			-0.038
10/30/2017 14:59			0.024	0.026	0	0.02	0			-0.038
10/30/2017 15:00	14.3	77.9	0.025	0.026	0	0.021	0	40.75419;-	10	-0.039
10/30/2017 15:01			0.024	0.026	0	0.021	0			-0.038
10/30/2017 15:02			0.025	0.026	0	0.022	0			-0.039
10/30/2017 15:03			0.024	0.026	0	0.022	0.001			-0.038
10/30/2017 15:04			0.025	0.026	0	0.022	0.001			-0.038
10/30/2017 15:05	13.4	85	0.017	0.026	0	0.023	0.001	40.75417;-	11	-0.037
10/30/2017 15:06			0.019	0.026	0	0.022	0.001			-0.037
10/30/2017 15:07			0.022	0.026	0	0.022	0.001			-0.037
10/30/2017 15:08			0.026	0.026	0	0.022	0.001			-0.038
10/30/2017 15:09			0.026	0.026	0	0.022	0.001			-0.038
10/30/2017 15:10	13.3	80	0.027	0.027	0	0.023	0.001	40.7542;-7	2	-0.038
10/30/2017 15:11			0.027	0.029	0	0.023	0.001			-0.038
10/30/2017 15:12			0.029	0.029	0	0.023	0.001			-0.038
10/30/2017 15:13			0.03	0.031	0	0.023	0.001			-0.038
10/30/2017 15:14			0.031	0.032	0	0.024	0.001			-0.038
10/30/2017 15:15	13.9	75.9	0.033	0.033	0	0.024	0.001	40.75422;-	-7	-0.038
10/30/2017 15:16			0.033	0.033	0	0.025	0.001			-0.038

10/30/2017 15:17			0.032	0.033	0	0.025	0.001			-0.038
10/30/2017 15:18			0.033	0.034	0	0.026	0.001			-0.038
10/30/2017 15:19			0.035	0.035	0	0.026	0.001			-0.038
10/30/2017 15:20	14	74.9	0.033	0.035	0	0.027	0.001	40.75429;-	-34	-0.038
10/30/2017 15:21			0.036	0.036	0	0.028	0.002			-0.038
10/30/2017 15:22			0.031	0.036	0	0.029	0.002			-0.038
10/30/2017 15:23			0.033	0.036	0	0.029	0.002			-0.039
10/30/2017 15:24			0.033	0.036	0	0.03	0.002			-0.038
10/30/2017 15:25	14.2	118.4	0.035	0.036	0	0.03	0.002	40.7542;-7	9	-0.038
10/30/2017 15:26			0.035	0.036	0	0.031	0.002			-0.038
10/30/2017 15:27			0.036	0.036	0	0.031	0.002			-0.038
10/30/2017 15:28			0.035	0.037	0	0.032	0.002			-0.038
10/30/2017 15:29			0.036	0.037	0	0.032	0.002			-0.038
10/30/2017 15:30	13.4	83	0.037	0.037	0	0.032	0.002			-0.038
10/30/2017 15:31										-0.038
10/30/2017 15:31			0.036	0.037	0	0.033	0.002			
10/30/2017 15:32			0.037	0.037	0	0.033	0.002			-0.038
10/30/2017 15:33			0.037	0.038	0	0.033	0.002			-0.038
10/30/2017 15:34			0.037	0.038	0	0.034	0.002			-0.038
10/30/2017 15:35	13.3	126.5	0.035	0.038	0	0.034	0.003	40.75421;-	7	-0.038
10/30/2017 15:36			0.038	0.038	0	0.034	0.003			-0.038
10/30/2017 15:37			0.039	0.039	0	0.034	0.003			-0.038
10/30/2017 15:38			0.039	0.039	0	0.034	0.003			-0.038
10/30/2017 15:39			0.036	0.039	0	0.035	0.003			-0.038
10/30/2017 15:40	13.1	81	0.039	0.039	0	0.035	0.003	40.75413;-	27	-0.038
10/30/2017 15:41			0.039	0.04	0	0.036	0.003			-0.038
10/30/2017 15:42			0.039	0.04	0	0.036	0.003			-0.037
10/30/2017 15:43			0.039	0.04	0	0.036	0.003			-0.038
10/30/2017 15:44			0.039	0.04	0	0.036	0.003			-0.038
10/30/2017 15:45	13	81	0.039	0.04	0	0.037	0.003	40.75411;-	19	-0.038
10/30/2017 15:46			0.042	0.042	0	0.037	0.003			-0.038
10/30/2017 15:47			0.041	0.042	0	0.037	0.004			-0.038
10/30/2017 15:48			0.042	0.042	0	0.037	0.004			-0.038
10/30/2017 15:49			0.042	0.044	0	0.038	0.004			-0.038
10/30/2017 15:50	13	82	0.041	0.044	0	0.038	0.004	40.75418;-	21	-0.038
10/30/2017 15:51			0.042	0.044	0	0.038	0.004			-0.038
10/30/2017 15:52			0.041	0.044	0	0.039	0.004			-0.038
10/30/2017 15:53			0.042	0.044	0	0.039	0.004			-0.038
10/30/2017 15:54			0.042	0.044	0	0.039	0.004			-0.038
10/30/2017 15:55	13.1	91.1	0.042	0.044	0	0.039	0.004	40.7542;-7	16	-0.038
10/30/2017 15:56			0.042	0.044	0	0.04	0.004			-0.038
10/30/2017 15:57			0.043	0.044	0	0.04	0.004			-0.038
10/30/2017 15:58			0.042	0.044	0	0.04	0.004			-0.038
10/30/2017 15:59			0.042	0.044	0	0.04	0.005			-0.038
10/30/2017 16:00	14.5	75.9	0.043	0.044	0	0.041	0.005	40.75415;-	20	-0.038
10/30/2017 16:01			0.043	0.044	0	0.041	0.005			-0.038
10/30/2017 16:02			0.043	0.045	0	0.041	0.005			-0.038
10/30/2017 16:03			0.044	0.045	0	0.041	0.005			-0.038
10/30/2017 16:04			0.044	0.045	0	0.041	0.005			-0.038
10/30/2017 16:05	14	75.9	0.043	0.045	0	0.042	0.005	40.75413;-	24	-0.038
10/30/2017 16:06			0.043	0.045	0	0.042	0.005			-0.038
10/30/2017 16:07			0.044	0.045	0	0.042	0.005			-0.038
10/30/2017 16:08			0.045	0.046	0	0.042	0.005			-0.038
10/30/2017 16:09			0.044	0.046	0	0.042	0.005			-0.038
10/30/2017 16:10	14.1	84	0.046	0.046	0	0.042	0.006	40.75413;-	22	-0.038
10/30/2017 16:11			0.043	0.046	0	0.043	0.006			-0.038

10/30/2017 16:12			0.045	0.046	0	0.043	0.006			-0.038
10/30/2017 16:13			0.045	0.046	0	0.043	0.006			-0.039
10/30/2017 16:14			0.044	0.046	0	0.043	0.006			-0.038
10/30/2017 16:15	13.9	75.9	0.045	0.047	0	0.043	0.006	40.75415;-	24	-0.038
10/30/2017 16:16			0.046	0.047	0	0.043	0.006			-0.039
10/30/2017 16:17			0.045	0.047	0	0.043	0.006			-0.039
10/30/2017 16:18			0.048	0.05	0	0.044	0.006			-0.039
10/30/2017 16:19			0.046	0.05	0	0.044	0.006			-0.039
10/30/2017 16:20	13.4	93.1	0.047	0.05	0	0.044	0.006	40.75416;-	23	-0.038
10/30/2017 16:21			0.047	0.05	0	0.044	0.007			-0.039
10/30/2017 16:22			0.047	0.05	0	0.044	0.007			-0.038
10/30/2017 16:23			0.047	0.05	0	0.045	0.007			-0.038
10/30/2017 16:24			0.046	0.05	0	0.045	0.007			-0.038
10/30/2017 16:25	13.8	73.9	0.045	0.05	0	0.045	0.007	40.75415;-	22	-0.038
10/30/2017 16:26			0.047	0.05	0	0.045	0.007			-0.038
10/30/2017 16:27			0.047	0.05	0	0.045	0.007			-0.038
10/30/2017 16:28			0.045	0.05	0	0.045	0.007			-0.038
10/30/2017 16:29			0.046	0.05	0	0.045	0.007			-0.038
10/30/2017 16:30	14.3	85	0.047	0.05	0	0.045	0.007	40.75416;-	21	-0.038
10/30/2017 16:31			0.061	0.067	0	0.046	0.008			-0.038
10/30/2017 16:32			0.054	0.067	0	0.046	0.008			-0.039
10/30/2017 16:33			0.053	0.067	0	0.046	0.008			-0.039
10/30/2017 16:34			0.056	0.067	0	0.047	0.008			-0.039
10/30/2017 16:35	14.1	75.9	0.056	0.067	0	0.047	0.008	40.75419;-	22	-0.039
10/30/2017 16:36			0.056	0.067	0	0.048	0.008			-0.039
10/30/2017 16:37			0.058	0.067	0	0.048	0.008			-0.039
10/30/2017 16:38			0.055	0.067	0	0.049	0.008			-0.039
10/30/2017 16:39			0.056	0.067	0	0.05	0.008			-0.038
10/30/2017 16:40	14.2	77.9	0.058	0.067	0	0.05	0.009	40.75418;-	24	-0.038
10/30/2017 16:41			0.055	0.067	0	0.051	0.009			-0.038
10/30/2017 16:42			0.057	0.067	0	0.052	0.009			-0.038
10/30/2017 16:43			0.058	0.067	0	0.052	0.009			-0.038
10/30/2017 16:44			0.057	0.067	0	0.053	0.009			-0.038
10/30/2017 16:45	13.9	74.9	0.057	0.067	0	0.054	0.009	40.75421;-	20	-0.038
10/30/2017 16:46			0.059	0.067	0	0.055	0.009			-0.039
10/30/2017 16:47			0.059	0.067	0	0.055	0.009			-0.039
10/30/2017 16:48			0.06	0.067	0	0.056	0.009			-0.039
10/30/2017 16:49			0.06	0.067	0	0.056	0.01			-0.039
10/30/2017 16:50	13.9	128.6	0.061	0.067	0	0.056	0.01	40.75421;-	22	-0.039
10/30/2017 16:51			0.061	0.067	0	0.057	0.01			-0.039
10/30/2017 16:52			0.062	0.067	0	0.057	0.01			-0.039
10/30/2017 16:53			0.062	0.067	0	0.057	0.01			-0.039
10/30/2017 16:54			0.062	0.067	0	0.058	0.01			-0.039
10/30/2017 16:55	13.8	76.9	0.064	0.067	0	0.058	0.01	40.75422;-	17	-0.039
10/30/2017 16:56			0.063	0.067	0	0.059	0.01			-0.039
10/30/2017 16:57			0.064	0.067	0	0.059	0.011			-0.039
10/30/2017 16:58			0.065	0.067	0	0.06	0.011			-0.039
10/30/2017 16:59			0.066	0.067	0	0.06	0.011			-0.039
10/30/2017 17:00	14.2	76.9	0.065	0.067	0	0.061	0.011	40.75421;-	3	-0.039
10/30/2017 17:01			0.067	0.067	0	0.061	0.011			-0.039
10/30/2017 17:02			0.068	0.068	0	0.062	0.011			-0.039
10/30/2017 17:03			0.067	0.068	0	0.062	0.011			-0.039
10/30/2017 17:04			0.069	0.07	0	0.063	0.012			-0.039
10/30/2017 17:05	14.1	90.1	0.07	0.07	0	0.063	0.012	40.7542;-7	5	-0.039
10/30/2017 17:08			0.073	0.076	0	0.066	0.012			-0.039
10/30/2017 17:09			0.072	0.076	0	0.066	0.012			-0.039

10/30/2017 17:10	13.8	97.2	0.078	0.079	0	0.067	0.012			-0.039
10/30/2017 17:10								40.75417;-	5	
10/30/2017 17:11			0.079	0.079	0	0.068	0.013			-0.039
10/30/2017 17:12			0.081	0.081	0	0.068	0.013			-0.039
10/30/2017 17:13			0.08	0.081	0	0.069	0.013			-0.038
10/30/2017 17:14			0.063	0.081	0	0.07	0.013			-0.039
10/30/2017 17:15	13.9	117.4	0.077	0.081	0	0.071	0.013	40.75413;-	1	-0.039
10/30/2017 17:16			0.079	0.081	0	0.072	0.013			-0.039
10/30/2017 17:17			0.078	0.081	0	0.073	0.014			-0.038
10/30/2017 17:18			0.08	0.081	0	0.074	0.014			-0.038
10/30/2017 17:19			0.081	0.082	0	0.075	0.014			-0.039
10/30/2017 17:20	14.1	117.4	0.08	0.082	0	0.075	0.014	40.75422;-	0	-0.039
10/30/2017 17:21			0.081	0.082	0	0.076	0.014			-0.039
10/30/2017 17:22			0.083	0.083	0	0.077	0.014			-0.038
10/30/2017 17:23			0.083	0.084	0	0.078	0.015			-0.039
10/30/2017 17:24			0.085	0.085	0	0.078	0.015			-0.039
10/30/2017 17:25	14.1	84	0.084	0.086	0	0.079	0.015	40.75423;-	1	-0.039
10/30/2017 17:26			0.086	0.087	0	0.079	0.015			-0.039
10/30/2017 17:27			0.086	0.087	0	0.08	0.015			-0.039
10/30/2017 17:28			0.088	0.088	0	0.08	0.015			-0.039
10/30/2017 17:29			0.088	0.09	0	0.081	0.016			-0.039
10/30/2017 17:30	14.1	85	0.09	0.09	0	0.082	0.016	40.75421;-	0	-0.039
10/30/2017 17:31			0.089	0.09	0	0.082	0.016			-0.038
10/30/2017 17:32			0.09	0.091	0	0.083	0.016			-0.039
10/30/2017 17:33			0.091	0.092	0	0.084	0.016			-0.039
10/30/2017 17:34			0.092	0.093	0	0.085	0.017			-0.039
10/30/2017 17:35	13.8	76.9	0.093	0.094	0	0.085	0.017	40.75421;-	-1	-0.039
10/30/2017 17:36			0.095	0.095	0	0.086	0.017			-0.039
10/30/2017 17:37			0.095	0.095	0	0.087	0.017			-0.039
10/30/2017 17:38			0.094	0.095	0	0.088	0.017			-0.038
10/30/2017 17:39			0.095	0.095	0	0.089	0.018			-0.038
10/30/2017 17:40	13.8	86	0.095	0.096	0	0.089	0.018	40.75423;-	-2	-0.038
10/30/2017 17:41			0.095	0.096	0	0.09	0.018			-0.038
10/30/2017 17:42			0.096	0.097	0	0.09	0.018			-0.038
10/30/2017 17:43			0.094	0.097	0	0.091	0.018			-0.038
10/30/2017 17:44			0.094	0.097	0	0.092	0.019			-0.038
10/30/2017 17:45	13.5	89.1	0.096	0.097	0	0.092	0.019	40.75418;-	3	-0.038
10/30/2017 17:46			0.096	0.097	0	0.092	0.019			-0.038
10/30/2017 17:47			0.094	0.097	0	0.093	0.019			-0.038
10/30/2017 17:48			0.095	0.097	0	0.093	0.019			-0.038
10/30/2017 17:49			0.096	0.097	0	0.093	0.02			-0.038
10/30/2017 17:50	14.1	77.9	0.095	0.097	0	0.094	0.02	40.75417;-	4	-0.038
10/30/2017 17:51			0.095	0.097	0	0.094	0.02			-0.038
10/30/2017 17:52			0.092	0.097	0	0.094	0.02			-0.038
10/30/2017 17:53			0.093	0.097	0	0.094	0.02			-0.037
10/30/2017 17:54			0.091	0.097	0	0.094	0.02			-0.038
10/30/2017 17:55	13.4	88.1	0.093	0.097	0	0.093	0.021	40.75419;-	4	-0.038
10/30/2017 17:56			0.071	0.097	0	0.093	0.021			-0.037
10/30/2017 17:57			0.068	0.097	0	0.093	0.021			-0.036
10/30/2017 17:58			0.073	0.097	0	0.091	0.021			-0.037
10/30/2017 17:59			0.078	0.097	0	0.089	0.021			-0.038
10/30/2017 18:00	13.3	93.1	0.079	0.097	0	0.088	0.021	40.75425;-	3	-0.038
10/30/2017 18:01			0.081	0.097	0	0.087	0.022			-0.038
10/30/2017 18:02			0.082	0.097	0	0.086	0.022			-0.038
10/30/2017 18:03			0.082	0.097	0	0.085	0.022			-0.038
10/30/2017 18:04			0.081	0.097	0	0.084	0.022			-0.038

10/30/2017 18:05	13.5	79	0.08	0.097	0	0.083	0.022	40.75421;-	7	-0.038
10/30/2017 18:06			0.08	0.097	0	0.082	0.022			-0.038
10/30/2017 18:07			0.081	0.097	0	0.081	0.023			-0.038
10/30/2017 18:08			0.079	0.097	0	0.081	0.023			-0.038
10/30/2017 18:09			0.078	0.097	0	0.08	0.023			-0.038
10/30/2017 18:10	13.3	79	0.074	0.097	0	0.079	0.023	40.75423;-	5	-0.038
10/30/2017 18:11			0.074	0.097	0	0.078	0.023			-0.038
10/30/2017 18:12			0.074	0.097	0	0.077	0.023			-0.038
10/30/2017 18:13			0.074	0.097	0	0.077	0.024			-0.038
10/30/2017 18:14			0.072	0.097	0	0.077	0.024			-0.038
10/30/2017 18:15	13.5	75.9	0.07	0.097	0	0.077	0.024	40.75423;-	4	-0.038
10/30/2017 18:16			0.069	0.097	0	0.076	0.024			-0.038
10/30/2017 18:17			0.067	0.097	0	0.076	0.024			-0.038
10/30/2017 18:18			0.066	0.097	0	0.075	0.024			-0.038
10/30/2017 18:19			0.067	0.097	0	0.074	0.024			-0.038
10/30/2017 18:20	13.4	82	0.065	0.097	0	0.073	0.025	40.75425;-	4	-0.038
10/30/2017 18:21			0.064	0.097	0	0.072	0.025			-0.038
10/30/2017 18:22			0.066	0.097	0	0.071	0.025			-0.038
10/30/2017 18:23			0.066	0.097	0	0.07	0.025			-0.038
10/30/2017 18:24			0.067	0.097	0	0.069	0.025			-0.038
10/30/2017 18:25	13.3	80	0.065	0.097	0	0.068	0.025	40.75423;-	2	-0.038
10/30/2017 18:26			0.064	0.097	0	0.068	0.025			-0.037
10/30/2017 18:27			0.064	0.097	0	0.067	0.026			-0.038
10/30/2017 18:28			0.064	0.097	0	0.066	0.026			-0.038
10/30/2017 18:29			0.064	0.097	0	0.066	0.026			-0.038
10/30/2017 18:30	13.1	83	0.062	0.097	0	0.065	0.026	40.7542;-7	7	-0.038
10/30/2017 18:31			0.061	0.097	0	0.065	0.026			-0.038
10/30/2017 18:32			0.061	0.097	0	0.064	0.026			-0.038
10/30/2017 18:33			0.061	0.097	0	0.064	0.026			-0.038
10/30/2017 18:34			0.059	0.097	0	0.063	0.026			-0.038
10/30/2017 18:35	13.4	87	0.06	0.097	0	0.063	0.027	40.75423;-	3	-0.038
10/30/2017 18:36			0.059	0.097	0	0.063	0.027			-0.038
10/30/2017 18:37			0.06	0.097	0	0.062	0.027			-0.038
10/30/2017 18:38			0.061	0.097	0	0.062	0.027			-0.038
10/30/2017 18:39			0.062	0.097	0	0.061	0.027			-0.038
10/30/2017 18:40	13.4	79	0.061	0.097	0	0.061	0.027	40.75423;-	5	-0.038
10/30/2017 18:41			0.061	0.097	0	0.061	0.027			-0.038
10/30/2017 18:42			0.063	0.097	0	0.061	0.027			-0.038
10/30/2017 18:43			0.062	0.097	0	0.061	0.028			-0.038
10/30/2017 18:44			0.064	0.097	0	0.06	0.028			-0.038
10/30/2017 18:45	13.4	79	0.065	0.097	0	0.06	0.028	40.75422;-	12	-0.038
10/30/2017 18:46			0.065	0.097	0	0.06	0.028			-0.038
10/30/2017 18:47			0.065	0.097	0	0.061	0.028			-0.038
10/30/2017 18:48			0.066	0.097	0	0.061	0.028			-0.038
10/30/2017 18:49			0.067	0.097	0	0.061	0.028			-0.038
10/30/2017 18:50	13.3	127.5	0.066	0.097	0	0.062	0.029	40.75426;-	7	-0.038
10/30/2017 18:51			0.066	0.097	0	0.062	0.029			-0.038
10/30/2017 18:52			0.066	0.097	0	0.063	0.029			-0.038
10/30/2017 18:53			0.064	0.097	0	0.063	0.029			-0.038
10/30/2017 18:54			0.064	0.097	0	0.063	0.029			-0.037
10/30/2017 18:55	13.1	79	0.064	0.097	0	0.063	0.029	40.75429;-	-5	-0.038
10/30/2017 18:56			0.063	0.097	0	0.064	0.029			-0.038
10/30/2017 18:57			0.063	0.097	0	0.064	0.029			-0.038
10/30/2017 18:58			0.064	0.097	0	0.064	0.03			-0.038
10/30/2017 18:59			0.062	0.097	0	0.064	0.03			-0.038
10/30/2017 19:00	13	85	0.062	0.097	0	0.064	0.03	40.75426;-	8	-0.038

10/30/2017 19:01			0.062	0.097	0	0.064	0.03			-0.038
10/30/2017 19:02			0.062	0.097	0	0.064	0.03			-0.038
10/30/2017 19:03			0.062	0.097	0	0.063	0.03			-0.038
10/30/2017 19:04			0.062	0.097	0	0.063	0.03			-0.038
10/30/2017 19:05	13	85	0.062	0.097	0	0.063	0.031	40.75426;-	6	-0.038
10/30/2017 19:06			0.062	0.097	0	0.063	0.031			-0.038
10/30/2017 19:07			0.062	0.097	0	0.062	0.031			-0.038
10/30/2017 19:08			0.062	0.097	0	0.062	0.031			-0.038
10/30/2017 19:09			0.061	0.097	0	0.062	0.031			-0.038
10/30/2017 19:10	13	83	0.061	0.097	0	0.061	0.031	40.75426;-	8	-0.038
10/30/2017 19:11			0.061	0.097	0	0.061	0.031			-0.038
10/30/2017 19:12			0.061	0.097	0	0.061	0.031			-0.038
10/30/2017 19:13			0.061	0.097	0	0.061	0.032			-0.038
10/30/2017 19:14			0.06	0.097	0	0.06	0.032			-0.038
10/30/2017 19:15	13	85	0.059	0.097	0	0.06	0.032	40.75426;-	5	-0.038
10/30/2017 19:16			0.059	0.097	0	0.06	0.032			-0.038
10/30/2017 19:17			0.06	0.097	0	0.06	0.032			-0.038
10/30/2017 19:18			0.059	0.097	0	0.06	0.032			-0.038
10/30/2017 19:19			0.059	0.097	0	0.059	0.032			-0.038
10/30/2017 19:20	12.9	85	0.059	0.097	0	0.059	0.032	40.75423;-	13	-0.038
10/30/2017 19:21			0.059	0.097	0	0.059	0.033			-0.038
10/30/2017 19:22			0.058	0.097	0	0.059	0.033			-0.038
10/30/2017 19:23			0.059	0.097	0	0.059	0.033			-0.038
10/30/2017 19:24			0.059	0.097	0	0.059	0.033			-0.038
10/30/2017 19:25	12.9	82	0.059	0.097	0	0.058	0.033	40.75425;-	12	-0.038
10/30/2017 19:26			0.058	0.097	0	0.058	0.033			-0.038
10/30/2017 19:27			0.058	0.097	0	0.058	0.033			-0.038
10/30/2017 19:28			0.057	0.097	0	0.058	0.033			-0.038
10/30/2017 19:29			0.056	0.097	0	0.058	0.033			-0.038
10/30/2017 19:30	12.9	81	0.057	0.097	0	0.058	0.034	40.75428;-	5	-0.038
10/30/2017 19:31			0.056	0.097	0	0.057	0.034			-0.038
10/30/2017 19:32			0.055	0.097	0	0.057	0.034			-0.038
10/30/2017 19:33			0.056	0.097	0	0.057	0.034			-0.038
10/30/2017 19:34			0.055	0.097	0	0.057	0.034			-0.038
10/30/2017 19:35	12.8	83	0.054	0.097	0	0.056	0.034	40.7543;-7	4	-0.038
10/30/2017 19:36			0.055	0.097	0	0.056	0.034			-0.038
10/30/2017 19:37			0.055	0.097	0	0.056	0.034			-0.038
10/30/2017 19:38			0.055	0.097	0	0.056	0.035			-0.038
10/30/2017 19:39			0.055	0.097	0	0.055	0.035			-0.038
10/30/2017 19:40	12.8	82	0.055	0.097	0	0.055	0.035	40.75425;-	0	-0.038
10/30/2017 19:41			0.055	0.097	0	0.055	0.035			-0.038
10/30/2017 19:42			0.055	0.097	0	0.055	0.035			-0.038
10/30/2017 19:43			0.056	0.097	0	0.055	0.035			-0.038
10/30/2017 19:44			0.056	0.097	0	0.054	0.035			-0.038
10/30/2017 19:45	12.8	89.1	0.056	0.097	0	0.054	0.035	40.75422;-	10	-0.038
10/30/2017 19:46			0.056	0.097	0	0.054	0.035			-0.038
10/30/2017 19:47			0.057	0.097	0	0.054	0.036			-0.038
10/30/2017 19:48			0.057	0.097	0	0.054	0.036			-0.038
10/30/2017 19:49			0.058	0.097	0	0.055	0.036			-0.038
10/30/2017 19:50	12.8	83	0.058	0.097	0	0.055	0.036	40.75422;-	5	-0.038
10/30/2017 19:51			0.057	0.097	0	0.055	0.036			-0.038
10/30/2017 19:52			0.057	0.097	0	0.055	0.036			-0.038
10/30/2017 19:53			0.057	0.097	0	0.055	0.036			-0.038
10/30/2017 19:54			0.059	0.097	0	0.055	0.036			-0.038
10/30/2017 19:55	12.8	86	0.06	0.097	0	0.055	0.036	40.75426;-	12	-0.038
10/30/2017 19:56			0.059	0.097	0	0.056	0.037			-0.038

10/30/2017 19:57			0.059	0.097	0	0.056	0.037			-0.038
10/30/2017 19:58			0.06	0.097	0	0.056	0.037			-0.038
10/30/2017 19:59			0.061	0.097	0	0.057	0.037			-0.038
10/30/2017 20:00	12.8	97.2	0.061	0.097	0	0.057	0.037	40.75429;-	18	-0.038
10/30/2017 20:01			0.06	0.097	0	0.057	0.037			-0.038
10/30/2017 20:02			0.06	0.097	0	0.057	0.037			-0.038
10/30/2017 20:03			0.059	0.097	0	0.058	0.037			-0.038
10/30/2017 20:04			0.059	0.097	0	0.058	0.038			-0.038
10/30/2017 20:05	12.7	129.6	0.059	0.097	0	0.058	0.038	40.75425;-	9	-0.038
10/30/2017 20:06			0.059	0.097	0	0.058	0.038			-0.038
10/30/2017 20:07			0.06	0.097	0	0.058	0.038			-0.038
10/30/2017 20:08			0.06	0.097	0	0.058	0.038			-0.038
10/30/2017 20:09			0.059	0.097	0	0.059	0.038			-0.038
10/30/2017 20:10	12.7	138.7	0.059	0.097	0	0.059	0.038	40.75422;-	6	-0.038
10/30/2017 20:11			0.059	0.097	0	0.059	0.038			-0.038
10/30/2017 20:12			0.059	0.097	0	0.059	0.039			-0.038
10/30/2017 20:13			0.059	0.097	0	0.059	0.039			-0.038
10/30/2017 20:14			0.059	0.097	0	0.059	0.039			-0.038
10/30/2017 20:15	12.8	82	0.06	0.097	0	0.059	0.039	40.75423;-	5	-0.038
10/30/2017 20:16			0.059	0.097	0	0.059	0.039			-0.038
10/30/2017 20:17			0.059	0.097	0	0.058	0.039			-0.038
10/30/2017 20:18			0.059	0.097	0	0.058	0.039			-0.038
10/30/2017 20:19			0.059	0.097	0	0.058	0.039			-0.038
10/30/2017 20:20	12.8	83	0.059	0.097	0	0.058	0.04	40.7542;-7	-3	-0.038
10/30/2017 20:21			0.06	0.097	0	0.058	0.04			-0.038
10/30/2017 20:22			0.059	0.097	0	0.058	0.04			-0.038
10/30/2017 20:23			0.059	0.097	0	0.058	0.04			-0.038
10/30/2017 20:24			0.058	0.097	0	0.058	0.04			-0.038
10/30/2017 20:25	12.8	82	0.057	0.097	0	0.058	0.04	40.75413;-	-7	-0.038
10/30/2017 20:26			0.057	0.097	0	0.058	0.04			-0.038
10/30/2017 20:27			0.057	0.097	0	0.058	0.04			-0.038
10/30/2017 20:28			0.057	0.097	0	0.058	0.041			-0.038
10/30/2017 20:29			0.056	0.097	0	0.058	0.041			-0.038
10/30/2017 20:30	12.8	98.2	0.056	0.097	0	0.058	0.041	40.75417;-	0	-0.038
10/30/2017 20:31			0.055	0.097	0	0.057	0.041			-0.038
10/30/2017 20:32			0.056	0.097	0	0.057	0.041			-0.038
10/30/2017 20:33			0.056	0.097	0	0.057	0.041			-0.038
10/30/2017 20:34			0.055	0.097	0	0.057	0.041			-0.038
10/30/2017 20:35	12.7	83	0.055	0.097	0	0.056	0.041	40.75423;-	2	-0.038
10/30/2017 20:36			0.055	0.097	0	0.056	0.041			-0.038
10/30/2017 20:37			0.055	0.097	0	0.056	0.042			-0.038
10/30/2017 20:38			0.055	0.097	0	0.055	0.042			-0.038
10/30/2017 20:39			0.055	0.097	0	0.055	0.042			-0.038
10/30/2017 20:40	12.7	88.1	0.054	0.097	0	0.055	0.042	40.75421;-	-2	-0.038
10/30/2017 20:41			0.052	0.097	0	0.055	0.042			-0.038
10/30/2017 20:42			0.053	0.097	0	0.054	0.042			-0.038
10/30/2017 20:43			0.053	0.097	0	0.054	0.042			-0.038
10/30/2017 20:44			0.053	0.097	0	0.054	0.042			-0.038
10/30/2017 20:45	12.7	91.1	0.051	0.097	0	0.054	0.042	40.75423;-	-5	-0.038
10/30/2017 20:46			0.053	0.097	0	0.053	0.043			-0.038
10/30/2017 20:47			0.051	0.097	0	0.053	0.043			-0.038
10/30/2017 20:48			0.051	0.097	0	0.053	0.043			-0.038
10/30/2017 20:49			0.051	0.097	0	0.053	0.043			-0.038
10/30/2017 20:50	12.7	82	0.051	0.097	0	0.052	0.043	40.75413;-	0	-0.038
10/30/2017 20:51			0.051	0.097	0	0.052	0.043			-0.038
10/30/2017 20:52			0.051	0.097	0	0.052	0.043			-0.038

10/30/2017 20:53			0.051	0.097	0	0.052	0.043			-0.038
10/31/2017 11:53	12.8	115.4								
10/31/2017 11:53								40.7539902;-73.4881527		
10/31/2017 11:54			0	0	0	0	0			
10/31/2017 11:55	12.8	85	0	0	0	0	0	40.7542;-7	-7	
10/31/2017 11:56			0	0	0	0	0			-0.023
10/31/2017 11:57			0	0	0	0	0			-0.028
10/31/2017 11:58			0	0	0	0	0			-0.03
10/31/2017 11:59			0	0	0	0	0			-0.032
10/31/2017 12:00	12.7	81	0	0	0	0	0	40.75425;-	-5	-0.033
10/31/2017 12:01			0	0	0	0	0			-0.034
10/31/2017 12:02			0	0	0	0	0			-0.034
10/31/2017 12:03			0	0	0	0	0			-0.035
10/31/2017 12:04			0	0	0	0	0			-0.035
10/31/2017 12:05	12.6	88.1	0	0	0	0	0	40.75422;-	-7	-0.035
10/31/2017 12:06			0	0	0	0	0			-0.035
10/31/2017 12:07			0.002	0.002	0	0	0			-0.035
10/31/2017 12:08			0.003	0.003	0	0	0			-0.034
10/31/2017 12:09			0.005	0.005	0	0	0			-0.035
10/31/2017 12:10	12.7	85	0.005	0.007	0	0	0	40.75429;-	-14	-0.036
10/31/2017 12:11			0.008	0.009	0	0	0			-0.036
10/31/2017 12:12			0.01	0.011	0	0.001	0			-0.036
10/31/2017 12:13			0.009	0.012	0	0.001	0			-0.036
10/31/2017 12:14			0.011	0.012	0	0.002	0			-0.034
10/31/2017 12:15	12.7	87	0.011	0.012	0	0.003	0	40.75432;-	-23	-0.034
10/31/2017 12:16			0.013	0.014	0	0.003	0			-0.033
10/31/2017 12:17			0.016	0.016	0	0.004	0			-0.034
10/31/2017 12:18			0.017	0.018	0	0.005	0			-0.032
10/31/2017 12:19			0.019	0.02	0	0.006	0			-0.033
10/31/2017 12:20	12.7	86	0.023	0.025	0	0.007	0	40.75423;-	-7	-0.031
10/31/2017 12:21			0.064	0.065	0	0.009	0			-0.029
10/31/2017 12:22			0.051	0.067	0	0.012	0			-0.028
10/31/2017 12:23			0.044	0.067	0	0.016	0			-0.029
10/31/2017 12:24			0.042	0.067	0	0.019	0			-0.031
10/31/2017 12:25	12.7	96.2	0.038	0.067	0	0.021	0	40.7543;-7	-13	-0.031
10/31/2017 12:26			0.037	0.067	0	0.024	0			-0.032
10/31/2017 12:27			0.039	0.067	0	0.026	0			-0.033
10/31/2017 12:28			0.036	0.067	0	0.027	0			-0.032
10/31/2017 12:29			0.035	0.067	0	0.029	0.001			-0.032
10/31/2017 12:30	12.7	91.1	0.03	0.067	0	0.031	0.001	40.75437;-	-37	-0.031
10/31/2017 12:31			0.032	0.067	0	0.032	0.001			-0.032
10/31/2017 12:32			0.03	0.067	0	0.033	0.001			-0.032
10/31/2017 12:33			0.029	0.067	0	0.034	0.001			-0.032
10/31/2017 12:34			0.028	0.067	0	0.035	0.001			-0.032
10/31/2017 12:35	12.7	83	0.028	0.067	0	0.036	0.001	40.75432;-	-17	-0.032
10/31/2017 12:36			0.028	0.067	0	0.036	0.001			-0.032
10/31/2017 12:37			0.027	0.067	0	0.035	0.001			-0.032
10/31/2017 12:38			0.027	0.067	0	0.033	0.001			-0.032
10/31/2017 12:39			0.028	0.067	0	0.032	0.001			-0.032
10/31/2017 12:40	12.7	83	0.026	0.067	0	0.031	0.001	40.75412;-	-11	-0.032
10/31/2017 12:41			0.024	0.067	0	0.03	0.001			-0.031
10/31/2017 12:42			0.025	0.067	0	0.029	0.001			-0.031
10/31/2017 12:43			0.025	0.067	0	0.028	0.001			-0.031
10/31/2017 12:44			0.026	0.067	0	0.027	0.001			-0.031
10/31/2017 12:45	12.7	89.1	0.026	0.067	0	0.027	0.001	40.75405;-	18	-0.03
10/31/2017 12:46			0.025	0.067	0	0.026	0.001			-0.029

10/31/2017 12:47			0.026	0.067	0	0.026	0.002			-0.03
10/31/2017 12:48			0.027	0.067	0	0.026	0.002			-0.032
10/31/2017 12:49			0.027	0.067	0	0.026	0.002			-0.031
10/31/2017 12:50	12.7	82	0.026	0.067	0	0.025	0.002	40.75404;-	9	-0.031
10/31/2017 12:51			0.027	0.067	0	0.025	0.002			-0.032
10/31/2017 12:52			0.028	0.067	0	0.025	0.002			-0.033
10/31/2017 12:53			0.026	0.067	0	0.025	0.002			-0.033
10/31/2017 12:54			0.027	0.067	0	0.025	0.002			-0.033
10/31/2017 12:55	12.7	86	0.028	0.067	0	0.025	0.002	40.75393;-	11	-0.032
10/31/2017 12:56			0.03	0.067	0	0.025	0.002			-0.032
10/31/2017 12:57			0.04	0.067	0	0.026	0.002			-0.03
10/31/2017 12:58			0.041	0.067	0	0.026	0.002			-0.028
10/31/2017 12:59			0.044	0.067	0	0.027	0.002			-0.028
10/31/2017 13:00	12.7	91.1	0.041	0.067	0	0.029	0.002	40.75413;-	6	-0.03
10/31/2017 13:01			0.038	0.067	0	0.03	0.002			-0.03
10/31/2017 13:02			0.036	0.067	0	0.031	0.002			-0.03
10/31/2017 13:03			0.034	0.067	0	0.031	0.003			-0.03
10/31/2017 13:04			0.036	0.067	0	0.032	0.003			-0.031
10/31/2017 13:05	12.7	81	0.036	0.067	0	0.032	0.003	40.75414;-	1	-0.032
10/31/2017 13:06			0.035	0.067	0	0.033	0.003			-0.033
10/31/2017 13:07			0.036	0.067	0	0.034	0.003			-0.033
10/31/2017 13:08			0.036	0.067	0	0.034	0.003			-0.032
10/31/2017 13:09			0.038	0.067	0	0.035	0.003			-0.033
10/31/2017 13:10	12.7	88.1	0.036	0.067	0	0.035	0.003	40.75413;-	7	-0.032
10/31/2017 13:11			0.036	0.067	0	0.036	0.003			-0.033
10/31/2017 13:12			0.036	0.067	0	0.036	0.003			-0.032
10/31/2017 13:13			0.038	0.067	0	0.036	0.003			-0.032
10/31/2017 13:14			0.037	0.067	0	0.036	0.003			-0.032
10/31/2017 13:15	12.7	83	0.037	0.067	0	0.035	0.003	40.75413;-	3	-0.032
10/31/2017 13:16			0.037	0.067	0	0.035	0.004			-0.032
10/31/2017 13:17			0.037	0.067	0	0.035	0.004			-0.032
10/31/2017 13:18			0.038	0.067	0	0.035	0.004			-0.031
10/31/2017 13:19			0.037	0.067	0	0.035	0.004			-0.031
10/31/2017 13:20	12.7	81	0.04	0.067	0	0.035	0.004	40.75414;-	8	-0.032
10/31/2017 13:21			0.039	0.067	0	0.036	0.004			-0.031
10/31/2017 13:22			0.039	0.067	0	0.036	0.004			-0.031
10/31/2017 13:23			0.04	0.067	0	0.036	0.004			-0.03
10/31/2017 13:24			0.04	0.067	0	0.036	0.004			-0.031
10/31/2017 13:25	12.8	125.5	0.052	0.069	0	0.037	0.004	40.75412;-	6	-0.029
10/31/2017 13:26			0.051	0.069	0	0.038	0.004			-0.03
10/31/2017 13:27			0.052	0.069	0	0.039	0.004			-0.031
10/31/2017 13:28			0.051	0.069	0	0.04	0.005			-0.032
10/31/2017 13:29			0.05	0.069	0	0.041	0.005			-0.033
10/31/2017 13:30	13.1	114.4	0.047	0.069	0	0.042	0.005	40.75414;-	-2	-0.031
10/31/2017 13:31			0.045	0.069	0	0.042	0.005			-0.03
10/31/2017 13:32			0.044	0.069	0	0.043	0.005			-0.03
10/31/2017 13:33			0.045	0.069	0	0.043	0.005			-0.03
10/31/2017 13:34			0.037	0.069	0	0.044	0.005			-0.031
10/31/2017 13:35	14.3	123.5	0.047	0.069	0	0.044	0.005	40.7542;-7	3	-0.032
10/31/2017 13:36			0.049	0.069	0	0.045	0.005			-0.031
10/31/2017 13:37			0.054	0.069	0	0.045	0.005			-0.03
10/31/2017 13:38			0.053	0.069	0	0.046	0.006			-0.031
10/31/2017 13:39			0.053	0.069	0	0.047	0.006			-0.032
10/31/2017 13:40	13.9	75.9	0.047	0.069	0	0.048	0.006	40.75415;-	4	-0.031
10/31/2017 13:41			0.046	0.069	0	0.048	0.006			-0.032
10/31/2017 13:42			0.045	0.069	0	0.047	0.006			-0.032

10/31/2017 13:43			0.045	0.069	0	0.047	0.006			-0.032
10/31/2017 13:44			0.044	0.069	0	0.047	0.006			-0.032
10/31/2017 13:45	14.4	75.9	0.045	0.069	0	0.046	0.006	40.75415;-	-5	-0.031
10/31/2017 13:46			0.047	0.069	0	0.046	0.006			-0.03
10/31/2017 13:47			0.044	0.069	0	0.046	0.006			-0.03
10/31/2017 13:48			0.042	0.069	0	0.046	0.007			-0.03
10/31/2017 13:49			0.042	0.069	0	0.046	0.007			-0.031
10/31/2017 13:50	14.1	73.9	0.042	0.069	0	0.046	0.007	40.75414;-	8	-0.032
10/31/2017 13:51			0.042	0.069	0	0.046	0.007			-0.033
10/31/2017 13:52			0.043	0.069	0	0.045	0.007			-0.033
10/31/2017 13:53			0.043	0.069	0	0.045	0.007			-0.031
10/31/2017 13:54			0.042	0.069	0	0.044	0.007			-0.032
10/31/2017 13:55	14	75.9	0.042	0.069	0	0.043	0.007	40.75414;-	14	-0.033
10/31/2017 13:56			0.042	0.069	0	0.043	0.007			-0.031
10/31/2017 13:57			0.041	0.069	0	0.043	0.007			-0.032
10/31/2017 13:58			0.04	0.069	0	0.042	0.007			-0.032
10/31/2017 13:59			0.04	0.069	0	0.042	0.007			-0.032
10/31/2017 14:00	13.6	76.9	0.04	0.069	0	0.042	0.008	40.75414;-	13	-0.033
10/31/2017 14:01			0.038	0.069	0	0.041	0.008			-0.033
10/31/2017 14:02			0.035	0.069	0	0.041	0.008			-0.032
10/31/2017 14:03			0.035	0.069	0	0.04	0.008			-0.032
10/31/2017 14:04			0.037	0.069	0	0.04	0.008			-0.032
10/31/2017 14:05	14.2	75.9	0.039	0.069	0	0.039	0.008	40.75414;-	9	-0.031
10/31/2017 14:06			0.043	0.069	0	0.039	0.008			-0.03
10/31/2017 14:07			0.032	0.069	0	0.039	0.008			-0.029
10/31/2017 14:08			0.034	0.069	0	0.039	0.008			-0.029
10/31/2017 14:09			0.034	0.069	0	0.038	0.008			-0.031
10/31/2017 14:10	14.4	74.9	0.03	0.069	0	0.037	0.008	40.75413;-	15	-0.031
10/31/2017 14:11			0.034	0.069	0	0.037	0.008			-0.032
10/31/2017 14:12			0.032	0.069	0	0.036	0.008			-0.032
10/31/2017 14:13			0.03	0.069	0	0.035	0.009			-0.032
10/31/2017 14:14			0.03	0.069	0	0.035	0.009			-0.03
10/31/2017 14:15	14.2	74.9	0.03	0.069	0	0.034	0.009	40.75411;-	30	-0.032
10/31/2017 14:16			0.03	0.069	0	0.033	0.009			-0.033
10/31/2017 14:17			0.03	0.069	0	0.033	0.009			-0.031
10/31/2017 14:18			0.029	0.069	0	0.032	0.009			-0.031
10/31/2017 14:19			0.027	0.069	0	0.032	0.009			-0.032
10/31/2017 14:20	13.7	77.9	0.027	0.069	0	0.031	0.009	40.75414;-	1	-0.032
10/31/2017 14:21			0.025	0.069	0	0.031	0.009			-0.032
10/31/2017 14:22			0.027	0.069	0	0.03	0.009			-0.032
10/31/2017 14:23			0.026	0.069	0	0.029	0.009			-0.031
10/31/2017 14:24			0.026	0.069	0	0.029	0.009			-0.032
10/31/2017 14:25	13.6	79	0.025	0.069	0	0.028	0.009	40.75418;-	13	-0.032
10/31/2017 14:26			0.025	0.069	0	0.028	0.009			-0.032
10/31/2017 14:27			0.024	0.069	0	0.027	0.009			-0.032
10/31/2017 14:28			0.022	0.069	0	0.027	0.009			-0.032
10/31/2017 14:29			0.022	0.069	0	0.026	0.009			-0.031
10/31/2017 14:30	13.6	81	0.022	0.069	0	0.026	0.009	40.75412;-	25	-0.031
10/31/2017 14:31			0.021	0.069	0	0.025	0.009			-0.031
10/31/2017 14:32			0.02	0.069	0	0.025	0.01			-0.03
10/31/2017 14:33			0.023	0.069	0	0.024	0.01			-0.03
10/31/2017 14:34			0.023	0.069	0	0.023	0.01			-0.032
10/31/2017 14:35	13.5	77.9	0.027	0.069	0	0.023	0.01	40.75416;-	6	-0.032
10/31/2017 14:36			0.028	0.069	0	0.023	0.01			-0.033
10/31/2017 14:37			0.024	0.069	0	0.023	0.01			-0.033
10/31/2017 14:38			0.019	0.069	0	0.023	0.01			-0.031

10/31/2017 14:39			0.019	0.069	0	0.023	0.01			-0.029
10/31/2017 14:40	13.6	77.9	0.018	0.069	0	0.022	0.01	40.75413;-	9	-0.03
10/31/2017 14:41			0.02	0.069	0	0.022	0.01			-0.032
10/31/2017 14:42			0.018	0.069	0	0.022	0.01			-0.032
10/31/2017 14:43			0.017	0.069	0	0.021	0.01			-0.031
10/31/2017 14:44			0.018	0.069	0	0.021	0.01			-0.03
10/31/2017 14:45	14.1	120.5	0.02	0.069	0	0.02	0.01	40.75413;-	19	-0.031
10/31/2017 14:46			0.019	0.069	0	0.02	0.01			-0.032
10/31/2017 14:47			0.017	0.069	0	0.02	0.01			-0.031
10/31/2017 14:48			0.018	0.069	0	0.02	0.01			-0.031
10/31/2017 14:49			0.016	0.069	0	0.02	0.01			-0.032
10/31/2017 14:50	14.7	113.4	0.015	0.069	0	0.019	0.01	40.75411;-	15	-0.031
10/31/2017 14:51			0.015	0.069	0	0.019	0.01			-0.031
10/31/2017 14:52			0.017	0.069	0	0.018	0.01			-0.033
10/31/2017 14:53			0.018	0.069	0	0.017	0.01			-0.033
10/31/2017 14:54			0.017	0.069	0	0.017	0.01			-0.034
10/31/2017 14:55	14.1	76.9	0.018	0.069	0	0.017	0.01	40.75417;-	11	-0.033
10/31/2017 14:56			0.017	0.069	0	0.017	0.01			-0.034
10/31/2017 14:57			0.018	0.069	0	0.016	0.011			-0.034
10/31/2017 14:58			0.016	0.069	0	0.016	0.011			-0.031
10/31/2017 14:59			0.014	0.069	0	0.016	0.011			-0.031
10/31/2017 15:00	14.2	76.9	0.013	0.069	0	0.016	0.011	40.75416;-	10	-0.031
10/31/2017 15:01			0.014	0.069	0	0.016	0.011			-0.031
10/31/2017 15:02			0.013	0.069	0	0.015	0.011			-0.031
10/31/2017 15:03			0.013	0.069	0	0.015	0.011			-0.031
10/31/2017 15:04			0.016	0.069	0	0.015	0.011			-0.031
10/31/2017 15:05	14.1	75.9	0.016	0.069	0	0.015	0.011	40.75412;-	14	-0.032
10/31/2017 15:06			0.014	0.069	0	0.015	0.011			-0.032
10/31/2017 15:07			0.01	0.069	0	0.015	0.011			-0.03
10/31/2017 15:08			0.012	0.069	0	0.014	0.011			-0.031
10/31/2017 15:09			0.011	0.069	0	0.014	0.011			-0.031
10/31/2017 15:10	14.3	74.9	0.011	0.069	0	0.014	0.011	40.75417;-	8	-0.03
10/31/2017 15:11			0.011	0.069	0	0.013	0.011			-0.031
10/31/2017 15:12			0.01	0.069	0	0.013	0.011			-0.032
10/31/2017 15:13			0.012	0.069	0	0.012	0.011			-0.032
10/31/2017 15:14			0.012	0.069	0	0.012	0.011			-0.032
10/31/2017 15:15	14.2	79	0.011	0.069	0	0.012	0.011	40.75413;-	6	-0.032
10/31/2017 15:16			0.01	0.069	0	0.012	0.011			-0.031
10/31/2017 15:17			0.011	0.069	0	0.011	0.011			-0.032
10/31/2017 15:18			0.012	0.069	0	0.011	0.011			-0.032
10/31/2017 15:19			0.013	0.069	0	0.011	0.011			-0.032
10/31/2017 15:20	14.3	74.9	0.015	0.069	0	0.011	0.011	40.75412;-	2	-0.032
10/31/2017 15:21			0.016	0.069	0	0.011	0.011			-0.032
10/31/2017 15:22			0.018	0.069	0	0.011	0.011			-0.032
10/31/2017 15:23			0.019	0.069	0	0.011	0.011			-0.032
10/31/2017 15:24			0.019	0.069	0	0.012	0.011			-0.033
10/31/2017 15:25	14.2	114.4	0.019	0.069	0	0.012	0.011			-0.034
10/31/2017 15:25								40.75417;-	7	
10/31/2017 15:26			0.018	0.069	0	0.013	0.011			-0.034
10/31/2017 15:27			0.018	0.069	0	0.013	0.011			-0.034
10/31/2017 15:28			0.017	0.069	0	0.014	0.011			-0.034
10/31/2017 15:29			0.014	0.069	0	0.014	0.011			-0.033
10/31/2017 15:30	14.2	74.9	0.014	0.069	0	0.015	0.011	40.75416;-	14	-0.033
10/31/2017 15:31			0.014	0.069	0	0.015	0.011			-0.033
10/31/2017 15:32			0.013	0.069	0	0.015	0.012			-0.031
10/31/2017 15:33			0.011	0.069	0	0.015	0.012			-0.032

10/31/2017 15:34			0.01	0.069	0	0.015	0.012			-0.032
10/31/2017 15:35	14.4	82	0.008	0.069	0	0.015	0.012	40.75415;-	15	-0.032
10/31/2017 15:36			0.007	0.069	0	0.015	0.012			-0.032
10/31/2017 15:37			0.007	0.069	0	0.014	0.012			-0.032
10/31/2017 15:38			0.008	0.069	0	0.014	0.012			-0.032
10/31/2017 15:39			0.01	0.069	0	0.013	0.012			-0.033
10/31/2017 15:40	13.6	79	0.01	0.069	0	0.012	0.012	40.75411;-	16	-0.034
10/31/2017 15:41			0.008	0.069	0	0.012	0.012			-0.033
10/31/2017 15:42			0.01	0.069	0	0.011	0.012			-0.034
10/31/2017 15:43			0.008	0.069	0	0.01	0.012			-0.034
10/31/2017 15:44			0.007	0.069	0	0.01	0.012			-0.033
10/31/2017 15:45	14.2	76.9	0.006	0.069	0	0.009	0.012	40.75415;-	13	-0.032
10/31/2017 15:46			0.007	0.069	0	0.009	0.012			-0.032
10/31/2017 15:47			0.008	0.069	0	0.008	0.012			-0.032
10/31/2017 15:48			0.011	0.069	0	0.008	0.012			-0.032
10/31/2017 15:49			0.012	0.069	0	0.008	0.012			-0.032
10/31/2017 15:50	14.2	74.9	0.014	0.069	0	0.008	0.012	40.75405;-	18	-0.033
10/31/2017 15:51			0.011	0.069	0	0.008	0.012			-0.032
10/31/2017 15:52			0.011	0.069	0	0.008	0.012			-0.033
10/31/2017 15:53			0.009	0.069	0	0.008	0.012			-0.033
10/31/2017 15:54			0.009	0.069	0	0.008	0.012			-0.032
10/31/2017 15:55	14.3	76.9	0.008	0.069	0	0.008	0.012	40.75408;-	18	-0.033
10/31/2017 15:56			0.006	0.069	0	0.008	0.012			-0.033
10/31/2017 15:57			0.002	0.069	0	0.008	0.012			-0.033
10/31/2017 15:58			0.006	0.069	0	0.008	0.012			-0.033
10/31/2017 15:59			0.004	0.069	0	0.008	0.012			-0.033
10/31/2017 16:00	14.2	79	0.004	0.069	0	0.007	0.012	40.75413;-	15	-0.033
10/31/2017 16:01			0.005	0.069	0	0.007	0.012			-0.033
10/31/2017 16:02			0.004	0.069	0	0.007	0.012			-0.03
10/31/2017 16:03			0.004	0.069	0	0.007	0.012			-0.029
10/31/2017 16:04			0.004	0.069	0	0.007	0.012			-0.032
10/31/2017 16:05	14.1	84	0.002	0.069	0	0.006	0.012	40.75412;-	22	-0.032
10/31/2017 16:06			0.002	0.069	0	0.005	0.012			-0.031
10/31/2017 16:07			0.001	0.069	0	0.005	0.012			-0.032
10/31/2017 16:08			0	0.069	0	0.004	0.012			-0.032
10/31/2017 16:09			0	0.069	0	0.003	0.012			-0.032
10/31/2017 16:10	14.6	73.9	0	0.069	0	0.003	0.012	40.75411;-	18	-0.03
10/31/2017 16:11			0	0.069	0	0.002	0.012			-0.029
10/31/2017 16:12			0	0.069	0	0.002	0.012			-0.032
10/31/2017 16:13			0	0.069	0	0.002	0.012			-0.032
10/31/2017 16:14			0.002	0.069	0	0.001	0.012			-0.032
10/31/2017 16:15	14.2	73.9	0.003	0.069	0	0.001	0.012	40.75412;-	22	-0.032
10/31/2017 16:16			0.005	0.069	0	0.001	0.012			-0.033
10/31/2017 16:17			0.005	0.069	0	0.001	0.012			-0.033
10/31/2017 16:18			0.007	0.069	0	0.001	0.012			-0.032
10/31/2017 16:19			0.006	0.069	0	0.001	0.012			-0.033
10/31/2017 16:20	14.1	75.9	0.006	0.069	0	0.001	0.012	40.75409;-	24	-0.033
10/31/2017 16:21			0.006	0.069	0	0.001	0.012			-0.033
10/31/2017 16:22			0.004	0.069	0	0.002	0.012			-0.033
10/31/2017 16:23			0.005	0.069	0	0.002	0.012			-0.034
10/31/2017 16:24			0.005	0.069	0	0.002	0.012			-0.034
10/31/2017 16:25	14.1	75.9	0.003	0.069	0	0.002	0.012	40.75411;-	25	-0.033
10/31/2017 16:26			0.003	0.069	0	0.003	0.012			-0.033
10/31/2017 16:27			0.003	0.069	0	0.003	0.012			-0.033
10/31/2017 16:28			0.004	0.069	0	0.003	0.012			-0.033
10/31/2017 16:29			0.004	0.069	0	0.003	0.012			-0.033

10/31/2017 16:30	14.2	85	0.004	0.069	0	0.003	0.012	40.75413;-	21	-0.034
10/31/2017 16:31			0.004	0.069	0	0.004	0.012			-0.033
10/31/2017 16:32			0.005	0.069	0	0.003	0.012			-0.034
10/31/2017 16:33			0.005	0.069	0	0.003	0.012			-0.034
10/31/2017 16:34			0.005	0.069	0	0.003	0.012			-0.034
10/31/2017 16:35	14.2	76.9	0.005	0.069	0	0.003	0.012	40.75414;-	18	-0.035
10/31/2017 16:36			0.005	0.069	0	0.003	0.012			-0.034
10/31/2017 16:37			0.004	0.069	0	0.003	0.012			-0.032
10/31/2017 16:38			0.003	0.069	0	0.003	0.012			-0.032
10/31/2017 16:39			0.003	0.069	0	0.003	0.012			-0.032
10/31/2017 16:40	14.1	76.9	0.004	0.069	0	0.003	0.012	40.75414;-	13	-0.033
10/31/2017 16:41			0.004	0.069	0	0.003	0.012			-0.033
10/31/2017 16:42			0.004	0.069	0	0.003	0.012			-0.033
10/31/2017 16:43			0.004	0.069	0	0.003	0.012			-0.033
10/31/2017 16:44			0.003	0.069	0	0.003	0.012			-0.034
10/31/2017 16:45	14.5	75.9	0.005	0.069	0	0.003	0.012	40.75413;-	18	-0.034
10/31/2017 16:46			0.005	0.069	0	0.003	0.012			-0.034
10/31/2017 16:47			0.006	0.069	0	0.003	0.012			-0.034
10/31/2017 16:48			0.005	0.069	0	0.003	0.012			-0.033
10/31/2017 16:49			0.004	0.069	0	0.003	0.012			-0.032
10/31/2017 16:50	14.1	83	0.003	0.069	0	0.003	0.012	40.75415;-	1	-0.033
10/31/2017 16:51			0.003	0.069	0	0.003	0.012			-0.033
10/31/2017 16:52			0.003	0.069	0	0.003	0.012			-0.032
10/31/2017 16:53			0.003	0.069	0	0.003	0.012			-0.033
10/31/2017 16:54			0.003	0.069	0	0.003	0.012			-0.033
10/31/2017 16:55	14.5	83	0.003	0.069	0	0.003	0.012	40.75418;-	7	-0.032
10/31/2017 16:56			0.003	0.069	0	0.003	0.012			-0.033
10/31/2017 16:57			0.004	0.069	0	0.003	0.012			-0.032
10/31/2017 16:58			0.006	0.069	0	0.003	0.012			-0.033
10/31/2017 16:59			0.008	0.069	0	0.003	0.012			-0.034
10/31/2017 17:00	14.1	76.9	0.006	0.069	0	0.003	0.012	40.75414;-	-2	-0.034
10/31/2017 17:01			0.007	0.069	0	0.003	0.012			-0.034
10/31/2017 17:02			0.007	0.069	0	0.004	0.012			-0.035
10/31/2017 17:03			0.007	0.069	0	0.004	0.012			-0.035
10/31/2017 17:04			0.007	0.069	0	0.004	0.012			-0.034
10/31/2017 17:05	13.5	79	0.005	0.069	0	0.004	0.012	40.75416;-	5	-0.034
10/31/2017 17:06			0.005	0.069	0	0.004	0.012			-0.033
10/31/2017 17:07			0.004	0.069	0	0.004	0.013			-0.033
10/31/2017 17:08			0.005	0.069	0	0.004	0.013			-0.033
10/31/2017 17:09			0.006	0.069	0	0.004	0.013			-0.034
10/31/2017 17:10	13.5	96.2	0.005	0.069	0	0.005	0.013	40.75415;-	5	-0.033
10/31/2017 17:11			0.004	0.069	0	0.005	0.013			-0.033
10/31/2017 17:12			0.004	0.069	0	0.005	0.013			-0.033
10/31/2017 17:13			0.004	0.069	0	0.005	0.013			-0.033
10/31/2017 17:14			0.003	0.069	0	0.005	0.013			-0.033
10/31/2017 17:15	13.5	79	0.004	0.069	0	0.005	0.013	40.75416;-	15	-0.034
10/31/2017 17:16			0.003	0.069	0	0.004	0.013			-0.033
10/31/2017 17:17			0.004	0.069	0	0.004	0.013			-0.033
10/31/2017 17:18			0.003	0.069	0	0.004	0.013			-0.034
10/31/2017 17:19			0.004	0.069	0	0.004	0.013			-0.033
10/31/2017 17:20	13.8	77.9	0.005	0.069	0	0.003	0.013	40.75416;-	6	-0.033
10/31/2017 17:21			0.005	0.069	0	0.003	0.013			-0.034
10/31/2017 17:22			0.006	0.069	0	0.003	0.013			-0.034
10/31/2017 17:23			0.005	0.069	0	0.003	0.013			-0.034
10/31/2017 17:24			0.005	0.069	0	0.003	0.013			-0.034
10/31/2017 17:25	13.8	79	0.006	0.069	0	0.003	0.013	40.75416;-	5	-0.033

10/31/2017 17:26			0.006	0.069	0	0.003	0.013			-0.034
10/31/2017 17:27			0.005	0.069	0	0.003	0.013			-0.032
10/31/2017 17:28			0.004	0.069	0	0.003	0.013			-0.031
10/31/2017 17:29			0.004	0.069	0	0.003	0.013			-0.032
10/31/2017 17:30	13.6	87	0.005	0.069	0	0.003	0.013	40.75414;-	4	-0.032
10/31/2017 17:31			0.006	0.069	0	0.004	0.013			-0.034
10/31/2017 17:32			0.007	0.069	0	0.004	0.013			-0.034
10/31/2017 17:33			0.007	0.069	0	0.004	0.013			-0.034
10/31/2017 17:34			0.005	0.069	0	0.004	0.013			-0.034
10/31/2017 17:35	13.6	82	0.008	0.069	0	0.004	0.013	40.75417;-	9	-0.033
10/31/2017 17:36			0.009	0.069	0	0.004	0.013			-0.033
10/31/2017 17:37			0.009	0.069	0	0.005	0.013			-0.033
10/31/2017 17:38			0.009	0.069	0	0.005	0.013			-0.034
10/31/2017 17:39			0.007	0.069	0	0.005	0.013			-0.034
10/31/2017 17:40	13.8	77.9	0.006	0.069	0	0.005	0.013	40.75419;-	8	-0.034
10/31/2017 17:41			0.005	0.069	0	0.005	0.013			-0.034
10/31/2017 17:42			0.004	0.069	0	0.005	0.013			-0.033
10/31/2017 17:43			0.003	0.069	0	0.005	0.013			-0.032
10/31/2017 17:44			0.003	0.069	0	0.005	0.013			-0.033
10/31/2017 17:45	13.8	88.1	0.003	0.069	0	0.005	0.013	40.75417;-	2	-0.034
10/31/2017 17:46			0.004	0.069	0	0.005	0.013			-0.034
10/31/2017 17:47			0.003	0.069	0	0.005	0.013			-0.034
10/31/2017 17:48			0.002	0.069	0	0.005	0.013			-0.034
10/31/2017 17:49			0.003	0.069	0	0.004	0.013			-0.034
10/31/2017 17:50	13.5	85	0.002	0.069	0	0.004	0.013	40.75419;-	-1	-0.034
10/31/2017 17:51			0.002	0.069	0	0.004	0.013			-0.034
10/31/2017 17:52			0.001	0.069	0	0.003	0.013			-0.033
10/31/2017 17:53			0	0.069	0	0.003	0.013			-0.033
10/31/2017 17:54			0.001	0.069	0	0.002	0.013			-0.033
10/31/2017 17:55	13.5	80	0.001	0.069	0	0.002	0.013	40.75418;-	0	-0.034
10/31/2017 17:56			0.001	0.069	0	0.002	0.013			-0.034
10/31/2017 17:57			0	0.069	0	0.001	0.013			-0.034
10/31/2017 17:58			0.001	0.069	0	0.001	0.013			-0.034
10/31/2017 17:59			0	0.069	0	0.001	0.013			-0.034
10/31/2017 18:00	13.5	88.1	0	0.069	0	0.001	0.013	40.75418;-	3	-0.033
10/31/2017 18:01			0	0.069	0	0.001	0.013			-0.033
10/31/2017 18:02			0	0.069	0	0	0.013			-0.032
10/31/2017 18:03			0	0.069	0	0	0.013			-0.032
10/31/2017 18:04			0	0.069	0	0	0.013			-0.033
10/31/2017 18:05	13.5	83	0	0.069	0	0	0.013	40.7542;-7	0	-0.033
10/31/2017 18:06			0	0.069	0	0	0.013			-0.033
10/31/2017 18:07			0	0.069	0	0	0.013			-0.032
10/31/2017 18:08			0	0.069	0	0	0.013			-0.032
10/31/2017 18:09			0	0.069	0	0	0.013			-0.033
10/31/2017 18:10	13.5	82	0	0.069	0	0	0.013	40.75414;-	0	-0.033
10/31/2017 18:11			0	0.069	0	0	0.013			-0.033
10/31/2017 18:12			0	0.069	0	0	0.013			-0.033
10/31/2017 18:13			0	0.069	0	0	0.013			-0.032
10/31/2017 18:14			0	0.069	0	0	0.013			-0.032
10/31/2017 18:15	13.7	88.1	0	0.069	0	0	0.013	40.75417;-	2	-0.033
10/31/2017 18:16			0	0.069	0	0	0.013			-0.033
10/31/2017 18:17			0	0.069	0	0	0.013			-0.032
10/31/2017 18:18			0.002	0.069	0	0	0.013			-0.033
10/31/2017 18:19			0.003	0.069	0	0	0.013			-0.032
10/31/2017 18:20	13.5	79	0.004	0.069	0	0	0.013	40.75418;-	0	-0.032
10/31/2017 18:21			0	0.069	0	0	0.013			-0.033

10/31/2017 18:22			0	0.069	0	0	0.013			-0.032
10/31/2017 18:23			0	0.069	0	0	0.013			-0.032
10/31/2017 18:24			0	0.069	0	0	0.013			-0.033
10/31/2017 18:25	13.6	80	0	0.069	0	0	0.013	40.75417;-	5	-0.033
10/31/2017 18:26			0	0.069	0	0	0.013			-0.034
10/31/2017 18:27			0	0.069	0	0	0.013			-0.033
10/31/2017 18:28			0	0.069	0	0	0.013			-0.033
10/31/2017 18:29			0	0.069	0	0	0.013			-0.033
10/31/2017 18:30	13.7	84	0	0.069	0	0	0.013	40.75423;-	-4	-0.032
10/31/2017 18:31			0	0.069	0	0	0.013			-0.033
10/31/2017 18:32			0	0.069	0	0	0.013			-0.033
10/31/2017 18:33			0	0.069	0	0	0.013			-0.033
10/31/2017 18:34			0	0.069	0	0	0.013			-0.033
10/31/2017 18:35	13.5	82	0	0.069	0	0	0.013	40.75423;-	-7	-0.032
10/31/2017 18:36			0	0.069	0	0	0.013			-0.033
10/31/2017 18:37			0	0.069	0	0	0.013			-0.031
10/31/2017 18:38			0	0.069	0	0	0.013			-0.031
10/31/2017 18:39			0	0.069	0	0	0.013			-0.032
10/31/2017 18:40	13.6	91.1	0	0.069	0	0	0.013	40.7542;-7	3	-0.032
10/31/2017 18:41			0	0.069	0	0	0.013			-0.032
10/31/2017 18:42			0	0.069	0	0	0.013			-0.031
10/31/2017 18:43			0	0.069	0	0	0.013			-0.032
10/31/2017 18:44			0	0.069	0	0	0.013			-0.031
10/31/2017 18:45	13.6	88.1	0	0.069	0	0	0.013	40.75416;-	13	-0.032
10/31/2017 18:46			0	0.069	0	0	0.013			-0.031
10/31/2017 18:47			0	0.069	0	0	0.013			-0.031
10/31/2017 18:48			0	0.069	0	0	0.013			-0.031
10/31/2017 18:49			0	0.069	0	0	0.013			-0.03
10/31/2017 18:50	13.6	77.9	0	0.069	0	0	0.013	40.75416;-	9	-0.029
10/31/2017 18:51			0	0.069	0	0	0.013			-0.028
10/31/2017 18:52			0	0.069	0	0	0.013			-0.03
10/31/2017 18:53			0	0.069	0	0	0.013			-0.032
10/31/2017 18:54			0	0.069	0	0	0.013			-0.031
10/31/2017 18:55	13.6	79	0	0.069	0	0	0.013	40.75419;-	8	-0.034
10/31/2017 18:56			0	0.069	0	0	0.013			-0.033
10/31/2017 18:57			0	0.069	0	0	0.013			-0.032
10/31/2017 18:58			0	0.069	0	0	0.013			-0.032
10/31/2017 18:59			0	0.069	0	0	0.013			-0.033
10/31/2017 19:00	13.5	88.1	0.001	0.069	0	0	0.013	40.75419;-	0	-0.033
10/31/2017 19:01			0.001	0.069	0	0	0.013			-0.032
10/31/2017 19:02			0	0.069	0	0	0.013			-0.032
10/31/2017 19:03			0	0.069	0	0	0.013			-0.033
10/31/2017 19:04			0.001	0.069	0	0	0.013			-0.033
10/31/2017 19:05	13.4	81	0.002	0.069	0	0	0.013	40.75417;-	0	-0.034
10/31/2017 19:06			0.002	0.069	0	0	0.013			-0.034
10/31/2017 19:07			0.001	0.069	0	0	0.013			-0.033
10/31/2017 19:08			0.001	0.069	0	0	0.013			-0.034
10/31/2017 19:09			0.002	0.069	0	0	0.013			-0.034
10/31/2017 19:10	13.4	80	0	0.069	0	0	0.013	40.75413;-	17	-0.032
10/31/2017 19:11			0	0.069	0	0	0.013			-0.032
10/31/2017 19:12			0	0.069	0	0	0.013			-0.033
10/31/2017 19:13			0	0.069	0	0	0.013			-0.027
10/31/2017 19:14			0	0.069	0	0	0.013			-0.03
10/31/2017 19:15	13.3	89.1	0	0.069	0	0	0.013	40.75416;-	16	-0.032
10/31/2017 19:16			0	0.069	0	0	0.013			-0.032
10/31/2017 19:17			0	0.069	0	0	0.013			-0.031

10/31/2017 19:18			0	0.069	0	0	0.013			-0.032
10/31/2017 19:19			0	0.069	0	0	0.013			-0.032
10/31/2017 19:20	13.2	82	0	0.069	0	0	0.013	40.75413;-	18	-0.033
10/31/2017 19:21			0	0.069	0	0	0.013			-0.034
10/31/2017 19:22			0	0.069	0	0	0.013			-0.033
10/31/2017 19:23			0	0.069	0	0	0.013			-0.033
10/31/2017 19:24			0	0.069	0	0	0.013			-0.034
10/31/2017 19:25	13.1	83	0	0.069	0	0	0.013	40.75414;-	16	-0.034
10/31/2017 19:26			0	0.069	0	0	0.013			-0.034
10/31/2017 19:27			0	0.069	0	0	0.013			-0.032
10/31/2017 19:28			0	0.069	0	0	0.013			-0.033
10/31/2017 19:29			0	0.069	0	0	0.013			-0.033
10/31/2017 19:30	13.1	82	0	0.069	0	0	0.013	40.75413;-	17	-0.032
10/31/2017 19:31			0	0.069	0	0	0.013			-0.033
10/31/2017 19:32			0	0.069	0	0	0.013			-0.033
10/31/2017 19:33			0	0.069	0	0	0.013			-0.033
10/31/2017 19:34			0	0.069	0	0	0.013			-0.033
10/31/2017 19:35	13.1	81	0	0.069	0	0	0.013	40.75416;-	21	-0.034
10/31/2017 19:36			0	0.069	0	0	0.013			-0.033
10/31/2017 19:37			0	0.069	0	0	0.013			-0.033
10/31/2017 19:38			0	0.069	0	0	0.013			-0.032
10/31/2017 19:39			0	0.069	0	0	0.013			-0.032
10/31/2017 19:40	13	82	0.001	0.069	0	0	0.013	40.75416;-	30	-0.033
10/31/2017 19:41			0.003	0.069	0	0	0.013			-0.032
10/31/2017 19:42			0.001	0.069	0	0	0.013			-0.031
10/31/2017 19:43			0	0.069	0	0	0.013			-0.032
10/31/2017 19:44			0	0.069	0	0	0.013			-0.033
10/31/2017 19:45	13	84	0	0.069	0	0	0.013	40.75418;-	16	-0.033
10/31/2017 19:46			0	0.069	0	0	0.013			-0.033
10/31/2017 19:47			0	0.069	0	0	0.013			-0.033
10/31/2017 19:48			0	0.069	0	0	0.013			-0.033
10/31/2017 19:49			0	0.069	0	0	0.013			-0.033
10/31/2017 19:50	13	82	0	0.069	0	0	0.013	40.75418;-	15	-0.032
10/31/2017 19:51			0	0.069	0	0	0.013			-0.032
10/31/2017 19:52			0	0.069	0	0	0.013			-0.032
10/31/2017 19:53			0	0.069	0	0	0.013			-0.032
10/31/2017 19:54			0	0.069	0	0	0.013			-0.032
10/31/2017 19:55	13	86	0	0.069	0	0	0.013	40.75418;-	10	-0.033
10/31/2017 19:56			0	0.069	0	0	0.013			-0.033
10/31/2017 19:57			0	0.069	0	0	0.013			-0.034
10/31/2017 19:58			0	0.069	0	0	0.013			-0.034
10/31/2017 19:59			0	0.069	0	0	0.013			-0.034
10/31/2017 20:00	13	83	0	0.069	0	0	0.013	40.7542;-7	21	-0.034
10/31/2017 20:01			0	0.069	0	0	0.013			-0.035
10/31/2017 20:02			0	0.069	0	0	0.013			-0.033
10/31/2017 20:03			0	0.069	0	0	0.013			-0.033
10/31/2017 20:04			0	0.069	0	0	0.013			-0.034
10/31/2017 20:05	13	80	0	0.069	0	0	0.013	40.75419;-	12	-0.033
10/31/2017 20:06			0	0.069	0	0	0.013			-0.033
10/31/2017 20:07			0	0.069	0	0	0.013			-0.033
10/31/2017 20:08			0	0.069	0	0	0.013			-0.034
10/31/2017 20:09			0	0.069	0	0	0.013			-0.035
10/31/2017 20:10	13	82	0	0.069	0	0	0.013	40.75419;-	15	-0.034
10/31/2017 20:11			0	0.069	0	0	0.013			-0.034
10/31/2017 20:12			0	0.069	0	0	0.013			-0.034
10/31/2017 20:13			0	0.069	0	0	0.013			-0.035

10/31/2017 20:14			0	0.069	0	0	0.013			-0.034
10/31/2017 20:15	12.9	86	0	0.069	0	0	0.013	40.75419;-	7	-0.034
10/31/2017 20:16			0	0.069	0	0	0.013			-0.034
10/31/2017 20:17			0	0.069	0	0	0.013			-0.033
10/31/2017 20:18			0	0.069	0	0	0.013			-0.033
10/31/2017 20:19			0	0.069	0	0	0.013			-0.033
10/31/2017 20:20	12.9	83	0	0.069	0	0	0.013	40.75419;-	5	-0.034
10/31/2017 20:21			0	0.069	0	0	0.013			-0.033
10/31/2017 20:22			0	0.069	0	0	0.013			-0.032
10/31/2017 20:23			0	0.069	0	0	0.013			-0.033
10/31/2017 20:24			0	0.069	0	0	0.013			-0.033
10/31/2017 20:25	12.9	82	0	0.069	0	0	0.013	40.75415;-	10	-0.033
10/31/2017 20:26			0	0.069	0	0	0.013			-0.032
10/31/2017 20:27			0	0.069	0	0	0.013			-0.032
10/31/2017 20:28			0	0.069	0	0	0.013			-0.032
10/31/2017 20:29			0	0.069	0	0	0.013			-0.033
10/31/2017 20:30	12.9	93.1	0	0.069	0	0	0.013	40.75418;-	1	-0.033
10/31/2017 20:31			0	0.069	0	0	0.013			-0.032
10/31/2017 20:32			0	0.069	0	0	0.013			-0.033
10/31/2017 20:33			0	0.069	0	0	0.013			-0.033
10/31/2017 20:34			0	0.069	0	0	0.013			-0.033
10/31/2017 20:35	12.9	84	0	0.069	0	0	0.013	40.75419;-	4	-0.033
10/31/2017 20:36			0	0.069	0	0	0.013			-0.034
10/31/2017 20:37			0	0.069	0	0	0.013			-0.034
10/31/2017 20:38			0.001	0.069	0	0	0.013			-0.034
10/31/2017 20:39			0	0.069	0	0	0.013			-0.033
10/31/2017 20:40	12.9	96.2	0	0.069	0	0	0.013	40.75415;-	9	-0.033
10/31/2017 20:41			0	0.069	0	0	0.013			-0.033
10/31/2017 20:42			0	0.069	0	0	0.013			-0.033
10/31/2017 20:43			0	0.069	0	0	0.013			-0.033
10/31/2017 20:44			0	0.069	0	0	0.013			-0.033
10/31/2017 20:45	12.9	92.1	0	0.069	0	0	0.013	40.75418;-	6	-0.033
10/31/2017 20:46			0	0.069	0	0	0.013			-0.034
10/31/2017 20:47			0	0.069	0	0	0.013			-0.034
10/31/2017 20:48			0	0.069	0	0	0.013			-0.035
10/31/2017 20:49			0	0.069	0	0	0.013			-0.035
10/31/2017 20:50	12.9	86	0	0.069	0	0	0.013	40.75415;-	11	-0.035
10/31/2017 20:51			0	0.069	0	0	0.013			-0.035
11/1/2017 12:05	12.9	113.4								
11/1/2017 12:05								40.754091599999995;-73.484419		
11/1/2017 12:06			0	0	0	0	0			
11/1/2017 12:07			0	0	0	0	0			
11/1/2017 12:08			0	0	0	0	0			-0.018
11/1/2017 12:09			0	0	0	0	0			-0.023
11/1/2017 12:10	12.7	123.5	0	0	0	0	0	40.75417;-	4	-0.027
11/1/2017 12:11			0	0	0	0	0			-0.029
11/1/2017 12:12			0	0	0	0	0			-0.031
11/1/2017 12:13			0	0	0	0	0			-0.032
11/1/2017 12:14			0	0	0	0	0			-0.032
11/1/2017 12:15	12.6	125.5	0	0	0	0	0	40.75414;-	8	-0.033
11/1/2017 12:16			0	0	0	0	0			-0.033
11/1/2017 12:17			0	0	0	0	0			-0.034
11/1/2017 12:18			0	0	0	0	0			-0.035
11/1/2017 12:19			0	0	0	0	0			-0.035
11/1/2017 12:20	12.7	85	0	0	0	0	0	40.75421;-	-7	-0.035
11/1/2017 12:21			0	0	0	0	0			-0.035

11/1/2017 12:22			0	0	0	0	0			-0.035
11/1/2017 12:23			0	0	0	0	0			-0.036
11/1/2017 12:24			0	0	0	0	0			-0.036
11/1/2017 12:25	12.6	81	0	0	0	0	0	40.75405;-	9	-0.036
11/1/2017 12:26			0	0	0	0	0			-0.036
11/1/2017 12:27			0	0	0	0	0			-0.035
11/1/2017 12:28			0	0.001	0	0	0			-0.035
11/1/2017 12:29			0.001	0.001	0	0	0			-0.036
11/1/2017 12:30	12.6	124.5	0.001	0.002	0	0	0			-0.035
11/1/2017 12:30								40.75411;-	8	
11/1/2017 12:31			0.002	0.003	0	0	0			-0.036
11/1/2017 12:32			0.002	0.003	0	0	0			-0.036
11/1/2017 12:33			0.003	0.004	0	0	0			-0.036
11/1/2017 12:34			0.005	0.005	0	0	0			-0.036
11/1/2017 12:35	12.7	81	0.005	0.006	0	0	0	40.75413;-	0	-0.036
11/1/2017 12:36			0.007	0.008	0	0.001	0			-0.036
11/1/2017 12:37			0.008	0.008	0	0.001	0			-0.036
11/1/2017 12:38			0.008	0.008	0	0.001	0			-0.036
11/1/2017 12:39			0.009	0.01	0	0.002	0			-0.036
11/1/2017 12:40	12.6	81	0.009	0.01	0	0.002	0	40.75417;-	6	-0.036
11/1/2017 12:41			0.009	0.01	0	0.003	0			-0.036
11/1/2017 12:42			0.009	0.01	0	0.004	0			-0.036
11/1/2017 12:43			0.01	0.011	0	0.004	0			-0.036
11/1/2017 12:44			0.01	0.012	0	0.005	0			-0.036
11/1/2017 12:45	12.7	95.1	0.013	0.013	0	0.005	0	40.75414;-	8	-0.036
11/1/2017 12:46			0.013	0.014	0	0.006	0			-0.036
11/1/2017 12:47			0.013	0.014	0	0.007	0			-0.036
11/1/2017 12:48			0.013	0.014	0	0.008	0			-0.036
11/1/2017 12:49			0.014	0.014	0	0.008	0			-0.036
11/1/2017 12:50	12.7	90.1	0.014	0.015	0	0.009	0	40.75413;-	9	-0.036
11/1/2017 12:51			0.015	0.015	0	0.009	0			-0.036
11/1/2017 12:52			0.016	0.016	0	0.01	0			-0.036
11/1/2017 12:53			0.015	0.016	0	0.01	0			-0.036
11/1/2017 12:54			0.015	0.016	0	0.011	0			-0.036
11/1/2017 12:55	12.6	129.6	0.016	0.017	0	0.011	0	40.75409;-	8	-0.036
11/1/2017 12:56			0.017	0.018	0	0.012	0			-0.036
11/1/2017 12:57			0.016	0.018	0	0.012	0			-0.036
11/1/2017 12:58			0.018	0.019	0	0.013	0			-0.036
11/1/2017 12:59			0.017	0.019	0	0.013	0			-0.036
11/1/2017 13:00	12.7	86	0.017	0.02	0	0.014	0	40.75405;-	15	-0.036
11/1/2017 13:01			0.018	0.02	0	0.014	0			-0.036
11/1/2017 13:02			0.017	0.02	0	0.014	0			-0.036
11/1/2017 13:03			0.018	0.021	0	0.015	0			-0.036
11/1/2017 13:04			0.019	0.021	0	0.015	0			-0.036
11/1/2017 13:05	12.7	82	0.02	0.022	0	0.016	0	40.75404;-	15	-0.036
11/1/2017 13:06			0.022	0.022	0	0.016	0			-0.036
11/1/2017 13:07			0.02	0.022	0	0.016	0			-0.036
11/1/2017 13:08			0.018	0.022	0	0.017	0			-0.036
11/1/2017 13:09			0.022	0.023	0	0.017	0			-0.037
11/1/2017 13:10	12.7	81	0.022	0.024	0	0.017	0.001	40.75406;-	12	-0.036
11/1/2017 13:11			0.019	0.024	0	0.018	0.001			-0.037
11/1/2017 13:12			0.023	0.024	0	0.018	0.001			-0.036
11/1/2017 13:13			0.021	0.024	0	0.018	0.001			-0.036
11/1/2017 13:14			0.023	0.024	0	0.019	0.001			-0.036
11/1/2017 13:15	12.7	92.1	0.021	0.024	0	0.019	0.001	40.75409;-	7	-0.037
11/1/2017 13:16			0.022	0.024	0	0.019	0.001			-0.036

11/1/2017 13:17			0.021	0.025	0	0.02	0.001			-0.036
11/1/2017 13:18			0.023	0.025	0	0.02	0.001			-0.037
11/1/2017 13:19			0.023	0.025	0	0.02	0.001			-0.037
11/1/2017 13:20	12.7	82	0.023	0.025	0	0.021	0.001	40.75408;-	-1	-0.036
11/1/2017 13:21			0.023	0.025	0	0.021	0.001			-0.037
11/1/2017 13:22			0.023	0.026	0	0.021	0.001			-0.037
11/1/2017 13:23			0.025	0.026	0	0.021	0.001			-0.036
11/1/2017 13:24			0.025	0.026	0	0.021	0.001			-0.037
11/1/2017 13:25	12.7	82	0.027	0.028	0	0.022	0.001	40.75413;-	2	-0.037
11/1/2017 13:26			0.024	0.028	0	0.022	0.001			-0.037
11/1/2017 13:27			0.025	0.028	0	0.022	0.001			-0.037
11/1/2017 13:28			0.026	0.028	0	0.022	0.001			-0.037
11/1/2017 13:29			0.025	0.028	0	0.023	0.001			-0.037
11/1/2017 13:30	12.7	83	0.027	0.028	0	0.023	0.001	40.754;-73.	10	-0.037
11/1/2017 13:31			0.027	0.028	0	0.023	0.002			-0.037
11/1/2017 13:32			0.027	0.029	0	0.023	0.002			-0.037
11/1/2017 13:33			0.027	0.029	0	0.024	0.002			-0.037
11/1/2017 13:34			0.027	0.029	0	0.024	0.002			-0.037
11/1/2017 13:35	12.7	81	0.027	0.029	0	0.024	0.002	40.75412;-	4	-0.037
11/1/2017 13:36			0.027	0.029	0	0.024	0.002			-0.037
11/1/2017 13:37			0.027	0.029	0	0.025	0.002			-0.037
11/1/2017 13:38			0.027	0.029	0	0.025	0.002			-0.036
11/1/2017 13:39			0.027	0.029	0	0.025	0.002			-0.036
11/1/2017 13:40	12.7	84	0.028	0.029	0	0.025	0.002	40.75412;-	10	-0.036
11/1/2017 13:41			0.028	0.029	0	0.026	0.002			-0.036
11/1/2017 13:42			0.027	0.029	0	0.026	0.002			-0.036
11/1/2017 13:43			0.028	0.029	0	0.026	0.002			-0.036
11/1/2017 13:44			0.029	0.029	0	0.026	0.002			-0.037
11/1/2017 13:45	12.8	83	0.027	0.029	0	0.026	0.002	40.75408;-	6	-0.036
11/1/2017 13:46			0.028	0.029	0	0.026	0.002			-0.037
11/1/2017 13:47			0.028	0.03	0	0.026	0.002			-0.037
11/1/2017 13:48			0.027	0.03	0	0.026	0.002			-0.036
11/1/2017 13:49			0.028	0.03	0	0.026	0.003			-0.037
11/1/2017 13:50	12.8	81	0.027	0.03	0	0.027	0.003	40.75413;-	5	-0.036
11/1/2017 13:51			0.028	0.03	0	0.027	0.003			-0.037
11/1/2017 13:52			0.029	0.03	0	0.027	0.003			-0.036
11/1/2017 13:53			0.03	0.03	0	0.027	0.003			-0.036
11/1/2017 13:54			0.028	0.031	0	0.027	0.003			-0.036
11/1/2017 13:55	12.7	82	0.03	0.031	0	0.027	0.003	40.75406;-	16	-0.036
11/1/2017 13:56			0.03	0.031	0	0.027	0.003			-0.036
11/1/2017 13:57			0.03	0.031	0	0.027	0.003			-0.036
11/1/2017 13:58			0.029	0.031	0	0.028	0.003			-0.036
11/1/2017 13:59			0.03	0.031	0	0.028	0.003			-0.036
11/1/2017 14:00	12.7	83	0.03	0.031	0	0.028	0.003	40.75411;-	14	-0.036
11/1/2017 14:01			0.03	0.031	0	0.028	0.003			-0.036
11/1/2017 14:02			0.03	0.031	0	0.028	0.003			-0.036
11/1/2017 14:03			0.03	0.031	0	0.028	0.003			-0.036
11/1/2017 14:04			0.03	0.031	0	0.029	0.003			-0.036
11/1/2017 14:05	12.7	124.5	0.03	0.031	0	0.029	0.003	40.75413;-	3	-0.036
11/1/2017 14:06			0.03	0.031	0	0.029	0.004			-0.036
11/1/2017 14:07			0.03	0.031	0	0.029	0.004			-0.036
11/1/2017 14:08			0.03	0.031	0	0.029	0.004			-0.036
11/1/2017 14:09			0.03	0.031	0	0.029	0.004			-0.035
11/1/2017 14:10	12.7	101.2	0.031	0.031	0	0.029	0.004	40.75411;-	14	-0.035
11/1/2017 14:11			0.031	0.031	0	0.029	0.004			-0.035
11/1/2017 14:12			0.03	0.031	0	0.029	0.004			-0.035

11/1/2017 14:13			0.03	0.031	0	0.029	0.004			-0.035
11/1/2017 14:14			0.031	0.031	0	0.029	0.004			-0.036
11/1/2017 14:15	12.7	82	0.032	0.032	0	0.029	0.004	40.75411;-	17	-0.036
11/1/2017 14:16			0.032	0.032	0	0.029	0.004			-0.036
11/1/2017 14:17			0.032	0.032	0	0.029	0.004			-0.036
11/1/2017 14:18			0.033	0.034	0	0.03	0.004			-0.036
11/1/2017 14:19			0.032	0.034	0	0.03	0.004			-0.036
11/1/2017 14:20	12.7	93.1	0.034	0.034	0	0.03	0.004	40.75417;-	13	-0.036
11/1/2017 14:21			0.035	0.035	0	0.03	0.005			-0.036
11/1/2017 14:22			0.033	0.035	0	0.03	0.005			-0.036
11/1/2017 14:23			0.03	0.036	0	0.031	0.005			-0.03
11/1/2017 14:24			0.031	0.036	0	0.031	0.005			-0.031
11/1/2017 14:25	12.7	82	0.032	0.036	0	0.031	0.005	40.75415;-	15	-0.032
11/1/2017 14:26			0.032	0.036	0	0.031	0.005			-0.033
11/1/2017 14:27			0.032	0.036	0	0.031	0.005			-0.034
11/1/2017 14:28			0.031	0.036	0	0.031	0.005			-0.035
11/1/2017 14:29			0.032	0.036	0	0.031	0.005			-0.035
11/1/2017 14:30	12.7	82	0.033	0.036	0	0.031	0.005	40.75412;-	24	-0.034
11/1/2017 14:31			0.033	0.036	0	0.031	0.005			-0.035
11/1/2017 14:32			0.033	0.036	0	0.031	0.005			-0.035
11/1/2017 14:33			0.034	0.036	0	0.032	0.005			-0.035
11/1/2017 14:34			0.033	0.036	0	0.032	0.005			-0.035
11/1/2017 14:35	12.7	82	0.033	0.036	0	0.032	0.005	40.75412;-	29	-0.036
11/1/2017 14:36			0.033	0.036	0	0.032	0.006			-0.036
11/1/2017 14:37			0.034	0.036	0	0.032	0.006			-0.036
11/1/2017 14:38			0.034	0.036	0	0.032	0.006			-0.036
11/1/2017 14:39			0.034	0.036	0	0.032	0.006			-0.036
11/1/2017 14:40	12.8	80	0.035	0.036	0	0.032	0.006	40.75412;-	18	-0.036
11/1/2017 14:41			0.034	0.036	0	0.032	0.006			-0.036
11/1/2017 14:42			0.034	0.036	0	0.032	0.006			-0.036
11/1/2017 14:43			0.035	0.036	0	0.033	0.006			-0.036
11/1/2017 14:44			0.035	0.036	0	0.033	0.006			-0.036
11/1/2017 14:45	12.7	81	0.035	0.036	0	0.033	0.006	40.75414;-	17	-0.037
11/1/2017 14:46			0.036	0.036	0	0.033	0.006			-0.036
11/1/2017 14:47			0.035	0.036	0	0.033	0.006			-0.037
11/1/2017 14:48			0.035	0.037	0	0.033	0.006			-0.037
11/1/2017 14:49			0.035	0.037	0	0.033	0.006			-0.037
11/1/2017 14:50	12.7	92.1	0.036	0.037	0	0.033	0.007	40.75414;-	12	-0.037
11/1/2017 14:51			0.036	0.037	0	0.034	0.007			-0.037
11/1/2017 14:52			0.036	0.037	0	0.034	0.007			-0.037
11/1/2017 14:53			0.036	0.039	0	0.034	0.007			-0.037
11/1/2017 14:54			0.037	0.039	0	0.034	0.007			-0.037
11/1/2017 14:55	12.8	86	0.036	0.039	0	0.034	0.007	40.75411;-	13	-0.037
11/1/2017 14:56			0.035	0.039	0	0.034	0.007			-0.037
11/1/2017 14:57			0.037	0.039	0	0.034	0.007			-0.037
11/1/2017 14:58			0.037	0.039	0	0.034	0.007			-0.037
11/1/2017 14:59			0.037	0.039	0	0.034	0.007			-0.037
11/1/2017 15:00	12.7	110.3	0.036	0.039	0	0.034	0.007	40.75412;-	3	-0.037
11/1/2017 15:01			0.037	0.039	0	0.035	0.007			-0.037
11/1/2017 15:02			0.035	0.039	0	0.035	0.007			-0.037
11/1/2017 15:03			0.035	0.039	0	0.035	0.007			-0.037
11/1/2017 15:04			0.036	0.039	0	0.035	0.008			-0.037
11/1/2017 15:05	12.7	83	0.035	0.039	0	0.035	0.008	40.75413;-	8	-0.037
11/1/2017 15:06			0.036	0.039	0	0.035	0.008			-0.037
11/1/2017 15:07			0.037	0.039	0	0.035	0.008			-0.037
11/1/2017 15:08			0.037	0.039	0	0.035	0.008			-0.037

11/1/2017 15:09			0.037	0.039	0	0.035	0.008			-0.037
11/1/2017 15:10	12.7	82	0.036	0.039	0	0.035	0.008	40.75415;-	9	-0.037
11/1/2017 15:11			0.036	0.039	0	0.035	0.008			-0.037
11/1/2017 15:12			0.037	0.039	0	0.035	0.008			-0.036
11/1/2017 15:13			0.037	0.039	0	0.035	0.008			-0.036
11/1/2017 15:14			0.037	0.039	0	0.035	0.008			-0.037
11/1/2017 15:15	12.8	94.1	0.035	0.039	0	0.035	0.008	40.75412;-	8	-0.037
11/1/2017 15:16			0.036	0.039	0	0.035	0.008			-0.037
11/1/2017 15:17			0.035	0.039	0	0.035	0.008			-0.037
11/1/2017 15:18			0.036	0.039	0	0.035	0.009			-0.037
11/1/2017 15:19			0.035	0.039	0	0.035	0.009			-0.037
11/1/2017 15:20	12.8	86	0.035	0.039	0	0.035	0.009	40.75408;-	10	-0.037
11/1/2017 15:21			0.035	0.039	0	0.035	0.009			-0.037
11/1/2017 15:22			0.035	0.039	0	0.035	0.009			-0.037
11/1/2017 15:23			0.036	0.039	0	0.035	0.009			-0.036
11/1/2017 15:24			0.035	0.039	0	0.035	0.009			-0.037
11/1/2017 15:25	12.8	96.2	0.035	0.039	0	0.035	0.009	40.75419;-	8	-0.037
11/1/2017 15:26			0.035	0.039	0	0.035	0.009			-0.037
11/1/2017 15:27			0.035	0.039	0	0.035	0.009			-0.037
11/1/2017 15:28			0.035	0.039	0	0.034	0.009			-0.037
11/1/2017 15:29			0.035	0.039	0	0.034	0.009			-0.037
11/1/2017 15:30	12.8	81	0.035	0.039	0	0.034	0.009	40.75408;-	17	-0.037
11/1/2017 15:31			0.034	0.039	0	0.034	0.01			-0.037
11/1/2017 15:32			0.035	0.039	0	0.034	0.01			-0.036
11/1/2017 15:33			0.034	0.039	0	0.034	0.01			-0.036
11/1/2017 15:34			0.033	0.039	0	0.034	0.01			-0.036
11/1/2017 15:35	12.9	80	0.033	0.039	0	0.034	0.01	40.75405;-	16	-0.036
11/1/2017 15:36			0.034	0.039	0	0.034	0.01			-0.036
11/1/2017 15:37			0.034	0.039	0	0.033	0.01			-0.036
11/1/2017 15:38			0.033	0.039	0	0.033	0.01			-0.036
11/1/2017 15:39			0.033	0.039	0	0.033	0.01			-0.037
11/1/2017 15:40	13.1	91.1	0.032	0.039	0	0.033	0.01	40.75407;-	19	-0.037
11/1/2017 15:41			0.033	0.039	0	0.033	0.01			-0.037
11/1/2017 15:42			0.033	0.039	0	0.033	0.01			-0.037
11/1/2017 15:43			0.033	0.039	0	0.033	0.01			-0.036
11/1/2017 15:44			0.033	0.039	0	0.033	0.01			-0.036
11/1/2017 15:45	13.6	77.9	0.033	0.039	0	0.033	0.01	40.75404;-	28	-0.037
11/1/2017 15:46			0.033	0.039	0	0.032	0.011			-0.037
11/1/2017 15:47			0.033	0.039	0	0.032	0.011			-0.037
11/1/2017 15:48			0.033	0.039	0	0.032	0.011			-0.037
11/1/2017 15:49			0.033	0.039	0	0.032	0.011			-0.037
11/1/2017 15:50	13.8	89.1	0.033	0.039	0	0.032	0.011	40.75403;-	29	-0.037
11/1/2017 15:51			0.033	0.039	0	0.032	0.011			-0.037
11/1/2017 15:52			0.032	0.039	0	0.032	0.011			-0.037
11/1/2017 15:53			0.033	0.039	0	0.032	0.011			-0.037
11/1/2017 15:54			0.034	0.039	0	0.032	0.011			-0.037
11/1/2017 15:55	14.2	79	0.033	0.039	0	0.032	0.011	40.75404;-	21	-0.037
11/1/2017 15:56			0.037	0.041	0	0.032	0.011			-0.037
11/1/2017 15:57			0.034	0.041	0	0.032	0.011			-0.036
11/1/2017 15:58			0.035	0.041	0	0.032	0.011			-0.036
11/1/2017 15:59			0.035	0.041	0	0.032	0.011			-0.037
11/1/2017 16:00	14.1	119.4	0.034	0.041	0	0.032	0.011			-0.037
11/1/2017 16:00								40.75405;-	26	
11/1/2017 16:01			0.034	0.041	0	0.033	0.012			-0.037
11/1/2017 16:02			0.035	0.041	0	0.033	0.012			-0.036
11/1/2017 16:03			0.035	0.041	0	0.033	0.012			-0.036

11/1/2017 16:04			0.035	0.041	0	0.033	0.012			-0.036
11/1/2017 16:05	14	76.9	0.035	0.041	0	0.033	0.012	40.75403;-	32	-0.036
11/1/2017 16:06			0.035	0.041	0	0.033	0.012			-0.037
11/1/2017 16:07			0.036	0.041	0	0.033	0.012			-0.037
11/1/2017 16:08			0.035	0.041	0	0.033	0.012			-0.037
11/1/2017 16:09			0.034	0.041	0	0.034	0.012			-0.036
11/1/2017 16:10	14.2	76.9	0.035	0.041	0	0.034	0.012	40.75406;-	28	-0.037
11/1/2017 16:11			0.035	0.041	0	0.034	0.012			-0.037
11/1/2017 16:12			0.036	0.041	0	0.034	0.012			-0.037
11/1/2017 16:13			0.036	0.041	0	0.034	0.012			-0.037
11/1/2017 16:14			0.036	0.041	0	0.034	0.013			-0.037
11/1/2017 16:15	13.9	86	0.037	0.041	0	0.034	0.013	40.75405;-	23	-0.037
11/1/2017 16:16			0.037	0.041	0	0.034	0.013			-0.037
11/1/2017 16:17			0.037	0.041	0	0.034	0.013			-0.037
11/1/2017 16:18			0.036	0.041	0	0.034	0.013			-0.037
11/1/2017 16:19			0.036	0.041	0	0.035	0.013			-0.036
11/1/2017 16:20	13.7	86	0.034	0.041	0	0.035	0.013	40.75412;-	15	-0.036
11/1/2017 16:21			0.035	0.041	0	0.035	0.013			-0.037
11/1/2017 16:22			0.035	0.041	0	0.035	0.013			-0.036
11/1/2017 16:23			0.036	0.041	0	0.035	0.013			-0.037
11/1/2017 16:24			0.035	0.041	0	0.035	0.013			-0.037
11/1/2017 16:25	13.7	76.9	0.037	0.041	0	0.035	0.013	40.75414;-	19	-0.037
11/1/2017 16:26			0.037	0.041	0	0.035	0.013			-0.037
11/1/2017 16:27			0.035	0.041	0	0.035	0.013			-0.037
11/1/2017 16:28			0.038	0.041	0	0.035	0.014			-0.037
11/1/2017 16:29			0.037	0.041	0	0.035	0.014			-0.037
11/1/2017 16:30	13.8	81	0.035	0.041	0	0.035	0.014	40.75413;-	14	-0.037
11/1/2017 16:31			0.038	0.041	0	0.035	0.014			-0.037
11/1/2017 16:32			0.036	0.041	0	0.035	0.014			-0.037
11/1/2017 16:33			0.036	0.041	0	0.035	0.014			-0.037
11/1/2017 16:34			0.036	0.041	0	0.035	0.014			-0.037
11/1/2017 16:35	13.7	76.9	0.036	0.041	0	0.035	0.014	40.75413;-	13	-0.037
11/1/2017 16:36			0.036	0.041	0	0.035	0.014			-0.037
11/1/2017 16:37			0.036	0.041	0	0.035	0.014			-0.037
11/1/2017 16:38			0.036	0.041	0	0.035	0.014			-0.037
11/1/2017 16:39			0.036	0.041	0	0.035	0.014			-0.037
11/1/2017 16:40	13.6	81	0.035	0.041	0	0.035	0.014	40.75409;-	22	-0.037
11/1/2017 16:41			0.034	0.041	0	0.035	0.014			-0.037
11/1/2017 16:42			0.035	0.041	0	0.035	0.015			-0.037
11/1/2017 16:43			0.034	0.041	0	0.035	0.015			-0.037
11/1/2017 16:44			0.035	0.041	0	0.035	0.015			-0.037
11/1/2017 16:45	13.4	93.1	0.034	0.041	0	0.035	0.015	40.75416;-	9	-0.037
11/1/2017 16:46			0.031	0.041	0	0.034	0.015			-0.037
11/1/2017 16:47			0.031	0.041	0	0.034	0.015			-0.037
11/1/2017 16:48			0.03	0.041	0	0.034	0.015			-0.036
11/1/2017 16:49			0.031	0.041	0	0.033	0.015			-0.037
11/1/2017 16:50	13.4	79	0.031	0.041	0	0.033	0.015	40.75415;-	8	-0.037
11/1/2017 16:51			0.03	0.041	0	0.033	0.015			-0.037
11/1/2017 16:52			0.031	0.041	0	0.032	0.015			-0.037
11/1/2017 16:53			0.03	0.041	0	0.032	0.015			-0.037
11/1/2017 16:54			0.03	0.041	0	0.032	0.015			-0.037
11/1/2017 16:55	13.2	128.6	0.029	0.041	0	0.031	0.015	40.75416;-	4	-0.037
11/1/2017 16:56			0.029	0.041	0	0.031	0.015			-0.037
11/1/2017 16:57			0.029	0.041	0	0.03	0.016			-0.037
11/1/2017 16:58			0.029	0.041	0	0.03	0.016			-0.037
11/1/2017 16:59			0.028	0.041	0	0.03	0.016			-0.037

11/1/2017 17:00	13.2	81	0.028	0.041	0	0.029	0.016	40.75416;-	7	-0.037
11/1/2017 17:01			0.028	0.041	0	0.029	0.016			-0.037
11/1/2017 17:02			0.028	0.041	0	0.029	0.016			-0.038
11/1/2017 17:03			0.028	0.041	0	0.029	0.016			-0.037
11/1/2017 17:04			0.028	0.041	0	0.028	0.016			-0.037
11/1/2017 17:05	13.1	82	0.028	0.041	0	0.028	0.016	40.75413;-	21	-0.038
11/1/2017 17:06			0.028	0.041	0	0.028	0.016			-0.038
11/1/2017 17:07			0.028	0.041	0	0.028	0.016			-0.037
11/1/2017 17:08			0.028	0.041	0	0.028	0.016			-0.037
11/1/2017 17:09			0.026	0.041	0	0.027	0.016			-0.038
11/1/2017 17:10	13	81	0.026	0.041	0	0.027	0.016	40.75417;-	8	-0.037
11/1/2017 17:11			0.025	0.041	0	0.027	0.016			-0.038
11/1/2017 17:12			0.025	0.041	0	0.027	0.016			-0.038
11/1/2017 17:13			0.024	0.041	0	0.026	0.016			-0.038
11/1/2017 17:14			0.024	0.041	0	0.026	0.016			-0.038
11/1/2017 17:15	13	82	0.024	0.041	0	0.026	0.017	40.75418;-	-4	-0.038
11/1/2017 17:16			0.024	0.041	0	0.025	0.017			-0.038
11/1/2017 17:17			0.024	0.041	0	0.025	0.017			-0.038
11/1/2017 17:18			0.024	0.041	0	0.025	0.017			-0.038
11/1/2017 17:19			0.023	0.041	0	0.025	0.017			-0.038
11/1/2017 17:20	13	89.1	0.023	0.041	0	0.024	0.017	40.75417;-	-1	-0.038
11/1/2017 17:21			0.022	0.041	0	0.024	0.017			-0.037
11/1/2017 17:22			0.022	0.041	0	0.024	0.017			-0.038
11/1/2017 17:23			0.022	0.041	0	0.023	0.017			-0.038
11/1/2017 17:24			0.023	0.041	0	0.023	0.017			-0.038
11/1/2017 17:25	13	81	0.022	0.041	0	0.023	0.017	40.75416;-	0	-0.038
11/1/2017 17:26			0.022	0.041	0	0.023	0.017			-0.038
11/1/2017 17:27			0.022	0.041	0	0.022	0.017			-0.038
11/1/2017 17:28			0.024	0.041	0	0.022	0.017			-0.038
11/1/2017 17:29			0.022	0.041	0	0.022	0.017			-0.038
11/1/2017 17:30	12.9	90.1	0.021	0.041	0	0.022	0.017	40.75417;-	0	-0.038
11/1/2017 17:31			0.021	0.041	0	0.022	0.017			-0.038
11/1/2017 17:32			0.021	0.041	0	0.022	0.017			-0.038
11/1/2017 17:33			0.021	0.041	0	0.021	0.017			-0.038
11/1/2017 17:34			0.021	0.041	0	0.021	0.017			-0.038
11/1/2017 17:35	12.9	83	0.021	0.041	0	0.021	0.017	40.75413;-	12	-0.038
11/1/2017 17:36			0.021	0.041	0	0.021	0.017			-0.038
11/1/2017 17:37			0.022	0.041	0	0.021	0.018			-0.038
11/1/2017 17:38			0.022	0.041	0	0.021	0.018			-0.038
11/1/2017 17:39			0.022	0.041	0	0.021	0.018			-0.038
11/1/2017 17:40	13	82	0.022	0.041	0	0.021	0.018	40.75414;-	10	-0.038
11/1/2017 17:41			0.022	0.041	0	0.021	0.018			-0.038
11/1/2017 17:42			0.022	0.041	0	0.021	0.018			-0.038
11/1/2017 17:43			0.022	0.041	0	0.021	0.018			-0.038
11/1/2017 17:44			0.022	0.041	0	0.021	0.018			-0.038
11/1/2017 17:45	12.9	82	0.021	0.041	0	0.021	0.018	40.75417;-	1	-0.038
11/1/2017 17:46			0.022	0.041	0	0.021	0.018			-0.038
11/1/2017 17:47			0.021	0.041	0	0.021	0.018			-0.038
11/1/2017 17:48			0.021	0.041	0	0.021	0.018			-0.038
11/1/2017 17:49			0.021	0.041	0	0.02	0.018			-0.038
11/1/2017 17:50	12.9	93.1	0.021	0.041	0	0.02	0.018	40.75419;-	0	-0.038
11/1/2017 17:51			0.021	0.041	0	0.02	0.018			-0.038
11/1/2017 17:52			0.015	0.041	0	0.02	0.018			-0.031
11/1/2017 17:53			0.015	0.041	0	0.02	0.018			-0.034
11/1/2017 17:54			0.016	0.041	0	0.02	0.018			-0.035
11/1/2017 17:55	13	85	0.016	0.041	0	0.019	0.018	40.75418;-	2	-0.036

11/1/2017 17:56			0.018	0.041	0	0.019	0.018			-0.036
11/1/2017 17:57			0.018	0.041	0	0.019	0.018			-0.037
11/1/2017 17:58			0.017	0.041	0	0.018	0.018			-0.037
11/1/2017 17:59			0.018	0.041	0	0.018	0.018			-0.037
11/1/2017 18:00	13.1	82	0.018	0.041	0	0.018	0.018	40.75418;-	10	-0.037
11/1/2017 18:01			0.018	0.041	0	0.018	0.018			-0.037
11/1/2017 18:02			0.018	0.041	0	0.017	0.019			-0.037
11/1/2017 18:03			0.018	0.041	0	0.017	0.019			-0.037
11/1/2017 18:04			0.018	0.041	0	0.017	0.019			-0.037
11/1/2017 18:05	13.1	81	0.019	0.041	0	0.017	0.019	40.75419;-	11	-0.037
11/1/2017 18:06			0.018	0.041	0	0.017	0.019			-0.037
11/1/2017 18:07			0.019	0.041	0	0.016	0.019			-0.037
11/1/2017 18:08			0.02	0.041	0	0.017	0.019			-0.037
11/1/2017 18:09			0.02	0.041	0	0.017	0.019			-0.037
11/1/2017 18:10	12.9	128.6	0.02	0.041	0	0.017	0.019			-0.037
11/1/2017 18:10								40.75418;-	4	
11/1/2017 18:11			0.02	0.041	0	0.017	0.019			-0.038
11/1/2017 18:12			0.02	0.041	0	0.017	0.019			-0.038
11/1/2017 18:13			0.02	0.041	0	0.018	0.019			-0.038
11/1/2017 18:14			0.02	0.041	0	0.018	0.019			-0.038
11/1/2017 18:15	13	125.5	0.019	0.041	0	0.018	0.019	40.75419;-	3	-0.038
11/1/2017 18:16			0.02	0.041	0	0.018	0.019			-0.038
11/1/2017 18:17			0.02	0.041	0	0.018	0.019			-0.038
11/1/2017 18:18			0.02	0.041	0	0.018	0.019			-0.038
11/1/2017 18:19			0.02	0.041	0	0.019	0.019			-0.038
11/1/2017 18:20	13	81	0.02	0.041	0	0.019	0.019	40.75416;-	11	-0.038
11/1/2017 18:21			0.021	0.041	0	0.019	0.019			-0.038
11/1/2017 18:22			0.021	0.041	0	0.019	0.019			-0.037
11/1/2017 18:23			0.02	0.041	0	0.019	0.019			-0.038
11/1/2017 18:24			0.021	0.041	0	0.019	0.019			-0.038
11/1/2017 18:25	13	87	0.02	0.041	0	0.019	0.019	40.7542;-7	6	-0.038
11/1/2017 18:26			0.021	0.041	0	0.019	0.019			-0.038
11/1/2017 18:27			0.02	0.041	0	0.019	0.02			-0.037
11/1/2017 18:28			0.02	0.041	0	0.019	0.02			-0.037
11/1/2017 18:29			0.02	0.041	0	0.019	0.02			-0.037
11/1/2017 18:30	12.9	86	0.02	0.041	0	0.019	0.02	40.75422;-	0	-0.038
11/1/2017 18:31			0.02	0.041	0	0.019	0.02			-0.038
11/1/2017 18:32			0.021	0.041	0	0.02	0.02			-0.038
11/1/2017 18:33			0.021	0.041	0	0.02	0.02			-0.038
11/1/2017 18:34			0.021	0.041	0	0.02	0.02			-0.038
11/1/2017 18:35	12.9	92.1	0.02	0.041	0	0.02	0.02	40.75423;-	0	-0.038
11/1/2017 18:36			0.02	0.041	0	0.02	0.02			-0.038
11/1/2017 18:37			0.02	0.041	0	0.019	0.02			-0.038
11/1/2017 18:38			0.02	0.041	0	0.019	0.02			-0.038
11/1/2017 18:39			0.02	0.041	0	0.019	0.02			-0.038
11/1/2017 18:40	12.9	101.2	0.02	0.041	0	0.019	0.02	40.7542;-7	4	-0.038
11/1/2017 18:41			0.02	0.041	0	0.019	0.02			-0.038
11/1/2017 18:42			0.02	0.041	0	0.019	0.02			-0.038
11/1/2017 18:43			0.02	0.041	0	0.019	0.02			-0.038
11/1/2017 18:44			0.02	0.041	0	0.019	0.02			-0.038
11/1/2017 18:45	12.9	96.2	0.02	0.041	0	0.019	0.02	40.75416;-	5	-0.038
11/1/2017 18:46			0.019	0.041	0	0.019	0.02			-0.037
11/1/2017 18:47			0.019	0.041	0	0.019	0.02			-0.037
11/1/2017 18:48			0.018	0.041	0	0.019	0.02			-0.037
11/1/2017 18:49			0.018	0.041	0	0.019	0.02			-0.038
11/1/2017 18:50	12.9	82	0.018	0.041	0	0.019	0.02	40.75421;-	-2	-0.038

11/1/2017 18:51			0.02	0.041	0	0.019	0.021			-0.037
11/1/2017 18:52			0.018	0.041	0	0.019	0.021			-0.037
11/1/2017 18:53			0.018	0.041	0	0.019	0.021			-0.038
11/1/2017 18:54			0.018	0.041	0	0.018	0.021			-0.037
11/1/2017 18:55	12.9	81	0.018	0.041	0	0.018	0.021	40.75417;-	-2	-0.037
11/1/2017 18:56			0.018	0.041	0	0.018	0.021			-0.037
11/1/2017 18:57			0.018	0.041	0	0.018	0.021			-0.037
11/1/2017 18:58			0.018	0.041	0	0.018	0.021			-0.037
11/1/2017 18:59			0.017	0.041	0	0.018	0.021			-0.037
11/1/2017 19:00	13	85	0.018	0.041	0	0.018	0.021	40.75421;-	7	-0.037
11/1/2017 19:01			0.018	0.041	0	0.017	0.021			-0.037
11/1/2017 19:02			0.017	0.041	0	0.017	0.021			-0.037
11/1/2017 19:03			0.017	0.041	0	0.017	0.021			-0.038
11/1/2017 19:04			0.017	0.041	0	0.017	0.021			-0.038
11/1/2017 19:05	12.9	91.1	0.018	0.041	0	0.017	0.021	40.75422;-	-4	-0.038
11/1/2017 19:06			0.017	0.041	0	0.017	0.021			-0.037
11/1/2017 19:07			0.018	0.041	0	0.017	0.021			-0.037
11/1/2017 19:08			0.018	0.041	0	0.017	0.021			-0.038
11/1/2017 19:09			0.019	0.041	0	0.017	0.021			-0.038
11/1/2017 19:10	12.9	80	0.019	0.041	0	0.017	0.021	40.75419;-	2	-0.037
11/1/2017 19:11			0.019	0.041	0	0.017	0.021			-0.037
11/1/2017 19:12			0.019	0.041	0	0.017	0.021			-0.037
11/1/2017 19:13			0.02	0.041	0	0.017	0.021			-0.037
11/1/2017 19:14			0.019	0.041	0	0.017	0.021			-0.037
11/1/2017 19:15	12.8	106.3	0.02	0.041	0	0.017	0.021	40.75423;-	1	-0.037
11/1/2017 19:16			0.02	0.041	0	0.018	0.021			-0.037
11/1/2017 19:17			0.02	0.041	0	0.018	0.021			-0.037
11/1/2017 19:18			0.019	0.041	0	0.018	0.022			-0.037
11/1/2017 19:19			0.019	0.041	0	0.018	0.022			-0.037
11/1/2017 19:20	12.8	101.2	0.018	0.041	0	0.018	0.022	40.75419;-	10	-0.037
11/1/2017 19:21			0.018	0.041	0	0.018	0.022			-0.037
11/1/2017 19:22			0.018	0.041	0	0.018	0.022			-0.037
11/1/2017 19:23			0.018	0.041	0	0.018	0.022			-0.037
11/1/2017 19:24			0.018	0.041	0	0.018	0.022			-0.038
11/1/2017 19:25	12.8	91.1	0.018	0.041	0	0.018	0.022	40.75415;-	11	-0.038
11/1/2017 19:26			0.019	0.041	0	0.018	0.022			-0.038
11/1/2017 19:27			0.018	0.041	0	0.018	0.022			-0.038
11/1/2017 19:28			0.019	0.041	0	0.018	0.022			-0.038
11/1/2017 19:29			0.018	0.041	0	0.018	0.022			-0.038
11/1/2017 19:30	12.8	86	0.018	0.041	0	0.018	0.022	40.75413;-	25	-0.038
11/1/2017 19:31			0.018	0.041	0	0.018	0.022			-0.038
11/1/2017 19:32			0.018	0.041	0	0.018	0.022			-0.038
11/1/2017 19:33			0.017	0.041	0	0.018	0.022			-0.038
11/1/2017 19:34			0.018	0.041	0	0.017	0.022			-0.038
11/1/2017 19:35	12.7	86	0.017	0.041	0	0.017	0.022	40.75418;-	16	-0.038
11/1/2017 19:36			0.017	0.041	0	0.017	0.022			-0.038
11/1/2017 19:37			0.017	0.041	0	0.017	0.022			-0.038
11/1/2017 19:38			0.017	0.041	0	0.017	0.022			-0.038
11/1/2017 19:39			0.017	0.041	0	0.017	0.022			-0.038
11/1/2017 19:40	12.7	91.1	0.017	0.041	0	0.017	0.022	40.75421;-	22	-0.038
11/1/2017 19:41			0.016	0.041	0	0.017	0.022			-0.038
11/1/2017 19:42			0.017	0.041	0	0.017	0.022			-0.038
11/1/2017 19:43			0.016	0.041	0	0.017	0.022			-0.038
11/1/2017 19:44			0.016	0.041	0	0.016	0.022			-0.038
11/1/2017 19:45	12.7	88.1	0.016	0.041	0	0.016	0.022	40.75418;-	13	-0.038
11/1/2017 19:46			0.015	0.041	0	0.016	0.023			-0.038

11/1/2017 19:47			0.016	0.041	0	0.016	0.023			-0.037
11/1/2017 19:48			0.015	0.041	0	0.016	0.023			-0.037
11/1/2017 19:49			0.015	0.041	0	0.016	0.023			-0.037
11/1/2017 19:50	12.7	85	0.014	0.041	0	0.015	0.023	40.7542;-7	28	-0.037
11/1/2017 19:51			0.014	0.041	0	0.015	0.023			-0.038
11/1/2017 19:52			0.015	0.041	0	0.015	0.023			-0.037
11/1/2017 19:53			0.014	0.041	0	0.015	0.023			-0.037
11/1/2017 19:54			0.013	0.041	0	0.014	0.023			-0.037
11/1/2017 19:55	12.7	83	0.013	0.041	0	0.014	0.023	40.75425;-	21	-0.037
11/1/2017 19:56			0.013	0.041	0	0.014	0.023			-0.037
11/1/2017 19:57			0.013	0.041	0	0.014	0.023			-0.037
11/1/2017 19:58			0.013	0.041	0	0.013	0.023			-0.037
11/1/2017 19:59			0.012	0.041	0	0.013	0.023			-0.037
11/1/2017 20:00	12.7	87	0.012	0.041	0	0.013	0.023	40.75422;-	26	-0.037
11/2/2017 12:02	12.8	122.5								
11/2/2017 12:02								40.7538705;-73.48784789999999		
11/2/2017 12:03			0	0	0	0	0			
11/2/2017 12:04	12.7	129.6								
11/2/2017 12:04								40.7535969;-73.4841079		
11/2/2017 12:05	12.7	125.5	0	0	0	0	0			
11/2/2017 12:06			0	0	0	0	0			
11/2/2017 12:07			0	0	0	0	0			
11/2/2017 12:08			0	0	0	0	0			
11/2/2017 12:09			0	0	0	0	0			
11/2/2017 12:10	12.6	67.8	0	0	0	0	0			
11/2/2017 12:11			0	0	0	0	0			
11/2/2017 12:12			0	0	0	0	0			
11/2/2017 12:13			0	0	0	0	0			
11/2/2017 12:14			0	0	0	0	0			
11/2/2017 12:15	12.6	123.5	0	0	0	0	0			
11/2/2017 12:16			0	0	0	0	0			
11/2/2017 12:17			0	0	0	0	0			-0.006
11/2/2017 12:18			0	0	0	0	0			-0.02
11/2/2017 12:19			0	0	0	0	0			-0.065
11/2/2017 12:20	12.6	84	0	0	0	0	0	40.75412;-	9	-0.081
11/2/2017 12:21			0	0	0	0	0			-0.089
11/2/2017 12:22			0	0	0	0	0			-0.096
11/2/2017 12:23			0	0	0	0	0			-0.101
11/2/2017 12:24			0	0	0	0	0			-0.103
11/2/2017 12:25	12.6	84	0	0	0	0	0	40.7542;-7	9	-0.106
11/2/2017 12:26			0	0	0	0	0			-0.107
11/2/2017 12:27			0	0	0	0	0			-0.109
11/2/2017 12:28			0	0	0	0	0			-0.11
11/2/2017 12:29			0	0	0	0	0			-0.111
11/2/2017 12:30	12.5	84	0	0	0	0	0	40.75406;-	17	-0.111
11/2/2017 12:31			0	0	0	0	0			-0.112
11/2/2017 12:32			0	0	0	0	0			-0.114
11/2/2017 12:33			0	0	0	0	0			-0.114
11/2/2017 12:34			0	0	0	0	0			-0.115
11/2/2017 12:35	12.6	92.1	0	0	0	0	0	40.75407;-	13	-0.115
11/2/2017 12:36			0	0	0	0	0			-0.115
11/2/2017 12:37			0	0	0	0	0			-0.115
11/2/2017 12:38			0	0	0	0	0			-0.115
11/2/2017 12:39			0	0	0	0	0			-0.116
11/2/2017 12:40	12.6	82	0	0	0	0	0	40.75401;-	16	-0.117
11/2/2017 12:41			0	0	0	0	0			-0.116

11/2/2017 12:42			0	0	0	0	0			-0.115
11/2/2017 12:43			0	0	0	0	0			-0.115
11/2/2017 12:44			0	0	0	0	0			-0.115
11/2/2017 12:45	12.6	87	0	0	0	0	0	40.75399;-	9	-0.116
11/2/2017 12:46			0	0	0	0	0			-0.117
11/2/2017 12:47			0	0	0	0	0			-0.118
11/2/2017 12:48			0	0	0	0	0			-0.118
11/2/2017 12:49			0	0	0	0	0			-0.116
11/2/2017 12:50	12.6	84	0	0	0	0	0	40.75415;-	12	-0.115
11/2/2017 12:51			0	0	0	0	0			-0.116
11/2/2017 12:52			0	0	0	0	0			-0.117
11/2/2017 12:53			0	0	0	0	0			-0.116
11/2/2017 12:54			0	0	0	0	0			-0.116
11/2/2017 12:55	12.6	86	0	0	0	0	0	40.75413;-	12	-0.117
11/2/2017 12:56			0	0	0	0	0			-0.117
11/2/2017 12:57			0	0	0	0	0			-0.116
11/2/2017 12:58			0	0	0	0	0			-0.115
11/2/2017 12:59			0	0	0	0	0			-0.116
11/2/2017 13:00	12.6	82	0	0	0	0	0	40.75405;-	11	-0.117
11/2/2017 13:01			0	0	0	0	0			-0.117
11/2/2017 13:02			0	0	0	0	0			-0.115
11/2/2017 13:03			0	0	0	0	0			-0.115
11/2/2017 13:04			0	0	0	0	0			-0.116
11/2/2017 13:05	12.6	84	0	0	0	0	0	40.75407;-	17	-0.115
11/2/2017 13:06			0	0	0	0	0			-0.116
11/2/2017 13:07			0	0	0	0	0			-0.115
11/2/2017 13:08			0	0	0	0	0			-0.117
11/2/2017 13:09			0	0	0	0	0			-0.118
11/2/2017 13:10	12.6	84	0	0	0	0	0	40.75397;-	27	-0.116
11/2/2017 13:11			0	0	0	0	0			-0.116
11/2/2017 13:12			0	0	0	0	0			-0.114
11/2/2017 13:13			0	0	0	0	0			-0.114
11/2/2017 13:14			0	0	0	0	0			-0.116
11/2/2017 13:15	12.6	81	0	0	0	0	0	40.75416;-	8	-0.117
11/2/2017 13:16			0	0	0	0	0			-0.115
11/2/2017 13:17			0	0	0	0	0			-0.113
11/2/2017 13:18			0	0	0	0	0			-0.114
11/2/2017 13:19			0	0	0	0	0			-0.115
11/2/2017 13:20	12.6	79	0	0	0	0	0	40.75414;-	18	-0.116
11/2/2017 13:21			0	0	0	0	0			-0.116
11/2/2017 13:22			0	0	0	0	0			-0.113
11/2/2017 13:23			0	0	0	0	0			-0.114
11/2/2017 13:24			0	0	0	0	0			-0.114
11/2/2017 13:25	12.6	82	0	0	0	0	0	40.75406;-	13	-0.115
11/2/2017 13:26			0	0	0	0	0			-0.115
11/2/2017 13:27			0	0	0	0	0			-0.115
11/2/2017 13:28			0	0	0	0	0			-0.115
11/2/2017 13:29			0	0	0	0	0			-0.117
11/2/2017 13:30	12.6	87	0	0	0	0	0	40.75413;-	15	-0.117
11/2/2017 13:31			0	0	0	0	0			-0.117
11/2/2017 13:32			0	0	0	0	0			-0.117
11/2/2017 13:33			0	0	0	0	0			-0.118
11/2/2017 13:34			0	0	0	0	0			-0.118
11/2/2017 13:35	12.6	84	0	0	0	0	0	40.75416;-	5	-0.117
11/2/2017 13:36			0	0	0	0	0			-0.117
11/2/2017 13:37			0	0	0	0	0			-0.115

11/2/2017 13:38			0	0	0	0	0			-0.115
11/2/2017 13:39			0	0	0	0	0			-0.115
11/2/2017 13:40	12.6	84	0	0	0	0	0	40.75411;-	19	-0.116
11/2/2017 13:41			0	0	0	0	0			-0.117
11/2/2017 13:42			0	0	0	0	0			-0.118
11/2/2017 13:43			0	0	0	0	0			-0.118
11/2/2017 13:44			0	0	0	0	0			-0.118
11/2/2017 13:45	12.6	83	0	0	0	0	0	40.75413;-	17	-0.119
11/2/2017 13:46			0	0	0	0	0			-0.119
11/2/2017 13:47			0	0	0	0	0			-0.119
11/2/2017 13:48			0	0	0	0	0			-0.118
11/2/2017 13:49			0	0	0	0	0			-0.118
11/2/2017 13:50	12.6	83	0	0	0	0	0	40.75411;-	20	-0.118
11/2/2017 13:51			0	0	0	0	0			-0.117
11/2/2017 13:52			0	0	0	0	0			-0.118
11/2/2017 13:53			0	0	0	0	0			-0.118
11/2/2017 13:54			0	0	0	0	0			-0.117
11/2/2017 13:55	12.7	83	0	0	0	0	0	40.75418;-	10	-0.117
11/2/2017 13:56			0	0	0	0	0			-0.117
11/2/2017 13:57			0	0	0	0	0			-0.117
11/2/2017 13:58			0	0	0	0	0			-0.117
11/2/2017 13:59			0	0	0	0	0			-0.117
11/2/2017 14:00	12.9	82	0	0	0	0	0	40.7542;-7	3	-0.117
11/2/2017 14:01			0	0	0	0	0			-0.118
11/2/2017 14:02			0	0	0	0	0			-0.118
11/2/2017 14:03			0	0	0	0	0			-0.117
11/2/2017 14:04			0	0	0	0	0			-0.117
11/2/2017 14:05	12.8	82	0	0	0	0	0	40.75413;-	18	-0.118
11/2/2017 14:06			0	0	0	0	0			-0.118
11/2/2017 14:07			0	0	0	0	0			-0.118
11/2/2017 14:08			0	0	0	0	0			-0.117
11/2/2017 14:09			0	0	0	0	0			-0.118
11/2/2017 14:10	12.9	91.1	0	0	0	0	0	40.75415;-	10	-0.118
11/2/2017 14:11			0	0	0	0	0			-0.117
11/2/2017 14:12			0	0	0	0	0			-0.117
11/2/2017 14:13			0	0	0	0	0			-0.117
11/2/2017 14:14			0	0	0	0	0			-0.117
11/2/2017 14:15	13.1	84	0	0	0	0	0	40.75408;-	31	-0.116
11/2/2017 14:16			0	0	0	0	0			-0.117
11/2/2017 14:17			0	0	0	0	0			-0.117
11/2/2017 14:18			0	0	0	0	0			-0.117
11/2/2017 14:19			0	0	0	0	0			-0.117
11/2/2017 14:20	13.2	80	0	0	0	0	0	40.75411;-	22	-0.117
11/2/2017 14:21			0	0	0	0	0			-0.117
11/2/2017 14:22			0	0	0	0	0			-0.117
11/2/2017 14:23			0	0	0	0	0			-0.118
11/2/2017 14:24			0	0	0	0	0			-0.117
11/2/2017 14:25	13.2	77.9	0	0	0	0	0	40.75413;-	26	-0.118
11/2/2017 14:26			0	0	0	0	0			-0.117
11/2/2017 14:27			0	0	0	0	0			-0.117
11/2/2017 14:28			0	0	0	0	0			-0.118
11/2/2017 14:29			0	0	0	0	0			-0.118
11/2/2017 14:30	13.2	80	0	0	0	0	0	40.75412;-	28	-0.118
11/2/2017 14:31			0	0	0	0	0			-0.118
11/2/2017 14:32			0	0	0	0	0			-0.118
11/2/2017 14:33			0	0	0	0	0			-0.118

11/2/2017 14:34			0	0	0	0	0			-0.119
11/2/2017 14:35	13.3	83	0	0.001	0	0	0	40.75416;-	15	-0.116
11/2/2017 14:36			0	0.001	0	0	0			-0.118
11/2/2017 14:37			0	0.001	0	0	0			-0.118
11/2/2017 14:38			0	0.001	0	0	0			-0.117
11/2/2017 14:39			0	0.002	0	0	0			-0.117
11/2/2017 14:40	14	119.4	0	0.002	0	0	0	40.75409;-	26	-0.117
11/2/2017 14:41			0	0.002	0	0	0			-0.116
11/2/2017 14:42			0.001	0.002	0	0	0			-0.117
11/2/2017 14:43			0.003	0.003	0	0	0			-0.117
11/2/2017 14:44			0.002	0.003	0	0	0			-0.117
11/2/2017 14:45	13.6	77.9	0.002	0.004	0	0	0	40.75402;-	35	-0.117
11/2/2017 14:46			0.004	0.004	0	0	0			-0.116
11/2/2017 14:47			0.003	0.006	0	0	0			-0.114
11/2/2017 14:48			0.004	0.006	0	0	0			-0.112
11/2/2017 14:49			0.006	0.007	0	0.001	0			-0.111
11/2/2017 14:50	13.2	87	0.006	0.007	0	0.001	0	40.75412;-	13	-0.111
11/2/2017 14:51			0.007	0.01	0	0.001	0			-0.112
11/2/2017 14:52			0.006	0.01	0	0.002	0			-0.111
11/2/2017 14:53			0.009	0.01	0	0.002	0			-0.111
11/2/2017 14:54			0.008	0.01	0	0.003	0			-0.112
11/2/2017 14:55	13.1	84	0.009	0.011	0	0.003	0	40.75417;-	2	-0.108
11/2/2017 14:56			0.009	0.011	0	0.004	0			-0.11
11/2/2017 14:57			0.009	0.011	0	0.005	0			-0.112
11/2/2017 14:58			0.009	0.011	0	0.005	0			-0.113
11/2/2017 14:59			0.01	0.011	0	0.006	0			-0.114
11/2/2017 15:00	13.4	84	0.009	0.011	0	0.006	0	40.75414;-	11	-0.115
11/2/2017 15:01			0.007	0.011	0	0.006	0			-0.116
11/2/2017 15:02			0.008	0.011	0	0.007	0			-0.116
11/2/2017 15:03			0.009	0.011	0	0.007	0			-0.115
11/2/2017 15:04			0.01	0.011	0	0.007	0			-0.116
11/2/2017 15:05	13.7	76.9	0.011	0.011	0	0.008	0	40.75408;-	6	-0.117
11/2/2017 15:06			0.009	0.011	0	0.008	0			-0.116
11/2/2017 15:07			0.01	0.011	0	0.008	0			-0.117
11/2/2017 15:08			0.011	0.012	0	0.008	0			-0.118
11/2/2017 15:09			0.012	0.012	0	0.008	0			-0.118
11/2/2017 15:10	13.3	87	0.013	0.013	0	0.009	0	40.75406;-	15	-0.118
11/2/2017 15:11			0.013	0.013	0	0.009	0			-0.118
11/2/2017 15:12			0.013	0.013	0	0.009	0			-0.119
11/2/2017 15:13			0.013	0.016	0	0.009	0			-0.118
11/2/2017 15:14			0.009	0.016	0	0.01	0			-0.117
11/2/2017 15:15	13.2	80	0.008	0.016	0	0.01	0	40.75419;-	7	-0.112
11/2/2017 15:16			0.009	0.016	0	0.01	0			-0.114
11/2/2017 15:17			0.012	0.016	0	0.01	0			-0.116
11/2/2017 15:18			0.011	0.016	0	0.01	0			-0.116
11/2/2017 15:19			0.011	0.016	0	0.01	0			-0.116
11/2/2017 15:20	13.1	82	0.011	0.016	0	0.01	0	40.75418;-	11	-0.111
11/2/2017 15:21			0.013	0.016	0	0.01	0			-0.113
11/2/2017 15:22			0.015	0.016	0	0.01	0			-0.114
11/2/2017 15:23			0.016	0.016	0	0.011	0			-0.114
11/2/2017 15:24			0.016	0.016	0	0.011	0			-0.116
11/2/2017 15:25	12.9	82	0.016	0.017	0	0.011	0	40.75421;-	4	-0.114
11/2/2017 15:26			0.016	0.018	0	0.011	0			-0.115
11/2/2017 15:27			0.018	0.018	0	0.011	0			-0.116
11/2/2017 15:28			0.018	0.018	0	0.012	0			-0.117
11/2/2017 15:29			0.018	0.018	0	0.012	0			-0.117

11/2/2017 15:30	12.9	80	0.019	0.02	0	0.012	0		40.75416;-	15	-0.118
11/2/2017 15:31			0.019	0.02	0	0.013	0				-0.118
11/2/2017 15:32			0.02	0.021	0	0.014	0.001				-0.119
11/2/2017 15:33			0.02	0.021	0	0.015	0.001				-0.118
11/2/2017 15:34			0.02	0.021	0	0.015	0.001				-0.118
11/2/2017 15:35	12.9	83	0.02	0.021	0	0.016	0.001		40.75406;-	19	-0.119
11/2/2017 15:36			0.023	0.024	0	0.016	0.001				-0.119
11/2/2017 15:37			0.024	0.024	0	0.017	0.001				-0.118
11/2/2017 15:38			0.023	0.024	0	0.018	0.001				-0.118
11/2/2017 15:39			0.023	0.025	0	0.018	0.001				-0.119
11/2/2017 15:40	12.8	82	0.024	0.025	0	0.019	0.001		40.75411;-	21	-0.119
11/2/2017 15:41			0.025	0.026	0	0.019	0.001				-0.119
11/2/2017 15:42			0.023	0.026	0	0.02	0.001				-0.119
11/2/2017 15:43			0.024	0.026	0	0.02	0.001				-0.117
11/2/2017 15:44			0.024	0.026	0	0.021	0.001				-0.117
11/2/2017 15:45	12.9	85	0.025	0.026	0	0.021	0.001		40.75408;-	18	-0.118
11/2/2017 15:46			0.027	0.027	0	0.022	0.001				-0.118
11/2/2017 15:47			0.027	0.027	0	0.022	0.001				-0.117
11/2/2017 15:48			0.027	0.027	0	0.022	0.001				-0.118
11/2/2017 15:49			0.027	0.028	0	0.023	0.001				-0.118
11/2/2017 15:50	12.9	92.1	0.028	0.03	0	0.023	0.001		40.75409;-	18	-0.119
11/2/2017 15:51			0.03	0.03	0	0.024	0.001				-0.119
11/2/2017 15:52			0.03	0.031	0	0.024	0.001				-0.119
11/2/2017 15:53			0.029	0.031	0	0.025	0.002				-0.119
11/2/2017 15:54			0.03	0.032	0	0.025	0.002				-0.119
11/2/2017 15:55	12.9	85	0.031	0.032	0	0.026	0.002		40.75414;-	10	-0.119
11/2/2017 15:56			0.032	0.032	0	0.026	0.002				-0.119
11/2/2017 15:57			0.03	0.032	0	0.027	0.002				-0.118
11/2/2017 15:58			0.03	0.032	0	0.027	0.002				-0.116
11/2/2017 15:59			0.03	0.032	0	0.027	0.002				-0.116
11/2/2017 16:00	12.8	127.5	0.027	0.032	0	0.028	0.002				-0.115
11/2/2017 16:00									40.75399;-	25	
11/2/2017 16:01			0.03	0.032	0	0.028	0.002				-0.115
11/2/2017 16:02			0.031	0.032	0	0.028	0.002				-0.117
11/2/2017 16:03			0.03	0.032	0	0.028	0.002				-0.117
11/2/2017 16:04			0.031	0.032	0	0.029	0.002				-0.117
11/2/2017 16:05	12.9	91.1	0.031	0.032	0	0.029	0.002		40.75405;-	29	-0.118
11/2/2017 16:06			0.032	0.032	0	0.029	0.002				-0.117
11/2/2017 16:07			0.032	0.033	0	0.029	0.002				-0.115
11/2/2017 16:08			0.032	0.033	0	0.029	0.002				-0.115
11/2/2017 16:09			0.032	0.034	0	0.03	0.003				-0.116
11/2/2017 16:10	13.3	101.2	0.031	0.034	0	0.03	0.003		40.754;-73.	32	-0.116
11/2/2017 16:11			0.032	0.034	0	0.03	0.003				-0.114
11/2/2017 16:12			0.031	0.034	0	0.03	0.003				-0.115
11/2/2017 16:13			0.033	0.034	0	0.03	0.003				-0.116
11/2/2017 16:14			0.032	0.034	0	0.03	0.003				-0.117
11/2/2017 16:15	14.1	75.9	0.032	0.034	0	0.03	0.003		40.75413;-	24	-0.117
11/2/2017 16:16			0.032	0.034	0	0.03	0.003				-0.117
11/2/2017 16:17			0.03	0.034	0	0.031	0.003				-0.117
11/2/2017 16:18			0.031	0.034	0	0.031	0.003				-0.117
11/2/2017 16:19			0.034	0.034	0	0.031	0.003				-0.118
11/2/2017 16:20	14	75.9	0.033	0.034	0	0.031	0.003		40.75414;-	10	-0.118
11/2/2017 16:21			0.031	0.034	0	0.031	0.003				-0.117
11/2/2017 16:22			0.032	0.034	0	0.031	0.003				-0.118
11/2/2017 16:23			0.035	0.037	0	0.031	0.003				-0.118
11/2/2017 16:24			0.037	0.037	0	0.031	0.004				-0.119

11/2/2017 16:25	14.4	74.9	0.038	0.039	0	0.032	0.004	40.75412;-	23	-0.118
11/2/2017 16:26			0.039	0.04	0	0.032	0.004			-0.118
11/2/2017 16:27			0.038	0.04	0	0.033	0.004			-0.117
11/2/2017 16:28			0.039	0.04	0	0.033	0.004			-0.117
11/2/2017 16:29			0.039	0.041	0	0.033	0.004			-0.118
11/2/2017 16:30	14	76.9	0.04	0.041	0	0.034	0.004	40.75414;-	24	-0.117
11/2/2017 16:31			0.041	0.043	0	0.034	0.004			-0.118
11/2/2017 16:32			0.044	0.045	0	0.035	0.004			-0.118
11/2/2017 16:33			0.046	0.046	0	0.036	0.004			-0.119
11/2/2017 16:34			0.044	0.046	0	0.037	0.004			-0.119
11/2/2017 16:35	14.4	80	0.045	0.046	0	0.038	0.004	40.75413;-	22	-0.118
11/2/2017 16:36			0.048	0.048	0	0.038	0.005			-0.118
11/2/2017 16:37			0.046	0.048	0	0.039	0.005			-0.118
11/2/2017 16:38			0.048	0.048	0	0.04	0.005			-0.119
11/2/2017 16:39			0.052	0.052	0	0.041	0.005			-0.119
11/2/2017 16:40	14	75.9	0.053	0.053	0	0.042	0.005	40.75415;-	15	-0.119
11/2/2017 16:41			0.053	0.053	0	0.043	0.005			-0.119
11/2/2017 16:42			0.053	0.053	0	0.044	0.005			-0.119
11/2/2017 16:43			0.053	0.055	0	0.045	0.005			-0.119
11/2/2017 16:44			0.055	0.055	0	0.046	0.005			-0.119
11/2/2017 16:45	13.8	79	0.058	0.058	0	0.047	0.005	40.75416;-	21	-0.119
11/2/2017 16:46			0.059	0.059	0	0.048	0.006			-0.119
11/2/2017 16:47			0.06	0.061	0	0.049	0.006			-0.12
11/2/2017 16:48			0.06	0.061	0	0.05	0.006			-0.119
11/2/2017 16:49			0.06	0.062	0	0.051	0.006			-0.118
11/2/2017 16:50	13.8	80	0.061	0.062	0	0.052	0.006	40.75415;-	12	-0.118
11/2/2017 16:51			0.063	0.063	0	0.053	0.006			-0.119
11/2/2017 16:52			0.064	0.064	0	0.054	0.006			-0.119
11/2/2017 16:53			0.067	0.067	0	0.055	0.006			-0.119
11/2/2017 16:54			0.065	0.067	0	0.056	0.007			-0.119
11/2/2017 16:55	14.2	76.9	0.067	0.068	0	0.057	0.007	40.75418;-	8	-0.119
11/2/2017 16:56			0.067	0.068	0	0.058	0.007			-0.118
11/2/2017 16:57			0.067	0.068	0	0.059	0.007			-0.119
11/2/2017 16:58			0.069	0.069	0	0.06	0.007			-0.119
11/2/2017 16:59			0.07	0.071	0	0.061	0.007			-0.119
11/2/2017 17:00	13.8	80	0.071	0.071	0	0.062	0.007	40.75418;-	6	-0.119
11/2/2017 17:01			0.071	0.073	0	0.063	0.008			-0.119
11/2/2017 17:02			0.073	0.075	0	0.064	0.008			-0.119
11/2/2017 17:03			0.074	0.075	0	0.065	0.008			-0.118
11/2/2017 17:04			0.074	0.075	0	0.066	0.008			-0.118
11/2/2017 17:05	13.8	77.9	0.074	0.075	0	0.067	0.008	40.75417;-	9	-0.119
11/2/2017 17:06			0.075	0.076	0	0.068	0.008			-0.119
11/2/2017 17:07			0.074	0.076	0	0.069	0.009			-0.119
11/2/2017 17:08			0.075	0.076	0	0.069	0.009			-0.118
11/2/2017 17:09			0.074	0.076	0	0.07	0.009			-0.118
11/2/2017 17:10	13.8	75.9	0.073	0.076	0	0.071	0.009	40.75414;-	11	-0.118
11/2/2017 17:11			0.075	0.076	0	0.071	0.009			-0.119
11/2/2017 17:12			0.076	0.076	0	0.072	0.009			-0.119
11/2/2017 17:13			0.075	0.076	0	0.072	0.009			-0.118
11/2/2017 17:14			0.075	0.076	0	0.073	0.01			-0.119
11/2/2017 17:15	13.7	76.9	0.078	0.078	0	0.073	0.01	40.75415;-	16	-0.119
11/2/2017 17:16			0.076	0.079	0	0.073	0.01			-0.119
11/2/2017 17:17			0.075	0.079	0	0.074	0.01			-0.118
11/2/2017 17:18			0.077	0.079	0	0.074	0.01			-0.118
11/2/2017 17:19			0.077	0.079	0	0.074	0.01			-0.118
11/2/2017 17:20	14.1	76.9	0.076	0.079	0	0.074	0.011	40.75415;-	14	-0.117

11/2/2017 17:21			0.078	0.079	0	0.074	0.011			-0.119
11/2/2017 17:22			0.079	0.08	0	0.074	0.011			-0.118
11/2/2017 17:23			0.082	0.082	0	0.075	0.011			-0.119
11/2/2017 17:24			0.082	0.083	0	0.075	0.011			-0.119
11/2/2017 17:25	14.1	86	0.084	0.084	0	0.075	0.011	40.75416;-	16	-0.119
11/2/2017 17:26			0.084	0.084	0	0.076	0.012			-0.119
11/2/2017 17:27			0.084	0.084	0	0.077	0.012			-0.12
11/2/2017 17:28			0.084	0.086	0	0.077	0.012			-0.119
11/2/2017 17:29			0.085	0.086	0	0.078	0.012			-0.12
11/2/2017 17:30	14.1	90.1	0.088	0.088	0	0.078	0.012	40.75417;-	9	-0.12
11/2/2017 17:31			0.086	0.088	0	0.079	0.012			-0.118
11/2/2017 17:32			0.085	0.088	0	0.08	0.013			-0.118
11/2/2017 17:33			0.083	0.088	0	0.08	0.013			-0.118
11/2/2017 17:34			0.079	0.088	0	0.081	0.013			-0.117
11/2/2017 17:35	13.8	76.9	0.079	0.088	0	0.081	0.013	40.75416;-	14	-0.113
11/2/2017 17:36			0.078	0.088	0	0.081	0.013			-0.116
11/2/2017 17:37			0.078	0.088	0	0.082	0.013			-0.117
11/2/2017 17:38			0.08	0.088	0	0.082	0.014			-0.116
11/2/2017 17:39			0.079	0.088	0	0.082	0.014			-0.117
11/2/2017 17:40	13.8	77.9	0.078	0.088	0	0.081	0.014	40.75417;-	5	-0.118
11/2/2017 17:41			0.08	0.088	0	0.081	0.014			-0.118
11/2/2017 17:42			0.08	0.088	0	0.081	0.014			-0.119
11/2/2017 17:43			0.081	0.088	0	0.081	0.014			-0.119
11/2/2017 17:44			0.081	0.088	0	0.08	0.015			-0.119
11/2/2017 17:45	13.8	87	0.079	0.088	0	0.08	0.015	40.75417;-	9	-0.119
11/2/2017 17:46			0.078	0.088	0	0.08	0.015			-0.118
11/2/2017 17:47			0.08	0.088	0	0.079	0.015			-0.119
11/2/2017 17:48			0.078	0.088	0	0.079	0.015			-0.119
11/2/2017 17:49			0.078	0.088	0	0.079	0.015			-0.119
11/2/2017 17:50	13.8	82	0.079	0.088	0	0.078	0.016	40.75417;-	7	-0.119
11/2/2017 17:51			0.079	0.088	0	0.078	0.016			-0.119
11/2/2017 17:52			0.08	0.088	0	0.078	0.016			-0.119
11/2/2017 17:53			0.079	0.088	0	0.078	0.016			-0.119
11/2/2017 17:54			0.078	0.088	0	0.079	0.016			-0.119
11/2/2017 17:55	14.1	97.2	0.076	0.088	0	0.078	0.016	40.75414;-	18	-0.119
11/2/2017 17:56			0.076	0.088	0	0.078	0.017			-0.119
11/2/2017 17:57			0.076	0.088	0	0.078	0.017			-0.119
11/2/2017 17:58			0.075	0.088	0	0.078	0.017			-0.119
11/2/2017 17:59			0.075	0.088	0	0.077	0.017			-0.118
11/2/2017 18:00	13.6	80	0.074	0.088	0	0.077	0.017	40.75412;-	4	-0.118
11/2/2017 18:01			0.07	0.088	0	0.076	0.017			-0.116
11/2/2017 18:02			0.069	0.088	0	0.076	0.017			-0.117
11/2/2017 18:03			0.067	0.088	0	0.075	0.018			-0.118
11/2/2017 18:04			0.069	0.088	0	0.074	0.018			-0.118
11/2/2017 18:05	13.8	82	0.067	0.088	0	0.074	0.018	40.75415;-	5	-0.116
11/2/2017 18:06			0.067	0.088	0	0.073	0.018			-0.118
11/2/2017 18:07			0.067	0.088	0	0.072	0.018			-0.119
11/2/2017 18:08			0.066	0.088	0	0.071	0.018			-0.119
11/2/2017 18:09			0.066	0.088	0	0.07	0.018			-0.119
11/2/2017 18:10	13.4	79	0.069	0.088	0	0.07	0.019	40.75414;-	7	-0.119
11/2/2017 18:11			0.066	0.088	0	0.069	0.019			-0.119
11/2/2017 18:12			0.065	0.088	0	0.069	0.019			-0.119
11/2/2017 18:13			0.066	0.088	0	0.068	0.019			-0.12
11/2/2017 18:14			0.066	0.088	0	0.067	0.019			-0.119
11/2/2017 18:15	14	87	0.064	0.088	0	0.067	0.019	40.75419;-	6	-0.119
11/2/2017 18:16			0.064	0.088	0	0.066	0.019			-0.119

11/2/2017 18:17			0.064	0.088	0	0.066	0.02			-0.12
11/2/2017 18:18			0.066	0.088	0	0.065	0.02			-0.12
11/2/2017 18:19			0.069	0.088	0	0.065	0.02			-0.12
11/2/2017 18:20	13.9	121.5	0.067	0.088	0	0.065	0.02	40.75418;-	5	-0.12
11/2/2017 18:21			0.069	0.088	0	0.065	0.02			-0.12
11/2/2017 18:22			0.071	0.088	0	0.065	0.02			-0.12
11/2/2017 18:23			0.069	0.088	0	0.066	0.02			-0.119
11/2/2017 18:24			0.07	0.088	0	0.066	0.021			-0.119
11/2/2017 18:25	14	86	0.069	0.088	0	0.066	0.021	40.75418;-	6	-0.119
11/2/2017 18:26			0.07	0.088	0	0.066	0.021			-0.12
11/2/2017 18:27			0.069	0.088	0	0.066	0.021			-0.12
11/2/2017 18:28			0.068	0.088	0	0.066	0.021			-0.119
11/2/2017 18:29			0.07	0.088	0	0.067	0.021			-0.119
11/2/2017 18:30	13.9	84	0.067	0.088	0	0.067	0.021	40.75417;-	6	-0.119
11/2/2017 18:31			0.068	0.088	0	0.067	0.022			-0.119
11/2/2017 18:32			0.068	0.088	0	0.067	0.022			-0.119
11/2/2017 18:33			0.068	0.088	0	0.067	0.022			-0.12
11/2/2017 18:34			0.067	0.088	0	0.068	0.022			-0.118
11/2/2017 18:35	13.6	86	0.067	0.088	0	0.067	0.022	40.75416;-	17	-0.119
11/2/2017 18:36			0.068	0.088	0	0.067	0.022			-0.119
11/2/2017 18:37			0.065	0.088	0	0.067	0.022			-0.119
11/2/2017 18:38			0.065	0.088	0	0.067	0.022			-0.119
11/2/2017 18:39			0.064	0.088	0	0.067	0.023			-0.119
11/2/2017 18:40	13.5	87	0.064	0.088	0	0.066	0.023	40.75421;-	9	-0.119
11/2/2017 18:41			0.062	0.088	0	0.066	0.023			-0.119
11/2/2017 18:42			0.062	0.088	0	0.065	0.023			-0.119
11/2/2017 18:43			0.06	0.088	0	0.065	0.023			-0.119
11/2/2017 18:44			0.058	0.088	0	0.064	0.023			-0.117
11/2/2017 18:45	13.5	83	0.057	0.088	0	0.064	0.023	40.75419;-	2	-0.118
11/2/2017 18:46			0.057	0.088	0	0.063	0.023			-0.118
11/2/2017 18:47			0.056	0.088	0	0.062	0.024			-0.118
11/2/2017 18:48			0.056	0.088	0	0.061	0.024			-0.118
11/2/2017 18:49			0.058	0.088	0	0.061	0.024			-0.118
11/2/2017 18:50	13.4	81	0.058	0.088	0	0.06	0.024	40.75421;-	-2	-0.119
11/2/2017 18:51			0.058	0.088	0	0.06	0.024			-0.119
11/2/2017 18:52			0.057	0.088	0	0.059	0.024			-0.119
11/2/2017 18:53			0.056	0.088	0	0.059	0.024			-0.119
11/2/2017 18:54			0.057	0.088	0	0.058	0.024			-0.119
11/2/2017 18:55	13.3	93.1	0.058	0.088	0	0.058	0.025	40.75418;-	6	-0.119
11/2/2017 18:56			0.057	0.088	0	0.057	0.025			-0.12
11/2/2017 18:57			0.057	0.088	0	0.057	0.025			-0.119
11/2/2017 18:58			0.057	0.088	0	0.057	0.025			-0.119
11/2/2017 18:59			0.057	0.088	0	0.056	0.025			-0.12
11/2/2017 19:00	13.2	92.1	0.055	0.088	0	0.056	0.025	40.75421;-	4	-0.119
11/2/2017 19:01			0.054	0.088	0	0.056	0.025			-0.116
11/2/2017 19:02			0.054	0.088	0	0.056	0.025			-0.118
11/2/2017 19:03			0.053	0.088	0	0.056	0.025			-0.118
11/2/2017 19:04			0.053	0.088	0	0.056	0.026			-0.119
11/2/2017 19:05	13.2	82	0.052	0.088	0	0.055	0.026	40.75418;-	13	-0.119
11/2/2017 19:06			0.053	0.088	0	0.055	0.026			-0.119
11/2/2017 19:07			0.053	0.088	0	0.055	0.026			-0.119
11/2/2017 19:08			0.053	0.088	0	0.054	0.026			-0.119
11/2/2017 19:09			0.053	0.088	0	0.054	0.026			-0.119
11/2/2017 19:10	13.1	124.5	0.051	0.088	0	0.054	0.026	40.75413;-	27	-0.119
11/2/2017 19:11			0.054	0.088	0	0.054	0.026			-0.12
11/2/2017 19:12			0.055	0.088	0	0.053	0.026			-0.119

11/2/2017 19:13			0.054	0.088	0	0.053	0.027			-0.119
11/2/2017 19:14			0.021	0.088	0	0.053	0.027			-0.117
11/2/2017 19:15	13	125.5	0.009	0.088	0	0.051	0.027	40.75411;-	30	
11/2/2017 19:16			0.005	0.088	0	0.048	0.027			
11/2/2017 19:17			0	0.088	0	0.044	0.027			
11/2/2017 19:18			0	0.088	0	0.041	0.027			
11/2/2017 19:19			0	0.088	0	0.037	0.027			-0.156
11/2/2017 19:20	13.3	91.1	0.002	0.088	0	0.034	0.027	40.75414;-	13	-0.156
11/2/2017 19:21			0.006	0.088	0	0.03	0.027			-0.156
11/2/2017 19:22			0.009	0.088	0	0.027	0.027			-0.156
11/2/2017 19:23			0.013	0.088	0	0.024	0.027			-0.156
11/2/2017 19:24			0.015	0.088	0	0.021	0.027			-0.156
11/2/2017 19:25	13.3	80	0.016	0.088	0	0.019	0.027	40.75411;-	12	-0.156
11/2/2017 19:26			0.019	0.088	0	0.016	0.027			-0.156
11/2/2017 19:27			0.022	0.088	0	0.014	0.027			-0.156
11/2/2017 19:28			0.025	0.088	0	0.012	0.027			-0.156
11/2/2017 19:29			0.025	0.088	0	0.01	0.027			-0.156
11/2/2017 19:30	13.2	90.1	0.027	0.088	0	0.01	0.027	40.75414;-	12	-0.156
11/2/2017 19:31			0.028	0.088	0	0.011	0.027			-0.156
11/2/2017 19:32			0.03	0.088	0	0.013	0.027			-0.156
11/2/2017 19:33			0.03	0.088	0	0.015	0.027			-0.156
11/2/2017 19:34			0.03	0.088	0	0.016	0.027			-0.156
11/2/2017 19:35	13.2	81	0.031	0.088	0	0.018	0.027	40.75419;-	21	-0.156
11/2/2017 19:36			0.032	0.088	0	0.02	0.027			-0.156
11/2/2017 19:37			0.033	0.088	0	0.022	0.027			-0.156
11/2/2017 19:38			0.032	0.088	0	0.024	0.028			-0.156
11/2/2017 19:39			0.033	0.088	0	0.025	0.028			-0.156
11/2/2017 19:40	13.1	130.6	0.032	0.088	0	0.026	0.028	40.7542;-7	4	-0.156
11/2/2017 19:41			0.033	0.088	0	0.027	0.028			-0.156
11/2/2017 19:42			0.032	0.088	0	0.028	0.028			-0.156
11/2/2017 19:43			0.033	0.088	0	0.029	0.028			-0.156
11/2/2017 19:44			0.034	0.088	0	0.03	0.028			-0.156
11/2/2017 19:45	13.1	81	0.033	0.088	0	0.03	0.028	40.75419;-	25	-0.156
11/2/2017 19:46			0.033	0.088	0	0.031	0.028			-0.156
11/2/2017 19:47			0.034	0.088	0	0.031	0.028			-0.156
11/2/2017 19:48			0.032	0.088	0	0.031	0.028			-0.156
11/2/2017 19:49			0.032	0.088	0	0.031	0.028			-0.156
11/2/2017 19:50	13	83	0.033	0.088	0	0.031	0.028	40.75418;-	14	-0.156
11/2/2017 19:51			0.032	0.088	0	0.032	0.028			-0.156
11/2/2017 19:52			0.03	0.088	0	0.032	0.028			-0.156
11/2/2017 19:53			0.031	0.088	0	0.032	0.029			-0.156
11/2/2017 19:54			0.032	0.088	0	0.032	0.029			-0.156
11/2/2017 19:55	13	82	0.03	0.088	0	0.032	0.029	40.7542;-7	24	-0.156
11/2/2017 19:56			0.032	0.088	0	0.031	0.029			-0.156
11/2/2017 19:57			0.032	0.088	0	0.031	0.029			-0.156
11/2/2017 19:58			0.033	0.088	0	0.031	0.029			-0.156
11/2/2017 19:59			0.034	0.088	0	0.031	0.029			-0.156
11/2/2017 20:00	13	83	0.033	0.088	0	0.031	0.029	40.75417;-	12	-0.156
11/2/2017 20:01			0.033	0.088	0	0.031	0.029			-0.156
11/2/2017 20:02			0.033	0.088	0	0.031	0.029			-0.156
11/2/2017 20:03			0.03	0.088	0	0.031	0.029			-0.156
11/2/2017 20:04			0.03	0.088	0	0.031	0.029			-0.156
11/2/2017 20:05	13	82	0.03	0.088	0	0.031	0.029	40.75414;-	10	-0.156
11/2/2017 20:06			0.03	0.088	0	0.031	0.029			-0.156
11/2/2017 20:07			0.03	0.088	0	0.031	0.029			-0.156
11/2/2017 20:08			0.03	0.088	0	0.031	0.03			-0.156

11/2/2017 20:09			0.029	0.088	0	0.031	0.03				-0.156
11/2/2017 20:10	12.9	82	0.03	0.088	0	0.03	0.03		40.75414;-	15	-0.156
11/2/2017 20:11			0.03	0.088	0	0.03	0.03				-0.156
11/2/2017 20:12			0.03	0.088	0	0.03	0.03				-0.156
11/2/2017 20:13			0.028	0.088	0	0.03	0.03				-0.156
11/2/2017 20:14			0.028	0.088	0	0.029	0.03				-0.156
11/2/2017 20:15	12.9	92.1	0.028	0.088	0	0.029	0.03		40.75418;-	8	-0.156
11/2/2017 20:16			0.028	0.088	0	0.029	0.03				-0.156
11/2/2017 20:17			0.028	0.088	0	0.029	0.03				-0.156
11/2/2017 20:18			0.028	0.088	0	0.028	0.03				-0.156
11/2/2017 20:19			0.028	0.088	0	0.028	0.03				-0.156
11/2/2017 20:20	12.9	87	0.027	0.088	0	0.028	0.03		40.75416;-	8	-0.156
11/2/2017 20:21			0.025	0.088	0	0.028	0.03				-0.156
11/2/2017 20:22			0.026	0.088	0	0.028	0.03				-0.156
11/2/2017 20:23			0.025	0.088	0	0.027	0.03				-0.156
11/2/2017 20:24			0.025	0.088	0	0.027	0.03				-0.156
11/2/2017 20:25	13	81	0.013	0.088	0	0.027	0.03		40.75414;-	10	-0.156
11/6/2017 14:00	12.6	123.5									
11/6/2017 14:00									40.7537452;-73.4868305		
11/6/2017 14:01			0	0	0	0	0				
11/6/2017 14:02			0	0	0	0	0				
11/6/2017 14:03			0	0	0	0	0				
11/6/2017 14:04			0	0	0	0	0				
11/6/2017 14:05	12.6	86	0	0	0	0	0		40.75412;-	10	
11/6/2017 14:06			0	0	0	0	0				-0.147
11/6/2017 14:07			0	0	0	0	0				-0.156
11/6/2017 14:08			0	0	0	0	0				-0.156
11/6/2017 14:09			0	0	0	0	0				-0.156
11/6/2017 14:10	12.5	83	0	0	0	0	0		40.75413;-	9	-0.156
11/6/2017 14:11			0	0	0	0	0				-0.156
11/6/2017 14:12			0	0	0	0	0				-0.156
11/6/2017 14:13			0	0	0	0	0				-0.156
11/6/2017 14:14			0	0	0	0	0				-0.156
11/6/2017 14:15	12.6	89.1	0	0	0	0	0		40.75412;-	14	-0.156
11/6/2017 14:16			0	0	0	0	0				-0.156
11/6/2017 14:17			0	0	0	0	0				-0.156
11/6/2017 14:18			0	0	0	0	0				-0.156
11/6/2017 14:19			0	0	0	0	0				-0.156
11/6/2017 14:20	12.5	87	0	0	0	0	0		40.75413;-	14	-0.156
11/6/2017 14:21			0	0	0	0	0				-0.156
11/6/2017 14:22			0	0	0	0	0				-0.156
11/6/2017 14:23			0	0	0	0	0				-0.156
11/6/2017 14:24			0	0	0	0	0				-0.156
11/6/2017 14:25	12.5	84	0	0	0	0	0		40.75414;-	12	-0.156
11/6/2017 14:26			0	0	0	0	0				-0.156
11/6/2017 14:27			0	0	0	0	0				-0.156
11/6/2017 14:28			0	0	0	0	0				-0.156
11/6/2017 14:29			0	0	0	0	0				-0.156
11/6/2017 14:30	12.5	82	0	0	0	0	0		40.75415;-	15	-0.156
11/6/2017 14:31			0	0	0	0	0				-0.156
11/6/2017 14:32			0	0	0	0	0				-0.156
11/6/2017 14:33			0	0	0	0	0				-0.156
11/6/2017 14:34			0	0	0	0	0				-0.156
11/6/2017 14:35	12.5	84	0	0	0	0	0		40.75416;-	12	-0.156
11/6/2017 14:36			0	0	0	0	0				-0.156
11/6/2017 14:37			0	0	0	0	0				-0.156

11/6/2017 14:38			0	0	0	0	0			-0.156
11/6/2017 14:39			0	0	0	0	0			-0.156
11/6/2017 14:40	12.5	86	0	0	0	0	0	40.75415;-	10	-0.156
11/6/2017 14:41			0	0	0	0	0			-0.156
11/6/2017 14:42			0	0	0	0	0			-0.156
11/6/2017 14:43			0	0	0	0	0			-0.156
11/6/2017 14:44			0	0.001	0	0	0			-0.156
11/6/2017 14:45	12.5	86	0.001	0.002	0	0	0	40.75415;-	11	-0.156
11/6/2017 14:46			0.002	0.002	0	0	0			-0.156
11/6/2017 14:47			0.003	0.003	0	0	0			-0.156
11/6/2017 14:48			0.003	0.003	0	0	0			-0.156
11/6/2017 14:49			0.004	0.004	0	0	0			-0.156
11/6/2017 14:50	12.5	88.1	0.004	0.005	0	0	0	40.75413;-	14	-0.156
11/6/2017 14:51			0.004	0.005	0	0	0			-0.156
11/6/2017 14:52			0.005	0.006	0	0.001	0			-0.156
11/6/2017 14:53			0.005	0.006	0	0.001	0			-0.156
11/6/2017 14:54			0.006	0.006	0	0.001	0			-0.156
11/6/2017 14:55	12.5	88.1	0.006	0.007	0	0.002	0	40.75414;-	12	-0.156
11/6/2017 14:56			0.006	0.007	0	0.002	0			-0.156
11/6/2017 14:57			0.007	0.007	0	0.003	0			-0.156
11/6/2017 14:58			0.007	0.007	0	0.003	0			-0.156
11/6/2017 14:59			0.006	0.008	0	0.003	0			-0.156
11/6/2017 15:00	12.5	84	0.006	0.008	0	0.004	0	40.75414;-	15	-0.156
11/6/2017 15:01			0.007	0.008	0	0.004	0			-0.156
11/6/2017 15:02			0.007	0.008	0	0.004	0			-0.156
11/6/2017 15:03			0.007	0.008	0	0.005	0			-0.156
11/6/2017 15:04			0.008	0.008	0	0.005	0			-0.156
11/6/2017 15:05	12.5	84	0.008	0.008	0	0.005	0	40.75416;-	12	-0.156
11/6/2017 15:06			0.007	0.008	0	0.005	0			-0.156
11/6/2017 15:07			0.008	0.008	0	0.006	0			-0.156
11/6/2017 15:08			0.007	0.008	0	0.006	0			-0.156
11/6/2017 15:09			0.007	0.008	0	0.006	0			-0.156
11/6/2017 15:10	12.5	83	0.007	0.008	0	0.006	0	40.75407;-	12	-0.156
11/6/2017 15:11			0.007	0.008	0	0.006	0			-0.156
11/6/2017 15:12			0.006	0.008	0	0.006	0			-0.156
11/6/2017 15:13			0.006	0.008	0	0.006	0			-0.156
11/6/2017 15:14			0.006	0.008	0	0.006	0			-0.156
11/6/2017 15:15	12.5	84	0.006	0.008	0	0.006	0	40.75412;-	16	-0.156
11/6/2017 15:16			0.006	0.008	0	0.006	0			-0.156
11/6/2017 15:17			0.006	0.008	0	0.006	0			-0.156
11/6/2017 15:18			0.006	0.008	0	0.006	0			-0.156
11/6/2017 15:19			0.006	0.008	0	0.006	0			-0.156
11/6/2017 15:20	12.5	128.6	0.006	0.008	0	0.006	0	40.75411;-	13	-0.156
11/6/2017 15:21			0.006	0.008	0	0.006	0			-0.156
11/6/2017 15:22			0.006	0.008	0	0.006	0			-0.156
11/6/2017 15:23			0.005	0.008	0	0.005	0			-0.156
11/6/2017 15:24			0.005	0.008	0	0.005	0			-0.156
11/6/2017 15:25	12.5	84	0.005	0.008	0	0.005	0	40.75409;-	14	-0.156
11/6/2017 15:26			0.005	0.008	0	0.005	0			-0.156
11/6/2017 15:27			0.005	0.008	0	0.005	0			-0.156
11/6/2017 15:28			0.004	0.008	0	0.005	0			-0.156
11/6/2017 15:29			0.004	0.008	0	0.005	0			-0.156
11/6/2017 15:30	12.5	94.1	0.005	0.008	0	0.005	0	40.75405;-	12	-0.156
11/6/2017 15:31			0.005	0.008	0	0.005	0			-0.156
11/6/2017 15:32			0.004	0.008	0	0.004	0			-0.156
11/6/2017 15:33			0.004	0.008	0	0.004	0			-0.156

11/6/2017 15:34			0.004	0.008	0	0.004	0			-0.156
11/6/2017 15:35	12.5	83	0.004	0.008	0	0.004	0	40.75408;-	17	-0.156
11/6/2017 15:36			0.005	0.008	0	0.004	0			-0.156
11/6/2017 15:37			0.006	0.008	0	0.004	0			-0.156
11/6/2017 15:38			0.005	0.008	0	0.004	0			-0.156
11/6/2017 15:39			0.005	0.008	0	0.004	0			-0.156
11/6/2017 15:40	12.5	84	0.005	0.008	0	0.004	0	40.75406;-	18	-0.156
11/6/2017 15:41			0.005	0.008	0	0.004	0			-0.156
11/6/2017 15:42			0.005	0.008	0	0.004	0			-0.156
11/6/2017 15:43			0.005	0.008	0	0.004	0			-0.156
11/6/2017 15:44			0.004	0.008	0	0.004	0			-0.156
11/6/2017 15:45	12.6	83	0.005	0.008	0	0.004	0	40.75404;-	20	-0.156
11/6/2017 15:46			0.004	0.008	0	0.004	0			-0.156
11/6/2017 15:47			0.004	0.008	0	0.004	0			-0.156
11/6/2017 15:48			0.005	0.008	0	0.004	0			-0.156
11/6/2017 15:49			0.005	0.008	0	0.004	0			-0.156
11/6/2017 15:50	12.6	92.1	0.004	0.008	0	0.004	0	40.75401;-	26	-0.156
11/6/2017 15:51			0.004	0.008	0	0.004	0			-0.156
11/6/2017 15:52			0.004	0.008	0	0.004	0			-0.156
11/6/2017 15:53			0.004	0.008	0	0.004	0			-0.156
11/6/2017 15:54			0.004	0.008	0	0.004	0			-0.156
11/6/2017 15:55	12.7	83	0.004	0.008	0	0.004	0	40.754;-73.	27	-0.156
11/6/2017 15:56			0.005	0.008	0	0.004	0			-0.156
11/6/2017 15:57			0.005	0.008	0	0.004	0			-0.156
11/6/2017 15:58			0.005	0.008	0	0.004	0			-0.156
11/6/2017 15:59			0.006	0.008	0	0.004	0			-0.156
11/6/2017 16:00	12.7	88.1	0.006	0.008	0	0.004	0	40.75404;-	22	-0.156
11/6/2017 16:01			0.005	0.008	0	0.004	0			-0.156
11/6/2017 16:02			0.006	0.008	0	0.004	0			-0.156
11/6/2017 16:03			0.004	0.008	0	0.004	0			-0.156
11/6/2017 16:04			0.006	0.008	0	0.004	0			-0.156
11/6/2017 16:05	12.6	86	0.006	0.008	0	0.004	0	40.75409;-	13	-0.156
11/6/2017 16:06			0.006	0.008	0	0.004	0			-0.156
11/6/2017 16:07			0.006	0.008	0	0.004	0			-0.156
11/6/2017 16:08			0.006	0.008	0	0.004	0			-0.156
11/6/2017 16:09			0.007	0.008	0	0.005	0			-0.156
11/6/2017 16:10	12.6	83	0.007	0.008	0	0.005	0	40.75411;-	10	-0.156
11/6/2017 16:11			0.007	0.008	0	0.005	0			-0.156
11/6/2017 16:12			0.007	0.008	0	0.005	0			-0.156
11/6/2017 16:13			0.007	0.008	0	0.005	0			-0.156
11/6/2017 16:14			0.007	0.008	0	0.005	0			-0.156
11/6/2017 16:15	12.7	93.1	0.013	0.015	0	0.005	0	40.75412;-	10	-0.156
11/6/2017 16:16			0.012	0.015	0	0.006	0			-0.156
11/6/2017 16:17			0.013	0.016	0	0.006	0			-0.156
11/6/2017 16:18			0.016	0.016	0	0.007	0.001			-0.156
11/6/2017 16:19			0.016	0.016	0	0.008	0.001			-0.156
11/6/2017 16:20	12.7	83	0.016	0.017	0	0.008	0.001	40.75411;-	13	-0.156
11/6/2017 16:21			0.016	0.017	0	0.009	0.001			-0.156
11/6/2017 16:22			0.016	0.017	0	0.009	0.001			-0.156
11/6/2017 16:23			0.017	0.017	0	0.01	0.001			-0.156
11/6/2017 16:24			0.016	0.017	0	0.011	0.001			-0.156
11/6/2017 16:25	12.6	84	0.015	0.017	0	0.011	0.001	40.75411;-	18	-0.156
11/6/2017 16:26			0.015	0.017	0	0.012	0.001			-0.156
11/6/2017 16:27			0.017	0.018	0	0.013	0.001			-0.156
11/6/2017 16:28			0.017	0.018	0	0.013	0.001			-0.156
11/6/2017 16:29			0.017	0.018	0	0.014	0.001			-0.156

11/6/2017 16:30	12.6	134.6	0.018	0.018	0	0.015	0.001			-0.156
11/6/2017 16:30								40.75412;-	16	
11/6/2017 16:31			0.016	0.018	0	0.015	0.001			-0.156
11/6/2017 16:32			0.015	0.018	0	0.015	0.001			-0.156
11/6/2017 16:33			0.016	0.018	0	0.015	0.001			-0.156
11/6/2017 16:34			0.016	0.018	0	0.015	0.001			-0.156
11/6/2017 16:35	12.7	85	0.015	0.018	0	0.015	0.001	40.75413;-	2	-0.156
11/6/2017 16:36			0.015	0.018	0	0.015	0.001			-0.156
11/6/2017 16:37			0.014	0.018	0	0.015	0.001			-0.156
11/6/2017 16:38			0.016	0.018	0	0.015	0.001			-0.156
11/6/2017 16:39			0.014	0.018	0	0.015	0.001			-0.156
11/6/2017 16:40	12.7	132.6	0.012	0.018	0	0.015	0.001	40.75411;-	5	-0.156
11/6/2017 16:41			0.013	0.018	0	0.015	0.001			-0.156
11/6/2017 16:42			0.013	0.018	0	0.014	0.001			-0.156
11/6/2017 16:43			0.012	0.018	0	0.014	0.001			-0.156
11/6/2017 16:44			0.012	0.018	0	0.014	0.001			-0.156
11/6/2017 16:45	12.8	82	0.012	0.018	0	0.013	0.001	40.75409;-	12	-0.156
11/6/2017 16:46			0.011	0.018	0	0.013	0.001			-0.156
11/6/2017 16:47			0.011	0.018	0	0.013	0.001			-0.156
11/6/2017 16:48			0.011	0.018	0	0.013	0.001			-0.156
11/6/2017 16:49			0.011	0.018	0	0.012	0.001			-0.156
11/6/2017 16:50	12.9	81	0.012	0.018	0	0.012	0.001	40.75409;-	5	-0.156
11/6/2017 16:51			0.012	0.018	0	0.012	0.001			-0.156
11/6/2017 16:52			0.012	0.018	0	0.012	0.002			-0.156
11/6/2017 16:53			0.012	0.018	0	0.011	0.002			-0.156
11/6/2017 16:54			0.012	0.018	0	0.011	0.002			-0.156
11/6/2017 16:55	12.9	84	0.012	0.018	0	0.011	0.002	40.75412;-	5	-0.156
11/6/2017 16:56			0.012	0.018	0	0.011	0.002			-0.156
11/6/2017 16:57			0.013	0.018	0	0.011	0.002			-0.156
11/6/2017 16:58			0.013	0.018	0	0.011	0.002			-0.156
11/6/2017 16:59			0.012	0.018	0	0.011	0.002			-0.156
11/6/2017 17:00	12.8	83	0.013	0.018	0	0.011	0.002	40.75412;-	3	-0.156
11/6/2017 17:01			0.011	0.018	0	0.011	0.002			-0.156
11/6/2017 17:02			0.013	0.018	0	0.011	0.002			-0.156
11/6/2017 17:03			0.012	0.018	0	0.011	0.002			-0.156
11/6/2017 17:04			0.013	0.018	0	0.011	0.002			-0.156
11/6/2017 17:05	12.7	101.2	0.013	0.018	0	0.011	0.002	40.75408;-	8	-0.156
11/6/2017 17:06			0.014	0.018	0	0.012	0.002			-0.156
11/6/2017 17:07			0.015	0.018	0	0.012	0.002			-0.156
11/6/2017 17:08			0.013	0.018	0	0.012	0.002			-0.156
11/6/2017 17:09			0.013	0.018	0	0.012	0.002			-0.156
11/6/2017 17:10	12.6	83	0.016	0.018	0	0.012	0.002	40.75409;-	8	-0.156
11/6/2017 17:11			0.013	0.018	0	0.012	0.002			-0.156
11/6/2017 17:12			0.013	0.018	0	0.012	0.002			-0.156
11/6/2017 17:13			0.015	0.018	0	0.012	0.002			-0.156
11/6/2017 17:14			0.013	0.018	0	0.012	0.002			-0.156
11/6/2017 17:15	12.6	82	0.017	0.018	0	0.013	0.002	40.75411;-	10	-0.156
11/6/2017 17:16			0.018	0.019	0	0.013	0.002			-0.156
11/6/2017 17:17			0.018	0.019	0	0.013	0.002			-0.156
11/6/2017 17:18			0.019	0.02	0	0.013	0.002			-0.156
11/6/2017 17:19			0.017	0.02	0	0.014	0.002			-0.156
11/6/2017 17:20	12.6	84	0.018	0.02	0	0.014	0.002	40.75411;-	6	-0.156
11/6/2017 17:21			0.018	0.02	0	0.014	0.002			-0.156
11/6/2017 17:22			0.018	0.02	0	0.015	0.002			-0.156
11/6/2017 17:23			0.018	0.02	0	0.015	0.002			-0.156
11/6/2017 17:24			0.018	0.02	0	0.015	0.002			-0.156

11/6/2017 17:25	12.6	85	0.019	0.02	0	0.015	0.002	40.75412;-	4	-0.156
11/6/2017 17:26			0.019	0.02	0	0.015	0.002			-0.156
11/6/2017 17:27			0.018	0.02	0	0.016	0.003			-0.156
11/6/2017 17:28			0.019	0.02	0	0.016	0.003			-0.156
11/6/2017 17:29			0.02	0.02	0	0.017	0.003			-0.156
11/6/2017 17:30	12.7	97.2	0.02	0.021	0	0.017	0.003	40.75413;-	4	-0.156
11/6/2017 17:31			0.022	0.023	0	0.017	0.003			-0.156
11/6/2017 17:32			0.012	0.023	0	0.018	0.003			-0.156
11/6/2017 17:33			0.008	0.023	0	0.017	0.003			
11/6/2017 17:34			0.006	0.023	0	0.017	0.003			
11/6/2017 17:35	12.7	88.1	0.004	0.023	0	0.016	0.003	40.75413;-	10	
11/6/2017 17:36			0.005	0.023	0	0.015	0.003			
11/6/2017 17:37			0.009	0.023	0	0.014	0.003			-0.007
11/6/2017 17:38			0.01	0.023	0	0.014	0.003			-0.009
11/6/2017 17:39			0.011	0.023	0	0.013	0.003			-0.012
11/6/2017 17:40	12.6	89.1	0.012	0.023	0	0.013	0.003	40.75415;-	8	-0.015
11/6/2017 17:41			0.012	0.023	0	0.012	0.003			-0.017
11/6/2017 17:42			0.013	0.023	0	0.012	0.003			-0.015
11/6/2017 17:43			0.012	0.023	0	0.011	0.003			-0.016
11/6/2017 17:44			0.013	0.023	0	0.011	0.003			-0.017
11/6/2017 17:45	12.6	95.1	0.013	0.023	0	0.01	0.003	40.75415;-	12	-0.018
11/6/2017 17:46			0.016	0.023	0	0.01	0.003			-0.02
11/6/2017 17:47			0.014	0.023	0	0.009	0.003			-0.022
11/6/2017 17:48			0.017	0.023	0	0.009	0.003			-0.022
11/6/2017 17:49			0.016	0.023	0	0.01	0.003			-0.021
11/6/2017 17:50	12.7	88.1	0.016	0.023	0	0.011	0.003	40.75417;-	16	-0.022
11/6/2017 17:51			0.017	0.023	0	0.011	0.003			-0.023
11/6/2017 17:52			0.018	0.023	0	0.012	0.003			-0.025
11/6/2017 17:53			0.018	0.023	0	0.013	0.003			-0.026
11/6/2017 17:54			0.02	0.023	0	0.014	0.003			-0.026
11/6/2017 17:55	12.7	87	0.019	0.023	0	0.014	0.003	40.75414;-	15	-0.026
11/6/2017 17:56			0.02	0.023	0	0.015	0.003			-0.026
11/6/2017 17:57			0.019	0.023	0	0.015	0.003			-0.026
11/6/2017 17:58			0.02	0.023	0	0.016	0.003			-0.027
11/6/2017 17:59			0.021	0.023	0	0.016	0.003			-0.026
11/6/2017 18:00	12.7	92.1	0.02	0.023	0	0.017	0.004	40.75414;-	10	-0.026
11/6/2017 18:01			0.023	0.023	0	0.017	0.004			-0.026
11/6/2017 18:02			0.023	0.023	0	0.017	0.004			-0.027
11/6/2017 18:03			0.023	0.024	0	0.018	0.004			-0.026
11/6/2017 18:04			0.023	0.024	0	0.018	0.004			-0.026
11/6/2017 18:05	12.7	84	0.024	0.025	0	0.019	0.004	40.75414;-	6	-0.027
11/6/2017 18:06			0.026	0.026	0	0.019	0.004			-0.028
11/6/2017 18:07			0.027	0.027	0	0.02	0.004			-0.027
11/6/2017 18:08			0.025	0.027	0	0.02	0.004			-0.028
11/6/2017 18:09			0.026	0.027	0	0.021	0.004			-0.027
11/6/2017 18:10	12.6	90.1	0.026	0.027	0	0.021	0.004	40.75412;-	6	-0.029
11/6/2017 18:11			0.027	0.027	0	0.022	0.004			-0.029
11/6/2017 18:12			0.027	0.027	0	0.022	0.004			-0.029
11/6/2017 18:13			0.027	0.03	0	0.023	0.004			-0.029
11/6/2017 18:14			0.027	0.03	0	0.023	0.004			-0.026
11/6/2017 18:15	12.6	92.1	0.026	0.03	0	0.024	0.004	40.75412;-	12	-0.026
11/6/2017 18:16			0.027	0.03	0	0.024	0.004			-0.027
11/6/2017 18:17			0.028	0.03	0	0.025	0.004			-0.028
11/6/2017 18:18			0.03	0.03	0	0.025	0.004			-0.028
11/6/2017 18:19			0.03	0.031	0	0.025	0.004			-0.029
11/6/2017 18:20	12.6	88.1	0.031	0.032	0	0.026	0.005	40.75413;-	11	-0.028

11/6/2017 18:21			0.032	0.032	0	0.026	0.005			-0.026
11/6/2017 18:22			0.03	0.032	0	0.027	0.005			-0.026
11/6/2017 18:23			0.032	0.032	0	0.027	0.005			-0.025
11/6/2017 18:24			0.03	0.032	0	0.027	0.005			-0.026
11/6/2017 18:25	12.6	84	0.032	0.032	0	0.028	0.005	40.75413;-	9	-0.028
11/6/2017 18:26			0.032	0.032	0	0.028	0.005			-0.028
11/6/2017 18:27			0.032	0.033	0	0.028	0.005			-0.028
11/6/2017 18:28			0.034	0.034	0	0.029	0.005			-0.029
11/6/2017 18:29			0.032	0.034	0	0.029	0.005			-0.028
11/6/2017 18:30	12.6	84	0.033	0.034	0	0.03	0.005	40.75414;-	8	-0.026
11/6/2017 18:31			0.032	0.034	0	0.03	0.005			-0.024
11/6/2017 18:32			0.03	0.034	0	0.03	0.005			-0.021
11/6/2017 18:33			0.032	0.034	0	0.03	0.005			-0.02
11/6/2017 18:34			0.03	0.034	0	0.031	0.005			-0.02
11/6/2017 18:35	12.6	88.1	0.03	0.034	0	0.031	0.006	40.75414;-	7	-0.019
11/6/2017 18:36			0.032	0.034	0	0.031	0.006			-0.019
11/6/2017 18:37			0.032	0.034	0	0.031	0.006			-0.02
11/6/2017 18:38			0.032	0.034	0	0.031	0.006			-0.02
11/6/2017 18:39			0.033	0.034	0	0.031	0.006			-0.022
11/6/2017 18:40	12.6	82	0.034	0.035	0	0.031	0.006	40.75412;-	8	-0.022
11/6/2017 18:41			0.034	0.036	0	0.031	0.006			-0.021
11/6/2017 18:42			0.032	0.036	0	0.031	0.006			-0.02
11/6/2017 18:43			0.036	0.036	0	0.031	0.006			-0.022
11/6/2017 18:44			0.034	0.037	0	0.031	0.006			-0.022
11/6/2017 18:45	12.6	86	0.032	0.037	0	0.031	0.006	40.75414;-	6	-0.022
11/6/2017 18:46			0.034	0.037	0	0.031	0.006			-0.021
11/6/2017 18:47			0.036	0.037	0	0.031	0.006			-0.021
11/6/2017 18:48			0.034	0.037	0	0.032	0.006			-0.021
11/6/2017 18:49			0.037	0.037	0	0.032	0.006			-0.023
11/6/2017 18:50	12.6	83	0.035	0.037	0	0.032	0.007	40.75414;-	7	-0.024
11/6/2017 18:51			0.036	0.038	0	0.033	0.007			-0.024
11/6/2017 18:52			0.037	0.038	0	0.033	0.007			-0.024
11/6/2017 18:53			0.037	0.038	0	0.033	0.007			-0.025
11/6/2017 18:54			0.037	0.039	0	0.034	0.007			-0.025
11/6/2017 18:55	12.6	84	0.037	0.039	0	0.034	0.007	40.75414;-	9	-0.021
11/6/2017 18:56			0.036	0.039	0	0.034	0.007			-0.02
11/6/2017 18:57			0.037	0.039	0	0.034	0.007			-0.021
11/6/2017 18:58			0.037	0.039	0	0.035	0.007			-0.022
11/6/2017 18:59			0.039	0.039	0	0.035	0.007			-0.022
11/6/2017 19:00	12.5	85	0.04	0.04	0	0.035	0.007	40.75413;-	10	-0.023
11/6/2017 19:01			0.039	0.04	0	0.035	0.007			-0.022
11/6/2017 19:02			0.039	0.04	0	0.036	0.007			-0.024
11/6/2017 19:03			0.04	0.041	0	0.036	0.008			-0.024
11/6/2017 19:04			0.039	0.041	0	0.036	0.008			-0.024
11/6/2017 19:05	12.5	85	0.041	0.041	0	0.037	0.008	40.75413;-	11	-0.024
11/6/2017 19:06			0.04	0.041	0	0.037	0.008			-0.025
11/6/2017 19:07			0.04	0.041	0	0.037	0.008			-0.025
11/6/2017 19:08			0.041	0.044	0	0.037	0.008			-0.027
11/6/2017 19:09			0.041	0.044	0	0.038	0.008			-0.027
11/6/2017 19:10	12.5	86	0.039	0.044	0	0.038	0.008	40.75411;-	12	-0.024
11/6/2017 19:11			0.041	0.044	0	0.038	0.008			-0.024
11/6/2017 19:12			0.039	0.044	0	0.038	0.008			-0.021
11/6/2017 19:13			0.039	0.044	0	0.039	0.008			-0.021
11/6/2017 19:14			0.041	0.044	0	0.039	0.008			-0.024
11/6/2017 19:15	12.5	84	0.043	0.044	0	0.039	0.009	40.75412;-	12	-0.025
11/6/2017 19:16			0.042	0.044	0	0.039	0.009			-0.025

11/6/2017 19:17			0.041	0.044	0	0.039	0.009			-0.023
11/6/2017 19:18			0.038	0.044	0	0.039	0.009			-0.02
11/6/2017 19:19			0.039	0.044	0	0.039	0.009			-0.019
11/6/2017 19:20	12.5	92.1	0.039	0.044	0	0.039	0.009	40.75413;-	17	-0.02
11/6/2017 19:21			0.04	0.044	0	0.039	0.009			-0.02
11/6/2017 19:22			0.039	0.044	0	0.039	0.009			-0.021
11/6/2017 19:23			0.04	0.044	0	0.039	0.009			-0.019
11/6/2017 19:24			0.04	0.044	0	0.039	0.009			-0.021
11/6/2017 19:25	12.5	94.1	0.04	0.044	0	0.039	0.009	40.75413;-	16	-0.021
11/6/2017 19:26			0.039	0.044	0	0.039	0.009			-0.02
11/6/2017 19:27			0.041	0.044	0	0.039	0.01			-0.02
11/6/2017 19:28			0.039	0.044	0	0.039	0.01			-0.02
11/6/2017 19:29			0.041	0.044	0	0.039	0.01			-0.02
11/6/2017 19:30	12.5	84	0.041	0.044	0	0.039	0.01	40.75412;-	14	-0.021
11/6/2017 19:31			0.039	0.044	0	0.039	0.01			-0.021
11/6/2017 19:32			0.041	0.044	0	0.039	0.01			-0.021
11/6/2017 19:33			0.04	0.044	0	0.039	0.01			-0.02
11/6/2017 19:34			0.041	0.044	0	0.039	0.01			-0.021
11/6/2017 19:35	12.5	94.1	0.041	0.044	0	0.039	0.01	40.75414;-	14	-0.021
11/6/2017 19:36			0.041	0.044	0	0.039	0.01			-0.022
11/6/2017 19:37			0.041	0.044	0	0.039	0.01			-0.022
11/6/2017 19:38			0.04	0.044	0	0.039	0.01			-0.022
11/6/2017 19:39			0.041	0.044	0	0.039	0.011			-0.021
11/6/2017 19:40	12.5	95.1	0.04	0.044	0	0.04	0.011	40.75413;-	12	-0.019
11/6/2017 19:41			0.039	0.044	0	0.04	0.011			-0.018
11/6/2017 19:42			0.04	0.044	0	0.039	0.011			-0.018
11/6/2017 19:43			0.041	0.044	0	0.039	0.011			-0.019
11/6/2017 19:44			0.041	0.044	0	0.039	0.011			-0.02
11/6/2017 19:45	12.5	83	0.041	0.044	0	0.039	0.011	40.75409;-	13	-0.02
11/6/2017 19:46			0.04	0.044	0	0.039	0.011			-0.019
11/6/2017 19:47			0.041	0.044	0	0.039	0.011			-0.02
11/6/2017 19:48			0.039	0.044	0	0.039	0.011			-0.021
11/6/2017 19:49			0.04	0.044	0	0.039	0.011			-0.02
11/6/2017 19:50	12.5	93.1	0.04	0.044	0	0.039	0.011	40.75412;-	12	-0.02
11/6/2017 19:51			0.038	0.044	0	0.039	0.012			-0.019
11/6/2017 19:52			0.038	0.044	0	0.039	0.012			-0.018
11/6/2017 19:53			0.037	0.044	0	0.039	0.012			-0.016
11/6/2017 19:54			0.038	0.044	0	0.039	0.012			-0.017
11/6/2017 19:55	12.5	89.1	0.04	0.044	0	0.039	0.012	40.75414;-	22	-0.019
11/6/2017 19:56			0.033	0.044	0	0.039	0.012			-0.013
11/6/2017 19:57			0.036	0.044	0	0.038	0.012			-0.014
11/6/2017 19:58			0.037	0.044	0	0.038	0.012			-0.016
11/6/2017 19:59			0.04	0.044	0	0.038	0.012			-0.017
11/6/2017 20:00	12.5	82	0.04	0.044	0	0.038	0.012	40.75413;-	12	-0.018
11/6/2017 20:01			0.042	0.044	0	0.038	0.012			-0.021
11/6/2017 20:02			0.04	0.044	0	0.038	0.012			-0.021
11/6/2017 20:03			0.043	0.044	0	0.038	0.012			-0.02
11/6/2017 20:04			0.04	0.044	0	0.038	0.013			-0.019
11/6/2017 20:05	12.5	94.1	0.039	0.044	0	0.038	0.013	40.75413;-	14	-0.019
11/6/2017 20:06			0.04	0.044	0	0.038	0.013			-0.019
11/6/2017 20:07			0.038	0.044	0	0.038	0.013			-0.019
11/6/2017 20:08			0.039	0.044	0	0.038	0.013			-0.018
11/6/2017 20:09			0.038	0.044	0	0.038	0.013			-0.02
11/6/2017 20:10	12.5	84	0.04	0.044	0	0.038	0.013	40.75412;-	12	-0.02
11/6/2017 20:11			0.041	0.044	0	0.038	0.013			-0.022
11/6/2017 20:12			0.041	0.044	0	0.038	0.013			-0.023

11/6/2017 20:13			0.04	0.044	0	0.039	0.013			-0.022
11/6/2017 20:14			0.039	0.044	0	0.039	0.013			-0.02
11/6/2017 20:15	12.5	85	0.041	0.044	0	0.039	0.013	40.75411;-	11	-0.021
11/6/2017 20:16			0.04	0.044	0	0.039	0.014			-0.02
11/6/2017 20:17			0.04	0.044	0	0.039	0.014			-0.02
11/6/2017 20:18			0.04	0.044	0	0.039	0.014			-0.02
11/6/2017 20:19			0.04	0.044	0	0.039	0.014			-0.019
11/6/2017 20:20	12.5	83	0.039	0.044	0	0.039	0.014	40.75408;-	16	-0.019
11/6/2017 20:21			0.04	0.044	0	0.039	0.014			-0.019
11/6/2017 20:22			0.038	0.044	0	0.039	0.014			-0.018
11/6/2017 20:23			0.038	0.044	0	0.039	0.014			-0.017
11/6/2017 20:24			0.038	0.044	0	0.039	0.014			-0.017
11/6/2017 20:25	12.5	85	0.038	0.044	0	0.039	0.014	40.75408;-	15	-0.018
11/6/2017 20:26			0.038	0.044	0	0.039	0.014			-0.019
11/6/2017 20:27			0.038	0.044	0	0.039	0.014			-0.018
11/6/2017 20:28			0.039	0.044	0	0.038	0.014			-0.019
11/6/2017 20:29			0.041	0.044	0	0.038	0.015			-0.022
11/6/2017 20:30	12.6	90.1	0.042	0.044	0	0.038	0.015	40.75408;-	12	-0.022
11/6/2017 20:31			0.041	0.044	0	0.038	0.015			-0.022
11/6/2017 20:32			0.042	0.044	0	0.039	0.015			-0.023
11/6/2017 20:33			0.041	0.044	0	0.039	0.015			-0.025
11/6/2017 20:34			0.043	0.044	0	0.039	0.015			-0.026
11/6/2017 20:35	12.5	83	0.042	0.044	0	0.039	0.015	40.75411;-	8	-0.024
11/6/2017 20:36			0.043	0.044	0	0.039	0.015			-0.025
11/6/2017 20:37			0.042	0.044	0	0.039	0.015			-0.027
11/6/2017 20:38			0.043	0.044	0	0.039	0.015			-0.028
11/6/2017 20:39			0.043	0.045	0	0.04	0.015			-0.028
11/6/2017 20:40	12.5	85	0.045	0.045	0	0.04	0.016	40.75407;-	8	-0.029
11/6/2017 20:41			0.045	0.046	0	0.041	0.016			-0.027
11/6/2017 20:42			0.045	0.046	0	0.041	0.016			-0.028
11/6/2017 20:43			0.044	0.046	0	0.041	0.016			-0.026
11/6/2017 20:44			0.043	0.046	0	0.042	0.016			-0.027
11/6/2017 20:45	12.5	90.1	0.045	0.048	0	0.042	0.016	40.75412;-	5	-0.028
11/6/2017 20:46			0.046	0.048	0	0.042	0.016			-0.029
11/6/2017 20:47			0.048	0.048	0	0.043	0.016			-0.029
11/6/2017 20:48			0.048	0.048	0	0.043	0.016			-0.029
11/6/2017 20:49			0.048	0.049	0	0.043	0.016			-0.03
11/6/2017 20:50	12.5	88.1	0.048	0.049	0	0.044	0.016	40.75414;-	4	-0.03
11/6/2017 20:51			0.048	0.049	0	0.044	0.017			-0.031
11/6/2017 20:52			0.049	0.049	0	0.044	0.017			-0.03
11/6/2017 20:53			0.048	0.05	0	0.045	0.017			-0.027
11/6/2017 20:54			0.047	0.05	0	0.045	0.017			-0.024
11/6/2017 20:55	12.5	87	0.047	0.05	0	0.045	0.017	40.75414;-	6	-0.025
11/6/2017 20:56			0.042	0.05	0	0.045	0.017			-0.024
11/6/2017 20:57			0.025	0.05	0	0.045	0.017			0.002
11/6/2017 20:58			0.024	0.05	0	0.044	0.017			0.002
11/6/2017 20:59			0.025	0.05	0	0.043	0.017			0
11/6/2017 21:00	12.5	85	0.023	0.05	0	0.042	0.017	40.75414;-	7	-0.003
11/6/2017 21:01			0.022	0.05	0	0.04	0.017			-0.001
11/6/2017 21:02			0.02	0.05	0	0.038	0.017			-0.002
11/6/2017 21:03			0.02	0.05	0	0.037	0.017			-0.003
11/6/2017 21:04			0.02	0.05	0	0.035	0.017			-0.003
11/6/2017 21:05	12.5	85	0.02	0.05	0	0.033	0.018	40.75414;-	8	-0.001
11/6/2017 21:06			0.02	0.05	0	0.031	0.018			-0.001
11/6/2017 21:07			0.018	0.05	0	0.029	0.018			0
11/6/2017 21:08			0.019	0.05	0	0.027	0.018			0

11/6/2017 21:09			0.018	0.05	0	0.025	0.018				-0.001
11/6/2017 21:10	12.5	96.2	0.016	0.05	0	0.023	0.018		40.75412;-	10	-0.001
11/6/2017 21:11			0.016	0.05	0	0.021	0.018				0
11/6/2017 21:12			0.017	0.05	0	0.02	0.018				0
11/6/2017 21:13			0.018	0.05	0	0.019	0.018				0
11/6/2017 21:14			0.016	0.05	0	0.018	0.018				-0.001
11/6/2017 21:15	12.5	84	0.015	0.05	0	0.018	0.018		40.75413;-	7	0
11/6/2017 21:16			0.015	0.05	0	0.017	0.018				0
11/6/2017 21:17			0.014	0.05	0	0.017	0.018				0
11/6/2017 21:18			0.013	0.05	0	0.016	0.018				0
11/6/2017 21:19			0.013	0.05	0	0.016	0.018				0
11/6/2017 21:20	12.5	90.1	0.012	0.05	0	0.016	0.018		40.75413;-	5	0
11/6/2017 21:21			0.013	0.05	0	0.015	0.018				0
11/7/2017 14:13			0	0	0	0	0				
11/7/2017 14:14			0	0	0	0	0				
11/7/2017 14:15	12.7	90.1	0	0	0	0	0		40.75414;-	7	-0.03
11/7/2017 14:16			0	0	0	0	0				-0.032
11/7/2017 14:17			0	0	0	0	0				-0.033
11/7/2017 14:18			0	0	0	0	0				-0.033
11/7/2017 14:19			0	0	0	0	0				-0.033
11/7/2017 14:20	12.7	84	0	0	0	0	0		40.75414;-	15	-0.033
11/7/2017 14:21			0	0	0	0	0				-0.033
11/7/2017 14:22			0	0	0	0	0				-0.033
11/7/2017 14:23			0	0	0	0	0				-0.034
11/7/2017 14:24			0	0	0	0	0				-0.034
11/7/2017 14:25	12.8	90.1	0	0	0	0	0		40.75412;-	11	-0.034
11/7/2017 14:26			0	0	0	0	0				-0.034
11/7/2017 14:27			0	0	0	0	0				-0.034
11/7/2017 14:28			0	0	0	0	0				-0.034
11/7/2017 14:29			0	0	0	0	0				-0.034
11/7/2017 14:30	13.1	80	0	0	0	0	0		40.75414;-	13	-0.034
11/7/2017 14:31			0	0	0	0	0				-0.035
11/7/2017 14:32			0	0	0	0	0				-0.035
11/7/2017 14:33			0	0	0	0	0				-0.035
11/7/2017 14:34			0	0	0	0	0				-0.035
11/7/2017 14:35	13.1	83	0	0	0	0	0		40.75414;-	14	-0.035
11/7/2017 14:36			0	0	0	0	0				-0.035
11/7/2017 14:37			0	0	0	0	0				-0.035
11/7/2017 14:38			0	0	0	0	0				-0.034
11/7/2017 14:39			0	0	0	0	0				-0.034
11/7/2017 14:40	13.2	79	0	0	0	0	0		40.75415;-	13	-0.035
11/7/2017 14:41			0.003	0.005	0	0	0				-0.035
11/7/2017 14:42			0.002	0.005	0	0	0				-0.035
11/7/2017 14:43			0.003	0.005	0	0	0				-0.035
11/7/2017 14:44			0.003	0.005	0	0	0				-0.034
11/7/2017 14:45	13.2	87	0.001	0.005	0	0	0		40.75417;-	11	-0.033
11/7/2017 14:46			0.002	0.005	0	0	0				-0.032
11/7/2017 14:47			0.003	0.005	0	0.001	0				-0.032
11/7/2017 14:48			0.007	0.015	0	0.001	0				-0.032
11/7/2017 14:49			0.006	0.015	0	0.001	0				-0.033
11/7/2017 14:50	13.4	77.9	0.006	0.015	0	0.002	0		40.75415;-	14	-0.033
11/7/2017 14:51			0.008	0.015	0	0.002	0				-0.034
11/7/2017 14:52			0.008	0.015	0	0.003	0				-0.034
11/7/2017 14:53			0.007	0.015	0	0.003	0				-0.034
11/7/2017 14:54			0.008	0.015	0	0.004	0				-0.034
11/7/2017 14:55	13.3	82	0.009	0.015	0	0.004	0		40.75414;-	14	-0.034

11/7/2017 14:56			0.008	0.015	0	0.005	0			-0.035
11/7/2017 14:57			0.008	0.015	0	0.005	0			-0.034
11/7/2017 14:58			0.009	0.015	0	0.005	0			-0.034
11/7/2017 14:59			0.01	0.015	0	0.006	0			-0.033
11/7/2017 15:00	13.5	82	0.009	0.015	0	0.006	0	40.75417;-	13	-0.033
11/7/2017 15:01			0.009	0.015	0	0.007	0			-0.033
11/7/2017 15:02			0.01	0.015	0	0.007	0			-0.032
11/7/2017 15:03			0.011	0.015	0	0.008	0			-0.033
11/7/2017 15:04			0.01	0.015	0	0.008	0			-0.033
11/7/2017 15:05	13.3	113.4	0.01	0.015	0	0.008	0	40.75416;-	15	-0.034
11/7/2017 15:06			0.012	0.015	0	0.008	0			-0.034
11/7/2017 15:07			0.011	0.015	0	0.008	0			-0.034
11/7/2017 15:08			0.012	0.015	0	0.009	0			-0.033
11/7/2017 15:09			0.013	0.015	0	0.009	0			-0.033
11/7/2017 15:10	13.2	80	0.013	0.015	0	0.009	0	40.75416;-	14	-0.033
11/7/2017 15:11			0.012	0.015	0	0.009	0			-0.033
11/7/2017 15:12			0.013	0.015	0	0.01	0			-0.033
11/7/2017 15:13			0.015	0.015	0	0.01	0			-0.033
11/7/2017 15:14			0.014	0.015	0	0.01	0			-0.034
11/7/2017 15:15	13.1	84	0.015	0.015	0	0.011	0	40.75416;-	16	-0.034
11/7/2017 15:16			0.013	0.015	0	0.011	0			-0.034
11/7/2017 15:17			0.014	0.015	0	0.011	0			-0.034
11/7/2017 15:18			0.014	0.015	0	0.012	0			-0.033
11/7/2017 15:19			0.014	0.016	0	0.012	0			-0.033
11/7/2017 15:20	13.1	92.1	0.015	0.016	0	0.012	0	40.75415;-	15	-0.033
11/7/2017 15:21			0.015	0.016	0	0.012	0			-0.032
11/7/2017 15:22			0.016	0.018	0	0.013	0			-0.032
11/7/2017 15:23			0.015	0.018	0	0.013	0			-0.032
11/7/2017 15:24			0.01	0.018	0	0.013	0			-0.032
11/7/2017 15:25	13.1	87	0.012	0.018	0	0.013	0	40.75414;-	17	-0.033
11/7/2017 15:26			0.013	0.018	0	0.013	0			-0.034
11/7/2017 15:27			0.013	0.018	0	0.013	0			-0.034
11/7/2017 15:28			0.013	0.018	0	0.013	0			-0.034
11/7/2017 15:29			0.014	0.018	0	0.013	0			-0.034
11/7/2017 15:30	13.1	85	0.014	0.018	0	0.013	0.001	40.75412;-	18	-0.034
11/7/2017 15:31			0.014	0.018	0	0.013	0.001			-0.035
11/7/2017 15:32			0.013	0.018	0	0.013	0.001			-0.035
11/7/2017 15:33			0.013	0.018	0	0.013	0.001			-0.034
11/7/2017 15:34			0.012	0.018	0	0.013	0.001			-0.034
11/7/2017 15:35	13.1	91.1	0.014	0.018	0	0.013	0.001	40.75411;-	17	-0.034
11/7/2017 15:36			0.013	0.018	0	0.012	0.001			-0.034
11/7/2017 15:37			0.013	0.018	0	0.012	0.001			-0.034
11/7/2017 15:38			0.013	0.018	0	0.012	0.001			-0.034
11/7/2017 15:39			0.014	0.018	0	0.012	0.001			-0.034
11/7/2017 15:40	13	82	0.013	0.018	0	0.012	0.001	40.75406;-	25	-0.034
11/7/2017 15:41			0.013	0.018	0	0.012	0.001			-0.034
11/7/2017 15:42			0.012	0.018	0	0.012	0.001			-0.034
11/7/2017 15:43			0.014	0.018	0	0.012	0.001			-0.035
11/7/2017 15:44			0.014	0.018	0	0.012	0.001			-0.035
11/7/2017 15:45	13	80	0.014	0.018	0	0.013	0.001	40.75406;-	22	-0.034
11/7/2017 15:46			0.014	0.018	0	0.013	0.001			-0.034
11/7/2017 15:47			0.014	0.018	0	0.013	0.001			-0.034
11/7/2017 15:48			0.014	0.018	0	0.013	0.001			-0.034
11/7/2017 15:49			0.015	0.018	0	0.013	0.001			-0.034
11/7/2017 15:50	12.9	83	0.014	0.018	0	0.013	0.001	40.75411;-	17	-0.034
11/7/2017 15:51			0.014	0.018	0	0.013	0.001			-0.034

11/7/2017 15:52			0.013	0.018	0	0.013	0.001			-0.034
11/7/2017 15:53			0.015	0.018	0	0.013	0.001			-0.034
11/7/2017 15:54			0.014	0.018	0	0.013	0.001			-0.034
11/7/2017 15:55	12.8	82	0.015	0.018	0	0.013	0.001	40.75411;-	17	-0.035
11/7/2017 15:56			0.013	0.018	0	0.013	0.001			-0.034
11/7/2017 15:57			0.015	0.018	0	0.013	0.001			-0.034
11/7/2017 15:58			0.015	0.018	0	0.013	0.001			-0.034
11/7/2017 15:59			0.013	0.018	0	0.013	0.001			-0.034
11/7/2017 16:00	12.8	85	0.015	0.018	0	0.013	0.001	40.75414;-	11	-0.034
11/7/2017 16:01			0.015	0.018	0	0.013	0.001			-0.034
11/7/2017 16:02			0.015	0.018	0	0.013	0.001			-0.034
11/7/2017 16:03			0.015	0.018	0	0.013	0.001			-0.034
11/7/2017 16:04			0.015	0.018	0	0.014	0.001			-0.035
11/7/2017 16:05	12.8	84	0.015	0.018	0	0.014	0.001	40.75409;-	13	-0.035
11/7/2017 16:06			0.015	0.018	0	0.014	0.002			-0.035
11/7/2017 16:07			0.016	0.018	0	0.014	0.002			-0.035
11/7/2017 16:08			0.016	0.018	0	0.014	0.002			-0.035
11/7/2017 16:09			0.016	0.018	0	0.014	0.002			-0.035
11/7/2017 16:10	12.8	86	0.016	0.018	0	0.014	0.002	40.75411;-	14	-0.034
11/7/2017 16:11			0.015	0.018	0	0.014	0.002			-0.034
11/7/2017 16:12			0.014	0.018	0	0.014	0.002			-0.034
11/7/2017 16:13			0.015	0.018	0	0.014	0.002			-0.035
11/7/2017 16:14			0.016	0.018	0	0.015	0.002			-0.034
11/7/2017 16:15	12.8	129.6	0.015	0.018	0	0.015	0.002			-0.034
11/7/2017 16:15								40.75412;-	16	
11/7/2017 16:16			0.014	0.018	0	0.015	0.002			-0.034
11/7/2017 16:17			0.015	0.018	0	0.015	0.002			-0.034
11/7/2017 16:18			0.015	0.018	0	0.015	0.002			-0.034
11/7/2017 16:19			0.016	0.018	0	0.015	0.002			-0.034
11/7/2017 16:20	12.8	123.5	0.017	0.018	0	0.015	0.002	40.75411;-	15	-0.034
11/7/2017 16:21			0.017	0.018	0	0.015	0.002			-0.034
11/7/2017 16:22			0.017	0.018	0	0.015	0.002			-0.034
11/7/2017 16:23			0.016	0.018	0	0.015	0.002			-0.034
11/7/2017 16:24			0.016	0.018	0	0.015	0.002			-0.035
11/7/2017 16:25	12.7	81	0.017	0.018	0	0.015	0.002	40.75412;-	15	-0.035
11/7/2017 16:26			0.016	0.018	0	0.015	0.002			-0.035
11/7/2017 16:27			0.017	0.018	0	0.015	0.002			-0.035
11/7/2017 16:28			0.017	0.019	0	0.015	0.002			-0.035
11/7/2017 16:29			0.017	0.019	0	0.015	0.002			-0.035
11/7/2017 16:30	12.8	87	0.016	0.019	0	0.015	0.002	40.75414;-	9	-0.035
11/7/2017 16:31			0.016	0.019	0	0.015	0.002			-0.034
11/7/2017 16:32			0.017	0.019	0	0.016	0.002			-0.034
11/7/2017 16:33			0.015	0.019	0	0.016	0.002			-0.034
11/7/2017 16:34			0.017	0.019	0	0.016	0.002			-0.035
11/7/2017 16:35	12.8	90.1	0.015	0.019	0	0.016	0.002	40.75409;-	11	-0.035
11/7/2017 16:36			0.016	0.019	0	0.016	0.002			-0.034
11/7/2017 16:37			0.017	0.019	0	0.016	0.003			-0.034
11/7/2017 16:38			0.017	0.019	0	0.016	0.003			-0.034
11/7/2017 16:39			0.017	0.019	0	0.016	0.003			-0.034
11/7/2017 16:40	12.8	82	0.017	0.019	0	0.016	0.003	40.75411;-	9	-0.035
11/7/2017 16:41			0.017	0.019	0	0.016	0.003			-0.034
11/7/2017 16:42			0.017	0.019	0	0.016	0.003			-0.034
11/7/2017 16:43			0.017	0.019	0	0.016	0.003			-0.034
11/7/2017 16:44			0.017	0.019	0	0.016	0.003			-0.034
11/7/2017 16:45	12.7	81	0.017	0.019	0	0.016	0.003	40.75413;-	8	-0.035
11/7/2017 16:46			0.017	0.019	0	0.016	0.003			-0.034

11/7/2017 16:47			0.017	0.019	0	0.016	0.003			-0.034
11/7/2017 16:48			0.016	0.019	0	0.016	0.003			-0.034
11/7/2017 16:49			0.016	0.019	0	0.016	0.003			-0.034
11/7/2017 16:50	12.7	84	0.015	0.019	0	0.016	0.003	40.75412;-	12	-0.035
11/7/2017 16:51			0.015	0.019	0	0.016	0.003			-0.035
11/7/2017 16:52			0.016	0.019	0	0.016	0.003			-0.035
11/7/2017 16:53			0.016	0.019	0	0.015	0.003			-0.035
11/7/2017 16:54			0.015	0.019	0	0.015	0.003			-0.035
11/7/2017 16:55	12.6	90.1	0.015	0.019	0	0.015	0.003	40.75412;-	11	-0.035
11/7/2017 16:56			0.016	0.019	0	0.015	0.003			-0.035
11/7/2017 16:57			0.015	0.019	0	0.015	0.003			-0.035
11/7/2017 16:58			0.016	0.019	0	0.015	0.003			-0.035
11/7/2017 16:59			0.016	0.019	0	0.015	0.003			-0.035
11/7/2017 17:00	12.6	82	0.016	0.019	0	0.015	0.003	40.75411;-	6	-0.035
11/7/2017 17:01			0.016	0.019	0	0.015	0.003			-0.035
11/7/2017 17:02			0.015	0.019	0	0.015	0.003			-0.035
11/7/2017 17:03			0.015	0.019	0	0.015	0.003			-0.035
11/7/2017 17:04			0.016	0.019	0	0.015	0.003			-0.035
11/7/2017 17:05	12.6	82	0.013	0.019	0	0.015	0.003	40.75412;-	11	-0.033
11/7/2017 17:06			0.014	0.019	0	0.015	0.003			-0.033
11/7/2017 17:07			0.015	0.019	0	0.014	0.003			-0.034
11/7/2017 17:08			0.015	0.019	0	0.014	0.004			-0.034
11/7/2017 17:09			0.015	0.019	0	0.014	0.004			-0.034
11/7/2017 17:10	12.6	117.4	0.015	0.019	0	0.014	0.004	40.75412;-	2	-0.034
11/7/2017 17:11			0.015	0.019	0	0.014	0.004			-0.034
11/7/2017 17:12			0.016	0.019	0	0.014	0.004			-0.034
11/7/2017 17:13			0.015	0.019	0	0.014	0.004			-0.034
11/7/2017 17:14			0.016	0.019	0	0.014	0.004			-0.034
11/7/2017 17:15	12.6	91.1	0.015	0.019	0	0.014	0.004	40.75413;-	4	-0.035
11/7/2017 17:16			0.015	0.019	0	0.014	0.004			-0.035
11/7/2017 17:17			0.016	0.019	0	0.014	0.004			-0.035
11/7/2017 17:18			0.015	0.019	0	0.014	0.004			-0.034
11/7/2017 17:19			0.016	0.019	0	0.014	0.004			-0.034
11/7/2017 17:20	12.5	85	0.016	0.019	0	0.014	0.004	40.75413;-	7	-0.035
11/7/2017 17:21			0.017	0.019	0	0.014	0.004			-0.035
11/7/2017 17:22			0.018	0.019	0	0.015	0.004			-0.035
11/7/2017 17:23			0.016	0.019	0	0.015	0.004			-0.035
11/7/2017 17:24			0.018	0.019	0	0.015	0.004			-0.035
11/7/2017 17:25	12.5	128.6	0.018	0.019	0	0.015	0.004	40.75413;-	5	-0.035
11/7/2017 17:26			0.018	0.019	0	0.015	0.004			-0.035
11/7/2017 17:27			0.017	0.019	0	0.015	0.004			-0.035
11/7/2017 17:28			0.018	0.019	0	0.015	0.004			-0.035
11/7/2017 17:29			0.018	0.019	0	0.016	0.004			-0.034
11/7/2017 17:30	12.5	87	0.016	0.019	0	0.016	0.004	40.75413;-	6	-0.034
11/7/2017 17:31			0.015	0.019	0	0.016	0.004			-0.034
11/7/2017 17:32			0.016	0.019	0	0.016	0.004			-0.033
11/7/2017 17:33			0.016	0.019	0	0.016	0.004			-0.032
11/7/2017 17:34			0.016	0.019	0	0.016	0.004			-0.033
11/7/2017 17:35	12.6	83	0.016	0.019	0	0.016	0.004	40.75415;-	5	-0.033
11/7/2017 17:36			0.015	0.019	0	0.016	0.004			-0.033
11/7/2017 17:37			0.015	0.019	0	0.016	0.004			-0.033
11/7/2017 17:38			0.016	0.019	0	0.015	0.004			-0.034
11/7/2017 17:39			0.016	0.019	0	0.015	0.005			-0.034
11/7/2017 17:40	12.5	82	0.016	0.019	0	0.015	0.005	40.75414;-	7	-0.034
11/7/2017 17:41			0.016	0.019	0	0.015	0.005			-0.034
11/7/2017 17:42			0.016	0.019	0	0.015	0.005			-0.034

11/7/2017 17:46	12.5	106.3	0.017	0.019	0	0.015	0.005			
11/7/2017 17:46								40.75415;-	9	
11/7/2017 17:47			0.017	0.019	0	0.015	0.005			-0.033
11/7/2017 17:48			0.017	0.019	0	0.015	0.005			-0.034
11/7/2017 17:49			0.017	0.019	0	0.015	0.005			-0.035
11/7/2017 17:50	12.5	69.8	0.018	0.019	0	0.015	0.005	40.75415;-	9	-0.035
11/7/2017 17:51			0.019	0.019	0	0.015	0.005			-0.035
11/7/2017 17:52			0.017	0.019	0	0.016	0.005			-0.035
11/7/2017 17:53			0.019	0.019	0	0.016	0.005			-0.035
11/7/2017 17:54			0.018	0.019	0	0.016	0.005			-0.035
11/7/2017 17:55	12.5	68.8	0.018	0.019	0	0.016	0.005	40.75415;-	9	-0.035
11/7/2017 17:56			0.017	0.019	0	0.016	0.005			-0.035
11/7/2017 17:57			0.017	0.019	0	0.016	0.005			-0.035
11/7/2017 17:58			0.018	0.019	0	0.016	0.005			-0.035
11/7/2017 17:59			0.017	0.019	0	0.016	0.005			-0.035
11/7/2017 18:00	12.5	69.8	0.018	0.019	0	0.016	0.005	40.75415;-	9	-0.035
11/7/2017 18:01			0.018	0.019	0	0.016	0.005			-0.035
11/7/2017 18:02			0.018	0.019	0	0.016	0.005			-0.035
11/7/2017 18:03			0.018	0.019	0	0.017	0.005			-0.035
11/7/2017 18:04			0.018	0.019	0	0.017	0.005			-0.035
11/7/2017 18:05	12.5	69.8	0.018	0.019	0	0.017	0.005	40.75415;-	9	-0.035
11/7/2017 18:06			0.019	0.019	0	0.017	0.005			-0.035
11/7/2017 18:07			0.017	0.019	0	0.017	0.006			-0.035
11/7/2017 18:08			0.018	0.019	0	0.017	0.006			-0.035
11/7/2017 18:09			0.016	0.019	0	0.017	0.006			-0.035
11/7/2017 18:10	12.5	70.9	0.016	0.019	0	0.017	0.006	40.75415;-	9	-0.035
11/7/2017 18:11			0.018	0.019	0	0.017	0.006			-0.035
11/7/2017 18:12			0.018	0.019	0	0.017	0.006			-0.035
11/7/2017 18:13			0.017	0.019	0	0.017	0.006			-0.035
11/7/2017 18:14			0.017	0.019	0	0.017	0.006			-0.035
11/7/2017 18:15	12.5	70.9	0.018	0.019	0	0.016	0.006	40.75415;-	9	-0.035
11/7/2017 18:16			0.017	0.019	0	0.016	0.006			-0.035
11/7/2017 18:17			0.018	0.019	0	0.016	0.006			-0.035
11/7/2017 18:18			0.019	0.019	0	0.017	0.006			-0.035
11/7/2017 18:19			0.018	0.019	0	0.017	0.006			-0.035
11/7/2017 18:20	12.5	68.8	0.019	0.019	0	0.017	0.006	40.75415;-	9	-0.035
11/7/2017 18:21			0.017	0.019	0	0.017	0.006			-0.035
11/7/2017 18:22			0.018	0.019	0	0.016	0.006			-0.035
11/7/2017 18:23			0.017	0.019	0	0.016	0.006			-0.035
11/7/2017 18:24			0.017	0.019	0	0.017	0.006			-0.035
11/7/2017 18:25	12.5	69.8	0.018	0.019	0	0.017	0.006	40.75415;-	9	-0.035
11/7/2017 18:26			0.019	0.019	0	0.017	0.006			-0.035
11/7/2017 18:27			0.017	0.019	0	0.017	0.006			-0.035
11/7/2017 18:28			0.018	0.019	0	0.017	0.006			-0.035
11/7/2017 18:29			0.017	0.019	0	0.017	0.006			-0.035
11/7/2017 18:30	12.5	68.8	0.019	0.019	0	0.017	0.006	40.75415;-	9	-0.035
11/7/2017 18:31			0.018	0.019	0	0.017	0.006			-0.035
11/7/2017 18:32			0.017	0.019	0	0.017	0.006			-0.035
11/7/2017 18:33			0.018	0.019	0	0.017	0.006			-0.035
11/7/2017 18:34			0.018	0.019	0	0.017	0.006			-0.035
11/7/2017 18:35	12.5	70.9	0.018	0.019	0	0.017	0.006	40.75415;-	9	-0.035
11/7/2017 18:36			0.017	0.019	0	0.017	0.007			-0.035
11/7/2017 18:37			0.017	0.019	0	0.017	0.007			-0.035
11/7/2017 18:38			0.017	0.019	0	0.017	0.007			-0.035
11/7/2017 18:39			0.017	0.019	0	0.017	0.007			-0.035
11/7/2017 18:40	12.5	69.8	0.017	0.019	0	0.017	0.007	40.75415;-	9	-0.035

11/7/2017 18:41			0.017	0.019	0	0.017	0.007			-0.035
11/7/2017 18:42			0.017	0.019	0	0.016	0.007			-0.035
11/7/2017 18:43			0.017	0.019	0	0.016	0.007			-0.035
11/7/2017 18:44			0.017	0.019	0	0.016	0.007			-0.035
11/7/2017 18:45	12.5	68.8	0.017	0.019	0	0.016	0.007	40.75415;-	9	-0.035
11/7/2017 18:46			0.017	0.019	0	0.016	0.007			-0.035
11/7/2017 18:47			0.017	0.019	0	0.016	0.007			-0.035
11/7/2017 18:48			0.017	0.019	0	0.016	0.007			-0.035
11/7/2017 18:49			0.017	0.019	0	0.016	0.007			-0.035
11/7/2017 18:50	12.5	119.4	0.017	0.019	0	0.016	0.007			-0.035
11/7/2017 18:50								40.75415;-	9	
11/7/2017 18:51			0.017	0.019	0	0.016	0.007			-0.035
11/7/2017 18:52			0.017	0.019	0	0.016	0.007			-0.035
11/7/2017 18:53			0.017	0.019	0	0.016	0.007			-0.034
11/7/2017 18:54			0.017	0.019	0	0.016	0.007			-0.034
11/7/2017 18:55	12.5	112.4	0.016	0.019	0	0.016	0.007	40.75415;-	9	-0.035
11/7/2017 18:56			0.018	0.019	0	0.016	0.007			-0.035
11/7/2017 18:57			0.017	0.019	0	0.016	0.007			-0.035
11/7/2017 18:58			0.017	0.019	0	0.016	0.007			-0.035
11/7/2017 18:59			0.017	0.019	0	0.016	0.007			-0.035
11/7/2017 19:00	12.5	114.4	0.017	0.019	0	0.016	0.007			-0.035
11/7/2017 19:00								40.75415;-	9	
11/7/2017 19:01			0.015	0.019	0	0.016	0.007			-0.034
11/7/2017 19:02			0.015	0.019	0	0.016	0.007			-0.034
11/7/2017 19:03			0.016	0.019	0	0.016	0.007			-0.034
11/7/2017 19:04			0.017	0.019	0	0.016	0.007			-0.034
11/7/2017 19:05	12.5	68.8	0.016	0.019	0	0.016	0.008	40.75415;-	9	-0.034
11/7/2017 19:06			0.017	0.019	0	0.016	0.008			-0.034
11/7/2017 19:07			0.017	0.019	0	0.016	0.008			-0.034
11/7/2017 19:08			0.017	0.019	0	0.016	0.008			-0.035
11/7/2017 19:09			0.017	0.019	0	0.016	0.008			-0.034
11/7/2017 19:10	12.5	70.9	0.016	0.019	0	0.016	0.008	40.75415;-	9	-0.034
11/7/2017 19:11			0.015	0.019	0	0.016	0.008			-0.034
11/7/2017 19:12			0.016	0.019	0	0.015	0.008			-0.035
11/7/2017 19:13			0.017	0.019	0	0.015	0.008			-0.035
11/7/2017 19:14			0.017	0.019	0	0.015	0.008			-0.035
11/7/2017 19:15	12.5	70.9	0.016	0.019	0	0.015	0.008	40.75415;-	9	-0.035
11/7/2017 19:16			0.017	0.019	0	0.015	0.008			-0.035
11/7/2017 19:17			0.016	0.019	0	0.015	0.008			-0.035
11/7/2017 19:18			0.017	0.019	0	0.016	0.008			-0.035
11/7/2017 19:19			0.017	0.019	0	0.016	0.008			-0.036
11/7/2017 19:20	12.5	68.8	0.017	0.019	0	0.016	0.008	40.75415;-	9	-0.036
11/7/2017 19:21			0.017	0.019	0	0.016	0.008			-0.035
11/7/2017 19:22			0.017	0.019	0	0.016	0.008			-0.036
11/7/2017 19:23			0.017	0.019	0	0.016	0.008			-0.036
11/7/2017 19:24			0.017	0.019	0	0.016	0.008			-0.036
11/7/2017 19:25	12.5	68.8	0.017	0.019	0	0.016	0.008	40.75415;-	9	-0.036
11/7/2017 19:26			0.017	0.019	0	0.016	0.008			-0.036
11/7/2017 19:27			0.017	0.019	0	0.016	0.008			-0.036
11/7/2017 19:28			0.017	0.019	0	0.016	0.008			-0.036
11/7/2017 19:29			0.017	0.019	0	0.016	0.008			-0.036
11/7/2017 19:30	12.5	69.8	0.017	0.019	0	0.016	0.008	40.75415;-	9	-0.036
11/7/2017 19:31			0.017	0.019	0	0.016	0.008			-0.036
11/7/2017 19:32			0.018	0.019	0	0.016	0.008			-0.036
11/7/2017 19:33			0.017	0.019	0	0.016	0.008			-0.036
11/7/2017 19:34			0.017	0.019	0	0.016	0.009			-0.036

11/7/2017 19:35	12.5	69.8	0.018	0.019	0	0.016	0.009	40.75415;-	9	-0.035
11/7/2017 19:36			0.018	0.019	0	0.016	0.009			-0.035
11/7/2017 19:37			0.018	0.019	0	0.016	0.009			-0.035
11/7/2017 19:38			0.017	0.019	0	0.017	0.009			-0.035
11/7/2017 19:39			0.017	0.019	0	0.017	0.009			-0.035
11/7/2017 19:40	12.4	69.8	0.017	0.019	0	0.017	0.009	40.75415;-	9	-0.035
11/7/2017 19:41			0.017	0.019	0	0.017	0.009			-0.035
11/7/2017 19:42			0.018	0.019	0	0.017	0.009			-0.035
11/7/2017 19:43			0.018	0.02	0	0.017	0.009			-0.035
11/7/2017 19:44			0.017	0.02	0	0.017	0.009			-0.035
11/7/2017 19:45	12.4	68.8	0.018	0.02	0	0.017	0.009	40.75415;-	9	-0.035
11/7/2017 19:46			0.018	0.02	0	0.017	0.009			-0.035
11/7/2017 19:47			0.018	0.02	0	0.017	0.009			-0.035
11/7/2017 19:48			0.017	0.02	0	0.017	0.009			-0.035
11/7/2017 19:49			0.018	0.02	0	0.017	0.009			-0.035
11/7/2017 19:50	12.4	76.9	0.017	0.02	0	0.017	0.009	40.75415;-	9	-0.035
11/7/2017 19:51			0.017	0.02	0	0.017	0.009			-0.035
11/7/2017 19:52			0.018	0.02	0	0.017	0.009			-0.035
11/7/2017 19:53			0.017	0.02	0	0.017	0.009			-0.035
11/7/2017 19:54			0.018	0.02	0	0.017	0.009			-0.035
11/7/2017 19:55	12.4	117.4	0.018	0.02	0	0.017	0.009	40.75415;-	9	-0.035
11/7/2017 19:56			0.018	0.02	0	0.017	0.009			-0.035
11/7/2017 19:57			0.018	0.02	0	0.017	0.009			-0.035
11/7/2017 19:58			0.018	0.02	0	0.017	0.009			-0.035
11/7/2017 19:59			0.018	0.02	0	0.017	0.009			-0.035
11/7/2017 20:00	12.4	68.8	0.018	0.02	0	0.017	0.009	40.75415;-	9	-0.035
11/7/2017 20:01			0.018	0.02	0	0.017	0.009			-0.035
11/7/2017 20:02			0.018	0.02	0	0.017	0.01			-0.035
11/7/2017 20:03			0.017	0.02	0	0.017	0.01			-0.035
11/7/2017 20:04			0.018	0.02	0	0.017	0.01			-0.035
11/7/2017 20:05	12.4	68.8	0.018	0.02	0	0.017	0.01	40.75415;-	9	-0.035
11/7/2017 20:06			0.018	0.02	0	0.017	0.01			-0.035
11/7/2017 20:07			0.018	0.02	0	0.017	0.01			-0.035
11/7/2017 20:08			0.018	0.02	0	0.017	0.01			-0.035
11/7/2017 20:09			0.019	0.02	0	0.017	0.01			-0.035
11/7/2017 20:10	12.4	69.8	0.019	0.02	0	0.017	0.01	40.75415;-	9	-0.035
11/7/2017 20:11			0.018	0.02	0	0.017	0.01			-0.035
11/7/2017 20:12			0.019	0.021	0	0.017	0.01			-0.035
11/7/2017 20:13			0.018	0.021	0	0.017	0.01			-0.035
11/7/2017 20:14			0.019	0.021	0	0.017	0.01			-0.035
11/7/2017 20:15	12.4	69.8	0.018	0.021	0	0.017	0.01	40.75415;-	9	-0.035
11/7/2017 20:16			0.019	0.021	0	0.017	0.01			-0.035
11/7/2017 20:17			0.019	0.021	0	0.017	0.01			-0.035
11/7/2017 20:18			0.018	0.021	0	0.017	0.01			-0.035
11/7/2017 20:19			0.018	0.021	0	0.017	0.01			-0.035
11/7/2017 20:20	12.4	69.8	0.018	0.021	0	0.018	0.01	40.75415;-	9	-0.035
11/7/2017 20:21			0.018	0.021	0	0.018	0.01			-0.036
11/7/2017 20:22			0.018	0.021	0	0.018	0.01			-0.035
11/7/2017 20:23			0.019	0.021	0	0.018	0.01			-0.035
11/7/2017 20:24			0.019	0.021	0	0.018	0.01			-0.036
11/7/2017 20:25	12.4	69.8	0.019	0.021	0	0.018	0.01	40.75415;-	9	-0.036
11/7/2017 20:26			0.018	0.021	0	0.018	0.01			-0.035
11/7/2017 20:27			0.018	0.021	0	0.018	0.01			-0.035
11/7/2017 20:28			0.018	0.021	0	0.018	0.01			-0.035
11/7/2017 20:29			0.019	0.021	0	0.018	0.011			-0.035
11/7/2017 20:30	12.4	68.8	0.019	0.021	0	0.018	0.011	40.75415;-	9	-0.035

11/7/2017 20:31			0.018	0.021	0	0.018	0.011			-0.035
11/7/2017 20:32			0.019	0.021	0	0.018	0.011			-0.035
11/7/2017 20:33			0.019	0.021	0	0.018	0.011			-0.035
11/7/2017 20:34			0.02	0.021	0	0.018	0.011			-0.035
11/7/2017 20:35	12.4	69.8	0.018	0.021	0	0.018	0.011	40.75415;-	9	-0.035
11/7/2017 20:36			0.019	0.021	0	0.018	0.011			-0.035
11/7/2017 20:37			0.018	0.021	0	0.018	0.011			-0.035
11/7/2017 20:38			0.018	0.021	0	0.018	0.011			-0.035
11/7/2017 20:39			0.018	0.021	0	0.018	0.011			-0.035
11/7/2017 20:40	12.4	69.8	0.017	0.021	0	0.018	0.011	40.75415;-	9	-0.035
11/7/2017 20:41			0.018	0.021	0	0.018	0.011			-0.035
11/7/2017 20:42			0.018	0.021	0	0.018	0.011			-0.035
11/7/2017 20:43			0.018	0.021	0	0.018	0.011			-0.035
11/7/2017 20:44			0.018	0.021	0	0.018	0.011			-0.035
11/7/2017 20:45	12.4	68.8	0.018	0.021	0	0.017	0.011	40.75415;-	9	-0.036
11/7/2017 20:46			0.018	0.021	0	0.017	0.011			-0.035
11/7/2017 20:47			0.018	0.021	0	0.017	0.011			-0.036
11/7/2017 20:48			0.018	0.021	0	0.017	0.011			-0.036
11/7/2017 20:49			0.018	0.021	0	0.017	0.011			-0.036
11/7/2017 20:50	12.4	85	0.018	0.021	0	0.017	0.011	40.75415;-	9	-0.036
11/7/2017 20:51			0.018	0.021	0	0.017	0.011			-0.036
11/7/2017 20:52			0.018	0.021	0	0.017	0.011			-0.036
11/7/2017 20:53			0.018	0.021	0	0.017	0.011			-0.036
11/7/2017 20:54			0.018	0.021	0	0.017	0.011			-0.036
11/7/2017 20:55	12.4	68.8	0.019	0.021	0	0.017	0.011	40.75415;-	9	-0.036
11/7/2017 20:56			0.019	0.021	0	0.017	0.012			-0.036
11/7/2017 20:57			0.018	0.021	0	0.017	0.012			-0.036
11/7/2017 20:58			0.019	0.021	0	0.017	0.012			-0.036
11/7/2017 20:59			0.019	0.021	0	0.017	0.012			-0.036
11/7/2017 21:00	12.4	69.8	0.018	0.021	0	0.017	0.012	40.75415;-	9	-0.036
11/7/2017 21:01			0.018	0.021	0	0.017	0.012			-0.036
11/7/2017 21:02			0.018	0.021	0	0.017	0.012			-0.036
11/7/2017 21:03			0.018	0.021	0	0.017	0.012			-0.036
11/7/2017 21:04			0.018	0.021	0	0.017	0.012			-0.036
11/7/2017 21:05	12.4	68.8	0.018	0.021	0	0.017	0.012	40.75415;-	9	-0.036
11/7/2017 21:06			0.018	0.021	0	0.017	0.012			-0.036
11/7/2017 21:07			0.018	0.021	0	0.017	0.012			-0.036
11/7/2017 21:08			0.018	0.021	0	0.017	0.012			-0.036
11/7/2017 21:09			0.018	0.021	0	0.017	0.012			-0.036
11/7/2017 21:10	12.4	69.8	0.018	0.021	0	0.017	0.012	40.75415;-	9	-0.036
11/7/2017 21:11			0.018	0.021	0	0.017	0.012			-0.036
11/8/2017 13:45	12.2	121.5								
11/8/2017 13:45								40.753559599999996;-73.4840766		
11/8/2017 13:46			0	0	0	0	0			
11/8/2017 13:47	12.5	119.4								
11/8/2017 13:47								40.753642299999996;-73.4840615		
11/8/2017 13:48			0	0	0	0	0			
11/8/2017 13:49			0	0	0	0	0			-0.022
11/8/2017 13:50	12.5	81	0	0	0	0	0	40.75413;-	15	-0.027
11/8/2017 13:51			0	0	0	0	0			-0.029
11/8/2017 13:52			0	0	0	0	0			-0.031
11/8/2017 13:53			0	0	0	0	0			-0.032
11/8/2017 13:54			0	0	0	0	0			-0.033
11/8/2017 13:55	12.5	82	0	0	0	0	0	40.75413;-	25	-0.034
11/8/2017 13:56			0	0	0	0	0			-0.034
11/8/2017 13:57			0	0	0	0	0			-0.034

11/8/2017 13:58			0	0	0	0	0			-0.034
11/8/2017 13:59			0	0	0	0	0			-0.034
11/8/2017 14:00	12.5	82	0	0	0	0	0	40.75413;-	29	-0.035
11/8/2017 14:01			0	0	0	0	0			-0.035
11/8/2017 14:02			0	0	0	0	0			-0.035
11/8/2017 14:03			0	0	0	0	0			-0.035
11/8/2017 14:04			0	0	0	0	0			-0.035
11/8/2017 14:05	12.5	83	0	0	0	0	0	40.75414;-	27	-0.035
11/8/2017 14:06			0	0	0	0	0			-0.035
11/8/2017 14:07			0	0	0	0	0			-0.035
11/8/2017 14:08			0	0	0	0	0			-0.035
11/8/2017 14:09			0	0	0	0	0			-0.035
11/8/2017 14:10	12.5	82	0	0	0	0	0	40.75418;-	21	-0.035
11/8/2017 14:11			0	0	0	0	0			-0.035
11/8/2017 14:12			0	0	0	0	0			-0.035
11/8/2017 14:13			0	0	0	0	0			-0.035
11/8/2017 14:14			0	0	0	0	0			-0.035
11/8/2017 14:15	12.5	82	0	0	0	0	0	40.75414;-	23	-0.035
11/8/2017 14:16			0	0	0	0	0			-0.035
11/8/2017 14:17			0	0	0	0	0			-0.035
11/8/2017 14:18			0	0	0	0	0			-0.035
11/8/2017 14:19			0	0	0	0	0			-0.035
11/8/2017 14:20	12.5	85	0	0	0	0	0	40.75415;-	23	-0.035
11/8/2017 14:21			0	0	0	0	0			-0.035
11/8/2017 14:22			0	0	0	0	0			-0.035
11/8/2017 14:23			0	0	0	0	0			-0.035
11/8/2017 14:24			0	0	0	0	0			-0.034
11/8/2017 14:25	12.5	82	0	0	0	0	0	40.75417;-	18	-0.034
11/8/2017 14:26			0	0	0	0	0			-0.034
11/8/2017 14:27			0	0	0	0	0			-0.035
11/8/2017 14:28			0	0	0	0	0			-0.035
11/8/2017 14:29			0	0	0	0	0			-0.035
11/8/2017 14:30	12.5	93.1	0	0	0	0	0	40.75419;-	12	-0.035
11/8/2017 14:31			0	0	0	0	0			-0.035
11/8/2017 14:32			0	0	0	0	0			-0.035
11/8/2017 14:33			0	0	0	0	0			-0.035
11/8/2017 14:34			0	0	0	0	0			-0.035
11/8/2017 14:35	12.5	82	0	0	0	0	0	40.75417;-	15	-0.035
11/8/2017 14:36			0	0	0	0	0			-0.035
11/8/2017 14:37			0	0	0	0	0			-0.035
11/8/2017 14:38			0	0	0	0	0			-0.035
11/8/2017 14:39			0	0	0	0	0			-0.035
11/8/2017 14:40	12.5	82	0	0	0	0	0	40.75415;-	12	-0.035
11/8/2017 14:41			0	0	0	0	0			-0.035
11/8/2017 14:42			0	0	0	0	0			-0.035
11/8/2017 14:43			0	0	0	0	0			-0.035
11/8/2017 14:44			0	0	0	0	0			-0.035
11/8/2017 14:45	12.5	83	0	0	0	0	0	40.7542;-7	13	-0.035
11/8/2017 14:46			0	0	0	0	0			-0.035
11/8/2017 14:47			0	0	0	0	0			-0.035
11/8/2017 14:48			0	0	0	0	0			-0.035
11/8/2017 14:49			0	0	0	0	0			-0.035
11/8/2017 14:50	12.5	82	0	0	0	0	0	40.75419;-	13	-0.035
11/8/2017 14:51			0	0	0	0	0			-0.035
11/8/2017 14:52			0	0	0	0	0			-0.035
11/8/2017 14:53			0	0	0	0	0			-0.035

11/8/2017 14:54			0	0	0	0	0			-0.035
11/8/2017 14:55	12.5	85	0	0	0	0	0	40.75421;-	9	-0.035
11/8/2017 14:56			0	0	0	0	0			-0.035
11/8/2017 14:57			0	0	0	0	0			-0.035
11/8/2017 14:58			0	0	0	0	0			-0.035
11/8/2017 14:59			0	0	0	0	0			-0.035
11/8/2017 15:00	12.5	94.1	0	0	0	0	0	40.75419;-	12	-0.035
11/8/2017 15:01			0	0	0	0	0			-0.035
11/8/2017 15:02			0	0	0	0	0			-0.035
11/8/2017 15:03			0	0	0	0	0			-0.035
11/8/2017 15:04			0	0	0	0	0			-0.035
11/8/2017 15:05	12.5	91.1	0	0	0	0	0	40.75412;-	18	-0.035
11/8/2017 15:06			0	0	0	0	0			-0.035
11/8/2017 15:07			0	0	0	0	0			-0.035
11/8/2017 15:08			0	0	0	0	0			-0.035
11/8/2017 15:09			0	0	0	0	0			-0.035
11/8/2017 15:10	12.5	82	0	0	0	0	0	40.75415;-	16	-0.035
11/8/2017 15:11			0	0	0	0	0			-0.035
11/8/2017 15:12			0	0	0	0	0			-0.035
11/8/2017 15:13			0	0	0	0	0			-0.035
11/8/2017 15:14			0	0	0	0	0			-0.035
11/8/2017 15:15	12.5	82	0	0	0	0	0	40.75414;-	20	-0.035
11/8/2017 15:16			0	0	0	0	0			-0.035
11/8/2017 15:17			0	0	0	0	0			-0.035
11/8/2017 15:18			0	0	0	0	0			-0.035
11/8/2017 15:19			0	0	0	0	0			-0.035
11/8/2017 15:20	12.5	103.2	0	0	0	0	0	40.75409;-	24	-0.035
11/8/2017 15:21			0	0	0	0	0			-0.035
11/8/2017 15:22			0	0	0	0	0			-0.035
11/8/2017 15:23			0	0	0	0	0			-0.035
11/8/2017 15:24			0	0	0	0	0			-0.035
11/8/2017 15:25	12.5	99.2	0	0	0	0	0	40.75413;-	18	-0.035
11/8/2017 15:26			0	0	0	0	0			-0.035
11/8/2017 15:27			0	0	0	0	0			-0.035
11/8/2017 15:28			0	0	0	0	0			-0.035
11/8/2017 15:29			0	0	0	0	0			-0.035
11/8/2017 15:30	12.5	127.5	0	0	0	0	0	40.75414;-	20	-0.035
11/8/2017 15:31			0	0	0	0	0			-0.035
11/8/2017 15:32			0	0	0	0	0			-0.035
11/8/2017 15:33			0	0	0	0	0			-0.035
11/8/2017 15:34			0	0	0	0	0			-0.035
11/8/2017 15:35	12.5	122.5	0	0	0	0	0	40.75413;-	20	-0.035
11/8/2017 15:36			0	0	0	0	0			-0.035
11/8/2017 15:37			0	0	0	0	0			-0.035
11/8/2017 15:38			0	0	0	0	0			-0.035
11/8/2017 15:39			0	0	0	0	0			-0.035
11/8/2017 15:40	12.5	81	0	0	0	0	0	40.75417;-	18	-0.035
11/8/2017 15:41			0	0	0	0	0			-0.035
11/8/2017 15:42			0	0	0	0	0			-0.035
11/8/2017 15:43			0	0	0	0	0			-0.035
11/8/2017 15:44			0	0	0	0	0			-0.035
11/8/2017 15:45	12.5	95.1	0	0	0	0	0	40.75417;-	18	-0.035
11/8/2017 15:46			0	0	0	0	0			-0.035
11/8/2017 15:47			0	0	0	0	0			-0.035
11/8/2017 15:48			0	0	0	0	0			-0.035
11/8/2017 15:49			0	0	0	0	0			-0.035

11/8/2017 15:50	12.5	81	0	0	0	0	0	40.75413;-	24	-0.035
11/8/2017 15:51			0	0	0	0	0			-0.035
11/8/2017 15:52			0	0	0	0	0			-0.035
11/8/2017 15:53			0	0	0	0	0			-0.035
11/8/2017 15:54			0	0	0	0	0			-0.035
11/8/2017 15:55	12.5	103.2	0	0	0	0	0	40.75414;-	30	-0.035
11/8/2017 15:56			0	0	0	0	0			-0.035
11/8/2017 15:57			0	0	0	0	0			-0.035
11/8/2017 15:58			0	0	0	0	0			-0.035
11/8/2017 15:59			0	0	0	0	0			-0.035
11/8/2017 16:00	12.6	91.1	0	0	0	0	0	40.75411;-	25	-0.031
11/8/2017 16:01			0	0	0	0	0			-0.031
11/8/2017 16:02			0	0	0	0	0			-0.032
11/8/2017 16:03			0	0	0	0	0			-0.033
11/8/2017 16:04			0	0	0	0	0			-0.033
11/8/2017 16:05	12.5	95.1	0	0	0	0	0	40.75412;-	28	-0.034
11/8/2017 16:06			0	0	0	0	0			-0.034
11/8/2017 16:07			0	0	0	0	0			-0.034
11/8/2017 16:08			0	0	0	0	0			-0.034
11/8/2017 16:09			0	0	0	0	0			-0.034
11/8/2017 16:10	12.6	82	0	0	0	0	0	40.75417;-	22	-0.035
11/8/2017 16:11			0	0	0	0	0			-0.035
11/8/2017 16:12			0	0	0	0	0			-0.035
11/8/2017 16:13			0	0.001	0	0	0			-0.035
11/8/2017 16:14			0	0.001	0	0	0			-0.035
11/8/2017 16:15	12.6	81	0	0.001	0	0	0	40.75413;-	26	-0.035
11/8/2017 16:16			0	0.001	0	0	0			-0.035
11/8/2017 16:17			0	0.001	0	0	0			-0.035
11/8/2017 16:18			0	0.001	0	0	0			-0.035
11/8/2017 16:19			0	0.001	0	0	0			-0.035
11/8/2017 16:20	12.6	100.2	0	0.001	0	0	0	40.75418;-	9	-0.035
11/8/2017 16:21			0.001	0.001	0	0	0			-0.035
11/8/2017 16:22			0.001	0.002	0	0	0			-0.035
11/8/2017 16:23			0.001	0.002	0	0	0			-0.035
11/8/2017 16:24			0.001	0.002	0	0	0			-0.035
11/8/2017 16:25	12.6	86	0.001	0.002	0	0	0	40.75413;-	-1	-0.035
11/8/2017 16:26			0.003	0.003	0	0	0			-0.035
11/8/2017 16:27			0.002	0.003	0	0	0			-0.035
11/8/2017 16:28			0.003	0.003	0	0	0			-0.035
11/8/2017 16:29			0.002	0.003	0	0	0			-0.035
11/8/2017 16:30	12.6	84	0.001	0.003	0	0	0	40.7542;-7	0	-0.035
11/8/2017 16:31			0.003	0.003	0	0	0			-0.035
11/8/2017 16:32			0.003	0.004	0	0	0			-0.035
11/8/2017 16:33			0.003	0.005	0	0	0			-0.035
11/8/2017 16:34			0.003	0.005	0	0.001	0			-0.035
11/8/2017 16:35	12.6	82	0.003	0.005	0	0.001	0	40.75421;-	-7	-0.035
11/8/2017 16:36			0.004	0.005	0	0.001	0			-0.035
11/8/2017 16:37			0.005	0.006	0	0.001	0			-0.035
11/8/2017 16:38			0.006	0.006	0	0.001	0			-0.035
11/8/2017 16:39			0.006	0.007	0	0.002	0			-0.035
11/8/2017 16:40	12.5	98.2	0.005	0.007	0	0.002	0	40.75415;-	1	-0.035
11/8/2017 16:41			0.006	0.007	0	0.002	0			-0.035
11/8/2017 16:42			0.007	0.007	0	0.003	0			-0.035
11/8/2017 16:43			0.007	0.007	0	0.003	0			-0.035
11/8/2017 16:44			0.007	0.008	0	0.004	0			-0.035
11/8/2017 16:45	12.5	91.1	0.007	0.008	0	0.004	0	40.75416;-	7	-0.035

11/8/2017 16:46			0.007	0.008	0	0.004	0			-0.035
11/8/2017 16:47			0.007	0.008	0	0.005	0			-0.035
11/8/2017 16:48			0.007	0.008	0	0.005	0			-0.035
11/8/2017 16:49			0.008	0.008	0	0.005	0			-0.035
11/8/2017 16:50	12.5	86	0.007	0.009	0	0.005	0	40.75416;-	4	-0.035
11/8/2017 16:51			0.008	0.01	0	0.006	0			-0.035
11/8/2017 16:52			0.008	0.01	0	0.006	0			-0.035
11/8/2017 16:53			0.01	0.01	0	0.006	0			-0.035
11/8/2017 16:54			0.008	0.01	0	0.007	0			-0.035
11/8/2017 16:55	12.6	94.1	0.008	0.01	0	0.007	0	40.75415;-	7	-0.035
11/8/2017 16:56			0.009	0.01	0	0.007	0			-0.035
11/8/2017 16:57			0.009	0.01	0	0.007	0			-0.035
11/8/2017 16:58			0.008	0.01	0	0.007	0			-0.035
11/8/2017 16:59			0.009	0.01	0	0.007	0			-0.035
11/8/2017 17:00	12.7	81	0.01	0.01	0	0.007	0	40.75415;-	3	-0.035
11/8/2017 17:01			0.009	0.01	0	0.008	0			-0.035
11/8/2017 17:02			0.01	0.011	0	0.008	0			-0.035
11/8/2017 17:03			0.01	0.011	0	0.008	0			-0.035
11/8/2017 17:04			0.009	0.011	0	0.008	0			-0.035
11/8/2017 17:05	13.4	77.9	0.009	0.011	0	0.008	0	40.75416;-	8	-0.035
11/8/2017 17:06			0.009	0.011	0	0.008	0			-0.035
11/8/2017 17:07			0.007	0.011	0	0.008	0			-0.031
11/8/2017 17:08			0.007	0.011	0	0.008	0			-0.032
11/8/2017 17:09			0.007	0.011	0	0.008	0			-0.033
11/8/2017 17:10	13.1	125.5	0.008	0.011	0	0.008	0	40.75418;-	0	-0.033
11/8/2017 17:11			0.009	0.011	0	0.008	0			-0.034
11/8/2017 17:12			0.009	0.011	0	0.008	0			-0.034
11/8/2017 17:13			0.009	0.011	0	0.008	0			-0.034
11/8/2017 17:14			0.009	0.011	0	0.008	0			-0.034
11/8/2017 17:15	13.1	124.5	0.011	0.011	0	0.008	0	40.75419;-	-6	-0.035
11/8/2017 17:16			0.012	0.013	0	0.008	0			-0.035
11/8/2017 17:17			0.01	0.013	0	0.008	0			-0.035
11/8/2017 17:18			0.012	0.013	0	0.008	0			-0.035
11/8/2017 17:19			0.01	0.013	0	0.008	0			-0.035
11/8/2017 17:20	13.1	84	0.012	0.013	0	0.008	0	40.75417;-	0	-0.035
11/8/2017 17:21			0.013	0.013	0	0.009	0			-0.035
11/8/2017 17:22			0.013	0.015	0	0.009	0			-0.035
11/8/2017 17:23			0.013	0.015	0	0.01	0			-0.035
11/8/2017 17:24			0.014	0.015	0	0.01	0			-0.035
11/8/2017 17:25	13	83	0.013	0.015	0	0.01	0	40.75416;-	0	-0.035
11/8/2017 17:26			0.015	0.015	0	0.011	0			-0.035
11/8/2017 17:27			0.014	0.015	0	0.011	0			-0.035
11/8/2017 17:28			0.013	0.015	0	0.011	0			-0.035
11/8/2017 17:29			0.014	0.016	0	0.012	0.001			-0.035
11/8/2017 17:30	13	84	0.015	0.016	0	0.012	0.001	40.75418;-	-1	-0.035
11/8/2017 17:31			0.016	0.017	0	0.012	0.001			-0.035
11/8/2017 17:32			0.016	0.017	0	0.012	0.001			-0.035
11/8/2017 17:33			0.016	0.017	0	0.013	0.001			-0.035
11/8/2017 17:34			0.016	0.017	0	0.013	0.001			-0.035
11/8/2017 17:35	13.1	80	0.017	0.018	0	0.013	0.001	40.75417;-	8	-0.035
11/8/2017 17:36			0.017	0.018	0	0.014	0.001			-0.035
11/8/2017 17:37			0.017	0.018	0	0.014	0.001			-0.035
11/8/2017 17:38			0.018	0.018	0	0.014	0.001			-0.035
11/8/2017 17:39			0.019	0.019	0	0.015	0.001			-0.035
11/8/2017 17:40	13	80	0.018	0.019	0	0.015	0.001	40.75417;-	9	-0.035
11/8/2017 17:41			0.019	0.019	0	0.015	0.001			-0.035

11/8/2017 17:42			0.018	0.019	0	0.015	0.001			-0.035
11/8/2017 17:43			0.018	0.02	0	0.016	0.001			-0.035
11/8/2017 17:44			0.02	0.02	0	0.016	0.001			-0.035
11/8/2017 17:45	12.9	80	0.019	0.021	0	0.016	0.001	40.75412;-	7	-0.035
11/8/2017 17:46			0.02	0.021	0	0.017	0.001			-0.035
11/8/2017 17:47			0.019	0.021	0	0.017	0.001			-0.035
11/8/2017 17:48			0.02	0.021	0	0.017	0.001			-0.035
11/8/2017 17:49			0.018	0.021	0	0.017	0.001			-0.035
11/8/2017 17:50	13.4	80	0.02	0.021	0	0.018	0.001	40.75417;-	6	-0.035
11/8/2017 17:51			0.019	0.022	0	0.018	0.001			-0.035
11/8/2017 17:52			0.018	0.022	0	0.018	0.001			-0.035
11/8/2017 17:53			0.017	0.022	0	0.018	0.001			-0.035
11/8/2017 17:54			0.017	0.022	0	0.018	0.001			-0.035
11/8/2017 17:55	13.4	80	0.018	0.022	0	0.018	0.001	40.75419;-	7	-0.035
11/8/2017 17:56			0.018	0.022	0	0.018	0.001			-0.035
11/8/2017 17:57			0.019	0.022	0	0.018	0.002			-0.035
11/8/2017 17:58			0.017	0.022	0	0.018	0.002			-0.035
11/8/2017 17:59			0.019	0.022	0	0.018	0.002			-0.035
11/8/2017 18:00	13.3	80	0.017	0.022	0	0.017	0.002	40.75417;-	0	-0.035
11/8/2017 18:01			0.017	0.022	0	0.017	0.002			-0.035
11/8/2017 18:02			0.019	0.022	0	0.017	0.002			-0.035
11/8/2017 18:03			0.017	0.022	0	0.017	0.002			-0.035
11/8/2017 18:04			0.016	0.022	0	0.017	0.002			-0.035
11/8/2017 18:05	13.4	87	0.016	0.022	0	0.017	0.002	40.7542;-7	-3	-0.035
11/8/2017 18:06			0.017	0.022	0	0.017	0.002			-0.035
11/8/2017 18:07			0.017	0.022	0	0.016	0.002			-0.035
11/8/2017 18:08			0.016	0.022	0	0.016	0.002			-0.035
11/8/2017 18:09			0.016	0.022	0	0.016	0.002			-0.035
11/8/2017 18:10	13.5	117.4	0.016	0.022	0	0.016	0.002			-0.035
11/8/2017 18:10								40.7542;-7	-2	
11/8/2017 18:11			0.016	0.022	0	0.016	0.002			-0.035
11/8/2017 18:12			0.018	0.022	0	0.016	0.002			-0.035
11/8/2017 18:13			0.014	0.022	0	0.016	0.002			-0.035
11/8/2017 18:14			0.016	0.022	0	0.016	0.002			-0.035
11/8/2017 18:15	13.6	76.9	0.015	0.022	0	0.016	0.002	40.75418;-	4	-0.035
11/8/2017 18:16			0.014	0.022	0	0.015	0.002			-0.035
11/8/2017 18:17			0.016	0.022	0	0.015	0.002			-0.035
11/8/2017 18:18			0.016	0.022	0	0.015	0.002			-0.035
11/8/2017 18:19			0.016	0.022	0	0.015	0.002			-0.035
11/8/2017 18:20	13.3	80	0.016	0.022	0	0.015	0.002	40.75415;-	14	-0.035
11/8/2017 18:21			0.017	0.022	0	0.015	0.002			-0.033
11/8/2017 18:22			0.016	0.022	0	0.015	0.002			-0.035
11/8/2017 18:23			0.016	0.022	0	0.015	0.002			-0.035
11/8/2017 18:24			0.018	0.022	0	0.015	0.002			-0.035
11/8/2017 18:25	13.3	89.1	0.018	0.022	0	0.015	0.002	40.75413;-	8	-0.035
11/8/2017 18:26			0.017	0.022	0	0.015	0.002			-0.035
11/8/2017 18:27			0.019	0.022	0	0.015	0.003			-0.035
11/8/2017 18:28			0.019	0.022	0	0.015	0.003			-0.035
11/8/2017 18:29			0.019	0.022	0	0.016	0.003			-0.035
11/8/2017 18:30	13.4	83	0.019	0.022	0	0.016	0.003	40.75418;-	6	-0.035
11/8/2017 18:31			0.019	0.022	0	0.016	0.003			-0.035
11/8/2017 18:32			0.02	0.022	0	0.017	0.003			-0.035
11/8/2017 18:33			0.021	0.022	0	0.017	0.003			-0.035
11/8/2017 18:34			0.022	0.022	0	0.017	0.003			-0.035
11/8/2017 18:35	13.4	79	0.022	0.023	0	0.018	0.003	40.75418;-	12	-0.035
11/8/2017 18:36			0.022	0.024	0	0.018	0.003			-0.035

11/8/2017 18:37			0.023	0.024	0	0.019	0.003			-0.035
11/8/2017 18:38			0.024	0.024	0	0.019	0.003			-0.035
11/8/2017 18:39			0.026	0.026	0	0.02	0.003			-0.035
11/8/2017 18:40	13.2	80	0.024	0.026	0	0.02	0.003	40.75419;-	9	-0.035
11/8/2017 18:41			0.024	0.026	0	0.02	0.003			-0.035
11/8/2017 18:42			0.024	0.026	0	0.021	0.003			-0.035
11/8/2017 18:43			0.025	0.026	0	0.021	0.003			-0.035
11/8/2017 18:44			0.027	0.027	0	0.022	0.003			-0.035
11/8/2017 18:45	13.1	83	0.026	0.028	0	0.022	0.003	40.75414;-	16	-0.035
11/8/2017 18:46			0.028	0.028	0	0.022	0.003			-0.035
11/8/2017 18:47			0.026	0.028	0	0.023	0.003			-0.035
11/8/2017 18:48			0.026	0.028	0	0.023	0.004			-0.035
11/8/2017 18:49			0.026	0.028	0	0.024	0.004			-0.035
11/8/2017 18:50	13	97.2	0.025	0.028	0	0.024	0.004	40.75412;-	20	-0.035
11/8/2017 18:51			0.026	0.028	0	0.024	0.004			-0.035
11/8/2017 18:52			0.025	0.028	0	0.024	0.004			-0.035
11/8/2017 18:53			0.028	0.028	0	0.025	0.004			-0.035
11/8/2017 18:54			0.028	0.029	0	0.025	0.004			-0.035
11/8/2017 18:55	12.9	85	0.028	0.03	0	0.025	0.004	40.75411;-	20	-0.035
11/8/2017 18:56			0.027	0.03	0	0.025	0.004			-0.035
11/8/2017 18:57			0.026	0.03	0	0.025	0.004			-0.035
11/8/2017 18:58			0.027	0.03	0	0.026	0.004			-0.035
11/8/2017 18:59			0.026	0.03	0	0.026	0.004			-0.035
11/8/2017 19:00	12.9	93.1	0.025	0.03	0	0.026	0.004	40.75416;-	11	-0.035
11/8/2017 19:01			0.025	0.03	0	0.025	0.004			-0.035
11/8/2017 19:02			0.025	0.03	0	0.025	0.004			-0.035
11/8/2017 19:03			0.026	0.03	0	0.025	0.004			-0.035
11/8/2017 19:04			0.026	0.03	0	0.025	0.004			-0.035
11/8/2017 19:05	12.8	82	0.025	0.03	0	0.025	0.004	40.75418;-	13	-0.035
11/8/2017 19:06			0.024	0.03	0	0.025	0.004			-0.035
11/8/2017 19:07			0.024	0.03	0	0.025	0.005			-0.035
11/8/2017 19:08			0.023	0.03	0	0.025	0.005			-0.035
11/8/2017 19:09			0.023	0.03	0	0.025	0.005			-0.035
11/8/2017 19:10	12.8	83	0.024	0.03	0	0.024	0.005	40.75416;-	10	-0.035
11/8/2017 19:11			0.023	0.03	0	0.024	0.005			-0.035
11/8/2017 19:12			0.023	0.03	0	0.024	0.005			-0.035
11/8/2017 19:13			0.022	0.03	0	0.023	0.005			-0.035
11/8/2017 19:14			0.023	0.03	0	0.023	0.005			-0.035
11/8/2017 19:15	12.8	92.1	0.022	0.03	0	0.023	0.005	40.75417;-	8	-0.035
11/8/2017 19:16			0.021	0.03	0	0.023	0.005			-0.035
11/8/2017 19:17			0.022	0.03	0	0.023	0.005			-0.035
11/8/2017 19:18			0.022	0.03	0	0.022	0.005			-0.035
11/8/2017 19:19			0.02	0.03	0	0.022	0.005			-0.035
11/8/2017 19:20	12.7	91.1	0.019	0.03	0	0.022	0.005	40.75415;-	16	-0.035
11/8/2017 19:21			0.02	0.03	0	0.021	0.005			-0.035
11/8/2017 19:22			0.02	0.03	0	0.021	0.005			-0.035
11/8/2017 19:23			0.02	0.03	0	0.021	0.005			-0.035
11/8/2017 19:24			0.019	0.03	0	0.02	0.005			-0.035
11/8/2017 19:25	12.7	81	0.02	0.03	0	0.02	0.005	40.75418;-	13	-0.035
11/8/2017 19:26			0.019	0.03	0	0.02	0.005			-0.035
11/8/2017 19:27			0.019	0.03	0	0.02	0.005			-0.035
11/8/2017 19:28			0.018	0.03	0	0.019	0.005			-0.035
11/8/2017 19:29			0.017	0.03	0	0.019	0.005			-0.035
11/8/2017 19:30	12.7	84	0.018	0.03	0	0.019	0.005	40.75414;-	11	-0.035
11/8/2017 19:31			0.018	0.03	0	0.018	0.006			-0.035
11/8/2017 19:32			0.018	0.03	0	0.018	0.006			-0.035

11/8/2017 19:33			0.008	0.03	0	0.018	0.006			-0.035
11/8/2017 19:34			0.012	0.03	0	0.017	0.006			-0.03
11/8/2017 19:35	12.6	84	0.012	0.03	0	0.017	0.006	40.75414;-	12	-0.032
11/8/2017 19:36			0.012	0.03	0	0.016	0.006			-0.033
11/8/2017 19:37			0.013	0.03	0	0.016	0.006			-0.033
11/8/2017 19:38			0.013	0.03	0	0.015	0.006			-0.034
11/8/2017 19:39			0.013	0.03	0	0.015	0.006			-0.034
11/8/2017 19:40	12.6	83	0.015	0.03	0	0.015	0.006	40.75419;-	4	-0.034
11/8/2017 19:41			0.014	0.03	0	0.014	0.006			-0.035
11/8/2017 19:42			0.013	0.03	0	0.014	0.006			-0.035
11/8/2017 19:43			0.014	0.03	0	0.013	0.006			-0.035
11/8/2017 19:44			0.013	0.03	0	0.013	0.006			-0.035
11/8/2017 19:45	12.5	133.6	0.013	0.03	0	0.013	0.006	40.75414;-	11	-0.035
11/8/2017 19:46			0.013	0.03	0	0.013	0.006			-0.035
11/8/2017 19:47			0.014	0.03	0	0.012	0.006			-0.035
11/8/2017 19:48			0.015	0.03	0	0.012	0.006			-0.035
11/8/2017 19:49			0.014	0.03	0	0.012	0.006			-0.035
11/8/2017 19:50	12.5	135.6	0.014	0.03	0	0.012	0.006	40.75417;-	10	-0.035
11/8/2017 19:51			0.015	0.03	0	0.013	0.006			-0.036
11/8/2017 19:52			0.015	0.03	0	0.013	0.006			-0.036
11/8/2017 19:53			0.015	0.03	0	0.013	0.006			-0.035
11/8/2017 19:54			0.015	0.03	0	0.013	0.006			-0.035
11/8/2017 19:55	12.5	87	0.015	0.03	0	0.013	0.006	40.75416;-	12	-0.035
11/8/2017 19:56			0.015	0.03	0	0.013	0.006			-0.035
11/8/2017 19:57			0.015	0.03	0	0.013	0.006			-0.036
11/8/2017 19:58			0.015	0.03	0	0.013	0.006			-0.035
11/8/2017 19:59			0.015	0.03	0	0.013	0.006			-0.036
11/8/2017 20:00	12.5	83	0.015	0.03	0	0.013	0.006	40.75413;-	7	-0.036
11/8/2017 20:01			0.014	0.03	0	0.013	0.006			-0.035
11/8/2017 20:02			0.014	0.03	0	0.013	0.006			-0.036
11/8/2017 20:03			0.014	0.03	0	0.013	0.006			-0.036
11/8/2017 20:04			0.013	0.03	0	0.013	0.006			-0.036
11/8/2017 20:05	12.5	82	0.014	0.03	0	0.013	0.006	40.75415;-	13	-0.036
11/8/2017 20:06			0.013	0.03	0	0.013	0.007			-0.036
11/8/2017 20:07			0.015	0.03	0	0.013	0.007			-0.036
11/8/2017 20:08			0.015	0.03	0	0.013	0.007			-0.036
11/8/2017 20:09			0.013	0.03	0	0.013	0.007			-0.036
11/8/2017 20:10	12.5	83	0.015	0.03	0	0.013	0.007	40.75409;-	22	-0.036
11/8/2017 20:11			0.014	0.03	0	0.013	0.007			-0.036
11/8/2017 20:12			0.015	0.03	0	0.013	0.007			-0.036
11/8/2017 20:13			0.013	0.03	0	0.013	0.007			-0.036
11/8/2017 20:14			0.013	0.03	0	0.013	0.007			-0.036
11/8/2017 20:15	12.5	82	0.014	0.03	0	0.013	0.007	40.75413;-	7	-0.036
11/8/2017 20:16			0.014	0.03	0	0.013	0.007			-0.036
11/8/2017 20:17			0.014	0.03	0	0.013	0.007			-0.036
11/8/2017 20:18			0.012	0.03	0	0.013	0.007			-0.036
11/8/2017 20:19			0.013	0.03	0	0.013	0.007			-0.036
11/8/2017 20:20	12.5	88.1	0.013	0.03	0	0.013	0.007	40.75414;-	9	-0.036
11/8/2017 20:21			0.013	0.03	0	0.013	0.007			-0.036
11/8/2017 20:22			0.013	0.03	0	0.013	0.007			-0.036
11/8/2017 20:23			0.012	0.03	0	0.013	0.007			-0.036
11/8/2017 20:24			0.012	0.03	0	0.012	0.007			-0.036
11/8/2017 20:25	12.5	83	0.012	0.03	0	0.012	0.007	40.75413;-	17	-0.036
11/8/2017 20:26			0.012	0.03	0	0.012	0.007			-0.036
11/8/2017 20:27			0.012	0.03	0	0.012	0.007			-0.036
11/8/2017 20:28			0.013	0.03	0	0.012	0.007			-0.036

11/8/2017 20:29			0.013	0.03	0	0.012	0.007			-0.036
11/8/2017 20:30	12.5	97.2	0.012	0.03	0	0.012	0.007	40.75413;-	8	-0.036
11/8/2017 20:31			0.013	0.03	0	0.012	0.007			-0.036
11/8/2017 20:32			0.012	0.03	0	0.012	0.007			-0.036
11/8/2017 20:33			0.012	0.03	0	0.012	0.007			-0.036
11/8/2017 20:34			0.012	0.03	0	0.012	0.007			-0.036
11/8/2017 20:35	12.2	87	0.012	0.03	0	0.012	0.007	40.75414;-	14	-0.036
11/8/2017 20:36			0.013	0.03	0	0.012	0.007			-0.036
11/8/2017 20:37			0.013	0.03	0	0.012	0.007			-0.036
11/8/2017 20:38			0.012	0.03	0	0.012	0.007			-0.036
11/8/2017 20:39			0.012	0.03	0	0.012	0.007			-0.036
11/8/2017 20:40	12	86	0.012	0.03	0	0.012	0.007	40.75413;-	17	-0.036
11/8/2017 20:41			0.012	0.03	0	0.012	0.007			-0.036
11/8/2017 20:42			0.012	0.03	0	0.012	0.007			-0.036
11/8/2017 20:43			0.012	0.03	0	0.012	0.007			-0.036
11/8/2017 20:44			0.012	0.03	0	0.012	0.008			-0.036
11/8/2017 20:45	12.3	83	0.012	0.03	0	0.011	0.008	40.75412;-	11	-0.036
11/8/2017 20:46			0.012	0.03	0	0.011	0.008			-0.036
11/8/2017 20:47			0.012	0.03	0	0.011	0.008			-0.036
11/8/2017 20:48			0.013	0.03	0	0.011	0.008			-0.036
11/8/2017 20:49			0.012	0.03	0	0.011	0.008			-0.036
11/8/2017 20:50	12.4	103.2	0.012	0.03	0	0.011	0.008	40.75413;-	16	-0.036
11/8/2017 20:51			0.012	0.03	0	0.011	0.008			-0.036
11/8/2017 20:52			0.012	0.03	0	0.011	0.008			-0.036
11/8/2017 20:53			0.012	0.03	0	0.011	0.008			-0.036
11/8/2017 20:54			0.012	0.03	0	0.011	0.008			-0.036
11/8/2017 20:55	12.4	101.2	0.012	0.03	0	0.011	0.008	40.75415;-	5	-0.036
11/8/2017 20:56			0.013	0.03	0	0.011	0.008			-0.036
11/8/2017 20:57			0.013	0.03	0	0.011	0.008			-0.036
11/8/2017 20:58			0.012	0.03	0	0.011	0.008			-0.036
11/8/2017 20:59			0.012	0.03	0	0.011	0.008			-0.036
11/8/2017 21:00	12.3	93.1	0.013	0.03	0	0.012	0.008	40.75411;-	7	-0.036
11/8/2017 21:01			0.013	0.03	0	0.012	0.008			-0.036
11/8/2017 21:02			0.016	0.03	0	0.012	0.008			-0.036
11/8/2017 21:03			0.016	0.03	0	0.012	0.008			-0.036
11/8/2017 21:04			0.016	0.03	0	0.012	0.008			-0.036
11/8/2017 21:05	12.3	85	0.016	0.03	0	0.012	0.008	40.75415;-	11	-0.036
11/8/2017 21:06			0.016	0.03	0	0.012	0.008			-0.036
11/8/2017 21:07			0.016	0.03	0	0.013	0.008			-0.036
11/8/2017 21:08			0.016	0.03	0	0.013	0.008			-0.036
11/8/2017 21:09			0.015	0.03	0	0.013	0.008			-0.036
11/8/2017 21:10	12.4	91.1	0.016	0.03	0	0.013	0.008	40.75415;-	9	-0.036
11/8/2017 21:11			0.015	0.03	0	0.013	0.008			-0.036
11/8/2017 21:12			0.016	0.03	0	0.014	0.008			-0.036
11/8/2017 21:13			0.012	0.03	0	0.014	0.008			-0.036
11/8/2017 21:14			0.007	0.03	0	0.013	0.008			-0.031
11/8/2017 21:15	12.4	85	0.008	0.03	0	0.013	0.008	40.75416;-	6	-0.032
11/8/2017 21:16			0.008	0.03	0	0.013	0.008			-0.033
11/8/2017 21:17			0.009	0.03	0	0.012	0.008			-0.033
11/8/2017 21:18			0.009	0.03	0	0.012	0.008			-0.034
11/8/2017 21:19			0.009	0.03	0	0.011	0.008			-0.034
11/8/2017 21:20	12.3	87	0.01	0.03	0	0.011	0.008	40.75416;-	9	-0.035
11/8/2017 21:21			0.009	0.03	0	0.011	0.008			-0.035
11/8/2017 21:22			0.01	0.03	0	0.01	0.008			-0.035
11/8/2017 21:23			0.01	0.03	0	0.01	0.008			-0.035
11/8/2017 21:24			0.01	0.03	0	0.01	0.008			-0.035

11/8/2017 21:25	12.2	90.1	0.011	0.03	0	0.009	0.009		40.75418;-	7	-0.035
11/8/2017 21:26			0.01	0.03	0	0.009	0.009				-0.035
11/8/2017 21:27											-0.035
11/9/2017 13:34	12.5	118.4									
11/9/2017 13:34									40.7536965;-73.484297		
11/9/2017 13:35	12.5	126.5	0	0	0	0	0				
11/9/2017 13:36			0	0	0	0	0				
11/9/2017 13:37			0	0	0	0	0				-0.028
11/9/2017 13:38			0	0	0	0	0				-0.03
11/9/2017 13:39			0	0	0	0	0				-0.031
11/9/2017 13:40	12.4	83	0	0	0	0	0		40.75411;-	22	-0.032
11/9/2017 13:41			0	0	0	0	0				-0.033
11/9/2017 13:42			0	0	0	0	0				-0.033
11/9/2017 13:43			0	0	0	0	0				-0.034
11/9/2017 13:44			0	0	0	0	0				-0.034
11/9/2017 13:45	12.3	97.2	0	0	0	0	0		40.75418;-	13	-0.035
11/9/2017 13:46			0	0	0	0	0				-0.035
11/9/2017 13:47			0	0	0	0	0				-0.035
11/9/2017 13:48			0	0	0	0	0				-0.035
11/9/2017 13:49			0	0	0	0	0				-0.035
11/9/2017 13:50	12.3	109.3	0	0	0	0	0		40.75414;-	16	-0.035
11/9/2017 13:51			0	0	0	0	0				-0.035
11/9/2017 13:52			0	0	0	0	0				-0.035
11/9/2017 13:53			0	0	0	0	0				-0.035
11/9/2017 13:54			0	0	0	0	0				-0.035
11/9/2017 13:55	12.3	87	0	0	0	0	0		40.75413;-	13	-0.035
11/9/2017 13:56			0	0	0	0	0				-0.035
11/9/2017 13:57			0	0	0	0	0				-0.036
11/9/2017 13:58			0	0	0	0	0				-0.035
11/9/2017 13:59			0	0	0	0	0				-0.035
11/9/2017 14:00	12.2	129.6	0	0	0	0	0		40.75416;-	12	-0.035
11/9/2017 14:01			0	0	0	0	0				-0.035
11/9/2017 14:02			0	0	0	0	0				-0.035
11/9/2017 14:03			0	0	0	0	0				-0.035
11/9/2017 14:04			0	0	0	0	0				-0.036
11/9/2017 14:05	12.4	122.5	0	0	0	0	0		40.75414;-	20	-0.035
11/9/2017 14:06			0	0	0	0	0				-0.036
11/9/2017 14:07			0	0	0	0	0				-0.035
11/9/2017 14:08			0	0	0	0	0				-0.035
11/9/2017 14:09			0	0	0	0	0				-0.035
11/9/2017 14:10	12.4	82	0	0	0	0	0		40.75416;-	16	-0.035
11/9/2017 14:11			0	0	0	0	0				-0.035
11/9/2017 14:12			0	0	0	0	0				-0.035
11/9/2017 14:13			0	0	0	0	0				-0.036
11/9/2017 14:14			0	0	0	0	0				-0.035
11/9/2017 14:15	12.5	130.6	0	0	0	0	0				-0.035
11/9/2017 14:15									40.75415;-	13	
11/9/2017 14:16			0	0	0	0	0				-0.035
11/9/2017 14:17			0	0	0	0	0				-0.035
11/9/2017 14:18			0	0	0	0	0				-0.035
11/9/2017 14:19			0	0	0	0	0				-0.036
11/9/2017 14:20	12.4	131.6	0	0	0	0	0		40.75415;-	16	-0.035
11/9/2017 14:21			0	0	0	0	0				-0.035
11/9/2017 14:22			0	0	0	0	0				-0.035
11/9/2017 14:23			0	0	0	0	0				-0.035
11/9/2017 14:24			0	0	0	0	0				-0.036

11/9/2017 14:25	13.2	124.5	0	0	0	0	0	40.75412;-	17	-0.036
11/9/2017 14:26			0	0	0	0	0			-0.036
11/9/2017 14:27			0	0	0	0	0			-0.036
11/9/2017 14:28			0	0	0	0	0			-0.036
11/9/2017 14:29			0	0	0	0	0			-0.035
11/9/2017 14:30	13.4	123.5	0	0	0	0	0			-0.036
11/9/2017 14:30								40.75411;-	14	
11/9/2017 14:31			0	0	0	0	0			-0.036
11/9/2017 14:32			0	0	0	0	0			-0.036
11/9/2017 14:33			0	0	0	0	0			-0.036
11/9/2017 14:34			0	0	0	0	0			-0.036
11/9/2017 14:35	13.7	75.9	0	0	0	0	0	40.75416;-	13	-0.036
11/9/2017 14:36			0	0	0	0	0			-0.035
11/9/2017 14:37			0	0	0	0	0			-0.036
11/9/2017 14:38			0	0	0	0	0			-0.035
11/9/2017 14:39			0	0	0	0	0			-0.035
11/9/2017 14:40	14.1	115.4	0	0	0	0	0			-0.028
11/9/2017 14:41			0	0	0	0	0			-0.027
11/9/2017 14:42			0	0	0	0	0			-0.03
11/9/2017 14:43			0	0	0	0	0			-0.031
11/9/2017 14:44			0	0	0	0	0			-0.032
11/9/2017 14:45	14.3	79	0	0	0	0	0	40.75417;-	10	-0.033
11/9/2017 14:46			0	0	0	0	0			-0.033
11/9/2017 14:47			0	0.001	0	0	0			-0.034
11/9/2017 14:48			0.001	0.002	0	0	0			-0.034
11/9/2017 14:49			0.003	0.003	0	0	0			-0.034
11/9/2017 14:50	14	77.9	0.005	0.005	0	0	0	40.75418;-	9	-0.034
11/9/2017 14:51			0.007	0.007	0	0	0			-0.034
11/9/2017 14:52			0.009	0.01	0	0	0			-0.035
11/9/2017 14:53			0.01	0.011	0	0.001	0			-0.035
11/9/2017 14:54			0.012	0.012	0	0.002	0			-0.035
11/9/2017 14:55	14	76.9	0.01	0.012	0	0.002	0	40.75412;-	10	-0.034
11/9/2017 14:56			0.011	0.013	0	0.003	0			-0.034
11/9/2017 14:57			0.011	0.013	0	0.004	0			-0.034
11/9/2017 14:58			0.012	0.013	0	0.004	0			-0.033
11/9/2017 14:59			0.013	0.014	0	0.005	0			-0.034
11/9/2017 15:00	14	76.9	0.014	0.016	0	0.006	0	40.75418;-	10	-0.033
11/9/2017 15:01			0.015	0.016	0	0.007	0			-0.033
11/9/2017 15:02			0.015	0.017	0	0.008	0			-0.034
11/9/2017 15:03			0.017	0.018	0	0.009	0			-0.033
11/9/2017 15:04			0.018	0.018	0	0.01	0			-0.034
11/9/2017 15:05	14	74.9	0.017	0.019	0	0.011	0	40.75422;-	9	-0.034
11/9/2017 15:06			0.018	0.02	0	0.012	0			-0.035
11/9/2017 15:07			0.017	0.02	0	0.013	0			-0.034
11/9/2017 15:08			0.018	0.02	0	0.013	0			-0.034
11/9/2017 15:09			0.02	0.02	0	0.014	0			-0.035
11/9/2017 15:10	14.3	122.5	0.018	0.02	0	0.014	0	40.75414;-	13	-0.034
11/9/2017 15:11			0.018	0.02	0	0.015	0			-0.034
11/9/2017 15:12			0.019	0.02	0	0.015	0			-0.034
11/9/2017 15:13			0.019	0.02	0	0.016	0			-0.035
11/9/2017 15:14			0.022	0.022	0	0.016	0			-0.035
11/9/2017 15:15	14.4	75.9	0.021	0.022	0	0.017	0	40.75417;-	16	-0.035
11/9/2017 15:16			0.019	0.022	0	0.017	0			-0.035
11/9/2017 15:17			0.02	0.022	0	0.017	0			-0.034
11/9/2017 15:18			0.019	0.022	0	0.018	0			-0.034
11/9/2017 15:19			0.02	0.022	0	0.018	0			-0.034

11/9/2017 15:20	14	75.9	0.023	0.023	0	0.018	0	40.75418;-	16	-0.034
11/9/2017 15:21			0.025	0.025	0	0.018	0			-0.034
11/9/2017 15:22			0.024	0.026	0	0.019	0.001			-0.035
11/9/2017 15:23			0.026	0.027	0	0.019	0.001			-0.035
11/9/2017 15:24			0.027	0.027	0	0.02	0.001			-0.035
11/9/2017 15:25	14.4	75.9	0.023	0.027	0	0.02	0.001	40.75416;-	17	-0.035
11/9/2017 15:26			0.026	0.027	0	0.021	0.001			-0.034
11/9/2017 15:27			0.03	0.03	0	0.021	0.001			-0.034
11/9/2017 15:28			0.029	0.03	0	0.022	0.001			-0.034
11/9/2017 15:29			0.031	0.031	0	0.023	0.001			-0.035
11/9/2017 15:30	14	79	0.028	0.032	0	0.023	0.001	40.75419;-	15	-0.034
11/9/2017 15:31			0.023	0.032	0	0.024	0.001			-0.034
11/9/2017 15:32			0.025	0.032	0	0.024	0.001			-0.033
11/9/2017 15:33			0.023	0.032	0	0.024	0.001			-0.032
11/9/2017 15:34			0.023	0.032	0	0.024	0.001			-0.032
11/9/2017 15:35	14.4	83	0.025	0.032	0	0.025	0.001	40.75414;-	19	-0.032
11/9/2017 15:36			0.027	0.032	0	0.025	0.001			-0.033
11/9/2017 15:37			0.03	0.032	0	0.025	0.001			-0.034
11/9/2017 15:38			0.032	0.032	0	0.025	0.001			-0.034
11/9/2017 15:39			0.033	0.034	0	0.026	0.001			-0.034
11/9/2017 15:40	13.6	77.9	0.035	0.035	0	0.026	0.002	40.75412;-	21	-0.035
11/9/2017 15:41			0.033	0.035	0	0.027	0.002			-0.034
11/9/2017 15:42			0.034	0.035	0	0.027	0.002			-0.034
11/9/2017 15:43			0.036	0.036	0	0.028	0.002			-0.034
11/9/2017 15:44			0.036	0.037	0	0.028	0.002			-0.035
11/9/2017 15:45	14.3	82	0.037	0.037	0	0.028	0.002	40.75412;-	21	-0.035
11/9/2017 15:46			0.036	0.038	0	0.029	0.002			-0.035
11/9/2017 15:47			0.033	0.038	0	0.03	0.002			-0.035
11/9/2017 15:48			0.033	0.038	0	0.031	0.002			-0.034
11/9/2017 15:49			0.034	0.038	0	0.031	0.002			-0.034
11/9/2017 15:50	14.3	81	0.028	0.038	0	0.032	0.002	40.75414;-	21	-0.034
11/9/2017 15:51			0.025	0.038	0	0.032	0.002			-0.033
11/9/2017 15:52			0.028	0.038	0	0.032	0.002			-0.033
11/9/2017 15:53			0.027	0.038	0	0.032	0.002			-0.033
11/9/2017 15:54			0.027	0.038	0	0.032	0.002			-0.033
11/9/2017 15:55	14.3	76.9	0.029	0.038	0	0.031	0.003	40.75414;-	15	-0.033
11/9/2017 15:56			0.03	0.038	0	0.031	0.003			-0.033
11/9/2017 15:57			0.03	0.038	0	0.031	0.003			-0.033
11/9/2017 15:58			0.03	0.038	0	0.031	0.003			-0.034
11/9/2017 15:59			0.032	0.038	0	0.03	0.003			-0.034
11/9/2017 16:00	14.3	85	0.033	0.038	0	0.03	0.003	40.75416;-	18	-0.034
11/9/2017 16:01			0.035	0.038	0	0.03	0.003			-0.035
11/9/2017 16:02			0.034	0.038	0	0.03	0.003			-0.035
11/9/2017 16:03			0.034	0.038	0	0.03	0.003			-0.034
11/9/2017 16:04			0.034	0.038	0	0.03	0.003			-0.034
11/9/2017 16:05	14.2	120.5	0.035	0.038	0	0.03	0.003	40.75414;-	9	-0.034
11/9/2017 16:06			0.035	0.038	0	0.03	0.003			-0.034
11/9/2017 16:07			0.036	0.038	0	0.03	0.003			-0.034
11/9/2017 16:08			0.037	0.038	0	0.031	0.003			-0.034
11/9/2017 16:09			0.038	0.038	0	0.032	0.003			-0.035
11/9/2017 16:10	14.3	118.4	0.037	0.038	0	0.032	0.004	40.75412;-	22	-0.035
11/9/2017 16:11			0.037	0.039	0	0.033	0.004			-0.034
11/9/2017 16:12			0.039	0.039	0	0.033	0.004			-0.035
11/9/2017 16:13			0.039	0.04	0	0.034	0.004			-0.035
11/9/2017 16:14			0.035	0.04	0	0.035	0.004			-0.034
11/9/2017 16:15	13.8	77.9	0.036	0.04	0	0.035	0.004	40.75418;-	3	-0.034

11/9/2017 16:16			0.036	0.04	0	0.035	0.004			-0.034
11/9/2017 16:17			0.037	0.04	0	0.035	0.004			-0.034
11/9/2017 16:18			0.036	0.04	0	0.035	0.004			-0.034
11/9/2017 16:19			0.036	0.04	0	0.035	0.004			-0.034
11/9/2017 16:20	14.2	123.5	0.036	0.04	0	0.035	0.004	40.75416;-	7	-0.034
11/9/2017 16:21			0.036	0.04	0	0.036	0.004			-0.034
11/9/2017 16:22			0.034	0.04	0	0.036	0.004			-0.033
11/9/2017 16:23			0.032	0.04	0	0.036	0.005			-0.033
11/9/2017 16:24			0.031	0.04	0	0.035	0.005			-0.034
11/9/2017 16:25	13.5	83	0.031	0.04	0	0.035	0.005	40.75414;-	8	-0.033
11/9/2017 16:26			0.033	0.04	0	0.034	0.005			-0.033
11/9/2017 16:27			0.031	0.04	0	0.034	0.005			-0.034
11/9/2017 16:28			0.033	0.04	0	0.033	0.005			-0.034
11/9/2017 16:29			0.032	0.04	0	0.033	0.005			-0.034
11/9/2017 16:30	13.6	85	0.032	0.04	0	0.033	0.005	40.75415;-	20	-0.035
11/9/2017 16:31			0.033	0.04	0	0.033	0.005			-0.035
11/9/2017 16:32			0.032	0.04	0	0.032	0.005			-0.035
11/9/2017 16:33			0.032	0.04	0	0.032	0.005			-0.035
11/9/2017 16:34			0.029	0.04	0	0.032	0.005			-0.035
11/9/2017 16:35	13.7	86	0.028	0.04	0	0.031	0.005	40.75413;-	9	-0.034
11/9/2017 16:36			0.028	0.04	0	0.031	0.005			-0.033
11/9/2017 16:37			0.026	0.04	0	0.03	0.005			-0.032
11/9/2017 16:38			0.027	0.04	0	0.03	0.005			-0.033
11/9/2017 16:39			0.026	0.04	0	0.03	0.006			-0.033
11/9/2017 16:40	13.5	94.1	0.024	0.04	0	0.029	0.006	40.75413;-	0	-0.033
11/9/2017 16:41			0.023	0.04	0	0.029	0.006			-0.033
11/9/2017 16:42			0.024	0.04	0	0.028	0.006			-0.033
11/9/2017 16:43			0.024	0.04	0	0.028	0.006			-0.034
11/9/2017 16:44			0.024	0.04	0	0.027	0.006			-0.033
11/9/2017 16:45	13.7	80	0.024	0.04	0	0.027	0.006	40.75415;-	6	-0.033
11/9/2017 16:46			0.023	0.04	0	0.026	0.006			-0.033
11/9/2017 16:47			0.023	0.04	0	0.026	0.006			-0.033
11/9/2017 16:48			0.023	0.04	0	0.025	0.006			-0.034
11/9/2017 16:49			0.022	0.04	0	0.025	0.006			-0.034
11/9/2017 16:50	14.2	81	0.02	0.04	0	0.024	0.006	40.75412;-	2	-0.034
11/9/2017 16:51			0.021	0.04	0	0.024	0.006			-0.034
11/9/2017 16:52			0.021	0.04	0	0.023	0.006			-0.034
11/9/2017 16:53			0.018	0.04	0	0.023	0.006			-0.034
11/9/2017 16:54			0.017	0.04	0	0.022	0.006			-0.034
11/9/2017 16:55	13.3	79	0.019	0.04	0	0.021	0.006	40.75416;-	1	-0.033
11/9/2017 16:56			0.019	0.04	0	0.021	0.006			-0.034
11/9/2017 16:57			0.019	0.04	0	0.021	0.006			-0.033
11/9/2017 16:58			0.019	0.04	0	0.02	0.006			-0.034
11/9/2017 16:59			0.016	0.04	0	0.02	0.006			-0.034
11/9/2017 17:00	14	77.9	0.015	0.04	0	0.019	0.006	40.75416;-	1	-0.033
11/9/2017 17:01			0.015	0.04	0	0.019	0.006			-0.032
11/9/2017 17:02			0.015	0.04	0	0.018	0.007			-0.033
11/9/2017 17:03			0.014	0.04	0	0.018	0.007			-0.033
11/9/2017 17:04			0.014	0.04	0	0.017	0.007			-0.033
11/9/2017 17:05	13.3	94.1	0.015	0.04	0	0.017	0.007	40.75413;-	3	-0.032
11/9/2017 17:06			0.012	0.04	0	0.016	0.007			-0.033
11/9/2017 17:07			0.012	0.04	0	0.016	0.007			-0.033
11/9/2017 17:08			0.013	0.04	0	0.015	0.007			-0.033
11/9/2017 17:09			0.014	0.04	0	0.015	0.007			-0.033
11/9/2017 17:10	14.3	75.9	0.012	0.04	0	0.015	0.007	40.75414;-	8	-0.034
11/9/2017 17:11			0.012	0.04	0	0.014	0.007			-0.034

11/9/2017 17:12			0.012	0.04	0	0.014	0.007			-0.033
11/9/2017 17:13			0.012	0.04	0	0.014	0.007			-0.034
11/9/2017 17:14			0.014	0.04	0	0.013	0.007			-0.034
11/9/2017 17:15	14.2	76.9	0.015	0.04	0	0.013	0.007	40.75414;-	6	-0.034
11/9/2017 17:16			0.015	0.04	0	0.013	0.007			-0.034
11/9/2017 17:17			0.016	0.04	0	0.013	0.007			-0.035
11/9/2017 17:18			0.016	0.04	0	0.013	0.007			-0.034
11/9/2017 17:19			0.017	0.04	0	0.013	0.007			-0.035
11/9/2017 17:20	13.7	120.5	0.019	0.04	0	0.013	0.007	40.75415;-	5	-0.035
11/9/2017 17:21			0.019	0.04	0	0.014	0.007			-0.035
11/9/2017 17:22			0.019	0.04	0	0.014	0.007			-0.034
11/9/2017 17:23			0.02	0.04	0	0.014	0.007			-0.035
11/9/2017 17:24			0.02	0.04	0	0.015	0.007			-0.035
11/9/2017 17:25	14	75.9	0.02	0.04	0	0.015	0.007	40.75417;-	10	-0.034
11/9/2017 17:26			0.02	0.04	0	0.015	0.007			-0.034
11/9/2017 17:27			0.022	0.04	0	0.016	0.007			-0.034
11/9/2017 17:28			0.022	0.04	0	0.017	0.007			-0.035
11/9/2017 17:29			0.023	0.04	0	0.017	0.007			-0.035
11/9/2017 17:30	13.4	80	0.023	0.04	0	0.018	0.007	40.75419;-	0	-0.035
11/9/2017 17:31			0.022	0.04	0	0.018	0.007			-0.035
11/9/2017 17:32			0.022	0.04	0	0.019	0.008			-0.035
11/9/2017 17:33			0.021	0.04	0	0.019	0.008			-0.035
11/9/2017 17:34			0.02	0.04	0	0.019	0.008			-0.034
11/9/2017 17:35	13.1	84	0.02	0.04	0	0.02	0.008	40.75419;-	-1	-0.034
11/9/2017 17:36			0.019	0.04	0	0.02	0.008			-0.035
11/9/2017 17:37			0.019	0.04	0	0.02	0.008			-0.035
11/9/2017 17:38			0.019	0.04	0	0.02	0.008			-0.035
11/9/2017 17:39			0.018	0.04	0	0.02	0.008			-0.035
11/9/2017 17:40	13.4	83	0.017	0.04	0	0.02	0.008	40.75416;-	6	-0.035
11/9/2017 17:41			0.017	0.04	0	0.019	0.008			-0.035
11/9/2017 17:42			0.017	0.04	0	0.019	0.008			-0.035
11/9/2017 17:43			0.016	0.04	0	0.019	0.008			-0.035
11/9/2017 17:44			0.015	0.04	0	0.019	0.008			-0.035
11/9/2017 17:45	13.4	80	0.015	0.04	0	0.018	0.008	40.75418;-	4	-0.035
11/9/2017 17:46			0.015	0.04	0	0.018	0.008			-0.034
11/9/2017 17:47			0.013	0.04	0	0.017	0.008			-0.034
11/9/2017 17:48			0.014	0.04	0	0.017	0.008			-0.034
11/9/2017 17:49			0.013	0.04	0	0.016	0.008			-0.035
11/9/2017 17:50	13.8	83	0.013	0.04	0	0.016	0.008	40.75418;-	9	-0.034
11/9/2017 17:51			0.015	0.04	0	0.015	0.008			-0.034
11/9/2017 17:52			0.015	0.04	0	0.015	0.008			-0.034
11/9/2017 17:53			0.015	0.04	0	0.015	0.008			-0.034
11/9/2017 17:54			0.016	0.04	0	0.015	0.008			-0.034
11/9/2017 17:55	13.7	83	0.015	0.04	0	0.014	0.008	40.75422;-	10	-0.034
11/9/2017 17:56			0.016	0.04	0	0.014	0.008			-0.034
11/9/2017 17:57			0.016	0.04	0	0.014	0.008			-0.034
11/9/2017 17:58			0.016	0.04	0	0.014	0.008			-0.035
11/9/2017 17:59			0.016	0.04	0	0.014	0.008			-0.034
11/9/2017 18:00	13.7	79	0.015	0.04	0	0.014	0.008	40.75418;-	3	-0.034
11/9/2017 18:01			0.016	0.04	0	0.014	0.008			-0.034
11/9/2017 18:02			0.017	0.04	0	0.014	0.009			-0.034
11/9/2017 18:03			0.016	0.04	0	0.014	0.009			-0.034
11/9/2017 18:04			0.016	0.04	0	0.014	0.009			-0.034
11/9/2017 18:05	13.8	84	0.016	0.04	0	0.015	0.009	40.75422;-	1	-0.034
11/9/2017 18:06			0.016	0.04	0	0.015	0.009			-0.034
11/9/2017 18:07			0.016	0.04	0	0.015	0.009			-0.034

11/9/2017 18:08			0.017	0.04	0	0.015	0.009			-0.034
11/9/2017 18:09			0.017	0.04	0	0.015	0.009			-0.035
11/9/2017 18:10	13.4	88.1	0.017	0.04	0	0.015	0.009	40.75415;-	17	-0.034
11/9/2017 18:11			0.017	0.04	0	0.015	0.009			-0.035
11/9/2017 18:12			0.017	0.04	0	0.015	0.009			-0.035
11/9/2017 18:13			0.017	0.04	0	0.016	0.009			-0.035
11/9/2017 18:14			0.016	0.04	0	0.016	0.009			-0.035
11/9/2017 18:15	13.2	81	0.016	0.04	0	0.016	0.009	40.75413;-	19	-0.034
11/9/2017 18:16			0.016	0.04	0	0.016	0.009			-0.034
11/9/2017 18:17			0.016	0.04	0	0.016	0.009			-0.034
11/9/2017 18:18			0.014	0.04	0	0.016	0.009			-0.034
11/9/2017 18:19			0.014	0.04	0	0.016	0.009			-0.034
11/9/2017 18:20	13.4	86	0.013	0.04	0	0.015	0.009	40.75415;-	18	-0.034
11/9/2017 18:21			0.012	0.04	0	0.015	0.009			-0.034
11/9/2017 18:22			0.012	0.04	0	0.015	0.009			-0.034
11/9/2017 18:23			0.011	0.04	0	0.015	0.009			-0.034
11/9/2017 18:24			0.012	0.04	0	0.014	0.009			-0.034
11/9/2017 18:25	13.3	89.1	0.012	0.04	0	0.014	0.009	40.75416;-	9	-0.034
11/9/2017 18:26			0.012	0.04	0	0.014	0.009			-0.034
11/9/2017 18:27			0.011	0.04	0	0.013	0.009			-0.035
11/9/2017 18:28			0.012	0.04	0	0.013	0.009			-0.034
11/9/2017 18:29			0.012	0.04	0	0.013	0.009			-0.034
11/9/2017 18:30	13.2	81	0.011	0.04	0	0.012	0.009	40.75415;-	15	-0.035
11/9/2017 18:31			0.011	0.04	0	0.012	0.009			-0.035
11/9/2017 18:32			0.011	0.04	0	0.012	0.009			-0.035
11/9/2017 18:33			0.011	0.04	0	0.011	0.009			-0.035
11/9/2017 18:34			0.01	0.04	0	0.011	0.009			-0.035
11/9/2017 18:35	13.1	81	0.01	0.04	0	0.011	0.009	40.75415;-	1	-0.035
11/9/2017 18:36			0.009	0.04	0	0.011	0.009			-0.035
11/9/2017 18:37			0.009	0.04	0	0.01	0.01			-0.035
11/9/2017 18:38			0.008	0.04	0	0.01	0.01			-0.035
11/9/2017 18:39			0.007	0.04	0	0.01	0.01			-0.035
11/9/2017 18:40	13.1	129.6	0.007	0.04	0	0.01	0.01	40.75413;-	17	-0.035
11/9/2017 18:41			0.007	0.04	0	0.009	0.01			-0.035
11/9/2017 18:42			0.006	0.04	0	0.009	0.01			-0.035
11/9/2017 18:43			0.005	0.04	0	0.009	0.01			-0.035
11/9/2017 18:44			0.004	0.04	0	0.008	0.01			-0.035
11/9/2017 18:45	13.1	126.5	0.004	0.04	0	0.008	0.01	40.75415;-	20	-0.034
11/9/2017 18:46			0.003	0.04	0	0.007	0.01			-0.034
11/9/2017 18:47			0.001	0.04	0	0.007	0.01			-0.035
11/9/2017 18:48			0	0.04	0	0.006	0.01			-0.035
11/9/2017 18:49			0.001	0.04	0	0.006	0.01			-0.035
11/9/2017 18:50	13	81	0	0.04	0	0.005	0.01	40.75417;-	9	-0.035
11/9/2017 18:51			0	0.04	0	0.004	0.01			-0.035
11/9/2017 18:52			0	0.04	0	0.004	0.01			-0.035
11/9/2017 18:53			0	0.04	0	0.003	0.01			-0.035
11/9/2017 18:54			0	0.04	0	0.003	0.01			-0.035
11/9/2017 18:55	13	91.1	0	0.04	0	0.002	0.01	40.75414;-	13	-0.035
11/9/2017 18:56			0	0.04	0	0.002	0.01			-0.035
11/9/2017 18:57			0	0.04	0	0.001	0.01			-0.035
11/9/2017 18:58			0	0.04	0	0.001	0.01			-0.035
11/9/2017 18:59			0	0.04	0	0	0.01			-0.035
11/9/2017 19:00	13	87	0	0.04	0	0	0.01	40.75416;-	16	-0.035
11/9/2017 19:01			0	0.04	0	0	0.01			-0.035
11/9/2017 19:02			0	0.04	0	0	0.01			-0.035
11/9/2017 19:03			0	0.04	0	0	0.01			-0.035

11/9/2017 19:04			0	0.04	0	0	0.01			-0.035
11/9/2017 19:05	13	118.4	0	0.04	0	0	0.01	40.75417;-	14	-0.035
11/9/2017 19:06			0	0.04	0	0	0.01			-0.035
11/9/2017 19:07			0	0.04	0	0	0.01			-0.035
11/9/2017 19:08			0	0.04	0	0	0.01			-0.035
11/9/2017 19:09			0	0.04	0	0	0.01			-0.035
11/9/2017 19:10	13	114.4	0	0.04	0	0	0.01	40.75419;-	21	-0.035
11/9/2017 19:11			0	0.04	0	0	0.01			-0.035
11/9/2017 19:12			0	0.04	0	0	0.01			-0.035
11/9/2017 19:13			0	0.04	0	0	0.01			-0.035
11/9/2017 19:14			0	0.04	0	0	0.01			-0.035
11/9/2017 19:15	13	82	0	0.04	0	0	0.01	40.75418;-	25	-0.035
11/9/2017 19:16			0	0.04	0	0	0.01			-0.035
11/9/2017 19:17			0	0.04	0	0	0.01			-0.036
11/9/2017 19:18			0	0.04	0	0	0.01			-0.035
11/9/2017 19:19			0	0.04	0	0	0.01			-0.036
11/9/2017 19:20	13	94.1	0	0.04	0	0	0.01	40.75422;-	23	-0.036
11/9/2017 19:21			0	0.04	0	0	0.01			-0.036
11/9/2017 19:22			0	0.04	0	0	0.01			-0.036
11/9/2017 19:23			0	0.04	0	0	0.01			-0.035
11/9/2017 19:24			0	0.04	0	0	0.01			-0.035
11/9/2017 19:25	13	82	0	0.04	0	0	0.01	40.75419;-	14	-0.035
11/9/2017 19:26			0	0.04	0	0	0.01			-0.035
11/9/2017 19:27			0	0.04	0	0	0.01			-0.035
11/9/2017 19:28			0	0.04	0	0	0.01			-0.035
11/9/2017 19:29			0	0.04	0	0	0.01			-0.035
11/9/2017 19:30	12.9	88.1	0	0.04	0	0	0.01	40.75414;-	15	-0.036
11/9/2017 19:31			0	0.04	0	0	0.01			-0.035
11/9/2017 19:32			0	0.04	0	0	0.01			-0.035
11/9/2017 19:33			0	0.04	0	0	0.01			-0.035
11/9/2017 19:34			0	0.04	0	0	0.01			-0.035
11/9/2017 19:35	12.9	83	0	0.04	0	0	0.01	40.7542;-7	21	-0.035
11/9/2017 19:36			0	0.04	0	0	0.01			-0.035
11/9/2017 19:37			0	0.04	0	0	0.01			-0.035
11/9/2017 19:38			0	0.04	0	0	0.01			-0.035
11/9/2017 19:39			0	0.04	0	0	0.01			-0.035
11/9/2017 19:40	12.9	81	0	0.04	0	0	0.01	40.75419;-	-1	-0.035
11/9/2017 19:41			0	0.04	0	0	0.01			-0.035
11/9/2017 19:42			0	0.04	0	0	0.01			-0.035
11/9/2017 19:43			0	0.04	0	0	0.01			-0.033
11/9/2017 19:44			0	0.04	0	0	0.01			-0.029
11/9/2017 19:45	12.9	81	0	0.04	0	0	0.01	40.75416;-	11	-0.032
11/9/2017 19:46			0	0.04	0	0	0.01			-0.032
11/9/2017 19:47			0	0.04	0	0	0.01			-0.033
11/9/2017 19:48			0	0.04	0	0	0.01			-0.034
11/9/2017 19:49			0	0.04	0	0	0.01			-0.034
11/9/2017 19:50	12.9	131.6	0	0.04	0	0	0.01			-0.035
11/9/2017 19:50								40.75417;-	14	
11/9/2017 19:51			0	0.04	0	0	0.01			-0.035
11/9/2017 19:52			0	0.04	0	0	0.01			-0.035
11/9/2017 19:53			0	0.04	0	0	0.01			-0.035
11/9/2017 19:54			0	0.04	0	0	0.01			-0.035
11/9/2017 19:55	12.9	82	0	0.04	0	0	0.01	40.75414;-	15	-0.035
11/9/2017 19:56			0	0.04	0	0	0.01			-0.035
11/9/2017 19:57			0	0.04	0	0	0.01			-0.035
11/9/2017 19:58			0	0.04	0	0	0.01			-0.035

11/9/2017 19:59			0	0.04	0	0	0.01			-0.035
11/9/2017 20:00	12.9	85	0	0.04	0	0	0.01	40.75416;-	8	-0.035
11/9/2017 20:01			0	0.04	0	0	0.01			-0.035
11/9/2017 20:02			0	0.04	0	0	0.01			-0.035
11/9/2017 20:03			0	0.04	0	0	0.01			-0.035
11/9/2017 20:04			0	0.04	0	0	0.01			-0.035
11/9/2017 20:05	12.9	81	0	0.04	0	0	0.01	40.75416;-	15	-0.035
11/9/2017 20:06			0	0.04	0	0	0.01			-0.035
11/9/2017 20:07			0	0.04	0	0	0.01			-0.035
11/9/2017 20:08			0	0.04	0	0	0.01			-0.035
11/9/2017 20:09			0	0.04	0	0	0.01			-0.035
11/9/2017 20:10	12.9	89.1	0	0.04	0	0	0.01	40.75415;-	4	-0.035
11/9/2017 20:11			0	0.04	0	0	0.01			-0.035
11/9/2017 20:12			0	0.04	0	0	0.01			-0.035
11/9/2017 20:13			0	0.04	0	0	0.01			-0.035
11/9/2017 20:14			0	0.04	0	0	0.01			-0.035
11/9/2017 20:15	12.9	93.1	0	0.04	0	0	0.01	40.75417;-	4	-0.035
11/9/2017 20:16			0	0.04	0	0	0.01			-0.035
11/9/2017 20:17			0	0.04	0	0	0.01			-0.035
11/9/2017 20:18			0	0.04	0	0	0.01			-0.035
11/9/2017 20:19			0	0.04	0	0	0.01			-0.035
11/9/2017 20:20	12.9	99.2	0	0.04	0	0	0.01	40.75415;-	7	-0.035
11/9/2017 20:21			0	0.04	0	0	0.01			-0.035
11/9/2017 20:22			0	0.04	0	0	0.01			-0.035
11/9/2017 20:23			0	0.04	0	0	0.01			-0.035
11/9/2017 20:24			0	0.04	0	0	0.01			-0.034
11/9/2017 20:25	12.9	88.1	0	0.04	0	0	0.01	40.75418;-	2	-0.034
11/9/2017 20:26			0	0.04	0	0	0.01			-0.035
11/9/2017 20:27			0	0.04	0	0	0.01			-0.035
11/9/2017 20:28			0	0.04	0	0	0.01			-0.035
11/9/2017 20:29			0	0.04	0	0	0.01			-0.034
11/9/2017 20:30	12.9	91.1	0	0.04	0	0	0.01	40.75419;-	7	-0.035
11/9/2017 20:31			0	0.04	0	0	0.01			-0.035
11/9/2017 20:32			0	0.04	0	0	0.01			-0.035
11/9/2017 20:33			0	0.04	0	0	0.01			-0.035
11/9/2017 20:34			0	0.04	0	0	0.01			-0.035
11/9/2017 20:35	12.8	80	0	0.04	0	0	0.01	40.75413;-	13	-0.035
11/9/2017 20:36			0	0.04	0	0	0.01			-0.035
11/9/2017 20:37			0	0.04	0	0	0.01			-0.035
11/9/2017 20:38			0	0.04	0	0	0.01			-0.035
11/9/2017 20:39			0	0.04	0	0	0.01			-0.035
11/9/2017 20:40	12.8	92.1	0	0.04	0	0	0.01	40.75414;-	8	-0.035
11/9/2017 20:41			0	0.04	0	0	0.01			-0.035
11/9/2017 20:42			0	0.04	0	0	0.01			-0.035
11/9/2017 20:43			0	0.04	0	0	0.01			-0.035
11/9/2017 20:44			0	0.04	0	0	0.01			-0.035
11/9/2017 20:45	12.8	87	0	0.04	0	0	0.01	40.75417;-	1	-0.035
11/9/2017 20:46			0	0.04	0	0	0.01			-0.035
11/9/2017 20:47			0	0.04	0	0	0.01			-0.035
11/9/2017 20:48			0	0.04	0	0	0.01			-0.035
11/9/2017 20:49			0	0.04	0	0	0.01			-0.035
11/9/2017 20:50	12.8	82	0	0.04	0	0	0.01	40.7542;-7	1	-0.035
11/9/2017 20:51			0	0.04	0	0	0.01			-0.035
11/9/2017 20:52			0	0.04	0	0	0.01			-0.035
11/9/2017 20:53			0	0.04	0	0	0.01			-0.035
11/9/2017 20:54			0	0.04	0	0	0.01			-0.035

11/9/2017 20:55	12.8	86	0	0.04	0	0	0.01	40.75426;-	-4	-0.034
11/9/2017 20:56			0	0.04	0	0	0.01			-0.027
11/9/2017 20:57			0	0.04	0	0	0.01			-0.031
11/9/2017 20:58			0	0.04	0	0	0.01			-0.031
11/9/2017 20:59			0	0.04	0	0	0.01			-0.032
11/9/2017 21:00	12.8	85	0	0.04	0	0	0.01	40.75418;-	5	-0.033
11/9/2017 21:01			0	0.04	0	0	0.01			-0.033
11/9/2017 21:02			0	0.04	0	0	0.01			-0.034
11/9/2017 21:03			0	0.04	0	0	0.01			-0.034
11/9/2017 21:04			0	0.04	0	0	0.01			-0.034
11/9/2017 21:05	12.8	83	0	0.04	0	0	0.01	40.75423;-	-3	-0.034
11/9/2017 21:06			0	0.04	0	0	0.01			-0.035
11/9/2017 21:07			0	0.04	0	0	0.01			-0.035
11/9/2017 21:08			0	0.04	0	0	0.01			-0.035
11/9/2017 21:09			0	0.04	0	0	0.01			-0.035
11/9/2017 21:10	12.8	84	0	0.04	0	0	0.01	40.7542;-7	0	-0.035
11/9/2017 21:11			0	0.04	0	0	0.01			-0.035
11/9/2017 21:12			0	0.04	0	0	0.01			-0.035
11/9/2017 21:13			0	0.04	0	0	0.01			-0.035
11/9/2017 21:14			0	0.04	0	0	0.01			-0.035
11/9/2017 21:15	12.8	90.1	0	0.04	0	0	0.01	40.75416;-	3	-0.035
11/9/2017 21:16			0	0.04	0	0	0.01			-0.035
11/9/2017 21:17			0	0.04	0	0	0.01			-0.035
11/9/2017 21:18			0	0.04	0	0	0.01			-0.035
11/9/2017 21:19			0	0.04	0	0	0.01			-0.035
11/9/2017 21:20	12.8	129.6	0	0.04	0	0	0.01	40.75423;-	-6	-0.035
11/9/2017 21:21			0	0.04	0	0	0.01			-0.035
11/9/2017 21:22			0	0.04	0	0	0.01			-0.035
11/9/2017 21:23			0	0.04	0	0	0.01			-0.035
11/9/2017 21:24			0	0.04	0	0	0.01			-0.035
11/9/2017 21:25	12.8	81	0	0.04	0	0	0.01	40.75419;-	3	-0.035
11/9/2017 21:26			0	0.04	0	0	0.01			-0.035
11/9/2017 21:27			0	0.04	0	0	0.01			-0.032
11/9/2017 21:28										-0.027
11/10/2017 13:43								40.753782699999995;-73.4873005		
11/10/2017 13:44			0	0	0	0	0			
11/10/2017 13:45	12.9	126.5	0	0	0	0	0	40.75419;-	-8	
11/10/2017 13:46			0	0	0	0	0			
11/10/2017 13:47			0	0	0	0	0			
11/10/2017 13:48			0	0	0	0	0			-0.035
11/10/2017 13:49			0	0	0	0	0			-0.036
11/10/2017 13:50	13.1	80	0	0	0	0	0	40.75416;-	1	-0.036
11/10/2017 13:51			0	0	0	0	0			-0.036
11/10/2017 13:52			0	0	0	0	0			-0.037
11/10/2017 13:53			0	0	0	0	0			-0.037
11/10/2017 13:54			0	0	0	0	0			-0.037
11/10/2017 13:55	12.9	85	0	0	0	0	0	40.75413;-	4	-0.037
11/10/2017 13:56			0	0	0	0	0			-0.037
11/10/2017 13:57			0	0	0	0	0			-0.037
11/10/2017 13:58			0	0	0	0	0			-0.037
11/10/2017 13:59			0	0	0	0	0			-0.037
11/10/2017 14:00	13	80	0	0	0	0	0	40.75412;-	12	-0.037
11/10/2017 14:01			0	0	0	0	0			-0.037
11/10/2017 14:02			0	0	0	0	0			-0.037
11/10/2017 14:03			0	0	0	0	0			-0.037
11/10/2017 14:04			0	0	0	0	0			-0.037

11/10/2017 14:05	13	87	0	0	0	0	0	40.75415;-[illegible]	12	-0.037
11/10/2017 14:06			0	0	0	0	0			-0.037
11/10/2017 14:07			0	0	0	0	0			-0.037
11/10/2017 14:08			0	0	0	0	0			-0.037
11/10/2017 14:09			0	0	0	0	0			-0.037
11/10/2017 14:10	13.2	83	0	0	0	0	0	40.75412;-[illegible]	12	-0.037
11/10/2017 14:11			0	0	0	0	0			-0.037
11/10/2017 14:12			0	0	0	0	0			-0.037
11/10/2017 14:13			0	0	0	0	0			-0.037
11/10/2017 14:14			0	0	0	0	0			-0.037
11/10/2017 14:15	13.3	124.5	0	0	0	0	0	40.75413;-[illegible]	6	-0.037
11/10/2017 14:16			0	0	0	0	0			-0.037
11/10/2017 14:17			0	0	0	0	0			-0.037
11/10/2017 14:18			0	0	0	0	0			-0.037
11/10/2017 14:19			0	0	0	0	0			-0.037
11/10/2017 14:20	13.6	117.4	0	0	0	0	0	40.75418;-[illegible]	14	-0.037
11/10/2017 14:21			0	0	0	0	0			-0.037
11/10/2017 14:22			0	0	0	0	0			-0.037
11/10/2017 14:23			0	0	0	0	0			-0.037
11/10/2017 14:24			0	0	0	0	0			-0.037
11/10/2017 14:25	13.9	79	0	0	0	0	0	40.75415;-[illegible]	13	-0.037
11/10/2017 14:26			0	0	0	0	0			-0.037
11/10/2017 14:27			0	0	0	0	0			-0.037
11/10/2017 14:28			0	0	0	0	0			-0.037
11/10/2017 14:29			0	0	0	0	0			-0.037
11/10/2017 14:30	13.6	86	0	0	0	0	0	40.75418;-[illegible]	9	-0.037
11/10/2017 14:31			0	0	0	0	0			-0.037
11/10/2017 14:32			0	0	0	0	0			-0.037
11/10/2017 14:33			0	0	0	0	0			-0.037
11/10/2017 14:34			0	0	0	0	0			-0.037
11/10/2017 14:35	13.6	76.9	0	0	0	0	0	40.75419;-[illegible]	10	-0.037
11/10/2017 14:36			0	0	0	0	0			-0.037
11/10/2017 14:37			0	0	0	0	0			-0.037
11/10/2017 14:38			0	0	0	0	0			-0.037
11/10/2017 14:39			0	0	0	0	0			-0.037
11/10/2017 14:40	14	80	0	0	0	0	0	40.75416;-[illegible]	8	-0.037
11/10/2017 14:41			0	0	0	0	0			-0.037
11/10/2017 14:42			0	0	0	0	0			-0.037
11/10/2017 14:43			0	0	0	0	0			-0.037
11/10/2017 14:44			0	0	0	0	0			-0.037
11/10/2017 14:45	13.7	75.9	0	0	0	0	0	40.75419;-[illegible]	13	-0.037
11/10/2017 14:46			0	0	0	0	0			-0.037
11/10/2017 14:47			0	0	0	0	0			-0.037
11/10/2017 14:48			0	0	0	0	0			-0.037
11/10/2017 14:49			0	0	0	0	0			-0.037
11/10/2017 14:50	13.6	76.9	0	0	0	0	0	40.75409;-[illegible]	6	-0.037
11/10/2017 14:51			0	0	0	0	0			-0.037
11/10/2017 14:52			0	0	0	0	0			-0.037
11/10/2017 14:53			0	0	0	0	0			-0.037
11/10/2017 14:54			0	0	0	0	0			-0.037
11/10/2017 14:55	13.6	76.9	0	0	0	0	0	40.75411;-[illegible]	16	-0.037
11/10/2017 14:56			0	0	0	0	0			-0.037
11/10/2017 14:57			0	0	0	0	0			-0.037
11/10/2017 14:58			0	0	0	0	0			-0.037
11/10/2017 14:59			0	0	0	0	0			-0.037
11/10/2017 15:00	13.7	97.2	0	0	0	0	0	40.75419;-[illegible]	-11	-0.037

11/10/2017 15:01			0	0	0	0	0			-0.037
11/10/2017 15:02			0	0	0	0	0			-0.037
11/10/2017 15:03			0	0	0	0	0			-0.037
11/10/2017 15:04			0	0	0	0	0			-0.037
11/10/2017 15:05	13.6	88.1	0	0	0	0	0	40.7542;-7	0	-0.037
11/10/2017 15:06			0	0	0	0	0			-0.037
11/10/2017 15:07			0	0	0	0	0			-0.037
11/10/2017 15:08			0	0	0	0	0			-0.037
11/10/2017 15:09			0	0	0	0	0			-0.037
11/10/2017 15:10	13.7	83	0	0	0	0	0	40.75418;-	3	-0.037
11/10/2017 15:11			0	0	0	0	0			-0.037
11/10/2017 15:12			0	0	0	0	0			-0.037
11/10/2017 15:13			0	0	0	0	0			-0.037
11/10/2017 15:14			0	0	0	0	0			-0.037
11/10/2017 15:15	13.7	81	0	0	0	0	0	40.75412;-	9	-0.037
11/10/2017 15:16			0	0	0	0	0			-0.037
11/10/2017 15:17			0	0	0	0	0			-0.037
11/10/2017 15:18			0	0	0	0	0			-0.037
11/10/2017 15:19			0	0	0	0	0			-0.037
11/10/2017 15:20	14	75.9	0	0	0	0	0	40.75411;-	13	-0.037
11/10/2017 15:21			0	0	0	0	0			-0.037
11/10/2017 15:22			0	0	0	0	0			-0.037
11/10/2017 15:23			0	0	0	0	0			-0.036
11/10/2017 15:24			0	0	0	0	0			-0.037
11/10/2017 15:25	13.6	116.4	0	0	0	0	0	40.75416;-	7	-0.036
11/10/2017 15:26			0	0	0	0	0			-0.036
11/10/2017 15:27			0	0	0	0	0			-0.036
11/10/2017 15:28			0	0	0	0	0			-0.036
11/10/2017 15:29			0	0	0	0	0			-0.036
11/10/2017 15:30	13.6	122.5	0	0	0	0	0	40.75417;-	13	-0.036
11/10/2017 15:31			0	0	0	0	0			-0.036
11/10/2017 15:32			0	0	0	0	0			-0.037
11/10/2017 15:33			0	0	0	0	0			-0.037
11/10/2017 15:34			0	0	0	0	0			-0.037
11/10/2017 15:35	13.8	79	0	0	0	0	0	40.75404;-	33	-0.037
11/10/2017 15:36			0	0	0	0	0			-0.037
11/10/2017 15:37			0	0	0	0	0			-0.037
11/10/2017 15:38			0	0	0	0	0			-0.037
11/10/2017 15:39			0	0	0	0	0			-0.037
11/10/2017 15:40	13.4	77.9	0	0	0	0	0	40.75417;-	8	-0.036
11/10/2017 15:41			0	0	0	0	0			-0.037
11/10/2017 15:42			0	0	0	0	0			-0.037
11/10/2017 15:43			0	0	0	0	0			-0.037
11/10/2017 15:44			0	0	0	0	0			-0.037
11/10/2017 15:45	13.7	76.9	0	0	0	0	0	40.75414;-	22	-0.036
11/10/2017 15:46			0	0	0	0	0			-0.037
11/10/2017 15:47			0	0	0	0	0			-0.037
11/10/2017 15:48			0	0	0	0	0			-0.037
11/10/2017 15:49			0	0	0	0	0			-0.037
11/10/2017 15:50	13.6	80	0	0	0	0	0	40.75415;-	14	-0.037
11/10/2017 15:51			0	0	0	0	0			-0.037
11/10/2017 15:52			0	0	0	0	0			-0.037
11/10/2017 15:53			0	0	0	0	0			-0.037
11/10/2017 15:54			0	0	0	0	0			-0.036
11/10/2017 15:55	13.7	76.9	0	0	0	0	0	40.75415;-	14	-0.037
11/10/2017 15:56			0	0	0	0	0			-0.037

11/10/2017 15:57			0	0	0	0	0			-0.037
11/10/2017 15:58			0	0	0	0	0			-0.037
11/10/2017 15:59			0	0	0	0	0			-0.036
11/10/2017 16:00	13.8	92.1	0	0	0	0	0	40.75413;-	20	-0.036
11/10/2017 16:01			0	0	0	0	0			-0.037
11/10/2017 16:02			0	0	0	0	0			-0.036
11/10/2017 16:03			0	0	0	0	0			-0.036
11/10/2017 16:04			0	0	0	0	0			-0.037
11/10/2017 16:05	14	84	0	0	0	0	0	40.75413;-	-1	-0.037
11/10/2017 16:06			0	0	0	0	0			-0.037
11/10/2017 16:07			0	0	0	0	0			-0.037
11/10/2017 16:08			0	0	0	0	0			-0.036
11/10/2017 16:09			0	0	0	0	0			-0.036
11/10/2017 16:10	13.8	84	0	0	0	0	0	40.75416;-	6	-0.037
11/10/2017 16:11			0	0	0	0	0			-0.036
11/10/2017 16:12			0	0	0	0	0			-0.036
11/10/2017 16:13			0	0	0	0	0			-0.036
11/10/2017 16:14			0	0	0	0	0			-0.037
11/10/2017 16:15	13.4	99.2	0	0	0	0	0	40.75413;-	0	-0.037
11/10/2017 16:16			0	0	0	0	0			-0.037
11/10/2017 16:17			0	0	0	0	0			-0.037
11/10/2017 16:18			0	0	0	0	0			-0.036
11/10/2017 16:19			0	0	0	0	0			-0.036
11/10/2017 16:20	13.1	86	0	0	0	0	0	40.75405;-	18	-0.036
11/10/2017 16:21			0	0	0	0	0			-0.037
11/10/2017 16:22			0	0	0	0	0			-0.037
11/10/2017 16:23			0	0	0	0	0			-0.037
11/10/2017 16:24			0	0	0	0	0			-0.036
11/10/2017 16:25	13.3	83	0	0	0	0	0	40.75416;-	-1	-0.037
11/10/2017 16:26			0	0	0	0	0			-0.036
11/10/2017 16:27			0	0	0	0	0			-0.036
11/10/2017 16:28			0	0	0	0	0			-0.036
11/10/2017 16:29			0	0	0	0	0			-0.036
11/10/2017 16:30	13.1	79	0	0	0	0	0	40.75413;-	3	-0.036
11/10/2017 16:31			0	0	0	0	0			-0.036
11/10/2017 16:32			0	0	0	0	0			-0.037
11/10/2017 16:33			0	0	0	0	0			-0.037
11/10/2017 16:34			0	0	0	0	0			-0.036
11/10/2017 16:35	13.1	82	0	0	0	0	0	40.75413;-	10	-0.037
11/10/2017 16:36			0	0	0	0	0			-0.037
11/10/2017 16:37			0	0	0	0	0			-0.037
11/10/2017 16:38			0	0	0	0	0			-0.037
11/10/2017 16:39			0	0	0	0	0			-0.037
11/10/2017 16:40	13.4	88.1	0	0	0	0	0	40.75412;-	6	-0.037
11/10/2017 16:41			0	0	0	0	0			-0.037
11/10/2017 16:42			0	0	0	0	0			-0.037
11/10/2017 16:43			0	0	0	0	0			-0.037
11/10/2017 16:44			0	0	0	0	0			-0.037
11/10/2017 16:45	13.1	77.9	0	0	0	0	0	40.75414;-	5	-0.036
11/10/2017 16:46			0	0	0	0	0			-0.036
11/10/2017 16:47			0	0	0	0	0			-0.036
11/10/2017 16:48			0	0	0	0	0			-0.036
11/10/2017 16:49			0	0	0	0	0			-0.036
11/10/2017 16:50	13.2	88.1	0	0	0	0	0	40.75412;-	7	-0.036
11/10/2017 16:51			0	0	0	0	0			-0.036
11/10/2017 16:52			0	0	0	0	0			-0.036

11/10/2017 16:53			0	0	0	0	0			-0.036
11/10/2017 16:54			0	0	0	0	0			-0.037
11/10/2017 16:55	13.2	79	0	0	0	0	0	40.75415;-	4	-0.037
11/10/2017 16:56			0	0	0	0	0			-0.037
11/13/2017 13:20	12.3	128.6								
11/13/2017 13:20								40.7539533;-73.4843798		
11/13/2017 13:21			0	0	0	0	0			
11/13/2017 13:22			0	0	0	0	0			-0.02
11/13/2017 13:23			0	0	0	0	0			-0.025
11/13/2017 13:24			0	0	0	0	0			-0.028
11/13/2017 13:25	12.4	97.2	0	0	0	0	0	40.75414;-	19	-0.03
11/13/2017 13:26			0	0	0	0	0			-0.02
11/13/2017 13:27			0	0	0	0	0			-0.02
11/13/2017 13:28			0	0	0	0	0			-0.025
11/13/2017 13:29			0	0	0	0	0			-0.028
11/13/2017 13:30	12.3	88.1	0	0	0	0	0	40.75413;-	24	-0.03
11/13/2017 13:31			0	0	0	0	0			-0.032
11/13/2017 13:32			0	0	0	0	0			-0.033
11/13/2017 13:33			0	0	0	0	0			-0.033
11/13/2017 13:34			0	0	0	0	0			-0.034
11/13/2017 13:35	12.3	87	0	0	0	0	0	40.75411;-	28	-0.034
11/13/2017 13:36			0	0	0	0	0			-0.034
11/13/2017 13:37			0	0	0	0	0			-0.035
11/13/2017 13:38			0	0	0	0	0			-0.035
11/13/2017 13:39			0	0	0	0	0			-0.035
11/13/2017 13:40	12.4	92.1	0	0	0	0	0	40.75414;-	20	-0.035
11/13/2017 13:41			0	0	0	0	0			-0.035
11/13/2017 13:42			0	0	0	0	0			-0.035
11/13/2017 13:43			0	0	0	0	0			-0.035
11/13/2017 13:44			0	0	0	0	0			-0.035
11/13/2017 13:45	12.4	88.1	0	0	0	0	0	40.75418;-	16	-0.035
11/13/2017 13:46			0	0	0	0	0			-0.035
11/13/2017 13:47			0	0	0	0	0			-0.035
11/13/2017 13:48			0	0	0	0	0			-0.035
11/13/2017 13:49			0	0	0	0	0			-0.035
11/13/2017 13:50	12.4	93.1	0	0	0	0	0	40.75413;-	14	-0.035
11/13/2017 13:51			0	0	0	0	0			-0.035
11/13/2017 13:52			0	0	0	0	0			-0.035
11/13/2017 13:53			0	0	0	0	0			-0.035
11/13/2017 13:54			0	0	0	0	0			-0.035
11/13/2017 13:55	12.3	101.2	0	0	0	0	0	40.75411;-	20	-0.035
11/13/2017 13:56			0	0	0	0	0			-0.035
11/13/2017 13:57			0	0	0	0	0			-0.035
11/13/2017 13:58			0	0	0	0	0			-0.035
11/13/2017 13:59			0	0	0	0	0			-0.035
11/13/2017 14:00	12.3	96.2	0	0	0	0	0	40.75414;-	13	-0.035
11/13/2017 14:01			0	0	0	0	0			-0.035
11/13/2017 14:02			0	0	0	0	0			-0.035
11/13/2017 14:03			0	0	0	0	0			-0.035
11/13/2017 14:04			0	0	0	0	0			-0.035
11/13/2017 14:05	12.3	88.1	0	0	0	0	0	40.75414;-	13	-0.035
11/13/2017 14:06			0	0	0	0	0			-0.035
11/13/2017 14:07			0	0	0	0	0			-0.035
11/13/2017 14:08			0	0	0	0	0			-0.035
11/13/2017 14:09			0	0	0	0	0			-0.035
11/13/2017 14:10	12.2	89.1	0	0	0	0	0	40.75413;-	17	-0.035

11/13/2017 14:11			0	0	0	0	0			-0.035
11/13/2017 14:12			0	0	0	0	0			-0.035
11/13/2017 14:13			0	0	0	0	0			-0.035
11/13/2017 14:14			0	0	0	0	0			-0.035
11/13/2017 14:15	12.2	88.1	0	0	0	0	0	40.75413;-	10	-0.035
11/13/2017 14:16			0	0	0	0	0			-0.035
11/13/2017 14:17			0	0	0	0	0			-0.035
11/13/2017 14:18			0	0	0	0	0			-0.035
11/13/2017 14:19			0	0	0	0	0			-0.035
11/13/2017 14:20	12.2	88.1	0	0	0	0	0	40.75419;-	5	-0.035
11/13/2017 14:21			0	0	0	0	0			-0.035
11/13/2017 14:22			0	0	0	0	0			-0.035
11/13/2017 14:23			0	0	0	0	0			-0.035
11/13/2017 14:24			0	0	0	0	0			-0.034
11/13/2017 14:25	12.2	89.1	0	0	0	0	0	40.75412;-	11	-0.034
11/13/2017 14:26			0	0	0	0	0			-0.034
11/13/2017 14:27			0	0	0	0	0			-0.035
11/13/2017 14:28			0	0	0	0	0			-0.035
11/13/2017 14:29			0	0	0	0	0			-0.034
11/13/2017 14:30	12.1	91.1	0	0	0	0	0	40.75407;-	16	-0.035
11/13/2017 14:31			0	0	0	0	0			-0.035
11/13/2017 14:32			0	0	0	0	0			-0.035
11/13/2017 14:33			0	0	0	0	0			-0.035
11/13/2017 14:34			0	0	0	0	0			-0.034
11/13/2017 14:35	12.2	104.3	0	0	0	0	0	40.75414;-	9	-0.034
11/13/2017 14:36			0	0	0	0	0			-0.034
11/13/2017 14:37			0	0	0	0	0			-0.034
11/13/2017 14:38			0	0	0	0	0			-0.034
11/13/2017 14:39			0	0	0	0	0			-0.034
11/13/2017 14:40	12.1	87	0	0	0	0	0	40.75417;-	7	-0.035
11/13/2017 14:41			0	0	0	0	0			-0.034
11/13/2017 14:42			0	0	0	0	0			-0.034
11/13/2017 14:43			0	0	0	0	0			-0.034
11/13/2017 14:44			0	0	0	0	0			-0.034
11/13/2017 14:45	12.1	89.1	0	0	0	0	0	40.75417;-	9	-0.034
11/13/2017 14:46			0	0	0	0	0			-0.034
11/13/2017 14:47			0	0	0	0	0			-0.035
11/13/2017 14:48			0	0	0	0	0			-0.034
11/13/2017 14:49			0	0	0	0	0			-0.034
11/13/2017 14:50	12.1	89.1	0	0	0	0	0	40.75414;-	13	-0.034
11/13/2017 14:51			0	0	0	0	0			-0.034
11/13/2017 14:52			0	0	0	0	0			-0.034
11/13/2017 14:53			0	0	0	0	0			-0.034
11/13/2017 14:54			0	0	0	0	0			-0.034
11/13/2017 14:55	12.1	89.1	0	0	0	0	0	40.75414;-	26	-0.034
11/13/2017 14:56			0	0	0	0	0			-0.034
11/13/2017 14:57			0	0	0	0	0			-0.034
11/13/2017 14:58			0	0	0	0	0			-0.034
11/13/2017 14:59			0	0	0	0	0			-0.034
11/13/2017 15:00	12.1	92.1	0	0	0	0	0	40.75413;-	15	-0.034
11/13/2017 15:01			0	0	0	0	0			-0.034
11/13/2017 15:02			0	0	0	0	0			-0.034
11/13/2017 15:03			0	0	0	0	0			-0.034
11/13/2017 15:04			0	0	0	0	0			-0.034
11/13/2017 15:05	12.1	89.1	0	0	0	0	0	40.75411;-	13	-0.034
11/13/2017 15:06			0	0	0	0	0			-0.034

11/13/2017 15:07			0	0	0	0	0			-0.034
11/13/2017 15:08			0	0	0	0	0			-0.034
11/13/2017 15:09			0	0	0	0	0			-0.034
11/13/2017 15:10	12.1	98.2	0	0	0	0	0	40.75408;-	15	-0.034
11/13/2017 15:11			0	0	0	0	0			-0.034
11/13/2017 15:12			0	0	0	0	0			-0.034
11/13/2017 15:13			0	0	0	0	0			-0.034
11/13/2017 15:14			0	0	0	0	0			-0.034
11/13/2017 15:15	12.1	98.2	0	0	0	0	0	40.75406;-	22	-0.034
11/13/2017 15:16			0	0	0	0	0			-0.034
11/13/2017 15:17			0	0	0	0	0			-0.034
11/13/2017 15:18			0	0	0	0	0			-0.034
11/13/2017 15:19			0	0	0	0	0			-0.034
11/13/2017 15:20	12.1	94.1	0	0	0	0	0	40.75408;-	20	-0.034
11/13/2017 15:21			0	0	0	0	0			-0.034
11/13/2017 15:22			0	0	0	0	0			-0.034
11/13/2017 15:23			0	0	0	0	0			-0.034
11/13/2017 15:24			0	0	0	0	0			-0.034
11/13/2017 15:25	12.1	96.2	0	0	0	0	0	40.75408;-	20	-0.034
11/13/2017 15:26			0	0	0	0	0			-0.034
11/13/2017 15:27			0	0	0	0	0			-0.034
11/13/2017 15:28			0	0	0	0	0			-0.034
11/13/2017 15:29			0	0	0	0	0			-0.034
11/13/2017 15:30	12	145.8	0	0	0	0	0			-0.034
11/13/2017 15:30								40.75414;-	17	
11/13/2017 15:31			0	0	0	0	0			-0.034
11/13/2017 15:32			0	0	0	0	0			-0.033
11/13/2017 15:33			0	0	0	0	0			-0.033
11/13/2017 15:34			0	0	0	0	0			-0.033
11/13/2017 15:35	12.1	89.1	0	0	0	0	0	40.75405;-	36	-0.034
11/13/2017 15:36			0	0	0	0	0			-0.034
11/13/2017 15:37			0	0	0	0	0			-0.034
11/13/2017 15:38			0	0	0	0	0			-0.034
11/13/2017 15:39			0	0	0	0	0			-0.034
11/13/2017 15:40	12	94.1	0	0	0	0	0	40.75416;-	17	-0.034
11/13/2017 15:41			0	0	0	0	0			-0.034
11/13/2017 15:42			0	0	0	0	0			-0.034
11/13/2017 15:43			0	0	0	0	0			-0.034
11/13/2017 15:44			0	0	0	0	0			-0.033
11/13/2017 15:45	12.2	90.1	0	0	0	0	0	40.75413;-	21	-0.034
11/13/2017 15:46			0	0	0	0	0			-0.034
11/13/2017 15:47			0	0	0	0	0			-0.034
11/13/2017 15:48			0	0	0	0	0			-0.034
11/13/2017 15:49			0	0	0	0	0			-0.034
11/13/2017 15:50	12.1	99.2	0	0	0	0	0	40.75409;-	25	-0.034
11/13/2017 15:51			0	0	0	0	0			-0.034
11/13/2017 15:52			0	0	0	0	0			-0.033
11/13/2017 15:53			0	0	0	0	0			-0.034
11/13/2017 15:54			0	0	0	0	0			-0.034
11/13/2017 15:55	12.1	97.2	0	0	0	0	0	40.75411;-	15	-0.034
11/13/2017 15:56			0	0	0	0	0			-0.034
11/13/2017 15:57			0	0	0	0	0			-0.034
11/13/2017 15:58			0	0	0	0	0			-0.034
11/13/2017 15:59			0	0	0	0	0			-0.033
11/13/2017 16:00	11.8	141.7	0	0	0	0	0	40.75409;-	8	-0.034
11/13/2017 16:01			0	0	0	0	0			-0.034

11/13/2017 16:02			0	0	0	0	0			-0.033
11/13/2017 16:03			0	0	0	0	0			-0.033
11/13/2017 16:04			0	0	0	0	0			-0.034
11/13/2017 16:05	12.1	96.2	0	0	0	0	0	40.75407;-	28	-0.033
11/13/2017 16:06			0	0	0	0	0			-0.033
11/13/2017 16:07			0	0	0	0	0			-0.033
11/13/2017 16:08			0	0	0	0	0			-0.033
11/13/2017 16:09			0	0	0	0	0			-0.033
11/13/2017 16:10	12.1	94.1	0	0.001	0	0	0	40.75413;-	14	-0.033
11/13/2017 16:11			0	0.001	0	0	0			-0.033
11/13/2017 16:12			0	0.001	0	0	0			-0.033
11/13/2017 16:13			0	0.001	0	0	0			-0.033
11/13/2017 16:14			0	0.001	0	0	0			-0.033
11/13/2017 16:15	12.1	92.1	0	0.001	0	0	0	40.75414;-	14	-0.032
11/13/2017 16:16			0	0.001	0	0	0			-0.033
11/13/2017 16:17			0	0.001	0	0	0			-0.032
11/13/2017 16:18			0	0.001	0	0	0			-0.033
11/13/2017 16:19			0	0.001	0	0	0			-0.033
11/13/2017 16:20	12.1	98.2	0	0.001	0	0	0	40.75414;-	19	-0.033
11/13/2017 16:21			0	0.001	0	0	0			-0.033
11/13/2017 16:22			0	0.001	0	0	0			-0.033
11/13/2017 16:23			0	0.001	0	0	0			-0.033
11/13/2017 16:24			0.001	0.001	0	0	0			-0.033
11/13/2017 16:25	12	100.2	0	0.001	0	0	0	40.75415;-	11	-0.034
11/13/2017 16:26			0.001	0.001	0	0	0			-0.034
11/13/2017 16:27			0	0.001	0	0	0			-0.033
11/13/2017 16:28			0	0.001	0	0	0			-0.033
11/13/2017 16:29			0	0.001	0	0	0			-0.033
11/13/2017 16:30	12.1	87	0.001	0.001	0	0	0	40.75413;-	7	-0.033
11/13/2017 16:31			0	0.001	0	0	0			-0.033
11/13/2017 16:32			0.001	0.001	0	0	0			-0.033
11/13/2017 16:33			0	0.001	0	0	0			-0.034
11/13/2017 16:34			0	0.001	0	0	0			-0.033
11/13/2017 16:35	12.2	96.2	0.001	0.001	0	0	0	40.75412;-	13	-0.033
11/13/2017 16:36			0.001	0.001	0	0	0			-0.033
11/13/2017 16:37			0.001	0.002	0	0	0			-0.033
11/13/2017 16:38			0	0.002	0	0	0			-0.033
11/13/2017 16:39			0.001	0.002	0	0	0			-0.033
11/13/2017 16:40	12.1	89.1	0.001	0.002	0	0	0	40.75414;-	21	-0.033
11/13/2017 16:41			0	0.002	0	0	0			-0.033
11/13/2017 16:42			0	0.002	0	0	0			-0.033
11/13/2017 16:43			0	0.002	0	0	0			-0.033
11/13/2017 16:44			0	0.002	0	0	0			-0.033
11/13/2017 16:45	12.1	94.1	0.001	0.002	0	0	0	40.75417;-	8	-0.034
11/13/2017 16:46			0.001	0.002	0	0	0			-0.033
11/13/2017 16:47			0.002	0.003	0	0	0			-0.034
11/13/2017 16:48			0.001	0.003	0	0	0			-0.034
11/13/2017 16:49			0.001	0.003	0	0	0			-0.034
11/13/2017 16:50	12.1	88.1	0.002	0.003	0	0	0	40.75416;-	6	-0.034
11/13/2017 16:51			0.002	0.003	0	0	0			-0.034
11/13/2017 16:52			0.001	0.003	0	0	0			-0.034
11/13/2017 16:53			0.002	0.003	0	0	0			-0.034
11/13/2017 16:54			0.002	0.003	0	0	0			-0.034
11/13/2017 16:55	12.1	94.1	0.002	0.003	0	0	0	40.75417;-	10	-0.033
11/13/2017 16:56			0.002	0.003	0	0	0			-0.034
11/13/2017 16:57			0.002	0.003	0	0	0			-0.034

11/13/2017 16:58			0.002	0.003	0	0	0			-0.034
11/13/2017 16:59			0.003	0.003	0	0.001	0			-0.034
11/13/2017 17:00	12.1	98.2	0.002	0.003	0	0.001	0	40.75418;-	5	-0.034
11/13/2017 17:01			0.002	0.003	0	0.001	0			-0.034
11/13/2017 17:02			0.002	0.003	0	0.001	0			-0.034
11/13/2017 17:03			0.003	0.003	0	0.001	0			-0.034
11/13/2017 17:04			0.002	0.004	0	0.001	0			-0.034
11/13/2017 17:05	12.1	90.1	0.003	0.004	0	0.001	0	40.75419;-	7	-0.034
11/13/2017 17:06			0.003	0.004	0	0.001	0			-0.034
11/13/2017 17:07			0.003	0.004	0	0.001	0			-0.033
11/13/2017 17:08			0.003	0.004	0	0.001	0			-0.034
11/13/2017 17:09			0.003	0.004	0	0.001	0			-0.034
11/13/2017 17:10	12.1	93.1	0.003	0.004	0	0.001	0	40.75418;-	6	-0.034
11/13/2017 17:11			0.003	0.004	0	0.001	0			-0.034
11/13/2017 17:12			0.003	0.004	0	0.002	0			-0.034
11/13/2017 17:13			0.003	0.004	0	0.002	0			-0.034
11/13/2017 17:14			0.003	0.004	0	0.002	0			-0.034
11/13/2017 17:15	12.1	92.1	0.003	0.004	0	0.002	0	40.75418;-	10	-0.034
11/13/2017 17:16			0.003	0.005	0	0.002	0			-0.034
11/13/2017 17:17			0.004	0.005	0	0.002	0			-0.034
11/13/2017 17:18			0.003	0.005	0	0.002	0			-0.034
11/13/2017 17:19			0.004	0.005	0	0.002	0			-0.034
11/13/2017 17:20	12.1	92.1	0.005	0.005	0	0.002	0	40.75416;-	10	-0.034
11/13/2017 17:21			0.004	0.005	0	0.002	0			-0.034
11/13/2017 17:22			0.004	0.005	0	0.002	0			-0.034
11/13/2017 17:23			0.004	0.006	0	0.002	0			-0.034
11/13/2017 17:24			0.004	0.006	0	0.002	0			-0.034
11/13/2017 17:25	12	91.1	0.003	0.006	0	0.003	0	40.75418;-	3	-0.034
11/13/2017 17:26			0.003	0.006	0	0.003	0			-0.034
11/13/2017 17:27			0.004	0.006	0	0.003	0			-0.034
11/13/2017 17:28			0.004	0.006	0	0.003	0			-0.034
11/13/2017 17:29			0.005	0.006	0	0.003	0			-0.033
11/13/2017 17:30	12.1	88.1	0.004	0.006	0	0.003	0	40.75421;-	7	-0.034
11/13/2017 17:31			0.004	0.006	0	0.003	0			-0.033
11/13/2017 17:32			0.003	0.006	0	0.003	0			-0.034
11/13/2017 17:33			0.005	0.006	0	0.003	0			-0.034
11/13/2017 17:34			0.005	0.006	0	0.003	0			-0.033
11/13/2017 17:35	12.1	103.2	0.004	0.006	0	0.003	0	40.75416;-	12	-0.033
11/13/2017 17:36			0.003	0.006	0	0.003	0			-0.033
11/13/2017 17:37			0.005	0.006	0	0.003	0			-0.033
11/13/2017 17:38			0.005	0.006	0	0.003	0			-0.033
11/13/2017 17:39			0.004	0.006	0	0.003	0			-0.033
11/13/2017 17:40	12.1	94.1	0.004	0.006	0	0.003	0	40.75417;-	5	-0.033
11/13/2017 17:41			0.005	0.006	0	0.003	0			-0.033
11/13/2017 17:42			0.006	0.007	0	0.003	0			-0.033
11/13/2017 17:43			0.004	0.007	0	0.003	0			-0.033
11/13/2017 17:44			0.006	0.007	0	0.003	0			-0.033
11/13/2017 17:45	12.3	106.3	0.004	0.007	0	0.003	0	40.75414;-	15	-0.033
11/13/2017 17:46			0.006	0.007	0	0.004	0			-0.033
11/13/2017 17:47			0.006	0.007	0	0.004	0			-0.033
11/13/2017 17:48			0.006	0.007	0	0.004	0			-0.033
11/13/2017 17:49			0.006	0.007	0	0.004	0			-0.033
11/13/2017 17:50	12.3	89.1	0.006	0.007	0	0.004	0	40.75415;-	19	-0.033
11/13/2017 17:51			0.006	0.007	0	0.004	0			-0.034
11/13/2017 17:52			0.005	0.007	0	0.004	0			-0.033
11/13/2017 17:53			0.006	0.007	0	0.004	0			-0.033

11/13/2017 17:54			0.006	0.007	0	0.005	0			-0.033
11/13/2017 17:55	12.1	88.1	0.006	0.007	0	0.005	0	40.75415;-	16	-0.033
11/13/2017 17:56			0.006	0.007	0	0.005	0			-0.033
11/13/2017 17:57			0.006	0.007	0	0.005	0			-0.033
11/13/2017 17:58			0.006	0.007	0	0.005	0			-0.033
11/13/2017 17:59			0.006	0.007	0	0.005	0			-0.033
11/13/2017 18:00	12.1	89.1	0.006	0.007	0	0.005	0	40.75415;-	12	-0.033
11/13/2017 18:01			0.006	0.007	0	0.005	0			-0.033
11/13/2017 18:02			0.007	0.007	0	0.005	0			-0.033
11/13/2017 18:03			0.007	0.007	0	0.005	0			-0.033
11/13/2017 18:04			0.007	0.007	0	0.005	0			-0.033
11/13/2017 18:05	12.1	88.1	0.007	0.007	0	0.005	0	40.75414;-	17	-0.033
11/13/2017 18:06			0.006	0.007	0	0.005	0			-0.033
11/13/2017 18:07			0.006	0.007	0	0.005	0			-0.033
11/13/2017 18:08			0.006	0.007	0	0.005	0			-0.033
11/13/2017 18:09			0.007	0.007	0	0.005	0			-0.033
11/13/2017 18:10	12.1	103.2	0.007	0.007	0	0.005	0	40.75411;-	20	-0.033
11/13/2017 18:11			0.006	0.007	0	0.005	0			-0.034
11/13/2017 18:12			0.006	0.007	0	0.005	0			-0.034
11/13/2017 18:13			0.006	0.007	0	0.005	0			-0.034
11/13/2017 18:14			0.007	0.007	0	0.005	0			-0.034
11/13/2017 18:15	12.1	90.1	0.006	0.007	0	0.006	0	40.75411;-	24	-0.034
11/13/2017 18:16			0.006	0.007	0	0.006	0			-0.034
11/13/2017 18:17			0.007	0.007	0	0.006	0			-0.034
11/13/2017 18:18			0.007	0.008	0	0.006	0			-0.034
11/13/2017 18:19			0.007	0.008	0	0.006	0			-0.034
11/13/2017 18:20	12.2	102.2	0.007	0.008	0	0.006	0	40.75416;-	20	-0.034
11/13/2017 18:21			0.007	0.008	0	0.006	0			-0.034
11/13/2017 18:22			0.008	0.009	0	0.006	0			-0.034
11/13/2017 18:23			0.008	0.009	0	0.006	0			-0.034
11/13/2017 18:24			0.009	0.009	0	0.006	0			-0.034
11/13/2017 18:25	12.1	94.1	0.007	0.009	0	0.006	0	40.75412;-	10	-0.034
11/13/2017 18:26			0.008	0.009	0	0.006	0			-0.034
11/13/2017 18:27			0.008	0.009	0	0.006	0			-0.034
11/13/2017 18:28			0.008	0.01	0	0.006	0			-0.034
11/13/2017 18:29			0.008	0.01	0	0.006	0			-0.034
11/13/2017 18:30	12.2	91.1	0.008	0.01	0	0.007	0	40.75414;-	11	-0.034
11/13/2017 18:31			0.008	0.01	0	0.007	0			-0.034
11/13/2017 18:32			0.009	0.01	0	0.007	0			-0.034
11/13/2017 18:33			0.009	0.01	0	0.007	0			-0.034
11/13/2017 18:34			0.009	0.01	0	0.007	0			-0.034
11/13/2017 18:35	12.1	88.1	0.009	0.01	0	0.007	0	40.75411;-	13	-0.034
11/13/2017 18:36			0.01	0.01	0	0.007	0.001			-0.034
11/13/2017 18:37			0.01	0.01	0	0.007	0.001			-0.034
11/13/2017 18:38			0.01	0.01	0	0.007	0.001			-0.034
11/13/2017 18:39			0.009	0.01	0	0.008	0.001			-0.034
11/13/2017 18:40	12.1	98.2	0.01	0.01	0	0.008	0.001	40.75416;-	16	-0.033
11/13/2017 18:41			0.01	0.01	0	0.008	0.001			-0.034
11/13/2017 18:42			0.009	0.01	0	0.008	0.001			-0.034
11/13/2017 18:43			0.009	0.01	0	0.008	0.001			-0.034
11/13/2017 18:44			0.009	0.01	0	0.008	0.001			-0.034
11/13/2017 18:45	12.1	89.1	0.01	0.01	0	0.008	0.001	40.75412;-	15	-0.033
11/13/2017 18:46			0.008	0.01	0	0.008	0.001			-0.033
11/13/2017 18:47			0.009	0.01	0	0.008	0.001			-0.033
11/13/2017 18:48			0.009	0.01	0	0.008	0.001			-0.033
11/13/2017 18:49			0.009	0.01	0	0.008	0.001			-0.033

11/13/2017 18:50	12.1	93.1	0.009	0.01	0	0.008	0.001	40.75414;-	6	-0.033
11/13/2017 18:51			0.01	0.01	0	0.008	0.001			-0.033
11/13/2017 18:52			0.008	0.01	0	0.008	0.001			-0.033
11/13/2017 18:53			0.009	0.01	0	0.008	0.001			-0.033
11/13/2017 18:54			0.01	0.01	0	0.008	0.001			-0.034
11/13/2017 18:55	12.2	89.1	0.01	0.01	0	0.008	0.001	40.75417;-	7	-0.033
11/13/2017 18:56			0.01	0.01	0	0.008	0.001			-0.033
11/13/2017 18:57			0.01	0.01	0	0.008	0.001			-0.033
11/13/2017 18:58			0.009	0.01	0	0.008	0.001			-0.033
11/13/2017 18:59			0.01	0.01	0	0.008	0.001			-0.033
11/13/2017 19:00	12.2	89.1	0.01	0.01	0	0.008	0.001	40.75422;-	31	-0.034
11/13/2017 19:01			0.009	0.01	0	0.008	0.001			-0.034
11/13/2017 19:02			0.008	0.01	0	0.008	0.001			-0.034
11/13/2017 19:03			0.01	0.01	0	0.008	0.001			-0.034
11/13/2017 19:04			0.01	0.01	0	0.008	0.001			-0.033
11/13/2017 19:05	12	88.1	0.01	0.01	0	0.008	0.001	40.75411;-	18	-0.033
11/13/2017 19:06			0.01	0.01	0	0.009	0.001			-0.033
11/13/2017 19:07			0.01	0.011	0	0.009	0.001			-0.033
11/13/2017 19:08			0.008	0.011	0	0.009	0.001			-0.034
11/13/2017 19:09			0.01	0.011	0	0.009	0.001			-0.034
11/13/2017 19:10	12	98.2	0.01	0.011	0	0.009	0.001	40.75416;-	30	-0.034
11/13/2017 19:11			0.01	0.011	0	0.009	0.001			-0.034
11/13/2017 19:12			0.01	0.011	0	0.009	0.001			-0.034
11/13/2017 19:13			0.01	0.011	0	0.009	0.001			-0.034
11/13/2017 19:14			0.009	0.011	0	0.009	0.001			-0.034
11/13/2017 19:15	12.1	91.1	0.01	0.011	0	0.009	0.001	40.75414;-	15	-0.034
11/13/2017 19:16			0.009	0.011	0	0.009	0.001			-0.033
11/13/2017 19:17			0.01	0.011	0	0.009	0.001			-0.033
11/13/2017 19:18			0.009	0.011	0	0.009	0.001			-0.033
11/13/2017 19:19			0.01	0.011	0	0.009	0.001			-0.033
11/13/2017 19:20	12.1	100.2	0.01	0.011	0	0.009	0.001	40.75416;-	5	-0.033
11/13/2017 19:21			0.01	0.011	0	0.009	0.001			-0.033
11/13/2017 19:22			0.01	0.011	0	0.009	0.001			-0.034
11/13/2017 19:23			0.01	0.011	0	0.009	0.001			-0.034
11/13/2017 19:24			0.01	0.011	0	0.009	0.001			-0.034
11/13/2017 19:25	11.9	143.7	0.01	0.011	0	0.009	0.001	40.75418;-	3	-0.034
11/13/2017 19:26			0.011	0.011	0	0.009	0.001			-0.034
11/13/2017 19:27			0.01	0.011	0	0.009	0.001			-0.034
11/13/2017 19:28			0.01	0.011	0	0.009	0.001			-0.033
11/13/2017 19:29			0.01	0.011	0	0.009	0.002			-0.033
11/13/2017 19:30	12.1	90.1	0.01	0.011	0	0.009	0.002	40.75417;-	6	-0.033
11/13/2017 19:31			0.01	0.011	0	0.009	0.002			-0.033
11/13/2017 19:32			0.011	0.011	0	0.009	0.002			-0.033
11/13/2017 19:33			0.011	0.011	0	0.009	0.002			-0.033
11/13/2017 19:34			0.01	0.011	0	0.009	0.002			-0.033
11/13/2017 19:35	12	89.1	0.01	0.011	0	0.01	0.002	40.75415;-	9	-0.033
11/13/2017 19:36			0.01	0.011	0	0.01	0.002			-0.033
11/13/2017 19:37			0.011	0.011	0	0.01	0.002			-0.034
11/13/2017 19:38			0.009	0.011	0	0.01	0.002			-0.033
11/13/2017 19:39			0.01	0.011	0	0.009	0.002			-0.033
11/13/2017 19:40	12.1	95.1	0.009	0.011	0	0.009	0.002	40.75416;-	10	-0.033
11/13/2017 19:41			0.009	0.011	0	0.009	0.002			-0.033
11/13/2017 19:42			0.009	0.011	0	0.009	0.002			-0.034
11/13/2017 19:43			0.009	0.011	0	0.009	0.002			-0.034
11/13/2017 19:44			0.008	0.011	0	0.009	0.002			-0.034
11/13/2017 19:45	12	105.3	0.01	0.011	0	0.009	0.002	40.75416;-	11	-0.034

11/13/2017 19:46			0.009	0.011	0	0.009	0.002			-0.034
11/13/2017 19:47			0.01	0.011	0	0.009	0.002			-0.034
11/13/2017 19:48			0.011	0.011	0	0.009	0.002			-0.034
11/13/2017 19:49			0.009	0.011	0	0.009	0.002			-0.034
11/13/2017 19:50	12	89.1	0.009	0.011	0	0.008	0.002	40.75415;-	13	-0.034
11/13/2017 19:51			0.01	0.011	0	0.008	0.002			-0.034
11/13/2017 19:52			0.009	0.011	0	0.008	0.002			-0.034
11/13/2017 19:53			0.009	0.011	0	0.008	0.002			-0.034
11/13/2017 19:54			0.011	0.011	0	0.008	0.002			-0.034
11/13/2017 19:55	12	91.1	0.01	0.011	0	0.008	0.002	40.75411;-	16	-0.034
11/13/2017 19:56			0.01	0.011	0	0.008	0.002			-0.034
11/13/2017 19:57			0.009	0.011	0	0.008	0.002			-0.034
11/13/2017 19:58			0.009	0.011	0	0.009	0.002			-0.034
11/13/2017 19:59			0.008	0.011	0	0.008	0.002			-0.034
11/13/2017 20:00	12	94.1	0.008	0.011	0	0.008	0.002	40.75409;-	13	-0.034
11/13/2017 20:01			0.009	0.011	0	0.008	0.002			-0.034
11/13/2017 20:02			0.009	0.011	0	0.008	0.002			-0.034
11/13/2017 20:03			0.01	0.011	0	0.008	0.002			-0.034
11/13/2017 20:04			0.009	0.011	0	0.008	0.002			-0.034
11/13/2017 20:05	12	90.1	0.009	0.011	0	0.008	0.002	40.75413;-	15	-0.034
11/13/2017 20:06			0.009	0.011	0	0.008	0.002			-0.034
11/13/2017 20:07			0.01	0.011	0	0.008	0.002			-0.034
11/13/2017 20:08			0.009	0.011	0	0.008	0.002			-0.034
11/13/2017 20:09			0.009	0.011	0	0.008	0.002			-0.034
11/13/2017 20:10	12	94.1	0.009	0.011	0	0.008	0.002	40.75397;-	24	-0.034
11/13/2017 20:11			0.008	0.011	0	0.008	0.002			-0.033
11/13/2017 20:12			0.008	0.011	0	0.008	0.002			-0.033
11/13/2017 20:13			0.008	0.011	0	0.008	0.002			-0.034
11/13/2017 20:14			0.008	0.011	0	0.008	0.002			-0.034
11/13/2017 20:15	12	90.1	0.008	0.011	0	0.008	0.002	40.75411;-	10	-0.034
11/13/2017 20:16			0.009	0.011	0	0.008	0.002			-0.034
11/13/2017 20:17			0.009	0.011	0	0.008	0.002			-0.034
11/13/2017 20:18			0.009	0.011	0	0.008	0.002			-0.034
11/13/2017 20:19			0.008	0.011	0	0.008	0.002			-0.034
11/13/2017 20:20	12	95.1	0.008	0.011	0	0.008	0.002	40.75413;-	9	-0.034
11/13/2017 20:21			0.009	0.011	0	0.008	0.002			-0.034
11/13/2017 20:22			0.009	0.011	0	0.008	0.002			-0.034
11/13/2017 20:23			0.009	0.011	0	0.008	0.003			-0.034
11/13/2017 20:24			0.01	0.011	0	0.008	0.003			-0.034
11/13/2017 20:25	12	89.1	0.009	0.011	0	0.008	0.003	40.75413;-	6	-0.034
11/13/2017 20:26			0.009	0.011	0	0.008	0.003			-0.034
11/13/2017 20:27			0.009	0.011	0	0.008	0.003			-0.034
11/13/2017 20:28			0.009	0.011	0	0.008	0.003			-0.034
11/13/2017 20:29			0.01	0.011	0	0.008	0.003			-0.034
11/13/2017 20:30	12	97.2	0.011	0.011	0	0.008	0.003	40.75416;-	-3	-0.034
11/13/2017 20:31			0.01	0.011	0	0.008	0.003			-0.034
11/13/2017 20:32			0.01	0.011	0	0.008	0.003			-0.034
11/13/2017 20:33			0.011	0.011	0	0.009	0.003			-0.034
11/13/2017 20:34			0.011	0.011	0	0.009	0.003			-0.034
11/13/2017 20:35	11.9	104.3	0.011	0.011	0	0.009	0.003	40.75417;-	3	-0.034
11/13/2017 20:36			0.01	0.012	0	0.009	0.003			-0.034
11/13/2017 20:37			0.01	0.012	0	0.009	0.003			-0.034
11/13/2017 20:38			0.011	0.012	0	0.009	0.003			-0.034
11/13/2017 20:39			0.011	0.012	0	0.009	0.003			-0.035
11/13/2017 20:40	11.9	93.1	0.01	0.012	0	0.009	0.003	40.7542;-7	0	-0.034
11/13/2017 20:41			0.01	0.012	0	0.009	0.003			-0.034

11/13/2017 20:42			0.011	0.012	0	0.009	0.003			-0.034
11/13/2017 20:43			0.011	0.012	0	0.009	0.003			-0.034
11/13/2017 20:44			0.009	0.012	0	0.009	0.003			-0.034
11/13/2017 20:45	11.9	95.1	0.011	0.012	0	0.009	0.003	40.75416;-	4	-0.034
11/13/2017 20:46			0.009	0.012	0	0.009	0.003			-0.035
11/13/2017 20:47			0.009	0.012	0	0.009	0.003			-0.034
11/13/2017 20:48			0.009	0.012	0	0.009	0.003			-0.034
11/13/2017 20:49			0.009	0.012	0	0.009	0.003			-0.034
11/13/2017 20:50	12	98.2	0.008	0.012	0	0.009	0.003	40.75414;-	3	-0.034
11/13/2017 20:51			0.01	0.012	0	0.009	0.003			-0.034
11/13/2017 20:52			0.008	0.012	0	0.009	0.003			-0.028
11/13/2017 20:53			0.008	0.012	0	0.009	0.003			-0.025
11/13/2017 20:54			0.008	0.012	0	0.009	0.003			-0.027
11/13/2017 20:55	12	91.1	0.008	0.012	0	0.009	0.003	40.75417;-	3	-0.029
11/13/2017 20:56			0.008	0.012	0	0.008	0.003			-0.03
11/13/2017 20:57			0.008	0.012	0	0.008	0.003			-0.031
11/13/2017 20:58			0.009	0.012	0	0.008	0.003			-0.032
11/13/2017 20:59			0.008	0.012	0	0.008	0.003			-0.033
11/13/2017 21:00	11.9	90.1	0.009	0.012	0	0.008	0.003	40.75414;-	6	-0.033
11/13/2017 21:01			0.008	0.012	0	0.008	0.003			-0.033
11/13/2017 21:02			0.008	0.012	0	0.008	0.003			-0.034
11/13/2017 21:03			0.008	0.012	0	0.008	0.003			-0.034
11/14/2017 15:23	12.3	125.5								
11/14/2017 15:23								40.7542873;-73.4844825		
11/14/2017 15:24			0	0	0	0	0			
11/14/2017 15:25	12.7	87	0	0	0	0	0	40.75415;-	20	
11/14/2017 15:26			0	0	0	0	0			
11/14/2017 15:27			0	0	0	0	0			-0.023
11/14/2017 15:28			0	0	0	0	0			-0.028
11/14/2017 15:29			0	0	0	0	0			-0.03
11/14/2017 15:30	12.5	83	0	0	0	0	0	40.75412;-	25	-0.031
11/14/2017 15:31			0	0	0	0	0			-0.033
11/14/2017 15:32			0	0	0	0	0			-0.033
11/14/2017 15:33			0	0	0	0	0			-0.034
11/14/2017 15:34			0	0	0	0	0			-0.034
11/14/2017 15:35	12.5	88.1	0	0	0	0	0	40.75414;-	17	-0.035
11/14/2017 15:36			0	0	0	0	0			-0.035
11/14/2017 15:37			0	0	0	0	0			-0.035
11/14/2017 15:38			0	0	0	0	0			-0.035
11/14/2017 15:39			0	0	0	0	0			-0.036
11/14/2017 15:40	12.4	84	0	0	0	0	0	40.75408;-	16	-0.036
11/14/2017 15:41			0	0	0	0	0			-0.036
11/14/2017 15:42			0	0	0	0	0			-0.036
11/14/2017 15:43			0	0	0	0	0			-0.036
11/14/2017 15:44			0	0	0	0	0			-0.036
11/14/2017 15:45	12.4	90.1	0	0	0	0	0	40.75415;-	8	-0.036
11/14/2017 15:46			0	0	0	0	0			-0.036
11/14/2017 15:47			0	0	0	0	0			-0.036
11/14/2017 15:48			0	0	0	0	0			-0.036
11/14/2017 15:49			0	0	0	0	0			-0.036
11/14/2017 15:50	12.4	131.6	0	0	0	0	0			-0.036
11/14/2017 15:50								40.75415;-	7	
11/14/2017 15:51			0	0	0	0	0			-0.036
11/14/2017 15:52			0	0	0	0	0			-0.036
11/14/2017 15:53			0	0	0	0	0			-0.036
11/14/2017 15:54			0	0	0	0	0			-0.036

11/14/2017 15:55	12.4	86	0	0	0	0	0	40.75419;-	3	-0.036
11/14/2017 15:56			0	0	0	0	0			-0.036
11/14/2017 15:57			0	0	0	0	0			-0.036
11/14/2017 15:58			0	0	0	0	0			-0.036
11/14/2017 15:59			0	0	0	0	0			-0.036
11/14/2017 16:00	12.4	83	0	0	0	0	0	40.75417;-	-5	-0.036
11/14/2017 16:01			0	0	0	0	0			-0.036
11/14/2017 16:02			0	0	0	0	0			-0.036
11/14/2017 16:03			0	0	0	0	0			-0.036
11/14/2017 16:04			0	0	0	0	0			-0.036
11/14/2017 16:05	12.4	84	0	0	0	0	0	40.75415;-	5	-0.036
11/14/2017 16:06			0	0	0	0	0			-0.036
11/14/2017 16:07			0	0	0	0	0			-0.036
11/14/2017 16:08			0	0	0	0	0			-0.036
11/14/2017 16:09			0	0	0	0	0			-0.036
11/14/2017 16:10	12.4	96.2	0	0	0	0	0	40.75415;-	9	-0.036
11/14/2017 16:11			0	0	0	0	0			-0.036
11/14/2017 16:12			0	0	0	0	0			-0.036
11/14/2017 16:13			0	0	0	0	0			-0.036
11/14/2017 16:14			0	0	0	0	0			-0.036
11/14/2017 16:15	12.4	83	0	0	0	0	0	40.75415;-	4	-0.036
11/14/2017 16:16			0	0	0	0	0			-0.036
11/14/2017 16:17			0	0	0	0	0			-0.036
11/14/2017 16:18			0	0	0	0	0			-0.036
11/14/2017 16:19			0	0	0	0	0			-0.036
11/14/2017 16:20	12.4	82	0	0	0	0	0	40.75414;-	0	-0.036
11/14/2017 16:21			0	0	0	0	0			-0.036
11/14/2017 16:22			0	0	0	0	0			-0.036
11/14/2017 16:23			0	0	0	0	0			-0.036
11/14/2017 16:24			0	0	0	0	0			-0.036
11/14/2017 16:25	12.4	92.1	0	0	0	0	0	40.75417;-	-1	-0.036
11/14/2017 16:26			0	0	0	0	0			-0.036
11/14/2017 16:27			0	0	0	0	0			-0.036
11/14/2017 16:28			0	0	0	0	0			-0.036
11/14/2017 16:29			0	0	0	0	0			-0.036
11/14/2017 16:30	12.5	83	0	0	0	0	0	40.75412;-	3	-0.036
11/14/2017 16:31			0	0	0	0	0			-0.036
11/14/2017 16:32			0	0	0	0	0			-0.036
11/14/2017 16:33			0	0	0	0	0			-0.036
11/14/2017 16:34			0	0	0	0	0			-0.036
11/14/2017 16:35	12.4	82	0	0	0	0	0	40.75416;-	3	-0.036
11/14/2017 16:36			0	0	0	0	0			-0.036
11/14/2017 16:37			0	0	0	0	0			-0.036
11/14/2017 16:38			0	0	0	0	0			-0.036
11/14/2017 16:39			0	0	0	0	0			-0.035
11/14/2017 16:40	12.4	83	0	0	0	0	0	40.75416;-	6	-0.036
11/14/2017 16:41			0	0	0	0	0			-0.036
11/14/2017 16:42			0	0	0	0	0			-0.036
11/14/2017 16:43			0	0	0	0	0			-0.036
11/14/2017 16:44			0	0	0	0	0			-0.036
11/14/2017 16:45	12.4	87	0	0	0	0	0	40.75417;-	5	-0.036
11/14/2017 16:46			0	0	0	0	0			-0.036
11/14/2017 16:47			0	0	0	0	0			-0.036
11/14/2017 16:48			0	0	0	0	0			-0.036
11/14/2017 16:49			0	0.001	0	0	0			-0.036
11/14/2017 16:50	12.4	86	0.001	0.001	0	0	0	40.75417;-	2	-0.036

11/14/2017 16:51			0	0.001	0	0	0			-0.036
11/14/2017 16:52			0	0.001	0	0	0			-0.036
11/14/2017 16:53			0	0.001	0	0	0			-0.036
11/14/2017 16:54			0	0.001	0	0	0			-0.036
11/14/2017 16:55	12.4	85	0.001	0.001	0	0	0	40.75418;-	1	-0.036
11/14/2017 16:56			0.001	0.001	0	0	0			-0.036
11/14/2017 16:57			0.001	0.001	0	0	0			-0.036
11/14/2017 16:58			0.002	0.002	0	0	0			-0.036
11/14/2017 16:59			0.001	0.002	0	0	0			-0.036
11/14/2017 17:00	12.4	83	0.001	0.002	0	0	0	40.7542;-7	4	-0.036
11/14/2017 17:01			0.001	0.002	0	0	0			-0.036
11/14/2017 17:02			0	0.002	0	0	0			-0.036
11/14/2017 17:03			0.001	0.002	0	0	0			-0.036
11/14/2017 17:04			0.002	0.002	0	0	0			-0.036
11/14/2017 17:05	12.4	84	0.001	0.002	0	0	0	40.7542;-7	0	-0.036
11/14/2017 17:06			0.002	0.002	0	0	0			-0.035
11/14/2017 17:07			0.002	0.002	0	0	0			-0.036
11/14/2017 17:08			0.002	0.002	0	0	0			-0.036
11/14/2017 17:09			0.003	0.003	0	0	0			-0.036
11/14/2017 17:10	12.3	132.6	0.003	0.003	0	0	0			-0.036
11/14/2017 17:10								40.75418;-	0	
11/14/2017 17:11			0.002	0.003	0	0	0			-0.036
11/14/2017 17:12			0.002	0.003	0	0	0			-0.036
11/14/2017 17:13			0.002	0.003	0	0.001	0			-0.036
11/14/2017 17:14			0.002	0.003	0	0.001	0			-0.036
11/14/2017 17:15	12.3	140.7	0.002	0.003	0	0.001	0	40.75419;-	2	-0.036
11/14/2017 17:16			0.003	0.003	0	0.001	0			-0.036
11/14/2017 17:17			0.005	0.005	0	0.001	0			-0.036
11/14/2017 17:18			0.004	0.005	0	0.001	0			-0.036
11/14/2017 17:19			0.005	0.005	0	0.001	0			-0.036
11/14/2017 17:20	12.4	97.2	0.003	0.006	0	0.002	0	40.75417;-	6	-0.036
11/14/2017 17:21			0.005	0.006	0	0.002	0			-0.036
11/14/2017 17:22			0.005	0.006	0	0.002	0			-0.036
11/14/2017 17:23			0.005	0.006	0	0.002	0			-0.036
11/14/2017 17:24			0.005	0.006	0	0.003	0			-0.036
11/14/2017 17:25	12.4	83	0.006	0.006	0	0.003	0	40.75418;-	0	-0.036
11/14/2017 17:26			0.005	0.006	0	0.003	0			-0.036
11/14/2017 17:27			0.005	0.006	0	0.003	0			-0.036
11/14/2017 17:28			0.005	0.006	0	0.003	0			-0.036
11/14/2017 17:29			0.005	0.006	0	0.004	0			-0.036
11/14/2017 17:30	12.4	91.1	0.005	0.006	0	0.004	0	40.75419;-	8	-0.036
11/14/2017 17:31			0.005	0.006	0	0.004	0			-0.036
11/14/2017 17:32			0.006	0.006	0	0.004	0			-0.036
11/14/2017 17:33			0.006	0.006	0	0.004	0			-0.036
11/14/2017 17:34			0.006	0.007	0	0.004	0			-0.036
11/14/2017 17:35	12.4	128.6	0.005	0.007	0	0.004	0	40.75422;-	5	-0.036
11/14/2017 17:36			0.006	0.007	0	0.005	0			-0.036
11/14/2017 17:37			0.006	0.007	0	0.005	0			-0.036
11/14/2017 17:38			0.005	0.007	0	0.005	0			-0.036
11/14/2017 17:39			0.006	0.007	0	0.005	0			-0.036
11/14/2017 17:40	12.3	130.6	0.006	0.007	0	0.005	0	40.75418;-	0	-0.036
11/14/2017 17:41			0.006	0.007	0	0.005	0			-0.036
11/14/2017 17:42			0.006	0.007	0	0.005	0			-0.036
11/14/2017 17:43			0.006	0.007	0	0.005	0			-0.036
11/14/2017 17:44			0.006	0.007	0	0.005	0			-0.036
11/14/2017 17:45	12.4	84	0.006	0.007	0	0.005	0	40.75418;-	16	-0.036

11/14/2017 17:46			0.006	0.007	0	0.005	0			-0.036
11/14/2017 17:47			0.007	0.007	0	0.005	0			-0.036
11/14/2017 17:48			0.005	0.007	0	0.005	0			-0.036
11/14/2017 17:49			0.006	0.007	0	0.005	0			-0.036
11/14/2017 17:50	12.4	83	0.006	0.007	0	0.005	0	40.75418;-	13	-0.036
11/14/2017 17:51			0.007	0.007	0	0.005	0			-0.036
11/14/2017 17:52			0.007	0.007	0	0.005	0			-0.035
11/14/2017 17:53			0.007	0.007	0	0.005	0			-0.035
11/14/2017 17:54			0.007	0.007	0	0.005	0			-0.035
11/14/2017 17:55	12.4	88.1	0.007	0.008	0	0.005	0	40.7542;-7	13	-0.035
11/14/2017 17:56			0.007	0.008	0	0.005	0			-0.035
11/14/2017 17:57			0.007	0.008	0	0.005	0			-0.035
11/14/2017 17:58			0.006	0.008	0	0.005	0			-0.035
11/14/2017 17:59			0.007	0.008	0	0.005	0			-0.035
11/14/2017 18:00	12.4	92.1	0.007	0.008	0	0.005	0	40.7542;-7	11	-0.035
11/14/2017 18:01			0.007	0.008	0	0.005	0			-0.036
11/14/2017 18:02			0.007	0.009	0	0.005	0			-0.035
11/14/2017 18:03			0.008	0.009	0	0.006	0			-0.035
11/14/2017 18:04			0.009	0.009	0	0.006	0			-0.035
11/14/2017 18:05	12.4	92.1	0.009	0.009	0	0.006	0	40.75415;-	17	-0.035
11/14/2017 18:06			0.009	0.009	0	0.006	0			-0.035
11/14/2017 18:07			0.007	0.009	0	0.006	0			-0.035
11/14/2017 18:08			0.008	0.009	0	0.006	0			-0.035
11/14/2017 18:09			0.007	0.009	0	0.006	0			-0.035
11/14/2017 18:10	12.4	83	0.009	0.009	0	0.006	0	40.75418;-	10	-0.035
11/14/2017 18:11			0.008	0.009	0	0.006	0			-0.035
11/14/2017 18:12			0.008	0.009	0	0.007	0			-0.035
11/14/2017 18:13			0.009	0.009	0	0.007	0			-0.035
11/14/2017 18:14			0.008	0.009	0	0.007	0			-0.035
11/14/2017 18:15	12.4	96.2	0.009	0.009	0	0.007	0	40.75414;-	18	-0.035
11/14/2017 18:16			0.009	0.01	0	0.007	0			-0.035
11/14/2017 18:17			0.009	0.01	0	0.007	0			-0.035
11/14/2017 18:18			0.009	0.01	0	0.007	0			-0.035
11/14/2017 18:19			0.009	0.01	0	0.007	0			-0.035
11/14/2017 18:20	12.4	83	0.009	0.01	0	0.007	0	40.75416;-	17	-0.035
11/14/2017 18:21			0.009	0.01	0	0.007	0			-0.035
11/14/2017 18:22			0.009	0.01	0	0.008	0			-0.035
11/14/2017 18:23			0.01	0.01	0	0.008	0			-0.035
11/14/2017 18:24			0.009	0.01	0	0.008	0			-0.035
11/14/2017 18:25	12.4	82	0.01	0.01	0	0.008	0	40.75414;-	18	-0.035
11/14/2017 18:26			0.009	0.01	0	0.008	0			-0.035
11/14/2017 18:27			0.009	0.01	0	0.008	0			-0.035
11/14/2017 18:28			0.009	0.01	0	0.008	0			-0.035
11/14/2017 18:29			0.01	0.01	0	0.008	0.001			-0.035
11/14/2017 18:30	12.4	83	0.009	0.01	0	0.008	0.001	40.75415;-	20	-0.035
11/14/2017 18:31			0.009	0.01	0	0.008	0.001			-0.035
11/14/2017 18:32			0.009	0.01	0	0.008	0.001			-0.035
11/14/2017 18:33			0.01	0.01	0	0.008	0.001			-0.035
11/14/2017 18:34			0.01	0.01	0	0.008	0.001			-0.035
11/14/2017 18:35	12.4	86	0.009	0.01	0	0.009	0.001	40.75414;-	19	-0.036
11/14/2017 18:36			0.01	0.01	0	0.009	0.001			-0.035
11/14/2017 18:37			0.01	0.01	0	0.009	0.001			-0.036
11/14/2017 18:38			0.01	0.01	0	0.009	0.001			-0.036
11/14/2017 18:39			0.011	0.011	0	0.009	0.001			-0.036
11/14/2017 18:40	12.4	90.1	0.01	0.011	0	0.009	0.001	40.75413;-	14	-0.036
11/14/2017 18:41			0.011	0.011	0	0.009	0.001			-0.036

11/14/2017 18:42			0.01	0.011	0	0.009	0.001			-0.035
11/14/2017 18:43			0.01	0.011	0	0.009	0.001			-0.036
11/14/2017 18:44			0.01	0.011	0	0.009	0.001			-0.036
11/14/2017 18:45	12.4	96.2	0.01	0.011	0	0.009	0.001	40.75416;-	18	-0.036
11/14/2017 18:46			0.01	0.011	0	0.009	0.001			-0.036
11/14/2017 18:47			0.011	0.012	0	0.009	0.001			-0.036
11/14/2017 18:48			0.011	0.012	0	0.009	0.001			-0.035
11/14/2017 18:49			0.011	0.012	0	0.009	0.001			-0.035
11/14/2017 18:50	12.4	86	0.01	0.012	0	0.009	0.001	40.75418;-	21	-0.035
11/14/2017 18:51			0.01	0.012	0	0.009	0.001			-0.035
11/14/2017 18:52			0.011	0.012	0	0.009	0.001			-0.035
11/14/2017 18:53			0.011	0.012	0	0.009	0.001			-0.035
11/14/2017 18:54			0.011	0.013	0	0.009	0.001			-0.035
11/14/2017 18:59	12.4	124.5								
11/14/2017 18:59								40.7536997;-73.48734329999999		
11/14/2017 19:00	12.4	113.4	0.011	0.013	0	0.01	0.001			
11/14/2017 19:01			0.012	0.013	0	0.01	0.001			-0.035
11/14/2017 19:02			0.012	0.013	0	0.01	0.001			-0.035
11/14/2017 19:03			0.011	0.013	0	0.01	0.001			-0.035
11/14/2017 19:04			0.011	0.013	0	0.01	0.001			-0.035
11/14/2017 19:05	12.4	93.1	0.013	0.013	0	0.01	0.001	40.75417;-	27	-0.035
11/14/2017 19:06			0.011	0.013	0	0.01	0.001			-0.035
11/14/2017 19:07			0.012	0.013	0	0.01	0.001			-0.035
11/14/2017 19:08			0.013	0.013	0	0.01	0.001			-0.035
11/14/2017 19:09			0.011	0.013	0	0.011	0.001			-0.035
11/14/2017 19:10	12.4	95.1	0.011	0.013	0	0.011	0.001	40.75416;-	15	-0.035
11/14/2017 19:11			0.013	0.013	0	0.011	0.001			-0.035
11/14/2017 19:12			0.013	0.013	0	0.011	0.001			-0.035
11/14/2017 19:13			0.012	0.013	0	0.011	0.001			-0.035
11/14/2017 19:14			0.012	0.013	0	0.011	0.001			-0.035
11/14/2017 19:15	12.4	86	0.013	0.013	0	0.011	0.001	40.75416;-	16	-0.035
11/14/2017 19:16			0.013	0.013	0	0.011	0.002			-0.035
11/14/2017 19:17			0.012	0.013	0	0.011	0.002			-0.035
11/14/2017 19:18			0.013	0.013	0	0.011	0.002			-0.035
11/14/2017 19:19			0.013	0.013	0	0.011	0.002			-0.035
11/14/2017 19:20	12.4	85	0.013	0.013	0	0.011	0.002	40.75417;-	15	-0.036
11/14/2017 19:21			0.013	0.014	0	0.011	0.002			-0.035
11/14/2017 19:22			0.013	0.014	0	0.011	0.002			-0.035
11/14/2017 19:23			0.013	0.014	0	0.011	0.002			-0.036
11/14/2017 19:24			0.013	0.014	0	0.011	0.002			-0.036
11/14/2017 19:25	12.4	87	0.013	0.014	0	0.011	0.002	40.75416;-	9	-0.035
11/14/2017 19:26			0.012	0.014	0	0.012	0.002			-0.035
11/14/2017 19:27			0.014	0.014	0	0.012	0.002			-0.035
11/14/2017 19:28			0.013	0.014	0	0.012	0.002			-0.035
11/14/2017 19:29			0.013	0.014	0	0.012	0.002			-0.035
11/14/2017 19:30	12.4	86	0.013	0.014	0	0.012	0.002	40.75418;-	20	-0.036
11/14/2017 19:31			0.013	0.014	0	0.012	0.002			-0.035
11/14/2017 19:32			0.013	0.014	0	0.012	0.002			-0.036
11/14/2017 19:33			0.013	0.014	0	0.012	0.002			-0.036
11/14/2017 19:34			0.013	0.014	0	0.012	0.002			-0.036
11/14/2017 19:35	12.4	129.6	0.013	0.014	0	0.012	0.002	40.75414;-	17	-0.036
11/14/2017 19:36			0.013	0.014	0	0.012	0.002			-0.036
11/14/2017 19:37			0.014	0.014	0	0.012	0.002			-0.036
11/14/2017 19:38			0.013	0.014	0	0.012	0.002			-0.035
11/14/2017 19:39			0.013	0.014	0	0.012	0.002			-0.035
11/14/2017 19:40	12.4	82	0.013	0.014	0	0.012	0.002	40.75416;-	12	-0.036

11/14/2017 19:41			0.013	0.014	0	0.012	0.002			-0.035
11/14/2017 19:42			0.014	0.014	0	0.012	0.002			-0.035
11/14/2017 19:43			0.013	0.014	0	0.012	0.002			-0.035
11/14/2017 19:44			0.014	0.014	0	0.012	0.002			-0.035
11/14/2017 19:45	12.4	84	0.013	0.014	0	0.012	0.002	40.75418;-	7	-0.035
11/14/2017 19:46			0.014	0.015	0	0.012	0.002			-0.035
11/14/2017 19:47			0.014	0.015	0	0.013	0.002			-0.036
11/14/2017 19:48			0.014	0.015	0	0.013	0.002			-0.035
11/14/2017 19:49			0.014	0.015	0	0.013	0.002			-0.035
11/14/2017 19:50	12.4	93.1	0.015	0.015	0	0.013	0.002	40.75414;-	12	-0.035
11/14/2017 19:51			0.015	0.015	0	0.013	0.002			-0.035
11/14/2017 19:52			0.015	0.016	0	0.013	0.002			-0.035
11/14/2017 19:53			0.014	0.017	0	0.013	0.003			-0.035
11/14/2017 19:54			0.014	0.017	0	0.013	0.003			-0.036
11/14/2017 19:55	12.4	85	0.015	0.017	0	0.013	0.003	40.75413;-	7	-0.036
11/14/2017 19:56			0.015	0.017	0	0.013	0.003			-0.036
11/14/2017 19:57			0.014	0.017	0	0.013	0.003			-0.036
11/14/2017 19:58			0.014	0.017	0	0.013	0.003			-0.036
11/14/2017 19:59			0.015	0.017	0	0.013	0.003			-0.036
11/14/2017 20:00	12.4	91.1	0.014	0.017	0	0.013	0.003	40.75412;-	10	-0.036
11/14/2017 20:01			0.014	0.017	0	0.013	0.003			-0.036
11/14/2017 20:02			0.014	0.017	0	0.013	0.003			-0.036
11/14/2017 20:03			0.015	0.017	0	0.013	0.003			-0.036
11/14/2017 20:04			0.014	0.017	0	0.013	0.003			-0.036
11/14/2017 20:05	12.4	129.6	0.014	0.017	0	0.014	0.003	40.75413;-	12	-0.036
11/14/2017 20:06			0.014	0.017	0	0.014	0.003			-0.036
11/14/2017 20:07			0.014	0.017	0	0.014	0.003			-0.036
11/14/2017 20:08			0.014	0.017	0	0.014	0.003			-0.036
11/14/2017 20:09			0.014	0.017	0	0.014	0.003			-0.036
11/14/2017 20:10	12.3	128.6	0.015	0.017	0	0.013	0.003	40.75414;-	14	-0.036
11/14/2017 20:11			0.014	0.017	0	0.013	0.003			-0.036
11/14/2017 20:12			0.014	0.017	0	0.013	0.003			-0.036
11/14/2017 20:13			0.015	0.017	0	0.013	0.003			-0.036
11/14/2017 20:14			0.015	0.017	0	0.013	0.003			-0.036
11/14/2017 20:15	12.4	88.1	0.014	0.017	0	0.013	0.003	40.75411;-	14	-0.036
11/14/2017 20:16			0.014	0.017	0	0.014	0.003			-0.036
11/14/2017 20:17			0.014	0.017	0	0.014	0.003			-0.036
11/14/2017 20:18			0.015	0.017	0	0.014	0.003			-0.036
11/14/2017 20:19			0.015	0.017	0	0.014	0.003			-0.036
11/14/2017 20:20	12.4	83	0.014	0.017	0	0.013	0.003	40.75412;-	15	-0.036
11/14/2017 20:21			0.014	0.017	0	0.013	0.003			-0.036
11/14/2017 20:22			0.014	0.017	0	0.013	0.003			-0.036
11/14/2017 20:23			0.014	0.017	0	0.013	0.003			-0.036
11/14/2017 20:24			0.014	0.017	0	0.013	0.003			-0.036
11/14/2017 20:25	12.4	85	0.012	0.017	0	0.013	0.003	40.75418;-	8	-0.036
11/14/2017 20:26			0.013	0.017	0	0.013	0.003			-0.036
11/14/2017 20:27			0.013	0.017	0	0.013	0.003			-0.036
11/14/2017 20:28			0.014	0.017	0	0.013	0.004			-0.036
11/14/2017 20:29			0.014	0.017	0	0.013	0.004			-0.036
11/14/2017 20:30	12.4	83	0.014	0.017	0	0.013	0.004	40.75417;-	6	-0.036
11/14/2017 20:31			0.014	0.017	0	0.013	0.004			-0.036
11/14/2017 20:32			0.015	0.017	0	0.013	0.004			-0.036
11/14/2017 20:33			0.015	0.017	0	0.013	0.004			-0.036
11/14/2017 20:34			0.015	0.017	0	0.013	0.004			-0.036
11/14/2017 20:35	12.4	92.1	0.014	0.017	0	0.013	0.004	40.75413;-	14	-0.036
11/14/2017 20:36			0.014	0.017	0	0.013	0.004			-0.036

11/14/2017 20:37			0.015	0.017	0	0.013	0.004			-0.036
11/14/2017 20:38			0.015	0.017	0	0.013	0.004			-0.036
11/14/2017 20:39			0.015	0.017	0	0.013	0.004			-0.036
11/14/2017 20:40	12.4	94.1	0.015	0.017	0	0.013	0.004	40.75418;-	7	-0.036
11/14/2017 20:41			0.015	0.017	0	0.013	0.004			-0.036
11/14/2017 20:42			0.015	0.017	0	0.014	0.004			-0.036
11/14/2017 20:43			0.015	0.017	0	0.014	0.004			-0.036
11/14/2017 20:44			0.014	0.017	0	0.014	0.004			-0.036
11/14/2017 20:45	12.4	87	0.014	0.017	0	0.014	0.004	40.7542;-7	0	-0.036
11/14/2017 20:46			0.014	0.017	0	0.014	0.004			-0.036
11/14/2017 20:47			0.014	0.017	0	0.014	0.004			-0.036
11/14/2017 20:48			0.014	0.017	0	0.014	0.004			-0.036
11/14/2017 20:49			0.015	0.017	0	0.014	0.004			-0.036
11/14/2017 20:50	12.4	83	0.015	0.017	0	0.014	0.004	40.75421;-	-2	-0.036
11/14/2017 20:51			0.014	0.017	0	0.014	0.004			-0.036
11/14/2017 20:52			0.014	0.017	0	0.014	0.004			-0.036
11/14/2017 20:53			0.014	0.017	0	0.014	0.004			-0.036
11/14/2017 20:54			0.015	0.017	0	0.014	0.004			-0.036
11/14/2017 20:55	12.4	101.2	0.015	0.017	0	0.014	0.004	40.75418;-	4	-0.036
11/14/2017 20:56			0.015	0.017	0	0.014	0.004			-0.036
11/14/2017 20:57			0.015	0.017	0	0.014	0.004			-0.036
11/14/2017 20:58			0.015	0.017	0	0.014	0.004			-0.036
11/14/2017 20:59			0.015	0.017	0	0.014	0.004			-0.036
11/14/2017 21:00	12.3	85	0.015	0.017	0	0.014	0.004	40.75418;-	10	-0.036
11/14/2017 21:01			0.015	0.017	0	0.014	0.004			-0.036
11/14/2017 21:02			0.016	0.017	0	0.014	0.005			-0.036
11/14/2017 21:03			0.015	0.017	0	0.014	0.005			-0.036
11/14/2017 21:04			0.014	0.017	0	0.014	0.005			-0.036
11/14/2017 21:05	12.3	89.1	0.014	0.017	0	0.014	0.005	40.75412;-	7	-0.036
11/14/2017 21:06			0.015	0.017	0	0.014	0.005			-0.036
11/14/2017 21:07			0.015	0.017	0	0.014	0.005			-0.036
11/14/2017 21:08			0.015	0.017	0	0.014	0.005			-0.036
11/14/2017 21:09			0.015	0.017	0	0.014	0.005			-0.036
11/14/2017 21:10	12.3	87	0.015	0.017	0	0.014	0.005	40.75411;-	6	-0.036
11/14/2017 21:11			0.015	0.017	0	0.014	0.005			-0.036
11/14/2017 21:12			0.015	0.017	0	0.014	0.005			-0.036
11/14/2017 21:13			0.015	0.017	0	0.014	0.005			-0.036
11/14/2017 21:14			0.015	0.017	0	0.014	0.005			-0.036
11/14/2017 21:15	12.4	86	0.015	0.017	0	0.014	0.005	40.75411;-	10	-0.036
11/14/2017 21:16			0.015	0.017	0	0.014	0.005			-0.036
11/14/2017 21:17			0.015	0.017	0	0.014	0.005			-0.036
11/14/2017 21:18			0.015	0.017	0	0.014	0.005			-0.036
11/14/2017 21:19			0.015	0.017	0	0.014	0.005			-0.036
11/14/2017 21:20	12.3	92.1	0.015	0.017	0	0.014	0.005	40.75407;-	8	-0.036
11/14/2017 21:21			0.015	0.017	0	0.014	0.005			-0.036
11/14/2017 21:22			0.015	0.017	0	0.014	0.005			-0.036
11/14/2017 21:23			0.015	0.017	0	0.014	0.005			-0.036
11/14/2017 21:24			0.015	0.017	0	0.014	0.005			-0.035
11/14/2017 21:25	12.4	92.1	0.015	0.017	0	0.014	0.005	40.75413;-	6	-0.036
11/14/2017 21:26			0.015	0.017	0	0.014	0.005			-0.035
11/14/2017 21:27			0.015	0.017	0	0.014	0.005			-0.036
11/14/2017 21:28			0.015	0.017	0	0.014	0.005			-0.036
11/14/2017 21:29			0.015	0.017	0	0.014	0.005			-0.035
11/14/2017 21:30	12.3	93.1	0.015	0.017	0	0.014	0.005	40.75413;-	3	-0.035
11/14/2017 21:31			0.015	0.017	0	0.014	0.005			-0.035
11/14/2017 21:32			0.014	0.017	0	0.014	0.005			-0.035

11/14/2017 21:33			0.015	0.017	0	0.014	0.005			-0.035
11/14/2017 21:34			0.015	0.017	0	0.014	0.005			-0.035
11/14/2017 21:35	12.3	82	0.014	0.017	0	0.014	0.006	40.75415;-	0	-0.035
11/14/2017 21:36			0.014	0.017	0	0.014	0.006			-0.035
11/14/2017 21:37			0.015	0.017	0	0.014	0.006			-0.035
11/14/2017 21:38			0.015	0.017	0	0.014	0.006			-0.035
11/15/2017 13:20	12.6	122.5								
11/15/2017 13:20								40.7537259;-73.48685499999999		
11/15/2017 13:22			0	0	0	0	0			
11/15/2017 13:23			0	0	0	0	0			-0.018
11/15/2017 13:24			0	0	0	0	0			-0.022
11/15/2017 13:25	13.2	89.1	0	0	0	0	0	40.75417;-	4	-0.025
11/15/2017 13:26			0	0	0	0	0			-0.024
11/15/2017 13:27			0	0	0	0	0			-0.025
11/15/2017 13:28			0	0	0	0	0			-0.027
11/15/2017 13:29			0	0	0	0	0			-0.029
11/15/2017 13:30	13.5	85	0	0	0	0	0	40.75415;-	5	-0.03
11/15/2017 13:31			0	0	0	0	0			-0.031
11/15/2017 13:32			0	0	0	0	0			-0.031
11/15/2017 13:33			0	0	0	0	0			-0.031
11/15/2017 13:34			0	0	0	0	0			-0.032
11/15/2017 13:35	13.5	86	0	0	0	0	0	40.75413;-	15	-0.033
11/15/2017 13:36			0	0	0	0	0			-0.033
11/15/2017 13:37			0	0	0	0	0			-0.033
11/15/2017 13:38			0	0	0	0	0			-0.033
11/15/2017 13:39			0	0	0	0	0			-0.034
11/15/2017 13:40	13.5	85	0	0	0	0	0	40.75409;-	15	-0.034
11/15/2017 13:41			0	0	0	0	0			-0.034
11/15/2017 13:42			0	0	0	0	0			-0.034
11/15/2017 13:43			0	0	0	0	0			-0.034
11/15/2017 13:44			0	0	0	0	0			-0.034
11/15/2017 13:45	13.6	90.1	0	0	0	0	0	40.75409;-	14	-0.034
11/15/2017 13:46			0	0	0	0	0			-0.034
11/15/2017 13:47			0	0	0	0	0			-0.034
11/15/2017 13:48			0	0	0	0	0			-0.034
11/15/2017 13:49			0	0	0	0	0			-0.034
11/15/2017 13:50	13.6	74.9	0	0	0	0	0	40.75409;-	8	-0.033
11/15/2017 13:51			0	0	0	0	0			-0.033
11/15/2017 13:52			0	0	0	0	0			-0.033
11/15/2017 13:53			0	0	0	0	0			-0.033
11/15/2017 13:54			0	0	0	0	0			-0.033
11/15/2017 13:55	13.6	85	0	0	0	0	0	40.75412;-	15	-0.033
11/15/2017 13:56			0	0	0	0	0			-0.033
11/15/2017 13:57			0	0	0	0	0			-0.033
11/15/2017 13:58			0	0	0	0	0			-0.033
11/15/2017 13:59			0	0	0	0	0			-0.033
11/15/2017 14:00	13.6	80	0	0	0	0	0	40.75414;-	12	-0.033
11/15/2017 14:01			0	0	0	0	0			-0.032
11/15/2017 14:02			0	0	0	0	0			-0.033
11/15/2017 14:03			0	0	0	0	0			-0.033
11/15/2017 14:04			0	0	0	0	0			-0.033
11/15/2017 14:05	13.7	75.9	0	0	0	0	0	40.75412;-	11	-0.033
11/15/2017 14:06			0	0	0	0	0			-0.032
11/15/2017 14:07			0	0	0	0	0			-0.032
11/15/2017 14:08			0	0	0	0	0			-0.032
11/15/2017 14:09			0	0	0	0	0			-0.032

11/15/2017 14:10	13.6	83	0	0	0	0	0	40.75412;-	11	-0.032
11/15/2017 14:11			0	0	0	0	0			-0.033
11/15/2017 14:12			0	0	0	0	0			-0.033
11/15/2017 14:13			0	0	0	0	0			-0.033
11/15/2017 14:14			0	0	0	0	0			-0.033
11/15/2017 14:15	13.7	81	0	0	0	0	0	40.75413;-	10	-0.033
11/15/2017 14:16			0	0	0	0	0			-0.033
11/15/2017 14:17			0	0	0	0	0			-0.034
11/15/2017 14:18			0	0	0	0	0			-0.034
11/15/2017 14:19			0	0	0	0	0			-0.034
11/15/2017 14:20	13.7	75.9	0	0	0	0	0	40.75413;-	13	-0.033
11/15/2017 14:21			0	0	0	0	0			-0.033
11/15/2017 14:22			0	0	0	0	0			-0.033
11/15/2017 14:23			0	0	0	0	0			-0.033
11/15/2017 14:24			0	0	0	0	0			-0.033
11/15/2017 14:25	13.8	75.9	0	0	0	0	0	40.75413;-	13	-0.033
11/15/2017 14:26			0	0	0	0	0			-0.033
11/15/2017 14:27			0	0	0	0	0			-0.032
11/15/2017 14:28			0	0	0	0	0			-0.032
11/15/2017 14:29			0	0	0	0	0			-0.032
11/15/2017 14:30	13.8	87	0	0	0	0	0	40.75415;-	14	-0.033
11/15/2017 14:31			0	0	0	0	0			-0.033
11/15/2017 14:32			0	0	0	0	0			-0.033
11/15/2017 14:33			0	0	0	0	0			-0.033
11/15/2017 14:34			0	0	0	0	0			-0.033
11/15/2017 14:35	13.8	76.9	0	0	0	0	0	40.75414;-	12	-0.033
11/15/2017 14:36			0	0	0	0	0			-0.034
11/15/2017 14:37			0	0	0	0	0			-0.034
11/15/2017 14:38			0	0	0	0	0			-0.033
11/15/2017 14:39			0	0	0	0	0			-0.033
11/15/2017 14:40	13.8	76.9	0	0	0	0	0	40.75415;-	14	-0.032
11/15/2017 14:41			0	0	0	0	0			-0.032
11/15/2017 14:42			0	0	0	0	0			-0.032
11/15/2017 14:43			0	0	0	0	0			-0.033
11/15/2017 14:44			0	0	0	0	0			-0.033
11/15/2017 14:45	13.8	80	0	0	0	0	0	40.75413;-	13	-0.033
11/15/2017 14:46			0.001	0.001	0	0	0			-0.033
11/15/2017 14:47			0.001	0.003	0	0	0			-0.033
11/15/2017 14:48			0	0.003	0	0	0			-0.033
11/15/2017 14:49			0.002	0.003	0	0	0			-0.033
11/15/2017 14:50	13.9	80	0.003	0.004	0	0	0	40.75413;-	12	-0.033
11/15/2017 14:51			0.004	0.004	0	0	0			-0.034
11/15/2017 14:52			0.004	0.004	0	0	0			-0.033
11/15/2017 14:53			0.004	0.004	0	0	0			-0.032
11/15/2017 14:54			0.006	0.006	0	0.001	0			-0.033
11/15/2017 14:55	14	74.9	0.006	0.007	0	0.001	0	40.75412;-	16	-0.032
11/15/2017 14:56			0.007	0.007	0	0.001	0			-0.033
11/15/2017 14:57			0.008	0.008	0	0.002	0			-0.033
11/15/2017 14:58			0.009	0.009	0	0.002	0			-0.034
11/15/2017 14:59			0.009	0.009	0	0.003	0			-0.034
11/15/2017 15:00	13.9	84	0.008	0.009	0	0.003	0	40.75408;-	15	-0.034
11/15/2017 15:01			0.009	0.01	0	0.004	0			-0.034
11/15/2017 15:02			0.01	0.011	0	0.004	0			-0.032
11/15/2017 15:03			0.009	0.011	0	0.005	0			-0.03
11/15/2017 15:04			0.01	0.012	0	0.006	0			-0.031
11/15/2017 15:05	13.8	76.9	0.012	0.012	0	0.006	0	40.75405;-	28	-0.032

11/15/2017 15:06			0.013	0.014	0	0.007	0			-0.032
11/15/2017 15:07			0.014	0.014	0	0.007	0			-0.033
11/15/2017 15:08			0.013	0.014	0	0.008	0			-0.033
11/15/2017 15:09			0.014	0.015	0	0.009	0			-0.032
11/15/2017 15:10	13.8	75.9	0.014	0.015	0	0.009	0	40.75406;-	24	-0.033
11/15/2017 15:11			0.014	0.016	0	0.01	0			-0.032
11/15/2017 15:12			0.014	0.016	0	0.01	0			-0.032
11/15/2017 15:13			0.014	0.016	0	0.011	0			-0.031
11/15/2017 15:14			0.014	0.016	0	0.011	0			-0.031
11/15/2017 15:15	13.8	80	0.014	0.016	0	0.011	0	40.75407;-	16	-0.032
11/15/2017 15:16			0.014	0.016	0	0.012	0			-0.032
11/15/2017 15:17			0.014	0.016	0	0.012	0			-0.031
11/15/2017 15:18			0.014	0.016	0	0.012	0			-0.032
11/15/2017 15:19			0.015	0.017	0	0.013	0			-0.033
11/15/2017 15:20	13.8	76.9	0.016	0.017	0	0.013	0	40.75411;-	12	-0.033
11/15/2017 15:21			0.016	0.017	0	0.013	0			-0.033
11/15/2017 15:22			0.017	0.018	0	0.014	0			-0.034
11/15/2017 15:23			0.016	0.018	0	0.014	0			-0.034
11/15/2017 15:24			0.018	0.018	0	0.014	0			-0.034
11/15/2017 15:25	13.9	81	0.018	0.019	0	0.014	0	40.75413;-	6	-0.034
11/15/2017 15:26			0.018	0.019	0	0.015	0			-0.034
11/15/2017 15:27			0.018	0.019	0	0.015	0			-0.034
11/15/2017 15:28			0.017	0.019	0	0.015	0			-0.033
11/15/2017 15:29			0.017	0.019	0	0.015	0			-0.033
11/15/2017 15:30	13.9	80	0.017	0.019	0	0.016	0	40.75414;-	8	-0.032
11/15/2017 15:31			0.019	0.019	0	0.016	0.001			-0.032
11/15/2017 15:32			0.019	0.02	0	0.016	0.001			-0.032
11/15/2017 15:33			0.019	0.02	0	0.016	0.001			-0.032
11/15/2017 15:34			0.02	0.02	0	0.017	0.001			-0.033
11/15/2017 15:35	13.8	76.9	0.02	0.02	0	0.017	0.001	40.75411;-	13	-0.033
11/15/2017 15:36			0.02	0.021	0	0.017	0.001			-0.034
11/15/2017 15:37			0.02	0.021	0	0.017	0.001			-0.034
11/15/2017 15:38			0.021	0.021	0	0.018	0.001			-0.034
11/15/2017 15:39			0.02	0.021	0	0.018	0.001			-0.034
11/15/2017 15:40	13.6	79	0.02	0.022	0	0.018	0.001	40.75408;-	9	-0.034
11/15/2017 15:41			0.021	0.022	0	0.018	0.001			-0.034
11/15/2017 15:42			0.021	0.022	0	0.018	0.001			-0.035
11/15/2017 15:43			0.023	0.023	0	0.019	0.001			-0.034
11/15/2017 15:44			0.023	0.023	0	0.019	0.001			-0.034
11/15/2017 15:45	13.4	87	0.021	0.023	0	0.019	0.001	40.75409;-	7	-0.034
11/15/2017 15:46			0.021	0.023	0	0.02	0.001			-0.033
11/15/2017 15:47			0.021	0.023	0	0.02	0.001			-0.032
11/15/2017 15:48			0.019	0.023	0	0.02	0.001			-0.032
11/15/2017 15:49			0.019	0.023	0	0.02	0.001			-0.032
11/15/2017 15:50	13.1	123.5	0.018	0.023	0	0.02	0.001	40.75409;-	4	-0.033
11/15/2017 15:51			0.019	0.023	0	0.02	0.001			-0.033
11/15/2017 15:52			0.019	0.023	0	0.02	0.001			-0.034
11/15/2017 15:53			0.02	0.023	0	0.02	0.001			-0.034
11/15/2017 15:54			0.021	0.023	0	0.02	0.001			-0.034
11/15/2017 15:55	13	89.1	0.02	0.023	0	0.02	0.002	40.75408;-	8	-0.035
11/15/2017 15:56			0.02	0.023	0	0.02	0.002			-0.035
11/15/2017 15:57			0.019	0.023	0	0.019	0.002			-0.033
11/15/2017 15:58			0.02	0.023	0	0.019	0.002			-0.033
11/15/2017 15:59			0.021	0.023	0	0.019	0.002			-0.034
11/15/2017 16:00	13	125.5	0.021	0.023	0	0.019	0.002	40.75413;-	14	-0.034
11/15/2017 16:01			0.021	0.023	0	0.019	0.002			-0.034

11/15/2017 16:02			0.019	0.023	0	0.019	0.002			-0.034
11/15/2017 16:03			0.02	0.023	0	0.019	0.002			-0.034
11/15/2017 16:04			0.021	0.023	0	0.019	0.002			-0.033
11/15/2017 16:05	13	86	0.018	0.023	0	0.019	0.002	40.75412;-	5	-0.032
11/15/2017 16:06			0.017	0.023	0	0.019	0.002			-0.033
11/15/2017 16:07			0.018	0.023	0	0.019	0.002			-0.034
11/15/2017 16:08			0.018	0.023	0	0.019	0.002			-0.034
11/15/2017 16:09			0.018	0.023	0	0.019	0.002			-0.034
11/15/2017 16:10	13	85	0.018	0.023	0	0.018	0.002	40.75411;-	2	-0.034
11/15/2017 16:11			0.018	0.023	0	0.018	0.002			-0.035
11/15/2017 16:12			0.018	0.023	0	0.018	0.002			-0.035
11/15/2017 16:13			0.019	0.023	0	0.018	0.002			-0.034
11/15/2017 16:14			0.022	0.023	0	0.018	0.002			-0.034
11/15/2017 16:15	13	80	0.024	0.024	0	0.018	0.002	40.75411;-	1	-0.034
11/15/2017 16:16			0.023	0.024	0	0.018	0.002			-0.034
11/15/2017 16:17			0.022	0.024	0	0.018	0.002			-0.034
11/15/2017 16:18			0.022	0.024	0	0.019	0.002			-0.034
11/15/2017 16:19			0.02	0.024	0	0.019	0.002			-0.034
11/15/2017 16:20	13	85	0.019	0.024	0	0.019	0.003	40.75413;-	7	-0.034
11/15/2017 16:21			0.02	0.024	0	0.019	0.003			-0.035
11/15/2017 16:22			0.019	0.024	0	0.019	0.003			-0.035
11/15/2017 16:23			0.02	0.024	0	0.019	0.003			-0.035
11/15/2017 16:24			0.019	0.024	0	0.019	0.003			-0.035
11/15/2017 16:25	13	81	0.02	0.024	0	0.019	0.003	40.75409;-	8	-0.035
11/15/2017 16:26			0.021	0.024	0	0.019	0.003			-0.035
11/15/2017 16:27			0.021	0.024	0	0.02	0.003			-0.035
11/15/2017 16:28			0.022	0.024	0	0.02	0.003			-0.035
11/15/2017 16:29			0.022	0.024	0	0.02	0.003			-0.035
11/15/2017 16:30	13.1	80	0.019	0.024	0	0.02	0.003	40.75411;-	5	-0.034
11/15/2017 16:31			0.017	0.024	0	0.02	0.003			-0.033
11/15/2017 16:32			0.017	0.024	0	0.019	0.003			-0.032
11/15/2017 16:33			0.018	0.024	0	0.019	0.003			-0.032
11/15/2017 16:34			0.017	0.024	0	0.019	0.003			-0.033
11/15/2017 16:35	12.9	129.6	0.018	0.024	0	0.018	0.003	40.75412;-	9	-0.033
11/15/2017 16:36			0.017	0.024	0	0.018	0.003			-0.033
11/15/2017 16:37			0.017	0.024	0	0.018	0.003			-0.033
11/15/2017 16:38			0.016	0.024	0	0.018	0.003			-0.033
11/15/2017 16:39			0.016	0.024	0	0.018	0.003			-0.033
11/15/2017 16:40	13	82	0.015	0.024	0	0.017	0.003	40.75413;-	5	-0.033
11/15/2017 16:41			0.015	0.024	0	0.017	0.003			-0.033
11/15/2017 16:42			0.013	0.024	0	0.017	0.003			-0.033
11/15/2017 16:43			0.013	0.024	0	0.016	0.003			-0.033
11/15/2017 16:44			0.012	0.024	0	0.015	0.003			-0.033
11/15/2017 16:45	13	81	0.012	0.024	0	0.015	0.003	40.75411;-	2	-0.033
11/15/2017 16:46			0.011	0.024	0	0.014	0.003			-0.033
11/15/2017 16:47			0.011	0.024	0	0.014	0.003			-0.033
11/15/2017 16:48			0.011	0.024	0	0.014	0.003			-0.034
11/15/2017 16:49			0.01	0.024	0	0.013	0.004			-0.034
11/15/2017 16:50	13	86	0.009	0.024	0	0.013	0.004	40.75413;-	2	-0.034
11/15/2017 16:51			0.009	0.024	0	0.012	0.004			-0.034
11/15/2017 16:52			0.009	0.024	0	0.012	0.004			-0.034
11/15/2017 16:53			0.009	0.024	0	0.011	0.004			-0.035
11/15/2017 16:54			0.009	0.024	0	0.011	0.004			-0.035
11/15/2017 16:55	13.1	80	0.008	0.024	0	0.01	0.004	40.75414;-	5	-0.035
11/15/2017 16:56			0.008	0.024	0	0.01	0.004			-0.035
11/15/2017 16:57			0.008	0.024	0	0.009	0.004			-0.035

11/15/2017 16:58			0.007	0.024	0	0.009	0.004			-0.034
11/15/2017 16:59			0.007	0.024	0	0.009	0.004			-0.034
11/15/2017 17:00	13.2	87	0.007	0.024	0	0.008	0.004	40.75414;-	4	-0.033
11/15/2017 17:01			0.006	0.024	0	0.008	0.004			-0.033
11/15/2017 17:02			0.006	0.024	0	0.008	0.004			-0.033
11/15/2017 17:03			0.004	0.024	0	0.007	0.004			-0.032
11/15/2017 17:04			0.003	0.024	0	0.007	0.004			-0.032
11/15/2017 17:05	13.1	80	0.005	0.024	0	0.007	0.004	40.75414;-	4	-0.031
11/15/2017 17:06			0.006	0.024	0	0.006	0.004			-0.032
11/15/2017 17:07			0.006	0.024	0	0.006	0.004			-0.032
11/15/2017 17:08			0.005	0.024	0	0.006	0.004			-0.032
11/15/2017 17:09			0.007	0.024	0	0.006	0.004			-0.032
11/15/2017 17:10	13.2	83	0.007	0.024	0	0.005	0.004	40.75411;-	7	-0.033
11/15/2017 17:11			0.008	0.024	0	0.005	0.004			-0.033
11/15/2017 17:12			0.008	0.024	0	0.005	0.004			-0.033
11/15/2017 17:13			0.008	0.024	0	0.005	0.004			-0.033
11/15/2017 17:14			0.008	0.024	0	0.005	0.004			-0.033
11/15/2017 17:15	13.1	79	0.009	0.024	0	0.005	0.004	40.75412;-	2	-0.032
11/15/2017 17:16			0.01	0.024	0	0.005	0.004			-0.033
11/15/2017 17:17			0.009	0.024	0	0.006	0.004			-0.033
11/15/2017 17:18			0.009	0.024	0	0.006	0.004			-0.032
11/15/2017 17:19			0.011	0.024	0	0.006	0.004			-0.033
11/15/2017 17:20	13.1	86	0.011	0.024	0	0.007	0.004	40.75413;-	3	-0.034
11/15/2017 17:21			0.011	0.024	0	0.007	0.004			-0.034
11/15/2017 17:22			0.011	0.024	0	0.007	0.004			-0.033
11/15/2017 17:23			0.009	0.024	0	0.008	0.004			-0.033
11/15/2017 17:24			0.01	0.024	0	0.008	0.004			-0.032
11/15/2017 17:25	13	122.5	0.004	0.024	0	0.008	0.004			-0.024
11/15/2017 17:25								40.75416;-	5	
11/15/2017 17:26			0.006	0.024	0	0.008	0.004			-0.027
11/15/2017 17:27			0.008	0.024	0	0.008	0.004			-0.03
11/15/2017 17:28			0.008	0.024	0	0.008	0.004			-0.031
11/15/2017 17:29			0.009	0.024	0	0.008	0.004			-0.032
11/15/2017 17:30	13	90.1	0.008	0.024	0	0.008	0.004	40.75415;-	9	-0.032
11/15/2017 17:31			0.008	0.024	0	0.008	0.004			-0.032
11/15/2017 17:32			0.009	0.024	0	0.008	0.004			-0.033
11/15/2017 17:33			0.009	0.024	0	0.008	0.004			-0.033
11/15/2017 17:34			0.01	0.024	0	0.008	0.004			-0.034
11/15/2017 17:35	12.9	84	0.01	0.024	0	0.008	0.004	40.75414;-	2	-0.034
11/15/2017 17:36			0.01	0.024	0	0.008	0.004			-0.034
11/15/2017 17:37			0.01	0.024	0	0.008	0.004			-0.033
11/15/2017 17:38			0.008	0.024	0	0.008	0.004			-0.033
11/15/2017 17:39			0.01	0.024	0	0.008	0.004			-0.033
11/15/2017 17:40	13	94.1	0.009	0.024	0	0.008	0.004	40.75416;-	5	-0.033
11/15/2017 17:41			0.01	0.024	0	0.008	0.004			-0.033
11/15/2017 17:42			0.01	0.024	0	0.008	0.004			-0.034
11/15/2017 17:43			0.012	0.024	0	0.008	0.004			-0.034
11/15/2017 17:44			0.012	0.024	0	0.009	0.004			-0.034
11/15/2017 17:45	13	81	0.011	0.024	0	0.009	0.004	40.75407;-	13	-0.034
11/15/2017 17:46			0.012	0.024	0	0.009	0.004			-0.034
11/15/2017 17:47			0.01	0.024	0	0.009	0.004			-0.033
11/15/2017 17:48			0.012	0.024	0	0.009	0.004			-0.034
11/15/2017 17:49			0.012	0.024	0	0.009	0.005			-0.034
11/15/2017 17:50	12.9	85	0.012	0.024	0	0.01	0.005	40.75417;-	3	-0.035
11/15/2017 17:51			0.012	0.024	0	0.01	0.005			-0.035
11/15/2017 17:52			0.012	0.024	0	0.01	0.005			-0.035

11/15/2017 17:53			0.012	0.024	0	0.01	0.005			-0.035
11/15/2017 17:54			0.012	0.024	0	0.01	0.005			-0.035
11/15/2017 17:55	12.9	82	0.01	0.024	0	0.01	0.005	40.75418;-	2	-0.035
11/15/2017 17:56			0.009	0.024	0	0.01	0.005			-0.034
11/15/2017 17:57			0.009	0.024	0	0.01	0.005			-0.034
11/15/2017 17:58			0.009	0.024	0	0.01	0.005			-0.035
11/15/2017 17:59			0.009	0.024	0	0.01	0.005			-0.035
11/15/2017 18:00	12.9	81	0.009	0.024	0	0.01	0.005	40.75419;-	9	-0.035
11/15/2017 18:01			0.009	0.024	0	0.01	0.005			-0.035
11/15/2017 18:02			0.009	0.024	0	0.01	0.005			-0.035
11/15/2017 18:03			0.008	0.024	0	0.009	0.005			-0.034
11/15/2017 18:04			0.007	0.024	0	0.009	0.005			-0.035
11/15/2017 18:05	13	84	0.007	0.024	0	0.009	0.005	40.75415;-	7	-0.035
11/15/2017 18:06			0.007	0.024	0	0.009	0.005			-0.035
11/15/2017 18:07			0.006	0.024	0	0.008	0.005			-0.034
11/15/2017 18:08			0.005	0.024	0	0.008	0.005			-0.034
11/15/2017 18:09			0.005	0.024	0	0.007	0.005			-0.035
11/15/2017 18:10	13	80	0.005	0.024	0	0.007	0.005	40.75415;-	10	-0.035
11/15/2017 18:11			0.005	0.024	0	0.007	0.005			-0.035
11/15/2017 18:12			0.005	0.024	0	0.006	0.005			-0.035
11/15/2017 18:13			0.005	0.024	0	0.006	0.005			-0.035
11/15/2017 18:14			0.004	0.024	0	0.006	0.005			-0.035
11/15/2017 18:15	13	83	0.004	0.024	0	0.005	0.005	40.75417;-	11	-0.035
11/15/2017 18:16			0.004	0.024	0	0.005	0.005			-0.034
11/15/2017 18:17			0.002	0.024	0	0.005	0.005			-0.034
11/15/2017 18:18			0.002	0.024	0	0.004	0.005			-0.034
11/15/2017 18:19			0.003	0.024	0	0.004	0.005			-0.034
11/15/2017 18:20	13	80	0.003	0.024	0	0.004	0.005	40.75417;-	15	-0.035
11/15/2017 18:21			0.002	0.024	0	0.003	0.005			-0.035
11/15/2017 18:22			0.002	0.024	0	0.003	0.005			-0.034
11/15/2017 18:23			0.002	0.024	0	0.003	0.005			-0.035
11/15/2017 18:24			0.002	0.024	0	0.003	0.005			-0.035
11/15/2017 18:25	13	91.1	0.002	0.024	0	0.002	0.005	40.75417;-	12	-0.035
11/15/2017 18:26			0.002	0.024	0	0.002	0.005			-0.035
11/15/2017 18:27			0.002	0.024	0	0.002	0.005			-0.035
11/15/2017 18:28			0.002	0.024	0	0.002	0.005			-0.034
11/15/2017 18:29			0.001	0.024	0	0.002	0.005			-0.034
11/15/2017 18:30	13	80	0.001	0.024	0	0.001	0.005	40.75414;-	9	-0.034
11/15/2017 18:31			0	0.024	0	0.001	0.005			-0.034
11/15/2017 18:32			0	0.024	0	0.001	0.005			-0.035
11/15/2017 18:33			0	0.024	0	0.001	0.005			-0.035
11/15/2017 18:34			0.001	0.024	0	0.001	0.005			-0.035
11/15/2017 18:35	12.9	82	0	0.024	0	0.001	0.005	40.75416;-	9	-0.035
11/15/2017 18:36			0	0.024	0	0.001	0.005			-0.035
11/15/2017 18:37			0	0.024	0	0	0.005			-0.035
11/15/2017 18:38			0	0.024	0	0	0.005			-0.035
11/15/2017 18:39			0	0.024	0	0	0.005			-0.035
11/15/2017 18:40	12.9	84	0	0.024	0	0	0.005	40.75417;-	12	-0.034
11/15/2017 18:41			0	0.024	0	0	0.005			-0.035
11/15/2017 18:42			0	0.024	0	0	0.005			-0.035
11/15/2017 18:43			0	0.024	0	0	0.005			-0.035
11/15/2017 18:44			0	0.024	0	0	0.005			-0.035
11/15/2017 18:45	13	81	0	0.024	0	0	0.005	40.75416;-	12	-0.035
11/15/2017 18:46			0	0.024	0	0	0.005			-0.035
11/15/2017 18:47			0	0.024	0	0	0.005			-0.035
11/15/2017 18:48			0	0.024	0	0	0.005			-0.035

11/15/2017 18:49			0	0.024	0	0	0.005			-0.035
11/15/2017 18:50	13	90.1	0	0.024	0	0	0.005	40.75417;-	17	-0.035
11/15/2017 18:51			0	0.024	0	0	0.005			-0.035
11/15/2017 18:52			0	0.024	0	0	0.005			-0.035
11/15/2017 18:53			0	0.024	0	0	0.005			-0.035
11/15/2017 18:54			0	0.024	0	0	0.005			-0.035
11/15/2017 18:55	12.9	86	0	0.024	0	0	0.005	40.75416;-	17	-0.035
11/15/2017 18:56			0	0.024	0	0	0.005			-0.035
11/15/2017 18:57			0	0.024	0	0	0.005			-0.035
11/15/2017 18:58			0	0.024	0	0	0.005			-0.035
11/15/2017 18:59			0	0.024	0	0	0.005			-0.035
11/15/2017 19:00	12.9	84	0	0.024	0	0	0.005	40.75415;-	17	-0.035
11/15/2017 19:01			0	0.024	0	0	0.005			-0.035
11/15/2017 19:02			0	0.024	0	0	0.005			-0.035
11/15/2017 19:03			0	0.024	0	0	0.005			-0.035
11/15/2017 19:04			0	0.024	0	0	0.005			-0.035
11/15/2017 19:05	12.9	115.4	0	0.024	0	0	0.005	40.75416;-	13	-0.035
11/15/2017 19:06			0	0.024	0	0	0.005			-0.036
11/15/2017 19:07			0	0.024	0	0	0.005			-0.035
11/15/2017 19:08			0	0.024	0	0	0.005			-0.036
11/15/2017 19:09			0	0.024	0	0	0.005			-0.036
11/15/2017 19:10	12.9	103.2	0	0.024	0	0	0.005	40.75416;-	16	-0.036
11/15/2017 19:11			0	0.024	0	0	0.005			-0.036
11/15/2017 19:12			0	0.024	0	0	0.005			-0.035
11/15/2017 19:13			0	0.024	0	0	0.005			-0.035
11/15/2017 19:14			0	0.024	0	0	0.005			-0.035
11/15/2017 19:15	12.9	80	0	0.024	0	0	0.005	40.75417;-	14	-0.035
11/15/2017 19:16			0	0.024	0	0	0.005			-0.035
11/15/2017 19:17			0	0.024	0	0	0.005			-0.035
11/15/2017 19:18			0	0.024	0	0	0.005			-0.034
11/15/2017 19:19			0	0.024	0	0	0.005			-0.034
11/15/2017 19:20	12.9	83	0	0.024	0	0	0.005	40.75416;-	10	-0.035
11/15/2017 19:21			0	0.024	0	0	0.005			-0.034
11/15/2017 19:22			0	0.024	0	0	0.005			-0.035
11/15/2017 19:23			0	0.024	0	0	0.005			-0.034
11/15/2017 19:24			0	0.024	0	0	0.005			-0.034
11/15/2017 19:25	12.8	95.1	0	0.024	0	0	0.005	40.75415;-	7	-0.034
11/15/2017 19:26			0	0.024	0	0	0.005			-0.035
11/15/2017 19:27			0	0.024	0	0	0.005			-0.035
11/15/2017 19:28			0	0.024	0	0	0.005			-0.035
11/15/2017 19:29			0	0.024	0	0	0.005			-0.035
11/15/2017 19:30	12.8	85	0	0.024	0	0	0.005	40.75416;-	-1	-0.035
11/15/2017 19:31			0	0.024	0	0	0.005			-0.035
11/15/2017 19:32			0	0.024	0	0	0.005			-0.035
11/15/2017 19:33			0	0.024	0	0	0.005			-0.035
11/15/2017 19:34			0	0.024	0	0	0.005			-0.035
11/15/2017 19:35	12.8	85	0	0.024	0	0	0.005	40.75415;-	1	-0.035
11/15/2017 19:36			0	0.024	0	0	0.005			-0.035
11/15/2017 19:37			0	0.024	0	0	0.005			-0.035
11/15/2017 19:38			0	0.024	0	0	0.005			-0.035
11/15/2017 19:39			0	0.024	0	0	0.005			-0.035
11/15/2017 19:40	12.8	83	0	0.024	0	0	0.005	40.75415;-	11	-0.035
11/15/2017 19:41			0	0.024	0	0	0.005			-0.035
11/15/2017 19:42			0	0.024	0	0	0.005			-0.035
11/15/2017 19:43			0	0.024	0	0	0.005			-0.035
11/15/2017 19:44			0	0.024	0	0	0.005			-0.035

11/15/2017 19:45	12.8	85	0	0.024	0	0	0.005	40.75413;-	13	-0.035
11/15/2017 19:46			0	0.024	0	0	0.005			-0.035
11/15/2017 19:47			0	0.024	0	0	0.005			-0.035
11/15/2017 19:48			0	0.024	0	0	0.005			-0.035
11/15/2017 19:49			0	0.024	0	0	0.005			-0.035
11/15/2017 19:50	12.8	91.1	0	0.024	0	0	0.005	40.75414;-	8	-0.035
11/15/2017 19:51			0	0.024	0	0	0.005			-0.035
11/15/2017 19:52			0	0.024	0	0	0.005			-0.035
11/15/2017 19:53			0	0.024	0	0	0.005			-0.035
11/15/2017 19:54			0	0.024	0	0	0.005			-0.035
11/15/2017 19:55	12.8	93.1	0	0.024	0	0	0.005	40.75411;-	6	-0.035
11/15/2017 19:56			0	0.024	0	0	0.005			-0.035
11/15/2017 19:57			0	0.024	0	0	0.005			-0.035
11/15/2017 19:58			0	0.024	0	0	0.005			-0.035
11/15/2017 19:59			0	0.024	0	0	0.005			-0.035
11/15/2017 20:00	12.8	81	0	0.024	0	0	0.005	40.75412;-	6	-0.035
11/15/2017 20:01			0	0.024	0	0	0.005			-0.035
11/15/2017 20:02			0	0.024	0	0	0.005			-0.035
11/15/2017 20:03			0	0.024	0	0	0.005			-0.035
11/15/2017 20:04			0	0.024	0	0	0.005			-0.035
11/15/2017 20:05	12.8	81	0	0.024	0	0	0.005	40.75413;-	5	-0.035
11/15/2017 20:06			0	0.024	0	0	0.005			-0.035
11/15/2017 20:07			0	0.024	0	0	0.005			-0.035
11/15/2017 20:08			0	0.024	0	0	0.005			-0.035
11/15/2017 20:09			0	0.024	0	0	0.005			-0.035
11/15/2017 20:10	12.8	86	0	0.024	0	0	0.005	40.75413;-	7	-0.036
11/15/2017 20:11			0	0.024	0	0	0.005			-0.035
11/15/2017 20:12			0	0.024	0	0	0.005			-0.036
11/15/2017 20:13			0	0.024	0	0	0.005			-0.036
11/15/2017 20:14			0	0.024	0	0	0.005			-0.035
11/15/2017 20:15	12.8	89.1	0	0.024	0	0	0.005	40.75412;-	5	-0.035
11/15/2017 20:16			0	0.024	0	0	0.005			-0.035
11/15/2017 20:17			0	0.024	0	0	0.005			-0.035
11/15/2017 20:18			0	0.024	0	0	0.005			-0.035
11/15/2017 20:19			0	0.024	0	0	0.005			-0.035
11/15/2017 20:20	12.7	90.1	0	0.024	0	0	0.005	40.75411;-	5	-0.035
11/15/2017 20:21			0	0.024	0	0	0.005			-0.035
11/15/2017 20:22			0	0.024	0	0	0.005			-0.035
11/15/2017 20:23			0	0.024	0	0	0.005			-0.035
11/15/2017 20:24			0	0.024	0	0	0.005			-0.035
11/15/2017 20:25	12.7	81	0	0.024	0	0	0.005	40.75411;-	7	-0.035
11/15/2017 20:26			0	0.024	0	0	0.005			-0.035
11/15/2017 20:27			0	0.024	0	0	0.005			-0.035
11/15/2017 20:28			0	0.024	0	0	0.005			-0.034
11/15/2017 20:29			0	0.024	0	0	0.005			-0.034
11/15/2017 20:30	12.7	98.2	0	0.024	0	0	0.005	40.75409;-	7	-0.034
11/15/2017 20:31			0	0.024	0	0	0.005			-0.034
11/15/2017 20:32			0	0.024	0	0	0.005			-0.034
11/15/2017 20:33			0	0.024	0	0	0.005			-0.034
11/15/2017 20:34			0	0.024	0	0	0.005			-0.034
11/15/2017 20:35	12.7	82	0	0.024	0	0	0.005	40.75411;-	7	-0.034
11/15/2017 20:36			0	0.024	0	0	0.005			-0.034
11/15/2017 20:37			0	0.024	0	0	0.005			-0.034
11/15/2017 20:38			0	0.024	0	0	0.005			-0.035
11/15/2017 20:39			0	0.024	0	0	0.005			-0.034
11/15/2017 20:40	12.7	82	0	0.024	0	0	0.005	40.75413;-	13	-0.034

11/15/2017 20:41			0	0.024	0	0	0.005			-0.034
11/15/2017 20:42			0	0.024	0	0	0.005			-0.034
11/15/2017 20:43			0	0.024	0	0	0.005			-0.034
11/15/2017 20:44			0	0.024	0	0	0.005			-0.035
11/15/2017 20:45	12.7	82	0	0.024	0	0	0.005	40.75412;-	9	-0.035
11/15/2017 20:46			0	0.024	0	0	0.005			-0.035
11/15/2017 20:47			0	0.024	0	0	0.005			-0.035
11/15/2017 20:48			0	0.024	0	0	0.005			-0.035
11/15/2017 20:49			0	0.024	0	0	0.005			-0.035
11/15/2017 20:50	12.7	91.1	0	0.024	0	0	0.005	40.75412;-	10	-0.035
11/15/2017 20:51			0	0.024	0	0	0.005			-0.035
11/15/2017 20:52			0	0.024	0	0	0.005			-0.035
11/15/2017 20:53			0	0.024	0	0	0.005			-0.035
11/15/2017 20:54			0	0.024	0	0	0.005			-0.035
11/15/2017 20:55	12.7	81	0	0.024	0	0	0.005	40.75411;-	7	-0.035
11/15/2017 20:56			0	0.024	0	0	0.005			-0.035
11/15/2017 20:57			0	0.024	0	0	0.005			-0.035
11/15/2017 20:58			0	0.024	0	0	0.005			-0.035
11/15/2017 20:59			0	0.024	0	0	0.005			-0.036
11/15/2017 21:00	12.7	82	0	0.024	0	0	0.005	40.75409;-	9	-0.036
11/15/2017 21:01			0	0.024	0	0	0.005			-0.035
11/15/2017 21:02			0	0.024	0	0	0.005			-0.035
11/15/2017 21:03			0	0.024	0	0	0.005			-0.036
11/15/2017 21:04			0	0.024	0	0	0.005			-0.035
11/15/2017 21:05	12.6	90.1	0	0.024	0	0	0.005	40.75409;-	10	-0.035
11/15/2017 21:06			0	0.024	0	0	0.005			-0.035
11/15/2017 21:07			0	0.024	0	0	0.005			-0.035
11/15/2017 21:08			0	0.024	0	0	0.005			-0.035
11/15/2017 21:09			0	0.024	0	0	0.005			-0.035
11/15/2017 21:10	12.6	82	0	0.024	0	0	0.005	40.75409;-	10	-0.035
11/15/2017 21:11			0	0.024	0	0	0.005			-0.035
11/15/2017 21:12			0	0.024	0	0	0.005			-0.035
11/15/2017 21:13			0	0.024	0	0	0.005			-0.035
11/15/2017 21:14			0	0.024	0	0	0.005			-0.035
11/15/2017 21:15	12.6	98.2	0	0.024	0	0	0.005	40.75411;-	7	-0.035
11/15/2017 21:16			0	0.024	0	0	0.005			-0.035
11/15/2017 21:17			0	0.024	0	0	0.005			-0.035
11/15/2017 21:18			0	0.024	0	0	0.005			-0.035
11/15/2017 21:19			0	0.024	0	0	0.005			-0.035
11/15/2017 21:20	12.6	81	0	0.024	0	0	0.005	40.75412;-	9	-0.035
11/15/2017 21:21			0	0.024	0	0	0.005			-0.035
11/15/2017 21:22			0	0.024	0	0	0.005			-0.035
11/15/2017 21:23			0	0.024	0	0	0.005			-0.035
11/15/2017 21:24			0	0.024	0	0	0.005			-0.035
11/15/2017 21:25	12.6	90.1	0	0.024	0	0	0.005	40.75411;-	2	-0.035
11/15/2017 21:26			0	0.024	0	0	0.005			-0.034
11/15/2017 21:27			0	0.024	0	0	0.005			-0.035
11/15/2017 21:28			0	0.024	0	0	0.005			-0.035
11/16/2017 15:42	12.7	129.6								
11/16/2017 15:42								40.756298199999996;-73.4869336		
11/16/2017 15:43			0	0	0	0	0			
11/16/2017 15:44			0	0	0	0	0			
11/16/2017 15:45	12.8	125.5	0	0	0	0	0	40.75415;-	-7	-0.016
11/16/2017 15:46			0	0	0	0	0			-0.023
11/16/2017 15:47			0	0	0	0	0			-0.025
11/16/2017 15:48			0	0	0	0	0			-0.027

11/16/2017 15:49			0	0	0	0	0			-0.024
11/16/2017 15:50	12.7	80	0	0	0	0	0	40.75408;-	16	-0.018
11/16/2017 15:51			0	0	0	0	0			-0.02
11/16/2017 15:52			0	0	0	0	0			-0.022
11/16/2017 15:53			0	0	0	0	0			-0.022
11/16/2017 15:54			0	0	0	0	0			-0.023
11/16/2017 15:55	12.7	83	0	0	0	0	0	40.75414;-	1	-0.024
11/16/2017 15:56			0	0	0	0	0			-0.024
11/16/2017 15:57			0	0	0	0	0			-0.024
11/16/2017 15:58			0	0	0	0	0			-0.025
11/16/2017 15:59			0	0	0	0	0			-0.026
11/16/2017 16:00	12.7	81	0	0	0	0	0	40.75411;-	6	-0.027
11/16/2017 16:01			0	0	0	0	0			-0.027
11/16/2017 16:02			0	0	0	0	0			-0.027
11/16/2017 16:03			0	0	0	0	0			-0.026
11/16/2017 16:04			0	0	0	0	0			-0.025
11/16/2017 16:05	12.7	81	0	0	0	0	0	40.75415;-	7	-0.025
11/16/2017 16:06			0	0	0	0	0			-0.025
11/16/2017 16:07			0	0	0	0	0			-0.025
11/16/2017 16:08			0	0	0	0	0			-0.023
11/16/2017 16:09			0	0	0	0	0			-0.024
11/16/2017 16:10	12.7	82	0	0	0	0	0	40.75414;-	18	-0.024
11/16/2017 16:11			0	0	0	0	0			-0.025
11/16/2017 16:12			0	0	0	0	0			-0.025
11/16/2017 16:13			0	0	0	0	0			-0.026
11/16/2017 16:14			0	0	0	0	0			-0.026
11/16/2017 16:15	12.7	81	0	0	0	0	0	40.75413;-	4	-0.027
11/16/2017 16:16			0	0	0	0	0			-0.026
11/16/2017 16:17			0	0	0	0	0			-0.025
11/16/2017 16:18			0	0	0	0	0			-0.023
11/16/2017 16:19			0	0	0	0	0			-0.021
11/16/2017 16:20	12.7	82	0	0	0	0	0	40.75414;-	4	-0.023
11/16/2017 16:21			0	0	0	0	0			-0.024
11/16/2017 16:22			0	0	0	0	0			-0.024
11/16/2017 16:23			0	0	0	0	0			-0.024
11/16/2017 16:24			0	0	0	0	0			-0.024
11/16/2017 16:25	12.8	91.1	0	0	0	0	0	40.75415;-	7	-0.025
11/16/2017 16:26			0	0	0	0	0			-0.025
11/16/2017 16:27			0	0	0	0	0			-0.027
11/16/2017 16:28			0	0	0	0	0			-0.026
11/16/2017 16:29			0	0	0	0	0			-0.024
11/16/2017 16:30	13.1	80	0	0	0	0	0	40.75412;-	3	-0.025
11/16/2017 16:31			0	0	0	0	0			-0.025
11/16/2017 16:32			0	0	0	0	0			-0.025
11/16/2017 16:33			0	0	0	0	0			-0.026
11/16/2017 16:34			0	0	0	0	0			-0.024
11/16/2017 16:35	13.6	81	0	0	0	0	0	40.75414;-	11	-0.024
11/16/2017 16:36			0	0	0	0	0			-0.024
11/16/2017 16:37			0	0	0	0	0			-0.024
11/16/2017 16:38			0	0	0	0	0			-0.025
11/16/2017 16:39			0	0	0	0	0			-0.024
11/16/2017 16:40	13.1	79	0	0	0	0	0	40.75419;-	8	-0.024
11/16/2017 16:41			0	0	0	0	0			-0.024
11/16/2017 16:42			0	0	0	0	0			-0.023
11/16/2017 16:43			0	0	0	0	0			-0.022
11/16/2017 16:44			0	0	0	0	0			-0.021

11/16/2017 16:45	12.9	80	0	0	0	0	0	40.75417;-	8	-0.021
11/16/2017 16:46			0	0	0	0	0			-0.023
11/16/2017 16:47			0	0	0	0	0			-0.022
11/16/2017 16:48			0	0	0	0	0			-0.022
11/16/2017 16:49			0	0	0	0	0			-0.022
11/16/2017 16:50	12.9	90.1	0	0	0	0	0	40.75418;-	6	-0.02
11/16/2017 16:51			0	0	0	0	0			-0.02
11/16/2017 16:52			0	0	0	0	0			-0.021
11/16/2017 16:53			0	0	0	0	0			-0.022
11/16/2017 16:54			0	0	0	0	0			-0.023
11/16/2017 16:55	13	86	0	0	0	0	0	40.75417;-	3	-0.024
11/16/2017 16:56			0	0	0	0	0			-0.023
11/16/2017 16:57			0	0	0	0	0			-0.022
11/16/2017 16:58			0	0	0	0	0			-0.021
11/16/2017 16:59			0	0	0	0	0			-0.022
11/16/2017 17:00	13.3	85	0	0	0	0	0	40.7542;-7	3	-0.021
11/16/2017 17:01			0	0	0	0	0			-0.021
11/16/2017 17:02			0	0	0	0	0			-0.021
11/16/2017 17:03			0	0	0	0	0			-0.024
11/16/2017 17:04			0	0	0	0	0			-0.024
11/16/2017 17:05	13.7	76.9	0	0	0	0	0	40.75419;-	5	-0.024
11/16/2017 17:06			0	0	0	0	0			-0.025
11/16/2017 17:07			0	0	0	0	0			-0.025
11/16/2017 17:08			0	0	0	0	0			-0.025
11/16/2017 17:09			0	0	0	0	0			-0.025
11/16/2017 17:10	13.7	77.9	0	0	0	0	0	40.75418;-	8	-0.024
11/16/2017 17:11			0	0	0	0	0			-0.022
11/16/2017 17:12			0	0	0	0	0			-0.024
11/16/2017 17:13			0	0	0	0	0			-0.024
11/16/2017 17:14			0	0	0	0	0			-0.025
11/16/2017 17:15	13.8	75.9	0	0	0	0	0	40.75418;-	0	-0.023
11/16/2017 17:16			0	0	0	0	0			-0.023
11/16/2017 17:17			0	0	0	0	0			-0.023
11/16/2017 17:18			0	0	0	0	0			-0.023
11/16/2017 17:19			0	0	0	0	0			-0.022
11/16/2017 17:20	13.5	79	0	0	0	0	0	40.75417;-	5	-0.021
11/16/2017 17:21			0	0	0	0	0			-0.02
11/16/2017 17:22			0	0	0	0	0			-0.021
11/16/2017 17:23			0	0	0	0	0			-0.022
11/16/2017 17:24			0	0	0	0	0			-0.021
11/16/2017 17:25	13.1	83	0	0	0	0	0	40.75415;-	13	-0.022
11/16/2017 17:26			0	0	0	0	0			-0.022
11/16/2017 17:27			0	0	0	0	0			-0.021
11/16/2017 17:28			0	0	0	0	0			-0.02
11/16/2017 17:29			0	0	0	0	0			-0.019
11/16/2017 17:30	13	80	0	0	0	0	0	40.7542;-7	2	-0.02
11/16/2017 17:31			0	0	0	0	0			-0.02
11/16/2017 17:32			0	0	0	0	0			-0.019
11/16/2017 17:33			0	0	0	0	0			-0.021
11/16/2017 17:34			0	0	0	0	0			-0.023
11/16/2017 17:35	12.9	80	0	0	0	0	0	40.75418;-	7	-0.025
11/16/2017 17:36			0	0	0	0	0			-0.025
11/16/2017 17:37			0	0	0	0	0			-0.026
11/16/2017 17:38			0	0	0	0	0			-0.026
11/16/2017 17:39			0	0	0	0	0			-0.026
11/16/2017 17:40	12.9	82	0	0	0	0	0	40.75415;-	12	-0.018

11/16/2017 17:41			0	0	0	0	0			-0.017
11/16/2017 17:42			0	0	0	0	0			-0.019
11/16/2017 17:43			0	0	0	0	0			-0.019
11/16/2017 17:44			0	0	0	0	0			-0.022
11/16/2017 17:45	13.3	81	0	0	0	0	0	40.75416;-	6	-0.023
11/16/2017 17:46			0	0	0	0	0			-0.024
11/16/2017 17:47			0	0	0	0	0			-0.025
11/16/2017 17:48			0	0	0	0	0			-0.025
11/16/2017 17:49			0	0	0	0	0			-0.025
11/16/2017 17:50	13.1	84	0	0	0	0	0	40.75416;-	17	-0.023
11/16/2017 17:51			0	0	0	0	0			-0.022
11/16/2017 17:52			0	0	0	0	0			-0.021
11/16/2017 17:53			0	0	0	0	0			-0.02
11/16/2017 17:54			0	0	0	0	0			-0.02
11/16/2017 17:55	13.1	88.1	0	0	0	0	0	40.75418;-	8	-0.02
11/16/2017 17:56			0	0	0	0	0			-0.021
11/16/2017 17:57			0	0	0	0	0			-0.02
11/16/2017 17:58			0	0	0	0	0			-0.02
11/16/2017 17:59			0	0	0	0	0			-0.021
11/16/2017 18:00	13.6	77.9	0	0	0	0	0	40.75415;-	15	-0.022
11/16/2017 18:01			0	0	0	0	0			-0.023
11/16/2017 18:02			0	0	0	0	0			-0.022
11/16/2017 18:03			0	0	0	0	0			-0.02
11/16/2017 18:04			0	0	0	0	0			-0.018
11/16/2017 18:05	13.3	82	0	0	0	0	0	40.75408;-	26	-0.019
11/16/2017 18:06			0	0	0	0	0			-0.018
11/16/2017 18:07			0	0	0	0	0			-0.019
11/16/2017 18:08			0	0	0	0	0			-0.021
11/16/2017 18:09			0	0	0	0	0			-0.022
11/16/2017 18:10	13.3	79	0	0	0	0	0	40.75414;-	10	-0.023
11/16/2017 18:11			0	0	0	0	0			-0.024
11/16/2017 18:12			0	0	0	0	0			-0.027
11/16/2017 18:13			0	0	0	0	0			-0.026
11/16/2017 18:14			0	0	0	0	0			-0.025
11/16/2017 18:15	13.1	89.1	0	0	0	0	0	40.75412;-	19	-0.024
11/16/2017 18:16			0	0	0	0	0			-0.023
11/16/2017 18:17			0	0	0	0	0			-0.022
11/16/2017 18:18			0	0	0	0	0			-0.02
11/16/2017 18:19			0	0	0	0	0			-0.021
11/16/2017 18:20	13	81	0	0	0	0	0	40.75415;-	11	-0.02
11/16/2017 18:21			0	0	0	0	0			-0.02
11/16/2017 18:22			0	0	0	0	0			-0.02
11/16/2017 18:23			0	0	0	0	0			-0.021
11/16/2017 18:24			0	0	0	0	0			-0.02
11/16/2017 18:25	13	81	0	0	0	0	0	40.75416;-	15	-0.018
11/16/2017 18:26			0	0	0	0	0			-0.018
11/16/2017 18:27			0	0	0	0	0			-0.018
11/16/2017 18:28			0	0	0	0	0			-0.019
11/16/2017 18:29			0	0	0	0	0			-0.021
11/16/2017 18:30	12.9	86	0	0	0	0	0	40.75415;-	16	-0.02
11/16/2017 18:31			0	0	0	0	0			-0.02
11/16/2017 18:32			0	0	0	0	0			-0.02
11/16/2017 18:33			0	0	0	0	0			-0.02
11/16/2017 18:34			0	0	0	0	0			-0.018
11/16/2017 18:35	12.9	90.1	0	0	0	0	0	40.75413;-	9	-0.02
11/16/2017 18:36			0	0	0	0	0			-0.023

11/16/2017 18:37			0	0	0	0	0			-0.024
11/16/2017 18:38			0	0	0	0	0			-0.024
11/16/2017 18:39			0	0	0	0	0			-0.023
11/16/2017 18:40	13.1	85	0	0	0	0	0	40.75416;-	18	-0.024
11/16/2017 18:41			0	0	0	0	0			-0.022
11/16/2017 18:42			0	0	0	0	0			-0.022
11/16/2017 18:43			0	0	0	0	0			-0.021
11/16/2017 18:44			0	0	0	0	0			-0.02
11/16/2017 18:45	13.1	81	0	0	0	0	0	40.7542;-7	17	-0.022
11/16/2017 18:46			0	0	0	0	0			-0.024
11/16/2017 18:47			0	0	0	0	0			-0.023
11/16/2017 18:48			0	0	0	0	0			-0.022
11/16/2017 18:49			0	0	0	0	0			-0.021
11/16/2017 18:50	13	81	0	0	0	0	0	40.75425;-	27	-0.021
11/16/2017 18:51			0	0	0	0	0			-0.024
11/16/2017 18:52			0	0	0	0	0			-0.023
11/16/2017 18:53			0	0	0	0	0			-0.023
11/16/2017 18:54			0	0	0	0	0			-0.024
11/16/2017 18:55	13.1	81	0	0	0	0	0	40.75418;-	27	-0.023
11/16/2017 18:56			0	0	0	0	0			-0.023
11/16/2017 18:57			0	0	0	0	0			-0.023
11/16/2017 18:58			0	0	0	0	0			-0.022
11/16/2017 18:59			0	0	0	0	0			-0.023
11/16/2017 19:00	12.9	86	0	0	0	0	0	40.75421;-	19	-0.024
11/16/2017 19:01			0	0	0	0	0			-0.026
11/16/2017 19:02			0	0	0	0	0			-0.027
11/16/2017 19:03			0	0	0	0	0			-0.026
11/16/2017 19:04			0	0	0	0	0			-0.026
11/16/2017 19:05	13	81	0	0	0	0	0	40.75415;-	-25	-0.027
11/16/2017 19:06			0	0	0	0	0			-0.027
11/16/2017 19:07			0	0	0	0	0			-0.026
11/16/2017 19:08			0	0	0	0	0			-0.027
11/16/2017 19:09			0	0	0	0	0			-0.025
11/16/2017 19:10	13	90.1	0	0	0	0	0	40.75415;-	18	-0.025
11/16/2017 19:11			0	0	0	0	0			-0.025
11/16/2017 19:12			0	0	0	0	0			-0.026
11/16/2017 19:13			0	0	0	0	0			-0.025
11/16/2017 19:14			0	0	0	0	0			-0.026
11/16/2017 19:15	13	81	0	0	0	0	0	40.75415;-	9	-0.024
11/16/2017 19:16			0	0	0	0	0			-0.024
11/16/2017 19:17			0	0	0	0	0			-0.025
11/16/2017 19:18			0	0	0	0	0			-0.026
11/16/2017 19:19			0	0	0	0	0			-0.025
11/16/2017 19:20	13	81	0	0	0	0	0	40.75417;-	9	-0.026
11/16/2017 19:21			0	0	0	0	0			-0.025
11/16/2017 19:22			0	0	0	0	0			-0.027
11/16/2017 19:23			0	0	0	0	0			-0.028
11/16/2017 19:24			0	0	0	0	0			-0.029
11/16/2017 19:25	13	89.1	0	0	0	0	0	40.75415;-	14	-0.028
11/16/2017 19:26			0	0	0	0	0			-0.027
11/16/2017 19:27			0	0	0	0	0			-0.026
11/16/2017 19:28			0	0	0	0	0			-0.027
11/16/2017 19:29			0	0	0	0	0			-0.026
11/16/2017 19:30	12.9	95.1	0	0	0	0	0	40.75412;-	17	-0.027
11/16/2017 19:31			0	0	0	0	0			-0.027
11/16/2017 19:32			0	0	0	0	0			-0.028

11/16/2017 19:33			0	0	0	0	0			-0.028
11/16/2017 19:34			0	0	0	0	0			-0.028
11/16/2017 19:35	12.9	80	0	0	0	0	0	40.75414;-	17	-0.028
11/16/2017 19:36			0	0	0	0	0			-0.028
11/16/2017 19:37			0	0	0	0	0			-0.027
11/16/2017 19:38			0	0	0	0	0			-0.025
11/16/2017 19:39			0	0	0	0	0			-0.026
11/16/2017 19:40	12.9	83	0	0	0	0	0	40.75412;-	14	-0.027
11/16/2017 19:41			0	0	0	0	0			-0.028
11/16/2017 19:42			0	0.001	0	0	0			-0.028
11/16/2017 19:43			0	0.001	0	0	0			-0.027
11/16/2017 19:44			0	0.001	0	0	0			-0.028
11/16/2017 19:45	12.9	86	0	0.001	0	0	0	40.75414;-	18	-0.027
11/16/2017 19:46			0.001	0.001	0	0	0			-0.029
11/16/2017 19:47			0	0.001	0	0	0			-0.027
11/16/2017 19:48			0	0.001	0	0	0			-0.025
11/16/2017 19:49			0	0.001	0	0	0			-0.026
11/16/2017 19:50	12.8	83	0	0.001	0	0	0	40.75413;-	14	-0.025
11/16/2017 19:51			0	0.001	0	0	0			-0.025
11/16/2017 19:52			0	0.001	0	0	0			-0.025
11/16/2017 19:53			0	0.001	0	0	0			-0.025
11/16/2017 19:54			0	0.001	0	0	0			-0.025
11/16/2017 19:55	12.8	85	0	0.001	0	0	0	40.75413;-	4	-0.025
11/16/2017 19:56			0	0.001	0	0	0			-0.024
11/16/2017 19:57			0	0.001	0	0	0			-0.024
11/16/2017 19:58			0	0.001	0	0	0			-0.025
11/16/2017 19:59			0	0.001	0	0	0			-0.025
11/16/2017 20:00	12.7	87	0	0.001	0	0	0	40.75414;-	11	-0.024
11/16/2017 20:01			0	0.001	0	0	0			-0.025
11/16/2017 20:02			0	0.001	0	0	0			-0.025
11/16/2017 20:03			0	0.001	0	0	0			-0.026
11/16/2017 20:04			0	0.001	0	0	0			-0.027
11/16/2017 20:05	12.7	82	0	0.001	0	0	0	40.75416;-	6	-0.028
11/16/2017 20:06			0	0.001	0	0	0			-0.029
11/16/2017 20:07			0	0.001	0	0	0			-0.03
11/16/2017 20:08			0	0.001	0	0	0			-0.03
11/16/2017 20:09			0	0.001	0	0	0			-0.03
11/16/2017 20:10	12.7	97.2	0	0.001	0	0	0	40.75415;-	1	-0.03
11/16/2017 20:11			0	0.001	0	0	0			-0.031
11/16/2017 20:12			0	0.001	0	0	0			-0.031
11/16/2017 20:13			0	0.001	0	0	0			-0.032
11/16/2017 20:14			0	0.001	0	0	0			-0.032
11/16/2017 20:15	12.7	87	0	0.001	0	0	0	40.75416;-	4	-0.032
11/16/2017 20:16			0	0.001	0	0	0			-0.031
11/16/2017 20:17			0	0.001	0	0	0			-0.031
11/16/2017 20:18			0	0.001	0	0	0			-0.031
11/16/2017 20:19			0	0.001	0	0	0			-0.031
11/16/2017 20:20	12.7	93.1	0	0.001	0	0	0	40.75417;-	3	-0.03
11/16/2017 20:21			0	0.001	0	0	0			-0.03
11/16/2017 20:22			0	0.001	0	0	0			-0.03
11/16/2017 20:23			0	0.001	0	0	0			-0.03
11/16/2017 20:24			0	0.001	0	0	0			-0.03
11/16/2017 20:25	12.7	81	0	0.001	0	0	0	40.75416;-	3	-0.03
11/16/2017 20:26			0	0.001	0	0	0			-0.03
11/16/2017 20:27			0	0.001	0	0	0			-0.03
11/16/2017 20:28			0	0.001	0	0	0			-0.03

11/16/2017 20:29			0	0.001	0	0	0			-0.03
11/16/2017 20:30	12.7	82	0	0.001	0	0	0	40.75412;-	12	-0.03
11/16/2017 20:31			0	0.001	0	0	0			-0.03
11/16/2017 20:32			0	0.001	0	0	0			-0.03
11/16/2017 20:33			0	0.001	0	0	0			-0.03
11/16/2017 20:34			0	0.001	0	0	0			-0.03
11/16/2017 20:35	12.7	85	0	0.001	0	0	0	40.75413;-	11	-0.031
11/16/2017 20:36			0	0.001	0	0	0			-0.031
11/16/2017 20:37			0	0.001	0	0	0			-0.032
11/16/2017 20:38			0	0.001	0	0	0			-0.032
11/16/2017 20:39			0	0.001	0	0	0			-0.032
11/16/2017 20:40	12.7	83	0	0.001	0	0	0	40.75412;-	10	-0.031
11/16/2017 20:41			0	0.001	0	0	0			-0.031
11/16/2017 20:42			0	0.001	0	0	0			-0.03
11/16/2017 20:43			0	0.001	0	0	0			-0.031
11/16/2017 20:44			0	0.001	0	0	0			-0.031
11/16/2017 20:45	12.6	84	0	0.001	0	0	0	40.75412;-	11	-0.03
11/16/2017 20:46			0	0.001	0	0	0			-0.03
11/16/2017 20:47			0	0.001	0	0	0			-0.029
11/16/2017 20:48			0	0.001	0	0	0			-0.03
11/16/2017 20:49			0	0.001	0	0	0			-0.03
11/16/2017 20:50	12.6	130.6	0	0.001	0	0	0	40.75416;-	11	-0.03
11/16/2017 20:51			0	0.001	0	0	0			-0.03
11/16/2017 20:52			0	0.001	0	0	0			-0.03
11/16/2017 20:53			0	0.001	0	0	0			-0.031
11/16/2017 20:54			0	0.001	0	0	0			-0.032
11/16/2017 20:55	12.6	101.2	0	0.001	0	0	0	40.75417;-	7	-0.032
11/16/2017 20:56			0	0.001	0	0	0			-0.031
11/16/2017 20:57			0	0.001	0	0	0			-0.031
11/16/2017 20:58			0	0.001	0	0	0			-0.031
11/16/2017 20:59			0	0.001	0	0	0			-0.03
11/16/2017 21:00	12.6	82	0	0.001	0	0	0	40.75416;-	8	-0.031
11/16/2017 21:01			0	0.001	0	0	0			-0.031
11/16/2017 21:02			0	0.001	0	0	0			-0.032
11/16/2017 21:03			0	0.001	0	0	0			-0.032
11/16/2017 21:04			0	0.001	0	0	0			-0.032
11/16/2017 21:05	12.6	83	0	0.001	0	0	0			-0.033
11/16/2017 21:11			0	0.001	0	0	0			
11/16/2017 21:12			0	0.001	0	0	0			-0.032
11/16/2017 21:13			0	0.001	0	0	0			-0.031
11/16/2017 21:14			0	0.001	0	0	0			-0.031
11/16/2017 21:15	12.6	90.1	0	0.001	0	0	0	40.75417;-	3	-0.031
11/16/2017 21:16			0	0.001	0	0	0			-0.031
11/16/2017 21:17			0	0.001	0	0	0			-0.031
11/16/2017 21:18			0	0.001	0	0	0			-0.031
11/16/2017 21:19			0	0.001	0	0	0			-0.031
11/16/2017 21:20	12.6	84	0	0.001	0	0	0	40.75415;-	4	-0.031
11/16/2017 21:21			0	0.001	0	0	0			-0.032
11/16/2017 21:22			0	0.001	0	0	0			-0.032
11/16/2017 21:23			0	0.001	0	0	0			-0.031
11/16/2017 21:24			0	0.001	0	0	0			-0.031
11/16/2017 21:25	12.6	82	0	0.001	0	0	0	40.75414;-	2	-0.031
11/16/2017 21:26			0	0.001	0	0	0			-0.031
11/16/2017 21:27			0	0.001	0	0	0			-0.031
11/16/2017 21:28			0	0.001	0	0	0			-0.032
11/16/2017 21:29			0	0.001	0	0	0			-0.032

11/16/2017 21:30	12.6	91.1	0	0.001	0	0	0	40.75414;-[illegible]	-1	-0.032
11/16/2017 21:31			0	0.001	0	0	0			-0.032
11/16/2017 21:32			0	0.001	0	0	0			-0.032
11/16/2017 21:33			0	0.001	0	0	0			-0.032
11/16/2017 21:34			0	0.001	0	0	0			-0.032
11/16/2017 21:35	12.6	85	0	0.001	0	0	0	40.75418;-[illegible]	-4	-0.032
11/16/2017 21:36			0	0.001	0	0	0			-0.032
11/16/2017 21:37			0	0.001	0	0	0			-0.032
11/16/2017 21:38			0	0.001	0	0	0			-0.032
11/16/2017 21:39			0	0.001	0	0	0			-0.032
11/16/2017 21:40	12.6	83	0	0.001	0	0	0	40.75415;-[illegible]	-3	-0.033
11/16/2017 21:41			0	0.001	0	0	0			-0.033
11/16/2017 21:42			0	0.001	0	0	0			-0.033
11/16/2017 21:43			0	0.001	0	0	0			-0.033
11/16/2017 21:44			0	0.001	0	0	0			-0.033
11/16/2017 21:45	12.6	88.1	0	0.001	0	0	0	40.75418;-[illegible]	-2	-0.034
11/16/2017 21:46			0	0.001	0	0	0			-0.034
11/16/2017 21:47			0	0.001	0	0	0			-0.034
11/16/2017 21:48			0	0.001	0	0	0			-0.034
11/16/2017 21:49			0	0.001	0	0	0			-0.035

Timestamp (UTC)	Pressure (h	Current (m	Temperatu	Batt. Volta	VOC (STEL)	VOC (ppm)	VOC (Peak)	VOC (Low)	VOC (TWA)	Mass Conc.	Location	Altitude	Mass Conc.	STEL Mass	VOC (TWA)	VOC (STEL)	VOC (Peak)	VOC (Low)	VOC (ppm)	Device
10/3/2017 19:50												11								
10/3/2017 19:54					1.02	0.915	10.562	0	1.292											
10/3/2017 19:55					1.015	0.846	10.562	0	1.294											
10/3/2017 19:55												19								
10/3/2017 19:56					1.006	0.778	10.562	0	1.296											
10/3/2017 19:57					0.991	0.895	10.562	0	1.297											
10/3/2017 19:58					0.981	0.923	10.562	0	1.299											
10/3/2017 19:59					0.973	0.945	10.562	0	1.301											
10/3/2017 20:00					0.967	0.969	10.562	0	1.303											
10/3/2017 20:00												11								
10/3/2017 20:01					0.963	0.999	10.562	0	1.305											
10/3/2017 20:02					0.96	1.011	10.562	0	1.307											
10/3/2017 20:03					0.958	1.053	10.562	0	1.309											
10/3/2017 20:04					0.958	1.085	10.562	0	1.311											
10/3/2017 20:05					0.961	1.086	10.562	0	1.313											
10/3/2017 20:05												21								
10/3/2017 20:06					0.964	1.086	10.562	0	1.316											
10/3/2017 20:07					0.97	1.116	10.562	0	1.318											
10/3/2017 20:08					0.977	1.129	10.562	0	1.32											
10/3/2017 20:09					0.987	1.15	10.562	0	1.323											
10/3/2017 20:10					1.002	1.166	10.562	0	1.325											
10/3/2017 20:10												11								
10/3/2017 20:11					1.02	1.126	10.562	0	1.327											
10/3/2017 20:12					1.043	1.127	10.562	0	1.33											
10/3/2017 20:13					1.062	1.122	10.562	0	1.332											
10/3/2017 20:14					1.076	1.171	10.562	0	1.335											
10/3/2017 20:15					1.091	1.212	10.562	0	1.337											
10/3/2017 20:15												6								
10/3/2017 20:16					1.106	1.234	10.562	0	1.339											
10/3/2017 20:17					1.122	1.258	10.562	0	1.342											
10/3/2017 20:18					1.138	1.264	10.562	0	1.345											
10/3/2017 20:19					1.153	1.27	10.562	0	1.347											
10/3/2017 20:20					1.166	1.265	10.562	0	1.35											
10/3/2017 20:20												10								
10/3/2017 20:21					1.178	1.238	10.562	0	1.353											
10/3/2017 20:22					1.187	1.274	10.562	0	1.355											
10/3/2017 20:23					1.197	1.323	10.562	0	1.358											
10/3/2017 20:24					1.21	1.377	10.562	0	1.36											
10/3/2017 20:25					1.224	1.395	10.562	0	1.363											
10/3/2017 20:25												7								
10/3/2017 20:26					1.239	1.389	10.562	0	1.366											
10/3/2017 20:27					1.256	1.384	10.562	0	1.369											
10/3/2017 20:28					1.271	1.357	10.562	0	1.372											
10/3/2017 20:29					1.285	1.342	10.562	0	1.375											
10/3/2017 20:30					1.297	1.365	10.562	0	1.378											
10/3/2017 20:30												27								
10/3/2017 20:31					1.308	1.383	10.562	0	1.38											
10/3/2017 20:32					1.317	1.396	10.562	0	1.383											
10/3/2017 20:33					1.326	1.434	10.562	0	1.386											
10/3/2017 20:34					1.337	1.418	10.562	0	1.389											
10/3/2017 20:35					1.348	1.379	10.562	0	1.392											
10/3/2017 20:35												11								

10/3/2017 20:36	1.358	1.38	10.562	0	1.395	
10/3/2017 20:37	1.367	1.395	10.562	0	1.398	
10/3/2017 20:38	1.375	1.395	10.562	0	1.401	
10/3/2017 20:39	1.381	1.427	10.562	0	1.404	
10/3/2017 20:40	1.385	1.426	10.562	0	1.407	
10/3/2017 20:40						17
10/3/2017 20:41	1.388	1.458	10.562	0	1.41	
10/3/2017 20:42	1.392	1.458	10.562	0	1.413	
10/3/2017 20:43	1.397	1.507	10.562	0	1.416	
10/3/2017 20:44	1.407	1.469	10.562	0	1.419	
10/3/2017 20:45	1.415	1.472	10.562	0	1.422	
10/3/2017 20:45						21
10/3/2017 20:46	1.423	1.481	10.562	0	1.425	
10/3/2017 20:47	1.43	1.511	10.562	0	1.428	
10/3/2017 20:48	1.438	1.507	10.562	0	1.431	
10/3/2017 20:50						9
10/5/2017 12:26	0	0	0	0	0	
10/5/2017 12:27	0	0	0	0	0	
10/5/2017 12:28	0	0	0	0	0	
10/5/2017 12:29	0	0	0	0	0	
10/5/2017 12:30	0	0	0	0	0	
10/5/2017 12:30						-7
10/5/2017 12:31	0	0	0	0	0	
10/5/2017 12:32	0	0	0	0	0	
10/5/2017 12:33	0	0	0	0	0	
10/5/2017 12:34	0	0	0	0	0	
10/5/2017 12:35	0	0	0	0	0	
10/5/2017 12:35						4
10/5/2017 12:36	0	0	0	0	0	
10/5/2017 12:37	0	0	0	0	0	
10/5/2017 12:38	0	0	0	0	0	
10/5/2017 12:39	0	0	0	0	0	
10/5/2017 12:40	0	0	0	0	0	
10/5/2017 12:40						0
10/5/2017 12:41	0	0	0	0	0	
10/5/2017 12:42	0	0	0	0	0	
10/5/2017 12:43	0	0	0	0	0	
10/5/2017 12:44	0	0	0	0	0	
10/5/2017 12:45	0	0	0	0	0	
10/5/2017 12:45						9
10/5/2017 12:46	0	0	0	0	0	
10/5/2017 12:47	0	0	0	0	0	
10/5/2017 12:48	0	0	0	0	0	
10/5/2017 12:49	0	0	0	0	0	
10/5/2017 12:50	0	0	0	0	0	
10/5/2017 12:50						15
10/5/2017 12:51	0	0	0	0	0	
10/5/2017 12:52	0	0	0	0	0	
10/5/2017 12:53	0	0	0	0	0	
10/5/2017 12:54	0	0	0	0	0	
10/5/2017 12:55	0	0	0	0	0	
10/5/2017 12:55						19
10/5/2017 12:56	0	0	0	0	0	
10/5/2017 12:57	0	0	0	0	0	

10/5/2017 12:58	0	0	0	0	0	
10/5/2017 12:59	0	0	0	0	0	
10/5/2017 13:00	0	0	0	0	0	
10/5/2017 13:00						0
10/5/2017 13:01	0	0	0	0	0	
10/5/2017 13:02	0	0	0	0	0	
10/5/2017 13:03	0	0	0	0	0	
10/5/2017 13:04	0	0	0	0	0	
10/5/2017 13:05	0	0	0	0	0	
10/5/2017 13:05						24
10/5/2017 13:06	0	0	0	0	0	
10/5/2017 13:07	0	0	0	0	0	
10/5/2017 13:08	0	0	0	0	0	
10/5/2017 13:09	0	0	0	0	0	
10/5/2017 13:10	0	0	0	0	0	
10/5/2017 13:10						25
10/5/2017 13:11	0	0	0	0	0	
10/5/2017 13:12	0	0	0	0	0	
10/5/2017 13:13	0	0	0	0	0	
10/5/2017 13:14	0	0	0	0	0	
10/5/2017 13:15	0	0	0	0	0	
10/5/2017 13:15						21
10/5/2017 13:16	0	0	0	0	0	
10/5/2017 13:17	0	0	0	0	0	
10/5/2017 13:18	0	0	0	0	0	
10/5/2017 13:19	0	0	0	0	0	
10/5/2017 13:20	0	0	0	0	0	
10/5/2017 13:20						22
10/5/2017 13:21	0	0	0	0	0	
10/5/2017 13:22	0	0	0	0	0	
10/5/2017 13:23	0	0	0	0	0	
10/5/2017 13:24	0	0	0	0	0	
10/5/2017 13:25	0	0	0	0	0	
10/5/2017 13:25						26
10/5/2017 13:26	0	0	0	0	0	
10/5/2017 13:27	0	0	0	0	0	
10/5/2017 13:28	0	0	0	0	0	
10/5/2017 13:29	0	0	0	0	0	
10/5/2017 13:30	0	0	0	0	0	
10/5/2017 13:30						21
10/5/2017 13:31	0	0	0	0	0	
10/5/2017 13:32	0	0	0	0	0	
10/5/2017 13:33	0	0	0	0	0	
10/5/2017 13:34	0	0	0	0	0	
10/5/2017 13:35	0	0	0	0	0	
10/5/2017 13:35						15
10/5/2017 13:36	0	0	0	0	0	
10/5/2017 13:37	0	0	0	0	0	
10/5/2017 13:38	0	0	0	0	0	
10/5/2017 13:39	0	0	0	0	0	
10/5/2017 13:40	0	0	0	0	0	
10/5/2017 13:40						23
10/5/2017 13:41	0	0	0	0	0	
10/5/2017 13:42	0	0	0	0	0	

10/5/2017 13:43	0	0	0	0	0	
10/5/2017 13:44	0	0	0	0	0	
10/5/2017 13:45	0	0	0	0	0	
10/5/2017 13:45						23
10/5/2017 13:46	0	0	0	0	0	
10/5/2017 13:47	0	0	0	0	0	
10/5/2017 13:48	0	0	0	0	0	
10/5/2017 13:49	0	0	0	0	0	
10/5/2017 13:50	0	0	0	0	0	
10/5/2017 13:50						19
10/5/2017 13:51	0	0	0	0	0	
10/5/2017 13:52	0	0	0	0	0	
10/5/2017 13:53	0	0	0	0	0	
10/5/2017 13:54	0	0	0	0	0	
10/5/2017 13:55	0	0	0	0	0	
10/5/2017 13:55						20
10/5/2017 13:56	0	0	0	0	0	
10/5/2017 13:57	0	0	0	0	0	
10/5/2017 13:58	0	0	0	0	0	
10/5/2017 13:59	0	0	0	0	0	
10/5/2017 14:00	0	0	0	0	0	
10/5/2017 14:00						17
10/5/2017 14:01	0	0	0	0	0	
10/5/2017 14:02	0	0	0	0	0	
10/5/2017 14:03	0	0	0	0	0	
10/5/2017 14:04	0	0	0	0	0	
10/5/2017 14:05	0	0	0	0	0	
10/5/2017 14:05						14
10/5/2017 14:06	0	0	0	0	0	
10/5/2017 14:07	0	0	0	0	0	
10/5/2017 14:08	0	0	0	0	0	
10/5/2017 14:09	0	0	0	0	0	
10/5/2017 14:10	0	0	0	0	0	
10/5/2017 14:10						17
10/5/2017 14:11	0	0	0	0	0	
10/5/2017 14:12	0	0	0	0	0	
10/5/2017 14:13	0	0	0	0	0	
10/5/2017 14:14	0	0	0	0	0	
10/5/2017 14:15	0	0	0	0	0	
10/5/2017 14:15						9
10/5/2017 14:16	0	0	0	0	0	
10/5/2017 14:17	0	0	0	0	0	
10/5/2017 14:18	0	0	0	0	0	
10/5/2017 14:19	0	0	0	0	0	
10/5/2017 14:20	0	0	0	0	0	
10/5/2017 14:20						10
10/5/2017 14:21	0	0	0	0	0	
10/5/2017 14:22	0	0	0	0	0	
10/5/2017 14:23	0	0	0	0	0	
10/5/2017 14:24	0	0	0	0	0	
10/5/2017 14:25	0	0	0	0	0	
10/5/2017 14:25						15
10/5/2017 14:26	0	0	0	0	0	
10/5/2017 14:27	0	0	0	0	0	

10/5/2017 14:28	0	0	0	0	0	
10/5/2017 14:29	0	0	0	0	0	
10/5/2017 14:30	0	0	0	0	0	
10/5/2017 14:30						12
10/5/2017 14:31	0	0	0	0	0	
10/5/2017 14:32	0	0	0	0	0	
10/5/2017 14:33	0	0	0	0	0	
10/5/2017 14:34	0	0	0	0	0	
10/5/2017 14:35	0	0	0	0	0	
10/5/2017 14:35						8
10/5/2017 14:36	0	0	0	0	0	
10/5/2017 14:37	0	0	0	0	0	
10/5/2017 14:38	0	0	0	0	0	
10/5/2017 14:39	0	0	0	0	0	
10/5/2017 14:40	0	0	0	0	0	
10/5/2017 14:40						10
10/5/2017 14:41	0	0	0	0	0	
10/5/2017 14:42	0	0	0	0	0	
10/5/2017 14:43	0	0	0	0	0	
10/5/2017 14:44	0	0	0	0	0	
10/5/2017 14:45	0	0	0	0	0	
10/5/2017 14:45						11
10/5/2017 14:46	0	0	0	0	0	
10/5/2017 14:47	0	0	0	0	0	
10/5/2017 14:48	0	0	0	0	0	
10/5/2017 14:49	0	0	0	0	0	
10/6/2017 12:14	0	0	0	0	0	
10/6/2017 12:15	0	0	0	0	0	
10/6/2017 12:15						8
10/6/2017 12:16	0	0	0	0	0	
10/6/2017 12:17	0	0	0	0	0	
10/6/2017 12:18	0	0	0	0	0	
10/6/2017 12:19	0	0	0	0	0	
10/6/2017 12:20	0	0	0	0	0	
10/6/2017 12:20						6
10/6/2017 12:21	0	0	0	0	0	
10/6/2017 12:22	0	0	0	0	0	
10/6/2017 12:23	0	0	0	0	0	
10/6/2017 12:24	0	0	0	0	0	
10/6/2017 12:25	0	0	0	0	0	
10/6/2017 12:25						3
10/6/2017 12:26	0	0	0	0	0	
10/6/2017 12:27	0	0	0	0	0	
10/6/2017 12:28	0	0	0	0	0	
10/6/2017 12:29	0	0	0	0	0	
10/6/2017 12:30	0	0	0	0	0	
10/6/2017 12:30						1
10/6/2017 12:31	0	0	0	0	0	
10/6/2017 12:32	0	0	0	0	0	
10/6/2017 12:33	0	0	0	0	0	
10/6/2017 12:34	0	0	0	0	0	
10/6/2017 12:35	0	0	0	0	0	
10/6/2017 12:35						10
10/6/2017 12:36	0	0	0	0	0	

10/6/2017 12:37	0	0	0	0	0	
10/6/2017 12:38	0	0	0	0	0	
10/6/2017 12:39	0	0	0	0	0	
10/6/2017 12:40	0	0	0	0	0	
10/6/2017 12:40						13
10/6/2017 12:41	0	0	0	0	0	
10/6/2017 12:42	0	0	0	0	0	
10/6/2017 12:43	0	0	0	0	0	
10/6/2017 12:44	0	0	0	0	0	
10/6/2017 12:45	0	0	0	0	0	
10/6/2017 12:45						17
10/6/2017 12:46	0	0	0	0	0	
10/6/2017 12:47	0	0	0	0	0	
10/6/2017 12:48	0	0	0	0	0	
10/6/2017 12:49	0	0	0	0	0	
10/6/2017 12:50	0	0	0	0	0	
10/6/2017 12:50						8
10/6/2017 12:51	0	0	0	0	0	
10/6/2017 12:52	0	0	0	0	0	
10/6/2017 12:53	0	0	0	0	0	
10/6/2017 12:54	0	0	0	0	0	
10/6/2017 12:55	0	0	0	0	0	
10/6/2017 12:55						8
10/6/2017 12:56	0	0	0	0	0	
10/6/2017 12:57	0	0	0	0	0	
10/6/2017 12:58	0	0	0	0	0	
10/6/2017 12:59	0	0	0	0	0	
10/6/2017 13:00	0	0	0	0	0	
10/6/2017 13:00						13
10/6/2017 13:01	0	0	0	0	0	
10/6/2017 13:02	0	0	0	0	0	
10/6/2017 13:03	0	0	0	0	0	
10/6/2017 13:04	0	0	0	0	0	
10/6/2017 13:05	0	0	0	0	0	
10/6/2017 13:05						13
10/6/2017 13:06	0	0	0	0	0	
10/6/2017 13:07	0	0	0	0	0	
10/6/2017 13:08	0	0	0	0	0	
10/6/2017 13:09	0	0	0	0	0	
10/6/2017 13:10	0	0	0	0	0	
10/6/2017 13:10						11
10/6/2017 13:11	0	0	0	0	0	
10/6/2017 13:12	0	0	0	0	0	
10/6/2017 13:13	0	0	0	0	0	
10/6/2017 13:14	0	0	0	0	0	
10/6/2017 13:15	0	0	0	0	0	
10/6/2017 13:15						11
10/6/2017 13:16	0	0	0	0	0	
10/6/2017 13:17	0	0	0	0	0	
10/6/2017 13:18	0	0	0	0	0	
10/6/2017 13:19	0	0	0	0	0	
10/6/2017 13:20	0	0	0	0	0	
10/6/2017 13:20						12
10/6/2017 13:21	0	0	0	0	0	

10/6/2017 13:22	0	0	0	0	0	
10/6/2017 13:23	0	0	0	0	0	
10/6/2017 13:24	0	0	0	0	0	
10/6/2017 13:25	0	0	0	0	0	
10/6/2017 13:25						16
10/6/2017 13:26	0	0	0	0	0	
10/6/2017 13:27	0	0	0	0	0	
10/6/2017 13:28	0	0	0	0	0	
10/6/2017 13:29	0	0	0	0	0	
10/6/2017 13:30	0	0	0	0	0	
10/6/2017 13:30						14
10/6/2017 13:31	0	0	0	0	0	
10/6/2017 13:32	0	0	0	0	0	
10/6/2017 13:33	0	0	0	0	0	
10/6/2017 13:34	0	0	0	0	0	
10/6/2017 13:35	0	0	0	0	0	
10/6/2017 13:35						14
10/6/2017 13:36	0	0	0	0	0	
10/6/2017 13:37	0	0	0	0	0	
10/6/2017 13:38	0	0	0	0	0	
10/6/2017 13:39	0	0	0	0	0	
10/6/2017 13:40	0	0	0	0	0	
10/6/2017 13:40						14
10/6/2017 13:41	0	0	0	0	0	
10/6/2017 13:42	0	0	0	0	0	
10/6/2017 13:43	0	0	0	0	0	
10/6/2017 13:44	0	0	0	0	0	
10/6/2017 13:45	0	0	0	0	0	
10/6/2017 13:45						15
10/6/2017 13:46	0	0	0	0	0	
10/6/2017 13:47	0	0	0	0	0	
10/6/2017 13:48	0	0	0	0	0	
10/6/2017 13:49	0	0	0	0	0	
10/6/2017 13:50	0	0	0	0	0	
10/6/2017 13:50						8
10/6/2017 13:51	0	0	0	0	0	
10/6/2017 13:52	0	0	0	0	0	
10/6/2017 13:53	0	0	0	0	0	
10/6/2017 13:54	0	0	0	0	0	
10/6/2017 13:55	0	0	0	0	0	
10/6/2017 13:55						4
10/6/2017 13:56	0	0	0	0	0	
10/6/2017 13:57	0	0	0	0	0	
10/6/2017 13:58	0	0	0	0	0	
10/6/2017 13:59	0	0	0	0	0	
10/6/2017 14:00	0	0	0	0	0	
10/6/2017 14:00						3
10/6/2017 14:01	0	0	0	0	0	
10/6/2017 14:02	0	0	0	0	0	
10/6/2017 14:03	0	0	0	0	0	
10/6/2017 14:04	0	0	0	0	0	
10/6/2017 14:05	0	0	0	0	0	
10/6/2017 14:05						5
10/9/2017 15:27	0	0	12.189	0	0.043	

10/9/2017 15:28	0	0	12.189	0	0.043	
10/9/2017 15:29	0	0	12.189	0	0.043	
10/9/2017 15:30	0	0	12.189	0	0.043	-5
10/9/2017 15:31	0	0	12.189	0	0.043	
10/9/2017 15:32	0	0	12.189	0	0.043	
10/9/2017 15:33	0	0	12.189	0	0.043	
10/9/2017 15:34	0	0	12.189	0	0.043	
10/9/2017 15:35	0	0	12.189	0	0.043	5
10/9/2017 15:36	0	0	12.189	0	0.043	
10/9/2017 15:37	0	0	12.189	0	0.043	
10/9/2017 15:38	0	0	12.189	0	0.043	
10/9/2017 15:39	0	0	12.189	0	0.043	
10/9/2017 15:40	0	0	12.189	0	0.043	3
10/9/2017 15:41	0	0	12.189	0	0.043	
10/9/2017 15:42	0	0	12.189	0	0.043	
10/9/2017 15:43	0	0	12.189	0	0.043	
10/9/2017 15:44	0	0	12.189	0	0.043	
10/9/2017 15:45	0	0	12.189	0	0.043	7
10/9/2017 15:46	0	0	12.189	0	0.043	
10/9/2017 15:47	0	0	12.189	0	0.043	
10/9/2017 15:48	0	0	12.189	0	0.043	
10/9/2017 15:49	0	0	12.189	0	0.043	
10/9/2017 15:50	0	0	12.189	0	0.043	9
10/9/2017 15:51	0	0	12.189	0	0.043	
10/9/2017 15:52	0	0	12.189	0	0.043	
10/9/2017 15:53	0	0	12.189	0	0.043	
10/9/2017 15:54	0	0	12.189	0	0.043	
10/9/2017 15:55	0	0	12.189	0	0.043	13
10/9/2017 15:56	0	0	12.189	0	0.043	
10/9/2017 15:57	0	0	12.189	0	0.043	
10/9/2017 15:58	0	0	12.189	0	0.043	
10/9/2017 15:59	0	0	12.189	0	0.043	
10/9/2017 16:00	0	0	12.189	0	0.043	15
10/9/2017 16:01	0	0	12.189	0	0.043	
10/9/2017 16:02	0	0	12.189	0	0.043	
10/9/2017 16:03	0	0	12.189	0	0.043	
10/9/2017 16:04	0	0	12.189	0	0.043	
10/9/2017 16:05	0	0	12.189	0	0.043	18
10/9/2017 16:06	0	0	12.189	0	0.043	
10/9/2017 16:07	0	0	12.189	0	0.043	
10/9/2017 16:08	0	0	12.189	0	0.043	
10/9/2017 16:09	0	0	12.189	0	0.043	
10/9/2017 16:10	0	0	12.189	0	0.043	20
10/9/2017 16:11	0	0	12.189	0	0.043	
10/9/2017 16:12	0	0	12.189	0	0.043	
10/9/2017 16:13	0	0	12.189	0	0.043	
10/9/2017 16:14	0	0	12.189	0	0.043	
10/9/2017 16:15	0	0	12.189	0	0.043	20
10/9/2017 16:16	0	0	12.189	0	0.043	
10/9/2017 16:17	0	0	12.189	0	0.043	
10/9/2017 16:18	0	0	12.189	0	0.043	
10/9/2017 16:19	0	0	12.189	0	0.043	
10/9/2017 16:20	0	0	12.189	0	0.043	14
10/9/2017 16:21	0	0	12.189	0	0.043	

10/9/2017 16:22	0	0	12.189	0	0.043	
10/9/2017 16:23	0	0	12.189	0	0.043	
10/9/2017 16:24	0	0	12.189	0	0.043	
10/9/2017 16:25	0	0	12.189	0	0.043	16
10/9/2017 16:26	0	0	12.189	0	0.043	
10/9/2017 16:27	0	0	12.189	0	0.043	
10/9/2017 16:28	0	0	12.189	0	0.043	
10/9/2017 16:29	0	0	12.189	0	0.043	
10/9/2017 16:30	0	0	12.189	0	0.043	19
10/9/2017 16:31	0	0	12.189	0	0.043	
10/9/2017 16:32	0	0	12.189	0	0.043	
10/9/2017 16:33	0	0	12.189	0	0.043	
10/9/2017 16:34	0	0	12.189	0	0.043	
10/9/2017 16:35	0	0	12.189	0	0.043	17
10/9/2017 16:36	0	0	12.189	0	0.043	
10/9/2017 16:37	0	0	12.189	0	0.043	
10/9/2017 16:38	0	0	12.189	0	0.043	
10/9/2017 16:39	0	0	12.189	0	0.043	
10/9/2017 16:40	0	0	12.189	0	0.043	11
10/9/2017 16:41	0	0	12.189	0	0.043	
10/9/2017 16:42	0	0	12.189	0	0.043	
10/9/2017 16:43	0	0	12.189	0	0.043	
10/9/2017 16:44	0	0	12.189	0	0.043	
10/9/2017 16:45	0	0	12.189	0	0.043	8
10/9/2017 16:46	0	0	12.189	0	0.043	
10/9/2017 16:47	0	0	12.189	0	0.043	
10/9/2017 16:48	0	0	12.189	0	0.043	
10/9/2017 16:49	0	0	12.189	0	0.043	
10/9/2017 16:50	0	0	12.189	0	0.043	11
10/9/2017 16:51	0	0	12.189	0	0.043	
10/9/2017 16:52	0	0	12.189	0	0.043	
10/9/2017 16:53	0	0	12.189	0	0.043	
10/9/2017 16:54	0	0	12.189	0	0.043	
10/9/2017 16:55	0	0	12.189	0	0.043	10
10/9/2017 16:56	0	0	12.189	0	0.043	
10/9/2017 16:57	0	0	12.189	0	0.043	
10/9/2017 16:58	0	0	12.189	0	0.043	
10/9/2017 16:59	0	0	12.189	0	0.043	
10/9/2017 17:00	0	0	12.189	0	0.043	21
10/9/2017 17:01	0	0	12.189	0	0.043	
10/9/2017 17:02	0	0	12.189	0	0.043	
10/9/2017 17:03	0	0	12.189	0	0.043	
10/9/2017 17:04	0	0	12.189	0	0.043	
10/9/2017 17:05	0	0	12.189	0	0.043	19
10/9/2017 17:06	0	0	12.189	0	0.043	
10/9/2017 17:07	0	0	12.189	0	0.043	
10/9/2017 17:08	0	0	12.189	0	0.043	
10/9/2017 17:09	0	0	12.189	0	0.043	
10/9/2017 17:10	0	0	12.189	0	0.043	16
10/9/2017 17:11	0	0	12.189	0	0.043	
10/9/2017 17:12	0	0	12.189	0	0.043	
10/9/2017 17:13	0	0	12.189	0	0.043	
10/9/2017 17:14	0	0	12.189	0	0.043	
10/9/2017 17:15	0	0	12.189	0	0.043	18

10/9/2017 17:16	0	0	12.189	0	0.043	
10/9/2017 17:17	0	0	12.189	0	0.043	
10/9/2017 17:18	0	0	12.189	0	0.043	
10/9/2017 17:19	0	0	12.189	0	0.043	
10/9/2017 17:20	0	0	12.189	0	0.043	9
10/9/2017 17:21	0	0	12.189	0	0.043	
10/9/2017 17:22	0	0	12.189	0	0.043	
10/9/2017 17:23	0	0	12.189	0	0.043	
10/9/2017 17:24	0	0	12.189	0	0.043	
10/9/2017 17:25	0	0	12.189	0	0.043	11
10/9/2017 17:26	0	0	12.189	0	0.043	
10/9/2017 17:27	0	0	12.189	0	0.043	
10/9/2017 17:28	0	0	12.189	0	0.043	
10/9/2017 17:29	0	0	12.189	0	0.043	
10/9/2017 17:30	0	0	12.189	0	0.043	15
10/9/2017 17:31	0	0	12.189	0	0.043	
10/9/2017 17:32	0	0	12.189	0	0.043	
10/9/2017 17:33	0	0	12.189	0	0.043	
10/9/2017 17:34	0	0	12.189	0	0.043	
10/9/2017 17:35	0	0	12.189	0	0.043	23
10/9/2017 17:36	0	0	12.189	0	0.043	
10/9/2017 17:37	0	0	12.189	0	0.043	
10/9/2017 17:38	0	0	12.189	0	0.043	
10/9/2017 17:39	0	0	12.189	0	0.043	
10/9/2017 17:40	0	0	12.189	0	0.043	25
10/9/2017 17:41	0	0	12.189	0	0.043	
10/9/2017 17:42	0	0	12.189	0	0.043	
10/9/2017 17:43	0	0	12.189	0	0.043	
10/9/2017 17:44	0	0	12.189	0	0.043	
10/9/2017 17:45	0	0	12.189	0	0.043	18
10/9/2017 17:46	0	0	12.189	0	0.043	
10/9/2017 17:47	0	0	12.189	0	0.043	
10/9/2017 17:48	0	0	12.189	0	0.043	
10/9/2017 17:49	0	0	12.189	0	0.043	
10/9/2017 17:50	0	0	12.189	0	0.043	14
10/9/2017 17:51	0	0	12.189	0	0.043	
10/9/2017 17:52	0	0	12.189	0	0.043	
10/9/2017 17:53	0	0	12.189	0	0.043	
10/9/2017 17:54	0	0	12.189	0	0.043	
10/9/2017 17:55	0	0	12.189	0	0.043	21
10/9/2017 17:56	0	0	12.189	0	0.043	
10/9/2017 17:57	0	0	12.189	0	0.043	
10/9/2017 17:58	0	0	12.189	0	0.043	
10/9/2017 17:59	0	0	12.189	0	0.043	
10/9/2017 18:00	0	0	12.189	0	0.043	15
10/9/2017 18:01	0	0	12.189	0	0.043	
10/9/2017 18:02	0	0	12.189	0	0.043	
10/9/2017 18:03	0	0	12.189	0	0.043	
10/9/2017 18:04	0	0	12.189	0	0.043	
10/9/2017 18:05	0	0	12.189	0	0.043	20
10/9/2017 18:06	0	0	12.189	0	0.043	
10/9/2017 18:07	0	0	12.189	0	0.043	
10/9/2017 18:08	0	0	12.189	0	0.043	
10/9/2017 18:09	0	0	12.189	0	0.043	

10/9/2017 18:10	0	0	12.189	0	0.043	13
10/9/2017 18:11	0	0	12.189	0	0.043	
10/9/2017 18:12	0	0	12.189	0	0.043	
10/9/2017 18:13	0	0	12.189	0	0.043	
10/9/2017 18:14	0	0	12.189	0	0.043	
10/9/2017 18:15	0	0	12.189	0	0.043	59
10/9/2017 18:16	0	0	12.189	0	0.043	
10/9/2017 18:17	0	0	12.189	0	0.043	
10/9/2017 18:18	0	0	12.189	0	0.043	
10/9/2017 18:19	0	0	12.189	0	0.043	
10/9/2017 18:20	0	0	12.189	0	0.043	23
10/9/2017 18:21	0	0	12.189	0	0.043	
10/9/2017 18:22	0	0	12.189	0	0.043	
10/9/2017 18:23	0	0	12.189	0	0.043	
10/9/2017 18:24	0	0	12.189	0	0.043	
10/9/2017 18:25	0	0	12.189	0	0.043	5
10/9/2017 18:26	0	0	12.189	0	0.043	
10/9/2017 18:27	0	0	12.189	0	0.043	
10/9/2017 18:28	0	0	12.189	0	0.043	
10/9/2017 18:29	0	0	12.189	0	0.043	
10/9/2017 18:30	0	0	12.189	0	0.043	2
10/9/2017 18:31	0	0	12.189	0	0.043	
10/9/2017 18:32	0	0	12.189	0	0.043	
10/9/2017 18:33	0	0	12.189	0	0.043	
10/9/2017 18:34	0	0	12.189	0	0.043	
10/9/2017 18:35	0	0	12.189	0	0.043	10
10/9/2017 18:36	0	0	12.189	0	0.043	
10/9/2017 18:37	0	0	12.189	0	0.043	
10/9/2017 18:38	0	0	12.189	0	0.043	
10/9/2017 18:39	0	0	12.189	0	0.043	
10/9/2017 18:40	0	0	12.189	0	0.043	21
10/9/2017 18:41	0	0	12.189	0	0.043	
10/9/2017 18:42	0	0	12.189	0	0.043	
10/9/2017 18:43	0	0	12.189	0	0.043	
10/9/2017 18:44	0	0	12.189	0	0.043	
10/9/2017 18:45	0	0	12.189	0	0.043	
10/9/2017 18:45						15
10/9/2017 18:46	0	0	12.189	0	0.043	
10/9/2017 18:47	0	0	12.189	0	0.043	
10/9/2017 18:48	0	0	12.189	0	0.043	
10/9/2017 18:49	0	0	12.189	0	0.043	
10/9/2017 18:50	0	0	12.189	0	0.043	12
10/9/2017 18:51	0	0	12.189	0	0.043	
10/9/2017 18:52	0	0	12.189	0	0.043	
10/9/2017 18:53	0	0	12.189	0	0.043	
10/9/2017 18:54	0	0	12.189	0	0.043	
10/9/2017 18:55	0	0	12.189	0	0.043	37
10/9/2017 18:56	0	0	12.189	0	0.043	
10/9/2017 18:57	0	0	12.189	0	0.043	
10/9/2017 18:58	0	0	12.189	0	0.043	
10/9/2017 18:59	0	0	12.189	0	0.043	
10/9/2017 19:00	0	0	12.189	0	0.043	11
10/9/2017 19:01	0	0	12.189	0	0.043	
10/9/2017 19:02	0	0	12.189	0	0.043	

10/9/2017 19:03	0	0	12.189	0	0.043	
10/9/2017 19:04	0	0	12.189	0	0.043	
10/9/2017 19:05	0	0	12.189	0	0.043	9
10/9/2017 19:06	0	0	12.189	0	0.043	
10/9/2017 19:07	0	0	12.189	0	0.043	
10/9/2017 19:08	0	0	12.189	0	0.043	
10/9/2017 19:09	0	0	12.189	0	0.043	
10/9/2017 19:10	0	0	12.189	0	0.043	3
10/9/2017 19:11	0	0	12.189	0	0.043	
10/9/2017 19:12	0	0	12.189	0	0.043	
10/9/2017 19:13	0	0	12.189	0	0.043	
10/9/2017 19:14	0	0	12.189	0	0.043	
10/9/2017 19:15	0	0	12.189	0	0.043	7
10/9/2017 19:16	0	0	12.189	0	0.043	
10/9/2017 19:17	0	0	12.189	0	0.043	
10/9/2017 19:18	0	0	12.189	0	0.043	
10/9/2017 19:19	0	0	12.189	0	0.043	
10/9/2017 19:20	0	0	12.189	0	0.043	5
10/9/2017 19:21	0	0	12.189	0	0.043	
10/9/2017 19:22	0	0	12.189	0	0.043	
10/9/2017 19:23	0	0	12.189	0	0.043	
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10/9/2017 19:30	0	0	12.189	0	0.043	9
10/9/2017 19:31	0	0	12.189	0	0.043	
10/9/2017 19:32	0	0	12.189	0	0.043	
10/9/2017 19:33	0	0	12.189	0	0.043	
10/9/2017 19:34	0	0	12.189	0	0.043	
10/10/2017 12:40						31
10/10/2017 12:45						26
10/10/2017 15:55						-15
10/10/2017 16:00						-2
10/10/2017 16:05						5
10/10/2017 16:10						19
10/10/2017 16:15						21
10/10/2017 16:20						19
10/10/2017 16:25						21
10/10/2017 16:30						20
10/10/2017 16:35						15
10/10/2017 16:40						15
10/10/2017 16:45						17
10/10/2017 16:50						15
10/10/2017 16:55						22
10/10/2017 17:00						13
10/10/2017 17:05						6
10/10/2017 17:10						9
10/10/2017 17:15						10
10/10/2017 17:20						13
10/10/2017 17:25						19
10/10/2017 17:30						21

10/10/2017 17:35	19
10/10/2017 17:40	13
10/10/2017 17:45	18
10/10/2017 17:50	18
10/10/2017 17:55	31
10/10/2017 18:00	37
10/10/2017 18:05	55
10/10/2017 18:10	-1
10/10/2017 18:15	17
10/10/2017 18:20	9
10/10/2017 18:25	14
10/10/2017 18:30	-6
10/10/2017 18:35	-11
10/10/2017 18:40	-4
10/10/2017 18:45	4
10/10/2017 18:50	36
10/10/2017 18:55	12
10/10/2017 19:00	4
10/10/2017 19:05	4
10/10/2017 19:10	-3
10/10/2017 19:15	4
10/10/2017 19:20	1
10/10/2017 19:25	7
10/10/2017 19:30	9
10/10/2017 19:35	1
10/10/2017 19:40	-12
10/10/2017 19:45	-4
10/10/2017 19:50	17
10/10/2017 19:55	1
10/10/2017 20:00	6
10/10/2017 20:05	4
10/10/2017 20:10	8
10/10/2017 20:15	5
10/10/2017 20:20	9
10/10/2017 20:25	10
10/10/2017 20:30	10
10/10/2017 20:35	10
10/10/2017 20:40	9
10/10/2017 20:45	10
10/11/2017 12:40	13
10/11/2017 12:45	16
10/11/2017 12:50	22
10/11/2017 12:55	9
10/11/2017 13:00	6
10/11/2017 13:05	-6
10/11/2017 13:10	0
10/11/2017 13:15	7
10/11/2017 13:20	6
10/11/2017 13:25	4
10/11/2017 13:30	7
10/11/2017 13:35	11
10/11/2017 13:40	8
10/11/2017 13:45	6
10/11/2017 13:50	6

10/11/2017 13:55	6
10/11/2017 14:00	9
10/11/2017 14:05	6
10/11/2017 14:10	6
10/11/2017 14:15	-3
10/11/2017 14:20	-2
10/11/2017 14:25	5
10/11/2017 14:30	2
10/11/2017 14:35	4
10/11/2017 14:40	10
10/11/2017 14:45	4
10/11/2017 14:50	4
10/11/2017 14:55	9
10/11/2017 15:00	4
10/11/2017 15:05	4
10/11/2017 15:10	6
10/11/2017 15:15	9
10/11/2017 15:20	12
10/11/2017 15:25	9
10/11/2017 15:30	10
10/11/2017 15:35	6
10/11/2017 15:40	16
10/11/2017 15:45	14
10/11/2017 15:50	16
10/11/2017 15:55	20
10/11/2017 16:00	20
10/11/2017 16:05	21
10/11/2017 16:10	18
10/11/2017 16:15	18
10/11/2017 16:20	13
10/11/2017 16:25	11
10/11/2017 16:30	16
10/11/2017 16:35	14
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10/11/2017 17:20	19
10/11/2017 17:25	22
10/11/2017 17:30	25
10/11/2017 17:35	28
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10/11/2017 17:45	18
10/11/2017 17:50	31
10/11/2017 17:55	19
10/11/2017 18:00	17
10/11/2017 18:05	8
10/11/2017 18:10	10
10/11/2017 18:15	8
10/11/2017 18:20	7

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10/11/2017 18:35						2
10/11/2017 18:40						4
10/11/2017 18:45						0
10/11/2017 18:50						1
10/11/2017 18:55						2
10/11/2017 19:00						4
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10/11/2017 19:10						5
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10/11/2017 19:25						5
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10/11/2017 19:35						5
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10/11/2017 19:45						6
10/11/2017 19:50						2
10/11/2017 19:55						6
10/11/2017 20:00						5
10/11/2017 20:05						16
10/11/2017 20:10						8
10/11/2017 20:15						10
10/11/2017 20:20						8
10/11/2017 20:25						7
10/11/2017 20:30						7
10/11/2017 20:35						5
10/11/2017 20:40						7
10/12/2017 13:05						13
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10/12/2017 13:17	0	0.817	10.067	0	0.101	
10/12/2017 13:18	0	0.719	10.067	0	0.102	
10/12/2017 13:19	0	0.67	10.067	0	0.104	
10/12/2017 13:20	0	0.557	10.067	0	0.105	1
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10/12/2017 13:22	0	0.605	10.067	0	0.108	
10/12/2017 13:23	0	0.449	10.067	0	0.11	
10/12/2017 13:24	0	0.51	10.067	0	0.111	
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10/12/2017 13:28	1.89	0	10.067	0	0.113	
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10/12/2017 13:35	0.259	0	10.067	0	0.113	4
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10/12/2017 13:37	0.161	0	10.067	0	0.113	
10/12/2017 13:38	0.114	0	10.067	0	0.113	
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10/12/2017 13:42	0.014	0	10.067	0	0.113	
10/12/2017 13:43	0	0	10.067	0	0.113	
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10/12/2017 13:45	0	0	10.067	0	0.113	4
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10/12/2017 13:47	0	0	10.067	0	0.113	
10/12/2017 13:48	0	0	10.067	0	0.113	
10/12/2017 13:49	0	0	10.067	0	0.113	
10/12/2017 13:50	0	0	10.067	0	0.113	4
10/12/2017 13:51	0	0	10.067	0	0.113	
10/12/2017 13:52	0	0	10.067	0	0.113	
10/12/2017 13:53	0	0	10.067	0	0.113	
10/12/2017 13:54	0	0	10.067	0	0.113	
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10/12/2017 13:56	0	0	10.067	0	0.113	
10/12/2017 13:57	0	0	10.067	0	0.113	
10/12/2017 13:58	0	0	10.067	0	0.113	
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10/12/2017 14:00	0	0	10.067	0	0.113	4
10/12/2017 14:01	0	0	10.067	0	0.113	
10/12/2017 14:02	0	0	10.067	0	0.113	
10/12/2017 14:03	0	0	10.067	0	0.113	
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10/12/2017 14:05	0	0	10.067	0	0.113	5
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10/12/2017 14:07	0	0	10.067	0	0.113	
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10/12/2017 14:10	0	0	10.067	0	0.113	3
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10/12/2017 14:12	0	0	10.067	0	0.113	
10/12/2017 14:13	0	0	10.067	0	0.113	
10/12/2017 14:14	0	0	10.067	0	0.113	
10/12/2017 14:15	0	0	10.067	0	0.113	4
10/12/2017 14:16	0	0	10.067	0	0.113	
10/12/2017 14:17	0	0	10.067	0	0.113	
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10/12/2017 14:20	0	0	10.067	0	0.113	5
10/12/2017 14:21	0	0	10.067	0	0.113	
10/12/2017 14:22	0	0	10.067	0	0.113	
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10/12/2017 14:31	0	0	10.067	0	0.113	
10/12/2017 14:32	0	0	10.067	0	0.113	
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10/12/2017 14:34	0	0	10.067	0	0.113	

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10/12/2017 14:40	0	0	10.067	0	0.113	7
10/12/2017 14:41	0	0	10.067	0	0.113	
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10/12/2017 14:51	0	0	10.067	0	0.113	
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10/12/2017 14:56	0	0	10.067	0	0.113	
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10/12/2017 15:00	0	0	10.067	0	0.113	5
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10/12/2017 15:02	0	0	10.067	0	0.113	
10/12/2017 15:03	0	0	10.067	0	0.113	
10/12/2017 15:04	0	0	10.067	0	0.113	
10/12/2017 15:05	0	0	10.067	0	0.113	4
10/12/2017 15:06	0	0	10.067	0	0.113	
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10/12/2017 15:09	0	0	10.067	0	0.113	
10/12/2017 15:10	0	0	10.067	0	0.113	3
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10/12/2017 15:20	0	0	10.067	0	0.113	4
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10/12/2017 15:25	0	0	10.067	0	0.113	7
10/12/2017 15:26	0	0	10.067	0	0.113	
10/12/2017 15:27	0	0	10.067	0	0.113	
10/12/2017 15:28	0	0	10.067	0	0.113	

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10/12/2017 15:30	0	0	10.067	0	0.113	6
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10/12/2017 15:32	0	0	10.067	0	0.113	
10/12/2017 15:33	0	0	10.067	0	0.113	
10/12/2017 15:34	0	0	10.067	0	0.113	
10/12/2017 15:35	0	0	10.067	0	0.113	4
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10/12/2017 15:39	0	0	10.067	0	0.113	
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10/12/2017 15:42	0	0	10.067	0	0.113	
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10/12/2017 15:45	0	0	10.067	0	0.113	14
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10/12/2017 15:48	0	0	10.067	0	0.113	
10/12/2017 15:49	0	0	10.067	0	0.113	
10/12/2017 15:50	0	0	10.067	0	0.113	15
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10/12/2017 15:55	0	0	10.067	0	0.113	12
10/12/2017 15:56	0	0	10.067	0	0.113	
10/12/2017 15:57	0	0	10.067	0	0.113	
10/12/2017 15:58	0	0	10.067	0	0.113	
10/12/2017 15:59	0	0	10.067	0	0.113	
10/12/2017 16:00	0	0	10.067	0	0.113	17
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10/12/2017 16:02	0	0	10.067	0	0.113	
10/12/2017 16:03	0	0	10.067	0	0.113	
10/12/2017 16:04	0	0	10.067	0	0.113	
10/12/2017 16:05	0	0	10.067	0	0.113	16
10/12/2017 16:06	0	0	10.067	0	0.113	
10/12/2017 16:07	0	0	10.067	0	0.113	
10/12/2017 16:08	0	0	10.067	0	0.113	
10/12/2017 16:09	0	0	10.067	0	0.113	
10/12/2017 16:10	0	0	10.067	0	0.113	17
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10/12/2017 16:12	0	0	10.067	0	0.113	
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10/12/2017 16:20	0	0	10.067	0	0.113	17
10/12/2017 16:21	0	0	10.067	0	0.113	
10/12/2017 16:22	0	0	10.067	0	0.113	
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10/12/2017 16:25	0	0	10.067	0	0.113	17
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10/12/2017 16:27	0	0	10.067	0	0.113	
10/12/2017 16:28	0	0	10.067	0	0.113	
10/12/2017 16:29	0	0	10.067	0	0.113	
10/12/2017 16:30	0	0	10.067	0	0.113	20
10/12/2017 16:31	0	0	10.067	0	0.113	
10/12/2017 16:32	0	0	10.067	0	0.113	
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10/12/2017 16:34	0	0	10.067	0	0.113	
10/12/2017 16:35	0	0	10.067	0	0.113	18
10/12/2017 16:36	0	0	10.067	0	0.113	
10/12/2017 16:37	0	0	10.067	0	0.113	
10/12/2017 16:38	0	0	10.067	0	0.113	
10/12/2017 16:39	0	0	10.067	0	0.113	
10/12/2017 16:40	0	0	10.067	0	0.113	19
10/12/2017 16:41	0	0	10.067	0	0.113	
10/12/2017 16:42	0	0	10.067	0	0.113	
10/12/2017 16:43	0	0	10.067	0	0.113	
10/12/2017 16:44	0	0	10.067	0	0.113	
10/12/2017 16:45	0	0	10.067	0	0.113	20
10/12/2017 16:46	0	0	10.067	0	0.113	
10/12/2017 16:47	0	0	10.067	0	0.113	
10/12/2017 16:48	0	0	10.067	0	0.113	
10/12/2017 16:49	0	0	10.067	0	0.113	
10/12/2017 16:50	0	0	10.067	0	0.113	16
10/12/2017 16:51	0	0	10.067	0	0.113	
10/12/2017 16:52	0	0	10.067	0	0.113	
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10/12/2017 16:56	0	0	10.067	0	0.113	
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10/12/2017 16:59	0	0	10.067	0	0.113	
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10/12/2017 17:03	0	0	10.067	0	0.113	
10/12/2017 17:04	0	0	10.067	0	0.113	
10/12/2017 17:05	0	0	10.067	0	0.113	19
10/12/2017 17:06	0	0	10.067	0	0.113	
10/12/2017 17:07	0	0	10.067	0	0.113	
10/12/2017 17:08	0	0	10.067	0	0.113	
10/12/2017 17:09	0	0	10.067	0	0.113	
10/12/2017 17:10	0	0	10.067	0	0.113	18
10/12/2017 17:11	0	0	10.067	0	0.113	
10/12/2017 17:12	0	0	10.067	0	0.113	
10/12/2017 17:13	0	0	10.067	0	0.113	
10/12/2017 17:14	0	0	10.067	0	0.113	
10/12/2017 17:15	0	0	10.067	0	0.113	22
10/12/2017 17:16	0	0	10.067	0	0.113	
10/12/2017 17:17	0	0	10.067	0	0.113	

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10/12/2017 17:19	0	0	10.067	0	0.113	
10/12/2017 17:20	0	0	10.067	0	0.113	25
10/12/2017 17:21	0	0	10.067	0	0.113	
10/12/2017 17:22	0	0	10.067	0	0.113	
10/12/2017 17:23	0	0	10.067	0	0.113	
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10/12/2017 17:25	0	0	10.067	0	0.113	23
10/12/2017 17:26	0	0	10.067	0	0.113	
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10/12/2017 17:29	0	0	10.067	0	0.113	
10/12/2017 17:30	0	0	10.067	0	0.113	27
10/12/2017 17:31	0	0	10.067	0	0.113	
10/12/2017 17:32	0	0	10.067	0	0.113	
10/12/2017 17:33	0	0	10.067	0	0.113	
10/12/2017 17:34	0	0	10.067	0	0.113	
10/12/2017 17:35	0	0	10.067	0	0.113	32
10/12/2017 17:36	0	0	10.067	0	0.113	
10/12/2017 17:37	0	0	10.067	0	0.113	
10/12/2017 17:38	0	0	10.067	0	0.113	
10/12/2017 17:39	0	0	10.067	0	0.113	
10/12/2017 17:40	0	0	10.067	0	0.113	28
10/12/2017 17:41	0	0	10.067	0	0.113	
10/12/2017 17:42	0	0	10.067	0	0.113	
10/12/2017 17:43	0	0	10.067	0	0.113	
10/12/2017 17:44	0	0	10.067	0	0.113	
10/12/2017 17:45	0	0	10.067	0	0.113	18
10/12/2017 17:46	0	0	10.067	0	0.113	
10/12/2017 17:47	0	0	10.067	0	0.113	
10/12/2017 17:48	0	0	10.067	0	0.113	
10/12/2017 17:49	0	0	10.067	0	0.113	
10/12/2017 17:50	0	0	10.067	0	0.113	9
10/12/2017 17:51	0	0	10.067	0	0.113	
10/12/2017 17:52	0	0	10.067	0	0.113	
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10/12/2017 17:54	0	0	10.067	0	0.113	
10/12/2017 17:55	0	0	10.067	0	0.113	12
10/12/2017 17:56	0	0	10.067	0	0.113	
10/12/2017 17:57	0	0	10.067	0	0.113	
10/12/2017 17:58	0	0	10.067	0	0.113	
10/12/2017 17:59	0	0	10.067	0	0.113	
10/12/2017 18:00	0	0	10.067	0	0.113	-28
10/12/2017 18:01	0	0	10.067	0	0.113	
10/12/2017 18:02	0	0	10.067	0	0.113	
10/12/2017 18:03	0	0	10.067	0	0.113	
10/12/2017 18:04	0	0	10.067	0	0.113	
10/12/2017 18:05	0	0	10.067	0	0.113	-4
10/12/2017 18:06	0	0	10.067	0	0.113	
10/12/2017 18:07	0	0	10.067	0	0.113	
10/12/2017 18:08	0	0	10.067	0	0.113	
10/12/2017 18:09	0	0	10.067	0	0.113	
10/12/2017 18:10	0	0	10.067	0	0.113	3
10/12/2017 18:11	0	0	10.067	0	0.113	

10/12/2017 18:12	0	0	10.067	0	0.113	
10/12/2017 18:13	0	0	10.067	0	0.113	
10/12/2017 18:14	0	0	10.067	0	0.113	
10/12/2017 18:15	0	0	10.067	0	0.113	8
10/12/2017 18:16	0	0	10.067	0	0.113	
10/12/2017 18:17	0	0	10.067	0	0.113	
10/12/2017 18:18	0	0	10.067	0	0.113	
10/12/2017 18:19	0	0	10.067	0	0.113	
10/12/2017 18:20	0	0	10.067	0	0.113	13
10/12/2017 18:21	0	0	10.067	0	0.113	
10/12/2017 18:22	0	0	10.067	0	0.113	
10/12/2017 18:23	0	0	10.067	0	0.113	
10/12/2017 18:24	0	0	10.067	0	0.113	
10/12/2017 18:25	0	0	10.067	0	0.113	9
10/12/2017 18:26	0	0	10.067	0	0.113	
10/12/2017 18:27	0	0	10.067	0	0.113	
10/12/2017 18:28	0	0	10.067	0	0.113	
10/12/2017 18:29	0	0	10.067	0	0.113	
10/12/2017 18:30	0	0	10.067	0	0.113	4
10/12/2017 18:31	0	0	10.067	0	0.113	
10/12/2017 18:32	0	0	10.067	0	0.113	
10/12/2017 18:33	0	0	10.067	0	0.113	
10/12/2017 18:34	0	0	10.067	0	0.113	
10/12/2017 18:35	0	0	10.067	0	0.113	3
10/12/2017 18:36	0	0	10.067	0	0.113	
10/12/2017 18:37	0	0	10.067	0	0.113	
10/12/2017 18:38	0	0	10.067	0	0.113	
10/12/2017 18:39	0	0	10.067	0	0.113	
10/12/2017 18:40	0	0	10.067	0	0.113	5
10/12/2017 18:41	0	0	10.067	0	0.113	
10/12/2017 18:42	0	0	10.067	0	0.113	
10/12/2017 18:43	0	0	10.067	0	0.113	
10/12/2017 18:44	0	0	10.067	0	0.113	
10/12/2017 18:45	0	0	10.067	0	0.113	10
10/12/2017 18:46	0	0	10.067	0	0.113	
10/12/2017 18:47	0	0	10.067	0	0.113	
10/12/2017 18:48	0	0	10.067	0	0.113	
10/12/2017 18:49	0	0	10.067	0	0.113	
10/12/2017 18:50	0	0	10.067	0	0.113	9
10/12/2017 18:51	0	0	10.067	0	0.113	
10/12/2017 18:52	0	0	10.067	0	0.113	
10/12/2017 18:53	0	0	10.067	0	0.113	
10/12/2017 18:54	0	0	10.067	0	0.113	
10/12/2017 18:55	0	0	10.067	0	0.113	11
10/12/2017 18:56	0	0	10.067	0	0.113	
10/12/2017 18:57	0	0	10.067	0	0.113	
10/12/2017 18:58	0	0	10.067	0	0.113	
10/12/2017 18:59	0	0	10.067	0	0.113	
10/12/2017 19:00	0	0	10.067	0	0.113	10
10/12/2017 19:01	0	0	10.067	0	0.113	
10/12/2017 19:02	0	0	10.067	0	0.113	
10/12/2017 19:03	0	0	10.067	0	0.113	
10/12/2017 19:04	0	0	10.067	0	0.113	
10/12/2017 19:05	0	0	10.067	0	0.113	6

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10/12/2017 19:07	0	0	10.067	0	0.113	
10/12/2017 19:08	0	0	10.067	0	0.113	
10/12/2017 19:09	0	0	10.067	0	0.113	
10/12/2017 19:10	0	0	10.067	0	0.113	9
10/12/2017 19:11	0	0	10.067	0	0.113	
10/12/2017 19:12	0	0	10.067	0	0.113	
10/12/2017 19:13	0	0	10.067	0	0.113	
10/12/2017 19:14	0	0	10.067	0	0.113	
10/12/2017 19:15	0	0	10.067	0	0.113	15
10/12/2017 19:16	0	0	10.067	0	0.113	
10/12/2017 19:17	0	0	10.067	0	0.113	
10/12/2017 19:18	0	0	10.067	0	0.113	
10/12/2017 19:19	0	0	10.067	0	0.113	
10/12/2017 19:20	0	0	10.067	0	0.113	9
10/12/2017 19:21	0	0	10.067	0	0.113	
10/12/2017 19:22	0	0	10.067	0	0.113	
10/12/2017 19:23	0	0	10.067	0	0.113	
10/12/2017 19:24	0	0	10.067	0	0.113	
10/12/2017 19:25	0	0	10.067	0	0.113	12
10/12/2017 19:26	0	0	10.067	0	0.113	
10/12/2017 19:27	0	0	10.067	0	0.113	
10/12/2017 19:28	0	0	10.067	0	0.113	
10/12/2017 19:29	0	0	10.067	0	0.113	
10/12/2017 19:30	0	0	10.067	0	0.113	12
10/12/2017 19:31	0	0	10.067	0	0.113	
10/12/2017 19:32	0	0	10.067	0	0.113	
10/12/2017 19:33	0	0	10.067	0	0.113	
10/12/2017 19:34	0	0	10.067	0	0.113	
10/12/2017 19:35	0	0	10.067	0	0.113	8
10/12/2017 19:36	0	0	10.067	0	0.113	
10/12/2017 19:37	0	0	10.067	0	0.113	
10/12/2017 19:38	0	0	10.067	0	0.113	
10/12/2017 19:39	0	0	10.067	0	0.113	
10/12/2017 19:40	0	0	10.067	0	0.113	12
10/12/2017 19:41	0	0	10.067	0	0.113	
10/12/2017 19:42	0	0	10.067	0	0.113	
10/12/2017 19:43	0	0	10.067	0	0.113	
10/12/2017 19:44	0	0	10.067	0	0.113	
10/12/2017 19:45	0	0	10.067	0	0.113	8
10/12/2017 19:46	0	0	10.067	0	0.113	
10/12/2017 19:47	0	0	10.067	0	0.113	
10/12/2017 19:48	0	0	10.067	0	0.113	
10/12/2017 19:49	0	0	10.067	0	0.113	
10/12/2017 19:50	0	0	10.067	0	0.113	9
10/12/2017 19:51	0	0	10.067	0	0.113	
10/12/2017 19:52	0	0	10.067	0	0.113	
10/12/2017 19:53	0	0	10.067	0	0.113	
10/12/2017 19:54	0	0	10.067	0	0.113	
10/12/2017 19:55	0	0	10.067	0	0.113	7
10/12/2017 19:56	0	0	10.067	0	0.113	
10/12/2017 19:57	0	0	10.067	0	0.113	
10/12/2017 19:58	0	0	10.067	0	0.113	
10/12/2017 19:59	0	0	10.067	0	0.113	

10/12/2017 20:00	0	0	10.067	0	0.113	13
10/12/2017 20:01	0	0	10.067	0	0.113	
10/12/2017 20:02	0	0	10.067	0	0.113	
10/12/2017 20:03	0	0	10.067	0	0.113	
10/12/2017 20:04	0	0	10.067	0	0.113	
10/12/2017 20:05	0	0	10.067	0	0.113	15
10/12/2017 20:06	0	0	10.067	0	0.113	
10/12/2017 20:07	0	0	10.067	0	0.113	
10/12/2017 20:08	0	0	10.067	0	0.113	
10/12/2017 20:09	0	0	10.067	0	0.113	
10/12/2017 20:10	0	0	10.067	0	0.113	14
10/12/2017 20:11	0	0	10.067	0	0.113	
10/12/2017 20:12	0	0	10.067	0	0.113	
10/12/2017 20:13	0	0	10.067	0	0.113	
10/12/2017 20:14	0	0	10.067	0	0.113	
10/12/2017 20:15	0	0	10.067	0	0.113	9
10/12/2017 20:16	0	0	10.067	0	0.113	
10/12/2017 20:17	0	0	10.067	0	0.113	
10/12/2017 20:18	0	0	10.067	0	0.113	
10/12/2017 20:19	0	0	10.067	0	0.113	
10/12/2017 20:20	0	0	10.067	0	0.113	8
10/12/2017 20:21	0	0	10.067	0	0.113	
10/12/2017 20:22	0	0	10.067	0	0.113	
10/12/2017 20:23	0	0	10.067	0	0.113	
10/12/2017 20:24	0	0	10.067	0	0.113	
10/12/2017 20:25	0	0	10.067	0	0.113	5
10/12/2017 20:26	0	0	10.067	0	0.113	
10/12/2017 20:27	0	0	10.067	0	0.113	
10/12/2017 20:28	0	0	10.067	0	0.113	
10/12/2017 20:29	0	0	10.067	0	0.113	
10/12/2017 20:30	0	0	10.067	0	0.113	8
10/12/2017 20:31	0	0	10.067	0	0.113	
10/12/2017 20:32	0	0	10.067	0	0.113	
10/12/2017 20:33	0	0	10.067	0	0.113	
10/12/2017 20:34	0	0	10.067	0	0.113	
10/12/2017 20:35	0	0	10.067	0	0.113	11
10/12/2017 20:36	0	0	10.067	0	0.113	
10/12/2017 20:37	0	0	10.067	0	0.113	
10/12/2017 20:38	0	0	10.067	0	0.113	
10/12/2017 20:39	0	0	10.067	0	0.113	
10/12/2017 20:40	0	0	10.067	0	0.113	16
10/12/2017 20:41	0	0	10.067	0	0.113	
10/12/2017 20:42	0	0	10.067	0	0.113	
10/12/2017 20:43	0	0	10.067	0	0.113	
10/12/2017 20:44	0	0	10.067	0	0.113	
10/12/2017 20:45	0	0	10.067	0	0.113	12
10/12/2017 20:46	0	0	10.067	0	0.113	
10/12/2017 20:47	0	0	10.067	0	0.113	
10/12/2017 20:48	0	0	10.067	0	0.113	
10/12/2017 20:50						15
10/13/2017 12:40	0	7.164	8.262	0	0	
10/13/2017 12:41	0	6.922	8.262	0	0.012	
10/13/2017 12:42	0	6.852	8.262	0	0.027	
10/13/2017 12:43	0	5.637	8.262	0	0.041	

10/13/2017 12:44	0	6.15	8.262	0	0.055	
10/13/2017 12:45	0	5.929	8.262	0	0.067	34
10/13/2017 12:46	0	6.536	8.262	0	0.079	
10/13/2017 12:47	0	6.965	8.262	0	0.093	
10/13/2017 12:50	0	0	8.262	0	0.114	17
10/13/2017 12:51	0	1.144	8.262	0	0.114	
10/13/2017 12:52	0	0.234	8.262	0	0.114	
10/13/2017 12:53	0	0.906	8.262	0	0.115	
10/13/2017 12:54	0	0.759	8.262	0	0.117	
10/13/2017 12:55	3.793	0.213	8.262	0	0.118	10
10/13/2017 12:56	3.415	1.023	8.262	0	0.118	
10/13/2017 12:57	2.956	0	8.262	0	0.12	
10/13/2017 12:58	2.521	0.474	8.262	0	0.12	
10/13/2017 12:59	2.1	0.091	8.262	0	0.121	
10/13/2017 13:00	1.74	0.131	8.262	0	0.121	11
10/13/2017 13:01	1.362	0.31	8.262	0	0.122	
10/13/2017 13:02	0.964	0.193	8.262	0	0.123	
10/13/2017 13:03	0.542	0.027	8.262	0	0.124	
10/13/2017 13:04	0.347	0	8.262	0	0.124	
10/13/2017 13:05	0.341	0	8.262	0	0.124	
10/13/2017 13:05						10
10/13/2017 13:06	0.337	0	8.262	0	0.124	
10/13/2017 13:07	0.311	0	8.262	0	0.124	
10/13/2017 13:08	0.296	0	8.262	0	0.124	
10/13/2017 13:09	0.231	0	8.262	0	0.124	
10/13/2017 13:10	0.196	0	8.262	0	0.124	11
10/13/2017 13:11	0.182	0	8.262	0	0.124	
10/13/2017 13:12	0.144	0	8.262	0	0.124	
10/13/2017 13:13	0.128	0	8.262	0	0.124	
10/13/2017 13:14	0.114	0	8.262	0	0.124	
10/13/2017 13:15	0.087	0.62	8.262	0	0.124	5
10/13/2017 13:16	0.104	0	8.262	0	0.125	
10/13/2017 13:17	0.092	0	8.262	0	0.126	
10/13/2017 13:18	0.069	0	8.262	0	0.126	
10/13/2017 13:19	0.051	0	8.262	0	0.126	
10/13/2017 13:20	0.062	0	8.262	0	0.126	24
10/13/2017 13:21	0.071	0	8.262	0	0.126	
10/13/2017 13:22	0.073	0	8.262	0	0.126	
10/13/2017 13:23	0.079	0	8.262	0	0.127	
10/13/2017 13:24	0.079	0	8.262	0	0.127	
10/13/2017 13:25	0.079	0	8.262	0	0.127	13
10/13/2017 13:26	0.079	0.434	8.262	0	0.127	
10/13/2017 13:27	0.082	0	8.262	0	0.127	
10/13/2017 13:28	0.082	0	8.262	0	0.127	
10/13/2017 13:29	0.082	0	8.262	0	0.127	
10/13/2017 13:30	0.083	0	8.262	0	0.127	14
10/13/2017 13:31	0.056	0	8.262	0	0.127	
10/13/2017 13:32	0.037	0	8.262	0	0.127	
10/13/2017 13:33	0.034	0	8.262	0	0.127	
10/13/2017 13:34	0.032	0	8.262	0	0.127	
10/13/2017 13:35	0.02	0	8.262	0	0.127	16
10/13/2017 13:36	0.012	0	8.262	0	0.127	
10/13/2017 13:37	0.01	0	8.262	0	0.127	
10/13/2017 13:38	0.003	0	8.262	0	0.127	

10/13/2017 13:39	0.003	0	8.262	0	0.127	
10/13/2017 13:40	0.003	0	8.262	0	0.127	7
10/13/2017 13:41	0.003	0	8.262	0	0.127	
10/13/2017 13:42	0	0	8.262	0	0.127	
10/13/2017 13:43	0	0	8.262	0	0.127	
10/13/2017 13:44	0	0	8.262	0	0.127	
10/13/2017 13:45	0	0	8.262	0	0.127	5
10/13/2017 13:46	0	0	8.262	0	0.127	
10/13/2017 13:47	0	0	8.262	0	0.127	
10/13/2017 13:48	0	0	8.262	0	0.127	
10/13/2017 13:49	0	0	8.262	0	0.127	
10/13/2017 13:50	0	0	8.262	0	0.127	1
10/13/2017 13:51	0	0	8.262	0	0.127	
10/13/2017 13:52	0	0	8.262	0	0.127	
10/13/2017 13:53	0	0	8.262	0	0.127	
10/13/2017 13:54	0	0	8.262	0	0.127	
10/13/2017 13:55	0	0	8.262	0	0.127	4
10/13/2017 13:56	0	0	8.262	0	0.127	
10/13/2017 13:57	0	0	8.262	0	0.127	
10/13/2017 13:58	0	0	8.262	0	0.127	
10/13/2017 13:59	0	0	8.262	0	0.127	
10/13/2017 14:00	0	0	8.262	0	0.127	5
10/13/2017 14:01	0	0	8.262	0	0.127	
10/13/2017 14:02	0	0	8.262	0	0.127	
10/13/2017 14:03	0	0	8.262	0	0.127	
10/13/2017 14:04	0	0	8.262	0	0.127	
10/13/2017 14:05	0	0	8.262	0	0.127	10
10/13/2017 14:06	0	0	8.262	0	0.127	
10/13/2017 14:07	0	0	8.262	0	0.127	
10/13/2017 14:08	0	0	8.262	0	0.127	
10/13/2017 14:09	0	0	8.262	0	0.127	
10/13/2017 14:10	0	0	8.262	0	0.127	5
10/13/2017 14:11	0	0	8.262	0	0.127	
10/13/2017 14:12	0	0	8.262	0	0.127	
10/13/2017 14:13	0	0	8.262	0	0.127	
10/13/2017 14:14	0	0	8.262	0	0.127	
10/13/2017 14:15	0	0	8.262	0	0.127	1
10/13/2017 14:16	0	0	8.262	0	0.127	
10/13/2017 14:17	0	0	8.262	0	0.127	
10/13/2017 14:18	0	0	8.262	0	0.127	
10/13/2017 14:19	0	0	8.262	0	0.127	
10/13/2017 14:20	0	0	8.262	0	0.127	1
10/13/2017 14:21	0	0	8.262	0	0.127	
10/13/2017 14:22	0	0	8.262	0	0.127	
10/13/2017 14:23	0	0	8.262	0	0.127	
10/13/2017 14:24	0	0	8.262	0	0.127	
10/13/2017 14:25	0	0	8.262	0	0.127	2
10/13/2017 14:26	0	0	8.262	0	0.127	
10/13/2017 14:27	0	0	8.262	0	0.127	
10/13/2017 14:28	0	0	8.262	0	0.127	
10/13/2017 14:29	0	0	8.262	0	0.127	
10/13/2017 14:30	0	0	8.262	0	0.127	7
10/13/2017 14:31	0	0	8.262	0	0.127	
10/13/2017 14:32	0	0	8.262	0	0.127	

10/13/2017 14:33	0	0	8.262	0	0.127	
10/13/2017 14:34	0	0	8.262	0	0.127	
10/13/2017 14:35	0	0	8.262	0	0.127	3
10/13/2017 14:36	0	0	8.262	0	0.127	
10/13/2017 14:37	0	0	8.262	0	0.127	
10/13/2017 14:38	0	0	8.262	0	0.127	
10/13/2017 14:39	0	0	8.262	0	0.127	
10/13/2017 14:40	0	0	8.262	0	0.127	4
10/13/2017 14:41	0	0	8.262	0	0.127	
10/13/2017 14:42	0	0	8.262	0	0.127	
10/13/2017 14:43	0	0	8.262	0	0.127	
10/13/2017 14:44	0	0	8.262	0	0.127	
10/13/2017 14:45	0	0	8.262	0	0.127	8
10/13/2017 14:46	0	0	8.262	0	0.127	
10/13/2017 14:47	0	0	8.262	0	0.127	
10/13/2017 14:48	0	0	8.262	0	0.127	
10/13/2017 14:49	0	0	8.262	0	0.127	
10/13/2017 14:50	0	0	8.262	0	0.127	5
10/13/2017 14:51	0	0	8.262	0	0.127	
10/13/2017 14:52	0	0	8.262	0	0.127	
10/13/2017 14:53	0	0	8.262	0	0.127	
10/13/2017 14:54	0	0	8.262	0	0.127	
10/13/2017 14:55	0	0	8.262	0	0.127	11
10/13/2017 14:56	0	0	8.262	0	0.127	
10/13/2017 14:57	0	0	8.262	0	0.127	
10/13/2017 15:00	0	0	8.262	0	0.127	4
10/13/2017 15:01	0	0	8.262	0	0.127	
10/13/2017 15:02	0	0	8.262	0	0.127	
10/13/2017 15:03	0	0	8.262	0	0.127	
10/13/2017 15:04	0	0	8.262	0	0.127	
10/13/2017 15:05	0	0	8.262	0	0.127	2
10/13/2017 15:06	0	0	8.262	0	0.127	
10/13/2017 15:07	0	0	8.262	0	0.127	
10/13/2017 15:08	0	0	8.262	0	0.127	
10/13/2017 15:09	0	0	8.262	0	0.127	
10/13/2017 15:10	0	0	8.262	0	0.127	1
10/13/2017 15:11	0	0	8.262	0	0.127	
10/13/2017 15:12	0	0	8.262	0	0.127	
10/13/2017 15:13	0	0	8.262	0	0.127	
10/13/2017 15:14	0	0	8.262	0	0.127	
10/13/2017 15:15	0	0	8.262	0	0.127	4
10/13/2017 15:16	0	0	8.262	0	0.127	
10/13/2017 15:17	0	0	8.262	0	0.127	
10/13/2017 15:18	0	0	8.262	0	0.127	
10/13/2017 15:19	0	0	8.262	0	0.127	
10/13/2017 15:20	0	0	8.262	0	0.127	5
10/13/2017 15:21	0	0	8.262	0	0.127	
10/13/2017 15:22	0	0	8.262	0	0.127	
10/13/2017 15:23	0	0	8.262	0	0.127	
10/13/2017 15:24	0	0	8.262	0	0.127	
10/13/2017 15:25	0	0	8.262	0	0.127	4
10/13/2017 15:26	0	0	8.262	0	0.127	
10/13/2017 15:27	0	0	8.262	0	0.127	
10/13/2017 15:28	0	0	8.262	0	0.127	

10/13/2017 15:29	0	0	8.262	0	0.127	
10/13/2017 15:30	0	0	8.262	0	0.127	4
10/13/2017 15:31	0	0	8.262	0	0.127	
10/13/2017 15:32	0	0	8.262	0	0.127	
10/13/2017 15:33	0	0	8.262	0	0.127	
10/13/2017 15:34	0	0	8.262	0	0.127	
10/13/2017 15:35	0	0	8.262	0	0.127	11
10/13/2017 15:36	0	0	8.262	0	0.127	
10/13/2017 15:37	0	0	8.262	0	0.127	
10/13/2017 15:38	0	0	8.262	0	0.127	
10/13/2017 15:39	0	0	8.262	0	0.127	
10/13/2017 15:40	0	0	8.262	0	0.127	12
10/13/2017 15:41	0	0	8.262	0	0.127	
10/13/2017 15:42	0	0	8.262	0	0.127	
10/13/2017 15:43	0	0	8.262	0	0.127	
10/13/2017 15:44	0	0	8.262	0	0.127	
10/13/2017 15:45	0	0	8.262	0	0.127	8
10/13/2017 15:46	0	0	8.262	0	0.127	
10/13/2017 15:47	0	0	8.262	0	0.127	
10/13/2017 15:48	0	0	8.262	0	0.127	
10/13/2017 15:49	0	0	8.262	0	0.127	
10/13/2017 15:50	0	0	8.262	0	0.127	4
10/13/2017 15:51	0	0	8.262	0	0.127	
10/13/2017 15:52	0	0	8.262	0	0.127	
10/13/2017 15:53	0	0	8.262	0	0.127	
10/13/2017 15:54	0	0	8.262	0	0.127	
10/13/2017 15:55	0	0	8.262	0	0.127	9
10/13/2017 15:56	0	0	8.262	0	0.127	
10/13/2017 15:57	0	0	8.262	0	0.127	
10/13/2017 15:58	0	0	8.262	0	0.127	
10/13/2017 15:59	0	0	8.262	0	0.127	
10/13/2017 16:00	0	0	8.262	0	0.127	12
10/13/2017 16:01	0	0	8.262	0	0.127	
10/13/2017 16:02	0	0	8.262	0	0.127	
10/13/2017 16:03	0	0	8.262	0	0.127	
10/13/2017 16:04	0	0	8.262	0	0.127	
10/13/2017 16:05	0	0	8.262	0	0.127	16
10/13/2017 16:06	0	0	8.262	0	0.127	
10/13/2017 16:07	0	0	8.262	0	0.127	
10/13/2017 16:08	0	0	8.262	0	0.127	
10/13/2017 16:09	0	0	8.262	0	0.127	
10/13/2017 16:10	0	0	8.262	0	0.127	17
10/13/2017 16:11	0	0	8.262	0	0.127	
10/13/2017 16:12	0	0	8.262	0	0.127	
10/13/2017 16:13	0	0	8.262	0	0.127	
10/13/2017 16:14	0	0	8.262	0	0.127	
10/13/2017 16:15	0	0	8.262	0	0.127	21
10/13/2017 16:16	0	0	8.262	0	0.127	
10/13/2017 16:17	0	0	8.262	0	0.127	
10/13/2017 16:18	0	0	8.262	0	0.127	
10/13/2017 16:19	0	0	8.262	0	0.127	
10/13/2017 16:20	0	0	8.262	0	0.127	22
10/13/2017 16:21	0	0	8.262	0	0.127	
10/13/2017 16:22	0	0	8.262	0	0.127	

10/13/2017 16:23	0	0	8.262	0	0.127	
10/13/2017 16:24	0	0	8.262	0	0.127	
10/13/2017 16:25	0	0	8.262	0	0.127	24
10/13/2017 16:26	0	0	8.262	0	0.127	
10/13/2017 16:27	0	0	8.262	0	0.127	
10/13/2017 16:28	0	0	8.262	0	0.127	
10/13/2017 16:29	0	0	8.262	0	0.127	
10/13/2017 16:30	0	0	8.262	0	0.127	22
10/13/2017 16:31	0	0	8.262	0	0.127	
10/13/2017 16:32	0	0	8.262	0	0.127	
10/13/2017 16:33	0	0	8.262	0	0.127	
10/13/2017 16:34	0	0	8.262	0	0.127	
10/13/2017 16:35	0	0	8.262	0	0.127	23
10/13/2017 16:36	0	0	8.262	0	0.127	
10/13/2017 16:37	0	0	8.262	0	0.127	
10/13/2017 16:38	0	0	8.262	0	0.127	
10/13/2017 16:39	0	0	8.262	0	0.127	
10/13/2017 16:40	0	0	8.262	0	0.127	22
10/13/2017 16:41	0	0	8.262	0	0.127	
10/13/2017 16:42	0	0	8.262	0	0.127	
10/13/2017 16:43	0	0	8.262	0	0.127	
10/13/2017 16:44	0	0	8.262	0	0.127	
10/13/2017 16:45	0	0	8.262	0	0.127	16
10/13/2017 16:46	0	0	8.262	0	0.127	
10/13/2017 16:47	0	0	8.262	0	0.127	
10/13/2017 16:48	0	0	8.262	0	0.127	
10/13/2017 16:49	0	0	8.262	0	0.127	
10/13/2017 16:50	0	0	8.262	0	0.127	20
10/13/2017 16:51	0	0	8.262	0	0.127	
10/13/2017 16:52	0	0	8.262	0	0.127	
10/13/2017 16:53	0	0	8.262	0	0.127	
10/13/2017 16:54	0	0	8.262	0	0.127	
10/13/2017 16:55	0	0	8.262	0	0.127	18
10/13/2017 16:56	0	0	8.262	0	0.127	
10/13/2017 16:57	0	0	8.262	0	0.127	
10/13/2017 16:58	0	0	8.262	0	0.127	
10/13/2017 16:59	0	0	8.262	0	0.127	
10/13/2017 17:00	0	0	8.262	0	0.127	19
10/13/2017 17:01	0	0	8.262	0	0.127	
10/13/2017 17:02	0	0	8.262	0	0.127	
10/13/2017 17:03	0	0	8.262	0	0.127	
10/13/2017 17:04	0	0	8.262	0	0.127	
10/13/2017 17:05	0	0	8.262	0	0.127	17
10/13/2017 17:06	0	0	8.262	0	0.127	
10/13/2017 17:07	0	0	8.262	0	0.127	
10/13/2017 17:08	0	0	8.262	0	0.127	
10/13/2017 17:09	0	0	8.262	0	0.127	
10/13/2017 17:10	0	0	8.262	0	0.127	20
10/13/2017 17:11	0	0	8.262	0	0.127	
10/13/2017 17:12	0	0	8.262	0	0.127	
10/13/2017 17:13	0	0	8.262	0	0.127	
10/13/2017 17:14	0	0	8.262	0	0.127	
10/13/2017 17:15	0	0	8.262	0	0.127	18
10/13/2017 17:16	0	0	8.262	0	0.127	

10/13/2017 17:17	0	0	8.262	0	0.127	
10/13/2017 17:18	0	0	8.262	0	0.127	
10/13/2017 17:19	0	0	8.262	0	0.127	
10/13/2017 17:20	0	0	8.262	0	0.127	23
10/13/2017 17:21	0	0	8.262	0	0.127	
10/13/2017 17:22	0	0	8.262	0	0.127	
10/13/2017 17:23	0	0	8.262	0	0.127	
10/13/2017 17:24	0	0	8.262	0	0.127	
10/13/2017 17:25	0	0	8.262	0	0.127	23
10/13/2017 17:26	0	0	8.262	0	0.127	
10/13/2017 17:27	0	0	8.262	0	0.127	
10/13/2017 17:28	0	0	8.262	0	0.127	
10/13/2017 17:29	0	0	8.262	0	0.127	
10/13/2017 17:30	0	0	8.262	0	0.127	25
10/13/2017 17:31	0	0	8.262	0	0.127	
10/13/2017 17:32	0	0	8.262	0	0.127	
10/13/2017 17:33	0	0	8.262	0	0.127	
10/13/2017 17:34	0	0	8.262	0	0.127	
10/13/2017 17:35	0	0	8.262	0	0.127	24
10/13/2017 17:36	0	0	8.262	0	0.127	
10/13/2017 17:37	0	0	8.262	0	0.127	
10/13/2017 17:38	0	0	8.262	0	0.127	
10/13/2017 17:39	0	0	8.262	0	0.127	
10/13/2017 17:40	0	0	8.262	0	0.127	23
10/13/2017 17:41	0	0	8.262	0	0.127	
10/13/2017 17:42	0	0	8.262	0	0.127	
10/13/2017 17:43	0	0	8.262	0	0.127	
10/13/2017 17:44	0	0	8.262	0	0.127	
10/13/2017 17:45	0	0	8.262	0	0.127	21
10/13/2017 17:46	0	0	8.262	0	0.127	
10/13/2017 17:47	0	0	8.262	0	0.127	
10/13/2017 17:48	0	0	8.262	0	0.127	
10/13/2017 17:49	0	0	8.262	0	0.127	
10/13/2017 17:50	0	0	8.262	0	0.127	13
10/13/2017 17:51	0	0	8.262	0	0.127	
10/13/2017 17:52	0	0	8.262	0	0.127	
10/13/2017 17:53	0	0	8.262	0	0.127	
10/16/2017 14:56	0	0	6.046	0	0.009	
10/16/2017 14:57	0	0	6.046	0	0.009	
10/16/2017 14:58	0	0	6.046	0	0.009	
10/16/2017 14:59	0	0	6.046	0	0.009	
10/16/2017 15:00	0	0	6.046	0	0.009	0
10/16/2017 15:01	0	0	6.046	0	0.009	
10/16/2017 15:02	0	0	6.046	0	0.009	
10/16/2017 15:03	0	0	6.046	0	0.009	
10/16/2017 15:04	0	0	6.046	0	0.009	
10/16/2017 15:05	0	0	6.046	0	0.009	4
10/16/2017 15:06	0	0	6.046	0	0.009	
10/16/2017 15:07	0	0	6.046	0	0.009	
10/16/2017 15:08	0	0	6.046	0	0.009	
10/16/2017 15:09	0.318	0	6.046	0	0.009	
10/16/2017 15:10	0.04	0	6.046	0	0.009	10
10/16/2017 15:11	0	0	6.046	0	0.009	
10/16/2017 15:12	0	0	6.046	0	0.009	

10/16/2017 15:13	0	0	6.046	0	0.009	
10/16/2017 15:14	0	0	6.046	0	0.009	
10/16/2017 15:15	0	0	6.046	0	0.009	10
10/16/2017 15:16	0	0	6.046	0	0.009	
10/16/2017 15:17	0	0	6.046	0	0.009	
10/16/2017 15:18	0	0	6.046	0	0.009	
10/16/2017 15:19	0	0	6.046	0	0.009	
10/16/2017 15:20	0	0	6.046	0	0.009	11
10/16/2017 15:21	0	0	6.046	0	0.009	
10/16/2017 15:22	0	0	6.046	0	0.009	
10/16/2017 15:23	0	0	6.046	0	0.009	
10/16/2017 15:24	0	0	6.046	0	0.009	
10/16/2017 15:25	0	0	6.046	0	0.009	9
10/16/2017 15:26	0	0	6.046	0	0.009	
10/16/2017 15:27	0	0	6.046	0	0.009	
10/16/2017 15:28	0	0	6.046	0	0.009	
10/16/2017 15:29	0	0	6.046	0	0.009	
10/16/2017 15:30	0	0	6.046	0	0.009	14
10/16/2017 15:31	0	0	6.046	0	0.009	
10/16/2017 15:32	0	0	6.046	0	0.009	
10/16/2017 15:33	0	0	6.046	0	0.009	
10/16/2017 15:34	0	0	6.046	0	0.009	
10/16/2017 15:35	0	0	6.046	0	0.009	14
10/16/2017 15:36	0	0	6.046	0	0.009	
10/16/2017 15:37	0	0	6.046	0	0.009	
10/16/2017 15:38	0	0	6.046	0	0.009	
10/16/2017 15:39	0	0	6.046	0	0.009	
10/16/2017 15:40	0	0	6.046	0	0.009	14
10/16/2017 15:41	0	0	6.046	0	0.009	
10/16/2017 15:42	0	0	6.046	0	0.009	
10/16/2017 15:43	0	0	6.046	0	0.009	
10/16/2017 15:44	0	0	6.046	0	0.009	
10/16/2017 15:45	0	0	6.046	0	0.009	17
10/16/2017 15:46	0	0	6.046	0	0.009	
10/16/2017 15:47	0	0	6.046	0	0.009	
10/16/2017 15:48	0	0	6.046	0	0.009	
10/16/2017 15:49	0	0	6.046	0	0.009	
10/16/2017 15:50	0	0	6.046	0	0.009	16
10/16/2017 15:51	0	0	6.046	0	0.009	
10/16/2017 15:52	0	0	6.046	0	0.009	
10/16/2017 15:53	0	0	6.046	0	0.009	
10/16/2017 15:54	0	0	6.046	0	0.009	
10/16/2017 15:55	0	0	6.046	0	0.009	18
10/16/2017 15:56	0	0	6.046	0	0.009	
10/16/2017 15:57	0	0	6.046	0	0.009	
10/16/2017 15:58	0	0	6.046	0	0.009	
10/16/2017 15:59	0	0	6.046	0	0.009	
10/16/2017 16:00	0	0	6.046	0	0.009	21
10/16/2017 16:01	0	0	6.046	0	0.009	
10/16/2017 16:02	0	0	6.046	0	0.009	
10/16/2017 16:03	0	0	6.046	0	0.009	
10/16/2017 16:04	0	0	6.046	0	0.009	
10/16/2017 16:05	0	0	6.046	0	0.009	17
10/16/2017 16:06	0	0	6.046	0	0.009	

10/16/2017 16:07	0	0	6.046	0	0.009	
10/16/2017 16:08	0	0	6.046	0	0.009	
10/16/2017 16:09	0	0	6.046	0	0.009	
10/16/2017 16:10	0	0	6.046	0	0.009	15
10/16/2017 16:11	0	0	6.046	0	0.009	
10/16/2017 16:12	0	0	6.046	0	0.009	
10/16/2017 16:13	0	0	6.046	0	0.009	
10/16/2017 16:14	0	0	6.046	0	0.009	
10/16/2017 16:15	0	0	6.046	0	0.009	11
10/16/2017 16:16	0	0	6.046	0	0.009	
10/16/2017 16:17	0	0	6.046	0	0.009	
10/16/2017 16:18	0	0	6.046	0	0.009	
10/16/2017 16:19	0	0	6.046	0	0.009	
10/16/2017 16:20	0	0	6.046	0	0.009	13
10/16/2017 16:21	0	0	6.046	0	0.009	
10/16/2017 16:22	0	0	6.046	0	0.009	
10/16/2017 16:23	0	0	6.046	0	0.009	
10/16/2017 16:24	0	0	6.046	0	0.009	
10/16/2017 16:25	0	0	6.046	0	0.009	16
10/16/2017 16:26	0	0	6.046	0	0.009	
10/16/2017 16:27	0	0	6.046	0	0.009	
10/16/2017 16:28	0	0	6.046	0	0.009	
10/16/2017 16:29	0	0	6.046	0	0.009	
10/16/2017 16:30	0	0	6.046	0	0.009	16
10/16/2017 16:31	0	0	6.046	0	0.009	
10/16/2017 16:32	0	0	6.046	0	0.009	
10/16/2017 16:33	0	0	6.046	0	0.009	
10/16/2017 16:34	0	0	6.046	0	0.009	
10/16/2017 16:35	0	0	6.046	0	0.009	15
10/16/2017 16:36	0	0	6.046	0	0.009	
10/16/2017 16:37	0	0	6.046	0	0.009	
10/16/2017 16:38	0	0	6.046	0	0.009	
10/16/2017 16:39	0	0	6.046	0	0.009	
10/16/2017 16:40	0	0	6.046	0	0.009	13
10/16/2017 16:41	0	0	6.046	0	0.009	
10/16/2017 16:42	0	0	6.046	0	0.009	
10/16/2017 16:43	0	0	6.046	0	0.009	
10/16/2017 16:44	0	0	6.046	0	0.009	
10/16/2017 16:45	0	0	6.046	0	0.009	12
10/16/2017 16:46	0	0	6.046	0	0.009	
10/16/2017 16:47	0	0	6.046	0	0.009	
10/16/2017 16:48	0	0	6.046	0	0.009	
10/16/2017 16:49	0	0	6.046	0	0.009	
10/16/2017 16:50	0	0	6.046	0	0.009	16
10/16/2017 16:51	0	0	6.046	0	0.009	
10/16/2017 16:52	0	0	6.046	0	0.009	
10/16/2017 16:53	0	0	6.046	0	0.009	
10/16/2017 16:54	0	0	6.046	0	0.009	
10/16/2017 16:55	0	0	6.046	0	0.009	12
10/16/2017 16:56	0	0	6.046	0	0.009	
10/16/2017 16:57	0	0	6.046	0	0.009	
10/16/2017 16:58	0	0	6.046	0	0.009	
10/16/2017 16:59	0	0	6.046	0	0.009	
10/16/2017 17:00	0	0	6.046	0	0.009	9

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10/16/2017 17:02	0	0	6.046	0	0.009	
10/16/2017 17:03	0	0	6.046	0	0.009	
10/16/2017 17:04	0	0	6.046	0	0.009	
10/16/2017 17:05	0	0	6.046	0	0.009	14
10/16/2017 17:06	0	0	6.046	0	0.009	
10/16/2017 17:07	0	0	6.046	0	0.009	
10/16/2017 17:10	0	0	6.046	0	0.009	
10/16/2017 17:10						23
10/16/2017 17:11	0	0	6.046	0	0.009	
10/16/2017 17:13	0	0	6.046	0	0.009	
10/16/2017 17:14	0	0	6.046	0	0.009	
10/16/2017 17:15	0	0	6.046	0	0.009	24
10/16/2017 17:16	0	0	6.046	0	0.009	
10/16/2017 17:17	0	0	6.046	0	0.009	
10/16/2017 17:18	0	0	6.046	0	0.009	
10/16/2017 17:19	0	0	6.046	0	0.009	
10/16/2017 17:20	0	0	6.046	0	0.009	14
10/16/2017 17:21	0	0	6.046	0	0.009	
10/16/2017 17:22	0	0	6.046	0	0.009	
10/16/2017 17:23	0	0	6.046	0	0.009	
10/16/2017 17:24	0	0	6.046	0	0.009	
10/16/2017 17:25	0	0	6.046	0	0.009	22
10/16/2017 17:26	0	0.001	6.046	0	0.009	
10/16/2017 17:27	0	0	6.046	0	0.009	
10/16/2017 17:28	0	0	6.046	0	0.009	
10/16/2017 17:29	0	0	6.046	0	0.009	
10/16/2017 17:30	0	0	6.046	0	0.009	29
10/16/2017 17:31	0	0	6.046	0	0.009	
10/16/2017 17:32	0	0	6.046	0	0.009	
10/16/2017 17:33	0	0	6.046	0	0.009	
10/16/2017 17:34	0	0	6.046	0	0.009	
10/16/2017 17:35	0	0	6.046	0	0.009	33
10/16/2017 17:38	0	0	6.046	0	0.009	
10/16/2017 17:39	0	0	6.046	0	0.009	
10/16/2017 17:40	0	0	6.046	0	0.009	
10/16/2017 17:40						21
10/16/2017 17:41	0	0	6.046	0	0.009	
10/16/2017 17:42	0	0	6.046	0	0.009	
10/16/2017 17:43	0	0	6.046	0	0.009	
10/16/2017 17:44	0	0	6.046	0	0.009	
10/16/2017 17:45	0	0	6.046	0	0.009	5
10/16/2017 17:46	0	0	6.046	0	0.009	
10/16/2017 17:47	0	0	6.046	0	0.009	
10/16/2017 17:48	0	0	6.046	0	0.009	
10/16/2017 17:49	0	0	6.046	0	0.009	
10/16/2017 17:50	0	0	6.046	0	0.009	7
10/16/2017 17:51	0	0	6.046	0	0.009	
10/16/2017 17:52	0	0	6.046	0	0.009	
10/16/2017 17:53	0	0	6.046	0	0.009	
10/16/2017 17:54	0	0	6.046	0	0.009	
10/16/2017 17:55	0	0	6.046	0	0.009	11
10/16/2017 17:56	0	0	6.046	0	0.009	
10/16/2017 17:57	0	0	6.046	0	0.009	

10/16/2017 17:58	0	0	6.046	0	0.009	
10/16/2017 17:59	0	0	6.046	0	0.009	
10/16/2017 18:00	0	0	6.046	0	0.009	2
10/16/2017 18:01	0	0	6.046	0	0.009	
10/16/2017 18:02	0	0	6.046	0	0.009	
10/16/2017 18:03	0	0	6.046	0	0.009	
10/16/2017 18:04	0	0	6.046	0	0.009	
10/16/2017 18:05	0	0	6.046	0	0.009	3
10/16/2017 18:06	0	0	6.046	0	0.009	
10/16/2017 18:07	0	0	6.046	0	0.009	
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10/16/2017 18:09	0	0	6.046	0	0.009	
10/16/2017 18:10	0	0	6.046	0	0.009	5
10/16/2017 18:11	0	0	6.046	0	0.009	
10/16/2017 18:12	0	0	6.046	0	0.009	
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10/16/2017 18:14	0	0	6.046	0	0.009	
10/16/2017 18:15	0	0	6.046	0	0.009	18
10/16/2017 18:16	0	0	6.046	0	0.009	
10/16/2017 18:17	0	0	6.046	0	0.009	
10/16/2017 18:18	0	0	6.046	0	0.009	
10/16/2017 18:19	0	0	6.046	0	0.009	
10/16/2017 18:20	0	0	6.046	0	0.009	6
10/16/2017 18:21	0	0	6.046	0	0.009	
10/16/2017 18:22	0	0	6.046	0	0.009	
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10/16/2017 18:26	0	0	6.046	0	0.009	
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10/16/2017 18:29	0	0	6.046	0	0.009	
10/16/2017 18:30	0	0	6.046	0	0.009	6
10/16/2017 18:31	0	0	6.046	0	0.009	
10/16/2017 18:32	0	0	6.046	0	0.009	
10/16/2017 18:33	0	0	6.046	0	0.009	
10/16/2017 18:34	0	0	6.046	0	0.009	
10/16/2017 18:35	0	0	6.046	0	0.009	6
10/16/2017 18:36	0	0	6.046	0	0.009	
10/16/2017 18:37	0	0	6.046	0	0.009	
10/16/2017 18:38	0	0	6.046	0	0.009	
10/16/2017 18:39	0	0	6.046	0	0.009	
10/16/2017 18:40	0	0	6.046	0	0.009	10
10/16/2017 18:41	0	0	6.046	0	0.009	
10/16/2017 18:42	0	0	6.046	0	0.009	
10/16/2017 18:43	0	0	6.046	0	0.009	
10/16/2017 18:44	0	0	6.046	0	0.009	
10/16/2017 18:45	0	0	6.046	0	0.009	5
10/16/2017 18:46	0	0	6.046	0	0.009	
10/16/2017 18:47	0	0	6.046	0	0.009	
10/16/2017 18:48	0	0	6.046	0	0.009	
10/16/2017 18:49	0	0	6.046	0	0.009	
10/16/2017 18:50	0	0	6.046	0	0.009	10
10/16/2017 18:51	0	0	6.046	0	0.009	

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10/16/2017 18:55	0	0	6.046	0	0.009	9
10/16/2017 18:56	0	0	6.046	0	0.009	
10/16/2017 18:57	0	0	6.046	0	0.009	
10/16/2017 18:58	0	0	6.046	0	0.009	
10/16/2017 18:59	0	0	6.046	0	0.009	
10/16/2017 19:00	0	0	6.046	0	0.009	6
10/16/2017 19:01	0	0	6.046	0	0.009	
10/16/2017 19:02	0	0	6.046	0	0.009	
10/16/2017 19:03	0	0	6.046	0	0.009	
10/16/2017 19:04	0	0	6.046	0	0.009	
10/16/2017 19:05	0	0	6.046	0	0.009	1
10/16/2017 19:06	0	0	6.046	0	0.009	
10/16/2017 19:07	0	0	6.046	0	0.009	
10/16/2017 19:08	0	0	6.046	0	0.009	
10/16/2017 19:09	0	0	6.046	0	0.009	
10/16/2017 19:10	0	0	6.046	0	0.009	19
10/16/2017 19:11	0	0	6.046	0	0.009	
10/16/2017 19:12	0	0	6.046	0	0.009	
10/16/2017 19:13	0	0	6.046	0	0.009	
10/16/2017 19:14	0	0	6.046	0	0.009	
10/16/2017 19:15	0	0	6.046	0	0.009	22
10/16/2017 19:16	0	0	6.046	0	0.009	
10/16/2017 19:17	0	0	6.046	0	0.009	
10/16/2017 19:18	0	0	6.046	0	0.009	
10/16/2017 19:19	0	0	6.046	0	0.009	
10/16/2017 19:20	0	0	6.046	0	0.009	5
10/16/2017 19:21	0	0	6.046	0	0.009	
10/16/2017 19:22	0	0	6.046	0	0.009	
10/16/2017 19:23	0	0	6.046	0	0.009	
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10/16/2017 19:25	0	0	6.046	0	0.009	7
10/16/2017 19:26	0	0	6.046	0	0.009	
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10/16/2017 19:29	0	0	6.046	0	0.009	
10/16/2017 19:30	0	0	6.046	0	0.009	-5
10/16/2017 19:31	0	0	6.046	0	0.009	
10/16/2017 19:32	0	0	6.046	0	0.009	
10/16/2017 19:33	0	0	6.046	0	0.009	
10/16/2017 19:34	0	0	6.046	0	0.009	
10/16/2017 19:35	0	0	6.046	0	0.009	-4
10/16/2017 19:36	0	0	6.046	0	0.009	
10/16/2017 19:37	0	0	6.046	0	0.009	
10/16/2017 19:38	0	0	6.046	0	0.009	
10/16/2017 19:39	0	0	6.046	0	0.009	
10/16/2017 19:40	0	0	6.046	0	0.009	7
10/16/2017 19:41	0	0	6.046	0	0.009	
10/16/2017 19:42	0	0	6.046	0	0.009	
10/16/2017 19:43	0	0	6.046	0	0.009	
10/16/2017 19:44	0	0	6.046	0	0.009	
10/16/2017 19:45	0	0	6.046	0	0.009	10

10/16/2017 19:46	0	0	6.046	0	0.009	
10/16/2017 19:47	0	0	6.046	0	0.009	
10/16/2017 19:48	0	0	6.046	0	0.009	
10/16/2017 19:49	0	0	6.046	0	0.009	
10/16/2017 19:50	0	0	6.046	0	0.009	6
10/16/2017 19:51	0	0	6.046	0	0.009	
10/16/2017 19:52	0	0	6.046	0	0.009	
10/16/2017 19:53	0	0	6.046	0	0.009	
10/16/2017 19:54	0	0	6.046	0	0.009	
10/16/2017 19:55	0	0	6.046	0	0.009	10
10/16/2017 19:56	0	0	6.046	0	0.009	
10/16/2017 19:57	0	0	6.046	0	0.009	
10/16/2017 19:58	0	0	6.046	0	0.009	
10/16/2017 19:59	0	0	6.046	0	0.009	
10/16/2017 20:00	0	0	6.046	0	0.009	15
10/16/2017 20:01	0	0	6.046	0	0.009	
10/16/2017 20:02	0	0	6.046	0	0.009	
10/16/2017 20:03	0	0	6.046	0	0.009	
10/16/2017 20:04	0	0	6.046	0	0.009	
10/16/2017 20:05	0	0	6.046	0	0.009	24
10/16/2017 20:06	0	0	6.046	0	0.009	
10/16/2017 20:07	0	0	6.046	0	0.009	
10/16/2017 20:08	0	0	6.046	0	0.009	
10/16/2017 20:09	0	0	6.046	0	0.009	
10/16/2017 20:10	0	0	6.046	0	0.009	18
10/16/2017 20:11	0	0	6.046	0	0.009	
10/16/2017 20:12	0	0	6.046	0	0.009	
10/17/2017 12:20	0	0	3.823	0	0.006	
10/17/2017 12:21	0	0	3.823	0	0.006	
10/17/2017 12:22	0	0	3.823	0	0.006	
10/17/2017 12:23	0	0	3.823	0	0.006	
10/17/2017 12:24	0	0	3.823	0	0.006	
10/17/2017 12:25	0	0	3.823	0	0.006	18
10/17/2017 12:26	0	0	3.823	0	0.006	
10/17/2017 12:27	0	0	3.823	0	0.006	
10/17/2017 12:28	0	0	3.823	0	0.006	
10/17/2017 12:29	0	0	3.823	0	0.006	
10/17/2017 12:30	0	0	3.823	0	0.006	10
10/17/2017 12:31	0	0	3.823	0	0.006	
10/17/2017 12:32	0	0	3.823	0	0.006	
10/17/2017 12:33	0.2	0	3.823	0	0.006	
10/17/2017 12:34	0.018	0	3.823	0	0.006	
10/17/2017 12:35	0	0	3.823	0	0.006	11
10/17/2017 12:36	0	0	3.823	0	0.006	
10/17/2017 12:37	0	0	3.823	0	0.006	
10/17/2017 12:38	0	0	3.823	0	0.006	
10/17/2017 12:39	0	0	3.823	0	0.006	
10/17/2017 12:40	0	0	3.823	0	0.006	0
10/17/2017 12:41	0	0	3.823	0	0.006	
10/17/2017 12:42	0	0	3.823	0	0.006	
10/17/2017 12:43	0	0	3.823	0	0.006	
10/17/2017 12:44	0	0	3.823	0	0.006	
10/17/2017 12:45	0	0	3.823	0	0.006	8
10/17/2017 12:46	0	0	3.823	0	0.006	

10/17/2017 12:47	0	0	3.823	0	0.006	
10/17/2017 12:50	0	0.006	3.823	0	0.006	5
10/17/2017 12:51	0	0.01	3.823	0	0.006	
10/17/2017 12:52	0	0.02	3.823	0	0.006	
10/17/2017 12:53	0.001	0.019	3.823	0	0.006	
10/17/2017 12:54	0.002	0.02	3.823	0	0.006	
10/17/2017 12:55	0.004	0.023	3.823	0	0.006	10
10/17/2017 12:56	0.005	0.028	3.823	0	0.006	
10/17/2017 12:57	0.007	0.026	3.823	0	0.006	
10/17/2017 12:58	0.008	0.024	3.823	0	0.006	
10/17/2017 12:59	0.01	0.026	3.823	0	0.006	
10/17/2017 13:00	0.011	0.027	3.823	0	0.006	11
10/17/2017 13:01	0.013	0.024	3.823	0	0.006	
10/17/2017 13:02	0.015	0.007	3.823	0	0.006	
10/17/2017 13:03	0.016	0.004	3.823	0	0.006	
10/17/2017 13:04	0.016	0.003	3.823	0	0.006	
10/17/2017 13:05	0.016	0.005	3.823	0	0.006	13
10/17/2017 13:06	0.016	0.001	3.823	0	0.006	
10/17/2017 13:07	0.016	0	3.823	0	0.006	
10/17/2017 13:08	0.015	0	3.823	0	0.006	
10/17/2017 13:09	0.014	0	3.823	0	0.006	
10/17/2017 13:10	0.013	0	3.823	0	0.006	11
10/17/2017 13:11	0.011	0	3.823	0	0.006	
10/17/2017 13:12	0.01	0	3.823	0	0.006	
10/17/2017 13:13	0.008	0	3.823	0	0.006	
10/17/2017 13:14	0.006	0	3.823	0	0.006	
10/17/2017 13:15	0.005	0	3.823	0	0.006	8
10/17/2017 13:16	0.003	0	3.823	0	0.006	
10/17/2017 13:17	0.001	0	3.823	0	0.006	
10/17/2017 13:18	0	0	3.823	0	0.006	
10/17/2017 13:19	0	0	3.823	0	0.006	
10/17/2017 13:20	0	0	3.823	0	0.006	8
10/17/2017 13:21	0	0	3.823	0	0.006	
10/17/2017 13:22	0	0	3.823	0	0.006	
10/17/2017 13:23	0	0	3.823	0	0.006	
10/17/2017 13:24	0	0	3.823	0	0.006	
10/17/2017 13:25	0	0	3.823	0	0.006	8
10/17/2017 13:26	0	0	3.823	0	0.006	
10/17/2017 13:27	0	0	3.823	0	0.006	
10/17/2017 13:28	0	0	3.823	0	0.006	
10/17/2017 13:29	0	0	3.823	0	0.006	
10/17/2017 13:30	0	0	3.823	0	0.006	6
10/17/2017 13:31	0	0	3.823	0	0.006	
10/17/2017 13:32	0	0	3.823	0	0.006	
10/17/2017 13:33	0	0	3.823	0	0.006	
10/17/2017 13:34	0	0	3.823	0	0.006	
10/17/2017 13:35	0	0	3.823	0	0.006	2
10/17/2017 13:36	0	0	3.823	0	0.006	
10/17/2017 13:37	0	0	3.823	0	0.006	
10/17/2017 13:38	0	0	3.823	0	0.006	
10/17/2017 13:39	0	0	3.823	0	0.006	
10/17/2017 13:40	0	0	3.823	0	0.006	3
10/17/2017 13:41	0	0	3.823	0	0.006	
10/17/2017 13:42	0	0	3.823	0	0.006	

10/17/2017 13:43	0	0	3.823	0	0.006	
10/17/2017 13:44	0	0	3.823	0	0.006	
10/17/2017 13:45	0	0	3.823	0	0.006	3
10/17/2017 13:46	0	0	3.823	0	0.006	
10/17/2017 13:47	0	0	3.823	0	0.006	
10/17/2017 13:48	0	0	3.823	0	0.006	
10/17/2017 13:49	0	0	3.823	0	0.006	
10/17/2017 13:50	0	0	3.823	0	0.006	0
10/17/2017 13:51	0	0	3.823	0	0.006	
10/17/2017 13:52	0	0	3.823	0	0.006	
10/17/2017 13:53	0	0	3.823	0	0.006	
10/17/2017 13:54	0	0	3.823	0	0.006	
10/17/2017 13:55	0	0	3.823	0	0.006	1
10/17/2017 13:56	0	0	3.823	0	0.006	
10/17/2017 13:57	0	0	3.823	0	0.006	
10/17/2017 13:58	0	0	3.823	0	0.006	
10/17/2017 13:59	0	0	3.823	0	0.006	
10/17/2017 14:00	0	0	3.823	0	0.006	8
10/17/2017 14:01	0	0	3.823	0	0.006	
10/17/2017 14:02	0	0	3.823	0	0.006	
10/17/2017 14:03	0	0	3.823	0	0.006	
10/17/2017 14:04	0	0	3.823	0	0.006	
10/17/2017 14:05	0	0	3.823	0	0.006	10
10/17/2017 14:06	0	0	3.823	0	0.006	
10/17/2017 14:07	0	0	3.823	0	0.006	
10/17/2017 14:08	0	0	3.823	0	0.006	
10/17/2017 14:09	0	0	3.823	0	0.006	
10/17/2017 14:10	0	0	3.823	0	0.006	2
10/17/2017 14:11	0	0	3.823	0	0.006	
10/17/2017 14:12	0	0	3.823	0	0.006	
10/17/2017 14:13	0	0	3.823	0	0.006	
10/17/2017 14:14	0	0	3.823	0	0.006	
10/17/2017 14:15	0	0	3.823	0	0.006	-1
10/17/2017 14:16	0	0	3.823	0	0.006	
10/17/2017 14:17	0	0	3.823	0	0.006	
10/17/2017 14:18	0	0	3.823	0	0.006	
10/17/2017 14:19	0	0	3.823	0	0.006	
10/17/2017 14:20	0	0	3.823	0	0.006	4
10/17/2017 14:21	0	0.01	3.823	0	0.006	
10/17/2017 14:22	0	0.003	3.823	0	0.006	
10/17/2017 14:23	0	0.015	3.823	0	0.006	
10/17/2017 14:24	0.001	0.054	3.823	0	0.006	
10/17/2017 14:25	0.004	0.081	3.823	0	0.006	5
10/17/2017 14:26	0.008	0.055	3.823	0	0.007	
10/17/2017 14:27	0.012	0.036	3.823	0	0.007	
10/17/2017 14:28	0.016	0.043	3.823	0	0.007	
10/17/2017 14:29	0.02	0.009	3.823	0	0.007	
10/17/2017 14:30	0.02	0.024	3.823	0	0.007	8
10/17/2017 14:31	0.021	0.01	3.823	0	0.007	
10/17/2017 14:32	0.021	0	3.823	0	0.007	
10/17/2017 14:33	0.022	0	3.823	0	0.007	
10/17/2017 14:34	0.022	0.001	3.823	0	0.007	
10/17/2017 14:35	0.023	0.013	3.823	0	0.007	6
10/17/2017 14:36	0.023	0.04	3.823	0	0.007	

10/17/2017 14:37	0.025	0	3.823	0	0.007	
10/17/2017 14:38	0.024	0	3.823	0	0.007	
10/17/2017 14:39	0.024	0	3.823	0	0.007	
10/17/2017 14:40	0.02	0	3.823	0	0.007	9
10/17/2017 14:41	0.016	0	3.823	0	0.007	
10/17/2017 14:42	0.013	0	3.823	0	0.007	
10/17/2017 14:43	0.008	0	3.823	0	0.007	
10/17/2017 14:44	0.005	0	3.823	0	0.007	
10/17/2017 14:45	0.004	0	3.823	0	0.007	10
10/17/2017 14:46	0.003	0	3.823	0	0.007	
10/17/2017 14:47	0.003	0	3.823	0	0.007	
10/17/2017 14:48	0.003	0	3.823	0	0.007	
10/17/2017 14:49	0.002	0	3.823	0	0.007	
10/17/2017 14:50	0.002	0.003	3.823	0	0.007	11
10/17/2017 14:51	0.002	0.006	3.823	0	0.007	
10/17/2017 14:52	0	0.025	3.823	0	0.007	
10/17/2017 14:53	0.001	0	3.823	0	0.007	
10/17/2017 14:54	0.002	0	3.823	0	0.007	
10/17/2017 14:55	0.002	0	3.823	0	0.007	14
10/17/2017 14:56	0.002	0	3.823	0	0.007	
10/17/2017 14:57	0.002	0	3.823	0	0.007	
10/17/2017 14:58	0.002	0	3.823	0	0.007	
10/17/2017 14:59	0.002	0	3.823	0	0.007	
10/17/2017 15:00	0.002	0	3.823	0	0.007	14
10/17/2017 15:01	0.002	0	3.823	0	0.007	
10/17/2017 15:02	0.002	0	3.823	0	0.007	
10/17/2017 15:03	0.002	0	3.823	0	0.007	
10/17/2017 15:04	0.002	0	3.823	0	0.007	
10/17/2017 15:05	0.002	0	3.823	0	0.007	13
10/17/2017 15:06	0.002	0	3.823	0	0.007	
10/17/2017 15:07	0.002	0	3.823	0	0.007	
10/17/2017 15:08	0.001	0	3.823	0	0.007	
10/17/2017 15:09	0	0	3.823	0	0.007	
10/17/2017 15:10	0	0	3.823	0	0.007	16
10/17/2017 15:11	0	0	3.823	0	0.007	
10/17/2017 15:12	0	0	3.823	0	0.007	
10/17/2017 15:13	0	0	3.823	0	0.007	
10/17/2017 15:14	0	0	3.823	0	0.007	
10/17/2017 15:15	0	0	3.823	0	0.007	17
10/17/2017 15:16	0	0	3.823	0	0.007	
10/17/2017 15:17	0		3.823	0	0.007	
10/17/2017 15:18	0		3.823	0	0.007	
10/17/2017 15:19	0	0	3.823	0	0.007	
10/17/2017 15:20	0	0	3.823	0	0.007	18
10/17/2017 15:21	0	0	3.823	0	0.007	
10/17/2017 15:22	0	0	3.823	0	0.007	
10/17/2017 15:23	0	0	3.823	0	0.007	
10/17/2017 15:24	0	0	3.823	0	0.007	
10/17/2017 15:25	0	0	3.823	0	0.007	23
10/17/2017 15:26	0	0	3.823	0	0.007	
10/17/2017 15:27	0	0	3.823	0	0.007	
10/17/2017 15:28	0	0	3.823	0	0.007	
10/17/2017 15:30						20
10/17/2017 15:31	0	0	3.823	0	0.007	

10/17/2017 15:32	0	0	3.823	0	0.007	
10/17/2017 15:33	0	0	3.823	0	0.007	
10/17/2017 15:34	0	0	3.823	0	0.007	
10/17/2017 15:35	0	0	3.823	0	0.007	17
10/17/2017 15:36	0	0	3.823	0	0.007	
10/17/2017 15:37	0	0	3.823	0	0.007	
10/17/2017 15:38	0	0	3.823	0	0.007	
10/17/2017 15:39	0	0	3.823	0	0.007	
10/17/2017 15:40	0	0	3.823	0	0.007	20
10/17/2017 15:41	0	0	3.823	0	0.007	
10/17/2017 15:42	0	0	3.823	0	0.007	
10/17/2017 15:43	0	0	3.823	0	0.007	
10/17/2017 15:44	0	0	3.823	0	0.007	
10/17/2017 15:45	0	0	3.823	0	0.007	21
10/17/2017 15:46	0	0	3.823	0	0.007	
10/17/2017 15:47	0	0	3.823	0	0.007	
10/17/2017 15:48	0	0	3.823	0	0.007	
10/17/2017 15:49	0	0	3.823	0	0.007	
10/17/2017 15:50	0	0	3.823	0	0.007	16
10/17/2017 15:51	0	0	3.823	0	0.007	
10/17/2017 15:52	0	0	3.823	0	0.007	
10/17/2017 15:53	0	0	3.823	0	0.007	
10/17/2017 15:54	0	0	3.823	0	0.007	
10/17/2017 15:55	0	0	3.823	0	0.007	16
10/17/2017 15:56	0	0	3.823	0	0.007	
10/17/2017 15:57	0	0	3.823	0	0.007	
10/17/2017 15:58	0	0	3.823	0	0.007	
10/17/2017 15:59	0	0	3.823	0	0.007	
10/17/2017 16:00	0	0	3.823	0	0.007	17
10/17/2017 16:01	0	0	3.823	0	0.007	
10/17/2017 16:02	0	0	3.823	0	0.007	
10/17/2017 16:03	0	0	3.823	0	0.007	
10/17/2017 16:04	0	0	3.823	0	0.007	
10/17/2017 16:05	0	0	3.823	0	0.007	18
10/17/2017 16:06	0	0	3.823	0	0.007	
10/17/2017 16:07	0	0	3.823	0	0.007	
10/17/2017 16:08	0	0	3.823	0	0.007	
10/17/2017 16:09	0	0	3.823	0	0.007	
10/17/2017 16:10	0	0	3.823	0	0.007	14
10/17/2017 16:11	0	0	3.823	0	0.007	
10/17/2017 16:12	0	0	3.823	0	0.007	
10/17/2017 16:13	0	0	3.823	0	0.007	
10/17/2017 16:14	0	0	3.823	0	0.007	
10/17/2017 16:15	0	0	3.823	0	0.007	17
10/17/2017 16:16	0	0	3.823	0	0.007	
10/17/2017 16:17	0	0	3.823	0	0.007	
10/17/2017 16:18	0	0	3.823	0	0.007	
10/17/2017 16:19	0	0	3.823	0	0.007	
10/17/2017 16:20	0	0	3.823	0	0.007	18
10/17/2017 16:21	0	0	3.823	0	0.007	
10/17/2017 16:22	0	0	3.823	0	0.007	
10/17/2017 16:23	0	0	3.823	0	0.007	
10/17/2017 16:24	0	0	3.823	0	0.007	
10/17/2017 16:25	0	0	3.823	0	0.007	16

10/17/2017 16:26	0	0	3.823	0	0.007	
10/17/2017 16:27	0	0	3.823	0	0.007	
10/17/2017 16:28	0	0	3.823	0	0.007	
10/17/2017 16:29	0	0	3.823	0	0.007	
10/17/2017 16:30	0	0	3.823	0	0.007	13
10/17/2017 16:31	0	0	3.823	0	0.007	
10/17/2017 16:32	0	0	3.823	0	0.007	
10/17/2017 16:33	0	0	3.823	0	0.007	
10/17/2017 16:34	0	0	3.823	0	0.007	
10/17/2017 16:35	0	0	3.823	0	0.007	16
10/17/2017 16:36	0	0	3.823	0	0.007	
10/17/2017 16:37	0	0	3.823	0	0.007	
10/17/2017 16:38	0	0	3.823	0	0.007	
10/17/2017 16:39	0	0	3.823	0	0.007	
10/17/2017 16:40	0	0	3.823	0	0.007	15
10/17/2017 16:41	0	0	3.823	0	0.007	
10/17/2017 16:42	0	0	3.823	0	0.007	
10/17/2017 16:43	0	0	3.823	0	0.007	
10/17/2017 16:44	0	0	3.823	0	0.007	
10/17/2017 16:45	0	0	3.823	0	0.007	15
10/17/2017 16:46	0	0	3.823	0	0.007	
10/17/2017 16:47	0	0	3.823	0	0.007	
10/17/2017 16:48	0	0	3.823	0	0.007	
10/17/2017 16:49	0	0	3.823	0	0.007	
10/17/2017 16:50	0	0	3.823	0	0.007	18
10/17/2017 16:51	0	0	3.823	0	0.007	
10/17/2017 16:52	0	0	3.823	0	0.007	
10/17/2017 16:53	0	0	3.823	0	0.007	
10/17/2017 16:54	0	0	3.823	0	0.007	
10/17/2017 16:55	0	0	3.823	0	0.007	14
10/17/2017 16:56	0	0	3.823	0	0.007	
10/17/2017 16:57	0	0	3.823	0	0.007	
10/17/2017 16:58	0	0	3.823	0	0.007	
10/17/2017 16:59	0	0	3.823	0	0.007	
10/17/2017 17:00	0	0	3.823	0	0.007	18
10/17/2017 17:01	0	0	3.823	0	0.007	
10/18/2017 12:42	0	0	2.839	0	0.003	
10/18/2017 12:43	0	0	2.839	0	0.003	
10/18/2017 12:44	0	0	2.839	0	0.003	
10/18/2017 12:45	0	0	2.839	0	0.003	10
10/18/2017 12:46	0	0	2.839	0	0.003	
10/18/2017 12:47	0	0	2.839	0	0.003	
10/18/2017 12:48	0	0	2.839	0	0.003	
10/18/2017 12:49	0	0	2.839	0	0.003	
10/18/2017 12:50	0	0	2.839	0	0.003	4
10/18/2017 12:51	0	0	2.839	0	0.003	
10/18/2017 12:52	0	0	2.839	0	0.003	
10/18/2017 12:53	0	0	2.839	0	0.003	
10/18/2017 12:54	0	0	2.839	0	0.003	
10/18/2017 12:55	0.119	0	2.839	0	0.003	3
10/18/2017 12:56	0	0	2.839	0	0.003	
10/18/2017 12:57	0	0	2.839	0	0.003	
10/18/2017 12:58	0	0	2.839	0	0.003	
10/18/2017 12:59	0	0	2.839	0	0.003	

10/18/2017 13:00	0	0	2.839	0	0.003	33
10/18/2017 13:01	0	0	2.839	0	0.003	
10/18/2017 13:02	0	0	2.839	0	0.003	
10/18/2017 13:03	0	0	2.839	0	0.003	
10/18/2017 13:04	0	0	2.839	0	0.003	
10/18/2017 13:05	0	0	2.839	0	0.003	3
10/18/2017 13:06	0	0	2.839	0	0.003	
10/18/2017 13:07	0	0	2.839	0	0.003	
10/18/2017 13:08	0	0.002	2.839	0	0.003	
10/18/2017 13:09	0	0.012	2.839	0	0.003	
10/18/2017 13:10	0	0	2.839	0	0.003	22
10/18/2017 13:11	0	0.033	2.839	0	0.003	
10/18/2017 13:12	0.001	0.039	2.839	0	0.003	
10/18/2017 13:13	0.004	0.004	2.839	0	0.003	
10/18/2017 13:14	0.005	0	2.839	0	0.003	
10/18/2017 13:15	0.005	0.07	2.839	0	0.003	24
10/18/2017 13:16	0.008	0.021	2.839	0	0.003	
10/18/2017 13:17	0.009	0.024	2.839	0	0.004	
10/18/2017 13:18	0.011	0.025	2.839	0	0.004	
10/18/2017 13:19	0.013	0.019	2.839	0	0.004	
10/18/2017 13:20	0.014	0.013	2.839	0	0.004	6
10/18/2017 13:21	0.014	0.008	2.839	0	0.004	
10/18/2017 13:22	0.015	0.004	2.839	0	0.004	
10/18/2017 13:23	0.015	0	2.839	0	0.004	
10/18/2017 13:24	0.015	0	2.839	0	0.004	
10/18/2017 13:25	0.015	0	2.839	0	0.004	9
10/18/2017 13:26	0.015	0	2.839	0	0.004	
10/18/2017 13:27	0.013	0	2.839	0	0.004	
10/18/2017 13:28	0.011	0	2.839	0	0.004	
10/18/2017 13:29	0.01	0	2.839	0	0.004	
10/18/2017 13:30	0.009	0	2.839	0	0.004	0
10/18/2017 13:31	0.007	0	2.839	0	0.004	
10/18/2017 13:32	0.005	0	2.839	0	0.004	
10/18/2017 13:33	0.004	0	2.839	0	0.004	
10/18/2017 13:34	0.002	0	2.839	0	0.004	
10/18/2017 13:35	0.001	0	2.839	0	0.004	1
10/18/2017 13:36	0	0	2.839	0	0.004	
10/18/2017 13:37	0	0	2.839	0	0.004	
10/18/2017 13:38	0	0	2.839	0	0.004	
10/18/2017 13:39	0	0	2.839	0	0.004	
10/18/2017 13:40	0	0	2.839	0	0.004	-6
10/18/2017 13:41	0	0	2.839	0	0.004	
10/18/2017 13:42	0	0	2.839	0	0.004	
10/18/2017 13:43	0	0	2.839	0	0.004	
10/18/2017 13:44	0	0	2.839	0	0.004	
10/18/2017 13:45	0	0	2.839	0	0.004	-10
10/18/2017 13:46	0	0	2.839	0	0.004	
10/18/2017 13:47	0	0	2.839	0	0.004	
10/18/2017 13:48	0	0	2.839	0	0.004	
10/18/2017 13:49	0	0	2.839	0	0.004	
10/18/2017 13:50	0	0	2.839	0	0.004	-14
10/18/2017 13:51	0	0	2.839	0	0.004	
10/18/2017 13:52	0	0	2.839	0	0.004	
10/18/2017 13:53	0	0	2.839	0	0.004	

10/18/2017 13:54	0	0	2.839	0	0.004	
10/18/2017 13:55	0	0	2.839	0	0.004	-15
10/18/2017 13:56	0	0	2.839	0	0.004	
10/18/2017 13:57	0	0	2.839	0	0.004	
10/18/2017 13:58	0	0	2.839	0	0.004	
10/18/2017 13:59	0	0	2.839	0	0.004	
10/18/2017 14:00	0	0	2.839	0	0.004	-10
10/18/2017 14:01	0	0	2.839	0	0.004	
10/18/2017 14:02	0	0	2.839	0	0.004	
10/18/2017 14:03	0	0	2.839	0	0.004	
10/18/2017 14:04	0	0.019	2.839	0	0.004	
10/18/2017 14:05	0.001	0.059	2.839	0	0.004	-6
10/18/2017 14:06	0.004	0	2.839	0	0.004	
10/18/2017 14:07	0.004	0	2.839	0	0.004	
10/18/2017 14:08	0.004	0	2.839	0	0.004	
10/18/2017 14:09	0.004	0	2.839	0	0.004	
10/18/2017 14:10	0.004	0.02	2.839	0	0.004	5
10/18/2017 14:11	0.004	0.001	2.839	0	0.004	
10/18/2017 14:12	0.004	0.023	2.839	0	0.004	
10/18/2017 14:13	0.005	0.005	2.839	0	0.004	
10/18/2017 14:14	0.005	0.003	2.839	0	0.004	
10/18/2017 14:15	0.006	0.002	2.839	0	0.004	2
10/18/2017 14:16	0.006	0.03	2.839	0	0.004	
10/18/2017 14:17	0.009	0.081	2.839	0	0.004	
10/18/2017 14:18	0.011	0.03	2.839	0	0.004	
10/18/2017 14:19	0.014	0.049	2.839	0	0.004	
10/18/2017 14:20	0.015	0.08	2.839	0	0.004	6
10/18/2017 14:21	0.018	0.044	2.839	0	0.004	
10/18/2017 14:22	0.024	0.082	2.839	0	0.005	
10/18/2017 14:23	0.03	0.144	2.839	0	0.005	
10/18/2017 14:24	0.039	0.131	2.839	0	0.005	
10/18/2017 14:25	0.047	0.129	2.839	0	0.005	3
10/18/2017 14:26	0.057	0.192	2.839	0	0.006	
10/18/2017 14:27	0.07	0.166	2.839	0	0.006	
10/18/2017 14:28	0.081	0.175	2.839	0	0.006	
10/18/2017 14:29	0.091	0.183	2.839	0	0.007	
10/18/2017 14:30	0.103	0.214	2.839	0	0.007	4
10/18/2017 14:31	0.114	0.211	2.839	0	0.008	
10/18/2017 14:32	0.125	0.226	2.839	0	0.008	
10/18/2017 14:33	0.139	0.238	2.839	0	0.008	
10/18/2017 14:34	0.152	0.278	2.839	0	0.009	
10/18/2017 14:35	0.167	0.252	2.839	0	0.009	8
10/18/2017 14:36	0.178	0.271	2.839	0	0.01	
10/18/2017 14:37	0.19	0.25	2.839	0	0.011	
10/18/2017 14:38	0.199	0.212	2.839	0	0.011	
10/18/2017 14:39	0.209	0.195	2.839	0	0.012	
10/18/2017 14:40	0.207	0	2.839	0	0.012	12
10/18/2017 14:41	0.197	0	2.839	0	0.012	
10/18/2017 14:42	0.184	0	2.839	0	0.012	
10/18/2017 14:43	0.173	0	2.839	0	0.012	
10/18/2017 14:44	0.162	0	2.839	0	0.012	
10/18/2017 14:45	0.15	0	2.839	0	0.012	16
10/18/2017 14:46	0.138	0	2.839	0	0.012	
10/18/2017 14:49	0.092	0	2.839	0	0.012	

10/18/2017 14:50	0.075	0	2.839	0	0.012	16
10/18/2017 14:51	0.058	0	2.839	0	0.012	
10/18/2017 14:52	0.04	0	2.839	0	0.012	
10/18/2017 14:53	0.025	0	2.839	0	0.012	
10/18/2017 14:54	0.007	0	2.839	0	0.012	
10/18/2017 14:55	0	0	2.839	0	0.012	15
10/18/2017 14:56	0	0	2.839	0	0.012	
10/18/2017 14:57	0	0	2.839	0	0.012	
10/18/2017 14:58	0	0	2.839	0	0.012	
10/18/2017 14:59	0	0	2.839	0	0.012	
10/18/2017 15:00	0	0	2.839	0	0.012	19
10/18/2017 15:01	0	0	2.839	0	0.012	
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10/18/2017 15:04	0	0	2.839	0	0.012	
10/18/2017 15:05	0	0	2.839	0	0.012	18
10/18/2017 15:06	0	0	2.839	0	0.012	
10/18/2017 15:07	0	0	2.839	0	0.012	
10/18/2017 15:08	0	0	2.839	0	0.012	
10/18/2017 15:09	0	0	2.839	0	0.012	
10/18/2017 15:10	0	0	2.839	0	0.012	19
10/18/2017 15:11	0	0	2.839	0	0.012	
10/18/2017 15:12	0	0	2.839	0	0.012	
10/18/2017 15:13	0	0	2.839	0	0.012	
10/18/2017 15:14	0	0	2.839	0	0.012	
10/18/2017 15:15	0	0	2.839	0	0.012	18
10/18/2017 15:16	0	0	2.839	0	0.012	
10/18/2017 15:17	0	0	2.839	0	0.012	
10/18/2017 15:18	0	0	2.839	0	0.012	
10/18/2017 15:19	0	0	2.839	0	0.012	
10/18/2017 15:20	0	0	2.839	0	0.012	24
10/18/2017 15:21	0	0	2.839	0	0.012	
10/18/2017 15:22	0	0	2.839	0	0.012	
10/18/2017 15:23	0	0	2.839	0	0.012	
10/18/2017 15:24	0	0	2.839	0	0.012	
10/18/2017 15:25	0	0	2.839	0	0.012	18
10/18/2017 15:26	0	0	2.839	0	0.012	
10/18/2017 15:27	0	0	2.839	0	0.012	
10/18/2017 15:28	0	0	2.839	0	0.012	
10/18/2017 15:29	0	0	2.839	0	0.012	
10/18/2017 15:30	0	0	2.839	0	0.012	17
10/18/2017 15:31	0	0	2.839	0	0.012	
10/18/2017 15:32	0	0	2.839	0	0.012	
10/18/2017 15:33	0	0	2.839	0	0.012	
10/18/2017 15:34	0	0	2.839	0	0.012	
10/18/2017 15:35	0	0	2.839	0	0.012	17
10/18/2017 15:36	0	0	2.839	0	0.012	
10/18/2017 15:37	0	0	2.839	0	0.012	
10/18/2017 15:38	0	0	2.839	0	0.012	
10/18/2017 15:39	0	0	2.839	0	0.012	
10/18/2017 15:40	0	0	2.839	0	0.012	16
10/18/2017 15:41	0	0	2.839	0	0.012	
10/18/2017 15:42	0	0	2.839	0	0.012	
10/18/2017 15:43	0	0	2.839	0	0.012	

10/18/2017 15:44	0	0	2.839	0	0.012	
10/18/2017 15:45	0	0	2.839	0	0.012	13
10/18/2017 15:46	0	0	2.839	0	0.012	
10/18/2017 15:47	0	0	2.839	0	0.012	
10/18/2017 15:48	0	0	2.839	0	0.012	
10/18/2017 15:49	0	0	2.839	0	0.012	
10/18/2017 15:50	0	0	2.839	0	0.012	14
10/18/2017 15:51	0	0	2.839	0	0.012	
10/18/2017 15:52	0	0	2.839	0	0.012	
10/18/2017 15:53	0	0	2.839	0	0.012	
10/18/2017 15:54	0	0	2.839	0	0.012	
10/18/2017 15:55	0	0	2.839	0	0.012	15
10/18/2017 15:56	0	0	2.839	0	0.012	
10/18/2017 15:57	0	0	2.839	0	0.012	
10/18/2017 15:58	0	0	2.839	0	0.012	
10/18/2017 15:59	0	0	2.839	0	0.012	
10/18/2017 16:00	0	0	2.839	0	0.012	17
10/18/2017 16:01	0	0	2.839	0	0.012	
10/18/2017 16:02	0	0	2.839	0	0.012	
10/18/2017 16:03	0	0	2.839	0	0.012	
10/18/2017 16:04	0	0	2.839	0	0.012	
10/18/2017 16:05	0	0	2.839	0	0.012	15
10/18/2017 16:06	0	0	2.839	0	0.012	
10/18/2017 16:07	0	0	2.839	0	0.012	
10/18/2017 16:08	0	0	2.839	0	0.012	
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10/18/2017 16:10	0	0	2.839	0	0.012	18
10/18/2017 16:11	0	0	2.839	0	0.012	
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10/18/2017 16:13	0	0	2.839	0	0.012	
10/18/2017 16:14	0	0	2.839	0	0.012	
10/18/2017 16:15	0	0	2.839	0	0.012	19
10/18/2017 16:16	0	0	2.839	0	0.012	
10/18/2017 16:17	0	0	2.839	0	0.012	
10/18/2017 16:18	0	0	2.839	0	0.012	
10/18/2017 16:19	0	0	2.839	0	0.012	
10/18/2017 16:20	0	0	2.839	0	0.012	19
10/18/2017 16:21	0	0	2.839	0	0.012	
10/18/2017 16:22	0	0	2.839	0	0.012	
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10/18/2017 16:25	0	0	2.839	0	0.012	15
10/18/2017 16:26	0	0	2.839	0	0.012	
10/18/2017 16:27	0	0	2.839	0	0.012	
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10/18/2017 16:29	0	0	2.839	0	0.012	
10/18/2017 16:30	0	0	2.839	0	0.012	15
10/18/2017 16:31	0	0	2.839	0	0.012	
10/18/2017 16:32	0	0	2.839	0	0.012	
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10/18/2017 16:34	0	0	2.839	0	0.012	
10/18/2017 16:35	0	0	2.839	0	0.012	16
10/18/2017 16:36	0	0	2.839	0	0.012	
10/18/2017 16:37	0	0	2.839	0	0.012	

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10/18/2017 16:39	0	0	2.839	0	0.012	
10/18/2017 16:40	0	0	2.839	0	0.012	15
10/18/2017 16:41	0	0	2.839	0	0.012	
10/18/2017 16:42	0	0	2.839	0	0.012	
10/18/2017 16:43	0	0	2.839	0	0.012	
10/18/2017 16:44	0	0	2.839	0	0.012	
10/18/2017 16:45	0	0	2.839	0	0.012	15
10/18/2017 16:46	0	0	2.839	0	0.012	
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10/18/2017 16:49	0	0	2.839	0	0.012	
10/18/2017 16:50	0	0	2.839	0	0.012	15
10/18/2017 16:51	0	0	2.839	0	0.012	
10/18/2017 16:52	0	0	2.839	0	0.012	
10/18/2017 16:53	0	0	2.839	0	0.012	
10/18/2017 16:54	0	0	2.839	0	0.012	
10/18/2017 16:55	0	0	2.839	0	0.012	18
10/18/2017 16:56	0	0	2.839	0	0.012	
10/18/2017 16:57	0	0	2.839	0	0.012	
10/18/2017 16:58	0	0	2.839	0	0.012	
10/18/2017 16:59	0	0	2.839	0	0.012	
10/18/2017 17:00	0	0	2.839	0	0.012	17
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10/18/2017 17:04	0	0	2.839	0	0.012	
10/18/2017 17:05	0	0	2.839	0	0.012	21
10/18/2017 17:06	0	0	2.839	0	0.012	
10/18/2017 17:07	0	0	2.839	0	0.012	
10/18/2017 17:08	0	0	2.839	0	0.012	
10/18/2017 17:09	0	0	2.839	0	0.012	
10/18/2017 17:10	0	0	2.839	0	0.012	22
10/18/2017 17:11	0	0	2.839	0	0.012	
10/18/2017 17:12	0	0	2.839	0	0.012	
10/18/2017 17:13	0	0	2.839	0	0.012	
10/18/2017 17:14	0	0	2.839	0	0.012	
10/18/2017 17:15	0	0	2.839	0	0.012	24
10/18/2017 17:16	0	0	2.839	0	0.012	
10/18/2017 17:17	0	0	2.839	0	0.012	
10/18/2017 17:18	0	0	2.839	0	0.012	
10/18/2017 17:19	0	0	2.839	0	0.012	
10/18/2017 17:20	0	0	2.839	0	0.012	29
10/18/2017 17:21	0	0	2.839	0	0.012	
10/18/2017 17:22	0	0	2.839	0	0.012	
10/18/2017 17:23	0	0	2.839	0	0.012	
10/18/2017 17:24	0	0	2.839	0	0.012	
10/18/2017 17:25	0	0	2.839	0	0.012	32
10/18/2017 17:26	0	0	2.839	0	0.012	
10/18/2017 17:27	0	0	2.839	0	0.012	
10/18/2017 17:28	0	0	2.839	0	0.012	
10/18/2017 17:29	0	0	2.839	0	0.012	
10/18/2017 17:30	0	0	2.839	0	0.012	28
10/18/2017 17:31	0	0	2.839	0	0.012	

10/18/2017 17:32	0	0	2.839	0	0.012	
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10/18/2017 17:34	0	0	2.839	0	0.012	
10/18/2017 17:35	0	0	2.839	0	0.012	11
10/18/2017 17:36	0	0	2.839	0	0.012	
10/18/2017 17:37	0	0	2.839	0	0.012	
10/18/2017 17:38	0	0	2.839	0	0.012	
10/18/2017 17:39	0	0	2.839	0	0.012	
10/18/2017 17:40	0	0	2.839	0	0.012	13
10/18/2017 17:41	0	0	2.839	0	0.012	
10/18/2017 17:42	0	0	2.839	0	0.012	
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10/18/2017 17:44	0	0	2.839	0	0.012	
10/18/2017 17:45	0	0	2.839	0	0.012	11
10/18/2017 17:46	0	0	2.839	0	0.012	
10/18/2017 17:47	0	0	2.839	0	0.012	
10/18/2017 17:48	0	0	2.839	0	0.012	
10/18/2017 17:49	0	0	2.839	0	0.012	
10/18/2017 17:50	0	0	2.839	0	0.012	9
10/18/2017 17:51	0	0	2.839	0	0.012	
10/18/2017 17:52	0	0	2.839	0	0.012	
10/18/2017 17:53	0	0	2.839	0	0.012	
10/18/2017 17:54	0	0	2.839	0	0.012	
10/18/2017 17:55	0	0	2.839	0	0.012	5
10/18/2017 17:56	0	0	2.839	0	0.012	
10/18/2017 17:57	0	0	2.839	0	0.012	
10/18/2017 17:58	0	0	2.839	0	0.012	
10/18/2017 17:59	0	0	2.839	0	0.012	
10/18/2017 18:00	0	0	2.839	0	0.012	3
10/18/2017 18:01	0	0	2.839	0	0.012	
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10/18/2017 18:04	0	0	2.839	0	0.012	
10/18/2017 18:05	0	0	2.839	0	0.012	6
10/18/2017 18:06	0	0	2.839	0	0.012	
10/18/2017 18:07	0	0	2.839	0	0.012	
10/18/2017 18:08	0	0	2.839	0	0.012	
10/18/2017 18:09	0	0	2.839	0	0.012	
10/18/2017 18:10	0	0	2.839	0	0.012	13
10/18/2017 18:11	0	0	2.839	0	0.012	
10/18/2017 18:12	0	0	2.839	0	0.012	
10/18/2017 18:13	0	0	2.839	0	0.012	
10/18/2017 18:14	0	0	2.839	0	0.012	
10/18/2017 18:15	0	0	2.839	0	0.012	9
10/18/2017 18:16	0	0	2.839	0	0.012	
10/18/2017 18:17	0	0	2.839	0	0.012	
10/18/2017 18:18	0	0	2.839	0	0.012	
10/18/2017 18:19	0	0	2.839	0	0.012	
10/18/2017 18:20	0	0	2.839	0	0.012	9
10/18/2017 18:21	0	0	2.839	0	0.012	
10/18/2017 18:22	0	0	2.839	0	0.012	
10/18/2017 18:23	0	0	2.839	0	0.012	
10/18/2017 18:24	0	0	2.839	0	0.012	
10/18/2017 18:25	0	0	2.839	0	0.012	8

10/18/2017 18:26	0	0	2.839	0	0.012	
10/18/2017 18:27	0	0	2.839	0	0.012	
10/18/2017 18:28	0	0	2.839	0	0.012	
10/18/2017 18:29	0	0	2.839	0	0.012	
10/18/2017 18:30	0	0	2.839	0	0.012	7
10/18/2017 18:31	0	0	2.839	0	0.012	
10/18/2017 18:32	0	0	2.839	0	0.012	
10/18/2017 18:33	0	0	2.839	0	0.012	
10/18/2017 18:34	0	0	2.839	0	0.012	
10/18/2017 18:35	0	0	2.839	0	0.012	8
10/18/2017 18:36	0	0	2.839	0	0.012	
10/18/2017 18:37	0	0	2.839	0	0.012	
10/18/2017 18:38	0	0	2.839	0	0.012	
10/18/2017 18:39	0	0	2.839	0	0.012	
10/18/2017 18:40	0	0	2.839	0	0.012	8
10/18/2017 18:41	0	0	2.839	0	0.012	
10/18/2017 18:42	0	0	2.839	0	0.012	
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10/18/2017 18:44	0	0	2.839	0	0.012	
10/18/2017 18:45	0	0	2.839	0	0.012	3
10/18/2017 18:46	0	0	2.839	0	0.012	
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10/18/2017 18:49	0	0	2.839	0	0.012	
10/18/2017 18:50	0	0	2.839	0	0.012	5
10/18/2017 18:51	0	0	2.839	0	0.012	
10/18/2017 18:52	0	0	2.839	0	0.012	
10/18/2017 18:53	0	0	2.839	0	0.012	
10/18/2017 18:54	0	0	2.839	0	0.012	
10/18/2017 18:55	0	0	2.839	0	0.012	8
10/18/2017 18:56	0	0	2.839	0	0.012	
10/18/2017 18:57	0	0	2.839	0	0.012	
10/18/2017 18:58	0	0	2.839	0	0.012	
10/18/2017 18:59	0	0	2.839	0	0.012	
10/18/2017 19:00	0	0	2.839	0	0.012	9
10/18/2017 19:01	0	0	2.839	0	0.012	
10/18/2017 19:02	0	0	2.839	0	0.012	
10/18/2017 19:03	0	0	2.839	0	0.012	
10/18/2017 19:04	0	0	2.839	0	0.012	
10/18/2017 19:05	0	0	2.839	0	0.012	8
10/18/2017 19:06	0	0	2.839	0	0.012	
10/18/2017 19:07	0	0	2.839	0	0.012	
10/18/2017 19:08	0	0	2.839	0	0.012	
10/18/2017 19:09	0	0	2.839	0	0.012	
10/18/2017 19:10	0	0	2.839	0	0.012	10
10/18/2017 19:11	0	0	2.839	0	0.012	
10/18/2017 19:12	0	0	2.839	0	0.012	
10/18/2017 19:13	0	0	2.839	0	0.012	
10/18/2017 19:14	0	0	2.839	0	0.012	
10/18/2017 19:15	0	0	2.839	0	0.012	8
10/18/2017 19:16	0	0	2.839	0	0.012	
10/18/2017 19:17	0	0	2.839	0	0.012	
10/18/2017 19:18	0	0	2.839	0	0.012	
10/18/2017 19:19	0	0	2.839	0	0.012	

10/18/2017 19:20	0	0	2.839	0	0.012	7
10/18/2017 19:21	0	0	2.839	0	0.012	
10/18/2017 19:22	0	0	2.839	0	0.012	
10/18/2017 19:23	0	0	2.839	0	0.012	
10/18/2017 19:24	0	0	2.839	0	0.012	
10/18/2017 19:25	0	0	2.839	0	0.012	6
10/18/2017 19:26	0	0	2.839	0	0.012	
10/18/2017 19:27	0	0	2.839	0	0.012	
10/18/2017 19:28	0	0	2.839	0	0.012	
10/18/2017 19:29	0	0	2.839	0	0.012	
10/18/2017 19:30	0	0	2.839	0	0.012	5
10/18/2017 19:31	0	0	2.839	0	0.012	
10/18/2017 19:32	0	0	2.839	0	0.012	
10/18/2017 19:33	0	0	2.839	0	0.012	
10/18/2017 19:34	0	0	2.839	0	0.012	
10/18/2017 19:35	0	0	2.839	0	0.012	9
10/18/2017 19:36	0	0	2.839	0	0.012	
10/18/2017 19:37	0	0	2.839	0	0.012	
10/18/2017 19:38	0	0	2.839	0	0.012	
10/18/2017 19:39	0	0	2.839	0	0.012	
10/18/2017 19:40	0	0	2.839	0	0.012	13
10/18/2017 19:41	0	0	2.839	0	0.012	
10/18/2017 19:42	0	0	2.839	0	0.012	
10/18/2017 19:43	0	0	2.839	0	0.012	
10/18/2017 19:44	0	0	2.839	0	0.012	
10/18/2017 19:45	0	0	2.839	0	0.012	12
10/18/2017 19:46	0	0	2.839	0	0.012	
10/18/2017 19:47	0	0	2.839	0	0.012	
10/18/2017 19:48	0	0	2.839	0	0.012	
10/18/2017 19:49	0	0	2.839	0	0.012	
10/18/2017 19:50	0	0	2.839	0	0.012	8
10/18/2017 19:51	0	0	2.839	0	0.012	
10/18/2017 19:52	0	0	2.839	0	0.012	
10/18/2017 19:53	0	0	2.839	0	0.012	
10/18/2017 19:54	0	0	2.839	0	0.012	
10/18/2017 19:55	0	0	2.839	0	0.012	11
10/18/2017 19:56	0	0	2.839	0	0.012	
10/18/2017 19:57	0	0	2.839	0	0.012	
10/18/2017 19:58	0	0	2.839	0	0.012	
10/18/2017 19:59	0	0	2.839	0	0.012	
10/18/2017 20:00	0	0	2.839	0	0.012	14
10/18/2017 20:01	0	0	2.839	0	0.012	
10/18/2017 20:02	0	0	2.839	0	0.012	
10/18/2017 20:03	0	0	2.839	0	0.012	
10/18/2017 20:04	0	0	2.839	0	0.012	
10/18/2017 20:05	0	0	2.839	0	0.012	9
10/18/2017 20:06	0	0	2.839	0	0.012	
10/18/2017 20:07	0	0	2.839	0	0.012	
10/18/2017 20:08	0	0	2.839	0	0.012	
10/18/2017 20:09	0	0	2.839	0	0.012	
10/18/2017 20:10	0	0	2.839	0	0.012	15
10/18/2017 20:11	0	0	2.839	0	0.012	
10/18/2017 20:12	0	0	2.839	0	0.012	
10/18/2017 20:13	0	0	2.839	0	0.012	

10/18/2017 20:14	0	0	2.839	0	0.012	
10/18/2017 20:15	0	0	2.839	0	0.012	15
10/18/2017 20:16	0	0	2.839	0	0.012	
10/18/2017 20:17	0	0	2.839	0	0.012	
10/18/2017 20:18	0	0	2.839	0	0.012	
10/18/2017 20:19	0	0	2.839	0	0.012	
10/18/2017 20:20	0	0	2.839	0	0.012	16
10/18/2017 20:21	0	0	2.839	0	0.012	
10/18/2017 20:22	0	0	2.839	0	0.012	
10/18/2017 20:23	0	0	2.839	0	0.012	
10/18/2017 20:24	0	0	2.839	0	0.012	
10/18/2017 20:25	0	0	2.839	0	0.012	15
10/18/2017 20:26	0	0	2.839	0	0.012	
10/18/2017 20:27	0	0	2.839	0	0.012	
10/18/2017 20:28	0	0	2.839	0	0.012	
10/18/2017 20:29	0	0	2.839	0	0.012	
10/18/2017 20:30	0	0	2.839	0	0.012	26
10/18/2017 20:31	0	0	2.839	0	0.012	
10/18/2017 20:32	0	0	2.839	0	0.012	
10/18/2017 20:33	0	0	2.839	0	0.012	
10/18/2017 20:34	0	0	2.839	0	0.012	
10/18/2017 20:35	0	0	2.839	0	0.012	23
10/18/2017 20:36	0	0	2.839	0	0.012	
10/18/2017 20:37	0	0	2.839	0	0.012	
10/18/2017 20:38	0	0	2.839	0	0.012	
10/18/2017 20:39	0	0	2.839	0	0.012	
10/18/2017 20:40	0	0	2.839	0	0.012	25
10/18/2017 20:41	0	0	2.839	0	0.012	
10/18/2017 20:42	0	0	2.839	0	0.012	
10/18/2017 20:43	0	0	2.839	0	0.012	
10/18/2017 20:44	0	0	2.839	0	0.012	
10/18/2017 20:45	0	0	2.839	0	0.012	25
10/18/2017 20:46	0	0	2.839	0	0.012	
10/18/2017 20:47	0	0	2.839	0	0.012	
10/18/2017 20:48	0	0	2.839	0	0.012	
10/18/2017 20:49	0	0	2.839	0	0.012	
10/18/2017 20:50	0	0	2.839	0	0.012	26
10/18/2017 20:51	0	0	2.839	0	0.012	
10/18/2017 20:52	0	0	2.839	0	0.012	
10/18/2017 20:53	0	0	2.839	0	0.012	
10/18/2017 20:54	0	0	2.839	0	0.012	
10/18/2017 20:55	0	0	2.839	0	0.012	21
10/18/2017 20:56	0	0	2.839	0	0.012	
10/18/2017 20:57	0	0	2.839	0	0.012	
10/18/2017 20:58	0	0	2.839	0	0.012	
10/18/2017 20:59	0	0	2.839	0	0.012	
10/18/2017 21:00	0	0	2.839	0	0.012	14
10/18/2017 21:01	0	0	2.839	0	0.012	
10/18/2017 21:02	0	0	2.839	0	0.012	
10/18/2017 21:03	0	0	2.839	0	0.012	
10/18/2017 21:04	0	0	2.839	0	0.012	
10/18/2017 21:05	0	0	2.839	0	0.012	12
10/18/2017 21:06	0	0	2.839	0	0.012	
10/18/2017 21:07	0	0	2.839	0	0.012	

10/18/2017 21:08	0	0	2.839	0	0.012	
10/18/2017 21:09	0	0	2.839	0	0.012	
10/18/2017 21:10	0	0	2.839	0	0.012	11
10/18/2017 21:11	0	0	2.839	0	0.012	
10/18/2017 21:12	0	0	2.839	0	0.012	
10/18/2017 21:13	0	0	2.839	0	0.012	
10/18/2017 21:14	0	0	2.839	0	0.012	
10/18/2017 21:15	0	0	2.839	0	0.012	10
10/18/2017 21:16	0	0	2.839	0	0.012	
10/18/2017 21:17	0	0	2.839	0	0.012	
10/18/2017 21:18	0	0	2.839	0	0.012	
10/18/2017 21:19	0	0	2.839	0	0.012	
10/18/2017 21:20	0	0	2.839	0	0.012	10
10/18/2017 21:21	0	0	2.839	0	0.012	
10/18/2017 21:22	0	0	2.839	0	0.012	
10/18/2017 21:23	0	0	2.839	0	0.012	
10/18/2017 21:24	0	0	2.839	0	0.012	
10/18/2017 21:25	0	0	2.839	0	0.012	12
10/18/2017 21:26	0	0	2.839	0	0.012	
10/19/2017 13:04	0	0.026	10.254	0	0.025	
10/19/2017 13:05	0	0.147	10.254	0	0.025	
10/19/2017 13:06	0	0.242	10.254	0	0.025	
10/19/2017 13:07	0	0.378	10.254	0	0.025	
10/19/2017 13:08	0	0.199	10.254	0	0.026	
10/19/2017 13:09	0	0.304	10.254	0	0.027	
10/19/2017 13:10	0	0.151	10.254	0	0.027	10
10/19/2017 13:11	0	0.014	10.254	0	0.028	
10/19/2017 13:12	0	0.003	10.254	0	0.028	
10/19/2017 13:13	0	0	10.254	0	0.028	
10/19/2017 13:14	0	0	10.254	0	0.028	
10/19/2017 13:15	0	0	10.254	0	0.028	7
10/19/2017 13:16	0	0	10.254	0	0.028	
10/19/2017 13:17	0.919	0	10.254	0	0.028	
10/19/2017 13:18	0.409	0	10.254	0	0.028	
10/19/2017 13:19	0.111	0	10.254	0	0.028	
10/19/2017 13:20	0.109	0	10.254	0	0.028	8
10/19/2017 13:21	0.104	0	10.254	0	0.028	
10/19/2017 13:22	0.09	0	10.254	0	0.028	
10/19/2017 13:23	0.07	0	10.254	0	0.028	
10/19/2017 13:24	0.043	0	10.254	0	0.028	
10/19/2017 13:25	0.025	0	10.254	0	0.028	5
10/19/2017 13:26	0.01	0	10.254	0	0.028	
10/19/2017 13:27	0	0	10.254	0	0.028	
10/19/2017 13:28	0	0	10.254	0	0.028	
10/19/2017 13:29	0	0	10.254	0	0.028	
10/19/2017 13:30	0	0	10.254	0	0.028	5
10/19/2017 13:31	0	0	10.254	0	0.028	
10/19/2017 13:32	0	0	10.254	0	0.028	
10/19/2017 13:35						14
10/19/2017 13:36	0.001	0.013	10.254	0	0.028	
10/19/2017 13:37	0.002	0.011	10.254	0	0.028	
10/19/2017 13:38	0.003	0.003	10.254	0	0.028	
10/19/2017 13:39	0.003	0	10.254	0	0.028	
10/19/2017 13:40	0.003	0	10.254	0	0.028	4

10/19/2017 13:41	0.003	0	10.254	0	0.028	
10/19/2017 13:42	0.003	0	10.254	0	0.028	
10/19/2017 13:43	0.003	0	10.254	0	0.028	
10/19/2017 13:44	0.003	0	10.254	0	0.028	
10/19/2017 13:45	0.003	0	10.254	0	0.028	-6
10/19/2017 13:46	0.003	0	10.254	0	0.028	
10/19/2017 13:47	0.003	0	10.254	0	0.028	
10/19/2017 13:48	0.003	0	10.254	0	0.028	
10/19/2017 13:49	0.003	0	10.254	0	0.028	
10/19/2017 13:50	0.002	0	10.254	0	0.028	0
10/19/2017 13:51	0.001	0	10.254	0	0.028	
10/19/2017 13:52	0.001	0	10.254	0	0.028	
10/19/2017 13:53	0	0	10.254	0	0.028	
10/19/2017 13:54	0	0	10.254	0	0.028	
10/19/2017 13:55	0	0	10.254	0	0.028	5
10/19/2017 13:56	0	0	10.254	0	0.028	
10/19/2017 13:57	0	0	10.254	0	0.028	
10/19/2017 13:58	0	0	10.254	0	0.028	
10/19/2017 13:59	0	0	10.254	0	0.028	
10/19/2017 14:00	0	0	10.254	0	0.028	12
10/19/2017 14:01	0	0	10.254	0	0.028	
10/19/2017 14:02	0	0	10.254	0	0.028	
10/19/2017 14:03	0	0	10.254	0	0.028	
10/19/2017 14:04	0	0	10.254	0	0.028	
10/19/2017 14:05	0	0	10.254	0	0.028	6
10/19/2017 14:06	0	0	10.254	0	0.028	
10/19/2017 14:07	0	0	10.254	0	0.028	
10/19/2017 14:08	0	0	10.254	0	0.028	
10/19/2017 14:09	0	0	10.254	0	0.028	
10/19/2017 14:10	0	0	10.254	0	0.028	2
10/19/2017 14:11	0	0	10.254	0	0.028	
10/19/2017 14:12	0	0	10.254	0	0.028	
10/19/2017 14:13	0	0	10.254	0	0.028	
10/19/2017 14:14	0	0	10.254	0	0.028	
10/19/2017 14:15	0	0	10.254	0	0.028	
10/19/2017 14:15						5
10/19/2017 14:16	0	0	10.254	0	0.028	
10/19/2017 14:17	0	0	10.254	0	0.028	
10/19/2017 14:18	0	0	10.254	0	0.028	
10/19/2017 14:19	0	0	10.254	0	0.028	
10/19/2017 14:20	0	0	10.254	0	0.028	2
10/19/2017 14:21	0	0	10.254	0	0.028	
10/19/2017 14:22	0	0	10.254	0	0.028	
10/19/2017 14:23	0	0	10.254	0	0.028	
10/19/2017 14:25						8
10/19/2017 14:26	0	0.045	10.254	0	0.028	
10/19/2017 14:27	0.001	0.015	10.254	0	0.028	
10/19/2017 14:28	0.004	0	10.254	0	0.028	
10/19/2017 14:29	0.004	0	10.254	0	0.028	
10/19/2017 14:30	0.004	0	10.254	0	0.028	6
10/19/2017 14:31	0.004	0	10.254	0	0.028	
10/19/2017 14:32	0.004	0	10.254	0	0.028	
10/19/2017 14:33	0.004	0	10.254	0	0.028	
10/19/2017 14:34	0.004	0	10.254	0	0.028	

10/19/2017 14:35	0.004	0	10.254	0	0.028	4
10/19/2017 14:36	0.004	0	10.254	0	0.028	
10/19/2017 14:37	0.004	0	10.254	0	0.028	
10/19/2017 14:38	0.004	0	10.254	0	0.028	
10/19/2017 14:39	0.004	0	10.254	0	0.028	
10/19/2017 14:40	0.004	0	10.254	0	0.028	4
10/19/2017 14:41	0.004	0	10.254	0	0.028	
10/19/2017 14:42	0.002	0	10.254	0	0.028	
10/19/2017 14:43	0	0	10.254	0	0.028	
10/19/2017 14:44	0	0	10.254	0	0.028	
10/19/2017 14:45	0	0	10.254	0	0.028	2
10/19/2017 14:46	0	0	10.254	0	0.028	
10/19/2017 14:47	0	0	10.254	0	0.028	
10/19/2017 14:48	0	0	10.254	0	0.028	
10/19/2017 14:49	0	0	10.254	0	0.028	
10/19/2017 14:50	0	0	10.254	0	0.028	5
10/19/2017 14:51	0	0	10.254	0	0.028	
10/19/2017 14:52	0	0	10.254	0	0.028	
10/19/2017 14:53	0	0	10.254	0	0.028	
10/19/2017 14:54	0	0	10.254	0	0.028	
10/19/2017 14:55	0	0	10.254	0	0.028	8
10/19/2017 14:56	0	0	10.254	0	0.028	
10/19/2017 14:57	0	0	10.254	0	0.028	
10/19/2017 14:58	0	0	10.254	0	0.028	
10/19/2017 14:59	0	0	10.254	0	0.028	
10/19/2017 15:00	0	0	10.254	0	0.028	9
10/19/2017 15:01	0	0	10.254	0	0.028	
10/19/2017 15:02	0	0	10.254	0	0.028	
10/19/2017 15:03	0	0	10.254	0	0.028	
10/19/2017 15:04	0	0	10.254	0	0.028	
10/19/2017 15:05	0	0	10.254	0	0.028	15
10/19/2017 15:06	0	0	10.254	0	0.028	
10/19/2017 15:07	0	0	10.254	0	0.028	
10/19/2017 15:08	0	0	10.254	0	0.028	
10/19/2017 15:09	0	0	10.254	0	0.028	
10/19/2017 15:10	0	0	10.254	0	0.028	17
10/19/2017 15:11	0	0	10.254	0	0.028	
10/19/2017 15:12	0	0	10.254	0	0.028	
10/19/2017 15:13	0	0	10.254	0	0.028	
10/19/2017 15:14	0	0	10.254	0	0.028	
10/19/2017 15:15	0	0	10.254	0	0.028	21
10/19/2017 15:16	0	0	10.254	0	0.028	
10/19/2017 15:17	0	0	10.254	0	0.028	
10/19/2017 15:18	0	0	10.254	0	0.028	
10/19/2017 15:19	0	0	10.254	0	0.028	
10/19/2017 15:20	0	0	10.254	0	0.028	15
10/19/2017 15:21	0	0	10.254	0	0.028	
10/19/2017 15:22	0	0	10.254	0	0.028	
10/19/2017 15:23	0	0	10.254	0	0.028	
10/19/2017 15:24	0	0	10.254	0	0.028	
10/19/2017 15:25	0	0	10.254	0	0.028	15
10/19/2017 15:26	0	0	10.254	0	0.028	
10/19/2017 15:27	0	0	10.254	0	0.028	
10/19/2017 15:28	0	0	10.254	0	0.028	

10/19/2017 15:29	0	0	10.254	0	0.028	
10/19/2017 15:30	0	0	10.254	0	0.028	17
10/19/2017 15:31	0	0	10.254	0	0.028	
10/19/2017 15:32	0	0	10.254	0	0.028	
10/19/2017 15:33	0	0	10.254	0	0.028	
10/19/2017 15:34	0	0	10.254	0	0.028	
10/19/2017 15:35	0	0	10.254	0	0.028	17
10/19/2017 15:36	0	0	10.254	0	0.028	
10/19/2017 15:37	0	0	10.254	0	0.028	
10/19/2017 15:38	0	0	10.254	0	0.028	
10/19/2017 15:39	0	0	10.254	0	0.028	
10/19/2017 15:40	0	0	10.254	0	0.028	13
10/19/2017 15:41	0	0	10.254	0	0.028	
10/19/2017 15:42	0	0	10.254	0	0.028	
10/19/2017 15:43	0	0	10.254	0	0.028	
10/19/2017 15:44	0	0	10.254	0	0.028	
10/19/2017 15:45	0	0	10.254	0	0.028	15
10/19/2017 15:46	0	0	10.254	0	0.028	
10/19/2017 15:47	0	0	10.254	0	0.028	
10/19/2017 15:48	0	0	10.254	0	0.028	
10/19/2017 15:49	0	0	10.254	0	0.028	
10/19/2017 15:50	0	0	10.254	0	0.028	16
10/19/2017 15:51	0	0	10.254	0	0.028	
10/19/2017 15:52	0	0	10.254	0	0.028	
10/19/2017 15:53	0	0	10.254	0	0.028	
10/19/2017 15:54	0	0	10.254	0	0.028	
10/19/2017 15:55	0	0	10.254	0	0.028	15
10/19/2017 15:56	0	0	10.254	0	0.028	
10/19/2017 15:57	0	0	10.254	0	0.028	
10/19/2017 15:58	0	0	10.254	0	0.028	
10/19/2017 15:59	0	0	10.254	0	0.028	
10/19/2017 16:00	0	0	10.254	0	0.028	17
10/19/2017 16:01	0	0	10.254	0	0.028	
10/19/2017 16:02	0	0	10.254	0	0.028	
10/19/2017 16:03	0	0	10.254	0	0.028	
10/19/2017 16:04	0	0	10.254	0	0.028	
10/19/2017 16:05	0	0	10.254	0	0.028	18
10/19/2017 16:06	0	0	10.254	0	0.028	
10/19/2017 16:07	0	0	10.254	0	0.028	
10/19/2017 16:08	0	0	10.254	0	0.028	
10/19/2017 16:09	0	0	10.254	0	0.028	
10/19/2017 16:10	0	0	10.254	0	0.028	16
10/19/2017 16:11	0	0	10.254	0	0.028	
10/19/2017 16:12	0	0	10.254	0	0.028	
10/19/2017 16:13	0	0	10.254	0	0.028	
10/19/2017 16:14	0	0	10.254	0	0.028	
10/19/2017 16:15	0	0	10.254	0	0.028	14
10/19/2017 16:16	0	0	10.254	0	0.028	
10/19/2017 16:17	0	0	10.254	0	0.028	
10/19/2017 16:18	0	0	10.254	0	0.028	
10/19/2017 16:19	0	0	10.254	0	0.028	
10/19/2017 16:20	0	0	10.254	0	0.028	11
10/19/2017 16:21	0	0	10.254	0	0.028	
10/19/2017 16:22	0	0	10.254	0	0.028	

10/19/2017 16:23	0	0	10.254	0	0.028	
10/19/2017 16:24	0	0	10.254	0	0.028	
10/19/2017 16:25	0	0	10.254	0	0.028	12
10/19/2017 16:26	0	0	10.254	0	0.028	
10/19/2017 16:27	0	0	10.254	0	0.028	
10/19/2017 16:28	0	0	10.254	0	0.028	
10/19/2017 16:29	0	0	10.254	0	0.028	
10/19/2017 16:30	0	0	10.254	0	0.028	25
10/19/2017 16:31	0	0	10.254	0	0.028	
10/19/2017 16:32	0	0	10.254	0	0.028	
10/19/2017 16:33	0	0	10.254	0	0.028	
10/19/2017 16:34	0	0	10.254	0	0.028	
10/19/2017 16:35	0	0	10.254	0	0.028	15
10/19/2017 16:36	0	0	10.254	0	0.028	
10/19/2017 16:37	0	0	10.254	0	0.028	
10/19/2017 16:38	0	0	10.254	0	0.028	
10/19/2017 16:39	0	0	10.254	0	0.028	
10/19/2017 16:40	0	0	10.254	0	0.028	13
10/19/2017 16:41	0	0	10.254	0	0.028	
10/19/2017 16:42	0	0	10.254	0	0.028	
10/19/2017 16:43	0	0	10.254	0	0.028	
10/19/2017 16:44	0	0	10.254	0	0.028	
10/19/2017 16:45	0	0	10.254	0	0.028	13
10/19/2017 16:46	0	0	10.254	0	0.028	
10/19/2017 16:47	0	0	10.254	0	0.028	
10/19/2017 16:48	0	0	10.254	0	0.028	
10/19/2017 16:49	0	0	10.254	0	0.028	
10/19/2017 16:50	0	0	10.254	0	0.028	
10/19/2017 16:50						16
10/19/2017 16:51	0	0	10.254	0	0.028	
10/19/2017 16:52	0	0	10.254	0	0.028	
10/19/2017 16:53	0	0	10.254	0	0.028	
10/19/2017 16:54	0	0	10.254	0	0.028	
10/19/2017 16:55	0	0	10.254	0	0.028	18
10/19/2017 16:56	0	0	10.254	0	0.028	
10/19/2017 16:57	0	0	10.254	0	0.028	
10/19/2017 16:58	0	0	10.254	0	0.028	
10/19/2017 16:59	0	0	10.254	0	0.028	
10/19/2017 17:00	0	0	10.254	0	0.028	23
10/19/2017 17:01	0	0	10.254	0	0.028	
10/19/2017 17:02	0	0	10.254	0	0.028	
10/19/2017 17:03	0	0	10.254	0	0.028	
10/19/2017 17:04	0	0	10.254	0	0.028	
10/19/2017 17:05	0	0	10.254	0	0.028	23
10/19/2017 17:06	0	0	10.254	0	0.028	
10/19/2017 17:07	0	0	10.254	0	0.028	
10/19/2017 17:08	0	0	10.254	0	0.028	
10/19/2017 17:09	0	0	10.254	0	0.028	
10/19/2017 17:10	0	0	10.254	0	0.028	20
10/19/2017 17:11	0	0	10.254	0	0.028	
10/19/2017 17:12	0	0	10.254	0	0.028	
10/19/2017 17:13	0	0	10.254	0	0.028	
10/19/2017 17:14	0	0	10.254	0	0.028	
10/19/2017 17:15	0	0	10.254	0	0.028	20

10/19/2017 17:16	0	0	10.254	0	0.028	
10/19/2017 17:17	0	0	10.254	0	0.028	
10/19/2017 17:18	0	0	10.254	0	0.028	
10/19/2017 17:19	0	0	10.254	0	0.028	
10/19/2017 17:20	0	0	10.254	0	0.028	14
10/19/2017 17:21	0	0	10.254	0	0.028	
10/19/2017 17:22	0	0	10.254	0	0.028	
10/19/2017 17:23	0	0	10.254	0	0.028	
10/19/2017 17:24	0	0	10.254	0	0.028	
10/19/2017 17:25	0	0	10.254	0	0.028	13
10/19/2017 17:26	0	0	10.254	0	0.028	
10/19/2017 17:27	0	0	10.254	0	0.028	
10/19/2017 17:28	0	0	10.254	0	0.028	
10/19/2017 17:29	0	0	10.254	0	0.028	
10/19/2017 17:30	0	0	10.254	0	0.028	4
10/19/2017 17:31	0	0	10.254	0	0.028	
10/19/2017 17:32	0	0	10.254	0	0.028	
10/19/2017 17:33	0	0	10.254	0	0.028	
10/19/2017 17:34	0	0	10.254	0	0.028	
10/19/2017 17:35	0	0	10.254	0	0.028	-1
10/19/2017 17:36	0	0	10.254	0	0.028	
10/19/2017 17:37	0	0	10.254	0	0.028	
10/19/2017 17:38	0	0	10.254	0	0.028	
10/19/2017 17:39	0	0	10.254	0	0.028	
10/19/2017 17:40	0	0	10.254	0	0.028	3
10/19/2017 17:41	0	0	10.254	0	0.028	
10/19/2017 17:42	0	0	10.254	0	0.028	
10/19/2017 17:43	0	0	10.254	0	0.028	
10/19/2017 17:44	0	0	10.254	0	0.028	
10/19/2017 17:45	0	0	10.254	0	0.028	3
10/19/2017 17:46	0	0	10.254	0	0.028	
10/19/2017 17:47	0	0	10.254	0	0.028	
10/19/2017 17:48	0	0	10.254	0	0.028	
10/19/2017 17:49	0	0	10.254	0	0.028	
10/19/2017 17:50	0	0	10.254	0	0.028	4
10/19/2017 17:51	0	0	10.254	0	0.028	
10/19/2017 17:52	0	0	10.254	0	0.028	
10/19/2017 17:53	0	0	10.254	0	0.028	
10/19/2017 17:54	0	0	10.254	0	0.028	
10/19/2017 17:55	0	0	10.254	0	0.028	8
10/19/2017 17:56	0	0	10.254	0	0.028	
10/19/2017 17:57	0	0	10.254	0	0.028	
10/19/2017 17:58	0	0	10.254	0	0.028	
10/19/2017 17:59	0	0	10.254	0	0.028	
10/19/2017 18:00	0	0	10.254	0	0.028	11
10/19/2017 18:01	0	0	10.254	0	0.028	
10/19/2017 18:02	0	0	10.254	0	0.028	
10/19/2017 18:03	0	0	10.254	0	0.028	
10/19/2017 18:04	0	0	10.254	0	0.028	
10/19/2017 18:05	0	0	10.254	0	0.028	9
10/19/2017 18:06	0	0	10.254	0	0.028	
10/19/2017 18:07	0	0	10.254	0	0.028	
10/19/2017 18:08	0	0	10.254	0	0.028	
10/19/2017 18:09	0	0	10.254	0	0.028	

10/19/2017 18:10	0	0	10.254	0	0.028	6
10/19/2017 18:11	0	0	10.254	0	0.028	
10/19/2017 18:12	0	0	10.254	0	0.028	
10/19/2017 18:13	0	0	10.254	0	0.028	
10/19/2017 18:14	0	0	10.254	0	0.028	
10/19/2017 18:15	0	0	10.254	0	0.028	4
10/19/2017 18:16	0	0	10.254	0	0.028	
10/19/2017 18:17	0	0	10.254	0	0.028	
10/19/2017 18:18	0	0	10.254	0	0.028	
10/19/2017 18:19	0	0	10.254	0	0.028	
10/19/2017 18:20	0	0	10.254	0	0.028	7
10/19/2017 18:21	0	0	10.254	0	0.028	
10/19/2017 18:22	0	0	10.254	0	0.028	
10/19/2017 18:23	0	0	10.254	0	0.028	
10/19/2017 18:24	0	0	10.254	0	0.028	
10/19/2017 18:25	0	0	10.254	0	0.028	11
10/19/2017 18:26	0	0	10.254	0	0.028	
10/19/2017 18:27	0	0	10.254	0	0.028	
10/19/2017 18:28	0	0	10.254	0	0.028	
10/19/2017 18:29	0	0	10.254	0	0.028	
10/19/2017 18:30	0	0	10.254	0	0.028	11
10/19/2017 18:31	0	0	10.254	0	0.028	
10/19/2017 18:32	0	0	10.254	0	0.028	
10/19/2017 18:33	0	0	10.254	0	0.028	
10/19/2017 18:36	0	0	10.254	0	0.028	
10/23/2017 13:03	0	0.006	0.014	0	0	
10/23/2017 13:04	0	0.007	0.014	0	0	
10/23/2017 13:05	0	0.008	0.014	0	0	
10/23/2017 13:06	0	0.008	0.014	0	0	
10/23/2017 13:07	0	0.008	0.014	0	0	
10/23/2017 13:08	0	0.006	0.014	0	0	
10/23/2017 13:09	0	0.008	0.014	0	0	
10/23/2017 13:10	0	0.006	0.014	0	0	
10/23/2017 13:11	0	0.006	0.014	0	0	
10/23/2017 13:12	0	0.005	0.014	0	0	
10/23/2017 13:13	0	0.005	0.014	0	0	
10/23/2017 13:14	0	0.005	0.014	0	0	
10/23/2017 13:15	0	0.006	0.014	0	0	10
10/23/2017 13:16	0	0.004	0.014	0	0	
10/23/2017 13:17	0	0.004	0.014	0	0	
10/23/2017 14:26	0.003	0.004	0.014	0	0	
10/23/2017 14:27	0.003	0.004	0.014	0	0	
10/23/2017 14:28	0.003	0.004	0.014	0	0	
10/23/2017 14:29	0.003	0.004	0.014	0	0	
10/23/2017 14:30	0.003	0.004	0.014	0	0	17
10/23/2017 14:31	0.003	0.004	0.014	0	0	
10/23/2017 14:32	0.003	0.004	0.014	0	0	
10/23/2017 14:33	0.003	0.004	0.014	0	0	
10/23/2017 14:34	0.003	0.004	0.014	0	0	
10/23/2017 14:35	0.003	0.005	0.014	0	0	15
10/23/2017 14:36	0.003	0.004	0.014	0	0	
10/23/2017 14:37	0.003	0.004	0.014	0	0	
10/23/2017 14:38	0.003	0.004	0.014	0	0	
10/23/2017 14:39	0.003	0.004	0.014	0	0	

10/23/2017 14:40	0.003	0.003	0.014	0	0	24
10/23/2017 14:41	0.003	0.005	0.014	0	0	
10/23/2017 14:42	0.003	0.004	0.014	0	0	
10/23/2017 14:43	0.003	0.002	0.014	0	0	
10/23/2017 14:44	0.003	0.004	0.014	0	0	
10/23/2017 14:45	0.003	0.004	0.014	0	0	23
10/23/2017 14:46	0.003	0.004	0.014	0	0	
10/23/2017 14:47	0.003	0.004	0.014	0	0	
10/23/2017 14:48	0.003	0.003	0.014	0	0	
10/23/2017 14:49	0.003	0.003	0.014	0	0	
10/23/2017 14:50	0.003	0.003	0.014	0	0	20
10/23/2017 14:51	0.003	0.002	0.014	0	0	
10/23/2017 14:52	0.002	0.002	0.014	0	0	
10/23/2017 14:53	0.002	0.002	0.014	0	0	
10/23/2017 14:54	0.002	0.003	0.014	0	0	
10/23/2017 14:55	0.002	0.002	0.014	0	0	14
10/23/2017 14:56	0.002	0.004	0.014	0	0	
10/23/2017 14:57	0.002	0.002	0.014	0	0	
10/23/2017 14:58	0.002	0.002	0.014	0	0	
10/23/2017 14:59	0.002	0.002	0.014	0	0	
10/23/2017 15:00	0.002	0.001	0.014	0	0	21
10/23/2017 15:01	0.002	0	0.014	0	0	
10/23/2017 15:02	0.002	0.002	0.014	0	0	
10/23/2017 15:03	0.001	0.003	0.014	0	0	
10/23/2017 15:04	0.001	0.003	0.014	0	0	
10/23/2017 15:05	0.001	0.002	0.014	0	0	18
10/23/2017 15:06	0.001	0.004	0.014	0	0	
10/23/2017 15:07	0.001	0.002	0.014	0	0	
10/23/2017 15:08	0.001	0.002	0.014	0	0	
10/23/2017 15:09	0.001	0.002	0.014	0	0	
10/23/2017 15:10	0.001	0.003	0.014	0	0	16
10/23/2017 15:11	0.001	0.002	0.014	0	0	
10/23/2017 15:12	0.001	0.002	0.014	0	0	
10/23/2017 15:13	0.001	0.001	0.014	0	0	
10/23/2017 15:14	0.001	0.002	0.014	0	0	
10/23/2017 15:15	0.001	0.002	0.014	0	0	16
10/23/2017 15:16	0.001	0.002	0.014	0	0	
10/23/2017 15:17	0.001	0.002	0.014	0	0	
10/23/2017 15:18	0.001	0.002	0.014	0	0	
10/23/2017 15:19	0.001	0.001	0.014	0	0	
10/23/2017 15:20	0.001	0.002	0.014	0	0	16
10/23/2017 15:21	0.001	0.002	0.014	0	0	
10/23/2017 15:22	0.001	0	0.014	0	0	
10/23/2017 15:23	0.001	0.002	0.014	0	0	
10/23/2017 15:24	0.001	0	0.014	0	0	
10/23/2017 15:25	0.001	0	0.014	0	0	13
10/23/2017 15:26	0.001	0.001	0.014	0	0	
10/23/2017 15:27	0.001	0.001	0.014	0	0	
10/23/2017 15:28	0.001	0	0.014	0	0	
10/23/2017 15:29	0.001	0	0.014	0	0	
10/23/2017 15:31	0	0	0.014	0	0	
10/23/2017 15:32	0	0	0.014	0	0	
10/23/2017 15:33	0	0	0.014	0	0	
10/23/2017 15:34	0	0	0.014	0	0	

10/23/2017 15:35	0	0	0.014	0	0	16
10/23/2017 15:36	0	0	0.014	0	0	
10/23/2017 15:37	0	0	0.014	0	0	
10/23/2017 15:38	0	0	0.014	0	0	
10/23/2017 15:39	0	0	0.014	0	0	
10/23/2017 15:40	0	0.001	0.014	0	0	14
10/23/2017 15:41	0	0	0.014	0	0	
10/23/2017 15:42	0	0	0.014	0	0	
10/23/2017 15:43	0	0	0.014	0	0	
10/23/2017 15:44	0	0	0.014	0	0	
10/23/2017 15:45	0	0	0.014	0	0	16
10/23/2017 15:46	0	0	0.014	0	0	
10/23/2017 15:47	0	0	0.014	0	0	
10/23/2017 15:48	0	0	0.014	0	0	
10/23/2017 15:49	0	0	0.014	0	0	
10/23/2017 15:50	0	0	0.014	0	0	17
10/23/2017 15:51	0	0	0.014	0	0	
10/23/2017 15:52	0	0	0.014	0	0	
10/23/2017 15:53	0	0	0.014	0	0	
10/23/2017 15:54	0	0	0.014	0	0	
10/23/2017 15:55	0	0	0.014	0	0	20
10/23/2017 15:56	0	0	0.014	0	0	
10/23/2017 15:57	0	0	0.014	0	0	
10/23/2017 15:58	0	0	0.014	0	0	
10/23/2017 15:59	0	0	0.014	0	0	
10/23/2017 16:00	0	0	0.014	0	0	18
10/23/2017 16:01	0	0	0.014	0	0	
10/23/2017 16:02	0	0	0.014	0	0	
10/23/2017 16:03	0	0	0.014	0	0	
10/23/2017 16:04	0	0	0.014	0	0	
10/23/2017 16:05	0	0	0.014	0	0	12
10/23/2017 16:06	0	0	0.014	0	0	
10/23/2017 16:07	0	0	0.014	0	0	
10/23/2017 16:08	0	0	0.014	0	0	
10/23/2017 16:09	0	0	0.014	0	0	
10/23/2017 16:10	0	0.001	0.014	0	0	11
10/23/2017 16:11	0	0.002	0.014	0	0	
10/23/2017 16:12	0	0.001	0.014	0	0	
10/23/2017 16:13	0	0	0.014	0	0	
10/23/2017 16:14	0	0	0.014	0	0	
10/23/2017 16:15	0	0	0.014	0	0	14
10/23/2017 16:16	0	0	0.014	0	0	
10/23/2017 16:17	0	0	0.014	0	0	
10/23/2017 16:18	0	0	0.014	0	0	
10/23/2017 16:19	0	0	0.014	0	0	
10/23/2017 16:20	0	0	0.014	0	0	11
10/23/2017 16:21	0	0	0.014	0	0	
10/23/2017 16:22	0	0	0.014	0	0	
10/23/2017 16:23	0	0	0.014	0	0	
10/23/2017 16:24	0	0	0.014	0	0	
10/23/2017 16:25	0	0	0.014	0	0	14
10/23/2017 16:26	0	0	0.014	0	0	
10/23/2017 16:27	0	0	0.014	0	0	
10/23/2017 16:28	0	0	0.014	0	0	

10/23/2017 16:29	0	0	0.014	0	0	
10/23/2017 16:30	0	0	0.014	0	0	11
10/23/2017 16:31	0	0	0.014	0	0	
10/23/2017 16:32	0	0	0.014	0	0	
10/23/2017 16:33	0	0.002	0.014	0	0	
10/23/2017 16:34	0	0	0.014	0	0	
10/23/2017 16:35	0	0	0.014	0	0	14
10/23/2017 16:36	0	0	0.014	0	0	
10/23/2017 16:37	0	0	0.014	0	0	
10/23/2017 16:38	0	0	0.014	0	0	
10/23/2017 16:39	0	0	0.014	0	0	
10/23/2017 16:40	0	0	0.014	0	0	13
10/23/2017 16:41	0	0	0.014	0	0	
10/23/2017 16:42	0	0.001	0.014	0	0	
10/23/2017 16:43	0	0	0.014	0	0	
10/23/2017 16:44	0	0	0.014	0	0	
10/23/2017 16:45	0	0	0.014	0	0	27
10/23/2017 16:46	0	0	0.014	0	0	
10/23/2017 16:47	0	0	0.014	0	0	
10/23/2017 16:48	0	0	0.014	0	0	
10/23/2017 16:49	0	0	0.014	0	0	
10/23/2017 16:50	0	0	0.014	0	0	27
10/23/2017 16:51	0	0	0.014	0	0	
10/23/2017 16:52	0	0	0.014	0	0	
10/23/2017 16:53	0	0	0.014	0	0	
10/23/2017 16:54	0	0	0.014	0	0	
10/23/2017 16:55	0	0	0.014	0	0	18
10/23/2017 16:56	0	0	0.014	0	0	
10/23/2017 16:57	0	0	0.014	0	0	
10/23/2017 16:58	0	0	0.014	0	0	
10/23/2017 16:59	0	0	0.014	0	0	
10/23/2017 17:00	0	0	0.014	0	0	23
10/23/2017 17:01	0	0	0.014	0	0	
10/23/2017 17:02	0	0	0.014	0	0	
10/23/2017 17:03	0	0	0.014	0	0	
10/23/2017 17:04	0	0	0.014	0	0	
10/23/2017 17:05	0	0	0.014	0	0	25
10/23/2017 17:06	0	0	0.014	0	0	
10/23/2017 17:07	0	0	0.014	0	0	
10/23/2017 17:08	0	0	0.014	0	0	
10/23/2017 17:09	0	0	0.014	0	0	
10/23/2017 17:10	0	0	0.014	0	0	27
10/23/2017 17:11	0	0	0.014	0	0	
10/23/2017 17:12	0	0	0.014	0	0	
10/23/2017 17:13	0	0	0.014	0	0	
10/23/2017 17:14	0	0	0.014	0	0	
10/23/2017 17:15	0	0	0.014	0	0	11
10/23/2017 17:16	0	0	0.014	0	0	
10/23/2017 17:17	0	0	0.014	0	0	
10/23/2017 17:18	0	0	0.014	0	0	
10/23/2017 17:19	0	0	0.014	0	0	
10/23/2017 17:20	0	0	0.014	0	0	2
10/23/2017 17:21	0	0	0.014	0	0	
10/23/2017 17:22	0	0	0.014	0	0	

10/23/2017 17:23	0	0	0.014	0	0	
10/23/2017 17:24	0	0	0.014	0	0	
10/23/2017 17:25	0	0	0.014	0	0	0
10/23/2017 17:26	0	0	0.014	0	0	
10/23/2017 17:27	0	0	0.014	0	0	
10/23/2017 17:28	0	0	0.014	0	0	
10/23/2017 17:29	0	0	0.014	0	0	
10/23/2017 17:30	0	0	0.014	0	0	0
10/23/2017 17:31	0	0	0.014	0	0	
10/23/2017 17:32	0	0	0.014	0	0	
10/23/2017 17:33	0	0	0.014	0	0	
10/23/2017 17:34	0	0	0.014	0	0	
10/23/2017 17:35	0	0	0.014	0	0	2
10/23/2017 17:36	0	0	0.014	0	0	
10/23/2017 17:37	0	0	0.014	0	0	
10/23/2017 17:38	0	0	0.014	0	0	
10/23/2017 17:39	0	0	0.014	0	0	
10/23/2017 17:40	0	0	0.014	0	0	6
10/23/2017 17:41	0	0	0.014	0	0	
10/23/2017 17:42	0	0	0.014	0	0	
10/23/2017 17:43	0	0	0.014	0	0	
10/23/2017 17:44	0	0	0.014	0	0	
10/23/2017 17:45	0	0	0.014	0	0	6
10/23/2017 17:46	0	0	0.014	0	0	
10/23/2017 17:47	0	0	0.014	0	0	
10/23/2017 17:48	0	0	0.014	0	0	
10/23/2017 17:49	0	0	0.014	0	0	
10/23/2017 17:50	0	0	0.014	0	0	8
10/23/2017 17:51	0	0	0.014	0	0	
10/23/2017 17:52	0	0	0.014	0	0	
10/23/2017 17:53	0	0	0.014	0	0	
10/23/2017 17:54	0	0	0.014	0	0	
10/23/2017 17:55	0	0	0.014	0	0	4
10/23/2017 17:56	0	0	0.014	0	0	
10/23/2017 17:57	0	0	0.014	0	0	
10/23/2017 17:58	0	0	0.014	0	0	
10/23/2017 17:59	0	0	0.014	0	0	
10/23/2017 18:00	0	0	0.014	0	0	3
10/23/2017 18:01	0	0	0.014	0	0	
10/23/2017 18:02	0	0	0.014	0	0	
10/23/2017 18:03	0	0	0.014	0	0	
10/23/2017 18:04	0	0	0.014	0	0	
10/23/2017 18:05	0	0	0.014	0	0	5
10/23/2017 18:06	0	0	0.014	0	0	
10/23/2017 18:07	0	0	0.014	0	0	
10/23/2017 18:08	0	0	0.014	0	0	
10/23/2017 18:09	0	0	0.014	0	0	
10/23/2017 18:10	0	0	0.014	0	0	7
10/23/2017 18:11	0	0	0.014	0	0	
10/23/2017 18:12	0	0	0.014	0	0	
10/23/2017 18:13	0	0	0.014	0	0	
10/23/2017 18:14	0	0	0.014	0	0	
10/23/2017 18:15	0	0	0.014	0	0	9
10/23/2017 18:16	0	0	0.014	0	0	

10/23/2017 18:17	0	0	0.014	0	0	
10/23/2017 18:18	0	0	0.014	0	0	
10/23/2017 18:19	0	0	0.014	0	0	
10/23/2017 18:20	0	0	0.014	0	0	
10/23/2017 18:20						13
10/23/2017 18:21	0	0	0.014	0	0	
10/23/2017 18:22	0	0	0.014	0	0	
10/23/2017 18:23	0	0	0.014	0	0	
10/23/2017 18:24	0	0	0.014	0	0	
10/23/2017 18:25	0	0	0.014	0	0	15
10/23/2017 18:26	0	0	0.014	0	0	
10/23/2017 18:27	0	0	0.014	0	0	
10/23/2017 18:28	0	0	0.014	0	0	
10/23/2017 18:29	0	0	0.014	0	0	
10/23/2017 18:30	0	0	0.014	0	0	9
10/23/2017 18:31	0	0	0.014	0	0	
10/23/2017 18:32	0	0	0.014	0	0	
10/23/2017 18:33	0	0	0.014	0	0	
10/23/2017 18:34	0	0	0.014	0	0	
10/23/2017 18:35	0	0	0.014	0	0	11
10/23/2017 18:36	0	0	0.014	0	0	
10/23/2017 18:37	0	0	0.014	0	0	
10/23/2017 18:38	0	0	0.014	0	0	
10/23/2017 18:39	0	0	0.014	0	0	
10/23/2017 18:40	0	0	0.014	0	0	12
10/23/2017 18:41	0	0	0.014	0	0	
10/23/2017 18:42	0	0	0.014	0	0	
10/23/2017 18:43	0	0	0.014	0	0	
10/23/2017 18:44	0	0	0.014	0	0	
10/23/2017 18:45	0	0	0.014	0	0	7
10/23/2017 18:46	0	0	0.014	0	0	
10/23/2017 18:47	0	0	0.014	0	0	
10/23/2017 18:48	0	0	0.014	0	0	
10/23/2017 18:49	0	0	0.014	0	0	
10/23/2017 18:50	0	0	0.014	0	0	7
10/23/2017 18:51	0	0	0.014	0	0	
10/23/2017 18:52	0	0	0.014	0	0	
10/23/2017 18:53	0	0	0.014	0	0	
10/23/2017 18:54	0	0	0.014	0	0	
10/23/2017 18:55	0	0	0.014	0	0	8
10/23/2017 18:56	0	0	0.014	0	0	
10/23/2017 18:57	0	0	0.014	0	0	
10/23/2017 18:58	0	0	0.014	0	0	
10/23/2017 18:59	0	0	0.014	0	0	
10/23/2017 19:00	0	0.001	0.014	0	0	5
10/23/2017 19:01	0	0.001	0.014	0	0	
10/23/2017 19:02	0	0.001	0.014	0	0	
10/23/2017 19:03	0	0.001	0.014	0	0	
10/23/2017 19:04	0	0.001	0.014	0	0	
10/23/2017 19:05	0	0	0.014	0	0	7
10/23/2017 19:06	0	0.001	0.014	0	0	
10/23/2017 19:07	0	0	0.014	0	0	
10/23/2017 19:08	0	0	0.014	0	0	
10/23/2017 19:09	0	0	0.014	0	0	

10/23/2017 19:10	0	0	0.014	0	0	7
10/23/2017 19:11	0	0	0.014	0	0	
10/23/2017 19:12	0	0.001	0.014	0	0	
10/23/2017 19:13	0	0	0.014	0	0	
10/23/2017 19:14	0	0.001	0.014	0	0	
10/23/2017 19:15	0	0	0.014	0	0	9
10/23/2017 19:16	0	0	0.014	0	0	
10/23/2017 19:17	0	0	0.014	0	0	
10/23/2017 19:18	0	0	0.014	0	0	
10/23/2017 19:19	0	0	0.014	0	0	
10/23/2017 19:20	0	0	0.014	0	0	12
10/23/2017 19:21	0	0.001	0.014	0	0	
10/23/2017 19:22	0	0.001	0.014	0	0	
10/23/2017 19:23	0	0.001	0.014	0	0	
10/23/2017 19:24	0	0.001	0.014	0	0	
10/23/2017 19:25	0	0.001	0.014	0	0	8
10/23/2017 19:26	0	0.002	0.014	0	0	
10/23/2017 19:27	0	0	0.014	0	0	
10/23/2017 19:28	0	0.001	0.014	0	0.001	
10/23/2017 19:29	0	0	0.014	0	0.001	
10/23/2017 19:30	0	0.001	0.014	0	0.001	8
10/23/2017 19:31	0	0.001	0.014	0	0.001	
10/23/2017 19:32	0	0.002	0.014	0	0.001	
10/23/2017 19:33	0	0.001	0.014	0	0.001	
10/23/2017 19:34	0	0.001	0.014	0	0.001	
10/23/2017 19:35	0	0.003	0.014	0	0.001	10
10/23/2017 19:36	0	0.001	0.014	0	0.001	
10/23/2017 19:37	0	0.001	0.014	0	0.001	
10/23/2017 19:38	0	0.001	0.014	0	0.001	
10/23/2017 19:39	0	0.001	0.014	0	0.001	
10/23/2017 19:40	0	0.001	0.014	0	0.001	12
10/23/2017 19:41	0	0.001	0.014	0	0.001	
10/23/2017 19:42	0	0	0.014	0	0.001	
10/23/2017 19:43	0	0.001	0.014	0	0.001	
10/23/2017 19:44	0	0.001	0.014	0	0.001	
10/23/2017 19:45	0	0	0.014	0	0.001	11
10/23/2017 19:46	0	0	0.014	0	0.001	
10/23/2017 19:47	0	0.002	0.014	0	0.001	
10/23/2017 19:48	0	0.001	0.014	0	0.001	
10/23/2017 19:49	0	0.001	0.014	0	0.001	
10/23/2017 19:50	0	0.001	0.014	0	0.001	11
10/23/2017 19:51	0	0	0.014	0	0.001	
10/23/2017 19:52	0	0	0.014	0	0.001	
10/23/2017 19:53	0	0	0.014	0	0.001	
10/23/2017 19:54	0	0.001	0.014	0	0.001	
10/23/2017 19:55	0	0.001	0.014	0	0.001	12
10/23/2017 19:56	0	0.001	0.014	0	0.001	
10/23/2017 19:57	0	0.001	0.014	0	0.001	
10/23/2017 19:58	0	0.001	0.014	0	0.001	
10/23/2017 19:59	0	0	0.014	0	0.001	
10/23/2017 20:00	0	0.001	0.014	0	0.001	14
10/23/2017 20:01	0	0.001	0.014	0	0.001	
10/23/2017 20:02	0	0	0.014	0	0.001	
10/23/2017 20:03	0	0.001	0.014	0	0.001	

10/23/2017 20:04	0	0	0.014	0	0.001	
10/23/2017 20:05	0	0	0.014	0	0.001	13
10/23/2017 20:06	0	0.001	0.014	0	0.001	
10/23/2017 20:07	0	0.001	0.014	0	0.001	
10/23/2017 20:08	0	0.001	0.014	0	0.001	
10/23/2017 20:09	0	0	0.014	0	0.001	
10/23/2017 20:10	0	0.001	0.014	0	0.001	16
10/23/2017 20:11	0	0	0.014	0	0.001	
10/23/2017 20:12	0	0	0.014	0	0.001	
10/23/2017 20:13	0	0.001	0.014	0	0.001	
10/23/2017 20:14	0	0.001	0.014	0	0.001	
10/24/2017 12:45	0	0.009	0.01	0	0	
10/24/2017 12:46	0	0.009	0.01	0	0	
10/24/2017 12:47	0	0.006	0.01	0	0	
10/24/2017 12:48	0	0.005	0.01	0	0	
10/24/2017 12:49	0	0.004	0.01	0	0	
10/24/2017 12:50	0	0.004	0.01	0	0	0
10/24/2017 12:51	0	0.006	0.01	0	0	
10/24/2017 12:52	0	0.005	0.01	0	0	
10/24/2017 12:53	0	0.006	0.01	0	0	
10/24/2017 12:54	0	0.005	0.01	0	0	
10/24/2017 12:55	0	0.004	0.01	0	0	3
10/24/2017 12:56	0	0.004	0.01	0	0	
10/24/2017 12:57	0	0.004	0.01	0	0	
10/24/2017 12:58	0	0.003	0.01	0	0	
10/24/2017 12:59	0.004	0.004	0.01	0	0	
10/24/2017 13:00	0.004	0.005	0.01	0	0	6
10/24/2017 13:01	0.004	0.004	0.01	0	0	
10/24/2017 13:02	0.004	0.004	0.01	0	0	
10/24/2017 13:03	0.004	0.003	0.01	0	0	
10/24/2017 13:04	0.004	0.003	0.01	0	0	
10/24/2017 13:05	0.004	0.003	0.01	0	0	7
10/24/2017 13:06	0.003	0.002	0.01	0	0	
10/24/2017 13:07	0.003	0.003	0.01	0	0	
10/24/2017 13:08	0.003	0.002	0.01	0	0	
10/24/2017 13:09	0.003	0.002	0.01	0	0	
10/24/2017 13:10	0.003	0.003	0.01	0	0	12
10/24/2017 13:11	0.003	0.002	0.01	0	0	
10/24/2017 13:12	0.002	0.003	0.01	0	0	
10/24/2017 13:13	0.002	0.003	0.01	0	0	
10/24/2017 13:14	0.002	0.004	0.01	0	0	
10/24/2017 13:15	0.002	0.004	0.01	0	0	12
10/24/2017 13:16	0.002	0.003	0.01	0	0	
10/24/2017 13:17	0.002	0.004	0.01	0	0	
10/24/2017 13:18	0.002	0.005	0.01	0	0	
10/24/2017 13:19	0.002	0.004	0.01	0	0	
10/24/2017 13:20	0.002	0.005	0.01	0	0	10
10/24/2017 13:21	0.002	0.004	0.01	0	0	
10/24/2017 13:22	0.002	0.003	0.01	0	0	
10/24/2017 13:23	0.002	0.004	0.01	0	0	
10/24/2017 13:24	0.003	0.004	0.01	0	0	
10/24/2017 13:25	0.003	0.004	0.01	0	0	13
10/24/2017 13:26	0.003	0.004	0.01	0	0	
10/24/2017 13:27	0.003	0.005	0.01	0	0	

10/24/2017 13:28	0.003	0.004	0.01	0	0	
10/24/2017 13:29	0.003	0.002	0.01	0	0	
10/24/2017 13:30	0.003	0.004	0.01	0	0	8
10/24/2017 13:31	0.003	0.002	0.01	0	0	
10/24/2017 13:32	0.003	0.002	0.01	0	0	
10/24/2017 13:33	0.002	0.002	0.01	0	0	
10/24/2017 13:34	0.002	0.001	0.01	0	0	
10/24/2017 13:35	0.002	0.001	0.01	0	0	4
10/24/2017 13:36	0.002	0.002	0.01	0	0	
10/24/2017 13:37	0.002	0.002	0.01	0	0	
10/24/2017 13:38	0.002	0.002	0.01	0	0	
10/24/2017 13:39	0.002	0.002	0.01	0	0	
10/24/2017 13:40	0.002	0.002	0.01	0	0	4
10/24/2017 13:41	0.002	0.003	0.01	0	0	
10/24/2017 13:42	0.001	0.009	0.01	0	0	
10/24/2017 13:43	0.001	0.002	0.01	0	0	
10/24/2017 13:44	0.001	0.002	0.01	0	0	
10/24/2017 13:45	0.001	0.002	0.01	0	0	5
10/24/2017 13:46	0.001	0.002	0.01	0	0	
10/24/2017 13:47	0.001	0.003	0.01	0	0	
10/24/2017 13:48	0.001	0.002	0.01	0	0	
10/24/2017 13:49	0.001	0.002	0.01	0	0	
10/24/2017 13:50	0.001	0.003	0.01	0	0	1
10/24/2017 13:51	0.001	0.002	0.01	0	0	
10/24/2017 13:52	0.001	0.002	0.01	0	0	
10/24/2017 13:53	0.001	0.002	0.01	0	0	
10/24/2017 13:54	0.001	0.002	0.01	0	0	
10/24/2017 13:55	0.001	0.002	0.01	0	0	0
10/24/2017 13:56	0.001	0.001	0.01	0	0	
10/24/2017 13:57	0.001	0.002	0.01	0	0	
10/24/2017 13:58	0.001	0.002	0.01	0	0	
10/24/2017 13:59	0.001	0.002	0.01	0	0	
10/24/2017 14:00	0.001	0.002	0.01	0	0	1
10/24/2017 14:01	0.001	0	0.01	0	0	
10/24/2017 14:02	0.001	0.002	0.01	0	0	
10/24/2017 14:03	0.001	0.002	0.01	0	0	
10/24/2017 14:04	0.001	0.002	0.01	0	0	
10/24/2017 14:05	0.001	0.001	0.01	0	0	2
10/24/2017 14:06	0.001	0.002	0.01	0	0	
10/24/2017 14:07	0.001	0.002	0.01	0	0	
10/24/2017 14:08	0.001	0.002	0.01	0	0	
10/24/2017 14:09	0.001	0.002	0.01	0	0	
10/24/2017 14:10	0.001	0.002	0.01	0	0	6
10/24/2017 14:11	0.001	0.001	0.01	0	0	
10/24/2017 14:12	0.001	0.002	0.01	0	0	
10/24/2017 14:13	0.001	0	0.01	0	0	
10/24/2017 14:14	0.001	0.002	0.01	0	0	
10/24/2017 14:15	0.001	0.002	0.01	0	0	6
10/24/2017 14:16	0.001	0.002	0.01	0	0	
10/24/2017 14:17	0.001	0.002	0.01	0	0	
10/24/2017 14:18	0.001	0.003	0.01	0	0	
10/24/2017 14:19	0.001	0.002	0.01	0	0	
10/24/2017 14:20	0.001	0.003	0.01	0	0	4
10/24/2017 14:21	0.001	0.002	0.01	0	0	

10/24/2017 14:22	0.001	0.002	0.01	0	0	
10/24/2017 14:23	0.001	0.002	0.01	0	0	
10/24/2017 14:24	0.001	0.002	0.01	0	0	
10/24/2017 14:25	0.001	0.002	0.01	0	0	7
10/24/2017 14:26	0.001	0.003	0.01	0	0	
10/24/2017 14:27	0.001	0.002	0.01	0	0	
10/24/2017 14:28	0.001	0.001	0.01	0	0	
10/24/2017 14:29	0.001	0.002	0.01	0	0	
10/24/2017 14:30	0.001	0.002	0.01	0	0	11
10/24/2017 14:31	0.001	0.001	0.01	0	0	
10/24/2017 14:32	0.001	0.002	0.01	0	0	
10/24/2017 14:33	0.001	0.003	0.01	0	0	
10/24/2017 14:34	0.001	0.004	0.01	0	0	
10/24/2017 14:35	0.001	0.003	0.01	0	0	14
10/24/2017 14:36	0.001	0.004	0.01	0	0	
10/24/2017 14:37	0.001	0.003	0.01	0	0	
10/24/2017 14:38	0.001	0.002	0.01	0	0	
10/24/2017 14:39	0.001	0.002	0.01	0	0	
10/24/2017 14:40	0.001	0.004	0.01	0	0	10
10/24/2017 14:41	0.001	0.004	0.01	0	0	
10/24/2017 14:42	0.001	0.002	0.01	0	0	
10/24/2017 14:43	0.001	0.002	0.01	0	0	
10/24/2017 14:44	0.001	0.001	0.01	0	0	
10/24/2017 14:45	0.001	0.002	0.01	0	0	10
10/24/2017 14:46	0.001	0.003	0.01	0	0	
10/24/2017 14:47	0.001	0.001	0.01	0	0	
10/24/2017 14:48	0.001	0.004	0.01	0	0	
10/24/2017 14:49	0.001	0.002	0.01	0	0	
10/24/2017 14:50	0.001	0.003	0.01	0	0	15
10/24/2017 14:51	0.001	0.002	0.01	0	0	
10/24/2017 14:52	0.001	0	0.01	0	0	
10/24/2017 14:53	0.001	0	0.01	0	0	
10/24/2017 14:54	0.001	0.003	0.01	0	0	
10/24/2017 14:55	0.001	0.002	0.01	0	0	18
10/24/2017 14:56	0.001	0.002	0.01	0	0	
10/24/2017 14:57	0.001	0	0.01	0	0	
10/24/2017 14:58	0.001	0.001	0.01	0	0	
10/24/2017 14:59	0.001	0.001	0.01	0	0	
10/24/2017 15:00	0.001	0	0.01	0	0	
10/24/2017 15:00						17
10/24/2017 15:01	0.001	0	0.01	0	0	
10/24/2017 15:02	0	0.001	0.01	0	0	
10/24/2017 15:03	0	0.002	0.01	0	0	
10/24/2017 15:04	0	0.001	0.01	0	0	
10/24/2017 15:05	0	0.003	0.01	0	0	18
10/24/2017 15:06	0	0.002	0.01	0	0	
10/24/2017 15:07	0	0	0.01	0	0	
10/24/2017 15:08	0	0.001	0.01	0	0	
10/24/2017 15:09	0	0.002	0.01	0	0	
10/24/2017 15:10	0	0	0.01	0	0	18
10/24/2017 15:11	0	0	0.01	0	0	
10/24/2017 15:12	0	0.001	0.01	0	0	
10/24/2017 15:13	0	0.002	0.01	0	0	
10/24/2017 15:14	0	0	0.01	0	0	

10/24/2017 15:15	0	0.002	0.01	0	0	17
10/24/2017 15:16	0	0.002	0.01	0	0	
10/24/2017 15:17	0	0.002	0.01	0	0	
10/24/2017 15:18	0.001	0.002	0.01	0	0	
10/24/2017 15:19	0.001	0.002	0.01	0	0	
10/24/2017 15:20	0.001	0.001	0.01	0	0	17
10/24/2017 15:21	0.001	0	0.01	0	0	
10/24/2017 15:22	0	0.002	0.01	0	0	
10/24/2017 15:23	0	0.002	0.01	0	0	
10/24/2017 15:24	0	0.001	0.01	0	0	
10/24/2017 15:25	0	0.003	0.01	0	0	18
10/24/2017 15:26	0.001	0.002	0.01	0	0	
10/24/2017 15:27	0.001	0.002	0.01	0	0	
10/24/2017 15:28	0.001	0	0.01	0	0	
10/24/2017 15:29	0	0.001	0.01	0	0	
10/24/2017 15:30	0	0.001	0.01	0	0	16
10/24/2017 15:31	0	0	0.01	0	0	
10/24/2017 15:32	0	0	0.01	0	0	
10/24/2017 15:33	0	0	0.01	0	0	
10/24/2017 15:34	0	0.001	0.01	0	0	
10/24/2017 15:35	0	0	0.01	0	0	13
10/24/2017 15:36	0	0	0.01	0	0	
10/24/2017 15:37	0	0.001	0.01	0	0	
10/24/2017 15:38	0	0	0.01	0	0	
10/24/2017 15:39	0	0	0.01	0	0	
10/24/2017 15:40	0	0	0.01	0	0	15
10/24/2017 15:41	0	0	0.01	0	0	
10/24/2017 15:42	0	0	0.01	0	0	
10/24/2017 15:43	0	0	0.01	0	0	
10/24/2017 15:44	0	0.001	0.01	0	0	
10/24/2017 15:45	0	0	0.01	0	0	17
10/24/2017 15:46	0	0	0.01	0	0	
10/24/2017 15:47	0	0	0.01	0	0	
10/24/2017 15:48	0	0	0.01	0	0	
10/24/2017 15:49	0	0	0.01	0	0	
10/24/2017 15:50	0	0	0.01	0	0	19
10/24/2017 15:51	0	0	0.01	0	0	
10/24/2017 15:52	0	0	0.01	0	0	
10/24/2017 15:53	0	0	0.01	0	0	
10/24/2017 15:54	0	0	0.01	0	0	
10/24/2017 15:55	0	0	0.01	0	0	16
10/24/2017 15:56	0	0	0.01	0	0	
10/24/2017 15:57	0	0	0.01	0	0	
10/24/2017 15:58	0	0	0.01	0	0	
10/24/2017 15:59	0	0	0.01	0	0	
10/24/2017 16:00	0	0.001	0.01	0	0	14
10/24/2017 16:01	0	0	0.01	0	0	
10/24/2017 16:02	0	0.001	0.01	0	0	
10/24/2017 16:03	0	0	0.01	0	0	
10/24/2017 16:04	0	0	0.01	0	0	
10/24/2017 16:05	0	0	0.01	0	0	13
10/24/2017 16:06	0	0	0.01	0	0	
10/24/2017 16:07	0	0	0.01	0	0	
10/24/2017 16:08	0	0	0.01	0	0	

10/24/2017 16:09	0	0	0.01	0	0	
10/24/2017 16:10	0	0	0.01	0	0	17
10/24/2017 16:11	0	0	0.01	0	0	
10/24/2017 16:12	0	0	0.01	0	0	
10/24/2017 16:13	0	0	0.01	0	0	
10/24/2017 16:14	0	0	0.01	0	0	
10/24/2017 16:15	0	0	0.01	0	0	16
10/24/2017 16:16	0	0	0.01	0	0	
10/24/2017 16:17	0	0	0.01	0	0	
10/24/2017 16:18	0	0	0.01	0	0	
10/24/2017 16:19	0	0	0.01	0	0	
10/24/2017 16:20	0	0.001	0.01	0	0	19
10/24/2017 16:21	0	0	0.01	0	0	
10/24/2017 16:22	0	0	0.01	0	0	
10/24/2017 16:23	0	0.002	0.01	0	0	
10/24/2017 16:24	0	0	0.01	0	0	
10/24/2017 16:25	0	0	0.01	0	0	20
10/24/2017 16:26	0	0	0.01	0	0	
10/24/2017 16:27	0	0	0.01	0	0	
10/24/2017 16:28	0	0	0.01	0	0	
10/24/2017 16:29	0	0	0.01	0	0	
10/24/2017 16:30	0	0	0.01	0	0	24
10/24/2017 16:31	0	0	0.01	0	0	
10/24/2017 16:32	0	0	0.01	0	0	
10/24/2017 16:33	0	0	0.01	0	0	
10/24/2017 16:34	0	0	0.01	0	0	
10/24/2017 16:35	0	0	0.01	0	0	26
10/24/2017 16:36	0	0	0.01	0	0	
10/24/2017 16:37	0	0	0.01	0	0	
10/24/2017 16:38	0	0.001	0.01	0	0	
10/24/2017 16:39	0	0	0.01	0	0	
10/24/2017 16:40	0	0	0.01	0	0	30
10/24/2017 16:41	0	0	0.01	0	0	
10/24/2017 16:42	0	0	0.01	0	0	
10/24/2017 16:43	0	0	0.01	0	0	
10/24/2017 16:44	0	0	0.01	0	0	
10/24/2017 16:45	0	0.002	0.01	0	0	33
10/24/2017 16:46	0	0	0.01	0	0	
10/24/2017 16:47	0	0	0.01	0	0	
10/24/2017 16:48	0	0.001	0.01	0	0	
10/24/2017 16:49	0	0.001	0.01	0	0	
10/24/2017 16:50	0	0	0.01	0	0	35
10/24/2017 16:51	0	0.001	0.01	0	0	
10/24/2017 16:52	0	0.001	0.01	0	0	
10/24/2017 16:53	0	0	0.01	0	0	
10/24/2017 16:54	0	0.001	0.01	0	0	
10/24/2017 16:55	0	0	0.01	0	0	32
10/24/2017 16:56	0	0.001	0.01	0	0	
10/24/2017 16:57	0	0	0.01	0	0	
10/24/2017 16:58	0	0	0.01	0	0	
10/24/2017 16:59	0	0	0.01	0	0	
10/24/2017 17:00	0	0	0.01	0	0	19
10/24/2017 17:01	0	0	0.01	0	0	
10/24/2017 17:02	0	0.001	0.01	0	0	

10/24/2017 17:03	0	0.001	0.01	0	0	
10/24/2017 17:04	0	0.002	0.01	0	0	
10/24/2017 17:05	0	0	0.01	0	0	12
10/24/2017 17:06	0	0	0.01	0	0	
10/24/2017 17:07	0	0	0.01	0	0	
10/24/2017 17:08	0	0	0.01	0	0	
10/24/2017 17:09	0	0	0.01	0	0	
10/24/2017 17:10	0	0	0.01	0	0	4
10/24/2017 17:11	0	0	0.01	0	0	
10/24/2017 17:12	0	0.001	0.01	0	0	
10/24/2017 17:13	0	0	0.01	0	0	
10/24/2017 17:14	0	0	0.01	0	0	
10/24/2017 17:15	0	0	0.01	0	0	12
10/24/2017 17:16	0	0	0.01	0	0	
10/24/2017 17:17	0	0	0.01	0	0	
10/24/2017 17:18	0	0	0.01	0	0	
10/24/2017 17:19	0	0	0.01	0	0	
10/24/2017 17:20	0	0	0.01	0	0	13
10/24/2017 17:21	0	0	0.01	0	0	
10/24/2017 17:22	0	0	0.01	0	0	
10/24/2017 17:23	0	0	0.01	0	0	
10/24/2017 17:24	0	0	0.01	0	0	
10/24/2017 17:25	0	0	0.01	0	0	14
10/24/2017 17:26	0	0	0.01	0	0	
10/24/2017 17:27	0	0	0.01	0	0	
10/24/2017 17:28	0	0	0.01	0	0	
10/24/2017 17:29	0	0	0.01	0	0	
10/24/2017 17:30	0	0	0.01	0	0	9
10/24/2017 17:31	0	0	0.01	0	0	
10/24/2017 17:32	0	0	0.01	0	0	
10/24/2017 17:33	0	0	0.01	0	0	
10/24/2017 17:34	0	0	0.01	0	0	
10/24/2017 17:35	0	0	0.01	0	0	9
10/24/2017 17:36	0	0	0.01	0	0	
10/24/2017 17:37	0	0	0.01	0	0	
10/24/2017 17:38	0	0.002	0.01	0	0	
10/24/2017 17:39	0	0	0.01	0	0	
10/24/2017 17:40	0	0	0.01	0	0	8
10/24/2017 17:41	0	0	0.01	0	0	
10/24/2017 17:42	0	0	0.01	0	0	
10/24/2017 17:43	0	0	0.01	0	0	
10/24/2017 17:44	0	0	0.01	0	0	
10/24/2017 17:45	0	0	0.01	0	0	9
10/24/2017 17:46	0	0	0.01	0	0	
10/24/2017 17:47	0	0	0.01	0	0	
10/24/2017 17:48	0	0	0.01	0	0	
10/24/2017 17:49	0	0	0.01	0	0	
10/24/2017 17:50	0	0.002	0.01	0	0	10
10/24/2017 17:51	0	0	0.01	0	0	
10/24/2017 17:52	0	0	0.01	0	0	
10/24/2017 17:53	0	0	0.01	0	0	
10/24/2017 17:54	0	0.001	0.01	0	0	
10/24/2017 17:55	0	0	0.01	0	0	9
10/24/2017 17:56	0	0	0.01	0	0	

10/24/2017 17:57	0	0.001	0.01	0	0	
10/24/2017 17:58	0	0	0.01	0	0	
10/24/2017 17:59	0	0	0.01	0	0	
10/24/2017 18:00	0	0	0.01	0	0	9
10/24/2017 18:01	0	0	0.01	0	0	
10/24/2017 18:02	0	0.001	0.01	0	0	
10/24/2017 18:03	0	0	0.01	0	0	
10/24/2017 18:04	0	0.002	0.01	0	0	
10/24/2017 18:05	0	0.001	0.01	0	0	10
10/24/2017 18:06	0	0.001	0.01	0	0	
10/24/2017 18:07	0	0	0.01	0	0	
10/24/2017 18:08	0	0.002	0.01	0	0	
10/24/2017 18:09	0	0	0.01	0	0	
10/24/2017 18:10	0	0	0.01	0	0	12
10/24/2017 18:11	0	0	0.01	0	0	
10/24/2017 18:12	0	0	0.01	0	0	
10/24/2017 18:13	0	0	0.01	0	0	
10/24/2017 18:14	0	0	0.01	0	0	
10/24/2017 18:15	0	0	0.01	0	0	10
10/24/2017 18:16	0	0	0.01	0	0	
10/24/2017 18:17	0	0	0.01	0	0	
10/24/2017 18:18	0	0	0.01	0	0	
10/24/2017 18:19	0	0	0.01	0	0	
10/24/2017 18:20	0	0	0.01	0	0	10
10/24/2017 18:21	0	0	0.01	0	0	
10/24/2017 18:22	0	0	0.01	0	0	
10/24/2017 18:23	0	0	0.01	0	0	
10/24/2017 18:24	0	0	0.01	0	0	
10/24/2017 18:25	0	0	0.01	0	0	8
10/24/2017 18:26	0	0.002	0.01	0	0	
10/24/2017 18:27	0	0.001	0.01	0	0	
10/24/2017 18:28	0	0	0.01	0	0	
10/24/2017 18:29	0	0.001	0.01	0	0	
10/24/2017 18:30	0	0.002	0.01	0	0	6
10/24/2017 18:31	0	0.001	0.01	0	0	
10/24/2017 18:32	0	0.002	0.01	0	0	
10/24/2017 18:33	0	0	0.01	0	0	
10/24/2017 18:34	0	0	0.01	0	0	
10/24/2017 18:35	0	0	0.01	0	0	9
10/24/2017 18:36	0	0.001	0.01	0	0	
10/24/2017 18:37	0	0	0.01	0	0	
10/24/2017 18:38	0	0	0.01	0	0	
10/24/2017 18:39	0	0.002	0.01	0	0	
10/24/2017 18:40	0	0.002	0.01	0	0	10
10/24/2017 18:41	0	0.001	0.01	0	0	
10/24/2017 18:42	0	0	0.01	0	0	
10/24/2017 18:43	0	0.001	0.01	0	0	
10/24/2017 18:44	0	0	0.01	0	0	
10/24/2017 18:45	0	0.001	0.01	0	0	9
10/24/2017 18:46	0	0.002	0.01	0	0	
10/24/2017 18:47	0	0	0.01	0	0	
10/24/2017 18:48	0	0.001	0.01	0	0	
10/24/2017 18:49	0	0	0.01	0	0	
10/24/2017 18:50	0	0	0.01	0	0	9

10/24/2017 18:51	0	0	0.01	0	0	
10/24/2017 18:52	0	0	0.01	0	0	
10/24/2017 18:53	0	0.002	0.01	0	0	
10/24/2017 18:54	0	0.001	0.01	0	0	
10/24/2017 18:55	0	0.002	0.01	0	0	12
10/24/2017 18:56	0	0	0.01	0	0	
10/24/2017 18:57	0	0	0.01	0	0	
10/24/2017 18:58	0	0.002	0.01	0	0	
10/24/2017 18:59	0	0.001	0.01	0	0	
10/24/2017 19:00	0	0.002	0.01	0	0	9
10/24/2017 19:01	0	0.001	0.01	0	0	
10/24/2017 19:02	0	0.001	0.01	0	0	
10/24/2017 19:03	0	0.001	0.01	0	0	
10/24/2017 19:04	0	0.002	0.01	0	0	
10/24/2017 19:05	0	0.002	0.01	0	0	4
10/24/2017 19:06	0	0.001	0.01	0	0	
10/24/2017 19:07	0	0.001	0.01	0	0	
10/24/2017 19:08	0	0.001	0.01	0	0	
10/24/2017 19:09	0	0.001	0.01	0	0	
10/24/2017 19:10	0	0	0.01	0	0	12
10/24/2017 19:11	0	0	0.01	0	0	
10/24/2017 19:12	0	0	0.01	0	0	
10/24/2017 19:13	0	0	0.01	0	0	
10/24/2017 19:14	0	0	0.01	0	0	
10/24/2017 19:15	0	0	0.01	0	0	13
10/24/2017 19:16	0	0.001	0.01	0	0	
10/24/2017 19:17	0	0.001	0.01	0	0	
10/24/2017 19:18	0	0.001	0.01	0	0	
10/24/2017 19:19	0	0.001	0.01	0	0	
10/24/2017 19:20	0	0.001	0.01	0	0	12
10/24/2017 19:21	0	0	0.01	0	0	
10/24/2017 19:22	0	0	0.01	0	0	
10/24/2017 19:23	0	0.002	0.01	0	0	
10/24/2017 19:24	0	0.002	0.01	0	0	
10/24/2017 19:25	0	0.002	0.01	0	0	9
10/24/2017 19:26	0	0.002	0.01	0	0	
10/24/2017 19:27	0	0.002	0.01	0	0	
10/24/2017 19:28	0	0.001	0.01	0	0	
10/24/2017 19:29	0	0.003	0.01	0	0	
10/24/2017 19:30	0	0.002	0.01	0	0	10
10/24/2017 19:31	0	0.003	0.01	0	0	
10/24/2017 19:32	0.001	0.003	0.01	0	0	
10/24/2017 19:33	0.001	0.002	0.01	0	0	
10/24/2017 19:34	0.001	0.004	0.01	0	0	
10/24/2017 19:35	0.001	0.002	0.01	0	0	15
10/24/2017 19:36	0.001	0.001	0.01	0	0	
10/24/2017 19:37	0.001	0.002	0.01	0	0	
10/24/2017 19:38	0.001	0.001	0.01	0	0	
10/24/2017 19:39	0.001	0.002	0.01	0	0	
10/24/2017 19:40	0.001	0	0.01	0	0	15
10/24/2017 19:41	0.001	0.001	0.01	0	0	
10/24/2017 19:42	0.001	0.002	0.01	0	0	
10/24/2017 19:43	0.001	0.002	0.01	0	0	
10/24/2017 19:44	0.001	0.002	0.01	0	0	

10/24/2017 19:45	0.001	0.002	0.01	0	0	13
10/24/2017 19:46	0.001	0.003	0.01	0	0	
10/24/2017 19:47	0.001	0.003	0.01	0	0	
10/24/2017 19:48	0.001	0.002	0.01	0	0	
10/24/2017 19:49	0.001	0.003	0.01	0	0	
10/24/2017 19:50	0.001	0.002	0.01	0	0	13
10/24/2017 19:51	0.001	0.002	0.01	0	0	
10/24/2017 19:52	0.001	0.004	0.01	0	0	
10/24/2017 19:53	0.001	0.004	0.01	0	0	
10/24/2017 19:54	0.001	0.002	0.01	0	0	
10/24/2017 19:55	0.001	0.001	0.01	0	0	12
10/24/2017 19:56	0.001	0.002	0.01	0	0	
10/24/2017 19:57	0.001	0.002	0.01	0	0	
10/24/2017 19:58	0.001	0.002	0.01	0	0	
10/24/2017 19:59	0.001	0.003	0.01	0	0	
10/24/2017 20:00	0.001	0.002	0.01	0	0	14
10/24/2017 20:01	0.001	0.002	0.01	0	0	
10/24/2017 20:02	0.001	0.002	0.01	0	0	
10/24/2017 20:03	0.001	0.001	0.01	0	0	
10/24/2017 20:04	0.001	0.002	0.01	0	0	
10/24/2017 20:05	0.001	0.002	0.01	0	0	16
10/24/2017 20:06	0.001	0.002	0.01	0	0	
10/24/2017 20:07	0.001	0.002	0.01	0	0	
10/24/2017 20:08	0.001	0.002	0.01	0	0	
10/24/2017 20:09	0.001	0.002	0.01	0	0	
10/24/2017 20:10	0.001	0.002	0.01	0	0	15
10/24/2017 20:11	0.001	0.004	0.01	0	0	
10/24/2017 20:12	0.001	0.002	0.01	0	0	
10/24/2017 20:13	0.001	0.002	0.01	0	0	
10/24/2017 20:14	0.001	0.004	0.01	0	0	
10/24/2017 20:15	0.001	0.002	0.01	0	0	18
10/24/2017 20:16	0.001	0.004	0.01	0	0	
10/24/2017 20:17	0.001	0.002	0.01	0	0	
10/24/2017 20:18	0.001	0.003	0.01	0	0	
10/24/2017 20:19	0.001	0.004	0.01	0	0	
10/24/2017 20:20	0.002	0.002	0.01	0	0	21
10/24/2017 20:21	0.002	0.002	0.01	0	0	
10/24/2017 20:22	0.002	0.004	0.01	0	0	
10/24/2017 20:23	0.002	0.004	0.01	0	0	
10/24/2017 20:24	0.002	0.002	0.01	0	0	
10/24/2017 20:25	0.002	0.003	0.01	0	0	23
10/24/2017 20:26	0.002	0.003	0.01	0	0	
10/24/2017 20:27	0.002	0.002	0.01	0	0	
10/24/2017 20:28	0.002	0.003	0.01	0	0	
10/24/2017 20:29	0.002	0.004	0.01	0	0	
10/24/2017 20:30	0.002	0.002	0.01	0	0	22
10/24/2017 20:31	0.002	0.002	0.01	0	0	
10/24/2017 20:32	0.002	0.002	0.01	0	0	
10/24/2017 20:33	0.002	0.002	0.01	0	0	
10/24/2017 20:34	0.002	0.004	0.01	0	0	
10/24/2017 20:35	0.002	0.004	0.01	0	0	19
10/24/2017 20:36	0.002	0.003	0.01	0	0	
10/24/2017 20:37	0.002	0.002	0.01	0	0	
10/24/2017 20:38	0.002	0.004	0.01	0	0	

10/24/2017 20:39	0.002	0.002	0.01	0	0	
10/24/2017 20:40	0.002	0.004	0.01	0	0	18
10/24/2017 20:41	0.002	0.003	0.01	0	0.001	
10/24/2017 20:42	0.002	0.003	0.01	0	0.001	
10/24/2017 20:43	0.002	0.002	0.01	0	0.001	
10/24/2017 20:44	0.002	0.004	0.01	0	0.001	
10/24/2017 20:45	0.002	0.002	0.01	0	0.001	
10/24/2017 20:45						18
10/24/2017 20:46	0.002	0.004	0.01	0	0.001	
10/24/2017 20:47	0.002	0.003	0.01	0	0.001	
10/24/2017 20:48	0.002	0.004	0.01	0	0.001	
10/24/2017 20:49	0.002	0.003	0.01	0	0.001	
10/25/2017 13:43	0	0.006	0.01	0	0	
10/25/2017 13:44	0	0.006	0.01	0	0	
10/25/2017 13:45	0	0.006	0.01	0	0	14
10/25/2017 13:46	0	0.006	0.01	0	0	
10/25/2017 13:47	0	0.006	0.01	0	0	
10/25/2017 13:48	0	0.004	0.01	0	0	
10/25/2017 13:49	0	0.005	0.01	0	0	
10/25/2017 13:50	0	0.007	0.01	0	0	8
10/25/2017 13:51	0	0.006	0.01	0	0	
10/25/2017 13:52	0	0.006	0.01	0	0	
10/25/2017 13:53	0	0.005	0.01	0	0	
10/25/2017 13:54	0	0.005	0.01	0	0	
10/25/2017 13:55	0	0.005	0.01	0	0	6
10/25/2017 13:56	0.005	0.006	0.01	0	0	
10/25/2017 13:57	0.004	0.006	0.01	0	0	
10/25/2017 13:58	0.004	0.005	0.01	0	0	
10/25/2017 13:59	0.004	0.004	0.01	0	0	
10/25/2017 14:00	0.004	0.006	0.01	0	0	4
10/25/2017 14:01	0.004	0.005	0.01	0	0	
10/25/2017 14:02	0.004	0.004	0.01	0	0	
10/25/2017 14:03	0.004	0.005	0.01	0	0	
10/25/2017 14:04	0.004	0.005	0.01	0	0	
10/25/2017 14:05	0.004	0.004	0.01	0	0	6
10/25/2017 14:06	0.004	0.005	0.01	0	0	
10/25/2017 14:07	0.004	0.005	0.01	0	0	
10/25/2017 14:08	0.004	0.004	0.01	0	0	
10/25/2017 14:09	0.004	0.004	0.01	0	0	
10/25/2017 14:10	0.004	0.004	0.01	0	0	7
10/25/2017 14:11	0.004	0.005	0.01	0	0	
10/25/2017 14:12	0.004	0.002	0.01	0	0	
10/25/2017 14:13	0.004	0.004	0.01	0	0	
10/25/2017 14:14	0.004	0.006	0.01	0	0	
10/25/2017 14:15	0.004	0.005	0.01	0	0	3
10/25/2017 14:16	0.004	0.003	0.01	0	0	
10/25/2017 14:17	0.004	0.003	0.01	0	0	
10/25/2017 14:18	0.004	0.004	0.01	0	0	
10/25/2017 14:19	0.004	0.004	0.01	0	0	
10/25/2017 14:20	0.004	0.003	0.01	0	0	4
10/25/2017 14:21	0.004	0.003	0.01	0	0	
10/25/2017 14:22	0.003	0.004	0.01	0	0	
10/25/2017 14:23	0.003	0.004	0.01	0	0	
10/25/2017 14:24	0.003	0.004	0.01	0	0	

10/25/2017 14:25	0.003	0.004	0.01	0	0	2
10/25/2017 14:26	0.003	0.004	0.01	0	0	
10/25/2017 14:27	0.003	0.004	0.01	0	0	
10/25/2017 14:28	0.003	0.003	0.01	0	0	
10/25/2017 14:29	0.003	0.003	0.01	0	0	
10/25/2017 14:30	0.003	0.003	0.01	0	0	1
10/25/2017 14:31	0.003	0.002	0.01	0	0	
10/25/2017 14:32	0.002	0.004	0.01	0	0	
10/25/2017 14:33	0.002	0.004	0.01	0	0	
10/25/2017 14:34	0.002	0.004	0.01	0	0	
10/25/2017 14:35	0.002	0.004	0.01	0	0	7
10/25/2017 14:36	0.002	0.004	0.01	0	0	
10/25/2017 14:37	0.002	0.004	0.01	0	0	
10/25/2017 14:38	0.002	0.004	0.01	0	0	
10/25/2017 14:39	0.002	0.004	0.01	0	0	
10/25/2017 14:40	0.002	0.004	0.01	0	0	13
10/25/2017 14:41	0.003	0.004	0.01	0	0	
10/25/2017 14:42	0.003	0.004	0.01	0	0	
10/25/2017 14:43	0.003	0.004	0.01	0	0	
10/25/2017 14:44	0.003	0.004	0.01	0	0	
10/25/2017 14:45	0.003	0.004	0.01	0	0	15
10/25/2017 14:46	0.003	0.004	0.01	0	0	
10/25/2017 14:47	0.003	0.002	0.01	0	0	
10/25/2017 14:48	0.003	0.003	0.01	0	0	
10/25/2017 14:49	0.003	0.004	0.01	0	0	
10/25/2017 14:50	0.003	0.004	0.01	0	0	16
10/25/2017 14:51	0.003	0.003	0.01	0	0	
10/25/2017 14:52	0.003	0.004	0.01	0	0	
10/25/2017 14:53	0.003	0.005	0.01	0	0	
10/25/2017 14:54	0.003	0.004	0.01	0	0	
10/25/2017 14:55	0.003	0.003	0.01	0	0	18
10/25/2017 14:56	0.003	0.004	0.01	0	0	
10/25/2017 14:57	0.003	0.004	0.01	0	0	
10/25/2017 14:58	0.003	0.004	0.01	0	0	
10/25/2017 14:59	0.003	0.005	0.01	0	0	
10/25/2017 15:00	0.003	0.005	0.01	0	0	16
10/25/2017 15:01	0.003	0.004	0.01	0	0	
10/25/2017 15:02	0.003	0.004	0.01	0	0	
10/25/2017 15:03	0.003	0.006	0.01	0	0	
10/25/2017 15:04	0.003	0.004	0.01	0	0	
10/25/2017 15:05	0.003	0.004	0.01	0	0	16
10/25/2017 15:06	0.003	0.004	0.01	0	0	
10/25/2017 15:07	0.003	0.004	0.01	0	0	
10/25/2017 15:08	0.003	0.004	0.01	0	0	
10/25/2017 15:09	0.003	0.004	0.01	0	0	
10/25/2017 15:10	0.003	0.004	0.01	0	0	16
10/25/2017 15:11	0.003	0.004	0.01	0	0	
10/25/2017 15:12	0.003	0.005	0.01	0	0	
10/25/2017 15:13	0.003	0.005	0.01	0	0	
10/25/2017 15:14	0.003	0.004	0.01	0	0	
10/25/2017 15:15	0.003	0.004	0.01	0	0	17
10/25/2017 15:16	0.003	0.006	0.01	0	0	
10/25/2017 15:17	0.003	0.004	0.01	0	0	
10/25/2017 15:18	0.003	0.004	0.01	0	0	

10/25/2017 15:19	0.003	0.004	0.01	0	0	
10/25/2017 15:20	0.003	0.003	0.01	0	0	18
10/25/2017 15:21	0.003	0.003	0.01	0	0	
10/25/2017 15:22	0.003	0.004	0.01	0	0	
10/25/2017 15:23	0.003	0.004	0.01	0	0	
10/25/2017 15:24	0.003	0.003	0.01	0	0	
10/25/2017 15:25	0.003	0.005	0.01	0	0	15
10/25/2017 15:26	0.003	0.004	0.01	0	0	
10/25/2017 15:27	0.003	0.004	0.01	0	0	
10/25/2017 15:28	0.003	0.003	0.01	0	0	
10/25/2017 15:29	0.003	0.004	0.01	0	0	
10/25/2017 15:30	0.003	0.004	0.01	0	0	11
10/25/2017 15:31	0.003	0.005	0.01	0	0	
10/25/2017 15:32	0.003	0.004	0.01	0	0	
10/25/2017 15:33	0.003	0.004	0.01	0	0	
10/25/2017 15:34	0.003	0.005	0.01	0	0	
10/25/2017 15:35	0.003	0.004	0.01	0	0	15
10/25/2017 15:36	0.003	0.004	0.01	0	0	
10/25/2017 15:37	0.003	0.004	0.01	0	0	
10/25/2017 15:38	0.003	0.005	0.01	0	0	
10/25/2017 15:39	0.003	0.006	0.01	0	0	
10/25/2017 15:40	0.003	0.004	0.01	0	0	14
10/25/2017 15:41	0.003	0.005	0.01	0	0	
10/25/2017 15:42	0.003	0.005	0.01	0	0	
10/25/2017 15:43	0.003	0.005	0.01	0	0	
10/25/2017 15:44	0.004	0.004	0.01	0	0	
10/25/2017 15:45	0.004	0.005	0.01	0	0	12
10/25/2017 15:46	0.004	0.004	0.01	0	0	
10/25/2017 15:47	0.004	0.005	0.01	0	0	
10/25/2017 15:48	0.004	0.003	0.01	0	0.001	
10/25/2017 15:49	0.004	0.004	0.01	0	0.001	
10/25/2017 15:50	0.004	0.004	0.01	0	0.001	12
10/25/2017 15:51	0.004	0.004	0.01	0	0.001	
10/25/2017 15:52	0.004	0.005	0.01	0	0.001	
10/25/2017 15:53	0.004	0.006	0.01	0	0.001	
10/25/2017 15:54	0.004	0.004	0.01	0	0.001	
10/25/2017 15:55	0.004	0.004	0.01	0	0.001	11
10/25/2017 15:56	0.003	0.004	0.01	0	0.001	
10/25/2017 15:57	0.003	0.004	0.01	0	0.001	
10/25/2017 15:58	0.003	0.004	0.01	0	0.001	
10/25/2017 15:59	0.003	0.004	0.01	0	0.001	
10/25/2017 16:00	0.003	0.004	0.01	0	0.001	14
10/25/2017 16:01	0.003	0.004	0.01	0	0.001	
10/25/2017 16:02	0.003	0.004	0.01	0	0.001	
10/25/2017 16:03	0.003	0.005	0.01	0	0.001	
10/25/2017 16:04	0.003	0.003	0.01	0	0.001	
10/25/2017 16:05	0.003	0.003	0.01	0	0.001	18
10/25/2017 16:06	0.003	0.003	0.01	0	0.001	
10/25/2017 16:07	0.003	0.004	0.01	0	0.001	
10/25/2017 16:08	0.003	0.003	0.01	0	0.001	
10/25/2017 16:09	0.002	0.002	0.01	0	0.001	
10/25/2017 16:10	0.002	0.002	0.01	0	0.001	16
10/25/2017 16:11	0.002	0.003	0.01	0	0.001	
10/25/2017 16:12	0.002	0.001	0.01	0	0.001	

10/25/2017 16:13	0.002	0.002	0.01	0	0.001	
10/25/2017 16:14	0.002	0.002	0.01	0	0.001	
10/25/2017 16:15	0.002	0.004	0.01	0	0.001	14
10/25/2017 16:16	0.002	0.003	0.01	0	0.001	
10/25/2017 16:17	0.002	0.002	0.01	0	0.001	
10/25/2017 16:18	0.002	0.001	0.01	0	0.001	
10/25/2017 16:19	0.002	0.002	0.01	0	0.001	
10/25/2017 16:20	0.002	0.003	0.01	0	0.001	21
10/25/2017 16:21	0.002	0.003	0.01	0	0.001	
10/25/2017 16:22	0.002	0.001	0.01	0	0.001	
10/25/2017 16:23	0.002	0.003	0.01	0	0.001	
10/25/2017 16:24	0.002	0.003	0.01	0	0.001	
10/25/2017 16:25	0.002	0.002	0.01	0	0.001	24
10/25/2017 16:26	0.002	0.003	0.01	0	0.001	
10/25/2017 16:27	0.002	0.003	0.01	0	0.001	
10/25/2017 16:28	0.002	0.003	0.01	0	0.001	
10/25/2017 16:29	0.002	0.001	0.01	0	0.001	
10/25/2017 16:30	0.002	0.002	0.01	0	0.001	20
10/25/2017 16:31	0.001	0.002	0.01	0	0.001	
10/25/2017 16:32	0.001	0.003	0.01	0	0.001	
10/25/2017 16:33	0.001	0.002	0.01	0	0.001	
10/25/2017 16:34	0.001	0.002	0.01	0	0.001	
10/25/2017 16:35	0.001	0.001	0.01	0	0.001	23
10/25/2017 16:36	0.001	0.003	0.01	0	0.001	
10/25/2017 16:37	0.001	0.002	0.01	0	0.001	
10/25/2017 16:38	0.001	0.003	0.01	0	0.001	
10/25/2017 16:39	0.001	0.003	0.01	0	0.001	
10/25/2017 16:40	0.001	0.001	0.01	0	0.001	32
10/25/2017 16:41	0.001	0.003	0.01	0	0.001	
10/25/2017 16:42	0.001	0.003	0.01	0	0.001	
10/25/2017 16:43	0.001	0.005	0.01	0	0.001	
10/25/2017 16:44	0.002	0.003	0.01	0	0.001	
10/25/2017 16:45	0.002	0.003	0.01	0	0.001	30
10/25/2017 16:46	0.002	0.003	0.01	0	0.001	
10/25/2017 16:47	0.002	0.003	0.01	0	0.001	
10/25/2017 16:48	0.002	0.001	0.01	0	0.001	
10/25/2017 16:49	0.002	0.003	0.01	0	0.001	
10/25/2017 16:50	0.002	0.001	0.01	0	0.001	32
10/25/2017 16:51	0.002	0.003	0.01	0	0.001	
10/25/2017 16:52	0.002	0.003	0.01	0	0.001	
10/25/2017 16:53	0.002	0.003	0.01	0	0.001	
10/25/2017 16:54	0.002	0.001	0.01	0	0.001	
10/25/2017 16:55	0.002	0.003	0.01	0	0.001	23
10/25/2017 16:56	0.002	0.002	0.01	0	0.001	
10/25/2017 16:57	0.002	0.003	0.01	0	0.001	
10/25/2017 16:58	0.001	0.002	0.01	0	0.001	
10/25/2017 16:59	0.001	0.002	0.01	0	0.001	
10/25/2017 17:00	0.001	0.002	0.01	0	0.001	13
10/25/2017 17:01	0.001	0.002	0.01	0	0.001	
10/25/2017 17:02	0.001	0.002	0.01	0	0.001	
10/25/2017 17:03	0.001	0.003	0.01	0	0.001	
10/25/2017 17:04	0.001	0.002	0.01	0	0.001	
10/25/2017 17:05	0.001	0.002	0.01	0	0.001	9
10/25/2017 17:06	0.001	0.001	0.01	0	0.001	

10/25/2017 17:07	0.001	0.001	0.01	0	0.001	
10/25/2017 17:08	0.001	0.003	0.01	0	0.001	
10/25/2017 17:09	0.001	0.002	0.01	0	0.001	
10/25/2017 17:10	0.001	0.003	0.01	0	0.001	-1
10/25/2017 17:11	0.001	0.002	0.01	0	0.001	
10/25/2017 17:12	0.001	0.002	0.01	0	0.001	
10/25/2017 17:13	0.001	0.002	0.01	0	0.001	
10/25/2017 17:14	0.001	0.002	0.01	0	0.001	
10/25/2017 17:15	0.001	0.003	0.01	0	0.001	-6
10/25/2017 17:16	0.001	0.001	0.01	0	0.001	
10/25/2017 17:17	0.001	0.001	0.01	0	0.001	
10/25/2017 17:18	0.001	0.001	0.01	0	0.001	
10/25/2017 17:19	0.001	0.001	0.01	0	0.001	
10/25/2017 17:20	0.001	0.001	0.01	0	0.001	-7
10/25/2017 17:21	0.001	0.001	0.01	0	0.001	
10/25/2017 17:22	0.001	0.001	0.01	0	0.001	
10/25/2017 17:23	0.001	0.002	0.01	0	0.001	
10/25/2017 17:24	0.001	0.002	0.01	0	0.001	
10/25/2017 17:25	0.001	0.001	0.01	0	0.001	-3
10/25/2017 17:26	0.001	0.001	0.01	0	0.001	
10/25/2017 17:27	0.001	0.002	0.01	0	0.001	
10/25/2017 17:28	0.001	0.002	0.01	0	0.001	
10/25/2017 17:29	0.001	0.002	0.01	0	0.001	
10/25/2017 17:30	0.001	0.002	0.01	0	0.001	-2
10/25/2017 17:31	0.001	0.002	0.01	0	0.001	
10/25/2017 17:32	0.001	0.003	0.01	0	0.001	
10/25/2017 17:33	0.001	0.002	0.01	0	0.001	
10/25/2017 17:34	0.001	0.005	0.01	0	0.001	
10/25/2017 17:35	0.001	0.003	0.01	0	0.001	1
10/25/2017 17:36	0.001	0.003	0.01	0	0.001	
10/25/2017 17:37	0.001	0.003	0.01	0	0.001	
10/25/2017 17:38	0.001	0.003	0.01	0	0.001	
10/25/2017 17:39	0.001	0.001	0.01	0	0.001	
10/25/2017 17:40	0.001	0.001	0.01	0	0.001	3
10/25/2017 17:41	0.001	0.002	0.01	0	0.001	
10/25/2017 17:42	0.001	0.001	0.01	0	0.001	
10/25/2017 17:43	0.001	0.001	0.01	0	0.001	
10/25/2017 17:44	0.001	0.002	0.01	0	0.001	
10/25/2017 17:45	0.001	0.001	0.01	0	0.001	0
10/25/2017 17:46	0.001	0.002	0.01	0	0.001	
10/25/2017 17:47	0.001	0.002	0.01	0	0.001	
10/25/2017 17:48	0.001	0.001	0.01	0	0.001	
10/25/2017 17:49	0.001	0.002	0.01	0	0.001	
10/25/2017 17:50	0.001	0.001	0.01	0	0.001	4
10/25/2017 17:51	0.001	0.002	0.01	0	0.001	
10/25/2017 17:52	0.001	0.002	0.01	0	0.001	
10/25/2017 17:53	0.001	0.003	0.01	0	0.001	
10/25/2017 17:54	0.001	0.002	0.01	0	0.001	
10/25/2017 17:55	0.001	0.003	0.01	0	0.001	6
10/25/2017 17:56	0.001	0.003	0.01	0	0.001	
10/25/2017 17:57	0.001	0.003	0.01	0	0.001	
10/25/2017 17:58	0.001	0.002	0.01	0	0.001	
10/25/2017 17:59	0.001	0.003	0.01	0	0.001	
10/25/2017 18:00	0.001	0.001	0.01	0	0.001	4

10/25/2017 18:01	0.001	0.003	0.01	0	0.001	
10/25/2017 18:02	0.001	0.003	0.01	0	0.001	
10/25/2017 18:03	0.001	0.003	0.01	0	0.001	
10/25/2017 18:04	0.001	0.003	0.01	0	0.001	
10/25/2017 18:05	0.002	0.003	0.01	0	0.001	6
10/25/2017 18:06	0.002	0.003	0.01	0	0.001	
10/25/2017 18:07	0.002	0.003	0.01	0	0.001	
10/25/2017 18:08	0.002	0.003	0.01	0	0.001	
10/25/2017 18:09	0.002	0.003	0.01	0	0.001	
10/25/2017 18:10	0.002	0.003	0.01	0	0.001	3
10/25/2017 18:11	0.002	0.004	0.01	0	0.001	
10/25/2017 18:12	0.002	0.003	0.01	0	0.001	
10/25/2017 18:13	0.002	0.003	0.01	0	0.001	
10/25/2017 18:14	0.002	0.003	0.01	0	0.001	
10/25/2017 18:15	0.002	0.003	0.01	0	0.001	3
10/25/2017 18:16	0.002	0.003	0.01	0	0.001	
10/25/2017 18:17	0.002	0.002	0.01	0	0.001	
10/25/2017 18:18	0.002	0.003	0.01	0	0.001	
10/25/2017 18:19	0.002	0.003	0.01	0	0.001	
10/25/2017 18:20	0.002	0.003	0.01	0	0.001	0
10/25/2017 18:21	0.002	0.002	0.01	0	0.001	
10/25/2017 18:22	0.002	0.003	0.01	0	0.001	
10/25/2017 18:23	0.002	0.002	0.01	0	0.001	
10/25/2017 18:24	0.002	0.001	0.01	0	0.001	
10/25/2017 18:25	0.002	0.002	0.01	0	0.001	4
10/25/2017 18:26	0.002	0.003	0.01	0	0.001	
10/25/2017 18:27	0.002	0.003	0.01	0	0.001	
10/25/2017 18:28	0.002	0.001	0.01	0	0.001	
10/25/2017 18:29	0.001	0.001	0.01	0	0.001	
10/25/2017 18:30	0.001	0.001	0.01	0	0.001	10
10/25/2017 18:31	0.001	0.002	0.01	0	0.001	
10/25/2017 18:32	0.001	0.002	0.01	0	0.001	
10/25/2017 18:33	0.001	0.002	0.01	0	0.001	
10/25/2017 18:34	0.001	0.001	0.01	0	0.001	
10/25/2017 18:35	0.001	0.002	0.01	0	0.001	11
10/25/2017 18:36	0.001	0	0.01	0	0.001	
10/25/2017 18:37	0.001	0.001	0.01	0	0.001	
10/25/2017 18:38	0.001	0.002	0.01	0	0.001	
10/25/2017 18:39	0.001	0.003	0.01	0	0.001	
10/25/2017 18:40	0.001	0.003	0.01	0	0.001	9
10/25/2017 18:41	0.001	0.001	0.01	0	0.001	
10/25/2017 18:42	0.001	0.003	0.01	0	0.001	
10/25/2017 18:43	0.001	0.003	0.01	0	0.001	
10/25/2017 18:44	0.001	0.002	0.01	0	0.001	
10/25/2017 18:45	0.001	0.003	0.01	0	0.001	9
10/25/2017 18:46	0.001	0.002	0.01	0	0.001	
10/25/2017 18:47	0.001	0.003	0.01	0	0.001	
10/25/2017 18:48	0.001	0.004	0.01	0	0.001	
10/25/2017 18:49	0.001	0.003	0.01	0	0.001	
10/25/2017 18:50	0.001	0.002	0.01	0	0.001	6
10/25/2017 18:51	0.001	0.003	0.01	0	0.001	
10/25/2017 18:52	0.001	0.002	0.01	0	0.001	
10/25/2017 18:53	0.001	0.001	0.01	0	0.001	
10/25/2017 18:54	0.001	0	0.01	0	0.001	

10/25/2017 18:55	0.001	0.001	0.01	0	0.001	8
10/25/2017 18:56	0.001	0.003	0.01	0	0.001	
10/25/2017 18:57	0.001	0.001	0.01	0	0.001	
10/25/2017 18:58	0.001	0.001	0.01	0	0.001	
10/25/2017 18:59	0.001	0.002	0.01	0	0.001	
10/25/2017 19:00	0.001	0.001	0.01	0	0.001	5
10/25/2017 19:01	0.001	0.002	0.01	0	0.001	
10/25/2017 19:02	0.001	0.003	0.01	0	0.001	
10/25/2017 19:03	0.001	0.001	0.01	0	0.001	
10/25/2017 19:04	0.001	0.003	0.01	0	0.001	
10/25/2017 19:05	0.001	0.001	0.01	0	0.001	7
10/25/2017 19:06	0.001	0.001	0.01	0	0.001	
10/25/2017 19:07	0.001	0.001	0.01	0	0.001	
10/25/2017 19:08	0.001	0	0.01	0	0.001	
10/25/2017 19:09	0.001	0.002	0.01	0	0.001	
10/25/2017 19:10	0.001	0.001	0.01	0	0.001	12
10/25/2017 19:11	0.001	0.001	0.01	0	0.001	
10/25/2017 19:12	0	0.003	0.01	0	0.001	
10/25/2017 19:13	0	0.002	0.01	0	0.001	
10/25/2017 19:14	0	0.001	0.01	0	0.001	
10/25/2017 19:15	0	0.001	0.01	0	0.001	14
10/25/2017 19:16	0	0	0.01	0	0.001	
10/25/2017 19:17	0	0.001	0.01	0	0.001	
10/25/2017 19:18	0	0	0.01	0	0.001	
10/25/2017 19:19	0	0.001	0.01	0	0.001	
10/25/2017 19:20	0	0.001	0.01	0	0.001	10
10/25/2017 19:21	0	0.001	0.01	0	0.001	
10/25/2017 19:22	0	0.001	0.01	0	0.001	
10/25/2017 19:23	0	0.003	0.01	0	0.001	
10/25/2017 19:24	0	0.002	0.01	0	0.001	
10/25/2017 19:25	0	0.003	0.01	0	0.001	10
10/25/2017 19:26	0	0.002	0.01	0	0.001	
10/25/2017 19:27	0	0.001	0.01	0	0.001	
10/25/2017 19:28	0	0.001	0.01	0	0.001	
10/25/2017 19:29	0	0.001	0.01	0	0.001	
10/25/2017 19:30	0	0	0.01	0	0.001	13
10/25/2017 19:31	0	0	0.01	0	0.001	
10/25/2017 19:32	0	0	0.01	0	0.001	
10/25/2017 19:33	0	0.001	0.01	0	0.001	
10/25/2017 19:34	0	0	0.01	0	0.001	
10/25/2017 19:35	0	0	0.01	0	0.001	14
10/25/2017 19:36	0	0	0.01	0	0.001	
10/25/2017 19:37	0	0.001	0.01	0	0.001	
10/25/2017 19:38	0	0	0.01	0	0.001	
10/25/2017 19:39	0	0	0.01	0	0.001	
10/25/2017 19:40	0	0.001	0.01	0	0.001	11
10/25/2017 19:41	0	0	0.01	0	0.001	
10/25/2017 19:42	0	0	0.01	0	0.001	
10/25/2017 19:43	0	0	0.01	0	0.001	
10/25/2017 19:44	0	0.001	0.01	0	0.001	
10/25/2017 19:45	0	0.001	0.01	0	0.001	11
10/25/2017 19:46	0	0.001	0.01	0	0.001	
10/25/2017 19:47	0	0.001	0.01	0	0.001	
10/25/2017 19:48	0	0.001	0.01	0	0.001	

10/25/2017 19:49	0	0.001	0.01	0	0.001	
10/25/2017 19:50	0	0.001	0.01	0	0.001	7
10/25/2017 19:51	0	0.001	0.01	0	0.001	
10/25/2017 19:52	0	0.001	0.01	0	0.001	
10/25/2017 19:53	0	0	0.01	0	0.001	
10/25/2017 19:54	0	0.001	0.01	0	0.001	
10/25/2017 19:55	0	0.001	0.01	0	0.001	5
10/25/2017 19:56	0	0.001	0.01	0	0.001	
10/25/2017 19:57	0	0.001	0.01	0	0.001	
10/25/2017 19:58	0	0.001	0.01	0	0.001	
10/25/2017 19:59	0	0	0.01	0	0.001	
10/25/2017 20:00	0	0.001	0.01	0	0.001	8
10/25/2017 20:01	0	0.001	0.01	0	0.001	
10/25/2017 20:02	0	0	0.01	0	0.001	
10/25/2017 20:03	0	0.001	0.01	0	0.001	
10/25/2017 20:04	0	0.001	0.01	0	0.001	
10/25/2017 20:05	0	0.001	0.01	0	0.001	10
10/25/2017 20:06	0	0.003	0.01	0	0.001	
10/25/2017 20:07	0	0.003	0.01	0	0.001	
10/25/2017 20:08	0	0.002	0.01	0	0.001	
10/25/2017 20:09	0	0.001	0.01	0	0.001	
10/25/2017 20:10	0	0.001	0.01	0	0.001	10
10/25/2017 20:11	0	0.003	0.01	0	0.001	
10/25/2017 20:12	0	0.001	0.01	0	0.001	
10/25/2017 20:13	0	0.001	0.01	0	0.001	
10/25/2017 20:14	0	0.001	0.01	0	0.001	
10/25/2017 20:15	0	0.001	0.01	0	0.001	11
10/25/2017 20:16	0	0.001	0.01	0	0.001	
10/25/2017 20:17	0	0.003	0.01	0	0.001	
10/25/2017 20:18	0.001	0.001	0.01	0	0.001	
10/25/2017 20:19	0.001	0.001	0.01	0	0.001	
10/25/2017 20:20	0.001	0	0.01	0	0.001	11
10/25/2017 20:21	0.001	0.001	0.01	0	0.001	
10/25/2017 20:22	0	0.001	0.01	0	0.001	
10/25/2017 20:23	0	0.001	0.01	0	0.001	
10/25/2017 20:24	0	0.001	0.01	0	0.001	
10/25/2017 20:25	0	0	0.01	0	0.001	12
10/25/2017 20:26	0	0.001	0.01	0	0.001	
10/25/2017 20:27	0	0.001	0.01	0	0.001	
10/25/2017 20:28	0	0.001	0.01	0	0.001	
10/25/2017 20:29	0	0.002	0.01	0	0.001	
10/25/2017 20:30	0	0.001	0.01	0	0.001	13
10/25/2017 20:31	0	0.003	0.01	0	0.001	
10/25/2017 20:32	0	0.001	0.01	0	0.001	
10/25/2017 20:33	0	0.001	0.01	0	0.001	
10/25/2017 20:34	0	0.001	0.01	0	0.001	
10/26/2017 12:26	0	0.005	0.008	0	0	
10/26/2017 12:27	0	0.004	0.008	0	0	
10/26/2017 12:28	0	0.004	0.008	0	0	
10/26/2017 12:29	0	0.006	0.008	0	0	
10/26/2017 12:30	0	0.003	0.008	0	0	-9
10/26/2017 12:31	0	0.004	0.008	0	0	
10/26/2017 12:32	0	0.006	0.008	0	0	
10/26/2017 12:33	0	0.005	0.008	0	0	

10/26/2017 12:34	0	0.004	0.008	0	0	
10/26/2017 12:35	0	0.004	0.008	0	0	0
10/26/2017 12:36	0	0.004	0.008	0	0	
10/26/2017 12:37	0	0.004	0.008	0	0	
10/26/2017 12:38	0	0.004	0.008	0	0	
10/26/2017 12:39	0.003	0.003	0.008	0	0	
10/26/2017 12:40	0.003	0.004	0.008	0	0	
10/26/2017 12:40						-1
10/26/2017 12:41	0.003	0.004	0.008	0	0	
10/26/2017 12:42	0.003	0.004	0.008	0	0	
10/26/2017 12:43	0.003	0.004	0.008	0	0	
10/26/2017 12:44	0.003	0.004	0.008	0	0	
10/26/2017 12:45	0.003	0.004	0.008	0	0	2
10/26/2017 12:46	0.003	0.003	0.008	0	0	
10/26/2017 12:47	0.003	0.004	0.008	0	0	
10/26/2017 12:48	0.003	0.004	0.008	0	0	
10/26/2017 12:49	0.003	0.004	0.008	0	0	
10/26/2017 12:50	0.003	0.004	0.008	0	0	8
10/26/2017 12:51	0.003	0.004	0.008	0	0	
10/26/2017 12:52	0.003	0.004	0.008	0	0	
10/26/2017 12:53	0.003	0.003	0.008	0	0	
10/26/2017 12:54	0.003	0.004	0.008	0	0	
10/26/2017 12:55	0.003	0.003	0.008	0	0	9
10/26/2017 12:56	0.003	0.004	0.008	0	0	
10/26/2017 12:57	0.003	0.003	0.008	0	0	
10/26/2017 12:58	0.003	0.004	0.008	0	0	
10/26/2017 12:59	0.003	0.003	0.008	0	0	
10/26/2017 13:00	0.003	0.004	0.008	0	0	9
10/26/2017 13:01	0.003	0.003	0.008	0	0	
10/26/2017 13:02	0.003	0.004	0.008	0	0	
10/26/2017 13:03	0.003	0.004	0.008	0	0	
10/26/2017 13:04	0.003	0.003	0.008	0	0	
10/26/2017 13:05	0.003	0.004	0.008	0	0	9
10/26/2017 13:06	0.003	0.004	0.008	0	0	
10/26/2017 13:07	0.003	0.003	0.008	0	0	
10/26/2017 13:08	0.003	0.003	0.008	0	0	
10/26/2017 13:09	0.003	0.003	0.008	0	0	
10/26/2017 13:10	0.003	0.003	0.008	0	0	9
10/26/2017 13:11	0.003	0.003	0.008	0	0	
10/26/2017 13:12	0.003	0.003	0.008	0	0	
10/26/2017 13:13	0.003	0.003	0.008	0	0	
10/26/2017 13:14	0.003	0.003	0.008	0	0	
10/26/2017 13:15	0.003	0.003	0.008	0	0	5
10/26/2017 13:16	0.003	0.003	0.008	0	0	
10/26/2017 13:17	0.003	0.003	0.008	0	0	
10/26/2017 13:18	0.003	0.005	0.008	0	0	
10/26/2017 13:19	0.003	0.004	0.008	0	0	
10/26/2017 13:20	0.003	0.003	0.008	0	0	4
10/26/2017 13:21	0.003	0.002	0.008	0	0	
10/26/2017 13:22	0.003	0.004	0.008	0	0	
10/26/2017 13:23	0.003	0.004	0.008	0	0	
10/26/2017 13:24	0.003	0.003	0.008	0	0	
10/26/2017 13:25	0.003	0.003	0.008	0	0	8
10/26/2017 13:26	0.003	0.002	0.008	0	0	

10/26/2017 13:27	0.003	0.003	0.008	0	0	
10/26/2017 13:28	0.003	0.003	0.008	0	0	
10/26/2017 13:29	0.003	0.002	0.008	0	0	
10/26/2017 13:30	0.002	0.001	0.008	0	0	9
10/26/2017 13:31	0.002	0.003	0.008	0	0	
10/26/2017 13:32	0.002	0.001	0.008	0	0	
10/26/2017 13:33	0.002	0.002	0.008	0	0	
10/26/2017 13:34	0.002	0.002	0.008	0	0	
10/26/2017 13:35	0.002	0.003	0.008	0	0	8
10/26/2017 13:36	0.002	0.003	0.008	0	0	
10/26/2017 13:37	0.002	0.003	0.008	0	0	
10/26/2017 13:38	0.002	0.002	0.008	0	0	
10/26/2017 13:39	0.002	0.002	0.008	0	0	
10/26/2017 13:40	0.001	0.003	0.008	0	0	0
10/26/2017 13:41	0.001	0.003	0.008	0	0	
10/26/2017 13:42	0.001	0.003	0.008	0	0	
10/26/2017 13:43	0.002	0.003	0.008	0	0	
10/26/2017 13:44	0.002	0.003	0.008	0	0	
10/26/2017 13:45	0.002	0.002	0.008	0	0	2
10/26/2017 13:46	0.002	0.003	0.008	0	0	
10/26/2017 13:47	0.002	0.004	0.008	0	0	
10/26/2017 13:48	0.002	0.004	0.008	0	0	
10/26/2017 13:49	0.002	0.004	0.008	0	0	
10/26/2017 13:50	0.002	0.003	0.008	0	0	3
10/26/2017 13:51	0.002	0.003	0.008	0	0	
10/26/2017 13:52	0.002	0.003	0.008	0	0	
10/26/2017 13:53	0.002	0.003	0.008	0	0	
10/26/2017 13:54	0.002	0.004	0.008	0	0	
10/26/2017 13:55	0.002	0.003	0.008	0	0	0
10/26/2017 13:56	0.002	0.003	0.008	0	0	
10/26/2017 13:57	0.002	0.006	0.008	0	0	
10/26/2017 13:58	0.002	0.003	0.008	0	0	
10/26/2017 13:59	0.002	0.004	0.008	0	0	
10/26/2017 14:00	0.002	0.003	0.008	0	0	4
10/26/2017 14:01	0.003	0.003	0.008	0	0	
10/26/2017 14:02	0.003	0.004	0.008	0	0	
10/26/2017 14:03	0.003	0.003	0.008	0	0	
10/26/2017 14:04	0.003	0.003	0.008	0	0	
10/26/2017 14:05	0.003	0.003	0.008	0	0	7
10/26/2017 14:06	0.003	0.003	0.008	0	0	
10/26/2017 14:07	0.002	0.002	0.008	0	0	
10/26/2017 14:08	0.002	0.003	0.008	0	0	
10/26/2017 14:09	0.002	0.003	0.008	0	0	
10/26/2017 14:10	0.002	0.003	0.008	0	0	5
10/26/2017 14:11	0.002	0.003	0.008	0	0	
10/26/2017 14:12	0.002	0.003	0.008	0	0	
10/26/2017 14:13	0.002	0.002	0.008	0	0	
10/26/2017 14:14	0.002	0.003	0.008	0	0	
10/26/2017 14:15	0.002	0.003	0.008	0	0	10
10/26/2017 14:16	0.002	0.003	0.008	0	0	
10/26/2017 14:17	0.002	0.003	0.008	0	0	
10/26/2017 14:18	0.002	0.003	0.008	0	0	
10/26/2017 14:19	0.002	0.003	0.008	0	0	
10/26/2017 14:20	0.002	0.003	0.008	0	0	13

10/26/2017 14:21	0.002	0.003	0.008	0	0	
10/26/2017 14:22	0.002	0.003	0.008	0	0	
10/26/2017 14:23	0.002	0.003	0.008	0	0	
10/26/2017 14:24	0.002	0.003	0.008	0	0	
10/26/2017 14:25	0.002	0.003	0.008	0	0	12
10/26/2017 14:26	0.002	0.003	0.008	0	0	
10/26/2017 14:27	0.002	0.003	0.008	0	0	
10/26/2017 14:28	0.002	0.003	0.008	0	0	
10/26/2017 14:29	0.002	0.004	0.008	0	0	
10/26/2017 14:30	0.002	0.004	0.008	0	0	13
10/26/2017 14:31	0.002	0.003	0.008	0	0	
10/26/2017 14:32	0.002	0.003	0.008	0	0	
10/26/2017 14:33	0.002	0.003	0.008	0	0	
10/26/2017 14:34	0.002	0.003	0.008	0	0	
10/26/2017 14:35	0.002	0.004	0.008	0	0	16
10/26/2017 14:36	0.002	0.004	0.008	0	0	
10/26/2017 14:37	0.002	0.003	0.008	0	0	
10/26/2017 14:38	0.002	0.003	0.008	0	0	
10/26/2017 14:39	0.002	0.003	0.008	0	0	
10/26/2017 14:40	0.002	0.003	0.008	0	0	11
10/26/2017 14:41	0.002	0.003	0.008	0	0	
10/26/2017 14:42	0.002	0.003	0.008	0	0	
10/26/2017 14:43	0.002	0.003	0.008	0	0	
10/26/2017 14:44	0.002	0.003	0.008	0	0	
10/26/2017 14:45	0.002	0.003	0.008	0	0	14
10/26/2017 14:46	0.002	0.003	0.008	0	0	
10/26/2017 14:47	0.002	0.003	0.008	0	0	
10/26/2017 14:48	0.002	0.003	0.008	0	0	
10/26/2017 14:49	0.002	0.003	0.008	0	0	
10/26/2017 14:50	0.002	0.003	0.008	0	0	16
10/26/2017 14:51	0.002	0.003	0.008	0	0	
10/26/2017 14:52	0.002	0.003	0.008	0	0	
10/26/2017 14:53	0.002	0.003	0.008	0	0	
10/26/2017 14:54	0.002	0.001	0.008	0	0	
10/26/2017 14:55	0.002	0.004	0.008	0	0	9
10/26/2017 14:56	0.002	0.003	0.008	0	0	
10/26/2017 14:57	0.002	0.003	0.008	0	0	
10/26/2017 14:58	0.002	0.004	0.008	0	0	
10/26/2017 14:59	0.002	0.004	0.008	0	0	
10/26/2017 15:00	0.002	0.003	0.008	0	0	14
10/26/2017 15:01	0.002	0.003	0.008	0	0	
10/26/2017 15:02	0.002	0.004	0.008	0	0	
10/26/2017 15:03	0.002	0.003	0.008	0	0	
10/26/2017 15:04	0.002	0.003	0.008	0	0	
10/26/2017 15:05	0.002	0.003	0.008	0	0	15
10/26/2017 15:06	0.002	0.003	0.008	0	0	
10/26/2017 15:07	0.002	0.004	0.008	0	0	
10/26/2017 15:08	0.003	0.003	0.008	0	0	
10/26/2017 15:09	0.003	0.003	0.008	0	0	
10/26/2017 15:10	0.003	0.003	0.008	0	0	17
10/26/2017 15:11	0.003	0.004	0.008	0	0	
10/26/2017 15:12	0.003	0.003	0.008	0	0	
10/26/2017 15:13	0.003	0.003	0.008	0	0	
10/26/2017 15:14	0.003	0.003	0.008	0	0.001	

10/26/2017 15:15	0.003	0.003	0.008	0	0.001	17
10/26/2017 15:16	0.003	0.004	0.008	0	0.001	
10/26/2017 15:17	0.003	0.003	0.008	0	0.001	
10/26/2017 15:19	0.003	0.003	0.008	0	0.001	
10/26/2017 15:20	0.003	0.004	0.008	0	0.001	16
10/26/2017 15:21	0.003	0.003	0.008	0	0.001	
10/26/2017 15:22	0.003	0.003	0.008	0	0.001	
10/26/2017 15:23	0.002	0.003	0.008	0	0.001	
10/26/2017 15:24	0.002	0.003	0.008	0	0.001	
10/26/2017 15:25	0.002	0.003	0.008	0	0.001	19
10/26/2017 15:26	0.002	0.003	0.008	0	0.001	
10/26/2017 15:27	0.002	0.003	0.008	0	0.001	
10/26/2017 15:28	0.002	0.002	0.008	0	0.001	
10/26/2017 15:29	0.002	0.003	0.008	0	0.001	
10/26/2017 15:30	0.002	0.002	0.008	0	0.001	19
10/26/2017 15:31	0.002	0.001	0.008	0	0.001	
10/26/2017 15:32	0.002	0.003	0.008	0	0.001	
10/26/2017 15:33	0.002	0.003	0.008	0	0.001	
10/26/2017 15:34	0.002	0.003	0.008	0	0.001	
10/26/2017 15:35	0.002	0.003	0.008	0	0.001	14
10/26/2017 15:36	0.002	0.003	0.008	0	0.001	
10/26/2017 15:37	0.002	0.002	0.008	0	0.001	
10/26/2017 15:38	0.002	0.002	0.008	0	0.001	
10/26/2017 15:39	0.002	0.003	0.008	0	0.001	
10/26/2017 15:40	0.001	0.002	0.008	0	0.001	12
10/26/2017 15:41	0.001	0.002	0.008	0	0.001	
10/26/2017 15:42	0.001	0.003	0.008	0	0.001	
10/26/2017 15:43	0.001	0.002	0.008	0	0.001	
10/26/2017 15:44	0.001	0.001	0.008	0	0.001	
10/26/2017 15:45	0.001	0.001	0.008	0	0.001	14
10/26/2017 15:46	0.001	0.002	0.008	0	0.001	
10/26/2017 15:47	0.001	0.001	0.008	0	0.001	
10/26/2017 15:48	0.001	0.001	0.008	0	0.001	
10/26/2017 15:49	0.001	0.001	0.008	0	0.001	
10/26/2017 15:50	0.001	0.001	0.008	0	0.001	12
10/26/2017 15:51	0.001	0.002	0.008	0	0.001	
10/26/2017 15:52	0.001	0.001	0.008	0	0.001	
10/26/2017 15:53	0.001	0.002	0.008	0	0.001	
10/26/2017 15:54	0.001	0.002	0.008	0	0.001	
10/26/2017 15:55	0.001	0.001	0.008	0	0.001	14
10/26/2017 15:56	0.001	0.002	0.008	0	0.001	
10/26/2017 15:57	0.001	0.001	0.008	0	0.001	
10/26/2017 15:58	0.001	0.001	0.008	0	0.001	
10/26/2017 15:59	0.001	0.002	0.008	0	0.001	
10/26/2017 16:00	0.001	0.001	0.008	0	0.001	13
10/26/2017 16:01	0.001	0.001	0.008	0	0.001	
10/26/2017 16:02	0.001	0.001	0.008	0	0.001	
10/26/2017 16:03	0.001	0.001	0.008	0	0.001	
10/26/2017 16:04	0.001	0.001	0.008	0	0.001	
10/26/2017 16:05	0.001	0.002	0.008	0	0.001	13
10/26/2017 16:06	0.001	0.002	0.008	0	0.001	
10/26/2017 16:07	0.001	0.002	0.008	0	0.001	
10/26/2017 16:08	0.001	0.002	0.008	0	0.001	
10/26/2017 16:09	0.001	0.001	0.008	0	0.001	

10/26/2017 16:10	0.001	0.001	0.008	0	0.001	14
10/26/2017 16:11	0.001	0.001	0.008	0	0.001	
10/26/2017 16:12	0.001	0.002	0.008	0	0.001	
10/26/2017 16:13	0.001	0.002	0.008	0	0.001	
10/26/2017 16:14	0.001	0.002	0.008	0	0.001	
10/26/2017 16:15	0.001	0.002	0.008	0	0.001	17
10/26/2017 16:16	0.001	0.002	0.008	0	0.001	
10/26/2017 16:17	0.001	0.001	0.008	0	0.001	
10/26/2017 16:18	0.001	0.003	0.008	0	0.001	
10/26/2017 16:19	0.001	0.002	0.008	0	0.001	
10/26/2017 16:20	0.001	0.002	0.008	0	0.001	21
10/26/2017 16:21	0.001	0.001	0.008	0	0.001	
10/26/2017 16:22	0.001	0.002	0.008	0	0.001	
10/26/2017 16:23	0.001	0.001	0.008	0	0.001	
10/26/2017 16:24	0.001	0.002	0.008	0	0.001	
10/26/2017 16:25	0.001	0.001	0.008	0	0.001	22
10/26/2017 16:26	0.001	0.002	0.008	0	0.001	
10/26/2017 16:27	0.001	0.002	0.008	0	0.001	
10/26/2017 16:28	0.001	0.001	0.008	0	0.001	
10/26/2017 16:29	0.001	0.002	0.008	0	0.001	
10/26/2017 16:30	0.001	0.001	0.008	0	0.001	
10/26/2017 16:30						22
10/26/2017 16:31	0.001	0.002	0.008	0	0.001	
10/26/2017 16:32	0.001	0.002	0.008	0	0.001	
10/26/2017 16:33	0.001	0.001	0.008	0	0.001	
10/26/2017 16:34	0.001	0.003	0.008	0	0.001	
10/26/2017 16:35	0.001	0.002	0.008	0	0.001	22
10/26/2017 16:36	0.001	0.002	0.008	0	0.001	
10/26/2017 16:37	0.001	0.002	0.008	0	0.001	
10/26/2017 16:38	0.001	0.002	0.008	0	0.001	
10/26/2017 16:39	0.001	0.002	0.008	0	0.001	
10/26/2017 16:40	0.001	0.002	0.008	0	0.001	22
10/26/2017 16:41	0.001	0.002	0.008	0	0.001	
10/26/2017 16:42	0.001	0.002	0.008	0	0.001	
10/26/2017 16:43	0.001	0.001	0.008	0	0.001	
10/26/2017 16:44	0.001	0.001	0.008	0	0.001	
10/26/2017 16:45	0.001	0.002	0.008	0	0.001	42
10/26/2017 16:46	0.001	0.002	0.008	0	0.001	
10/26/2017 16:47	0.001	0.002	0.008	0	0.001	
10/26/2017 16:48	0.001	0.001	0.008	0	0.001	
10/26/2017 16:49	0.001	0.001	0.008	0	0.001	
10/26/2017 16:50	0.001	0.003	0.008	0	0.001	32
10/26/2017 16:51	0.001	0.002	0.008	0	0.001	
10/26/2017 16:52	0.001	0.002	0.008	0	0.001	
10/26/2017 16:53	0.001	0.002	0.008	0	0.001	
10/26/2017 16:54	0.001	0.002	0.008	0	0.001	
10/26/2017 16:55	0.001	0.002	0.008	0	0.001	12
10/26/2017 16:56	0.001	0.001	0.008	0	0.001	
10/26/2017 16:57	0.001	0.002	0.008	0	0.001	
10/26/2017 16:58	0.001	0.003	0.008	0	0.001	
10/26/2017 16:59	0.001	0.003	0.008	0	0.001	
10/26/2017 17:00	0.001	0.004	0.008	0	0.001	4
10/26/2017 17:01	0.001	0.003	0.008	0	0.001	
10/26/2017 17:02	0.001	0.004	0.008	0	0.001	

10/26/2017 17:03	0.001	0.003	0.008	0	0.001	
10/26/2017 17:04	0.001	0.002	0.008	0	0.001	
10/26/2017 17:05	0.001	0.003	0.008	0	0.001	8
10/26/2017 17:06	0.001	0.003	0.008	0	0.001	
10/26/2017 17:07	0.002	0.002	0.008	0	0.001	
10/26/2017 17:08	0.001	0.002	0.008	0	0.001	
10/26/2017 17:09	0.001	0.001	0.008	0	0.001	
10/26/2017 17:10	0.001	0.002	0.008	0	0.001	5
10/26/2017 17:11	0.001	0.002	0.008	0	0.001	
10/26/2017 17:12	0.001	0.002	0.008	0	0.001	
10/26/2017 17:13	0.001	0.001	0.008	0	0.001	
10/26/2017 17:14	0.001	0.002	0.008	0	0.001	
10/26/2017 17:15	0.001	0.002	0.008	0	0.001	5
10/26/2017 17:16	0.001	0.003	0.008	0	0.001	
10/26/2017 17:17	0.001	0.004	0.008	0	0.001	
10/26/2017 17:18	0.001	0.003	0.008	0	0.001	
10/26/2017 17:19	0.001	0.004	0.008	0	0.001	
10/26/2017 17:20	0.001	0.003	0.008	0	0.001	2
10/26/2017 17:21	0.001	0.002	0.008	0	0.001	
10/26/2017 17:22	0.001	0.002	0.008	0	0.001	
10/26/2017 17:23	0.001	0.002	0.008	0	0.001	
10/26/2017 17:24	0.001	0.004	0.008	0	0.001	
10/26/2017 17:25	0.001	0.002	0.008	0	0.001	0
10/26/2017 17:26	0.001	0.001	0.008	0	0.001	
10/26/2017 17:27	0.001	0.002	0.008	0	0.001	
10/26/2017 17:28	0.001	0.002	0.008	0	0.001	
10/26/2017 17:29	0.001	0.001	0.008	0	0.001	
10/26/2017 17:30	0.001	0.002	0.008	0	0.001	-3
10/26/2017 17:31	0.001	0.002	0.008	0	0.001	
10/26/2017 17:32	0.001	0.001	0.008	0	0.001	
10/26/2017 17:33	0.001	0.002	0.008	0	0.001	
10/26/2017 17:34	0.001	0.001	0.008	0	0.001	
10/26/2017 17:35	0.001	0.002	0.008	0	0.001	-2
10/26/2017 17:36	0.001	0.001	0.008	0	0.001	
10/26/2017 17:37	0.001	0.002	0.008	0	0.001	
10/26/2017 17:38	0.001	0.001	0.008	0	0.001	
10/26/2017 17:39	0.001	0.001	0.008	0	0.001	
10/26/2017 17:40	0.001	0.001	0.008	0	0.001	0
10/26/2017 17:41	0.001	0.002	0.008	0	0.001	
10/26/2017 17:42	0.001	0.002	0.008	0	0.001	
10/26/2017 17:43	0.001	0.002	0.008	0	0.001	
10/26/2017 17:44	0.001	0.003	0.008	0	0.001	
10/26/2017 17:45	0.001	0.002	0.008	0	0.001	-6
10/26/2017 17:46	0.001	0.002	0.008	0	0.001	
10/26/2017 17:47	0.001	0.002	0.008	0	0.001	
10/26/2017 17:48	0.001	0.003	0.008	0	0.001	
10/26/2017 17:49	0.001	0.003	0.008	0	0.001	
10/26/2017 17:50	0.001	0.002	0.008	0	0.001	-7
10/26/2017 17:51	0.001	0.002	0.008	0	0.001	
10/26/2017 17:52	0.001	0.002	0.008	0	0.001	
10/26/2017 17:53	0.001	0.002	0.008	0	0.001	
10/26/2017 17:54	0.001	0.002	0.008	0	0.001	
10/26/2017 17:55	0.001	0.001	0.008	0	0.001	-1
10/26/2017 17:56	0.001	0.002	0.008	0	0.001	

10/26/2017 17:57	0.001	0.001	0.008	0	0.001	
10/26/2017 17:58	0.001	0.002	0.008	0	0.001	
10/26/2017 17:59	0.001	0.001	0.008	0	0.001	
10/26/2017 18:00	0.001	0.002	0.008	0	0.001	1
10/26/2017 18:01	0.001	0.001	0.008	0	0.001	
10/26/2017 18:02	0.001	0.001	0.008	0	0.001	
10/26/2017 18:03	0.001	0.002	0.008	0	0.001	
10/26/2017 18:04	0.001	0.001	0.008	0	0.001	
10/26/2017 18:05	0.001	0.003	0.008	0	0.001	1
10/26/2017 18:06	0.001	0.002	0.008	0	0.001	
10/26/2017 18:07	0.001	0.001	0.008	0	0.001	
10/26/2017 18:08	0.001	0.001	0.008	0	0.001	
10/26/2017 18:09	0.001	0.002	0.008	0	0.001	
10/26/2017 18:10	0.001	0.003	0.008	0	0.001	7
10/26/2017 18:11	0.001	0.002	0.008	0	0.001	
10/26/2017 18:12	0.001	0.002	0.008	0	0.001	
10/26/2017 18:13	0.001	0.002	0.008	0	0.001	
10/26/2017 18:14	0.001	0.001	0.008	0	0.001	
10/26/2017 18:15	0.001	0.003	0.008	0	0.001	6
10/26/2017 18:16	0.001	0.001	0.008	0	0.001	
10/26/2017 18:17	0.001	0.002	0.008	0	0.001	
10/26/2017 18:18	0.001	0.002	0.008	0	0.001	
10/26/2017 18:19	0.001	0.002	0.008	0	0.001	
10/26/2017 18:20	0.001	0.003	0.008	0	0.001	7
10/26/2017 18:21	0.001	0.003	0.008	0	0.001	
10/26/2017 18:22	0.001	0.002	0.008	0	0.001	
10/26/2017 18:23	0.001	0.002	0.008	0	0.001	
10/26/2017 18:24	0.001	0.002	0.008	0	0.001	
10/26/2017 18:25	0.001	0.002	0.008	0	0.001	7
10/26/2017 18:26	0.001	0.002	0.008	0	0.001	
10/26/2017 18:27	0.001	0.001	0.008	0	0.001	
10/26/2017 18:28	0.001	0.002	0.008	0	0.001	
10/26/2017 18:29	0.001	0.001	0.008	0	0.001	
10/26/2017 18:30	0.001	0.002	0.008	0	0.001	10
10/26/2017 18:31	0.001	0.004	0.008	0	0.001	
10/26/2017 18:32	0.001	0.003	0.008	0	0.001	
10/26/2017 18:33	0.001	0.003	0.008	0	0.001	
10/26/2017 18:34	0.001	0.003	0.008	0	0.001	
10/26/2017 18:35	0.001	0.003	0.008	0	0.001	8
10/26/2017 18:36	0.001	0.002	0.008	0	0.001	
10/26/2017 18:37	0.001	0.002	0.008	0	0.001	
10/26/2017 18:38	0.001	0.004	0.008	0	0.001	
10/26/2017 18:39	0.001	0.002	0.008	0	0.001	
10/26/2017 18:40	0.001	0.002	0.008	0	0.001	10
10/26/2017 18:41	0.001	0.002	0.008	0	0.001	
10/26/2017 18:42	0.001	0.002	0.008	0	0.001	
10/26/2017 18:43	0.001	0.001	0.008	0	0.001	
10/26/2017 18:44	0.001	0.002	0.008	0	0.001	
10/26/2017 18:45	0.001	0.002	0.008	0	0.001	9
10/26/2017 18:46	0.001	0.002	0.008	0	0.001	
10/26/2017 18:47	0.001	0.003	0.008	0	0.001	
10/26/2017 18:48	0.001	0.004	0.008	0	0.001	
10/26/2017 18:49	0.001	0.002	0.008	0	0.001	
10/26/2017 18:50	0.001	0.004	0.008	0	0.001	4

10/26/2017 18:51	0.001	0.003	0.008	0	0.001	
10/26/2017 18:52	0.001	0.002	0.008	0	0.001	
10/26/2017 18:53	0.001	0.003	0.008	0	0.001	
10/26/2017 18:54	0.001	0.002	0.008	0	0.001	
10/26/2017 18:55	0.001	0.002	0.008	0	0.001	4
10/26/2017 18:56	0.001	0.004	0.008	0	0.001	
10/26/2017 18:57	0.002	0.003	0.008	0	0.001	
10/26/2017 18:58	0.002	0.004	0.008	0	0.001	
10/26/2017 18:59	0.002	0.003	0.008	0	0.001	
10/26/2017 19:00	0.002	0.004	0.008	0	0.001	5
10/26/2017 19:01	0.002	0.004	0.008	0	0.001	
10/26/2017 19:02	0.002	0.003	0.008	0	0.001	
10/26/2017 19:03	0.002	0.003	0.008	0	0.001	
10/26/2017 19:04	0.002	0.004	0.008	0	0.001	
10/26/2017 19:05	0.002	0.002	0.008	0	0.001	7
10/26/2017 19:06	0.002	0.004	0.008	0	0.001	
10/26/2017 19:07	0.002	0.004	0.008	0	0.001	
10/26/2017 19:08	0.002	0.003	0.008	0	0.001	
10/26/2017 19:09	0.002	0.004	0.008	0	0.001	
10/26/2017 19:10	0.002	0.002	0.008	0	0.001	10
10/26/2017 19:11	0.002	0.002	0.008	0	0.001	
10/26/2017 19:12	0.002	0.002	0.008	0	0.001	
10/26/2017 19:13	0.002	0.002	0.008	0	0.001	
10/26/2017 19:14	0.002	0.001	0.008	0	0.001	
10/26/2017 19:15	0.001	0.003	0.008	0	0.001	7
10/26/2017 19:16	0.001	0.002	0.008	0	0.001	
10/26/2017 19:17	0.001	0.001	0.008	0	0.001	
10/26/2017 19:18	0.001	0.002	0.008	0	0.001	
10/26/2017 19:19	0.001	0.004	0.008	0	0.001	
10/26/2017 19:20	0.001	0.002	0.008	0	0.001	6
10/26/2017 19:21	0.001	0.004	0.008	0	0.001	
10/26/2017 19:22	0.001	0.002	0.008	0	0.001	
10/26/2017 19:23	0.001	0.002	0.008	0	0.001	
10/26/2017 19:24	0.001	0.002	0.008	0	0.001	
10/26/2017 19:25	0.001	0.001	0.008	0	0.001	8
10/26/2017 19:26	0.001	0.003	0.008	0	0.001	
10/26/2017 19:27	0.001	0.002	0.008	0	0.001	
10/26/2017 19:28	0.001	0.002	0.008	0	0.001	
10/26/2017 19:29	0.001	0.002	0.008	0	0.001	
10/26/2017 19:30	0.001	0.003	0.008	0	0.001	6
10/26/2017 19:31	0.001	0.002	0.008	0	0.001	
10/26/2017 19:32	0.001	0.001	0.008	0	0.001	
10/26/2017 19:33	0.001	0.001	0.008	0	0.001	
10/26/2017 19:34	0.001	0.003	0.008	0	0.001	
10/26/2017 19:35	0.001	0.001	0.008	0	0.001	6
10/26/2017 19:36	0.001	0.002	0.008	0	0.001	
10/26/2017 19:37	0.001	0.002	0.008	0	0.001	
10/26/2017 19:38	0.001	0.002	0.008	0	0.001	
10/26/2017 19:39	0.001	0.002	0.008	0	0.001	
10/26/2017 19:40	0.001	0.003	0.008	0	0.001	6
10/26/2017 19:41	0.001	0.003	0.008	0	0.001	
10/26/2017 19:42	0.001	0.004	0.008	0	0.001	
10/26/2017 19:43	0.001	0.002	0.008	0	0.001	
10/26/2017 19:44	0.001	0.003	0.008	0	0.001	

10/26/2017 19:45	0.001	0.001	0.008	0	0.001	6
10/26/2017 19:46	0.001	0.002	0.008	0	0.001	
10/26/2017 19:47	0.001	0.001	0.008	0	0.001	
10/26/2017 19:48	0.001	0.001	0.008	0	0.001	
10/26/2017 19:49	0.001	0.002	0.008	0	0.001	
10/26/2017 19:50	0.001	0.002	0.008	0	0.001	9
10/26/2017 19:51	0.001	0.002	0.008	0	0.001	
10/26/2017 19:52	0.001	0.002	0.008	0	0.001	
10/26/2017 19:53	0.001	0.001	0.008	0	0.001	
10/26/2017 19:54	0.001	0.001	0.008	0	0.001	
10/26/2017 19:55	0.001	0.001	0.008	0	0.001	8
10/26/2017 19:56	0.001	0.001	0.008	0	0.001	
10/26/2017 19:57	0.001	0.001	0.008	0	0.001	
10/26/2017 19:58	0.001	0.002	0.008	0	0.001	
10/26/2017 19:59	0.001	0.004	0.008	0	0.001	
10/26/2017 20:00	0.001	0.002	0.008	0	0.001	10
10/26/2017 20:01	0.001	0.002	0.008	0	0.001	
10/26/2017 20:02	0.001	0.003	0.008	0	0.001	
10/26/2017 20:03	0.001	0.003	0.008	0	0.001	
10/26/2017 20:04	0.001	0.002	0.008	0	0.001	
10/26/2017 20:05	0.001	0.003	0.008	0	0.001	15
10/26/2017 20:06	0.001	0.002	0.008	0	0.001	
10/26/2017 20:07	0.001	0.003	0.008	0	0.001	
10/26/2017 20:08	0.001	0.002	0.008	0	0.001	
10/26/2017 20:09	0.001	0.003	0.008	0	0.001	
10/26/2017 20:10	0.001	0.004	0.008	0	0.001	17
10/26/2017 20:11	0.001	0.003	0.008	0	0.002	
10/26/2017 20:12	0.002	0.003	0.008	0	0.002	
10/26/2017 20:13	0.002	0.002	0.008	0	0.002	
10/26/2017 20:14	0.002	0.002	0.008	0	0.002	
10/26/2017 20:15	0.002	0.002	0.008	0	0.002	16
10/26/2017 20:16	0.002	0.002	0.008	0	0.002	
10/26/2017 20:17	0.002	0.001	0.008	0	0.002	
10/26/2017 20:18	0.001	0.002	0.008	0	0.002	
10/26/2017 20:19	0.001	0.001	0.008	0	0.002	
10/26/2017 20:20	0.001	0.002	0.008	0	0.002	20
10/26/2017 20:21	0.001	0.002	0.008	0	0.002	
10/26/2017 20:22	0.001	0.002	0.008	0	0.002	
10/26/2017 20:23	0.001	0.002	0.008	0	0.002	
10/26/2017 20:24	0.001	0.002	0.008	0	0.002	
10/26/2017 20:25	0.001	0.002	0.008	0	0.002	19
10/26/2017 20:26	0.001	0.003	0.008	0	0.002	
10/26/2017 20:27	0.001	0.003	0.008	0	0.002	
10/26/2017 20:28	0.001	0.003	0.008	0	0.002	
10/26/2017 20:29	0.001	0.004	0.008	0	0.002	
10/26/2017 20:30	0.001	0.003	0.008	0	0.002	14
10/26/2017 20:31	0.001	0.002	0.008	0	0.002	
10/26/2017 20:32	0.001	0.002	0.008	0	0.002	
10/26/2017 20:33	0.001	0.002	0.008	0	0.002	
10/26/2017 20:34	0.001	0.002	0.008	0	0.002	
10/26/2017 20:35	0.001	0.002	0.008	0	0.002	13
10/26/2017 20:36	0.002	0.002	0.008	0	0.002	
10/26/2017 20:37	0.002	0.002	0.008	0	0.002	
10/26/2017 20:38	0.002	0.002	0.008	0	0.002	

10/26/2017 20:39	0.002	0.003	0.008	0	0.002	
10/26/2017 20:40	0.002	0.004	0.008	0	0.002	13
10/26/2017 20:41	0.002	0.003	0.008	0	0.002	
10/26/2017 20:42	0.002	0.003	0.008	0	0.002	
10/26/2017 20:43	0.002	0.002	0.008	0	0.002	
10/26/2017 20:44	0.002	0.003	0.008	0	0.002	
10/26/2017 20:45	0.002	0.004	0.008	0	0.002	9
10/26/2017 20:46	0.002	0.003	0.008	0	0.002	
10/26/2017 20:47	0.002	0.002	0.008	0	0.002	
10/26/2017 20:48	0.002	0.004	0.008	0	0.002	
10/26/2017 20:49	0.002	0.002	0.008	0	0.002	
10/26/2017 20:50	0.002	0.002	0.008	0	0.002	5
10/26/2017 20:51	0.002	0.002	0.008	0	0.002	
10/26/2017 20:52	0.002	0.003	0.008	0	0.002	
10/26/2017 20:53	0.002	0.002	0.008	0	0.002	
10/26/2017 20:54	0.002	0.002	0.008	0	0.002	
10/27/2017 14:06	0	0.006	0.008	0	0	
10/27/2017 14:07	0	0.005	0.008	0	0	
10/27/2017 14:08	0	0.006	0.008	0	0	
10/27/2017 14:09	0	0.004	0.008	0	0	
10/27/2017 14:10	0	0.004	0.008	0	0	15
10/27/2017 14:11	0	0.004	0.008	0	0	
10/27/2017 14:12	0	0.003	0.008	0	0	
10/27/2017 14:13	0	0.004	0.008	0	0	
10/27/2017 14:14	0	0.005	0.008	0	0	
10/27/2017 14:15	0	0.004	0.008	0	0	13
10/27/2017 14:16	0	0.005	0.008	0	0	
10/27/2017 14:17	0	0.004	0.008	0	0	
10/27/2017 14:18	0	0.005	0.008	0	0	
10/27/2017 14:19	0	0.004	0.008	0	0	
10/27/2017 14:20	0	0.004	0.008	0	0	11
10/27/2017 14:21	0.004	0.004	0.008	0	0	
10/27/2017 14:22	0.004	0.004	0.008	0	0	
10/27/2017 14:23	0.004	0.003	0.008	0	0	
10/27/2017 14:24	0.003	0.003	0.008	0	0	
10/27/2017 14:25	0.003	0.004	0.008	0	0	15
10/27/2017 14:26	0.003	0.004	0.008	0	0	
10/27/2017 14:27	0.003	0.003	0.008	0	0	
10/27/2017 14:28	0.003	0.004	0.008	0	0	
10/27/2017 14:29	0.003	0.004	0.008	0	0	
10/27/2017 14:30	0.003	0.003	0.008	0	0	13
10/27/2017 14:31	0.003	0.002	0.008	0	0	
10/27/2017 14:32	0.003	0.004	0.008	0	0	
10/27/2017 14:33	0.003	0.003	0.008	0	0	
10/27/2017 14:34	0.003	0.002	0.008	0	0	
10/27/2017 14:35	0.003	0.003	0.008	0	0	10
10/27/2017 14:36	0.003	0.004	0.008	0	0	
10/27/2017 14:37	0.003	0.004	0.008	0	0	
10/27/2017 14:38	0.003	0.004	0.008	0	0	
10/27/2017 14:39	0.003	0.004	0.008	0	0	
10/27/2017 14:40	0.003	0.004	0.008	0	0	16
10/27/2017 14:41	0.003	0.004	0.008	0	0	
10/27/2017 14:42	0.003	0.004	0.008	0	0	
10/27/2017 14:43	0.003	0.004	0.008	0	0	

10/27/2017 14:44	0.003	0.004	0.008	0	0	
10/27/2017 14:45	0.003	0.002	0.008	0	0	7
10/27/2017 14:46	0.003	0.002	0.008	0	0	
10/27/2017 14:47	0.003	0.004	0.008	0	0	
10/27/2017 14:48	0.003	0.003	0.008	0	0	
10/27/2017 14:49	0.003	0.003	0.008	0	0	
10/27/2017 14:50	0.003	0.003	0.008	0	0	9
10/27/2017 14:51	0.003	0.003	0.008	0	0	
10/27/2017 14:52	0.003	0.003	0.008	0	0	
10/27/2017 14:53	0.003	0.004	0.008	0	0	
10/27/2017 14:54	0.003	0.003	0.008	0	0	
10/27/2017 14:55	0.003	0.002	0.008	0	0	11
10/27/2017 14:56	0.002	0.004	0.008	0	0	
10/27/2017 14:57	0.002	0.003	0.008	0	0	
10/27/2017 14:58	0.002	0.003	0.008	0	0	
10/27/2017 14:59	0.002	0.004	0.008	0	0	
10/27/2017 15:01	0.002	0.002	0.008	0	0	
10/27/2017 15:02	0.002	0.003	0.008	0	0	
10/27/2017 15:03	0.002	0.003	0.008	0	0	
10/27/2017 15:04	0.002	0.002	0.008	0	0	
10/27/2017 15:05	0.002	0.003	0.008	0	0	10
10/27/2017 15:06	0.002	0.002	0.008	0	0	
10/27/2017 15:07	0.002	0.004	0.008	0	0	
10/27/2017 15:08	0.002	0.002	0.008	0	0	
10/27/2017 15:09	0.002	0.004	0.008	0	0	
10/27/2017 15:10	0.002	0.003	0.008	0	0	12
10/27/2017 15:11	0.002	0.002	0.008	0	0	
10/27/2017 15:12	0.002	0.002	0.008	0	0	
10/27/2017 15:13	0.002	0.003	0.008	0	0	
10/27/2017 15:14	0.002	0.003	0.008	0	0	
10/27/2017 15:15	0.002	0.003	0.008	0	0	11
10/27/2017 15:16	0.002	0.002	0.008	0	0	
10/27/2017 15:17	0.002	0.003	0.008	0	0	
10/27/2017 15:18	0.002	0.003	0.008	0	0	
10/27/2017 15:19	0.002	0.002	0.008	0	0	
10/27/2017 15:20	0.002	0.004	0.008	0	0	12
10/27/2017 15:21	0.002	0.002	0.008	0	0	
10/27/2017 15:22	0.002	0.002	0.008	0	0	
10/27/2017 15:23	0.002	0.002	0.008	0	0	
10/27/2017 15:24	0.002	0.003	0.008	0	0	
10/27/2017 15:25	0.002	0.002	0.008	0	0	15
10/27/2017 15:26	0.002	0.002	0.008	0	0	
10/27/2017 15:27	0.002	0.002	0.008	0	0	
10/27/2017 15:38	0.002	0.003	0.008	0	0	
10/27/2017 15:39	0.002	0.004	0.008	0	0	
10/27/2017 15:40	0.002	0.003	0.008	0	0	10
10/27/2017 15:41	0.002	0.003	0.008	0	0	
10/27/2017 15:42	0.002	0.003	0.008	0	0	
10/27/2017 15:43	0.002	0.004	0.008	0	0	
10/27/2017 15:44	0.002	0.002	0.008	0	0	
10/27/2017 15:45	0.002	0.004	0.008	0	0	16
10/27/2017 15:46	0.002	0.002	0.008	0	0	
10/27/2017 15:47	0.002	0.003	0.008	0	0	
10/27/2017 15:48	0.002	0.004	0.008	0	0	

10/27/2017 15:49	0.002	0.003	0.008	0	0	
10/27/2017 15:50	0.002	0.002	0.008	0	0	10
10/27/2017 15:51	0.002	0.002	0.008	0	0	
10/27/2017 15:52	0.002	0.002	0.008	0	0	
10/27/2017 15:53	0.002	0.001	0.008	0	0	
10/27/2017 15:54	0.002	0.002	0.008	0	0	
10/27/2017 15:55	0.002	0.002	0.008	0	0	13
10/27/2017 15:56	0.001	0.002	0.008	0	0	
10/27/2017 15:57	0.001	0.002	0.008	0	0	
10/27/2017 15:58	0.001	0.002	0.008	0	0	
10/27/2017 15:59	0.001	0.001	0.008	0	0	
10/27/2017 16:00	0.001	0.002	0.008	0	0	14
10/27/2017 16:01	0.001	0.001	0.008	0	0	
10/27/2017 16:02	0.001	0.002	0.008	0	0	
10/27/2017 16:03	0.001	0.002	0.008	0	0	
10/27/2017 16:04	0.001	0.002	0.008	0	0	
10/27/2017 16:05	0.001	0.001	0.008	0	0	16
10/27/2017 16:06	0.001	0.001	0.008	0	0	
10/27/2017 16:07	0.001	0.001	0.008	0	0	
10/27/2017 16:08	0	0.001	0.008	0	0	
10/27/2017 16:09	0	0.001	0.008	0	0	
10/27/2017 16:10	0	0.001	0.008	0	0	16
10/27/2017 16:11	0	0.002	0.008	0	0	
10/27/2017 16:12	0	0.001	0.008	0	0	
10/27/2017 16:13	0	0.003	0.008	0	0	
10/27/2017 16:14	0	0.002	0.008	0	0	
10/27/2017 16:15	0	0.001	0.008	0	0	18
10/27/2017 16:16	0	0.001	0.008	0	0	
10/27/2017 16:17	0	0.002	0.008	0	0	
10/27/2017 16:18	0	0.001	0.008	0	0	
10/27/2017 16:19	0	0.001	0.008	0	0	
10/27/2017 16:20	0	0.001	0.008	0	0	24
10/27/2017 16:21	0	0	0.008	0	0	
10/27/2017 16:22	0	0.001	0.008	0	0	
10/27/2017 16:23	0	0.002	0.008	0	0	
10/27/2017 16:31	0	0.001	0.008	0	0	
10/27/2017 16:32	0	0.001	0.008	0	0	
10/27/2017 16:33	0	0.001	0.008	0	0	
10/27/2017 16:34	0	0.001	0.008	0	0	
10/27/2017 16:35	0	0.001	0.008	0	0	12
10/27/2017 16:36	0	0.001	0.008	0	0	
10/27/2017 16:37	0	0.001	0.008	0	0	
10/27/2017 16:38	0	0.001	0.008	0	0	
10/27/2017 16:39	0	0.001	0.008	0	0	
10/27/2017 16:40	0	0.001	0.008	0	0	18
10/27/2017 16:41	0	0.001	0.008	0	0	
10/27/2017 16:42	0	0.002	0.008	0	0	
10/27/2017 16:43	0	0.001	0.008	0	0	
10/27/2017 16:44	0	0.001	0.008	0	0	
10/27/2017 16:45	0	0.001	0.008	0	0	22
10/27/2017 16:46	0	0.001	0.008	0	0	
10/27/2017 16:47	0	0.002	0.008	0	0	
10/27/2017 17:26	0.001	0.002	0.008	0	0	
10/27/2017 17:27	0.001	0.002	0.008	0	0	

10/27/2017 17:28	0.001	0.002	0.008	0	0	
10/27/2017 17:29	0.001	0.002	0.008	0	0	
10/27/2017 17:30	0.001	0.002	0.008	0	0	1
10/27/2017 17:31	0.001	0.001	0.008	0	0	
10/27/2017 17:32	0.001	0.002	0.008	0	0	
10/30/2017 17:56	0	0.004	0.006	0	0	
10/30/2017 17:57	0	0.005	0.006	0	0	
10/30/2017 17:58	0	0.003	0.006	0	0	
10/30/2017 17:59	0	0.005	0.006	0	0	
10/30/2017 18:00	0	0.004	0.006	0	0	4
10/30/2017 18:01	0	0.004	0.006	0	0	
10/30/2017 18:02	0	0.003	0.006	0	0	
10/30/2017 18:03	0	0.002	0.006	0	0	
10/30/2017 18:04	0	0.004	0.006	0	0	
10/30/2017 18:05	0	0.004	0.006	0	0	5
10/30/2017 18:06	0	0.003	0.006	0	0	
10/30/2017 18:07	0	0.003	0.006	0	0	
10/30/2017 18:08	0	0.003	0.006	0	0	
10/30/2017 18:09	0	0.003	0.006	0	0	
10/30/2017 18:10	0	0.002	0.006	0	0	5
10/30/2017 18:11	0.002	0.003	0.006	0	0	
10/30/2017 18:12	0.002	0.003	0.006	0	0	
10/30/2017 18:13	0.002	0.002	0.006	0	0	
10/30/2017 18:14	0.002	0.002	0.006	0	0	
10/30/2017 18:15	0.002	0.003	0.006	0	0	5
10/30/2017 18:16	0.002	0.003	0.006	0	0	
10/30/2017 18:17	0.002	0.002	0.006	0	0	
10/30/2017 18:18	0.002	0.002	0.006	0	0	
10/30/2017 18:19	0.002	0.002	0.006	0	0	
10/30/2017 18:20	0.002	0.002	0.006	0	0	1
10/30/2017 18:21	0.002	0.002	0.006	0	0	
10/30/2017 18:22	0.002	0.002	0.006	0	0	
10/30/2017 18:23	0.002	0.003	0.006	0	0	
10/30/2017 18:24	0.002	0.002	0.006	0	0	
10/30/2017 18:25	0.002	0.002	0.006	0	0	6
10/30/2017 18:26	0.002	0.003	0.006	0	0	
10/30/2017 18:27	0.002	0.005	0.006	0	0	
10/30/2017 18:28	0.002	0.002	0.006	0	0	
10/30/2017 18:29	0.002	0.002	0.006	0	0	
10/30/2017 18:30	0.002	0.003	0.006	0	0	8
10/30/2017 18:31	0.002	0.003	0.006	0	0	
10/30/2017 18:32	0.002	0.002	0.006	0	0	
10/30/2017 18:33	0.002	0.002	0.006	0	0	
10/30/2017 18:34	0.001	0.002	0.006	0	0	
10/30/2017 18:40	0.001	0.002	0.006	0	0	
10/30/2017 18:41	0.001	0.003	0.006	0	0	
10/30/2017 18:42	0.001	0.003	0.006	0	0	
10/30/2017 18:43	0.001	0.003	0.006	0	0	
10/30/2017 18:44	0.001	0.002	0.006	0	0	
10/30/2017 18:45	0.001	0.002	0.006	0	0	4
10/30/2017 18:46	0.001	0.002	0.006	0	0	
10/30/2017 18:47	0.001	0.002	0.006	0	0	
10/30/2017 18:48	0.001	0.002	0.006	0	0	
10/30/2017 18:49	0.001	0.002	0.006	0	0	

10/30/2017 18:50	0.001	0.002	0.006	0	0	7
10/30/2017 18:51	0.001	0.002	0.006	0	0	
10/30/2017 18:52	0.001	0.002	0.006	0	0	
10/30/2017 18:53	0.001	0.002	0.006	0	0	
10/30/2017 18:54	0.001	0.001	0.006	0	0	
10/30/2017 18:55	0.001	0.002	0.006	0	0	10
10/30/2017 18:56	0.001	0.002	0.006	0	0	
10/30/2017 18:57	0.001	0.002	0.006	0	0	
10/30/2017 18:58	0.001	0.002	0.006	0	0	
10/30/2017 18:59	0.001	0.002	0.006	0	0	
10/30/2017 19:00	0.001	0.003	0.006	0	0	8
10/30/2017 19:01	0.001	0.002	0.006	0	0	
10/30/2017 19:02	0.001	0.002	0.006	0	0	
10/30/2017 19:03	0.001	0.001	0.006	0	0	
10/30/2017 19:04	0.001	0.002	0.006	0	0	
10/30/2017 19:05	0.001	0.002	0.006	0	0	13
10/30/2017 19:06	0.001	0.002	0.006	0	0	
10/30/2017 19:07	0.001	0.002	0.006	0	0	
10/30/2017 19:08	0.001	0.002	0.006	0	0	
10/30/2017 19:09	0.001	0.002	0.006	0	0	
10/30/2017 19:10	0.001	0.002	0.006	0	0	15
10/30/2017 19:11	0.001	0.002	0.006	0	0	
10/30/2017 19:12	0.001	0.002	0.006	0	0	
10/30/2017 19:13	0.001	0.002	0.006	0	0	
10/30/2017 19:14	0.001	0.002	0.006	0	0	
10/30/2017 19:15	0.001	0.002	0.006	0	0	11
10/30/2017 19:16	0.001	0.002	0.006	0	0	
10/30/2017 19:17	0.001	0.003	0.006	0	0	
10/30/2017 19:18	0.001	0.003	0.006	0	0	
10/30/2017 19:19	0.001	0.002	0.006	0	0	
10/30/2017 19:20	0.001	0.002	0.006	0	0	14
10/30/2017 19:21	0.001	0.003	0.006	0	0	
10/30/2017 19:22	0.001	0.002	0.006	0	0	
10/30/2017 19:23	0.001	0.002	0.006	0	0	
10/30/2017 19:24	0.001	0.002	0.006	0	0	
10/30/2017 19:25	0.001	0.002	0.006	0	0	17
10/30/2017 19:26	0.002	0.002	0.006	0	0	
10/30/2017 19:27	0.002	0.002	0.006	0	0	
10/30/2017 19:28	0.002	0.002	0.006	0	0	
10/30/2017 19:29	0.002	0.002	0.006	0	0	
10/30/2017 19:30	0.002	0.003	0.006	0	0	17
10/30/2017 19:31	0.002	0.002	0.006	0	0	
10/30/2017 19:32	0.002	0.002	0.006	0	0	
10/30/2017 19:33	0.002	0.002	0.006	0	0	
10/30/2017 19:34	0.002	0.002	0.006	0	0	
10/30/2017 19:35	0.001	0.002	0.006	0	0	16
10/30/2017 19:36	0.001	0.003	0.006	0	0	
10/30/2017 19:37	0.001	0.002	0.006	0	0	
10/30/2017 19:38	0.001	0.002	0.006	0	0	
10/30/2017 19:39	0.001	0.002	0.006	0	0	
10/30/2017 19:40	0.001	0.002	0.006	0	0	16
10/30/2017 19:41	0.001	0.001	0.006	0	0	
10/30/2017 19:42	0.001	0.002	0.006	0	0	
10/30/2017 19:43	0.001	0.002	0.006	0	0	

10/30/2017 19:44	0.001	0.002	0.006	0	0	
10/30/2017 19:45	0.001	0.003	0.006	0	0	20
10/30/2017 19:46	0.001	0.004	0.006	0	0	
10/30/2017 19:47	0.001	0.002	0.006	0	0	
10/30/2017 19:48	0.001	0.002	0.006	0	0	
10/30/2017 19:49	0.001	0.002	0.006	0	0	
10/30/2017 19:50	0.001	0.002	0.006	0	0	19
10/30/2017 19:51	0.001	0.001	0.006	0	0	
10/30/2017 19:52	0.001	0.002	0.006	0	0	
10/30/2017 19:53	0.001	0.002	0.006	0	0	
10/30/2017 19:54	0.001	0.002	0.006	0	0	
10/30/2017 19:55	0.001	0.002	0.006	0	0	19
10/30/2017 19:56	0.001	0.002	0.006	0	0	
10/30/2017 19:57	0.001	0.003	0.006	0	0	
10/30/2017 19:58	0.001	0.002	0.006	0	0	
10/30/2017 19:59	0.001	0.002	0.006	0	0	
10/30/2017 20:00	0.001	0.002	0.006	0	0	20
10/30/2017 20:01	0.001	0.002	0.006	0	0	
10/30/2017 20:02	0.001	0.002	0.006	0	0	
10/30/2017 20:03	0.001	0.002	0.006	0	0	
10/30/2017 20:04	0.001	0.002	0.006	0	0	
10/30/2017 20:05	0.001	0.002	0.006	0	0	20
10/30/2017 20:06	0.001	0.002	0.006	0	0	
10/30/2017 20:07	0.001	0.002	0.006	0	0	
10/30/2017 20:08	0.001	0.001	0.006	0	0	
10/30/2017 20:09	0.001	0.002	0.006	0	0	
10/30/2017 20:10	0.001	0.002	0.006	0	0	17
10/30/2017 20:11	0.001	0.002	0.006	0	0	
10/30/2017 20:12	0.001	0.002	0.006	0	0	
10/30/2017 20:13	0.001	0.002	0.006	0	0	
10/30/2017 20:14	0.001	0.002	0.006	0	0	
10/30/2017 20:15	0.001	0.001	0.006	0	0	16
10/30/2017 20:16	0.001	0.001	0.006	0	0	
10/30/2017 20:17	0.001	0.002	0.006	0	0	
10/30/2017 20:18	0.001	0.002	0.006	0	0	
10/30/2017 20:19	0.001	0.001	0.006	0	0	
10/30/2017 20:20	0.001	0.002	0.006	0	0	16
10/30/2017 20:21	0.001	0.002	0.006	0	0	
10/30/2017 20:22	0.001	0.002	0.006	0	0	
10/30/2017 20:23	0.001	0.002	0.006	0	0	
10/30/2017 20:24	0.001	0.002	0.006	0	0	
10/30/2017 20:25	0.001	0.002	0.006	0	0	14
10/30/2017 20:26	0.001	0.002	0.006	0	0	
10/30/2017 20:27	0.001	0.002	0.006	0	0	
10/30/2017 20:28	0.001	0.002	0.006	0	0	
10/30/2017 20:29	0.001	0.002	0.006	0	0	
10/30/2017 20:30	0.001	0.002	0.006	0	0	12
10/30/2017 20:31	0.001	0.002	0.006	0	0	
10/30/2017 20:32	0.001	0.002	0.006	0	0	
10/30/2017 20:33	0.001	0.002	0.006	0	0	
10/30/2017 20:34	0.001	0.002	0.006	0	0	
10/30/2017 20:35	0.001	0.002	0.006	0	0	13
10/30/2017 20:36	0.001	0.002	0.006	0	0	
10/30/2017 20:37	0.001	0.001	0.006	0	0	

10/30/2017 20:38	0.001	0.002	0.006	0	0	
10/30/2017 20:39	0.001	0.001	0.006	0	0	
10/30/2017 20:40	0.001	0.001	0.006	0	0	9
10/30/2017 20:41	0.001	0.001	0.006	0	0	
10/30/2017 20:42	0.001	0.001	0.006	0	0	
10/30/2017 20:43	0.001	0.001	0.006	0	0	
10/30/2017 20:44	0.001	0.001	0.006	0	0	
10/30/2017 20:45	0.001	0.001	0.006	0	0	12
10/30/2017 20:46	0.001	0.001	0.006	0	0	
10/30/2017 20:47	0.001	0	0.006	0	0	
10/30/2017 20:48	0	0.001	0.006	0	0	
10/30/2017 20:49	0	0.001	0.006	0	0	
10/30/2017 20:50	0	0.001	0.006	0	0	14
10/30/2017 20:51	0	0.001	0.006	0	0	
10/30/2017 20:52	0	0.001	0.006	0	0	
10/30/2017 20:53	0	0.001	0.006	0	0	
10/30/2017 20:54	0	0.001	0.006	0	0	
10/30/2017 20:55	0	0.001	0.006	0	0	14
10/30/2017 20:56	0	0.001	0.006	0	0	
10/30/2017 20:57	0	0.002	0.006	0	0	
10/30/2017 20:58	0	0.002	0.006	0	0	
10/30/2017 20:59	0	0.001	0.006	0	0	
10/30/2017 21:00	0	0.002	0.006	0	0	13
10/31/2017 12:01	0	0.005	0.008	0	0	
10/31/2017 12:02	0	0.006	0.008	0	0	
10/31/2017 12:03	0	0.006	0.008	0	0	
10/31/2017 12:04	0	0.005	0.008	0	0	
10/31/2017 12:05	0	0.005	0.008	0	0	10
10/31/2017 12:06	0	0.006	0.008	0	0	
10/31/2017 12:07	0	0.005	0.008	0	0	
10/31/2017 12:08	0	0.004	0.008	0	0	
10/31/2017 12:09	0	0.005	0.008	0	0	
10/31/2017 12:10	0	0.004	0.008	0	0	6
10/31/2017 12:11	0	0.007	0.008	0	0	
10/31/2017 12:12	0	0.005	0.008	0	0	
10/31/2017 12:13	0	0.006	0.008	0	0	
10/31/2017 12:14	0	0.004	0.008	0	0	
10/31/2017 12:15	0	0.005	0.008	0	0	7
10/31/2017 12:16	0.004	0.005	0.008	0	0	
10/31/2017 12:17	0.004	0.004	0.008	0	0	
10/31/2017 12:18	0.004	0.004	0.008	0	0	
10/31/2017 12:19	0.004	0.004	0.008	0	0	
10/31/2017 12:20	0.004	0.005	0.008	0	0	6
10/31/2017 12:21	0.004	0.005	0.008	0	0	
10/31/2017 12:22	0.004	0.005	0.008	0	0	
10/31/2017 12:23	0.004	0.005	0.008	0	0	
10/31/2017 12:24	0.004	0.004	0.008	0	0	
10/31/2017 12:25	0.004	0.004	0.008	0	0	10
10/31/2017 12:26	0.004	0.004	0.008	0	0	
10/31/2017 12:27	0.004	0.004	0.008	0	0	
10/31/2017 12:28	0.004	0.004	0.008	0	0	
10/31/2017 12:29	0.003	0.004	0.008	0	0	
10/31/2017 12:30	0.003	0.004	0.008	0	0	11
10/31/2017 12:31	0.003	0.004	0.008	0	0	

10/31/2017 12:32	0.003	0.005	0.008	0	0	
10/31/2017 12:33	0.003	0.004	0.008	0	0	
10/31/2017 12:34	0.003	0.004	0.008	0	0	
10/31/2017 12:35	0.003	0.004	0.008	0	0	8
10/31/2017 12:36	0.003	0.004	0.008	0	0	
10/31/2017 12:37	0.003	0.004	0.008	0	0	
10/31/2017 12:38	0.003	0.005	0.008	0	0	
10/31/2017 12:39	0.003	0.005	0.008	0	0	
10/31/2017 12:40	0.003	0.003	0.008	0	0	6
10/31/2017 12:41	0.003	0.004	0.008	0	0	
10/31/2017 12:42	0.003	0.004	0.008	0	0	
10/31/2017 12:43	0.003	0.004	0.008	0	0	
10/31/2017 12:44	0.003	0.004	0.008	0	0	
10/31/2017 12:45	0.003	0.004	0.008	0	0	8
10/31/2017 12:46	0.003	0.004	0.008	0	0	
10/31/2017 12:47	0.003	0.003	0.008	0	0	
10/31/2017 12:48	0.003	0.004	0.008	0	0	
10/31/2017 12:49	0.003	0.004	0.008	0	0	
10/31/2017 12:50	0.003	0.004	0.008	0	0	11
10/31/2017 12:51	0.003	0.006	0.008	0	0	
10/31/2017 12:52	0.003	0.005	0.008	0	0	
10/31/2017 12:53	0.003	0.006	0.008	0	0	
10/31/2017 12:54	0.003	0.005	0.008	0	0	
10/31/2017 12:55	0.003	0.005	0.008	0	0	1
10/31/2017 12:56	0.003	0.004	0.008	0	0	
10/31/2017 12:57	0.004	0.004	0.008	0	0	
10/31/2017 12:58	0.004	0.003	0.008	0	0	
10/31/2017 12:59	0.004	0.004	0.008	0	0	
10/31/2017 13:00	0.004	0.005	0.008	0	0	4
10/31/2017 13:01	0.004	0.004	0.008	0	0	
10/31/2017 13:02	0.004	0.004	0.008	0	0	
10/31/2017 13:03	0.004	0.004	0.008	0	0	
10/31/2017 13:04	0.004	0.006	0.008	0	0	
10/31/2017 13:05	0.004	0.005	0.008	0	0	0
10/31/2017 13:06	0.004	0.004	0.008	0	0	
10/31/2017 13:07	0.004	0.004	0.008	0	0	
10/31/2017 13:08	0.004	0.004	0.008	0	0	
10/31/2017 13:09	0.003	0.004	0.008	0	0	
10/31/2017 13:10	0.003	0.005	0.008	0	0	0
10/31/2017 13:11	0.003	0.004	0.008	0	0	
10/31/2017 13:12	0.003	0.004	0.008	0	0	
10/31/2017 13:13	0.003	0.004	0.008	0	0	
10/31/2017 13:14	0.003	0.004	0.008	0	0	
10/31/2017 13:15	0.003	0.004	0.008	0	0	-1
10/31/2017 13:16	0.003	0.004	0.008	0	0	
10/31/2017 13:17	0.003	0.004	0.008	0	0	
10/31/2017 13:18	0.003	0.004	0.008	0	0	
10/31/2017 13:19	0.003	0.004	0.008	0	0	
10/31/2017 13:20	0.003	0.003	0.008	0	0	1
10/31/2017 13:21	0.003	0.004	0.008	0	0	
10/31/2017 13:22	0.003	0.004	0.008	0	0	
10/31/2017 13:23	0.003	0.004	0.008	0	0	
10/31/2017 13:24	0.003	0.004	0.008	0	0	
10/31/2017 13:25	0.003	0.005	0.008	0	0	0

10/31/2017 13:26	0.003	0.004	0.008	0	0	
10/31/2017 13:27	0.003	0.004	0.008	0	0	
10/31/2017 13:28	0.003	0.005	0.008	0	0	
10/31/2017 13:29	0.003	0.004	0.008	0	0	
10/31/2017 13:30	0.003	0.005	0.008	0	0	0
10/31/2017 13:31	0.003	0.003	0.008	0	0	
10/31/2017 13:32	0.003	0.004	0.008	0	0	
10/31/2017 13:33	0.003	0.004	0.008	0	0	
10/31/2017 13:34	0.003	0.004	0.008	0	0	
10/31/2017 13:35	0.003	0.004	0.008	0	0	1
10/31/2017 13:36	0.003	0.004	0.008	0	0	
10/31/2017 13:37	0.003	0.004	0.008	0	0	
10/31/2017 13:38	0.003	0.004	0.008	0	0	
10/31/2017 13:39	0.003	0.004	0.008	0	0	
10/31/2017 13:40	0.003	0.004	0.008	0	0	1
10/31/2017 13:41	0.003	0.004	0.008	0	0	
10/31/2017 13:42	0.003	0.005	0.008	0	0	
10/31/2017 13:43	0.003	0.005	0.008	0	0	
10/31/2017 13:44	0.003	0.004	0.008	0	0	
10/31/2017 13:45	0.003	0.004	0.008	0	0	0
10/31/2017 13:46	0.003	0.004	0.008	0	0	
10/31/2017 13:47	0.003	0.004	0.008	0	0	
10/31/2017 13:48	0.003	0.004	0.008	0	0	
10/31/2017 13:49	0.003	0.004	0.008	0	0	
10/31/2017 13:50	0.003	0.004	0.008	0	0	3
10/31/2017 13:51	0.003	0.004	0.008	0	0	
10/31/2017 13:52	0.003	0.003	0.008	0	0	
10/31/2017 13:53	0.003	0.004	0.008	0	0	
10/31/2017 13:54	0.003	0.004	0.008	0	0	
10/31/2017 13:55	0.003	0.004	0.008	0	0	7
10/31/2017 13:56	0.003	0.004	0.008	0	0	
10/31/2017 13:57	0.003	0.003	0.008	0	0	
10/31/2017 13:58	0.003	0.002	0.008	0	0	
10/31/2017 13:59	0.003	0.002	0.008	0	0	
10/31/2017 14:00	0.003	0.004	0.008	0	0	1
10/31/2017 14:01	0.003	0.002	0.008	0	0	
10/31/2017 14:02	0.002	0.003	0.008	0	0	
10/31/2017 14:03	0.002	0.004	0.008	0	0	
10/31/2017 14:04	0.002	0.003	0.008	0	0	
10/31/2017 14:05	0.002	0.002	0.008	0	0	1
10/31/2017 14:06	0.002	0.002	0.008	0	0	
10/31/2017 14:07	0.002	0.003	0.008	0	0	
10/31/2017 14:08	0.002	0.004	0.008	0	0	
10/31/2017 14:09	0.002	0.003	0.008	0	0	
10/31/2017 14:10	0.002	0.003	0.008	0	0	2
10/31/2017 14:11	0.002	0.003	0.008	0	0.001	
10/31/2017 14:12	0.002	0.004	0.008	0	0.001	
10/31/2017 14:13	0.002	0.004	0.008	0	0.001	
10/31/2017 14:14	0.002	0.004	0.008	0	0.001	
10/31/2017 14:15	0.002	0.002	0.008	0	0.001	9
10/31/2017 14:16	0.002	0.002	0.008	0	0.001	
10/31/2017 14:17	0.002	0.002	0.008	0	0.001	
10/31/2017 14:18	0.002	0.002	0.008	0	0.001	
10/31/2017 14:19	0.002	0.002	0.008	0	0.001	

10/31/2017 14:20	0.002	0.002	0.008	0	0.001	9
10/31/2017 14:21	0.002	0.002	0.008	0	0.001	
10/31/2017 14:22	0.002	0.002	0.008	0	0.001	
10/31/2017 14:23	0.002	0.002	0.008	0	0.001	
10/31/2017 14:24	0.002	0.003	0.008	0	0.001	
10/31/2017 14:25	0.002	0.002	0.008	0	0.001	8
10/31/2017 14:26	0.002	0.002	0.008	0	0.001	
10/31/2017 14:27	0.002	0.001	0.008	0	0.001	
10/31/2017 14:28	0.001	0.002	0.008	0	0.001	
10/31/2017 14:29	0.001	0.002	0.008	0	0.001	
10/31/2017 14:30	0.001	0.002	0.008	0	0.001	10
10/31/2017 14:31	0.001	0.002	0.008	0	0.001	
10/31/2017 14:32	0.001	0.002	0.008	0	0.001	
10/31/2017 14:33	0.001	0.001	0.008	0	0.001	
10/31/2017 14:34	0.001	0.002	0.008	0	0.001	
10/31/2017 14:35	0.001	0.002	0.008	0	0.001	13
10/31/2017 14:36	0.001	0.002	0.008	0	0.001	
10/31/2017 14:37	0.001	0.001	0.008	0	0.001	
10/31/2017 14:38	0.001	0.002	0.008	0	0.001	
10/31/2017 14:39	0.001	0.001	0.008	0	0.001	
10/31/2017 14:40	0.001	0.001	0.008	0	0.001	16
10/31/2017 14:41	0.001	0.002	0.008	0	0.001	
10/31/2017 14:42	0.001	0.001	0.008	0	0.001	
10/31/2017 14:43	0.001	0.001	0.008	0	0.001	
10/31/2017 14:44	0.001	0.002	0.008	0	0.001	
10/31/2017 14:45	0.001	0.001	0.008	0	0.001	16
10/31/2017 14:46	0.001	0.001	0.008	0	0.001	
10/31/2017 14:47	0.001	0.001	0.008	0	0.001	
10/31/2017 14:48	0.001	0.002	0.008	0	0.001	
10/31/2017 14:49	0.001	0.002	0.008	0	0.001	
10/31/2017 14:50	0.001	0.002	0.008	0	0.001	17
10/31/2017 14:51	0.001	0.001	0.008	0	0.001	
10/31/2017 14:52	0.001	0.002	0.008	0	0.001	
10/31/2017 14:53	0.001	0.002	0.008	0	0.001	
10/31/2017 14:54	0.001	0.002	0.008	0	0.001	
10/31/2017 14:55	0.001	0.002	0.008	0	0.001	17
10/31/2017 14:56	0.001	0.002	0.008	0	0.001	
10/31/2017 14:57	0.001	0.002	0.008	0	0.001	
10/31/2017 14:58	0.001	0.001	0.008	0	0.001	
10/31/2017 14:59	0.001	0.002	0.008	0	0.001	
10/31/2017 15:00	0.001	0.002	0.008	0	0.001	17
10/31/2017 15:01	0.001	0.002	0.008	0	0.001	
10/31/2017 15:02	0.001	0.002	0.008	0	0.001	
10/31/2017 15:03	0.001	0.002	0.008	0	0.001	
10/31/2017 15:04	0.001	0.002	0.008	0	0.001	
10/31/2017 15:05	0.001	0.001	0.008	0	0.001	14
10/31/2017 15:06	0.001	0.002	0.008	0	0.001	
10/31/2017 15:07	0.001	0.002	0.008	0	0.001	
10/31/2017 15:08	0.001	0.002	0.008	0	0.001	
10/31/2017 15:09	0.001	0.002	0.008	0	0.001	
10/31/2017 15:10	0.001	0.002	0.008	0	0.001	15
10/31/2017 15:11	0.001	0.001	0.008	0	0.001	
10/31/2017 15:12	0.001	0.002	0.008	0	0.001	
10/31/2017 15:13	0.001	0.002	0.008	0	0.001	

10/31/2017 15:14	0.001	0.002	0.008	0	0.001	
10/31/2017 15:15	0.001	0.002	0.008	0	0.001	
10/31/2017 15:15						15
10/31/2017 15:16	0.001	0.002	0.008	0	0.001	
10/31/2017 15:17	0.001	0.002	0.008	0	0.001	
10/31/2017 15:18	0.001	0.002	0.008	0	0.001	
10/31/2017 15:19	0.001	0.002	0.008	0	0.001	
10/31/2017 15:20	0.001	0.002	0.008	0	0.001	17
10/31/2017 15:21	0.001	0.002	0.008	0	0.001	
10/31/2017 15:22	0.001	0.002	0.008	0	0.001	
10/31/2017 15:23	0.001	0.001	0.008	0	0.001	
10/31/2017 15:24	0.001	0.002	0.008	0	0.001	
10/31/2017 15:25	0.001	0.002	0.008	0	0.001	17
10/31/2017 15:26	0.001	0.001	0.008	0	0.001	
10/31/2017 15:27	0.001	0.003	0.008	0	0.001	
10/31/2017 15:28	0.001	0.001	0.008	0	0.001	
10/31/2017 15:29	0.001	0.002	0.008	0	0.001	
10/31/2017 15:30	0.001	0.002	0.008	0	0.001	17
10/31/2017 15:31	0.001	0.001	0.008	0	0.001	
10/31/2017 15:32	0.001	0.001	0.008	0	0.001	
10/31/2017 15:33	0.001	0.002	0.008	0	0.001	
10/31/2017 15:34	0.001	0.001	0.008	0	0.001	
10/31/2017 15:35	0.001	0.001	0.008	0	0.001	17
10/31/2017 15:36	0.001	0.001	0.008	0	0.001	
10/31/2017 15:37	0.001	0.002	0.008	0	0.001	
10/31/2017 15:38	0.001	0.002	0.008	0	0.001	
10/31/2017 15:39	0.001	0.002	0.008	0	0.001	
10/31/2017 15:40	0.001	0.002	0.008	0	0.001	18
10/31/2017 15:41	0.001	0.002	0.008	0	0.001	
10/31/2017 15:42	0.001	0.002	0.008	0	0.001	
10/31/2017 15:43	0.001	0.002	0.008	0	0.001	
10/31/2017 15:44	0.001	0.002	0.008	0	0.001	
10/31/2017 15:45	0.001	0.001	0.008	0	0.001	13
10/31/2017 15:46	0.001	0.002	0.008	0	0.001	
10/31/2017 15:47	0.001	0.002	0.008	0	0.001	
10/31/2017 15:48	0.001	0.002	0.008	0	0.001	
10/31/2017 15:49	0.001	0.003	0.008	0	0.001	
10/31/2017 15:50	0.001	0.002	0.008	0	0.001	15
10/31/2017 15:51	0.001	0.003	0.008	0	0.001	
10/31/2017 15:52	0.001	0.002	0.008	0	0.001	
10/31/2017 15:53	0.001	0.002	0.008	0	0.001	
10/31/2017 15:54	0.001	0.002	0.008	0	0.001	
10/31/2017 15:55	0.001	0.002	0.008	0	0.001	17
10/31/2017 15:56	0.001	0.002	0.008	0	0.001	
10/31/2017 15:57	0.001	0.001	0.008	0	0.001	
10/31/2017 15:58	0.001	0.002	0.008	0	0.001	
10/31/2017 15:59	0.001	0.001	0.008	0	0.001	
10/31/2017 16:00	0.001	0.002	0.008	0	0.001	20
10/31/2017 16:01	0.001	0.002	0.008	0	0.001	
10/31/2017 16:02	0.001	0.002	0.008	0	0.001	
10/31/2017 16:03	0.001	0.001	0.008	0	0.001	
10/31/2017 16:04	0.001	0.001	0.008	0	0.001	
10/31/2017 16:05	0.001	0.001	0.008	0	0.001	21
10/31/2017 16:06	0.001	0.001	0.008	0	0.001	

10/31/2017 16:07	0.001	0.001	0.008	0	0.001	
10/31/2017 16:08	0.001	0.002	0.008	0	0.001	
10/31/2017 16:09	0.001	0.001	0.008	0	0.001	
10/31/2017 16:10	0.001	0.001	0.008	0	0.001	24
10/31/2017 16:11	0.001	0.002	0.008	0	0.001	
10/31/2017 16:12	0.001	0.002	0.008	0	0.001	
10/31/2017 16:13	0.001	0.002	0.008	0	0.001	
10/31/2017 16:14	0.001	0.002	0.008	0	0.001	
10/31/2017 16:15	0.001	0.002	0.008	0	0.001	30
10/31/2017 16:16	0.001	0.002	0.008	0	0.001	
10/31/2017 16:17	0.001	0.002	0.008	0	0.001	
10/31/2017 16:18	0.001	0.002	0.008	0	0.001	
10/31/2017 16:19	0.001	0.001	0.008	0	0.001	
10/31/2017 16:20	0.001	0.001	0.008	0	0.001	17
10/31/2017 16:23	0.001	0.002	0.008	0	0.001	
10/31/2017 16:24	0.001	0.001	0.008	0	0.001	
10/31/2017 16:25	0.001	0.001	0.008	0	0.001	
10/31/2017 16:25						14
10/31/2017 16:26	0.001	0.001	0.008	0	0.001	
10/31/2017 16:27	0.001	0.001	0.008	0	0.001	
10/31/2017 16:28	0.001	0.001	0.008	0	0.001	
10/31/2017 16:29	0.001	0.002	0.008	0	0.001	
10/31/2017 16:30	0.001	0.001	0.008	0	0.001	15
10/31/2017 16:31	0.001	0.001	0.008	0	0.001	
10/31/2017 16:32	0.001	0.001	0.008	0	0.001	
10/31/2017 16:33	0	0.001	0.008	0	0.001	
10/31/2017 16:34	0	0	0.008	0	0.001	
10/31/2017 16:35	0	0.001	0.008	0	0.001	13
10/31/2017 16:36	0	0.001	0.008	0	0.001	
10/31/2017 16:37	0	0.001	0.008	0	0.001	
10/31/2017 16:38	0	0.002	0.008	0	0.001	
10/31/2017 16:39	0	0.002	0.008	0	0.001	
10/31/2017 16:40	0	0.002	0.008	0	0.001	10
10/31/2017 16:41	0	0.002	0.008	0	0.001	
10/31/2017 16:42	0	0.002	0.008	0	0.001	
10/31/2017 16:43	0	0.002	0.008	0	0.001	
10/31/2017 16:44	0	0.002	0.008	0	0.001	
10/31/2017 16:45	0	0.002	0.008	0	0.001	10
10/31/2017 16:46	0	0.003	0.008	0	0.001	
10/31/2017 16:47	0.001	0.002	0.008	0	0.001	
10/31/2017 16:48	0.001	0.002	0.008	0	0.001	
10/31/2017 16:49	0.001	0.003	0.008	0	0.001	
10/31/2017 16:50	0.001	0.002	0.008	0	0.001	10
10/31/2017 16:51	0.001	0.001	0.008	0	0.001	
10/31/2017 16:52	0.001	0.002	0.008	0	0.001	
10/31/2017 16:53	0.001	0.002	0.008	0	0.001	
10/31/2017 16:54	0.001	0.001	0.008	0	0.001	
10/31/2017 16:55	0.001	0.002	0.008	0	0.001	9
10/31/2017 16:56	0.001	0.001	0.008	0	0.001	
10/31/2017 16:57	0.001	0.002	0.008	0	0.001	
10/31/2017 16:58	0.001	0.002	0.008	0	0.001	
10/31/2017 16:59	0.001	0.002	0.008	0	0.001	
10/31/2017 17:00	0.001	0.001	0.008	0	0.001	6
10/31/2017 17:01	0.001	0.002	0.008	0	0.001	

10/31/2017 17:02	0.001	0.003	0.008	0	0.001	
10/31/2017 17:03	0.001	0.002	0.008	0	0.001	
10/31/2017 17:04	0.001	0.002	0.008	0	0.001	
10/31/2017 17:05	0.001	0.001	0.008	0	0.001	3
10/31/2017 17:06	0.001	0.002	0.008	0	0.001	
10/31/2017 17:07	0.001	0.001	0.008	0	0.001	
10/31/2017 17:08	0.001	0.002	0.008	0	0.001	
10/31/2017 17:09	0.001	0.001	0.008	0	0.001	
10/31/2017 17:10	0.001	0.002	0.008	0	0.001	10
10/31/2017 17:11	0.001	0.002	0.008	0	0.001	
10/31/2017 17:12	0.001	0.002	0.008	0	0.001	
10/31/2017 17:13	0.001	0.002	0.008	0	0.001	
10/31/2017 17:14	0.001	0.002	0.008	0	0.001	
10/31/2017 17:15	0.001	0.001	0.008	0	0.001	10
10/31/2017 17:16	0.001	0.001	0.008	0	0.001	
10/31/2017 17:17	0.001	0.001	0.008	0	0.001	
10/31/2017 17:18	0.001	0.001	0.008	0	0.001	
10/31/2017 17:19	0	0	0.008	0	0.001	
10/31/2017 17:20	0	0.001	0.008	0	0.001	6
10/31/2017 17:21	0	0.001	0.008	0	0.001	
10/31/2017 17:22	0	0.001	0.008	0	0.001	
10/31/2017 17:23	0	0.001	0.008	0	0.001	
10/31/2017 17:24	0	0.002	0.008	0	0.001	
10/31/2017 17:25	0	0.001	0.008	0	0.001	6
10/31/2017 17:26	0	0.002	0.008	0	0.001	
10/31/2017 17:27	0	0.001	0.008	0	0.001	
10/31/2017 17:28	0	0.001	0.008	0	0.001	
10/31/2017 17:29	0	0.001	0.008	0	0.001	
10/31/2017 17:30	0	0.002	0.008	0	0.001	10
10/31/2017 17:31	0	0.001	0.008	0	0.001	
10/31/2017 17:32	0	0.001	0.008	0	0.001	
10/31/2017 17:33	0	0.001	0.008	0	0.001	
10/31/2017 17:34	0	0.001	0.008	0	0.001	
10/31/2017 17:35	0	0.002	0.008	0	0.001	9
10/31/2017 17:36	0	0.001	0.008	0	0.001	
10/31/2017 17:37	0	0.001	0.008	0	0.001	
10/31/2017 17:38	0	0.001	0.008	0	0.001	
10/31/2017 17:39	0	0.002	0.008	0	0.001	
10/31/2017 17:40	0	0.001	0.008	0	0.001	9
10/31/2017 17:41	0	0.001	0.008	0	0.001	
10/31/2017 17:42	0	0.001	0.008	0	0.001	
10/31/2017 17:43	0	0.001	0.008	0	0.001	
10/31/2017 17:44	0	0.002	0.008	0	0.001	
10/31/2017 17:45	0	0.001	0.008	0	0.001	3
10/31/2017 17:46	0	0.001	0.008	0	0.001	
10/31/2017 17:47	0	0.001	0.008	0	0.001	
10/31/2017 17:48	0	0.001	0.008	0	0.001	
10/31/2017 17:49	0	0.001	0.008	0	0.001	
10/31/2017 17:50	0	0.001	0.008	0	0.001	1
10/31/2017 17:51	0	0.001	0.008	0	0.001	
10/31/2017 17:52	0	0.001	0.008	0	0.001	
10/31/2017 17:53	0	0.002	0.008	0	0.001	
10/31/2017 17:54	0	0.001	0.008	0	0.001	
10/31/2017 17:55	0	0.001	0.008	0	0.001	0

10/31/2017 17:56	0	0.002	0.008	0	0.001	
10/31/2017 17:57	0	0.001	0.008	0	0.001	
10/31/2017 17:58	0	0.002	0.008	0	0.001	
10/31/2017 17:59	0	0.001	0.008	0	0.001	
10/31/2017 18:00	0	0.001	0.008	0	0.001	1
10/31/2017 18:01	0	0.001	0.008	0	0.001	
10/31/2017 18:02	0	0.001	0.008	0	0.001	
10/31/2017 18:03	0	0.001	0.008	0	0.001	
10/31/2017 18:04	0	0.001	0.008	0	0.001	
10/31/2017 18:05	0	0.001	0.008	0	0.001	4
10/31/2017 18:06	0	0.001	0.008	0	0.001	
10/31/2017 18:07	0	0	0.008	0	0.001	
10/31/2017 18:08	0	0.001	0.008	0	0.001	
10/31/2017 18:09	0	0.001	0.008	0	0.001	
10/31/2017 18:10	0	0.001	0.008	0	0.001	8
10/31/2017 18:11	0	0.002	0.008	0	0.001	
10/31/2017 18:12	0	0.001	0.008	0	0.001	
10/31/2017 18:13	0	0.001	0.008	0	0.001	
10/31/2017 18:14	0	0.001	0.008	0	0.001	
10/31/2017 18:15	0	0.001	0.008	0	0.001	8
10/31/2017 18:16	0	0.001	0.008	0	0.001	
10/31/2017 18:17	0	0.002	0.008	0	0.001	
10/31/2017 18:18	0	0.001	0.008	0	0.001	
10/31/2017 18:19	0	0.001	0.008	0	0.001	
10/31/2017 18:20	0	0.001	0.008	0	0.001	7
10/31/2017 18:21	0	0.001	0.008	0	0.001	
10/31/2017 18:22	0	0.001	0.008	0	0.001	
10/31/2017 18:23	0	0.002	0.008	0	0.001	
10/31/2017 18:24	0	0.002	0.008	0	0.001	
10/31/2017 18:25	0	0.001	0.008	0	0.001	6
10/31/2017 18:26	0	0.001	0.008	0	0.001	
10/31/2017 18:27	0	0.001	0.008	0	0.001	
10/31/2017 18:28	0	0.001	0.008	0	0.001	
10/31/2017 18:29	0	0	0.008	0	0.001	
10/31/2017 18:30	0	0.001	0.008	0	0.001	8
10/31/2017 18:31	0	0.002	0.008	0	0.001	
10/31/2017 18:32	0	0.001	0.008	0	0.001	
10/31/2017 18:33	0	0.001	0.008	0	0.001	
10/31/2017 18:34	0	0.001	0.008	0	0.001	
10/31/2017 18:35	0	0.002	0.008	0	0.001	12
10/31/2017 18:36	0	0.001	0.008	0	0.001	
10/31/2017 18:37	0	0.001	0.008	0	0.001	
10/31/2017 18:38	0	0.001	0.008	0	0.001	
10/31/2017 18:39	0	0.001	0.008	0	0.001	
10/31/2017 18:40	0	0.001	0.008	0	0.001	12
10/31/2017 18:41	0	0.002	0.008	0	0.001	
10/31/2017 18:42	0	0.001	0.008	0	0.001	
10/31/2017 18:43	0	0.002	0.008	0	0.001	
10/31/2017 18:44	0	0.001	0.008	0	0.001	
10/31/2017 18:45	0	0.001	0.008	0	0.001	11
10/31/2017 18:46	0	0.002	0.008	0	0.001	
10/31/2017 18:47	0	0.002	0.008	0	0.001	
10/31/2017 18:48	0	0.002	0.008	0	0.001	
10/31/2017 18:49	0	0.001	0.008	0	0.001	

10/31/2017 18:50	0	0.002	0.008	0	0.001	9
10/31/2017 18:51	0	0.002	0.008	0	0.001	
10/31/2017 18:52	0	0.001	0.008	0	0.001	
10/31/2017 18:53	0	0.002	0.008	0	0.001	
10/31/2017 18:54	0	0.002	0.008	0	0.001	
10/31/2017 18:55	0	0.001	0.008	0	0.001	8
10/31/2017 18:56	0.001	0.001	0.008	0	0.001	
10/31/2017 18:57	0.001	0.003	0.008	0	0.001	
10/31/2017 18:58	0.001	0.002	0.008	0	0.001	
10/31/2017 18:59	0.001	0.002	0.008	0	0.001	
10/31/2017 19:00	0.001	0.002	0.008	0	0.001	7
10/31/2017 19:01	0.001	0.002	0.008	0	0.001	
10/31/2017 19:02	0.001	0.003	0.008	0	0.001	
10/31/2017 19:03	0.001	0.001	0.008	0	0.001	
10/31/2017 19:04	0.001	0.001	0.008	0	0.001	
10/31/2017 19:05	0.001	0.002	0.008	0	0.001	7
10/31/2017 19:06	0.001	0.001	0.008	0	0.001	
10/31/2017 19:07	0.001	0.001	0.008	0	0.001	
10/31/2017 19:08	0.001	0.001	0.008	0	0.001	
10/31/2017 19:09	0.001	0.002	0.008	0	0.001	
10/31/2017 19:10	0.001	0.002	0.008	0	0.001	9
10/31/2017 19:11	0.001	0.002	0.008	0	0.001	
10/31/2017 19:12	0.001	0.002	0.008	0	0.001	
10/31/2017 19:13	0.001	0.002	0.008	0	0.001	
10/31/2017 19:14	0.001	0.001	0.008	0	0.001	
10/31/2017 19:15	0.001	0.002	0.008	0	0.001	8
10/31/2017 19:16	0.001	0.002	0.008	0	0.001	
10/31/2017 19:17	0.001	0.002	0.008	0	0.001	
10/31/2017 19:18	0.001	0.002	0.008	0	0.001	
10/31/2017 19:19	0.001	0.002	0.008	0	0.001	
10/31/2017 19:20	0.001	0.002	0.008	0	0.001	9
10/31/2017 19:21	0.001	0.002	0.008	0	0.001	
10/31/2017 19:22	0.001	0.002	0.008	0	0.001	
10/31/2017 19:23	0.001	0.002	0.008	0	0.001	
10/31/2017 19:24	0.001	0.002	0.008	0	0.001	
10/31/2017 19:25	0.001	0.002	0.008	0	0.001	8
10/31/2017 19:26	0.001	0.002	0.008	0	0.001	
10/31/2017 19:27	0.001	0.002	0.008	0	0.001	
10/31/2017 19:28	0.001	0.002	0.008	0	0.001	
10/31/2017 19:29	0.001	0.002	0.008	0	0.001	
10/31/2017 19:30	0.001	0.002	0.008	0	0.001	10
10/31/2017 19:31	0.001	0.002	0.008	0	0.001	
10/31/2017 19:32	0.001	0.002	0.008	0	0.001	
10/31/2017 19:33	0.001	0.001	0.008	0	0.001	
10/31/2017 19:34	0.001	0.002	0.008	0	0.001	
10/31/2017 19:35	0.001	0.002	0.008	0	0.001	11
10/31/2017 19:36	0.001	0.002	0.008	0	0.001	
10/31/2017 19:37	0.001	0.002	0.008	0	0.001	
10/31/2017 19:38	0.001	0.002	0.008	0	0.001	
10/31/2017 19:39	0.001	0.002	0.008	0	0.001	
10/31/2017 19:40	0.001	0.001	0.008	0	0.001	12
10/31/2017 19:41	0.001	0.002	0.008	0	0.001	
10/31/2017 19:42	0.001	0.002	0.008	0	0.001	
10/31/2017 19:43	0.001	0.002	0.008	0	0.001	

10/31/2017 19:44	0.001	0.002	0.008	0	0.001	
10/31/2017 19:45	0.001	0.002	0.008	0	0.001	15
10/31/2017 19:46	0.001	0.002	0.008	0	0.001	
10/31/2017 19:47	0.001	0.002	0.008	0	0.001	
10/31/2017 19:48	0.001	0.002	0.008	0	0.001	
10/31/2017 19:49	0.001	0.002	0.008	0	0.001	
10/31/2017 19:50	0.001	0.002	0.008	0	0.001	18
10/31/2017 19:51	0.001	0.001	0.008	0	0.001	
10/31/2017 19:52	0.001	0.002	0.008	0	0.001	
10/31/2017 19:53	0.001	0.001	0.008	0	0.001	
10/31/2017 19:54	0.001	0.001	0.008	0	0.001	
10/31/2017 19:55	0.001	0.001	0.008	0	0.001	19
10/31/2017 19:56	0.001	0.001	0.008	0	0.001	
10/31/2017 19:57	0.001	0.001	0.008	0	0.001	
10/31/2017 19:58	0.001	0.001	0.008	0	0.001	
10/31/2017 19:59	0.001	0.002	0.008	0	0.001	
10/31/2017 20:00	0.001	0.002	0.008	0	0.001	18
10/31/2017 20:01	0.001	0.003	0.008	0	0.001	
10/31/2017 20:02	0.001	0.002	0.008	0	0.001	
10/31/2017 20:03	0.001	0.001	0.008	0	0.001	
10/31/2017 20:04	0.001	0.002	0.008	0	0.001	
10/31/2017 20:05	0	0.002	0.008	0	0.001	18
10/31/2017 20:06	0	0.001	0.008	0	0.001	
10/31/2017 20:07	0	0.001	0.008	0	0.001	
10/31/2017 20:08	0	0.002	0.008	0	0.001	
10/31/2017 20:09	0	0.002	0.008	0	0.001	
10/31/2017 20:10	0.001	0.001	0.008	0	0.001	14
10/31/2017 20:11	0.001	0.002	0.008	0	0.001	
10/31/2017 20:12	0.001	0.002	0.008	0	0.001	
10/31/2017 20:13	0.001	0.001	0.008	0	0.001	
10/31/2017 20:14	0.001	0.001	0.008	0	0.001	
10/31/2017 20:15	0.001	0.001	0.008	0	0.001	14
10/31/2017 20:16	0.001	0.001	0.008	0	0.001	
10/31/2017 20:17	0.001	0.001	0.008	0	0.001	
10/31/2017 20:18	0	0.001	0.008	0	0.001	
10/31/2017 20:19	0	0.001	0.008	0	0.001	
10/31/2017 20:20	0	0.001	0.008	0	0.001	14
10/31/2017 20:21	0	0.002	0.008	0	0.001	
10/31/2017 20:22	0	0.002	0.008	0	0.001	
10/31/2017 20:23	0	0.001	0.008	0	0.001	
10/31/2017 20:24	0	0.001	0.008	0	0.001	
10/31/2017 20:25	0	0.002	0.008	0	0.001	8
10/31/2017 20:26	0	0.002	0.008	0	0.001	
10/31/2017 20:27	0	0.002	0.008	0	0.001	
10/31/2017 20:28	0	0.002	0.008	0	0.001	
10/31/2017 20:29	0	0.002	0.008	0	0.001	
10/31/2017 20:30	0	0.002	0.008	0	0.001	8
10/31/2017 20:31	0	0.002	0.008	0	0.001	
10/31/2017 20:32	0.001	0.002	0.008	0	0.001	
10/31/2017 20:33	0.001	0.001	0.008	0	0.001	
10/31/2017 20:34	0.001	0.003	0.008	0	0.001	
10/31/2017 20:35	0.001	0.001	0.008	0	0.001	10
10/31/2017 20:36	0.001	0.001	0.008	0	0.001	
10/31/2017 20:37	0.001	0.002	0.008	0	0.001	

10/31/2017 20:38	0.001	0.002	0.008	0	0.001	
10/31/2017 20:39	0.001	0.002	0.008	0	0.001	
10/31/2017 20:40	0.001	0.002	0.008	0	0.001	8
10/31/2017 20:41	0.001	0.002	0.008	0	0.001	
10/31/2017 20:42	0.001	0.002	0.008	0	0.001	
10/31/2017 20:43	0.001	0.001	0.008	0	0.001	
10/31/2017 20:44	0.001	0.001	0.008	0	0.001	
10/31/2017 20:45	0.001	0.002	0.008	0	0.001	10
10/31/2017 20:46	0.001	0.001	0.008	0	0.001	
10/31/2017 20:47	0.001	0.002	0.008	0	0.001	
10/31/2017 20:48	0.001	0.001	0.008	0	0.001	
10/31/2017 20:49	0.001	0.001	0.008	0	0.001	
10/31/2017 20:50	0.001	0.001	0.008	0	0.001	5
10/31/2017 20:51	0.001	0.001	0.008	0	0.001	
10/31/2017 20:52	0.001	0.001	0.008	0	0.001	
10/31/2017 20:53	0.001	0.001	0.008	0	0.001	
10/31/2017 20:54	0.001	0.002	0.008	0	0.001	
10/31/2017 20:55	0.001	0.002	0.008	0	0.001	10
10/31/2017 20:56	0.001	0.002	0.008	0	0.001	
10/31/2017 20:57	0.001	0.002	0.008	0	0.001	
10/31/2017 20:58	0.001	0.002	0.008	0	0.001	
10/31/2017 20:59	0.001	0.002	0.008	0	0.001	
10/31/2017 21:00	0.001	0.002	0.008	0	0.001	12
10/31/2017 21:01	0.001	0.002	0.008	0	0.001	
10/31/2017 21:02	0.001	0.002	0.008	0	0.001	
10/31/2017 21:03	0.001	0.002	0.008	0	0.001	
10/31/2017 21:04	0.001	0.002	0.008	0	0.001	
10/31/2017 21:05	0.001	0.002	0.008	0	0.001	12
10/31/2017 21:06	0.001	0.002	0.008	0	0.001	
10/31/2017 21:07	0.001	0.002	0.008	0	0.001	
11/1/2017 12:02	0	0.009	0.01	0	0	
11/1/2017 12:03	0	0.007	0.01	0	0	
11/1/2017 12:04	0	0.007	0.01	0	0	
11/1/2017 12:05	0	0.005	0.01	0	0	6
11/1/2017 12:06	0	0.007	0.01	0	0	
11/1/2017 12:07	0	0.006	0.01	0	0	
11/1/2017 12:08	0	0.006	0.01	0	0	
11/1/2017 12:09	0	0.005	0.01	0	0	
11/1/2017 12:10	0	0.005	0.01	0	0	10
11/1/2017 12:11	0	0.005	0.01	0	0	
11/1/2017 12:12	0	0.005	0.01	0	0	
11/1/2017 12:13	0	0.005	0.01	0	0	
11/1/2017 12:14	0	0.005	0.01	0	0	
11/1/2017 12:15	0	0.005	0.01	0	0	4
11/1/2017 12:16	0.005	0.005	0.01	0	0	
11/1/2017 12:17	0.005	0.005	0.01	0	0	
11/1/2017 12:18	0.005	0.006	0.01	0	0	
11/1/2017 12:19	0.004	0.005	0.01	0	0	
11/1/2017 12:20	0.004	0.005	0.01	0	0	5
11/1/2017 12:21	0.004	0.005	0.01	0	0	
11/1/2017 12:22	0.004	0.004	0.01	0	0	
11/1/2017 12:23	0.004	0.005	0.01	0	0	
11/1/2017 12:24	0.004	0.005	0.01	0	0	
11/1/2017 12:25	0.004	0.005	0.01	0	0	10

11/1/2017 12:26	0.004	0.005	0.01	0	0	
11/1/2017 12:27	0.004	0.004	0.01	0	0	
11/1/2017 12:28	0.004	0.005	0.01	0	0	
11/1/2017 12:29	0.004	0.005	0.01	0	0	
11/1/2017 12:30	0.004	0.004	0.01	0	0	10
11/1/2017 12:31	0.004	0.003	0.01	0	0	
11/1/2017 12:32	0.004	0.003	0.01	0	0	
11/1/2017 12:33	0.003	0.003	0.01	0	0	
11/1/2017 12:34	0.003	0.005	0.01	0	0	
11/1/2017 12:35	0.003	0.005	0.01	0	0	7
11/1/2017 12:36	0.003	0.005	0.01	0	0	
11/1/2017 12:37	0.003	0.003	0.01	0	0	
11/1/2017 12:38	0.003	0.003	0.01	0	0	
11/1/2017 12:39	0.003	0.005	0.01	0	0	
11/1/2017 12:40	0.003	0.003	0.01	0	0	8
11/1/2017 12:41	0.003	0.005	0.01	0	0	
11/1/2017 12:42	0.003	0.005	0.01	0	0	
11/1/2017 12:43	0.003	0.004	0.01	0	0	
11/1/2017 12:44	0.003	0.004	0.01	0	0	
11/1/2017 12:45	0.003	0.005	0.01	0	0	7
11/1/2017 12:46	0.003	0.003	0.01	0	0	
11/1/2017 12:47	0.003	0.005	0.01	0	0	
11/1/2017 12:48	0.003	0.005	0.01	0	0	
11/1/2017 12:49	0.003	0.003	0.01	0	0	
11/1/2017 12:50	0.003	0.002	0.01	0	0	0
11/1/2017 12:51	0.003	0.003	0.01	0	0	
11/1/2017 12:52	0.003	0.002	0.01	0	0	
11/1/2017 12:53	0.003	0.003	0.01	0	0	
11/1/2017 12:54	0.003	0.004	0.01	0	0	
11/1/2017 12:55	0.003	0.003	0.01	0	0	-1
11/1/2017 12:56	0.002	0.003	0.01	0	0	
11/1/2017 12:57	0.002	0.003	0.01	0	0	
11/1/2017 12:58	0.002	0.003	0.01	0	0	
11/1/2017 12:59	0.002	0.003	0.01	0	0	
11/1/2017 13:00	0.002	0.002	0.01	0	0	-3
11/1/2017 13:01	0.002	0.003	0.01	0	0	
11/1/2017 13:02	0.002	0.003	0.01	0	0	
11/1/2017 13:03	0.002	0.003	0.01	0	0	
11/1/2017 13:04	0.002	0.003	0.01	0	0	
11/1/2017 13:05	0.002	0.004	0.01	0	0	-5
11/1/2017 13:06	0.002	0.004	0.01	0	0	
11/1/2017 13:07	0.002	0.004	0.01	0	0	
11/1/2017 13:08	0.002	0.004	0.01	0	0	
11/1/2017 13:09	0.002	0.004	0.01	0	0	
11/1/2017 13:10	0.002	0.004	0.01	0	0	2
11/1/2017 13:11	0.002	0.004	0.01	0	0	
11/1/2017 13:12	0.002	0.002	0.01	0	0	
11/1/2017 13:13	0.002	0.003	0.01	0	0	
11/1/2017 13:14	0.002	0.004	0.01	0	0	
11/1/2017 13:15	0.002	0.003	0.01	0	0	6
11/1/2017 13:16	0.002	0.004	0.01	0	0	
11/1/2017 13:17	0.002	0.003	0.01	0	0	
11/1/2017 13:18	0.002	0.003	0.01	0	0	
11/1/2017 13:19	0.002	0.003	0.01	0	0	

11/1/2017 13:20	0.002	0.004	0.01	0	0	4
11/1/2017 13:21	0.002	0.004	0.01	0	0	
11/1/2017 13:22	0.002	0.004	0.01	0	0	
11/1/2017 13:23	0.002	0.003	0.01	0	0	
11/1/2017 13:24	0.002	0.004	0.01	0	0	
11/1/2017 13:25	0.002	0.004	0.01	0	0	5
11/1/2017 13:26	0.002	0.004	0.01	0	0	
11/1/2017 13:27	0.002	0.004	0.01	0	0	
11/1/2017 13:28	0.002	0.003	0.01	0	0	
11/1/2017 13:29	0.002	0.003	0.01	0	0	
11/1/2017 13:30	0.002	0.004	0.01	0	0	5
11/1/2017 13:31	0.002	0.002	0.01	0	0	
11/1/2017 13:32	0.002	0.004	0.01	0	0	
11/1/2017 13:33	0.002	0.004	0.01	0	0	
11/1/2017 13:34	0.003	0.004	0.01	0	0	
11/1/2017 13:35	0.003	0.004	0.01	0	0	7
11/1/2017 13:36	0.003	0.003	0.01	0	0	
11/1/2017 13:37	0.003	0.002	0.01	0	0	
11/1/2017 13:38	0.003	0.005	0.01	0	0	
11/1/2017 13:39	0.003	0.004	0.01	0	0	
11/1/2017 13:40	0.003	0.004	0.01	0	0	6
11/1/2017 13:41	0.003	0.004	0.01	0	0	
11/1/2017 13:42	0.003	0.004	0.01	0	0	
11/1/2017 13:43	0.003	0.004	0.01	0	0	
11/1/2017 13:44	0.003	0.004	0.01	0	0	
11/1/2017 13:45	0.003	0.004	0.01	0	0	5
11/1/2017 13:46	0.003	0.004	0.01	0	0	
11/1/2017 13:47	0.003	0.002	0.01	0	0	
11/1/2017 13:48	0.003	0.003	0.01	0	0	
11/1/2017 13:49	0.003	0.003	0.01	0	0	
11/1/2017 13:50	0.003	0.002	0.01	0	0	6
11/1/2017 13:51	0.003	0.002	0.01	0	0	
11/1/2017 13:52	0.003	0.004	0.01	0	0	
11/1/2017 13:53	0.003	0.004	0.01	0	0	
11/1/2017 13:54	0.003	0.003	0.01	0	0	
11/1/2017 13:55	0.003	0.004	0.01	0	0	4
11/1/2017 13:56	0.003	0.002	0.01	0	0	
11/1/2017 13:57	0.002	0.002	0.01	0	0	
11/1/2017 13:58	0.002	0.003	0.01	0	0	
11/1/2017 13:59	0.002	0.004	0.01	0	0	
11/1/2017 14:00	0.002	0.004	0.01	0	0	4
11/1/2017 14:01	0.002	0.004	0.01	0	0	
11/1/2017 14:02	0.002	0.002	0.01	0	0	
11/1/2017 14:03	0.002	0.002	0.01	0	0	
11/1/2017 14:04	0.002	0.002	0.01	0	0	
11/1/2017 14:05	0.002	0.003	0.01	0	0	7
11/1/2017 14:06	0.002	0.002	0.01	0	0	
11/1/2017 14:07	0.002	0.002	0.01	0	0	
11/1/2017 14:08	0.002	0.002	0.01	0	0	
11/1/2017 14:09	0.002	0.002	0.01	0	0	
11/1/2017 14:10	0.002	0.002	0.01	0	0	8
11/1/2017 14:11	0.002	0.002	0.01	0	0	
11/1/2017 14:12	0.002	0.002	0.01	0	0	
11/1/2017 14:13	0.002	0.002	0.01	0	0	

11/1/2017 14:14	0.002	0.002	0.01	0	0	
11/1/2017 14:15	0.002	0.002	0.01	0	0	5
11/1/2017 14:16	0.002	0.002	0.01	0	0	
11/1/2017 14:17	0.002	0.002	0.01	0	0	
11/1/2017 14:18	0.002	0.002	0.01	0	0	
11/1/2017 14:19	0.002	0.002	0.01	0	0	
11/1/2017 14:20	0.002	0.002	0.01	0	0	6
11/1/2017 14:21	0.001	0.002	0.01	0	0	
11/1/2017 14:22	0.001	0.002	0.01	0	0	
11/1/2017 14:23	0.001	0.002	0.01	0	0	
11/1/2017 14:24	0.001	0.002	0.01	0	0	
11/1/2017 14:25	0.001	0.002	0.01	0	0	8
11/1/2017 14:26	0.001	0.002	0.01	0	0	
11/1/2017 14:27	0.001	0.003	0.01	0	0	
11/1/2017 14:28	0.001	0.002	0.01	0	0	
11/1/2017 14:29	0.001	0.001	0.01	0	0	
11/1/2017 14:30	0.001	0.002	0.01	0	0	8
11/1/2017 14:31	0.001	0.001	0.01	0	0	
11/1/2017 14:32	0.001	0.002	0.01	0	0	
11/1/2017 14:33	0.001	0.002	0.01	0	0	
11/1/2017 14:34	0.001	0.001	0.01	0	0	
11/1/2017 14:35	0.001	0.001	0.01	0	0	13
11/1/2017 14:36	0.001	0.002	0.01	0	0	
11/1/2017 14:37	0.001	0.002	0.01	0	0	
11/1/2017 14:38	0.001	0.002	0.01	0	0	
11/1/2017 14:39	0.001	0.002	0.01	0	0	
11/1/2017 14:40	0.001	0.001	0.01	0	0	17
11/1/2017 14:41	0.001	0.001	0.01	0	0	
11/1/2017 14:42	0.001	0.001	0.01	0	0	
11/1/2017 14:43	0.001	0.002	0.01	0	0	
11/1/2017 14:44	0.001	0.002	0.01	0	0	
11/1/2017 14:45	0.001	0.001	0.01	0	0	14
11/1/2017 14:46	0.001	0.001	0.01	0	0	
11/1/2017 14:47	0.001	0.001	0.01	0	0	
11/1/2017 14:48	0.001	0.002	0.01	0	0	
11/1/2017 14:49	0.001	0.001	0.01	0	0	
11/1/2017 14:50	0.001	0.001	0.01	0	0	15
11/1/2017 14:51	0.001	0.002	0.01	0	0	
11/1/2017 14:52	0.001	0.002	0.01	0	0	
11/1/2017 14:53	0.001	0.001	0.01	0	0	
11/1/2017 14:54	0.001	0.001	0.01	0	0	
11/1/2017 14:55	0.001	0.002	0.01	0	0.001	14
11/1/2017 14:56	0.001	0.004	0.01	0	0.001	
11/1/2017 14:57	0.001	0.002	0.01	0	0.001	
11/1/2017 14:58	0.001	0.001	0.01	0	0.001	
11/1/2017 14:59	0.001	0.001	0.01	0	0.001	
11/1/2017 15:00	0.001	0.001	0.01	0	0.001	17
11/1/2017 15:01	0.001	0.001	0.01	0	0.001	
11/1/2017 15:02	0.001	0.001	0.01	0	0.001	
11/1/2017 15:03	0.001	0.002	0.01	0	0.001	
11/1/2017 15:04	0.001	0.002	0.01	0	0.001	
11/1/2017 15:05	0.001	0.001	0.01	0	0.001	18
11/1/2017 15:06	0.001	0.001	0.01	0	0.001	
11/1/2017 15:07	0.001	0.002	0.01	0	0.001	

11/1/2017 15:08	0.001	0.002	0.01	0	0.001	
11/1/2017 15:09	0.001	0.003	0.01	0	0.001	
11/1/2017 15:10	0.001	0.004	0.01	0	0.001	20
11/1/2017 15:11	0.001	0.004	0.01	0	0.001	
11/1/2017 15:12	0.001	0.004	0.01	0	0.001	
11/1/2017 15:13	0.001	0.004	0.01	0	0.001	
11/1/2017 15:14	0.001	0.003	0.01	0	0.001	
11/1/2017 15:15	0.001	0.003	0.01	0	0.001	19
11/1/2017 15:16	0.002	0.002	0.01	0	0.001	
11/1/2017 15:17	0.002	0.002	0.01	0	0.001	
11/1/2017 15:18	0.002	0.002	0.01	0	0.001	
11/1/2017 15:19	0.002	0.001	0.01	0	0.001	
11/1/2017 15:20	0.002	0.001	0.01	0	0.001	19
11/1/2017 15:21	0.002	0.001	0.01	0	0.001	
11/1/2017 15:22	0.002	0.001	0.01	0	0.001	
11/1/2017 15:23	0.002	0.002	0.01	0	0.001	
11/1/2017 15:24	0.002	0.002	0.01	0	0.001	
11/1/2017 15:25	0.001	0.001	0.01	0	0.001	17
11/1/2017 15:26	0.001	0.002	0.01	0	0.001	
11/1/2017 15:27	0.001	0.001	0.01	0	0.001	
11/1/2017 15:28	0.001	0.002	0.01	0	0.001	
11/1/2017 15:29	0.001	0.002	0.01	0	0.001	
11/1/2017 15:30	0.001	0.001	0.01	0	0.001	14
11/1/2017 15:31	0.001	0.001	0.01	0	0.001	
11/1/2017 15:32	0.001	0.001	0.01	0	0.001	
11/1/2017 15:33	0.001	0.002	0.01	0	0.001	
11/1/2017 15:34	0.001	0.001	0.01	0	0.001	
11/1/2017 15:35	0.001	0.001	0.01	0	0.001	17
11/1/2017 15:36	0.001	0.002	0.01	0	0.001	
11/1/2017 15:37	0.001	0.002	0.01	0	0.001	
11/1/2017 15:38	0.001	0.002	0.01	0	0.001	
11/1/2017 15:39	0.001	0.001	0.01	0	0.001	
11/1/2017 15:40	0.001	0.001	0.01	0	0.001	15
11/1/2017 15:41	0.001	0.001	0.01	0	0.001	
11/1/2017 15:42	0.001	0.001	0.01	0	0.001	
11/1/2017 15:43	0.001	0.001	0.01	0	0.001	
11/1/2017 15:44	0.001	0.003	0.01	0	0.001	
11/1/2017 15:45	0.001	0.002	0.01	0	0.001	16
11/1/2017 15:46	0.001	0.001	0.01	0	0.001	
11/1/2017 15:47	0.001	0.001	0.01	0	0.001	
11/1/2017 15:48	0.001	0.002	0.01	0	0.001	
11/1/2017 15:49	0.001	0.002	0.01	0	0.001	
11/1/2017 15:50	0.001	0.002	0.01	0	0.001	20
11/1/2017 15:51	0.001	0.001	0.01	0	0.001	
11/1/2017 15:52	0.001	0.002	0.01	0	0.001	
11/1/2017 15:53	0.001	0.002	0.01	0	0.001	
11/1/2017 15:54	0.001	0.001	0.01	0	0.001	
11/1/2017 15:55	0.001	0.001	0.01	0	0.001	19
11/1/2017 15:56	0.001	0.001	0.01	0	0.001	
11/1/2017 15:57	0.001	0.001	0.01	0	0.001	
11/1/2017 15:58	0.001	0.001	0.01	0	0.001	
11/1/2017 15:59	0.001	0.002	0.01	0	0.001	
11/1/2017 16:00	0.001	0.001	0.01	0	0.001	18
11/1/2017 16:01	0.001	0.002	0.01	0	0.001	

11/1/2017 16:02	0.001	0.002	0.01	0	0.001	
11/1/2017 16:03	0.001	0.002	0.01	0	0.001	
11/1/2017 16:04	0.001	0.002	0.01	0	0.001	
11/1/2017 16:05	0.001	0.001	0.01	0	0.001	19
11/1/2017 16:06	0.001	0.004	0.01	0	0.001	
11/1/2017 16:07	0.001	0.001	0.01	0	0.001	
11/1/2017 16:08	0.001	0.002	0.01	0	0.001	
11/1/2017 16:09	0.001	0.002	0.01	0	0.001	
11/1/2017 16:10	0.001	0.001	0.01	0	0.001	18
11/1/2017 16:11	0.001	0.002	0.01	0	0.001	
11/1/2017 16:12	0.001	0.002	0.01	0	0.001	
11/1/2017 16:13	0.001	0.001	0.01	0	0.001	
11/1/2017 16:14	0.001	0.001	0.01	0	0.001	
11/1/2017 16:15	0.001	0.002	0.01	0	0.001	19
11/1/2017 16:16	0.001	0.003	0.01	0	0.001	
11/1/2017 16:17	0.001	0.002	0.01	0	0.001	
11/1/2017 16:18	0.001	0.001	0.01	0	0.001	
11/1/2017 16:19	0.001	0.001	0.01	0	0.001	
11/1/2017 16:20	0.001	0.001	0.01	0	0.001	25
11/1/2017 16:21	0.001	0.001	0.01	0	0.001	
11/1/2017 16:22	0	0.002	0.01	0	0.001	
11/1/2017 16:23	0	0.001	0.01	0	0.001	
11/1/2017 16:24	0	0.002	0.01	0	0.001	
11/1/2017 16:25	0	0.002	0.01	0	0.001	
11/1/2017 16:25						14
11/1/2017 16:26	0	0.002	0.01	0	0.001	
11/1/2017 16:27	0	0.001	0.01	0	0.001	
11/1/2017 16:28	0	0.002	0.01	0	0.001	
11/1/2017 16:29	0	0.002	0.01	0	0.001	
11/1/2017 16:30	0	0.002	0.01	0	0.001	11
11/1/2017 16:31	0	0.001	0.01	0	0.001	
11/1/2017 16:32	0	0.001	0.01	0	0.001	
11/1/2017 16:33	0	0.001	0.01	0	0.001	
11/1/2017 16:34	0	0.001	0.01	0	0.001	
11/1/2017 16:35	0	0.001	0.01	0	0.001	11
11/1/2017 16:36	0	0.001	0.01	0	0.001	
11/1/2017 16:37	0.001	0.002	0.01	0	0.001	
11/1/2017 16:38	0.001	0.002	0.01	0	0.001	
11/1/2017 16:39	0.001	0.002	0.01	0	0.001	
11/1/2017 16:40	0.001	0.002	0.01	0	0.001	12
11/1/2017 16:41	0.001	0.002	0.01	0	0.001	
11/1/2017 16:42	0.001	0.002	0.01	0	0.001	
11/1/2017 16:43	0.001	0.002	0.01	0	0.001	
11/1/2017 16:44	0.001	0.001	0.01	0	0.001	
11/1/2017 16:45	0.001	0.002	0.01	0	0.001	11
11/1/2017 16:46	0.001	0.002	0.01	0	0.001	
11/1/2017 16:47	0.001	0.001	0.01	0	0.001	
11/1/2017 16:48	0.001	0.002	0.01	0	0.001	
11/1/2017 16:49	0.001	0.002	0.01	0	0.001	
11/1/2017 16:50	0.001	0.001	0.01	0	0.001	13
11/1/2017 16:51	0.001	0.002	0.01	0	0.001	
11/1/2017 16:52	0.001	0.002	0.01	0	0.001	
11/1/2017 16:53	0.001	0.001	0.01	0	0.001	
11/1/2017 16:54	0.001	0.001	0.01	0	0.001	

11/1/2017 16:55	0.001	0.001	0.01	0	0.001	9
11/1/2017 16:56	0.001	0	0.01	0	0.001	
11/1/2017 16:57	0.001	0.001	0.01	0	0.001	
11/1/2017 16:58	0.001	0.001	0.01	0	0.001	
11/1/2017 16:59	0	0.001	0.01	0	0.001	
11/1/2017 17:00	0	0.001	0.01	0	0.001	10
11/1/2017 17:01	0	0.001	0.01	0	0.001	
11/1/2017 17:02	0	0.002	0.01	0	0.001	
11/1/2017 17:03	0	0.001	0.01	0	0.001	
11/1/2017 17:04	0	0.002	0.01	0	0.001	
11/1/2017 17:05	0	0.001	0.01	0	0.001	6
11/1/2017 17:06	0	0.001	0.01	0	0.001	
11/1/2017 17:07	0	0.002	0.01	0	0.001	
11/1/2017 17:08	0	0.002	0.01	0	0.001	
11/1/2017 17:09	0	0.001	0.01	0	0.001	
11/1/2017 17:10	0	0.002	0.01	0	0.001	3
11/1/2017 17:11	0	0.001	0.01	0	0.001	
11/1/2017 17:12	0	0.001	0.01	0	0.001	
11/1/2017 17:13	0	0.001	0.01	0	0.001	
11/1/2017 17:14	0	0.001	0.01	0	0.001	
11/1/2017 17:15	0	0.001	0.01	0	0.001	9
11/1/2017 17:16	0	0.001	0.01	0	0.001	
11/1/2017 17:17	0	0.001	0.01	0	0.001	
11/1/2017 17:18	0	0.001	0.01	0	0.001	
11/1/2017 17:19	0	0.001	0.01	0	0.001	
11/1/2017 17:20	0	0.001	0.01	0	0.001	9
11/1/2017 17:21	0	0.001	0.01	0	0.001	
11/1/2017 17:22	0	0.001	0.01	0	0.001	
11/1/2017 17:23	0	0.001	0.01	0	0.001	
11/1/2017 17:24	0	0.002	0.01	0	0.001	
11/1/2017 17:25	0	0.001	0.01	0	0.001	8
11/1/2017 17:26	0	0.001	0.01	0	0.001	
11/1/2017 17:27	0	0.002	0.01	0	0.001	
11/1/2017 17:28	0	0	0.01	0	0.001	
11/1/2017 17:29	0	0.001	0.01	0	0.001	
11/1/2017 17:30	0	0.002	0.01	0	0.001	7
11/1/2017 17:31	0	0.001	0.01	0	0.001	
11/1/2017 17:32	0	0.001	0.01	0	0.001	
11/1/2017 17:33	0	0.001	0.01	0	0.001	
11/1/2017 17:34	0	0.002	0.01	0	0.001	
11/1/2017 17:35	0	0.002	0.01	0	0.001	7
11/1/2017 17:36	0	0.001	0.01	0	0.001	
11/1/2017 17:37	0	0.002	0.01	0	0.001	
11/1/2017 17:38	0	0.001	0.01	0	0.001	
11/1/2017 17:39	0	0.001	0.01	0	0.001	
11/1/2017 17:40	0	0.001	0.01	0	0.001	8
11/1/2017 17:41	0	0.001	0.01	0	0.001	
11/1/2017 17:42	0	0.001	0.01	0	0.001	
11/1/2017 17:43	0	0.001	0.01	0	0.001	
11/1/2017 17:44	0	0.001	0.01	0	0.001	
11/1/2017 17:45	0	0.001	0.01	0	0.001	10
11/1/2017 17:46	0	0.001	0.01	0	0.001	
11/1/2017 17:47	0	0.001	0.01	0	0.001	
11/1/2017 17:48	0	0.001	0.01	0	0.001	

11/1/2017 17:49	0	0.002	0.01	0	0.001	
11/1/2017 17:50	0	0.001	0.01	0	0.001	7
11/1/2017 17:51	0	0.001	0.01	0	0.001	
11/1/2017 17:52	0	0.001	0.01	0	0.001	
11/1/2017 17:53	0	0.001	0.01	0	0.001	
11/1/2017 17:54	0	0.001	0.01	0	0.001	
11/1/2017 17:55	0	0.001	0.01	0	0.001	9
11/1/2017 17:56	0	0.001	0.01	0	0.001	
11/1/2017 17:57	0	0.001	0.01	0	0.001	
11/1/2017 17:58	0	0.001	0.01	0	0.001	
11/1/2017 17:59	0	0.001	0.01	0	0.001	
11/1/2017 18:00	0.001	0.001	0.01	0	0.001	9
11/1/2017 18:01	0	0.001	0.01	0	0.001	
11/1/2017 18:02	0	0.001	0.01	0	0.001	
11/1/2017 18:03	0	0.001	0.01	0	0.001	
11/1/2017 18:04	0	0.001	0.01	0	0.001	
11/1/2017 18:05	0	0.001	0.01	0	0.001	8
11/1/2017 18:06	0	0.001	0.01	0	0.001	
11/1/2017 18:07	0	0.002	0.01	0	0.001	
11/1/2017 18:08	0	0.001	0.01	0	0.001	
11/1/2017 18:09	0	0.002	0.01	0	0.001	
11/1/2017 18:10	0	0.002	0.01	0	0.001	14
11/1/2017 18:11	0.001	0.002	0.01	0	0.001	
11/1/2017 18:12	0.001	0.001	0.01	0	0.001	
11/1/2017 18:13	0.001	0.002	0.01	0	0.001	
11/1/2017 18:14	0.001	0.002	0.01	0	0.001	
11/1/2017 18:15	0.001	0.001	0.01	0	0.001	11
11/1/2017 18:16	0.001	0.001	0.01	0	0.001	
11/1/2017 18:17	0.001	0.002	0.01	0	0.001	
11/1/2017 18:18	0.001	0.002	0.01	0	0.001	
11/1/2017 18:19	0.001	0.001	0.01	0	0.001	
11/1/2017 18:20	0.001	0.001	0.01	0	0.001	7
11/1/2017 18:21	0.001	0.001	0.01	0	0.001	
11/1/2017 18:22	0.001	0.002	0.01	0	0.001	
11/1/2017 18:23	0.001	0.002	0.01	0	0.001	
11/1/2017 18:24	0.001	0.002	0.01	0	0.001	
11/1/2017 18:25	0.001	0.001	0.01	0	0.001	
11/1/2017 18:25						7
11/1/2017 18:26	0.001	0.001	0.01	0	0.001	
11/1/2017 18:27	0.001	0.002	0.01	0	0.001	
11/1/2017 18:28	0.001	0.002	0.01	0	0.001	
11/1/2017 18:29	0.001	0.002	0.01	0	0.001	
11/1/2017 18:30	0.001	0.002	0.01	0	0.001	10
11/1/2017 18:31	0.001	0.002	0.01	0	0.001	
11/1/2017 18:32	0.001	0.001	0.01	0	0.001	
11/1/2017 18:33	0.001	0.002	0.01	0	0.001	
11/1/2017 18:34	0.001	0.002	0.01	0	0.001	
11/1/2017 18:35	0.001	0.002	0.01	0	0.001	7
11/1/2017 18:36	0.001	0.001	0.01	0	0.001	
11/1/2017 18:37	0.001	0.001	0.01	0	0.001	
11/1/2017 18:38	0.001	0.001	0.01	0	0.001	
11/1/2017 18:39	0.001	0.001	0.01	0	0.001	
11/1/2017 18:40	0.001	0.002	0.01	0	0.001	13
11/1/2017 18:41	0.001	0.001	0.01	0	0.001	

11/1/2017 18:42	0.001	0.002	0.01	0	0.001	
11/1/2017 18:43	0.001	0.002	0.01	0	0.001	
11/1/2017 18:44	0.001	0.002	0.01	0	0.001	
11/1/2017 18:45	0.001	0.002	0.01	0	0.001	8
11/1/2017 18:46	0.001	0.002	0.01	0	0.001	
11/1/2017 18:47	0.001	0.002	0.01	0	0.001	
11/1/2017 18:48	0.001	0.003	0.01	0	0.001	
11/1/2017 18:49	0.001	0.002	0.01	0	0.001	
11/1/2017 18:50	0.001	0.002	0.01	0	0.001	6
11/1/2017 18:51	0.001	0.002	0.01	0	0.001	
11/1/2017 18:52	0.001	0.003	0.01	0	0.001	
11/1/2017 18:53	0.001	0.002	0.01	0	0.001	
11/1/2017 18:54	0.001	0.002	0.01	0	0.001	
11/1/2017 18:55	0.001	0.002	0.01	0	0.001	7
11/1/2017 18:56	0.001	0.002	0.01	0	0.001	
11/1/2017 18:57	0.001	0.002	0.01	0	0.001	
11/1/2017 18:58	0.001	0.002	0.01	0	0.001	
11/1/2017 18:59	0.001	0.002	0.01	0	0.001	
11/1/2017 19:00	0.001	0.001	0.01	0	0.001	11
11/1/2017 19:01	0.001	0.002	0.01	0	0.001	
11/1/2017 19:02	0.001	0.003	0.01	0	0.001	
11/1/2017 19:03	0.001	0.002	0.01	0	0.001	
11/1/2017 19:04	0.001	0.002	0.01	0	0.001	
11/1/2017 19:05	0.001	0.001	0.01	0	0.001	11
11/1/2017 19:06	0.001	0.002	0.01	0	0.001	
11/1/2017 19:07	0.001	0.002	0.01	0	0.001	
11/1/2017 19:08	0.001	0.002	0.01	0	0.001	
11/1/2017 19:09	0.001	0.001	0.01	0	0.001	
11/1/2017 19:10	0.001	0.001	0.01	0	0.001	9
11/1/2017 19:11	0.001	0.002	0.01	0	0.001	
11/1/2017 19:12	0.001	0.001	0.01	0	0.001	
11/1/2017 19:13	0.001	0.001	0.01	0	0.001	
11/1/2017 19:14	0.001	0.001	0.01	0	0.001	
11/1/2017 19:15	0.001	0.001	0.01	0	0.001	8
11/1/2017 19:16	0.001	0.001	0.01	0	0.001	
11/1/2017 19:17	0	0.001	0.01	0	0.001	
11/1/2017 19:18	0	0.001	0.01	0	0.001	
11/1/2017 19:19	0	0.001	0.01	0	0.001	
11/1/2017 19:20	0	0.001	0.01	0	0.001	11
11/1/2017 19:21	0	0.001	0.01	0	0.001	
11/1/2017 19:22	0	0.001	0.01	0	0.001	
11/1/2017 19:23	0	0.001	0.01	0	0.001	
11/1/2017 19:24	0	0.001	0.01	0	0.001	
11/1/2017 19:25	0	0.001	0.01	0	0.001	11
11/1/2017 19:26	0	0.001	0.01	0	0.001	
11/1/2017 19:27	0	0.001	0.01	0	0.001	
11/1/2017 19:28	0	0.001	0.01	0	0.001	
11/1/2017 19:29	0	0.001	0.01	0	0.001	
11/1/2017 19:30	0	0.001	0.01	0	0.001	11
11/1/2017 19:31	0	0.001	0.01	0	0.001	
11/1/2017 19:32	0	0.001	0.01	0	0.001	
11/1/2017 19:33	0	0.001	0.01	0	0.001	
11/1/2017 19:34	0	0.002	0.01	0	0.001	
11/1/2017 19:35	0	0.002	0.01	0	0.001	15

11/1/2017 19:36	0	0.001	0.01	0	0.001	
11/1/2017 19:37	0	0.001	0.01	0	0.001	
11/1/2017 19:38	0	0.001	0.01	0	0.001	
11/1/2017 19:39	0	0.001	0.01	0	0.001	
11/1/2017 19:40	0	0.001	0.01	0	0.001	15
11/1/2017 19:41	0	0.001	0.01	0	0.001	
11/1/2017 19:42	0	0.001	0.01	0	0.001	
11/1/2017 19:43	0	0.002	0.01	0	0.001	
11/1/2017 19:44	0.001	0.001	0.01	0	0.001	
11/1/2017 19:45	0.001	0.001	0.01	0	0.001	18
11/1/2017 19:46	0.001	0.001	0.01	0	0.001	
11/1/2017 19:47	0.001	0.001	0.01	0	0.001	
11/1/2017 19:48	0.001	0.001	0.01	0	0.001	
11/1/2017 19:49	0.001	0.001	0.01	0	0.001	
11/1/2017 19:50	0.001	0.001	0.01	0	0.001	16
11/1/2017 19:51	0.001	0.001	0.01	0	0.001	
11/1/2017 19:52	0.001	0.001	0.01	0	0.001	
11/1/2017 19:53	0.001	0.001	0.01	0	0.001	
11/1/2017 19:54	0.001	0	0.01	0	0.001	
11/1/2017 19:55	0	0	0.01	0	0.001	16
11/1/2017 19:56	0	0.001	0.01	0	0.001	
11/1/2017 19:57	0	0.001	0.01	0	0.001	
11/1/2017 19:58	0	0.001	0.01	0	0.001	
11/1/2017 19:59	0	0.002	0.01	0	0.001	
11/1/2017 20:00	0	0.001	0.01	0	0.001	16
11/1/2017 20:01	0	0.002	0.01	0	0.001	
11/1/2017 20:02	0	0.002	0.01	0	0.001	
11/1/2017 20:03	0	0.002	0.01	0	0.001	
11/1/2017 20:04	0	0.002	0.01	0	0.001	
11/1/2017 20:05	0	0.002	0.01	0	0.001	12
11/2/2017 12:14	0	0.009	0.015	0	0	
11/2/2017 12:15	0	0.009	0.015	0	0	8
11/2/2017 12:16	0	0.006	0.015	0	0	
11/2/2017 12:17	0	0.006	0.015	0	0	
11/2/2017 12:18	0	0.006	0.015	0	0	
11/2/2017 12:19	0	0.006	0.015	0	0	
11/2/2017 12:20	0	0.006	0.015	0	0	14
11/2/2017 12:21	0	0.006	0.015	0	0	
11/2/2017 12:22	0	0.006	0.015	0	0	
11/2/2017 12:23	0	0.005	0.015	0	0	
11/2/2017 12:24	0	0.006	0.015	0	0	
11/2/2017 12:25	0	0.005	0.015	0	0	6
11/2/2017 12:26	0	0.005	0.015	0	0	
11/2/2017 12:27	0	0.008	0.015	0	0	
11/2/2017 12:28	0.005	0.007	0.015	0	0	
11/2/2017 12:29	0.005	0.006	0.015	0	0	
11/2/2017 12:30	0.005	0.006	0.015	0	0	5
11/2/2017 12:31	0.005	0.005	0.015	0	0	
11/2/2017 12:32	0.005	0.005	0.015	0	0	
11/2/2017 12:33	0.005	0.005	0.015	0	0	
11/2/2017 12:34	0.005	0.006	0.015	0	0	
11/2/2017 12:35	0.004	0.004	0.015	0	0	1
11/2/2017 12:36	0.004	0.004	0.015	0	0	
11/2/2017 12:37	0.004	0.003	0.015	0	0	

11/2/2017 12:38	0.004	0.004	0.015	0	0	
11/2/2017 12:39	0.004	0.005	0.015	0	0	
11/2/2017 12:40	0.004	0.004	0.015	0	0	1
11/2/2017 12:41	0.004	0.004	0.015	0	0	
11/2/2017 12:42	0.004	0.004	0.015	0	0	
11/2/2017 12:43	0.004	0.006	0.015	0	0	
11/2/2017 12:44	0.004	0.006	0.015	0	0	
11/2/2017 12:45	0.004	0.005	0.015	0	0	1
11/2/2017 12:46	0.004	0.005	0.015	0	0	
11/2/2017 12:47	0.004	0.004	0.015	0	0	
11/2/2017 12:48	0.004	0.006	0.015	0	0	
11/2/2017 12:49	0.004	0.005	0.015	0	0	
11/2/2017 12:50	0.004	0.005	0.015	0	0	0
11/2/2017 12:51	0.004	0.005	0.015	0	0	
11/2/2017 12:52	0.004	0.004	0.015	0	0	
11/2/2017 12:53	0.004	0.004	0.015	0	0	
11/2/2017 12:54	0.004	0.004	0.015	0	0	
11/2/2017 12:55	0.004	0.004	0.015	0	0	0
11/2/2017 12:56	0.004	0.003	0.015	0	0	
11/2/2017 12:57	0.003	0.002	0.015	0	0	
11/2/2017 12:58	0.003	0.004	0.015	0	0	
11/2/2017 12:59	0.003	0.004	0.015	0	0	
11/2/2017 13:00	0.003	0.004	0.015	0	0	0
11/2/2017 13:01	0.003	0.004	0.015	0	0	
11/2/2017 13:02	0.003	0.003	0.015	0	0	
11/2/2017 13:03	0.003	0.002	0.015	0	0	
11/2/2017 13:04	0.003	0.004	0.015	0	0	
11/2/2017 13:05	0.003	0.003	0.015	0	0	0
11/2/2017 13:06	0.003	0.004	0.015	0	0	
11/2/2017 13:07	0.003	0.003	0.015	0	0	
11/2/2017 13:08	0.003	0.003	0.015	0	0	
11/2/2017 13:09	0.003	0.002	0.015	0	0	
11/2/2017 13:10	0.002	0.004	0.015	0	0	4
11/2/2017 13:11	0.002	0.005	0.015	0	0	
11/2/2017 13:12	0.003	0.004	0.015	0	0	
11/2/2017 13:13	0.003	0.004	0.015	0	0	
11/2/2017 13:14	0.003	0.004	0.015	0	0	
11/2/2017 13:15	0.003	0.006	0.015	0	0	-3
11/2/2017 13:16	0.003	0.005	0.015	0	0	
11/2/2017 13:17	0.003	0.005	0.015	0	0	
11/2/2017 13:18	0.003	0.002	0.015	0	0	
11/2/2017 13:19	0.003	0.004	0.015	0	0	
11/2/2017 13:20	0.003	0.004	0.015	0	0	-1
11/2/2017 13:21	0.003	0.004	0.015	0	0	
11/2/2017 13:22	0.003	0.004	0.015	0	0	
11/2/2017 13:23	0.003	0.005	0.015	0	0	
11/2/2017 13:24	0.003	0.004	0.015	0	0	
11/2/2017 13:25	0.003	0.004	0.015	0	0	0
11/2/2017 13:26	0.003	0.004	0.015	0	0	
11/2/2017 13:27	0.003	0.004	0.015	0	0	
11/2/2017 13:28	0.003	0.003	0.015	0	0	
11/2/2017 13:29	0.003	0.004	0.015	0	0	
11/2/2017 13:30	0.003	0.004	0.015	0	0	1
11/2/2017 13:31	0.003	0.003	0.015	0	0	

11/2/2017 13:32	0.003	0.004	0.015	0	0	
11/2/2017 13:33	0.003	0.002	0.015	0	0	
11/2/2017 13:34	0.003	0.004	0.015	0	0	
11/2/2017 13:35	0.003	0.002	0.015	0	0	2
11/2/2017 13:36	0.003	0.002	0.015	0	0	
11/2/2017 13:37	0.002	0.002	0.015	0	0	
11/2/2017 13:38	0.002	0.002	0.015	0	0	
11/2/2017 13:39	0.002	0.002	0.015	0	0	
11/2/2017 13:40	0.002	0.003	0.015	0	0	3
11/2/2017 13:41	0.002	0.004	0.015	0	0	
11/2/2017 13:42	0.002	0.002	0.015	0	0	
11/2/2017 13:43	0.002	0.002	0.015	0	0	
11/2/2017 13:44	0.002	0.003	0.015	0	0	
11/2/2017 13:45	0.002	0.001	0.015	0	0	2
11/2/2017 13:46	0.002	0.002	0.015	0	0	
11/2/2017 13:47	0.002	0.003	0.015	0	0	
11/2/2017 13:48	0.002	0.004	0.015	0	0	
11/2/2017 13:49	0.002	0.003	0.015	0	0	
11/2/2017 13:50	0.002	0.004	0.015	0	0	7
11/2/2017 13:51	0.002	0.003	0.015	0	0	
11/2/2017 13:52	0.002	0.003	0.015	0	0	
11/2/2017 13:53	0.002	0.002	0.015	0	0	
11/2/2017 13:54	0.002	0.003	0.015	0	0	
11/2/2017 13:55	0.002	0.003	0.015	0	0	
11/2/2017 13:55						2
11/2/2017 13:56	0.002	0.004	0.015	0	0	
11/2/2017 13:57	0.002	0.002	0.015	0	0	
11/2/2017 13:58	0.002	0.004	0.015	0	0	
11/2/2017 13:59	0.002	0.004	0.015	0	0	
11/2/2017 14:00	0.002	0.004	0.015	0	0	10
11/2/2017 14:01	0.002	0.004	0.015	0	0	
11/2/2017 14:02	0.002	0.003	0.015	0	0	
11/2/2017 14:03	0.002	0.004	0.015	0	0	
11/2/2017 14:04	0.002	0.004	0.015	0	0	
11/2/2017 14:05	0.002	0.004	0.015	0	0	11
11/2/2017 14:06	0.002	0.002	0.015	0	0	
11/2/2017 14:07	0.002	0.002	0.015	0	0	
11/2/2017 14:08	0.003	0.004	0.015	0	0	
11/2/2017 14:09	0.003	0.006	0.015	0	0	
11/2/2017 14:10	0.003	0.003	0.015	0	0	16
11/2/2017 14:11	0.003	0.004	0.015	0	0	
11/2/2017 14:12	0.003	0.004	0.015	0	0	
11/2/2017 14:13	0.003	0.002	0.015	0	0	
11/2/2017 14:14	0.003	0.002	0.015	0	0	
11/2/2017 14:15	0.003	0.003	0.015	0	0	13
11/2/2017 14:16	0.003	0.004	0.015	0	0	
11/2/2017 14:17	0.003	0.004	0.015	0	0	
11/2/2017 14:18	0.003	0.004	0.015	0	0	
11/2/2017 14:19	0.003	0.004	0.015	0	0	
11/2/2017 14:20	0.003	0.004	0.015	0	0	10
11/2/2017 14:21	0.002	0.005	0.015	0	0	
11/2/2017 14:22	0.003	0.005	0.015	0	0	
11/2/2017 14:23	0.003	0.003	0.015	0	0	
11/2/2017 14:24	0.002	0.002	0.015	0	0	

11/2/2017 14:25	0.002	0.004	0.015	0	0	11
11/2/2017 14:26	0.002	0.003	0.015	0	0	
11/2/2017 14:27	0.002	0.003	0.015	0	0	
11/2/2017 14:28	0.002	0.004	0.015	0	0	
11/2/2017 14:29	0.002	0.002	0.015	0	0	
11/2/2017 14:30	0.002	0.004	0.015	0	0	12
11/2/2017 14:31	0.002	0.002	0.015	0	0	
11/2/2017 14:32	0.002	0.002	0.015	0	0	
11/2/2017 14:33	0.002	0.003	0.015	0	0	
11/2/2017 14:34	0.002	0.002	0.015	0	0	
11/2/2017 14:35	0.002	0.002	0.015	0	0.001	11
11/2/2017 14:36	0.002	0.002	0.015	0	0.001	
11/2/2017 14:37	0.002	0.003	0.015	0	0.001	
11/2/2017 14:38	0.002	0.002	0.015	0	0.001	
11/2/2017 14:39	0.002	0.002	0.015	0	0.001	
11/2/2017 14:40	0.002	0.002	0.015	0	0.001	12
11/2/2017 14:41	0.002	0.002	0.015	0	0.001	
11/2/2017 14:42	0.001	0.002	0.015	0	0.001	
11/2/2017 14:43	0.001	0.002	0.015	0	0.001	
11/2/2017 14:44	0.001	0.002	0.015	0	0.001	
11/2/2017 14:45	0.001	0.001	0.015	0	0.001	14
11/2/2017 14:46	0.001	0.001	0.015	0	0.001	
11/2/2017 14:47	0.001	0.001	0.015	0	0.001	
11/2/2017 14:48	0.001	0.002	0.015	0	0.001	
11/2/2017 14:49	0.001	0.002	0.015	0	0.001	
11/2/2017 14:50	0.001	0.002	0.015	0	0.001	15
11/2/2017 14:51	0.001	0.002	0.015	0	0.001	
11/2/2017 14:52	0.001	0.001	0.015	0	0.001	
11/2/2017 14:53	0.001	0.002	0.015	0	0.001	
11/2/2017 14:54	0.001	0.001	0.015	0	0.001	
11/2/2017 14:55	0.001	0.002	0.015	0	0.001	18
11/2/2017 14:56	0.001	0.001	0.015	0	0.001	
11/2/2017 14:57	0.001	0.002	0.015	0	0.001	
11/2/2017 14:58	0	0	0.015	0	0.001	
11/2/2017 14:59	0	0	0.015	0	0.001	
11/2/2017 15:00	0	0.002	0.015	0	0.001	18
11/2/2017 15:01	0	0	0.015	0	0.001	
11/2/2017 15:02	0	0.002	0.015	0	0.001	
11/2/2017 15:03	0	0	0.015	0	0.001	
11/2/2017 15:04	0	0	0.015	0	0.001	
11/2/2017 15:05	0	0.002	0.015	0	0.001	15
11/2/2017 15:06	0	0	0.015	0	0.001	
11/2/2017 15:07	0	0.001	0.015	0	0.001	
11/2/2017 15:08	0	0.001	0.015	0	0.001	
11/2/2017 15:09	0	0	0.015	0	0.001	
11/2/2017 15:10	0	0	0.015	0	0.001	15
11/2/2017 15:11	0	0	0.015	0	0.001	
11/2/2017 15:12	0	0	0.015	0	0.001	
11/2/2017 15:13	0	0.002	0.015	0	0.001	
11/2/2017 15:14	0	0	0.015	0	0.001	
11/2/2017 15:15	0	0	0.015	0	0.001	18
11/2/2017 15:16	0	0	0.015	0	0.001	
11/2/2017 15:17	0	0	0.015	0	0.001	
11/2/2017 15:18	0	0.001	0.015	0	0.001	

11/2/2017 15:19	0	0.001	0.015	0	0.001	
11/2/2017 15:20	0	0	0.015	0	0.001	20
11/2/2017 15:21	0	0	0.015	0	0.001	
11/2/2017 15:22	0	0	0.015	0	0.001	
11/2/2017 15:23	0	0	0.015	0	0.001	
11/2/2017 15:24	0	0	0.015	0	0.001	
11/2/2017 15:25	0	0	0.015	0	0.001	20
11/2/2017 15:26	0	0	0.015	0	0.001	
11/2/2017 15:27	0	0	0.015	0	0.001	
11/2/2017 15:28	0	0	0.015	0	0.001	
11/2/2017 15:29	0	0	0.015	0	0.001	
11/2/2017 15:30	0	0	0.015	0	0.001	22
11/2/2017 15:31	0	0	0.015	0	0.001	
11/2/2017 15:32	0	0	0.015	0	0.001	
11/2/2017 15:33	0	0	0.015	0	0.001	
11/2/2017 15:34	0	0	0.015	0	0.001	
11/2/2017 15:35	0	0	0.015	0	0.001	22
11/2/2017 15:36	0	0	0.015	0	0.001	
11/2/2017 15:37	0	0	0.015	0	0.001	
11/2/2017 15:38	0	0	0.015	0	0.001	
11/2/2017 15:39	0	0	0.015	0	0.001	
11/2/2017 15:40	0	0	0.015	0	0.001	19
11/2/2017 15:41	0	0	0.015	0	0.001	
11/2/2017 15:42	0	0	0.015	0	0.001	
11/2/2017 15:43	0	0	0.015	0	0.001	
11/2/2017 15:44	0	0.001	0.015	0	0.001	
11/2/2017 15:45	0	0.002	0.015	0	0.001	19
11/2/2017 15:46	0	0	0.015	0	0.001	
11/2/2017 15:47	0	0	0.015	0	0.001	
11/2/2017 15:48	0	0	0.015	0	0.001	
11/2/2017 15:49	0	0	0.015	0	0.001	
11/2/2017 15:50	0	0	0.015	0	0.001	22
11/2/2017 15:51	0	0	0.015	0	0.001	
11/2/2017 15:52	0	0	0.015	0	0.001	
11/2/2017 15:53	0	0	0.015	0	0.001	
11/2/2017 15:54	0	0	0.015	0	0.001	
11/2/2017 15:55	0	0	0.015	0	0.001	23
11/2/2017 15:56	0	0	0.015	0	0.001	
11/2/2017 15:57	0	0	0.015	0	0.001	
11/2/2017 15:58	0	0	0.015	0	0.001	
11/2/2017 15:59	0	0	0.015	0	0.001	
11/2/2017 16:00	0	0	0.015	0	0.001	28
11/2/2017 16:01	0	0	0.015	0	0.001	
11/2/2017 16:02	0	0	0.015	0	0.001	
11/2/2017 16:03	0	0	0.015	0	0.001	
11/2/2017 16:04	0	0	0.015	0	0.001	
11/2/2017 16:05	0	0	0.015	0	0.001	33
11/2/2017 16:06	0	0	0.015	0	0.001	
11/2/2017 16:07	0	0	0.015	0	0.001	
11/2/2017 16:08	0	0	0.015	0	0.001	
11/2/2017 16:09	0	0	0.015	0	0.001	
11/2/2017 16:10	0	0	0.015	0	0.001	36
11/2/2017 16:11	0	0	0.015	0	0.001	
11/2/2017 16:12	0	0	0.015	0	0.001	

11/2/2017 16:13	0	0	0.015	0	0.001	
11/2/2017 16:14	0	0	0.015	0	0.001	
11/2/2017 16:15	0	0	0.015	0	0.001	35
11/2/2017 16:16	0	0	0.015	0	0.001	
11/2/2017 16:17	0	0	0.015	0	0.001	
11/2/2017 16:18	0	0	0.015	0	0.001	
11/2/2017 16:19	0	0	0.015	0	0.001	
11/2/2017 16:20	0	0	0.015	0	0.001	25
11/2/2017 16:21	0	0	0.015	0	0.001	
11/2/2017 16:22	0	0.001	0.015	0	0.001	
11/2/2017 16:23	0	0	0.015	0	0.001	
11/2/2017 16:24	0	0	0.015	0	0.001	
11/2/2017 16:25	0	0	0.015	0	0.001	18
11/2/2017 16:26	0	0.002	0.015	0	0.001	
11/2/2017 16:27	0	0	0.015	0	0.001	
11/2/2017 16:28	0	0.002	0.015	0	0.001	
11/2/2017 16:29	0	0.001	0.015	0	0.001	
11/2/2017 16:30	0	0.002	0.015	0	0.001	6
11/2/2017 16:31	0	0	0.015	0	0.001	
11/2/2017 16:32	0	0	0.015	0	0.001	
11/2/2017 16:33	0	0	0.015	0	0.001	
11/2/2017 16:34	0	0	0.015	0	0.001	
11/2/2017 16:35	0	0	0.015	0	0.001	-9
11/2/2017 16:36	0	0	0.015	0	0.001	
11/2/2017 16:37	0	0	0.015	0	0.001	
11/2/2017 16:38	0	0	0.015	0	0.001	
11/2/2017 16:39	0	0	0.015	0	0.001	
11/2/2017 16:40	0	0	0.015	0	0.001	-2
11/2/2017 16:41	0	0	0.015	0	0.001	
11/2/2017 16:42	0	0	0.015	0	0.001	
11/2/2017 16:43	0	0	0.015	0	0.001	
11/2/2017 16:44	0	0	0.015	0	0.001	
11/2/2017 16:45	0	0	0.015	0	0.001	-3
11/2/2017 16:46	0	0	0.015	0	0.001	
11/2/2017 16:47	0	0	0.015	0	0.001	
11/2/2017 16:48	0	0	0.015	0	0.001	
11/2/2017 16:49	0	0	0.015	0	0.001	
11/2/2017 16:50	0	0	0.015	0	0.001	-8
11/2/2017 16:51	0	0	0.015	0	0.001	
11/2/2017 16:52	0	0	0.015	0	0.001	
11/2/2017 16:53	0	0	0.015	0	0.001	
11/2/2017 16:54	0	0	0.015	0	0.001	
11/2/2017 16:55	0	0	0.015	0	0.001	-2
11/2/2017 16:56	0	0	0.015	0	0.001	
11/2/2017 16:57	0	0	0.015	0	0.001	
11/2/2017 16:58	0	0	0.015	0	0.001	
11/2/2017 16:59	0	0	0.015	0	0.001	
11/2/2017 17:00	0	0	0.015	0	0.001	
11/2/2017 17:00						11
11/2/2017 17:01	0	0	0.015	0	0.001	
11/2/2017 17:02	0	0	0.015	0	0.001	
11/2/2017 17:03	0	0	0.015	0	0.001	
11/2/2017 17:04	0	0	0.015	0	0.001	
11/2/2017 17:05	0	0	0.015	0	0.001	9

11/2/2017 17:06	0	0	0.015	0	0.001	
11/2/2017 17:07	0	0	0.015	0	0.001	
11/2/2017 17:08	0	0	0.015	0	0.001	
11/2/2017 17:09	0	0	0.015	0	0.001	
11/2/2017 17:10	0	0	0.015	0	0.001	7
11/2/2017 17:11	0	0	0.015	0	0.001	
11/2/2017 17:12	0	0	0.015	0	0.001	
11/2/2017 17:13	0	0	0.015	0	0.001	
11/2/2017 17:14	0	0	0.015	0	0.001	
11/2/2017 17:15	0	0	0.015	0	0.001	4
11/2/2017 17:16	0	0	0.015	0	0.001	
11/2/2017 17:17	0	0	0.015	0	0.001	
11/2/2017 17:18	0	0	0.015	0	0.001	
11/2/2017 17:19	0	0	0.015	0	0.001	
11/2/2017 17:20	0	0	0.015	0	0.001	6
11/2/2017 17:21	0	0	0.015	0	0.001	
11/2/2017 17:22	0	0	0.015	0	0.001	
11/2/2017 17:23	0	0	0.015	0	0.001	
11/2/2017 17:24	0	0	0.015	0	0.001	
11/2/2017 17:25	0	0	0.015	0	0.001	7
11/2/2017 17:26	0	0	0.015	0	0.001	
11/2/2017 17:27	0	0	0.015	0	0.001	
11/2/2017 17:28	0	0	0.015	0	0.001	
11/2/2017 17:29	0	0	0.015	0	0.001	
11/2/2017 17:30	0	0	0.015	0	0.001	4
11/2/2017 17:31	0	0	0.015	0	0.001	
11/2/2017 17:32	0	0	0.015	0	0.001	
11/2/2017 17:33	0	0	0.015	0	0.001	
11/2/2017 17:34	0	0	0.015	0	0.001	
11/2/2017 17:35	0	0	0.015	0	0.001	3
11/2/2017 17:36	0	0	0.015	0	0.001	
11/2/2017 17:37	0	0	0.015	0	0.001	
11/2/2017 17:38	0	0	0.015	0	0.001	
11/2/2017 17:39	0	0	0.015	0	0.001	
11/2/2017 17:40	0	0	0.015	0	0.001	3
11/2/2017 17:41	0	0	0.015	0	0.001	
11/2/2017 17:42	0	0	0.015	0	0.001	
11/2/2017 17:43	0	0	0.015	0	0.001	
11/2/2017 17:44	0	0	0.015	0	0.001	
11/2/2017 17:45	0	0	0.015	0	0.001	3
11/2/2017 17:46	0	0	0.015	0	0.001	
11/2/2017 17:47	0	0	0.015	0	0.001	
11/2/2017 17:48	0	0	0.015	0	0.001	
11/2/2017 17:49	0	0	0.015	0	0.001	
11/2/2017 17:50	0	0	0.015	0	0.001	4
11/2/2017 17:51	0	0	0.015	0	0.001	
11/2/2017 17:52	0	0	0.015	0	0.001	
11/2/2017 17:53	0	0	0.015	0	0.001	
11/2/2017 17:54	0	0	0.015	0	0.001	
11/2/2017 17:55	0	0	0.015	0	0.001	2
11/2/2017 17:56	0	0	0.015	0	0.001	
11/2/2017 17:57	0	0	0.015	0	0.001	
11/2/2017 17:58	0	0	0.015	0	0.001	
11/2/2017 17:59	0	0	0.015	0	0.001	

11/2/2017 18:00	0	0	0.015	0	0.001	1
11/2/2017 18:01	0	0	0.015	0	0.001	
11/2/2017 18:02	0	0	0.015	0	0.001	
11/2/2017 18:03	0	0	0.015	0	0.001	
11/2/2017 18:04	0	0	0.015	0	0.001	
11/2/2017 18:05	0	0	0.015	0	0.001	2
11/2/2017 18:06	0	0	0.015	0	0.001	
11/2/2017 18:07	0	0	0.015	0	0.001	
11/2/2017 18:08	0	0	0.015	0	0.001	
11/2/2017 18:09	0	0	0.015	0	0.001	
11/2/2017 18:10	0	0	0.015	0	0.001	6
11/2/2017 18:11	0	0	0.015	0	0.001	
11/2/2017 18:12	0	0	0.015	0	0.001	
11/2/2017 18:13	0	0	0.015	0	0.001	
11/2/2017 18:14	0	0	0.015	0	0.001	
11/2/2017 18:15	0	0	0.015	0	0.001	2
11/2/2017 18:16	0	0	0.015	0	0.001	
11/2/2017 18:17	0	0	0.015	0	0.001	
11/2/2017 18:18	0	0	0.015	0	0.001	
11/2/2017 18:19	0	0	0.015	0	0.001	
11/2/2017 18:20	0	0	0.015	0	0.001	3
11/2/2017 18:21	0	0	0.015	0	0.001	
11/2/2017 18:22	0	0	0.015	0	0.001	
11/2/2017 18:23	0	0	0.015	0	0.001	
11/2/2017 18:24	0	0	0.015	0	0.001	
11/2/2017 18:25	0	0	0.015	0	0.001	4
11/2/2017 18:26	0	0	0.015	0	0.001	
11/2/2017 18:27	0	0	0.015	0	0.001	
11/2/2017 18:28	0	0	0.015	0	0.001	
11/2/2017 18:29	0	0	0.015	0	0.001	
11/2/2017 18:30	0	0	0.015	0	0.001	4
11/2/2017 18:31	0	0	0.015	0	0.001	
11/2/2017 18:32	0	0	0.015	0	0.001	
11/2/2017 18:33	0	0	0.015	0	0.001	
11/2/2017 18:34	0	0	0.015	0	0.001	
11/2/2017 18:35	0	0	0.015	0	0.001	6
11/2/2017 18:36	0	0	0.015	0	0.001	
11/2/2017 18:37	0	0	0.015	0	0.001	
11/2/2017 18:38	0	0	0.015	0	0.001	
11/2/2017 18:39	0	0	0.015	0	0.001	
11/2/2017 18:40	0	0	0.015	0	0.001	11
11/2/2017 18:41	0	0	0.015	0	0.001	
11/2/2017 18:42	0	0	0.015	0	0.001	
11/2/2017 18:43	0	0	0.015	0	0.001	
11/2/2017 18:44	0	0	0.015	0	0.001	
11/2/2017 18:45	0	0	0.015	0	0.001	9
11/2/2017 18:46	0	0	0.015	0	0.001	
11/2/2017 18:47	0	0	0.015	0	0.001	
11/2/2017 18:48	0	0	0.015	0	0.001	
11/2/2017 18:49	0	0	0.015	0	0.001	
11/2/2017 18:50	0	0	0.015	0	0.001	10
11/2/2017 18:51	0	0	0.015	0	0.001	
11/2/2017 18:52	0	0	0.015	0	0.001	
11/2/2017 18:53	0	0	0.015	0	0.001	

11/2/2017 18:54	0	0	0.015	0	0.001	
11/2/2017 18:55	0	0	0.015	0	0.001	7
11/2/2017 18:56	0	0	0.015	0	0.001	
11/2/2017 18:57	0	0	0.015	0	0.001	
11/2/2017 18:58	0	0	0.015	0	0.001	
11/2/2017 18:59	0	0	0.015	0	0.001	
11/2/2017 19:00	0	0	0.015	0	0.001	11
11/2/2017 19:01	0	0	0.015	0	0.001	
11/2/2017 19:02	0	0	0.015	0	0.001	
11/2/2017 19:03	0	0	0.015	0	0.001	
11/2/2017 19:04	0	0	0.015	0	0.001	
11/2/2017 19:05	0	0	0.015	0	0.001	10
11/2/2017 19:06	0	0	0.015	0	0.001	
11/2/2017 19:07	0	0	0.015	0	0.001	
11/2/2017 19:08	0	0	0.015	0	0.001	
11/2/2017 19:09	0	0	0.015	0	0.001	
11/2/2017 19:10	0	0	0.015	0	0.001	11
11/2/2017 19:11	0	0	0.015	0	0.001	
11/2/2017 19:12	0	0	0.015	0	0.001	
11/2/2017 19:13	0	0	0.015	0	0.001	
11/2/2017 19:14	0	0	0.015	0	0.001	
11/2/2017 19:15	0	0	0.015	0	0.001	3
11/2/2017 19:16	0	0	0.015	0	0.001	
11/2/2017 19:17	0	0	0.015	0	0.001	
11/2/2017 19:18	0	0	0.015	0	0.001	
11/2/2017 19:19	0	0	0.015	0	0.001	
11/2/2017 19:20	0	0	0.015	0	0.001	11
11/2/2017 19:21	0	0	0.015	0	0.001	
11/2/2017 19:22	0	0	0.015	0	0.001	
11/2/2017 19:23	0	0	0.015	0	0.001	
11/2/2017 19:24	0	0	0.015	0	0.001	
11/2/2017 19:25	0	0	0.015	0	0.001	10
11/2/2017 19:26	0	0	0.015	0	0.001	
11/2/2017 19:27	0	0	0.015	0	0.001	
11/2/2017 19:28	0	0.001	0.015	0	0.001	
11/2/2017 19:29	0	0	0.015	0	0.001	
11/2/2017 19:30	0	0	0.015	0	0.001	12
11/2/2017 19:31	0	0	0.015	0	0.001	
11/2/2017 19:32	0	0	0.015	0	0.001	
11/2/2017 19:33	0	0	0.015	0	0.001	
11/2/2017 19:34	0	0	0.015	0	0.001	
11/2/2017 19:35	0	0	0.015	0	0.001	9
11/2/2017 19:36	0	0	0.015	0	0.001	
11/2/2017 19:37	0	0	0.015	0	0.001	
11/2/2017 19:38	0	0	0.015	0	0.001	
11/2/2017 19:39	0	0	0.015	0	0.001	
11/2/2017 19:40	0	0	0.015	0	0.001	10
11/2/2017 19:41	0	0	0.015	0	0.001	
11/2/2017 19:42	0	0.001	0.015	0	0.001	
11/2/2017 19:43	0	0	0.015	0	0.001	
11/2/2017 19:44	0	0	0.015	0	0.001	
11/2/2017 19:45	0	0	0.015	0	0.001	10
11/2/2017 19:46	0	0	0.015	0	0.001	
11/2/2017 19:47	0	0	0.015	0	0.001	

11/2/2017 19:48	0	0	0.015	0	0.001	
11/2/2017 19:49	0	0	0.015	0	0.001	
11/2/2017 19:50	0	0.001	0.015	0	0.001	11
11/2/2017 19:51	0	0	0.015	0	0.001	
11/2/2017 19:52	0	0	0.015	0	0.001	
11/2/2017 19:53	0	0	0.015	0	0.001	
11/2/2017 19:54	0	0	0.015	0	0.001	
11/2/2017 19:55	0	0	0.015	0	0.001	11
11/2/2017 19:56	0	0	0.015	0	0.001	
11/2/2017 19:57	0	0	0.015	0	0.001	
11/2/2017 19:58	0	0	0.015	0	0.001	
11/2/2017 19:59	0	0.001	0.015	0	0.001	
11/2/2017 20:00	0	0	0.015	0	0.001	10
11/2/2017 20:01	0	0	0.015	0	0.001	
11/2/2017 20:02	0	0.002	0.015	0	0.001	
11/2/2017 20:03	0	0	0.015	0	0.001	
11/2/2017 20:04	0	0.001	0.015	0	0.001	
11/2/2017 20:05	0	0.001	0.015	0	0.001	13
11/2/2017 20:06	0	0.001	0.015	0	0.001	
11/2/2017 20:07	0	0.001	0.015	0	0.001	
11/2/2017 20:08	0	0	0.015	0	0.001	
11/2/2017 20:09	0	0.001	0.015	0	0.001	
11/2/2017 20:10	0	0.002	0.015	0	0.001	11
11/2/2017 20:11	0	0.001	0.015	0	0.001	
11/2/2017 20:12	0	0	0.015	0	0.001	
11/2/2017 20:13	0	0	0.015	0	0.001	
11/2/2017 20:14	0	0.001	0.015	0	0.001	
11/2/2017 20:15	0	0.001	0.015	0	0.001	8
11/2/2017 20:16	0	0.001	0.015	0	0.001	
11/2/2017 20:17	0	0.001	0.015	0	0.001	
11/2/2017 20:18	0	0.001	0.015	0	0.001	
11/2/2017 20:19	0	0.001	0.015	0	0.001	
11/2/2017 20:20	0	0.001	0.015	0	0.001	12
11/2/2017 20:21	0	0.001	0.015	0	0.001	
11/2/2017 20:22	0	0.001	0.015	0	0.001	
11/2/2017 20:25						10
11/2/2017 20:30						8
11/2/2017 20:35						16
11/2/2017 20:37	0	0	0	0	0	
11/2/2017 20:38	0	0	0.001	0	0	
11/2/2017 20:39	0	0	0.001	0	0	
11/2/2017 20:40	0	0	0.001	0	0	11
11/2/2017 20:41	0	0	0.001	0	0	
11/2/2017 20:42	0	0	0.001	0	0	
11/2/2017 20:43	0	0	0.001	0	0	
11/2/2017 20:44	0	0	0.001	0	0	
11/2/2017 20:45	0	0.001	0.001	0	0	18
11/2/2017 20:46	0	0	0.001	0	0	
11/6/2017 13:54	0	0.006	0.006	0	0	
11/6/2017 13:55	0	0.006	0.008	0	0	
11/6/2017 13:56	0	0.009	0.009	0	0	
11/6/2017 13:57	0	0.008	0.009	0	0	
11/6/2017 13:58	0	0.006	0.009	0	0	
11/6/2017 13:59	0	0.006	0.009	0	0	

11/6/2017 14:00	0	0.006	0.009	0	0	55
11/6/2017 14:01	0	0.006	0.009	0	0	
11/6/2017 14:02	0	0.007	0.009	0	0	
11/6/2017 14:03	0	0.006	0.009	0	0	
11/6/2017 14:04	0	0.005	0.009	0	0	
11/6/2017 14:05	0	0.004	0.009	0	0	65
11/6/2017 14:06	0	0.005	0.009	0	0	
11/6/2017 14:07	0	0.004	0.009	0	0	
11/6/2017 14:08	0	0.005	0.009	0	0	
11/6/2017 14:09	0.005	0.006	0.009	0	0	
11/6/2017 14:10	0.005	0.004	0.009	0	0	45
11/6/2017 14:11	0.005	0.004	0.009	0	0	
11/6/2017 14:12	0.004	0.004	0.009	0	0	
11/6/2017 14:13	0.004	0.004	0.009	0	0	
11/6/2017 14:14	0.004	0.005	0.009	0	0	
11/6/2017 14:15	0.004	0.006	0.009	0	0	20
11/6/2017 14:16	0.004	0.004	0.009	0	0	
11/6/2017 14:17	0.004	0.003	0.009	0	0	
11/6/2017 14:18	0.004	0.004	0.009	0	0	
11/6/2017 14:19	0.004	0.004	0.009	0	0	
11/6/2017 14:20	0.004	0.003	0.009	0	0	13
11/6/2017 14:21	0.004	0.005	0.009	0	0	
11/6/2017 14:22	0.003	0.003	0.009	0	0	
11/6/2017 14:23	0.003	0.004	0.009	0	0	
11/6/2017 14:24	0.003	0.004	0.009	0	0	
11/6/2017 14:25	0.003	0.004	0.009	0	0	24
11/6/2017 14:26	0.003	0.005	0.009	0	0	
11/6/2017 14:27	0.003	0.004	0.009	0	0	
11/6/2017 14:28	0.003	0.003	0.009	0	0	
11/6/2017 14:29	0.003	0.002	0.009	0	0	
11/6/2017 14:30	0.003	0.003	0.009	0	0	14
11/6/2017 14:31	0.003	0.004	0.009	0	0	
11/6/2017 14:32	0.003	0.004	0.009	0	0	
11/6/2017 14:33	0.003	0.003	0.009	0	0	
11/6/2017 14:34	0.003	0.002	0.009	0	0	
11/6/2017 14:35	0.002	0.004	0.009	0	0	14
11/6/2017 14:36	0.003	0.003	0.009	0	0	
11/6/2017 14:37	0.003	0.005	0.009	0	0	
11/6/2017 14:38	0.003	0.004	0.009	0	0	
11/6/2017 14:39	0.003	0.004	0.009	0	0	
11/6/2017 14:40	0.003	0.004	0.009	0	0	11
11/6/2017 14:41	0.003	0.004	0.009	0	0	
11/6/2017 14:42	0.003	0.004	0.009	0	0	
11/6/2017 14:43	0.003	0.004	0.009	0	0	
11/6/2017 14:44	0.003	0.002	0.009	0	0	
11/6/2017 14:45	0.003	0.004	0.009	0	0	0
11/6/2017 14:46	0.003	0.003	0.009	0	0	
11/6/2017 14:47	0.003	0.004	0.009	0	0	
11/6/2017 14:48	0.003	0.002	0.009	0	0	
11/6/2017 14:49	0.003	0.003	0.009	0	0	
11/6/2017 14:50	0.003	0.002	0.009	0	0	11
11/6/2017 14:51	0.003	0.004	0.009	0	0	
11/6/2017 14:52	0.003	0.004	0.009	0	0	
11/6/2017 14:53	0.003	0.003	0.009	0	0	

11/6/2017 14:54	0.003	0.004	0.009	0	0	
11/6/2017 14:55	0.003	0.004	0.009	0	0	9
11/6/2017 14:56	0.003	0.002	0.009	0	0	
11/6/2017 14:57	0.003	0.002	0.009	0	0	
11/6/2017 14:58	0.002	0.004	0.009	0	0	
11/6/2017 14:59	0.002	0.004	0.009	0	0	
11/6/2017 15:00	0.003	0.004	0.009	0	0	9
11/6/2017 15:01	0.003	0.004	0.009	0	0	
11/6/2017 15:02	0.003	0.004	0.009	0	0	
11/6/2017 15:03	0.003	0.004	0.009	0	0	
11/6/2017 15:04	0.003	0.004	0.009	0	0	
11/6/2017 15:05	0.003	0.004	0.009	0	0	15
11/6/2017 15:06	0.003	0.004	0.009	0	0	
11/6/2017 15:07	0.003	0.004	0.009	0	0	
11/6/2017 15:08	0.003	0.005	0.009	0	0	
11/6/2017 15:09	0.003	0.004	0.009	0	0	
11/6/2017 15:10	0.003	0.004	0.009	0	0	20
11/6/2017 15:11	0.003	0.004	0.009	0	0	
11/6/2017 15:12	0.003	0.004	0.009	0	0	
11/6/2017 15:13	0.003	0.004	0.009	0	0	
11/6/2017 15:14	0.003	0.003	0.009	0	0	
11/6/2017 15:15	0.003	0.003	0.009	0	0	15
11/6/2017 15:16	0.003	0.004	0.009	0	0	
11/6/2017 15:17	0.003	0.003	0.009	0	0	
11/6/2017 15:18	0.003	0.005	0.009	0	0	
11/6/2017 15:19	0.003	0.005	0.009	0	0	
11/6/2017 15:20	0.003	0.004	0.009	0	0	15
11/6/2017 15:21	0.003	0.004	0.009	0	0	
11/6/2017 15:22	0.003	0.004	0.009	0	0	
11/6/2017 15:23	0.003	0.004	0.009	0	0	
11/6/2017 15:24	0.003	0.004	0.009	0	0	
11/6/2017 15:25	0.003	0.004	0.009	0	0	23
11/6/2017 15:26	0.003	0.003	0.009	0	0	
11/6/2017 15:27	0.003	0.004	0.009	0	0	
11/6/2017 15:28	0.003	0.004	0.009	0	0	
11/6/2017 15:29	0.003	0.004	0.009	0	0	
11/6/2017 15:30	0.003	0.004	0.009	0	0	22
11/6/2017 15:31	0.003	0.004	0.012	0	0	
11/6/2017 15:32	0.003	0.004	0.012	0	0	
11/6/2017 15:33	0.003	0.002	0.012	0	0	
11/6/2017 15:34	0.003	0.004	0.012	0	0	
11/6/2017 15:35	0.003	0.004	0.012	0	0	23
11/6/2017 15:36	0.003	0.004	0.012	0	0	
11/6/2017 15:37	0.003	0.002	0.012	0	0	
11/6/2017 15:38	0.003	0.003	0.012	0	0	
11/6/2017 15:39	0.003	0.004	0.012	0	0	
11/6/2017 15:40	0.003	0.002	0.012	0	0	21
11/6/2017 15:41	0.003	0.003	0.012	0	0	
11/6/2017 15:42	0.003	0.001	0.012	0	0	
11/6/2017 15:43	0.002	0.002	0.012	0	0	
11/6/2017 15:44	0.002	0.002	0.012	0	0	
11/6/2017 15:45	0.002	0.002	0.012	0	0	31
11/6/2017 15:46	0.002	0.003	0.012	0	0	
11/6/2017 15:47	0.002	0.004	0.012	0	0	

11/6/2017 15:48	0.002	0.004	0.012	0	0	
11/6/2017 15:49	0.002	0.002	0.012	0	0	
11/6/2017 15:50	0.002	0.003	0.012	0	0	25
11/6/2017 15:51	0.002	0.004	0.012	0	0	
11/6/2017 15:52	0.002	0.002	0.012	0	0	
11/6/2017 15:53	0.002	0.002	0.012	0	0	
11/6/2017 15:54	0.002	0.003	0.012	0	0	
11/6/2017 15:55	0.002	0.002	0.012	0	0	22
11/6/2017 15:56	0.002	0.002	0.012	0	0	
11/6/2017 15:57	0.002	0.002	0.012	0	0	
11/6/2017 15:58	0.002	0.002	0.012	0	0	
11/6/2017 15:59	0.002	0.002	0.012	0	0	
11/6/2017 16:00	0.002	0.002	0.012	0	0	27
11/6/2017 16:01	0.002	0.001	0.012	0	0	
11/6/2017 16:02	0.002	0.002	0.012	0	0	
11/6/2017 16:03	0.002	0.003	0.012	0	0	
11/6/2017 16:04	0.001	0.002	0.012	0	0	
11/6/2017 16:05	0.001	0.004	0.012	0	0	22
11/6/2017 16:06	0.001	0.002	0.012	0	0	
11/6/2017 16:07	0.001	0.002	0.012	0	0	
11/6/2017 16:08	0.001	0.002	0.012	0	0	
11/6/2017 16:09	0.001	0.002	0.012	0	0	
11/6/2017 16:10	0.001	0.002	0.012	0	0	19
11/6/2017 16:11	0.001	0.004	0.012	0	0	
11/6/2017 16:12	0.001	0.002	0.012	0	0	
11/6/2017 16:13	0.001	0.002	0.012	0	0	
11/6/2017 16:14	0.001	0.002	0.012	0	0	
11/6/2017 16:15	0.002	0.002	0.012	0	0	18
11/6/2017 16:16	0.002	0.003	0.012	0	0	
11/6/2017 16:17	0.002	0.004	0.012	0	0	
11/6/2017 16:18	0.002	0.003	0.012	0	0	
11/6/2017 16:19	0.002	0.003	0.012	0	0	
11/6/2017 16:20	0.002	0.002	0.012	0	0	-6
11/6/2017 16:21	0.002	0.004	0.012	0	0	
11/6/2017 16:22	0.002	0.002	0.012	0	0	
11/6/2017 16:23	0.002	0.002	0.012	0	0	
11/6/2017 16:24	0.002	0.003	0.012	0	0.001	
11/6/2017 16:25	0.002	0.002	0.012	0	0.001	-10
11/6/2017 16:26	0.002	0.001	0.012	0	0.001	
11/6/2017 16:27	0.002	0.002	0.012	0	0.001	
11/6/2017 16:28	0.002	0.002	0.012	0	0.001	
11/6/2017 16:29	0.002	0.002	0.012	0	0.001	
11/6/2017 16:30	0.002	0.003	0.012	0	0.001	-10
11/6/2017 16:31	0.002	0.002	0.012	0	0.001	
11/6/2017 16:32	0.002	0.002	0.012	0	0.001	
11/6/2017 16:33	0.001	0.002	0.012	0	0.001	
11/6/2017 16:34	0.001	0.002	0.012	0	0.001	
11/6/2017 16:35	0.001	0.002	0.012	0	0.001	-8
11/6/2017 16:36	0.001	0.002	0.012	0	0.001	
11/6/2017 16:37	0.001	0.002	0.012	0	0.001	
11/6/2017 16:38	0.001	0.002	0.012	0	0.001	
11/6/2017 16:39	0.001	0.002	0.012	0	0.001	
11/6/2017 16:40	0.001	0.002	0.012	0	0.001	5
11/6/2017 16:41	0.001	0.002	0.012	0	0.001	

11/6/2017 16:42	0.001	0.001	0.012	0	0.001	
11/6/2017 16:43	0.001	0.002	0.012	0	0.001	
11/6/2017 16:44	0.001	0.002	0.012	0	0.001	
11/6/2017 16:45	0.001	0.002	0.012	0	0.001	10
11/6/2017 16:46	0.001	0.002	0.012	0	0.001	
11/6/2017 16:47	0.001	0.002	0.012	0	0.001	
11/6/2017 16:48	0.001	0.004	0.012	0	0.001	
11/6/2017 16:49	0.001	0.002	0.012	0	0.001	
11/6/2017 16:50	0.001	0.004	0.012	0	0.001	12
11/6/2017 16:51	0.001	0.002	0.012	0	0.001	
11/6/2017 16:52	0.001	0.003	0.012	0	0.001	
11/6/2017 16:53	0.002	0.004	0.012	0	0.001	
11/6/2017 16:54	0.002	0.004	0.012	0	0.001	
11/6/2017 16:55	0.002	0.003	0.012	0	0.001	-8
11/6/2017 16:56	0.002	0.004	0.012	0	0.001	
11/6/2017 16:57	0.002	0.004	0.012	0	0.001	
11/6/2017 16:58	0.002	0.003	0.012	0	0.001	
11/6/2017 16:59	0.002	0.003	0.012	0	0.001	
11/6/2017 17:00	0.002	0.002	0.012	0	0.001	3
11/6/2017 17:01	0.002	0.002	0.012	0	0.001	
11/6/2017 17:02	0.002	0.003	0.012	0	0.001	
11/6/2017 17:03	0.002	0.002	0.012	0	0.001	
11/6/2017 17:04	0.002	0.002	0.012	0	0.001	
11/6/2017 17:05	0.002	0.004	0.012	0	0.001	9
11/6/2017 17:06	0.002	0.004	0.012	0	0.001	
11/6/2017 17:07	0.002	0.002	0.012	0	0.001	
11/6/2017 17:08	0.002	0.002	0.012	0	0.001	
11/6/2017 17:09	0.002	0.002	0.012	0	0.001	
11/6/2017 17:10	0.002	0.003	0.012	0	0.001	12
11/6/2017 17:11	0.002	0.002	0.012	0	0.001	
11/6/2017 17:12	0.002	0.003	0.012	0	0.001	
11/6/2017 17:13	0.002	0.002	0.012	0	0.001	
11/6/2017 17:14	0.002	0.003	0.012	0	0.001	
11/6/2017 17:15	0.002	0.003	0.012	0	0.001	-2
11/6/2017 17:16	0.002	0.004	0.012	0	0.001	
11/6/2017 17:17	0.002	0.002	0.012	0	0.001	
11/6/2017 17:18	0.002	0.003	0.012	0	0.001	
11/6/2017 17:19	0.002	0.002	0.012	0	0.001	
11/6/2017 17:20	0.002	0.002	0.012	0	0.001	2
11/6/2017 17:21	0.002	0.004	0.012	0	0.001	
11/6/2017 17:22	0.002	0.005	0.012	0	0.001	
11/6/2017 17:23	0.002	0.004	0.012	0	0.001	
11/6/2017 17:24	0.002	0.004	0.012	0	0.001	
11/6/2017 17:25	0.002	0.004	0.012	0	0.001	18
11/6/2017 17:26	0.002	0.004	0.012	0	0.001	
11/6/2017 17:27	0.002	0.004	0.012	0	0.001	
11/6/2017 17:28	0.002	0.002	0.012	0	0.001	
11/6/2017 17:29	0.002	0.004	0.012	0	0.001	
11/6/2017 17:30	0.002	0.004	0.012	0	0.001	11
11/6/2017 17:31	0.002	0.004	0.012	0	0.001	
11/6/2017 17:32	0.002	0.004	0.012	0	0.001	
11/6/2017 17:33	0.002	0.004	0.012	0	0.001	
11/6/2017 17:34	0.002	0.004	0.012	0	0.001	
11/6/2017 17:35	0.003	0.004	0.012	0	0.001	16

11/6/2017 17:36	0.003	0.003	0.012	0	0.001	
11/6/2017 17:37	0.002	0.002	0.012	0	0.001	
11/6/2017 17:38	0.002	0.003	0.012	0	0.001	
11/6/2017 17:39	0.002	0.002	0.012	0	0.001	
11/6/2017 17:40	0.002	0.004	0.012	0	0.001	16
11/6/2017 17:41	0.002	0.004	0.012	0	0.001	
11/6/2017 17:42	0.002	0.003	0.012	0	0.001	
11/6/2017 17:43	0.002	0.004	0.012	0	0.001	
11/6/2017 17:44	0.002	0.004	0.012	0	0.001	
11/6/2017 17:45	0.002	0.003	0.012	0	0.001	17
11/6/2017 17:46	0.002	0.004	0.012	0	0.001	
11/6/2017 17:47	0.002	0.003	0.012	0	0.001	
11/6/2017 17:48	0.002	0.004	0.012	0	0.001	
11/6/2017 17:49	0.002	0.003	0.012	0	0.001	
11/6/2017 17:50	0.002	0.002	0.012	0	0.001	14
11/6/2017 17:51	0.002	0.001	0.012	0	0.001	
11/6/2017 17:52	0.002	0.002	0.012	0	0.001	
11/6/2017 17:53	0.002	0.002	0.012	0	0.001	
11/6/2017 17:54	0.002	0.002	0.012	0	0.001	
11/6/2017 17:55	0.002	0.002	0.012	0	0.001	13
11/6/2017 17:56	0.002	0.003	0.012	0	0.001	
11/6/2017 17:57	0.002	0.002	0.012	0	0.001	
11/6/2017 17:58	0.002	0.002	0.012	0	0.001	
11/6/2017 17:59	0.002	0.002	0.012	0	0.001	
11/6/2017 18:00	0.001	0.001	0.012	0	0.001	19
11/6/2017 18:01	0.001	0.002	0.012	0	0.001	
11/6/2017 18:02	0.001	0.002	0.012	0	0.001	
11/6/2017 18:03	0.001	0.003	0.012	0	0.001	
11/6/2017 18:04	0.001	0.004	0.012	0	0.001	
11/6/2017 18:05	0.001	0.002	0.012	0	0.001	20
11/6/2017 18:06	0.001	0.001	0.012	0	0.001	
11/6/2017 18:07	0.001	0.002	0.012	0	0.001	
11/6/2017 18:08	0.001	0.003	0.012	0	0.001	
11/6/2017 18:09	0.001	0.002	0.012	0	0.001	
11/6/2017 18:10	0.001	0.002	0.012	0	0.001	16
11/6/2017 18:11	0.001	0.002	0.012	0	0.001	
11/6/2017 18:12	0.001	0.002	0.012	0	0.001	
11/6/2017 18:13	0.001	0.003	0.012	0	0.001	
11/6/2017 18:14	0.001	0.002	0.012	0	0.001	
11/6/2017 18:15	0.001	0.002	0.012	0	0.001	17
11/6/2017 18:16	0.001	0.001	0.012	0	0.001	
11/6/2017 18:17	0.001	0.002	0.012	0	0.001	
11/6/2017 18:18	0.001	0.002	0.012	0	0.001	
11/6/2017 18:19	0.001	0.002	0.012	0	0.001	
11/6/2017 18:20	0.001	0.002	0.012	0	0.001	16
11/6/2017 18:21	0.001	0	0.012	0	0.001	
11/6/2017 18:22	0.001	0.001	0.012	0	0.001	
11/6/2017 18:23	0.001	0	0.012	0	0.001	
11/6/2017 18:24	0.001	0.001	0.012	0	0.001	
11/6/2017 18:25	0.001	0.004	0.012	0	0.001	21
11/6/2017 18:26	0.001	0.002	0.012	0	0.001	
11/6/2017 18:27	0.001	0.002	0.012	0	0.001	
11/6/2017 18:28	0.001	0.001	0.012	0	0.001	
11/6/2017 18:29	0.001	0.002	0.012	0	0.001	

11/6/2017 18:30	0.001	0.002	0.012	0	0.001	21
11/6/2017 18:31	0.001	0.004	0.012	0	0.001	
11/6/2017 18:32	0.001	0.003	0.012	0	0.001	
11/6/2017 18:33	0.001	0.003	0.012	0	0.001	
11/6/2017 18:34	0.001	0.001	0.012	0	0.001	
11/6/2017 18:35	0.001	0.003	0.012	0	0.001	8
11/6/2017 18:36	0.001	0.002	0.012	0	0.001	
11/6/2017 18:37	0.001	0.002	0.012	0	0.001	
11/6/2017 18:38	0.001	0.003	0.012	0	0.001	
11/6/2017 18:39	0.002	0.002	0.012	0	0.001	
11/6/2017 18:40	0.002	0.003	0.012	0	0.001	18
11/6/2017 18:41	0.002	0.002	0.012	0	0.001	
11/6/2017 18:42	0.002	0.002	0.012	0	0.001	
11/6/2017 18:43	0.002	0.002	0.012	0	0.001	
11/6/2017 18:44	0.002	0.003	0.012	0	0.001	
11/6/2017 18:45	0.002	0.003	0.012	0	0.001	6
11/6/2017 18:46	0.002	0.002	0.012	0	0.001	
11/6/2017 18:47	0.002	0.002	0.012	0	0.001	
11/6/2017 18:48	0.002	0.002	0.012	0	0.001	
11/6/2017 18:49	0.002	0.003	0.012	0	0.001	
11/6/2017 18:50	0.002	0.002	0.012	0	0.001	6
11/6/2017 18:51	0.002	0.002	0.012	0	0.001	
11/6/2017 18:52	0.002	0.002	0.012	0	0.001	
11/6/2017 18:53	0.002	0.003	0.012	0	0.001	
11/6/2017 18:54	0.002	0.004	0.012	0	0.001	
11/6/2017 18:55	0.002	0.004	0.012	0	0.001	15
11/6/2017 18:56	0.002	0.002	0.012	0	0.001	
11/6/2017 18:57	0.002	0.002	0.012	0	0.001	
11/6/2017 18:58	0.001	0.003	0.012	0	0.001	
11/6/2017 18:59	0.002	0.002	0.012	0	0.001	
11/6/2017 19:00	0.001	0.002	0.012	0	0.001	11
11/6/2017 19:01	0.001	0.002	0.012	0	0.001	
11/6/2017 19:02	0.001	0.003	0.012	0	0.001	
11/6/2017 19:03	0.001	0.004	0.012	0	0.001	
11/6/2017 19:04	0.001	0.004	0.012	0	0.001	
11/6/2017 19:05	0.001	0.002	0.012	0	0.001	15
11/6/2017 19:06	0.001	0.002	0.012	0	0.001	
11/6/2017 19:07	0.001	0.002	0.012	0	0.001	
11/6/2017 19:08	0.001	0.002	0.012	0	0.001	
11/6/2017 19:09	0.001	0.001	0.012	0	0.001	
11/6/2017 19:10	0.001	0.002	0.012	0	0.001	14
11/6/2017 19:11	0.001	0.002	0.012	0	0.001	
11/6/2017 19:12	0.001	0.002	0.012	0	0.001	
11/6/2017 19:13	0.001	0.004	0.012	0	0.001	
11/6/2017 19:14	0.001	0.002	0.012	0	0.001	
11/6/2017 19:15	0.001	0.002	0.012	0	0.001	13
11/6/2017 19:16	0.001	0.002	0.012	0	0.001	
11/6/2017 19:17	0.001	0.002	0.012	0	0.001	
11/6/2017 19:18	0.001	0.001	0.012	0	0.001	
11/6/2017 19:19	0.001	0	0.012	0	0.001	
11/6/2017 19:20	0.001	0.002	0.012	0	0.001	16
11/6/2017 19:21	0.001	0.002	0.012	0	0.001	
11/6/2017 19:22	0.001	0.001	0.012	0	0.001	
11/6/2017 19:23	0.001	0.001	0.012	0	0.001	

11/6/2017 19:24	0.001	0.002	0.012	0	0.001	
11/6/2017 19:25	0.001	0.004	0.012	0	0.001	17
11/6/2017 19:26	0.001	0.002	0.012	0	0.001	
11/6/2017 19:27	0.001	0.003	0.012	0	0.001	
11/6/2017 19:28	0.001	0.002	0.012	0	0.001	
11/6/2017 19:29	0.001	0.001	0.012	0	0.001	
11/6/2017 19:30	0.001	0.002	0.012	0	0.001	13
11/6/2017 19:31	0.001	0.003	0.012	0	0.001	
11/6/2017 19:32	0.001	0.002	0.012	0	0.001	
11/6/2017 19:33	0.001	0.002	0.012	0	0.001	
11/6/2017 19:34	0.001	0.002	0.012	0	0.001	
11/6/2017 19:35	0.001	0.002	0.012	0	0.001	8
11/6/2017 19:36	0.001	0.004	0.012	0	0.001	
11/6/2017 19:37	0.001	0.003	0.012	0	0.001	
11/6/2017 19:38	0.001	0.002	0.012	0	0.001	
11/6/2017 19:39	0.001	0.002	0.012	0	0.001	
11/6/2017 19:40	0.001	0.003	0.012	0	0.001	1
11/6/2017 19:41	0.001	0.004	0.012	0	0.001	
11/6/2017 19:42	0.001	0.002	0.012	0	0.001	
11/6/2017 19:43	0.001	0.002	0.012	0	0.001	
11/6/2017 19:44	0.001	0.002	0.012	0	0.001	
11/6/2017 19:45	0.001	0.002	0.012	0	0.001	1
11/6/2017 19:46	0.001	0.002	0.012	0	0.001	
11/6/2017 19:47	0.001	0.001	0.012	0	0.001	
11/6/2017 19:48	0.001	0.002	0.012	0	0.001	
11/6/2017 19:49	0.001	0.002	0.012	0	0.001	
11/6/2017 19:50	0.001	0.002	0.012	0	0.001	6
11/6/2017 19:51	0.001	0.002	0.012	0	0.001	
11/6/2017 19:52	0.001	0.002	0.012	0	0.001	
11/6/2017 19:53	0.001	0.003	0.012	0	0.001	
11/6/2017 19:54	0.001	0.003	0.012	0	0.001	
11/6/2017 19:55	0.001	0.001	0.012	0	0.001	4
11/6/2017 19:56	0.001	0.001	0.012	0	0.001	
11/6/2017 19:57	0.001	0.002	0.012	0	0.001	
11/6/2017 19:58	0.001	0.001	0.012	0	0.001	
11/6/2017 19:59	0.001	0.002	0.012	0	0.001	
11/6/2017 20:00	0.001	0.003	0.012	0	0.001	6
11/6/2017 20:01	0.001	0.002	0.012	0	0.001	
11/6/2017 20:02	0.001	0.002	0.012	0	0.001	
11/6/2017 20:03	0.001	0.004	0.012	0	0.001	
11/6/2017 20:04	0.001	0	0.012	0	0.001	
11/6/2017 20:05	0.001	0.002	0.012	0	0.001	17
11/6/2017 20:06	0.001	0.002	0.012	0	0.001	
11/6/2017 20:07	0.001	0.001	0.012	0	0.001	
11/6/2017 20:08	0.001	0.002	0.012	0	0.001	
11/6/2017 20:09	0.001	0.002	0.012	0	0.001	
11/6/2017 20:10	0.001	0.002	0.012	0	0.001	26
11/6/2017 20:11	0.001	0.002	0.012	0	0.001	
11/6/2017 20:12	0.001	0.002	0.012	0	0.001	
11/6/2017 20:13	0.001	0.001	0.012	0	0.001	
11/6/2017 20:14	0.001	0.004	0.012	0	0.001	
11/6/2017 20:15	0.001	0.003	0.012	0	0.001	24
11/6/2017 20:16	0.001	0.002	0.012	0	0.001	
11/6/2017 20:17	0.001	0.002	0.012	0	0.001	

11/6/2017 20:18	0.001	0.001	0.012	0	0.001	
11/6/2017 20:19	0.001	0.002	0.012	0	0.001	
11/6/2017 20:20	0.001	0.001	0.012	0	0.001	23
11/6/2017 20:21	0.001	0.004	0.012	0	0.001	
11/6/2017 20:22	0.001	0.002	0.012	0	0.001	
11/6/2017 20:23	0.001	0.004	0.012	0	0.001	
11/6/2017 20:24	0.002	0.002	0.012	0	0.001	
11/6/2017 20:25	0.002	0.004	0.012	0	0.001	24
11/6/2017 20:26	0.002	0.002	0.012	0	0.001	
11/6/2017 20:27	0.002	0.002	0.012	0	0.001	
11/6/2017 20:28	0.002	0.004	0.012	0	0.001	
11/6/2017 20:29	0.002	0.005	0.012	0	0.001	
11/6/2017 20:30	0.002	0.005	0.012	0	0.001	27
11/6/2017 20:31	0.002	0.005	0.012	0	0.001	
11/6/2017 20:32	0.002	0.004	0.012	0	0.001	
11/6/2017 20:33	0.002	0.004	0.012	0	0.001	
11/6/2017 20:34	0.002	0.004	0.012	0	0.002	
11/6/2017 20:35	0.002	0.003	0.012	0	0.002	23
11/6/2017 20:36	0.002	0.004	0.012	0	0.002	
11/6/2017 20:37	0.003	0.003	0.012	0	0.002	
11/6/2017 20:38	0.003	0.003	0.012	0	0.002	
11/6/2017 20:39	0.003	0.004	0.012	0	0.002	
11/6/2017 20:40	0.003	0.004	0.012	0	0.002	23
11/6/2017 20:41	0.003	0.004	0.012	0	0.002	
11/6/2017 20:42	0.003	0.005	0.012	0	0.002	
11/6/2017 20:43	0.003	0.002	0.012	0	0.002	
11/6/2017 20:44	0.003	0.004	0.012	0	0.002	
11/6/2017 20:45	0.003	0.004	0.012	0	0.002	14
11/6/2017 20:46	0.003	0.005	0.012	0	0.002	
11/6/2017 20:47	0.003	0.004	0.012	0	0.002	
11/6/2017 20:48	0.003	0.004	0.012	0	0.002	
11/6/2017 20:49	0.003	0.005	0.012	0	0.002	
11/6/2017 20:50	0.003	0.006	0.012	0	0.002	11
11/6/2017 20:51	0.003	0.004	0.012	0	0.002	
11/6/2017 20:52	0.003	0.003	0.012	0	0.002	
11/6/2017 20:53	0.003	0.002	0.012	0	0.002	
11/6/2017 20:54	0.003	0.003	0.012	0	0.002	
11/6/2017 20:55	0.003	0.004	0.012	0	0.002	19
11/7/2017 14:21	0	0.007	0.01	0	0	
11/7/2017 14:22	0	0.006	0.01	0	0	
11/7/2017 14:23	0	0.006	0.01	0	0	
11/7/2017 14:24	0	0.006	0.01	0	0	
11/7/2017 14:25	0	0.006	0.01	0	0	7
11/7/2017 14:26	0	0.005	0.01	0	0	
11/7/2017 14:27	0	0.004	0.01	0	0	
11/7/2017 14:28	0	0.006	0.01	0	0	
11/7/2017 14:29	0	0.006	0.01	0	0	
11/7/2017 14:30	0	0.006	0.01	0	0	10
11/7/2017 14:31	0	0.005	0.01	0	0	
11/7/2017 14:32	0	0.006	0.01	0	0	
11/7/2017 14:33	0	0.004	0.01	0	0	
11/7/2017 14:34	0	0.006	0.01	0	0	
11/7/2017 14:35	0.005	0.004	0.01	0	0	13
11/7/2017 14:36	0.005	0.004	0.01	0	0	

11/7/2017 14:37	0.005	0.006	0.01	0	0	
11/7/2017 14:38	0.004	0.006	0.01	0	0	
11/7/2017 14:39	0.004	0.004	0.01	0	0	
11/7/2017 14:40	0.004	0.005	0.01	0	0	17
11/7/2017 14:41	0.004	0.005	0.01	0	0	
11/7/2017 14:42	0.004	0.005	0.01	0	0	
11/7/2017 14:43	0.004	0.004	0.01	0	0	
11/7/2017 14:44	0.004	0.005	0.01	0	0	
11/7/2017 14:45	0.004	0.004	0.01	0	0	
11/7/2017 14:45						20
11/7/2017 14:46	0.004	0.004	0.01	0	0	
11/7/2017 14:47	0.004	0.005	0.01	0	0	
11/7/2017 14:48	0.004	0.005	0.01	0	0	
11/7/2017 14:49	0.004	0.004	0.01	0	0	
11/7/2017 14:50	0.004	0.004	0.01	0	0	18
11/7/2017 14:51	0.004	0.005	0.01	0	0	
11/7/2017 14:52	0.004	0.005	0.01	0	0	
11/7/2017 14:53	0.004	0.005	0.01	0	0	
11/7/2017 14:54	0.004	0.005	0.01	0	0	
11/7/2017 14:55	0.004	0.005	0.01	0	0	23
11/7/2017 14:56	0.004	0.005	0.01	0	0	
11/7/2017 14:57	0.004	0.005	0.01	0	0	
11/7/2017 14:58	0.004	0.004	0.01	0	0	
11/7/2017 14:59	0.004	0.005	0.01	0	0	
11/7/2017 15:00	0.004	0.005	0.01	0	0	26
11/7/2017 15:01	0.004	0.005	0.01	0	0	
11/7/2017 15:02	0.004	0.005	0.01	0	0	
11/7/2017 15:03	0.004	0.007	0.01	0	0	
11/7/2017 15:04	0.004	0.005	0.01	0	0	
11/7/2017 15:05	0.004	0.004	0.01	0	0	19
11/7/2017 15:06	0.004	0.004	0.01	0	0	
11/7/2017 15:07	0.004	0.005	0.01	0	0	
11/7/2017 15:08	0.004	0.004	0.01	0	0	
11/7/2017 15:09	0.004	0.005	0.01	0	0	
11/7/2017 15:10	0.004	0.005	0.01	0	0	20
11/7/2017 15:11	0.004	0.004	0.01	0	0	
11/7/2017 15:12	0.004	0.004	0.01	0	0	
11/7/2017 15:13	0.004	0.003	0.01	0	0	
11/7/2017 15:14	0.004	0.002	0.01	0	0	
11/7/2017 15:15	0.003	0.002	0.01	0	0	18
11/7/2017 15:16	0.003	0.004	0.01	0	0	
11/7/2017 15:17	0.003	0.005	0.01	0	0	
11/7/2017 15:18	0.003	0.003	0.01	0	0	
11/7/2017 15:19	0.003	0.003	0.01	0	0	
11/7/2017 15:20	0.003	0.005	0.01	0	0	23
11/7/2017 15:21	0.003	0.005	0.01	0	0	
11/7/2017 15:22	0.003	0.003	0.01	0	0	
11/7/2017 15:23	0.003	0.004	0.01	0	0	
11/7/2017 15:24	0.003	0.005	0.01	0	0	
11/7/2017 15:25	0.003	0.005	0.01	0	0	26
11/7/2017 15:26	0.003	0.004	0.01	0	0	
11/7/2017 15:27	0.003	0.003	0.01	0	0	
11/7/2017 15:28	0.003	0.004	0.01	0	0	
11/7/2017 15:29	0.003	0.004	0.01	0	0	

11/7/2017 15:30	0.003	0.004	0.01	0	0	30
11/7/2017 15:31	0.003	0.004	0.01	0	0	
11/7/2017 15:32	0.003	0.005	0.01	0	0	
11/7/2017 15:33	0.003	0.005	0.01	0	0	
11/7/2017 15:34	0.003	0.005	0.01	0	0	
11/7/2017 15:35	0.003	0.003	0.01	0	0	28
11/7/2017 15:36	0.003	0.003	0.01	0	0	
11/7/2017 15:37	0.003	0.005	0.01	0	0	
11/7/2017 15:38	0.003	0.004	0.01	0	0	
11/7/2017 15:39	0.003	0.004	0.01	0	0	
11/7/2017 15:40	0.003	0.003	0.01	0	0	33
11/7/2017 15:41	0.003	0.004	0.01	0	0	
11/7/2017 15:42	0.003	0.003	0.01	0	0	
11/7/2017 15:43	0.003	0.003	0.01	0	0	
11/7/2017 15:44	0.003	0.003	0.01	0	0	
11/7/2017 15:45	0.003	0.003	0.01	0	0	34
11/7/2017 15:46	0.003	0.003	0.01	0	0	
11/7/2017 15:47	0.003	0.003	0.01	0	0	
11/7/2017 15:48	0.003	0.003	0.01	0	0	
11/7/2017 15:49	0.002	0.004	0.01	0	0	
11/7/2017 15:50	0.002	0.004	0.01	0	0	21
11/7/2017 15:51	0.002	0.003	0.01	0	0	
11/7/2017 15:52	0.002	0.004	0.01	0	0	
11/7/2017 15:53	0.002	0.003	0.01	0	0	
11/7/2017 15:54	0.002	0.003	0.01	0	0	
11/7/2017 15:55	0.002	0.004	0.01	0	0	27
11/7/2017 15:56	0.002	0.003	0.01	0	0	
11/7/2017 15:57	0.002	0.003	0.01	0	0	
11/7/2017 15:58	0.002	0.003	0.01	0	0	
11/7/2017 15:59	0.002	0.003	0.01	0	0	
11/7/2017 16:00	0.002	0.004	0.01	0	0	30
11/7/2017 16:01	0.002	0.003	0.01	0	0	
11/7/2017 16:02	0.002	0.004	0.01	0	0	
11/7/2017 16:03	0.002	0.003	0.01	0	0	
11/7/2017 16:04	0.002	0.003	0.01	0	0	
11/7/2017 16:05	0.002	0.004	0.01	0	0	27
11/7/2017 16:06	0.002	0.004	0.01	0	0	
11/7/2017 16:07	0.002	0.004	0.01	0	0	
11/7/2017 16:08	0.002	0.004	0.01	0	0	
11/7/2017 16:09	0.002	0.004	0.01	0	0	
11/7/2017 16:10	0.002	0.004	0.01	0	0	29
11/7/2017 16:11	0.002	0.003	0.01	0	0	
11/7/2017 16:12	0.002	0.004	0.01	0	0	
11/7/2017 16:13	0.002	0.003	0.01	0	0	
11/7/2017 16:14	0.002	0.003	0.01	0	0	
11/7/2017 16:15	0.002	0.003	0.01	0	0	27
11/7/2017 16:16	0.002	0.003	0.01	0	0	
11/7/2017 16:17	0.002	0.002	0.01	0	0	
11/7/2017 16:18	0.002	0.003	0.01	0	0	
11/7/2017 16:19	0.002	0.003	0.01	0	0	
11/7/2017 16:20	0.002	0.003	0.01	0	0	16
11/7/2017 16:21	0.002	0.003	0.01	0	0	
11/7/2017 16:22	0.002	0.003	0.01	0	0	
11/7/2017 16:23	0.002	0.004	0.01	0	0	

11/7/2017 16:24	0.002	0.003	0.01	0	0	
11/7/2017 16:25	0.002	0.004	0.01	0	0	1
11/7/2017 16:26	0.002	0.005	0.01	0	0	
11/7/2017 16:27	0.002	0.003	0.01	0	0	
11/7/2017 16:28	0.002	0.003	0.01	0	0	
11/7/2017 16:29	0.002	0.003	0.01	0	0	
11/7/2017 16:30	0.002	0.003	0.01	0	0	7
11/7/2017 16:31	0.002	0.003	0.01	0	0	
11/7/2017 16:32	0.002	0.002	0.01	0	0	
11/7/2017 16:33	0.002	0.003	0.01	0	0	
11/7/2017 16:34	0.002	0.002	0.01	0	0	
11/7/2017 16:35	0.002	0.004	0.01	0	0.001	9
11/7/2017 16:36	0.002	0.002	0.01	0	0.001	
11/7/2017 16:37	0.002	0.002	0.01	0	0.001	
11/7/2017 16:38	0.002	0.002	0.01	0	0.001	
11/7/2017 16:39	0.002	0.002	0.01	0	0.001	
11/7/2017 16:40	0.002	0.003	0.01	0	0.001	1
11/7/2017 16:41	0.002	0.003	0.01	0	0.001	
11/7/2017 16:42	0.002	0.001	0.01	0	0.001	
11/7/2017 16:43	0.002	0.003	0.01	0	0.001	
11/7/2017 16:44	0.002	0.003	0.01	0	0.001	
11/7/2017 16:45	0.002	0.002	0.01	0	0.001	6
11/7/2017 16:46	0.002	0.003	0.01	0	0.001	
11/7/2017 16:47	0.002	0.003	0.01	0	0.001	
11/7/2017 16:48	0.002	0.003	0.01	0	0.001	
11/7/2017 16:49	0.002	0.002	0.01	0	0.001	
11/7/2017 16:50	0.002	0.002	0.01	0	0.001	7
11/7/2017 16:51	0.002	0.003	0.01	0	0.001	
11/7/2017 16:52	0.002	0.003	0.01	0	0.001	
11/7/2017 16:53	0.002	0.002	0.01	0	0.001	
11/7/2017 16:54	0.002	0.001	0.01	0	0.001	
11/7/2017 16:55	0.002	0.001	0.01	0	0.001	7
11/7/2017 16:56	0.001	0.001	0.01	0	0.001	
11/7/2017 16:57	0.001	0.001	0.01	0	0.001	
11/7/2017 16:58	0.001	0.001	0.01	0	0.001	
11/7/2017 16:59	0.001	0	0.01	0	0.001	
11/7/2017 17:00	0.001	0.002	0.01	0	0.001	12
11/7/2017 17:01	0.001	0.002	0.01	0	0.001	
11/7/2017 17:02	0.001	0.003	0.01	0	0.001	
11/7/2017 17:03	0.001	0.003	0.01	0	0.001	
11/7/2017 17:04	0.001	0.003	0.01	0	0.001	
11/7/2017 17:05	0.001	0.003	0.01	0	0.001	12
11/7/2017 17:06	0.001	0.003	0.01	0	0.001	
11/7/2017 17:07	0.001	0.003	0.01	0	0.001	
11/7/2017 17:08	0.001	0.003	0.01	0	0.001	
11/7/2017 17:09	0.001	0.003	0.01	0	0.001	
11/7/2017 17:10	0.001	0.003	0.01	0	0.001	10
11/7/2017 17:11	0.001	0.003	0.01	0	0.001	
11/7/2017 17:12	0.001	0.003	0.01	0	0.001	
11/7/2017 17:13	0.002	0.003	0.01	0	0.001	
11/7/2017 17:14	0.002	0.004	0.01	0	0.001	
11/7/2017 17:15	0.002	0.003	0.01	0	0.001	13
11/7/2017 17:16	0.002	0.003	0.01	0	0.001	
11/7/2017 17:17	0.002	0.003	0.01	0	0.001	

11/7/2017 17:18	0.002	0.004	0.01	0	0.001	
11/7/2017 17:19	0.002	0.004	0.01	0	0.001	
11/7/2017 17:20	0.002	0.003	0.01	0	0.001	11
11/7/2017 17:21	0.002	0.004	0.01	0	0.001	
11/7/2017 17:22	0.002	0.005	0.01	0	0.001	
11/7/2017 17:23	0.002	0.004	0.01	0	0.001	
11/7/2017 17:24	0.003	0.003	0.01	0	0.001	
11/7/2017 17:25	0.003	0.003	0.01	0	0.001	3
11/7/2017 17:26	0.003	0.003	0.01	0	0.001	
11/7/2017 17:27	0.003	0.003	0.01	0	0.001	
11/7/2017 17:28	0.002	0.002	0.01	0	0.001	
11/7/2017 17:29	0.002	0.003	0.01	0	0.001	
11/7/2017 17:30	0.002	0.003	0.01	0	0.001	4
11/7/2017 17:31	0.002	0.003	0.01	0	0.001	
11/7/2017 17:32	0.002	0.002	0.01	0	0.001	
11/7/2017 17:33	0.002	0.003	0.01	0	0.001	
11/7/2017 17:34	0.002	0.003	0.01	0	0.001	
11/7/2017 17:35	0.002	0.003	0.01	0	0.001	8
11/7/2017 17:36	0.002	0.003	0.01	0	0.001	
11/7/2017 17:37	0.002	0.003	0.01	0	0.001	
11/7/2017 17:38	0.002	0.003	0.01	0	0.001	
11/7/2017 17:39	0.002	0.003	0.01	0	0.001	
11/7/2017 17:40	0.002	0.003	0.01	0	0.001	13
11/7/2017 17:41	0.002	0.003	0.01	0	0.001	
11/7/2017 17:42	0.002	0.003	0.01	0	0.001	
11/7/2017 17:43	0.002	0.002	0.01	0	0.001	
11/7/2017 17:44	0.002	0.001	0.01	0	0.001	
11/7/2017 17:45	0.002	0.002	0.01	0	0.001	9
11/7/2017 17:46	0.002	0.002	0.01	0	0.001	
11/7/2017 17:47	0.002	0.003	0.01	0	0.001	
11/7/2017 17:48	0.002	0.003	0.01	0	0.001	
11/7/2017 17:49	0.002	0.003	0.01	0	0.001	
11/7/2017 17:50	0.002	0.003	0.01	0	0.001	9
11/7/2017 17:51	0.002	0.003	0.01	0	0.001	
11/7/2017 17:52	0.002	0.003	0.01	0	0.001	
11/7/2017 17:53	0.002	0.003	0.01	0	0.001	
11/7/2017 17:54	0.002	0.003	0.01	0	0.001	
11/7/2017 17:55	0.002	0.003	0.01	0	0.001	9
11/7/2017 17:56	0.002	0.003	0.01	0	0.001	
11/7/2017 17:57	0.002	0.003	0.01	0	0.001	
11/7/2017 17:58	0.002	0.003	0.01	0	0.001	
11/7/2017 17:59	0.002	0.003	0.01	0	0.001	
11/7/2017 18:00	0.002	0.002	0.01	0	0.001	9
11/7/2017 18:01	0.002	0.002	0.01	0	0.001	
11/7/2017 18:02	0.002	0.003	0.01	0	0.001	
11/7/2017 18:03	0.002	0.003	0.01	0	0.001	
11/7/2017 18:04	0.002	0.003	0.01	0	0.001	
11/7/2017 18:05	0.002	0.002	0.01	0	0.001	9
11/7/2017 18:06	0.002	0.003	0.01	0	0.001	
11/7/2017 18:07	0.002	0.003	0.01	0	0.001	
11/7/2017 18:08	0.002	0.004	0.01	0	0.001	
11/7/2017 18:09	0.002	0.003	0.01	0	0.001	
11/7/2017 18:10	0.002	0.002	0.01	0	0.001	9
11/7/2017 18:11	0.002	0.003	0.01	0	0.001	

11/7/2017 18:12	0.002	0.003	0.01	0	0.001	
11/7/2017 18:13	0.002	0.003	0.01	0	0.001	
11/7/2017 18:14	0.002	0.003	0.01	0	0.001	
11/7/2017 18:15	0.002	0.003	0.01	0	0.001	9
11/7/2017 18:16	0.002	0.003	0.01	0	0.001	
11/7/2017 18:17	0.002	0.003	0.01	0	0.001	
11/7/2017 18:18	0.002	0.004	0.01	0	0.001	
11/7/2017 18:19	0.002	0.003	0.01	0	0.001	
11/7/2017 18:20	0.002	0.002	0.01	0	0.001	9
11/7/2017 18:21	0.002	0.003	0.01	0	0.001	
11/7/2017 18:22	0.002	0.002	0.01	0	0.001	
11/7/2017 18:23	0.002	0.003	0.01	0	0.001	
11/7/2017 18:24	0.002	0.003	0.01	0	0.001	
11/7/2017 18:25	0.002	0.003	0.01	0	0.001	9
11/7/2017 18:26	0.002	0.003	0.01	0	0.001	
11/7/2017 18:27	0.002	0.003	0.01	0	0.001	
11/7/2017 18:28	0.002	0.003	0.01	0	0.001	
11/7/2017 18:29	0.002	0.004	0.01	0	0.001	
11/7/2017 18:30	0.002	0.004	0.01	0	0.001	9
11/7/2017 18:31	0.002	0.003	0.01	0	0.001	
11/7/2017 18:32	0.002	0.003	0.01	0	0.001	
11/7/2017 18:33	0.002	0.003	0.01	0	0.001	
11/7/2017 18:34	0.002	0.003	0.01	0	0.001	
11/7/2017 18:35	0.002	0.004	0.01	0	0.001	9
11/7/2017 18:36	0.002	0.003	0.01	0	0.001	
11/7/2017 18:37	0.002	0.003	0.01	0	0.001	
11/7/2017 18:38	0.002	0.003	0.01	0	0.001	
11/7/2017 18:39	0.002	0.003	0.01	0	0.001	
11/7/2017 18:40	0.002	0.004	0.01	0	0.001	9
11/7/2017 18:41	0.002	0.003	0.01	0	0.001	
11/7/2017 18:42	0.002	0.003	0.01	0	0.001	
11/7/2017 18:43	0.002	0.002	0.01	0	0.001	
11/7/2017 18:44	0.002	0.003	0.01	0	0.001	
11/7/2017 18:45	0.002	0.003	0.01	0	0.001	9
11/7/2017 18:46	0.002	0.003	0.01	0	0.001	
11/7/2017 18:47	0.002	0.003	0.01	0	0.001	
11/7/2017 18:48	0.002	0.003	0.01	0	0.001	
11/7/2017 18:49	0.002	0.003	0.01	0	0.001	
11/7/2017 18:50	0.002	0.004	0.01	0	0.001	9
11/7/2017 18:51	0.002	0.004	0.01	0	0.001	
11/7/2017 18:52	0.002	0.001	0.01	0	0.001	
11/7/2017 18:53	0.002	0.003	0.01	0	0.001	
11/7/2017 18:54	0.002	0.003	0.01	0	0.001	
11/7/2017 18:55	0.002	0.004	0.01	0	0.001	9
11/7/2017 18:56	0.002	0.003	0.01	0	0.001	
11/7/2017 18:57	0.002	0.004	0.01	0	0.001	
11/7/2017 18:58	0.002	0.003	0.01	0	0.001	
11/7/2017 18:59	0.002	0.003	0.01	0	0.001	
11/7/2017 19:00	0.002	0.004	0.01	0	0.001	9
11/7/2017 19:01	0.002	0.003	0.01	0	0.001	
11/7/2017 19:02	0.002	0.003	0.01	0	0.001	
11/7/2017 19:03	0.002	0.003	0.01	0	0.001	
11/7/2017 19:04	0.002	0.004	0.01	0	0.001	
11/7/2017 19:05	0.002	0.003	0.01	0	0.001	9

11/7/2017 19:06	0.002	0.003	0.01	0	0.001	
11/7/2017 19:07	0.002	0.003	0.01	0	0.001	
11/7/2017 19:08	0.002	0.003	0.01	0	0.001	
11/7/2017 19:09	0.003	0.003	0.01	0	0.001	
11/7/2017 19:10	0.002	0.004	0.01	0	0.001	9
11/7/2017 19:11	0.002	0.004	0.01	0	0.001	
11/7/2017 19:12	0.002	0.004	0.01	0	0.001	
11/7/2017 19:13	0.002	0.003	0.01	0	0.001	
11/7/2017 19:14	0.002	0.003	0.01	0	0.001	
11/7/2017 19:15	0.002	0.003	0.01	0	0.001	9
11/7/2017 19:16	0.002	0.003	0.01	0	0.001	
11/7/2017 19:17	0.002	0.003	0.01	0	0.001	
11/7/2017 19:18	0.002	0.004	0.01	0	0.001	
11/7/2017 19:19	0.002	0.004	0.01	0	0.001	
11/7/2017 19:20	0.002	0.003	0.01	0	0.001	9
11/7/2017 19:21	0.002	0.003	0.01	0	0.001	
11/7/2017 19:22	0.002	0.003	0.01	0	0.001	
11/7/2017 19:23	0.002	0.003	0.01	0	0.001	
11/7/2017 19:24	0.002	0.003	0.01	0	0.001	
11/7/2017 19:25	0.002	0.003	0.01	0	0.001	9
11/7/2017 19:26	0.002	0.004	0.01	0	0.001	
11/7/2017 19:27	0.002	0.003	0.01	0	0.001	
11/7/2017 19:28	0.002	0.004	0.01	0	0.001	
11/7/2017 19:29	0.002	0.003	0.01	0	0.001	
11/7/2017 19:30	0.002	0.004	0.01	0	0.001	9
11/7/2017 19:31	0.002	0.003	0.01	0	0.001	
11/7/2017 19:32	0.002	0.003	0.01	0	0.001	
11/7/2017 19:33	0.002	0.003	0.01	0	0.001	
11/7/2017 19:34	0.002	0.004	0.01	0	0.001	
11/7/2017 19:35	0.002	0.003	0.01	0	0.001	9
11/7/2017 19:36	0.002	0.004	0.01	0	0.001	
11/7/2017 19:37	0.002	0.003	0.01	0	0.001	
11/7/2017 19:38	0.003	0.004	0.01	0	0.001	
11/7/2017 19:39	0.003	0.003	0.01	0	0.001	
11/7/2017 19:40	0.003	0.003	0.01	0	0.001	9
11/7/2017 19:41	0.003	0.003	0.01	0	0.001	
11/7/2017 19:42	0.003	0.004	0.01	0	0.001	
11/7/2017 19:43	0.003	0.003	0.01	0	0.001	
11/7/2017 19:44	0.003	0.003	0.01	0	0.001	
11/7/2017 19:45	0.003	0.004	0.01	0	0.001	9
11/7/2017 19:46	0.003	0.004	0.01	0	0.001	
11/7/2017 19:47	0.003	0.006	0.01	0	0.001	
11/7/2017 19:48	0.003	0.005	0.01	0	0.002	
11/7/2017 19:49	0.003	0.004	0.01	0	0.002	
11/7/2017 19:50	0.003	0.004	0.01	0	0.002	9
11/7/2017 19:51	0.003	0.003	0.01	0	0.002	
11/7/2017 19:52	0.003	0.004	0.01	0	0.002	
11/7/2017 19:53	0.003	0.004	0.01	0	0.002	
11/7/2017 19:54	0.003	0.003	0.01	0	0.002	
11/7/2017 19:55	0.003	0.004	0.01	0	0.002	9
11/7/2017 19:56	0.003	0.004	0.01	0	0.002	
11/7/2017 19:57	0.003	0.003	0.01	0	0.002	
11/7/2017 19:58	0.003	0.003	0.01	0	0.002	
11/7/2017 19:59	0.003	0.004	0.01	0	0.002	

11/7/2017 20:00	0.003	0.003	0.01	0	0.002	9
11/7/2017 20:01	0.003	0.004	0.01	0	0.002	
11/7/2017 20:02	0.003	0.003	0.01	0	0.002	
11/7/2017 20:03	0.003	0.004	0.01	0	0.002	
11/7/2017 20:04	0.003	0.004	0.01	0	0.002	
11/7/2017 20:05	0.003	0.004	0.01	0	0.002	9
11/7/2017 20:06	0.003	0.004	0.01	0	0.002	
11/7/2017 20:07	0.003	0.004	0.01	0	0.002	
11/7/2017 20:08	0.003	0.004	0.01	0	0.002	
11/7/2017 20:09	0.003	0.003	0.01	0	0.002	
11/7/2017 20:10	0.003	0.003	0.01	0	0.002	9
11/7/2017 20:11	0.003	0.003	0.01	0	0.002	
11/7/2017 20:12	0.003	0.003	0.01	0	0.002	
11/7/2017 20:13	0.003	0.003	0.01	0	0.002	
11/7/2017 20:14	0.003	0.004	0.01	0	0.002	
11/7/2017 20:15	0.003	0.003	0.01	0	0.002	9
11/7/2017 20:16	0.003	0.003	0.01	0	0.002	
11/7/2017 20:17	0.003	0.003	0.01	0	0.002	
11/7/2017 20:18	0.003	0.003	0.01	0	0.002	
11/7/2017 20:19	0.003	0.003	0.01	0	0.002	
11/7/2017 20:20	0.003	0.003	0.01	0	0.002	9
11/7/2017 20:21	0.003	0.003	0.01	0	0.002	
11/7/2017 20:22	0.003	0.004	0.01	0	0.002	
11/7/2017 20:23	0.003	0.002	0.01	0	0.002	
11/7/2017 20:24	0.003	0.003	0.01	0	0.002	
11/7/2017 20:25	0.002	0.003	0.01	0	0.002	9
11/7/2017 20:26	0.002	0.003	0.01	0	0.002	
11/7/2017 20:27	0.002	0.003	0.01	0	0.002	
11/7/2017 20:28	0.002	0.004	0.01	0	0.002	
11/7/2017 20:29	0.002	0.003	0.01	0	0.002	
11/7/2017 20:30	0.002	0.003	0.01	0	0.002	9
11/7/2017 20:31	0.002	0.003	0.01	0	0.002	
11/7/2017 20:32	0.002	0.003	0.01	0	0.002	
11/7/2017 20:33	0.002	0.003	0.01	0	0.002	
11/7/2017 20:34	0.002	0.004	0.01	0	0.002	
11/7/2017 20:35	0.002	0.004	0.01	0	0.002	9
11/7/2017 20:36	0.002	0.004	0.01	0	0.002	
11/7/2017 20:37	0.002	0.003	0.01	0	0.002	
11/7/2017 20:38	0.002	0.003	0.01	0	0.002	
11/7/2017 20:39	0.002	0.004	0.01	0	0.002	
11/7/2017 20:40	0.002	0.003	0.01	0	0.002	9
11/7/2017 20:41	0.002	0.004	0.01	0	0.002	
11/7/2017 20:42	0.002	0.003	0.01	0	0.002	
11/7/2017 20:43	0.002	0.003	0.01	0	0.002	
11/7/2017 20:44	0.002	0.003	0.01	0	0.002	
11/7/2017 20:45	0.002	0.003	0.01	0	0.002	9
11/7/2017 20:46	0.002	0.004	0.01	0	0.002	
11/7/2017 20:47	0.002	0.003	0.01	0	0.002	
11/7/2017 20:48	0.002	0.003	0.01	0	0.002	
11/7/2017 20:49	0.002	0.004	0.01	0	0.002	
11/7/2017 20:50	0.002	0.004	0.01	0	0.002	9
11/7/2017 20:51	0.002	0.003	0.01	0	0.002	
11/7/2017 20:52	0.002	0.003	0.01	0	0.002	
11/7/2017 20:53	0.002	0.003	0.01	0	0.002	

11/7/2017 20:54	0.002	0.004	0.01	0	0.002	
11/7/2017 20:55	0.002	0.003	0.01	0	0.002	9
11/7/2017 20:56	0.002	0.002	0.01	0	0.002	
11/7/2017 20:57	0.002	0.003	0.01	0	0.002	
11/7/2017 20:58	0.002	0.003	0.01	0	0.002	
11/7/2017 20:59	0.002	0.004	0.01	0	0.002	
11/7/2017 21:00	0.002	0.004	0.01	0	0.002	9
11/7/2017 21:01	0.003	0.004	0.01	0	0.002	
11/7/2017 21:02	0.003	0.004	0.01	0	0.002	
11/7/2017 21:03	0.003	0.004	0.01	0	0.002	
11/7/2017 21:04	0.003	0.004	0.01	0	0.002	
11/7/2017 21:05	0.003	0.004	0.01	0	0.002	9
11/7/2017 21:06	0.003	0.004	0.01	0	0.002	
11/7/2017 21:07	0.003	0.004	0.01	0	0.002	
11/7/2017 21:08	0.003	0.003	0.01	0	0.002	
11/7/2017 21:09	0.003	0.004	0.01	0	0.002	
11/7/2017 21:10	0.003	0.005	0.01	0	0.002	9
11/7/2017 21:11	0.003	0.005	0.01	0	0.002	
11/7/2017 21:12	0.003	0.004	0.01	0	0.002	
11/7/2017 21:13	0.003	0.005	0.01	0	0.002	
11/7/2017 21:14	0.003	0.003	0.01	0	0.002	
11/7/2017 21:15	0.003	0.004	0.01	0	0.002	9
11/7/2017 21:16	0.003	0.005	0.01	0	0.002	
11/7/2017 21:17	0.003	0.006	0.01	0	0.002	
11/8/2017 13:17	0	0.008	0.01	0	0	
11/8/2017 13:19	0	0.007	0.01	0	0	
11/8/2017 13:20	0	0.007	0.01	0	0	14
11/8/2017 13:21	0	0.005	0.01	0	0	
11/8/2017 13:22	0	0.006	0.01	0	0	
11/8/2017 13:23	0	0.006	0.01	0	0	
11/8/2017 13:24	0	0.005	0.01	0	0	
11/8/2017 13:25	0	0.006	0.01	0	0	9
11/8/2017 13:26	0	0.004	0.01	0	0	
11/8/2017 13:27	0	0.005	0.01	0	0	
11/8/2017 13:28	0	0.004	0.01	0	0	
11/8/2017 13:29	0	0.004	0.01	0	0	
11/8/2017 13:30	0	0.006	0.01	0	0	3
11/8/2017 13:31	0	0.004	0.01	0	0	
11/8/2017 13:32	0.005	0.006	0.01	0	0	
11/8/2017 13:33	0.004	0.003	0.01	0	0	
11/8/2017 13:39	0.004	0.004	0.01	0	0	
11/8/2017 13:40	0.003	0.004	0.01	0	0	4
11/8/2017 13:41	0.003	0.004	0.01	0	0	
11/8/2017 13:51	0.003	0.004	0.01	0	0	
11/8/2017 13:52	0.003	0.003	0.01	0	0	
11/8/2017 13:53	0.003	0.004	0.01	0	0	
11/8/2017 13:54	0.003	0.004	0.01	0	0	
11/8/2017 13:55	0.003	0.003	0.01	0	0	13
11/8/2017 13:56	0.003	0.003	0.01	0	0	
11/8/2017 13:57	0.003	0.004	0.01	0	0	
11/8/2017 13:58	0.003	0.004	0.01	0	0	
11/8/2017 13:59	0.003	0.004	0.01	0	0	
11/8/2017 14:00	0.003	0.004	0.01	0	0	13
11/8/2017 14:01	0.003	0.004	0.01	0	0	

11/8/2017 14:02	0.003	0.003	0.01	0	0	
11/8/2017 14:07	0.002	0.003	0.01	0	0	
11/8/2017 14:08	0.002	0.004	0.01	0	0	
11/8/2017 14:09	0.002	0.003	0.01	0	0	
11/8/2017 14:10	0.002	0.004	0.01	0	0	6
11/8/2017 14:11	0.002	0.004	0.01	0	0	
11/8/2017 14:12	0.002	0.004	0.01	0	0	
11/8/2017 14:13	0.003	0.003	0.01	0	0	
11/8/2017 14:14	0.003	0.003	0.01	0	0	
11/8/2017 14:15	0.003	0.005	0.01	0	0	12
11/8/2017 14:16	0.003	0.003	0.01	0	0	
11/8/2017 14:17	0.003	0.004	0.01	0	0	
11/8/2017 14:18	0.003	0.004	0.01	0	0	
11/8/2017 14:19	0.003	0.004	0.01	0	0	
11/8/2017 14:20	0.003	0.004	0.01	0	0	23
11/8/2017 14:21	0.003	0.004	0.01	0	0	
11/8/2017 14:22	0.003	0.004	0.01	0	0	
11/8/2017 14:23	0.003	0.004	0.01	0	0	
11/8/2017 14:24	0.003	0.003	0.01	0	0	
11/8/2017 14:25	0.003	0.003	0.01	0	0	19
11/8/2017 14:26	0.003	0.003	0.01	0	0	
11/8/2017 14:27	0.003	0.002	0.01	0	0	
11/8/2017 14:28	0.003	0.003	0.01	0	0	
11/8/2017 14:29	0.003	0.003	0.01	0	0	
11/8/2017 14:34	0.002	0.003	0.01	0	0	
11/8/2017 14:35	0.002	0.003	0.01	0	0	
11/8/2017 14:36	0.002	0.003	0.01	0	0	
11/8/2017 14:37	0.002	0.003	0.01	0	0	
11/8/2017 14:38	0.002	0.003	0.01	0	0	
11/8/2017 14:39	0.002	0.004	0.01	0	0	
11/8/2017 14:40	0.002	0.003	0.01	0	0	10
11/8/2017 14:41	0.002	0.003	0.01	0	0	
11/8/2017 14:42	0.002	0.003	0.01	0	0	
11/8/2017 14:43	0.002	0.003	0.01	0	0	
11/8/2017 14:48	0.002	0.003	0.01	0	0	
11/8/2017 14:49	0.002	0.003	0.01	0	0	
11/8/2017 14:50	0.002	0.004	0.01	0	0	32
11/8/2017 14:51	0.002	0.003	0.01	0	0	
11/8/2017 14:52	0.002	0.003	0.01	0	0	
11/8/2017 14:53	0.002	0.003	0.01	0	0	
11/8/2017 14:54	0.002	0.003	0.01	0	0	
11/8/2017 14:55	0.002	0.002	0.01	0	0	17
11/8/2017 14:56	0.002	0.003	0.01	0	0	
11/8/2017 14:57	0.002	0.003	0.01	0	0	
11/8/2017 14:58	0.002	0.005	0.01	0	0	
11/8/2017 14:59	0.002	0.003	0.01	0	0	
11/8/2017 15:00	0.002	0.004	0.01	0	0	16
11/8/2017 15:01	0.002	0.003	0.01	0	0	
11/8/2017 15:02	0.002	0.003	0.01	0	0	
11/8/2017 15:03	0.002	0.004	0.01	0	0	
11/8/2017 15:04	0.002	0.003	0.01	0	0	
11/8/2017 15:05	0.002	0.004	0.01	0	0	20
11/8/2017 15:06	0.002	0.004	0.01	0	0	
11/8/2017 15:07	0.003	0.004	0.01	0	0	

11/8/2017 15:08	0.003	0.003	0.01	0	0	
11/8/2017 15:09	0.003	0.003	0.01	0	0	
11/8/2017 15:10	0.003	0.004	0.01	0	0	18
11/8/2017 15:11	0.003	0.003	0.01	0	0	
11/8/2017 15:12	0.003	0.003	0.01	0	0	
11/8/2017 15:13	0.003	0.003	0.01	0	0	
11/8/2017 15:14	0.003	0.003	0.01	0	0	
11/8/2017 15:15	0.003	0.003	0.01	0	0	18
11/8/2017 15:16	0.003	0.003	0.01	0	0	
11/8/2017 15:17	0.003	0.003	0.01	0	0	
11/8/2017 15:18	0.003	0.003	0.01	0	0	
11/8/2017 15:19	0.003	0.003	0.01	0	0	
11/8/2017 15:20	0.003	0.003	0.01	0	0	22
11/8/2017 15:21	0.003	0.003	0.01	0	0	
11/8/2017 15:22	0.002	0.003	0.01	0	0	
11/8/2017 15:23	0.002	0.003	0.01	0	0	
11/8/2017 15:24	0.002	0.003	0.01	0	0	
11/8/2017 15:25	0.002	0.003	0.01	0	0	21
11/8/2017 15:26	0.002	0.003	0.01	0	0	
11/8/2017 15:27	0.002	0.003	0.01	0	0	
11/8/2017 15:28	0.002	0.003	0.01	0	0	
11/8/2017 15:29	0.002	0.004	0.01	0	0	
11/8/2017 15:30	0.002	0.004	0.01	0	0	19
11/8/2017 15:31	0.002	0.004	0.01	0	0	
11/8/2017 15:32	0.002	0.004	0.01	0	0	
11/8/2017 15:33	0.002	0.003	0.01	0	0	
11/8/2017 15:34	0.003	0.004	0.01	0	0	
11/8/2017 15:35	0.003	0.003	0.01	0	0	23
11/8/2017 15:36	0.002	0.003	0.01	0	0	
11/8/2017 15:37	0.002	0.003	0.01	0	0	
11/8/2017 15:38	0.002	0.003	0.01	0	0	
11/8/2017 15:39	0.002	0.003	0.01	0	0	
11/8/2017 15:40	0.002	0.003	0.01	0	0	25
11/8/2017 15:41	0.003	0.003	0.01	0	0	
11/8/2017 15:42	0.003	0.003	0.01	0	0	
11/8/2017 15:43	0.003	0.004	0.01	0	0	
11/8/2017 15:44	0.003	0.003	0.01	0	0	
11/8/2017 15:45	0.002	0.004	0.01	0	0	20
11/8/2017 15:46	0.002	0.003	0.01	0	0	
11/8/2017 15:47	0.002	0.003	0.01	0	0.001	
11/8/2017 16:00	0.002	0.004	0.01	0	0.001	
11/8/2017 16:01	0.002	0.002	0.01	0	0.001	
11/8/2017 16:02	0.002	0.002	0.01	0	0.001	
11/8/2017 16:03	0.002	0.002	0.01	0	0.001	
11/8/2017 16:04	0.002	0.003	0.01	0	0.001	
11/8/2017 16:05	0.002	0.003	0.01	0	0.001	5
11/8/2017 16:06	0.002	0.003	0.01	0	0.001	
11/8/2017 16:07	0.002	0.003	0.01	0	0.001	
11/8/2017 16:08	0.002	0.004	0.01	0	0.001	
11/8/2017 16:09	0.002	0.003	0.01	0	0.001	
11/8/2017 16:10	0.002	0.003	0.01	0	0.001	13
11/8/2017 16:11	0.002	0.003	0.01	0	0.001	
11/8/2017 16:12	0.002	0.004	0.01	0	0.001	
11/8/2017 16:13	0.002	0.003	0.01	0	0.001	

11/8/2017 16:14	0.002	0.003	0.01	0	0.001	
11/8/2017 16:15	0.002	0.004	0.01	0	0.001	5
11/8/2017 16:16	0.002	0.003	0.01	0	0.001	
11/8/2017 16:17	0.002	0.003	0.01	0	0.001	
11/8/2017 16:18	0.002	0.002	0.01	0	0.001	
11/8/2017 16:19	0.002	0.003	0.01	0	0.001	
11/8/2017 16:20	0.002	0.003	0.01	0	0.001	5
11/8/2017 16:21	0.002	0.002	0.01	0	0.001	
11/8/2017 16:22	0.002	0.003	0.01	0	0.001	
11/8/2017 16:23	0.002	0.001	0.01	0	0.001	
11/8/2017 16:24	0.002	0.001	0.01	0	0.001	
11/8/2017 16:25	0.002	0.003	0.01	0	0.001	5
11/8/2017 16:26	0.002	0.003	0.01	0	0.001	
11/8/2017 16:27	0.002	0.003	0.01	0	0.001	
11/8/2017 16:28	0.002	0.004	0.01	0	0.001	
11/8/2017 16:29	0.002	0.003	0.01	0	0.001	
11/8/2017 16:30	0.002	0.001	0.01	0	0.001	-2
11/8/2017 16:31	0.002	0.003	0.01	0	0.001	
11/8/2017 16:32	0.002	0.003	0.01	0	0.001	
11/8/2017 16:33	0.002	0.003	0.01	0	0.001	
11/8/2017 16:34	0.002	0.002	0.01	0	0.001	
11/8/2017 16:35	0.002	0.001	0.01	0	0.001	-2
11/8/2017 16:36	0.002	0.002	0.01	0	0.001	
11/8/2017 16:37	0.001	0.003	0.01	0	0.001	
11/8/2017 16:38	0.001	0.003	0.01	0	0.001	
11/8/2017 16:39	0.001	0.002	0.01	0	0.001	
11/8/2017 16:40	0.001	0.003	0.01	0	0.001	1
11/8/2017 16:41	0.002	0.003	0.01	0	0.001	
11/8/2017 16:42	0.002	0.003	0.01	0	0.001	
11/8/2017 16:43	0.002	0.003	0.01	0	0.001	
11/8/2017 16:44	0.001	0.001	0.01	0	0.001	
11/8/2017 16:45	0.001	0.002	0.01	0	0.001	5
11/8/2017 16:46	0.001	0.001	0.01	0	0.001	
11/8/2017 16:47	0.001	0.001	0.01	0	0.001	
11/8/2017 16:48	0.001	0.002	0.01	0	0.001	
11/8/2017 16:49	0.001	0.003	0.01	0	0.001	
11/8/2017 16:50	0.001	0.001	0.01	0	0.001	5
11/8/2017 16:51	0.001	0.001	0.01	0	0.001	
11/8/2017 16:52	0.001	0.001	0.01	0	0.001	
11/8/2017 16:53	0.001	0.002	0.01	0	0.001	
11/8/2017 16:54	0.001	0.001	0.01	0	0.001	
11/8/2017 16:55	0.001	0.003	0.01	0	0.001	5
11/8/2017 16:56	0.001	0.003	0.01	0	0.001	
11/8/2017 16:57	0.001	0.002	0.01	0	0.001	
11/8/2017 16:58	0.001	0.001	0.01	0	0.001	
11/8/2017 16:59	0.001	0.001	0.01	0	0.001	
11/8/2017 17:00	0.001	0.002	0.01	0	0.001	4
11/8/2017 17:01	0.001	0.001	0.01	0	0.001	
11/8/2017 17:02	0.001	0.001	0.01	0	0.001	
11/8/2017 17:03	0.001	0.001	0.01	0	0.001	
11/8/2017 17:04	0.001	0.001	0.01	0	0.001	
11/8/2017 17:05	0.001	0	0.01	0	0.001	10
11/8/2017 17:06	0.001	0.001	0.01	0	0.001	
11/8/2017 17:07	0	0.001	0.01	0	0.001	

11/8/2017 17:08	0	0.001	0.01	0	0.001	
11/8/2017 17:09	0	0.001	0.01	0	0.001	
11/8/2017 17:10	0	0.001	0.01	0	0.001	8
11/8/2017 17:11	0	0.001	0.01	0	0.001	
11/8/2017 17:12	0	0	0.01	0	0.001	
11/8/2017 17:13	0	0	0.01	0	0.001	
11/8/2017 17:14	0	0	0.01	0	0.001	
11/8/2017 17:15	0	0.002	0.01	0	0.001	4
11/8/2017 17:16	0	0.001	0.01	0	0.001	
11/8/2017 17:17	0	0.001	0.01	0	0.001	
11/8/2017 17:18	0	0.001	0.01	0	0.001	
11/8/2017 17:19	0	0.001	0.01	0	0.001	
11/8/2017 17:20	0	0.002	0.01	0	0.001	5
11/8/2017 17:21	0	0.001	0.01	0	0.001	
11/8/2017 17:22	0	0.001	0.01	0	0.001	
11/8/2017 17:23	0	0.001	0.01	0	0.001	
11/8/2017 17:24	0	0.003	0.01	0	0.001	
11/8/2017 17:25	0	0.003	0.01	0	0.001	5
11/8/2017 17:26	0	0.001	0.01	0	0.001	
11/8/2017 17:27	0.001	0.002	0.01	0	0.001	
11/8/2017 17:28	0.001	0.002	0.01	0	0.001	
11/8/2017 17:29	0.001	0.002	0.01	0	0.001	
11/8/2017 17:30	0.001	0.003	0.01	0	0.001	2
11/8/2017 17:31	0.001	0.003	0.01	0	0.001	
11/8/2017 17:32	0.001	0.001	0.01	0	0.001	
11/8/2017 17:33	0.001	0.003	0.01	0	0.001	
11/8/2017 17:34	0.001	0.002	0.01	0	0.001	
11/8/2017 17:35	0.001	0.003	0.01	0	0.001	5
11/8/2017 17:36	0.001	0.004	0.01	0	0.001	
11/8/2017 17:37	0.001	0.003	0.01	0	0.001	
11/8/2017 17:38	0.001	0.003	0.01	0	0.001	
11/8/2017 17:39	0.001	0.002	0.01	0	0.001	
11/8/2017 17:40	0.001	0.002	0.01	0	0.001	9
11/8/2017 17:41	0.002	0.003	0.01	0	0.001	
11/8/2017 17:42	0.002	0.003	0.01	0	0.001	
11/8/2017 17:43	0.002	0.003	0.01	0	0.001	
11/8/2017 17:44	0.002	0.002	0.01	0	0.001	
11/8/2017 17:45	0.002	0.003	0.01	0	0.001	10
11/8/2017 17:46	0.002	0.003	0.01	0	0.001	
11/8/2017 17:47	0.002	0.002	0.01	0	0.001	
11/8/2017 17:48	0.002	0.002	0.01	0	0.001	
11/8/2017 17:49	0.002	0.001	0.01	0	0.001	
11/8/2017 17:50	0.002	0.001	0.01	0	0.001	9
11/8/2017 17:51	0.002	0.002	0.01	0	0.001	
11/8/2017 17:52	0.001	0.003	0.01	0	0.001	
11/8/2017 17:53	0.001	0	0.01	0	0.001	
11/8/2017 17:54	0.001	0.003	0.01	0	0.001	
11/8/2017 17:55	0.001	0.003	0.01	0	0.001	9
11/8/2017 17:56	0.001	0.002	0.01	0	0.001	
11/8/2017 17:57	0.001	0.002	0.01	0	0.001	
11/8/2017 17:58	0.001	0.003	0.01	0	0.001	
11/8/2017 17:59	0.001	0.003	0.01	0	0.001	
11/8/2017 18:00	0.001	0.003	0.01	0	0.001	9
11/8/2017 18:01	0.001	0.003	0.01	0	0.001	

11/8/2017 18:02	0.001	0.002	0.01	0	0.001	
11/8/2017 18:03	0.001	0.001	0.01	0	0.001	
11/8/2017 18:04	0.001	0.002	0.01	0	0.001	
11/8/2017 18:05	0.001	0.003	0.01	0	0.001	8
11/8/2017 18:06	0.001	0.003	0.01	0	0.001	
11/8/2017 18:07	0.001	0.001	0.01	0	0.001	
11/8/2017 18:08	0.001	0.001	0.01	0	0.001	
11/8/2017 18:09	0.001	0.001	0.01	0	0.001	
11/8/2017 18:10	0.001	0.001	0.01	0	0.001	11
11/8/2017 18:11	0.001	0.002	0.01	0	0.001	
11/8/2017 18:12	0.001	0.002	0.01	0	0.001	
11/8/2017 18:13	0.001	0.001	0.01	0	0.001	
11/8/2017 18:14	0.001	0.003	0.01	0	0.001	
11/8/2017 18:15	0.001	0.001	0.01	0	0.001	12
11/8/2017 18:16	0.001	0.003	0.01	0	0.001	
11/8/2017 18:17	0.001	0.003	0.01	0	0.001	
11/8/2017 18:18	0.001	0.003	0.01	0	0.001	
11/8/2017 18:19	0.001	0.003	0.01	0	0.001	
11/8/2017 18:20	0.001	0.003	0.01	0	0.001	7
11/8/2017 18:21	0.001	0.003	0.01	0	0.001	
11/8/2017 18:22	0.001	0.003	0.01	0	0.001	
11/8/2017 18:23	0.001	0.003	0.01	0	0.001	
11/8/2017 18:24	0.001	0.003	0.01	0	0.001	
11/8/2017 18:25	0.001	0.003	0.01	0	0.001	-7
11/8/2017 18:26	0.002	0.002	0.01	0	0.001	
11/8/2017 18:27	0.002	0.002	0.01	0	0.001	
11/8/2017 18:28	0.002	0.001	0.01	0	0.001	
11/8/2017 18:29	0.002	0.003	0.01	0	0.001	
11/8/2017 18:30	0.002	0.003	0.01	0	0.001	3
11/8/2017 18:31	0.002	0.002	0.01	0	0.001	
11/8/2017 18:32	0.002	0.003	0.01	0	0.001	
11/8/2017 18:33	0.002	0.001	0.01	0	0.001	
11/8/2017 18:34	0.002	0.002	0.01	0	0.001	
11/8/2017 18:35	0.002	0.003	0.01	0	0.001	5
11/8/2017 18:36	0.001	0.003	0.01	0	0.001	
11/8/2017 18:37	0.001	0.003	0.01	0	0.001	
11/8/2017 18:38	0.001	0.003	0.01	0	0.001	
11/8/2017 18:39	0.001	0.003	0.01	0	0.001	
11/8/2017 18:40	0.001	0.003	0.01	0	0.001	5
11/8/2017 18:41	0.001	0.003	0.01	0	0.001	
11/8/2017 18:42	0.001	0.003	0.01	0	0.001	
11/8/2017 18:43	0.001	0.003	0.01	0	0.001	
11/8/2017 18:44	0.001	0.003	0.01	0	0.001	
11/8/2017 18:45	0.001	0.003	0.01	0	0.001	3
11/8/2017 18:46	0.001	0.002	0.01	0	0.001	
11/8/2017 18:47	0.001	0.001	0.01	0	0.001	
11/8/2017 18:48	0.001	0.001	0.01	0	0.001	
11/8/2017 18:49	0.001	0.002	0.01	0	0.001	
11/8/2017 18:50	0.001	0.003	0.01	0	0.001	6
11/8/2017 18:51	0.001	0.002	0.01	0	0.001	
11/8/2017 18:52	0.001	0.002	0.01	0	0.001	
11/8/2017 18:53	0.001	0.002	0.01	0	0.001	
11/8/2017 18:54	0.001	0.001	0.01	0	0.001	
11/8/2017 18:55	0.001	0.001	0.01	0	0.001	11

11/8/2017 18:56	0.001	0.003	0.01	0	0.001	
11/8/2017 18:57	0.001	0.001	0.01	0	0.001	
11/8/2017 18:58	0.001	0.001	0.01	0	0.001	
11/8/2017 18:59	0.001	0.001	0.01	0	0.001	
11/8/2017 19:00	0.001	0.001	0.01	0	0.001	12
11/8/2017 19:01	0.001	0.001	0.01	0	0.001	
11/8/2017 19:02	0.001	0.001	0.01	0	0.001	
11/8/2017 19:03	0.001	0.001	0.01	0	0.001	
11/8/2017 19:04	0.001	0.002	0.01	0	0.001	
11/8/2017 19:05	0.001	0.001	0.01	0	0.001	13
11/8/2017 19:06	0.001	0.002	0.01	0	0.001	
11/8/2017 19:07	0.001	0.001	0.01	0	0.001	
11/8/2017 19:08	0.001	0.002	0.01	0	0.001	
11/8/2017 19:09	0.001	0.002	0.01	0	0.001	
11/8/2017 19:10	0.001	0.001	0.01	0	0.001	16
11/8/2017 19:11	0.001	0.002	0.01	0	0.001	
11/8/2017 19:12	0.001	0.001	0.01	0	0.001	
11/8/2017 19:13	0.001	0.001	0.01	0	0.001	
11/8/2017 19:14	0.001	0.001	0.01	0	0.001	
11/8/2017 19:15	0.001	0.001	0.01	0	0.001	21
11/8/2017 19:16	0.001	0.001	0.01	0	0.001	
11/8/2017 19:17	0.001	0.001	0.01	0	0.001	
11/8/2017 19:18	0.001	0.001	0.01	0	0.001	
11/8/2017 19:19	0.001	0.001	0.01	0	0.001	
11/8/2017 19:20	0.001	0.001	0.01	0	0.001	26
11/8/2017 19:21	0.001	0.001	0.01	0	0.001	
11/8/2017 19:22	0.001	0.001	0.01	0	0.001	
11/8/2017 19:23	0.001	0.002	0.01	0	0.001	
11/8/2017 19:24	0.001	0.002	0.01	0	0.001	
11/8/2017 19:25	0.001	0.003	0.01	0	0.001	27
11/8/2017 19:26	0.001	0.002	0.01	0	0.001	
11/8/2017 19:27	0.001	0.004	0.01	0	0.001	
11/8/2017 19:28	0.001	0.003	0.01	0	0.001	
11/8/2017 19:29	0.001	0.002	0.01	0	0.001	
11/8/2017 19:30	0.001	0.003	0.01	0	0.001	24
11/8/2017 19:31	0.001	0.002	0.01	0	0.001	
11/8/2017 19:32	0.001	0.002	0.01	0	0.001	
11/8/2017 19:33	0.001	0.001	0.01	0	0.001	
11/8/2017 19:34	0.001	0.002	0.01	0	0.001	
11/8/2017 19:35	0.001	0.002	0.01	0	0.001	20
11/8/2017 19:36	0.001	0.001	0.01	0	0.001	
11/8/2017 19:37	0.001	0.001	0.01	0	0.001	
11/8/2017 19:38	0.001	0.001	0.01	0	0.001	
11/8/2017 19:39	0.001	0.001	0.01	0	0.001	
11/8/2017 19:40	0.001	0.001	0.01	0	0.001	24
11/8/2017 19:41	0.001	0.001	0.01	0	0.001	
11/8/2017 19:42	0.001	0.002	0.01	0	0.001	
11/8/2017 19:43	0.001	0.002	0.01	0	0.001	
11/8/2017 19:44	0.001	0.002	0.01	0	0.001	
11/8/2017 19:45	0.001	0.002	0.01	0	0.001	15
11/9/2017 13:31	0	0.008	0.01	0	0	
11/9/2017 13:32	0	0.008	0.01	0	0	
11/9/2017 13:33	0	0.008	0.01	0	0	
11/9/2017 13:34	0	0.006	0.01	0	0	

11/9/2017 13:35	0	0.007	0.01	0	0	6
11/9/2017 13:36	0	0.006	0.01	0	0	
11/9/2017 13:37	0	0.006	0.01	0	0	
11/9/2017 13:38	0	0.004	0.01	0	0	
11/9/2017 13:39	0	0.006	0.01	0	0	
11/9/2017 13:40	0	0.007	0.01	0	0	11
11/9/2017 13:41	0	0.006	0.01	0	0	
11/9/2017 13:42	0	0.008	0.01	0	0	
11/9/2017 13:43	0	0.007	0.01	0	0	
11/9/2017 13:44	0	0.006	0.01	0	0	
11/9/2017 13:45	0.006	0.006	0.01	0	0	11
11/9/2017 13:46	0.006	0.005	0.01	0	0	
11/9/2017 13:47	0.005	0.006	0.01	0	0	
11/9/2017 13:48	0.005	0.004	0.01	0	0	
11/9/2017 13:49	0.005	0.004	0.01	0	0	
11/9/2017 13:50	0.005	0.006	0.01	0	0	11
11/9/2017 13:51	0.005	0.005	0.01	0	0	
11/9/2017 13:52	0.005	0.004	0.01	0	0	
11/9/2017 13:53	0.005	0.004	0.01	0	0	
11/9/2017 13:54	0.005	0.004	0.01	0	0	
11/9/2017 13:55	0.005	0.005	0.01	0	0	10
11/9/2017 13:56	0.005	0.004	0.01	0	0	
11/9/2017 13:57	0.004	0.005	0.01	0	0	
11/9/2017 13:58	0.004	0.006	0.01	0	0	
11/9/2017 13:59	0.004	0.006	0.01	0	0	
11/9/2017 14:00	0.004	0.005	0.01	0	0	13
11/9/2017 14:01	0.004	0.006	0.01	0	0	
11/9/2017 14:02	0.004	0.005	0.01	0	0	
11/9/2017 14:03	0.004	0.005	0.01	0	0	
11/9/2017 14:04	0.004	0.004	0.01	0	0	
11/9/2017 14:05	0.004	0.005	0.01	0	0	14
11/9/2017 14:06	0.004	0.005	0.01	0	0	
11/9/2017 14:07	0.004	0.005	0.01	0	0	
11/9/2017 14:08	0.004	0.004	0.01	0	0	
11/9/2017 14:09	0.004	0.004	0.01	0	0	
11/9/2017 14:10	0.004	0.004	0.01	0	0	14
11/9/2017 14:11	0.004	0.005	0.01	0	0	
11/9/2017 14:12	0.004	0.004	0.01	0	0	
11/9/2017 14:13	0.004	0.005	0.01	0	0	
11/9/2017 14:14	0.004	0.004	0.01	0	0	
11/9/2017 14:15	0.004	0.004	0.01	0	0	14
11/9/2017 14:16	0.004	0.004	0.01	0	0	
11/9/2017 14:17	0.004	0.005	0.01	0	0	
11/9/2017 14:18	0.004	0.005	0.01	0	0	
11/9/2017 14:19	0.004	0.004	0.01	0	0	
11/9/2017 14:20	0.004	0.006	0.01	0	0	15
11/9/2017 14:21	0.004	0.005	0.01	0	0	
11/9/2017 14:22	0.004	0.005	0.01	0	0	
11/9/2017 14:23	0.004	0.005	0.01	0	0	
11/9/2017 14:24	0.004	0.004	0.01	0	0	
11/9/2017 14:25	0.004	0.005	0.01	0	0	11
11/9/2017 14:26	0.004	0.005	0.01	0	0	
11/9/2017 14:27	0.004	0.005	0.01	0	0	
11/9/2017 14:28	0.004	0.005	0.01	0	0	

11/9/2017 14:29	0.004	0.005	0.01	0	0	
11/9/2017 14:30	0.004	0.004	0.01	0	0	10
11/9/2017 14:31	0.004	0.005	0.01	0	0	
11/9/2017 14:32	0.004	0.005	0.01	0	0	
11/9/2017 14:33	0.004	0.005	0.01	0	0	
11/9/2017 14:34	0.004	0.005	0.01	0	0	
11/9/2017 14:35	0.004	0.005	0.01	0	0	14
11/9/2017 14:36	0.004	0.005	0.01	0	0	
11/9/2017 14:37	0.004	0.006	0.01	0	0	
11/9/2017 14:38	0.004	0.005	0.01	0	0	
11/9/2017 14:39	0.004	0.005	0.01	0	0	
11/9/2017 14:40	0.004	0.004	0.01	0	0	11
11/9/2017 14:41	0.004	0.003	0.01	0	0	
11/9/2017 14:42	0.004	0.003	0.01	0	0	
11/9/2017 14:43	0.003	0.004	0.01	0	0	
11/9/2017 14:44	0.003	0.004	0.01	0	0	
11/9/2017 14:45	0.003	0.004	0.01	0	0	12
11/9/2017 14:46	0.003	0.003	0.01	0	0	
11/9/2017 14:47	0.003	0.004	0.01	0	0	
11/9/2017 14:48	0.003	0.004	0.01	0	0	
11/9/2017 14:49	0.003	0.006	0.01	0	0	
11/9/2017 14:50	0.003	0.004	0.01	0	0	14
11/9/2017 14:51	0.003	0.005	0.01	0	0	
11/9/2017 14:52	0.003	0.004	0.01	0	0	
11/9/2017 14:53	0.003	0.003	0.01	0	0	
11/9/2017 14:54	0.003	0.004	0.01	0	0	
11/9/2017 14:55	0.003	0.004	0.01	0	0	13
11/9/2017 14:56	0.003	0.003	0.01	0	0	
11/9/2017 14:57	0.003	0.004	0.01	0	0	
11/9/2017 14:58	0.003	0.003	0.01	0	0	
11/9/2017 14:59	0.003	0.003	0.01	0	0	
11/9/2017 15:00	0.003	0.003	0.01	0	0	14
11/9/2017 15:01	0.003	0.003	0.01	0	0	
11/9/2017 15:02	0.003	0.003	0.01	0	0	
11/9/2017 15:03	0.003	0.003	0.01	0	0	
11/9/2017 15:04	0.003	0.003	0.01	0	0	
11/9/2017 15:05	0.003	0.003	0.01	0	0	10
11/9/2017 15:06	0.003	0.003	0.01	0	0	
11/9/2017 15:07	0.003	0.003	0.01	0	0	
11/9/2017 15:08	0.002	0.003	0.01	0	0	
11/9/2017 15:09	0.002	0.003	0.01	0	0	
11/9/2017 15:10	0.002	0.003	0.01	0	0	10
11/9/2017 15:11	0.002	0.002	0.01	0	0	
11/9/2017 15:12	0.002	0.002	0.01	0	0	
11/9/2017 15:13	0.002	0.001	0.01	0	0	
11/9/2017 15:14	0.002	0.002	0.01	0	0	
11/9/2017 15:15	0.002	0.001	0.01	0	0	14
11/9/2017 15:16	0.002	0.003	0.01	0	0	
11/9/2017 15:17	0.002	0.002	0.01	0	0	
11/9/2017 15:18	0.002	0.003	0.01	0	0	
11/9/2017 15:19	0.002	0.001	0.01	0	0	
11/9/2017 15:20	0.002	0.003	0.01	0	0	15
11/9/2017 15:21	0.002	0.002	0.01	0	0	
11/9/2017 15:22	0.002	0.002	0.01	0	0	

11/9/2017 15:23	0.002	0.001	0.01	0	0	
11/9/2017 15:24	0.001	0	0.01	0	0	
11/9/2017 15:25	0.001	0.001	0.01	0	0	17
11/9/2017 15:26	0.001	0.001	0.01	0	0	
11/9/2017 15:27	0.001	0.002	0.01	0	0	
11/9/2017 15:28	0.001	0.002	0.01	0	0	
11/9/2017 15:29	0.001	0.001	0.01	0	0	
11/9/2017 15:30	0.001	0	0.01	0	0	20
11/9/2017 15:31	0.001	0.003	0.01	0	0	
11/9/2017 15:32	0.001	0.001	0.01	0	0	
11/9/2017 15:33	0.001	0.001	0.01	0	0	
11/9/2017 15:34	0.001	0.003	0.01	0	0	
11/9/2017 15:35	0.001	0.003	0.01	0	0	27
11/9/2017 15:36	0.001	0.003	0.01	0	0	
11/9/2017 15:37	0.001	0.002	0.01	0	0	
11/9/2017 15:38	0	0.002	0.01	0	0	
11/9/2017 15:39	0	0.001	0.01	0	0	
11/9/2017 15:40	0.001	0.001	0.01	0	0	21
11/9/2017 15:41	0.001	0.002	0.01	0	0	
11/9/2017 15:42	0.001	0.001	0.01	0	0	
11/9/2017 15:43	0.001	0.001	0.01	0	0	
11/9/2017 15:44	0.001	0.001	0.01	0	0	
11/9/2017 15:45	0	0.001	0.01	0	0	15
11/9/2017 15:46	0	0.001	0.01	0	0	
11/9/2017 15:47	0	0.001	0.01	0	0	
11/9/2017 15:48	0	0.002	0.01	0	0	
11/9/2017 15:49	0	0.001	0.01	0	0	
11/9/2017 15:50	0	0.001	0.01	0	0	12
11/9/2017 15:51	0	0.001	0.01	0	0	
11/9/2017 15:52	0	0.001	0.01	0	0	
11/9/2017 15:53	0	0.001	0.01	0	0	
11/9/2017 15:54	0	0.001	0.01	0	0	
11/9/2017 15:55	0	0.001	0.01	0	0	12
11/9/2017 15:56	0	0.001	0.01	0	0	
11/9/2017 15:57	0	0.001	0.01	0	0	
11/9/2017 15:58	0	0.001	0.01	0	0	
11/9/2017 15:59	0	0.001	0.01	0	0	
11/9/2017 16:00	0	0	0.01	0	0	18
11/9/2017 16:01	0	0.001	0.01	0	0	
11/9/2017 16:02	0	0.001	0.01	0	0	
11/9/2017 16:03	0	0.001	0.01	0	0	
11/9/2017 16:04	0	0.001	0.01	0	0	
11/9/2017 16:05	0	0.001	0.01	0	0	20
11/9/2017 16:06	0	0.001	0.01	0	0.001	
11/9/2017 16:07	0	0.001	0.01	0	0.001	
11/9/2017 16:08	0	0.001	0.01	0	0.001	
11/9/2017 16:09	0	0.001	0.01	0	0.001	
11/9/2017 16:10	0	0.001	0.01	0	0.001	12
11/9/2017 16:11	0	0.001	0.01	0	0.001	
11/9/2017 16:12	0	0.001	0.01	0	0.001	
11/9/2017 16:13	0	0.001	0.01	0	0.001	
11/9/2017 16:14	0	0.002	0.01	0	0.001	
11/9/2017 16:15	0	0.001	0.01	0	0.001	11
11/9/2017 16:16	0	0.002	0.01	0	0.001	

11/9/2017 16:17	0	0.002	0.01	0	0.001	
11/9/2017 16:18	0.001	0	0.01	0	0.001	
11/9/2017 16:19	0	0.001	0.01	0	0.001	
11/9/2017 16:20	0	0.001	0.01	0	0.001	15
11/9/2017 16:21	0	0.001	0.01	0	0.001	
11/9/2017 16:22	0	0.001	0.01	0	0.001	
11/9/2017 16:23	0	0.001	0.01	0	0.001	
11/9/2017 16:24	0	0.001	0.01	0	0.001	
11/9/2017 16:25	0	0.001	0.01	0	0.001	9
11/9/2017 16:26	0	0.001	0.01	0	0.001	
11/9/2017 16:27	0	0.001	0.01	0	0.001	
11/9/2017 16:28	0	0.002	0.01	0	0.001	
11/9/2017 16:29	0	0.001	0.01	0	0.001	
11/9/2017 16:30	0	0.002	0.01	0	0.001	8
11/9/2017 16:31	0	0.001	0.01	0	0.001	
11/9/2017 16:32	0	0.001	0.01	0	0.001	
11/9/2017 16:33	0	0	0.01	0	0.001	
11/9/2017 16:34	0	0.001	0.01	0	0.001	
11/9/2017 16:35	0	0	0.01	0	0.001	6
11/9/2017 16:36	0	0.001	0.01	0	0.001	
11/9/2017 16:37	0	0.001	0.01	0	0.001	
11/9/2017 16:38	0	0	0.01	0	0.001	
11/9/2017 16:39	0	0.001	0.01	0	0.001	
11/9/2017 16:40	0	0.001	0.01	0	0.001	5
11/9/2017 16:41	0	0.001	0.01	0	0.001	
11/9/2017 16:42	0	0	0.01	0	0.001	
11/9/2017 16:43	0	0	0.01	0	0.001	
11/9/2017 16:44	0	0	0.01	0	0.001	
11/9/2017 16:45	0	0.001	0.01	0	0.001	4
11/9/2017 16:46	0	0	0.01	0	0.001	
11/9/2017 16:47	0	0.001	0.01	0	0.001	
11/9/2017 16:48	0	0	0.01	0	0.001	
11/9/2017 16:49	0	0.001	0.01	0	0.001	
11/9/2017 16:50	0	0.001	0.01	0	0.001	10
11/9/2017 16:51	0	0	0.01	0	0.001	
11/9/2017 16:52	0	0.001	0.01	0	0.001	
11/9/2017 16:53	0	0.001	0.01	0	0.001	
11/9/2017 16:54	0	0	0.01	0	0.001	
11/9/2017 16:55	0	0.001	0.01	0	0.001	6
11/9/2017 16:56	0	0	0.01	0	0.001	
11/9/2017 16:57	0	0	0.01	0	0.001	
11/9/2017 16:58	0	0	0.01	0	0.001	
11/9/2017 16:59	0	0	0.01	0	0.001	
11/9/2017 17:00	0	0	0.01	0	0.001	12
11/9/2017 17:01	0	0.001	0.01	0	0.001	
11/9/2017 17:02	0	0	0.01	0	0.001	
11/9/2017 17:03	0	0	0.01	0	0.001	
11/9/2017 17:04	0	0	0.01	0	0.001	
11/9/2017 17:05	0	0	0.01	0	0.001	10
11/9/2017 17:06	0	0.001	0.01	0	0.001	
11/9/2017 17:07	0	0	0.01	0	0.001	
11/9/2017 17:08	0	0	0.01	0	0.001	
11/9/2017 17:09	0	0.001	0.01	0	0.001	
11/9/2017 17:10	0	0	0.01	0	0.001	5

11/9/2017 17:11	0	0.001	0.01	0	0.001	
11/9/2017 17:12	0	0	0.01	0	0.001	
11/9/2017 17:13	0	0	0.01	0	0.001	
11/9/2017 17:14	0	0.001	0.01	0	0.001	
11/9/2017 17:15	0	0.001	0.01	0	0.001	0
11/9/2017 17:16	0	0	0.01	0	0.001	
11/9/2017 17:17	0	0	0.01	0	0.001	
11/9/2017 17:18	0	0.001	0.01	0	0.001	
11/9/2017 17:19	0	0.001	0.01	0	0.001	
11/9/2017 17:20	0	0.001	0.01	0	0.001	0
11/9/2017 17:21	0	0	0.01	0	0.001	
11/9/2017 17:22	0	0.001	0.01	0	0.001	
11/9/2017 17:23	0	0	0.01	0	0.001	
11/9/2017 17:24	0	0.001	0.01	0	0.001	
11/9/2017 17:25	0	0	0.01	0	0.001	4
11/9/2017 17:26	0	0	0.01	0	0.001	
11/9/2017 17:27	0	0	0.01	0	0.001	
11/9/2017 17:28	0	0.001	0.01	0	0.001	
11/9/2017 17:29	0	0.001	0.01	0	0.001	
11/9/2017 17:30	0	0.001	0.01	0	0.001	4
11/9/2017 17:31	0	0	0.01	0	0.001	
11/9/2017 17:32	0	0	0.01	0	0.001	
11/9/2017 17:33	0	0.001	0.01	0	0.001	
11/9/2017 17:34	0	0	0.01	0	0.001	
11/9/2017 17:35	0	0	0.01	0	0.001	7
11/9/2017 17:36	0	0	0.01	0	0.001	
11/9/2017 17:37	0	0	0.01	0	0.001	
11/9/2017 17:38	0	0	0.01	0	0.001	
11/9/2017 17:39	0	0	0.01	0	0.001	
11/9/2017 17:40	0	0	0.01	0	0.001	5
11/9/2017 17:41	0	0	0.01	0	0.001	
11/9/2017 17:42	0	0	0.01	0	0.001	
11/9/2017 17:43	0	0	0.01	0	0.001	
11/9/2017 17:44	0	0.001	0.01	0	0.001	
11/9/2017 17:45	0	0	0.01	0	0.001	7
11/9/2017 17:46	0	0	0.01	0	0.001	
11/9/2017 17:47	0	0	0.01	0	0.001	
11/9/2017 17:48	0	0	0.01	0	0.001	
11/9/2017 17:49	0	0	0.01	0	0.001	
11/9/2017 17:50	0	0.001	0.01	0	0.001	10
11/9/2017 17:51	0	0.001	0.01	0	0.001	
11/9/2017 17:52	0	0	0.01	0	0.001	
11/9/2017 17:53	0	0	0.01	0	0.001	
11/9/2017 17:54	0	0	0.01	0	0.001	
11/9/2017 17:55	0	0	0.01	0	0.001	13
11/9/2017 17:56	0	0	0.01	0	0.001	
11/9/2017 17:57	0	0	0.01	0	0.001	
11/9/2017 17:58	0	0.001	0.01	0	0.001	
11/9/2017 17:59	0	0.001	0.01	0	0.001	
11/9/2017 18:00	0	0.001	0.01	0	0.001	10
11/9/2017 18:01	0	0.001	0.01	0	0.001	
11/9/2017 18:02	0	0	0.01	0	0.001	
11/9/2017 18:03	0	0.001	0.01	0	0.001	
11/9/2017 18:04	0	0	0.01	0	0.001	

11/9/2017 18:05	0	0	0.01	0	0.001	10
11/9/2017 18:06	0	0	0.01	0	0.001	
11/9/2017 18:07	0	0	0.01	0	0.001	
11/9/2017 18:08	0	0	0.01	0	0.001	
11/9/2017 18:09	0	0.001	0.01	0	0.001	
11/9/2017 18:10	0	0.001	0.01	0	0.001	12
11/9/2017 18:11	0	0.001	0.01	0	0.001	
11/9/2017 18:12	0	0.001	0.01	0	0.001	
11/9/2017 18:13	0	0.001	0.01	0	0.001	
11/9/2017 18:14	0	0	0.01	0	0.001	
11/9/2017 18:15	0	0	0.01	0	0.001	13
11/9/2017 18:16	0	0	0.01	0	0.001	
11/9/2017 18:17	0	0.001	0.01	0	0.001	
11/9/2017 18:18	0	0	0.01	0	0.001	
11/9/2017 18:19	0	0	0.01	0	0.001	
11/9/2017 18:20	0	0	0.01	0	0.001	12
11/9/2017 18:21	0	0	0.01	0	0.001	
11/9/2017 18:22	0	0	0.01	0	0.001	
11/9/2017 18:23	0	0	0.01	0	0.001	
11/9/2017 18:24	0	0	0.01	0	0.001	
11/9/2017 18:25	0	0	0.01	0	0.001	10
11/9/2017 18:26	0	0	0.01	0	0.001	
11/9/2017 18:27	0	0	0.01	0	0.001	
11/9/2017 18:28	0	0	0.01	0	0.001	
11/9/2017 18:29	0	0	0.01	0	0.001	
11/9/2017 18:30	0	0	0.01	0	0.001	10
11/9/2017 18:31	0	0	0.01	0	0.001	
11/9/2017 18:32	0	0.001	0.01	0	0.001	
11/9/2017 18:33	0	0	0.01	0	0.001	
11/9/2017 18:34	0	0	0.01	0	0.001	
11/9/2017 18:35	0	0	0.01	0	0.001	12
11/9/2017 18:36	0	0	0.01	0	0.001	
11/9/2017 18:37	0	0	0.01	0	0.001	
11/9/2017 18:38	0	0	0.01	0	0.001	
11/9/2017 18:39	0	0	0.01	0	0.001	
11/9/2017 18:40	0	0	0.01	0	0.001	
11/9/2017 18:40						8
11/9/2017 18:41	0	0.001	0.01	0	0.001	
11/9/2017 18:42	0	0	0.01	0	0.001	
11/9/2017 18:43	0	0	0.01	0	0.001	
11/9/2017 18:44	0	0	0.01	0	0.001	
11/9/2017 18:45	0	0	0.01	0	0.001	5
11/9/2017 18:46	0	0	0.01	0	0.001	
11/9/2017 18:47	0	0	0.01	0	0.001	
11/9/2017 18:48	0	0	0.01	0	0.001	
11/9/2017 18:49	0	0.001	0.01	0	0.001	
11/9/2017 18:50	0	0	0.01	0	0.001	8
11/9/2017 18:51	0	0	0.01	0	0.001	
11/9/2017 18:52	0	0	0.01	0	0.001	
11/9/2017 18:53	0	0	0.01	0	0.001	
11/9/2017 18:54	0	0	0.01	0	0.001	
11/9/2017 18:55	0	0	0.01	0	0.001	10
11/9/2017 18:56	0	0	0.01	0	0.001	
11/9/2017 18:57	0	0	0.01	0	0.001	

11/9/2017 18:58	0	0	0.01	0	0.001	
11/9/2017 18:59	0	0	0.01	0	0.001	
11/9/2017 19:00	0	0	0.01	0	0.001	15
11/9/2017 19:01	0	0	0.01	0	0.001	
11/9/2017 19:02	0	0	0.01	0	0.001	
11/9/2017 19:03	0	0	0.01	0	0.001	
11/9/2017 19:04	0	0	0.01	0	0.001	
11/9/2017 19:05	0	0	0.01	0	0.001	
11/9/2017 19:05						16
11/9/2017 19:06	0	0	0.01	0	0.001	
11/9/2017 19:07	0	0	0.01	0	0.001	
11/9/2017 19:08	0	0	0.01	0	0.001	
11/9/2017 19:09	0	0	0.01	0	0.001	
11/9/2017 19:10	0	0	0.01	0	0.001	19
11/9/2017 19:11	0	0	0.01	0	0.001	
11/9/2017 19:12	0	0	0.01	0	0.001	
11/9/2017 19:13	0	0	0.01	0	0.001	
11/9/2017 19:14	0	0	0.01	0	0.001	
11/9/2017 19:15	0	0	0.01	0	0.001	18
11/9/2017 19:16	0	0	0.01	0	0.001	
11/9/2017 19:17	0	0.001	0.01	0	0.001	
11/9/2017 19:18	0	0	0.01	0	0.001	
11/9/2017 19:19	0	0	0.01	0	0.001	
11/9/2017 19:20	0	0	0.01	0	0.001	12
11/9/2017 19:21	0	0	0.01	0	0.001	
11/9/2017 19:22	0	0	0.01	0	0.001	
11/9/2017 19:23	0	0	0.01	0	0.001	
11/9/2017 19:24	0	0	0.01	0	0.001	
11/9/2017 19:25	0	0	0.01	0	0.001	12
11/9/2017 19:26	0	0	0.01	0	0.001	
11/9/2017 19:27	0	0.001	0.01	0	0.001	
11/9/2017 19:28	0	0	0.01	0	0.001	
11/9/2017 19:29	0	0	0.01	0	0.001	
11/9/2017 19:30	0	0	0.01	0	0.001	13
11/9/2017 19:31	0	0	0.01	0	0.001	
11/9/2017 19:32	0	0	0.01	0	0.001	
11/9/2017 19:33	0	0	0.01	0	0.001	
11/9/2017 19:34	0	0	0.01	0	0.001	
11/9/2017 19:35	0	0	0.01	0	0.001	16
11/9/2017 19:36	0	0.001	0.01	0	0.001	
11/9/2017 19:37	0	0	0.01	0	0.001	
11/9/2017 19:38	0	0.001	0.01	0	0.001	
11/9/2017 19:39	0	0.001	0.01	0	0.001	
11/9/2017 19:40	0	0.001	0.01	0	0.001	18
11/9/2017 19:41	0	0	0.01	0	0.001	
11/9/2017 19:42	0	0	0.01	0	0.001	
11/9/2017 19:43	0	0	0.01	0	0.001	
11/9/2017 19:44	0	0	0.01	0	0.001	
11/9/2017 19:45	0	0	0.01	0	0.001	19
11/9/2017 19:46	0	0	0.01	0	0.001	
11/9/2017 19:47	0	0	0.01	0	0.001	
11/9/2017 19:48	0	0.001	0.01	0	0.001	
11/9/2017 19:49	0	0	0.01	0	0.001	
11/9/2017 19:50	0	0.001	0.01	0	0.001	20

11/9/2017 19:51	0	0.001	0.01	0	0.001	
11/9/2017 19:52	0	0.001	0.01	0	0.001	
11/9/2017 19:53	0	0.001	0.01	0	0.001	
11/9/2017 19:54	0	0.001	0.01	0	0.001	
11/9/2017 19:55	0	0.001	0.01	0	0.001	14
11/9/2017 19:56	0	0.001	0.01	0	0.001	
11/9/2017 19:57	0	0.001	0.01	0	0.001	
11/9/2017 19:58	0	0.001	0.01	0	0.001	
11/9/2017 19:59	0	0.001	0.01	0	0.001	
11/9/2017 20:00	0	0.001	0.01	0	0.001	3
11/9/2017 20:01	0	0.001	0.01	0	0.001	
11/9/2017 20:02	0	0.001	0.01	0	0.001	
11/9/2017 20:03	0	0	0.01	0	0.001	
11/9/2017 20:04	0	0.001	0.01	0	0.001	
11/9/2017 20:05	0	0	0.01	0	0.001	8
11/9/2017 20:06	0	0.001	0.01	0	0.001	
11/9/2017 20:07	0	0.001	0.01	0	0.001	
11/9/2017 20:08	0	0.001	0.01	0	0.001	
11/9/2017 20:09	0	0.001	0.01	0	0.001	
11/9/2017 20:10	0	0.001	0.01	0	0.001	13
11/9/2017 20:11	0	0.001	0.01	0	0.001	
11/9/2017 20:12	0	0.001	0.01	0	0.001	
11/9/2017 20:13	0	0.001	0.01	0	0.001	
11/9/2017 20:14	0	0.002	0.01	0	0.001	
11/9/2017 20:15	0	0.001	0.01	0	0.001	17
11/9/2017 20:16	0	0.001	0.01	0	0.001	
11/9/2017 20:17	0	0.001	0.01	0	0.001	
11/9/2017 20:18	0	0.001	0.01	0	0.001	
11/9/2017 20:19	0	0.001	0.01	0	0.001	
11/9/2017 20:20	0	0.001	0.01	0	0.001	10
11/9/2017 20:21	0	0	0.01	0	0.001	
11/9/2017 20:22	0	0.001	0.01	0	0.001	
11/9/2017 20:23	0	0.001	0.01	0	0.001	
11/9/2017 20:24	0	0.001	0.01	0	0.001	
11/9/2017 20:25	0	0.001	0.01	0	0.001	3
11/9/2017 20:26	0	0.001	0.01	0	0.001	
11/9/2017 20:27	0	0.001	0.01	0	0.001	
11/9/2017 20:28	0	0.001	0.01	0	0.001	
11/9/2017 20:29	0	0.001	0.01	0	0.001	
11/9/2017 20:30	0	0.001	0.01	0	0.001	5
11/9/2017 20:31	0	0.001	0.01	0	0.001	
11/9/2017 20:32	0	0.001	0.01	0	0.001	
11/9/2017 20:33	0	0	0.01	0	0.001	
11/9/2017 20:34	0	0.001	0.01	0	0.001	
11/9/2017 20:35	0	0	0.01	0	0.001	6
11/9/2017 20:36	0	0	0.01	0	0.001	
11/9/2017 20:37	0	0	0.01	0	0.001	
11/9/2017 20:38	0	0	0.01	0	0.001	
11/9/2017 20:39	0	0.001	0.01	0	0.001	
11/9/2017 20:40	0	0.001	0.01	0	0.001	3
11/9/2017 20:41	0	0.001	0.01	0	0.001	
11/9/2017 20:42	0	0.001	0.01	0	0.001	
11/9/2017 20:43	0	0.001	0.01	0	0.001	
11/9/2017 20:44	0	0	0.01	0	0.001	

11/9/2017 20:45	0	0.001	0.01	0	0.001	5
11/9/2017 20:46	0	0	0.01	0	0.001	
11/9/2017 20:47	0	0	0.01	0	0.001	
11/9/2017 20:48	0	0.001	0.01	0	0.001	
11/9/2017 20:49	0	0.001	0.01	0	0.001	
11/9/2017 20:50	0	0.002	0.01	0	0.001	8
11/9/2017 20:51	0	0.001	0.01	0	0.001	
11/9/2017 20:52	0	0.002	0.01	0	0.001	
11/9/2017 20:53	0	0.001	0.01	0	0.001	
11/9/2017 20:54	0	0.001	0.01	0	0.001	
11/9/2017 20:55	0	0.001	0.01	0	0.001	10
11/9/2017 20:56	0	0.001	0.01	0	0.001	
11/9/2017 20:57	0	0.001	0.01	0	0.001	
11/9/2017 20:58	0	0.002	0.01	0	0.001	
11/9/2017 20:59	0	0.001	0.01	0	0.001	
11/9/2017 21:00	0	0.001	0.01	0	0.001	10
11/9/2017 21:01	0	0.001	0.01	0	0.001	
11/9/2017 21:02	0	0.001	0.01	0	0.001	
11/9/2017 21:03	0	0.001	0.01	0	0.001	
11/9/2017 21:04	0	0.001	0.01	0	0.001	
11/9/2017 21:05	0	0.001	0.01	0	0.001	14
11/9/2017 21:06	0	0.001	0.01	0	0.001	
11/9/2017 21:07	0	0.001	0.01	0	0.001	
11/9/2017 21:08	0	0.001	0.01	0	0.001	
11/9/2017 21:09	0	0.001	0.01	0	0.001	
11/9/2017 21:10	0	0.001	0.01	0	0.001	13
11/9/2017 21:11	0	0	0.01	0	0.001	
11/9/2017 21:12	0	0	0.01	0	0.001	
11/9/2017 21:13	0	0.001	0.01	0	0.001	
11/9/2017 21:14	0	0	0.01	0	0.001	
11/9/2017 21:15	0	0.001	0.01	0	0.001	10
11/9/2017 21:16	0	0	0.01	0	0.001	
11/9/2017 21:17	0	0.001	0.01	0	0.001	
11/9/2017 21:18	0	0.001	0.01	0	0.001	
11/9/2017 21:19	0	0.001	0.01	0	0.001	
11/9/2017 21:20	0	0.001	0.01	0	0.001	10
11/9/2017 21:21	0	0.001	0.01	0	0.001	
11/10/2017 13:26	0	0.003	0.004	0	0	
11/10/2017 13:27	0	0.003	0.004	0	0	
11/10/2017 13:28	0	0.003	0.004	0	0	
11/10/2017 13:29	0	0.003	0.004	0	0	
11/10/2017 13:30	0	0.002	0.004	0	0	4
11/10/2017 13:31	0	0.002	0.004	0	0	
11/10/2017 13:32	0	0.002	0.004	0	0	
11/10/2017 13:33	0	0.003	0.004	0	0	
11/10/2017 13:34	0	0.002	0.004	0	0	
11/10/2017 13:35	0	0.002	0.004	0	0	9
11/10/2017 13:36	0	0.002	0.004	0	0	
11/10/2017 13:37	0	0.002	0.004	0	0	
11/10/2017 13:38	0	0.002	0.004	0	0	
11/10/2017 13:39	0	0.002	0.004	0	0	
11/10/2017 13:40	0	0.002	0.004	0	0	10
11/10/2017 13:41	0.002	0.002	0.004	0	0	
11/10/2017 13:42	0.002	0.002	0.004	0	0	

11/10/2017 13:43	0.002	0.002	0.004	0	0	
11/10/2017 13:44	0.002	0.003	0.004	0	0	
11/10/2017 13:45	0.002	0.002	0.004	0	0	12
11/10/2017 13:46	0.002	0.002	0.004	0	0	
11/10/2017 13:47	0.001	0.001	0.004	0	0	
11/10/2017 13:48	0.001	0.002	0.004	0	0	
11/10/2017 13:49	0.001	0.002	0.004	0	0	
11/10/2017 13:50	0.001	0.002	0.004	0	0	11
11/10/2017 13:51	0.001	0.002	0.004	0	0	
11/10/2017 13:52	0.001	0.002	0.004	0	0	
11/10/2017 13:53	0.001	0.002	0.004	0	0	
11/10/2017 13:54	0.001	0.002	0.004	0	0	
11/10/2017 13:55	0.001	0.003	0.004	0	0	13
11/10/2017 13:56	0.001	0.002	0.004	0	0	
11/10/2017 13:57	0.001	0.002	0.004	0	0	
11/10/2017 13:58	0.001	0.002	0.004	0	0	
11/10/2017 13:59	0.001	0.002	0.004	0	0	
11/10/2017 14:00	0.001	0.002	0.004	0	0	12
11/10/2017 14:01	0.001	0.002	0.004	0	0	
11/10/2017 14:02	0.001	0.002	0.004	0	0	
11/10/2017 14:03	0.001	0.002	0.004	0	0	
11/10/2017 14:06	0.001	0.002	0.004	0	0	
11/10/2017 14:06						11
11/10/2017 14:07	0.001	0.001	0.004	0	0	
11/10/2017 14:08	0.001	0.002	0.004	0	0	
11/10/2017 14:09	0.001	0.001	0.004	0	0	
11/10/2017 14:10	0.001	0.002	0.004	0	0	13
11/10/2017 14:11	0.001	0.001	0.004	0	0	
11/10/2017 14:12	0.001	0.001	0.004	0	0	
11/10/2017 14:13	0.001	0.001	0.004	0	0	
11/10/2017 14:14	0.001	0.001	0.004	0	0	
11/10/2017 14:15	0.001	0.001	0.004	0	0	
11/10/2017 14:15						14
11/10/2017 14:16	0.001	0.001	0.004	0	0	
11/10/2017 14:17	0.001	0.001	0.004	0	0	
11/10/2017 14:18	0.001	0.002	0.004	0	0	
11/10/2017 14:19	0.001	0.002	0.004	0	0	
11/10/2017 14:20	0.001	0.001	0.004	0	0	14
11/10/2017 14:21	0.001	0.001	0.004	0	0	
11/10/2017 14:22	0.001	0.002	0.004	0	0	
11/10/2017 14:23	0.001	0.002	0.004	0	0	
11/10/2017 14:24	0.001	0.001	0.004	0	0	
11/10/2017 14:25	0.001	0.001	0.004	0	0	19
11/10/2017 14:26	0.001	0.001	0.004	0	0	
11/10/2017 14:27	0.001	0.002	0.004	0	0	
11/10/2017 14:28	0.001	0.001	0.004	0	0	
11/10/2017 14:29	0.001	0.001	0.004	0	0	
11/10/2017 14:30	0.001	0.001	0.004	0	0	18
11/10/2017 14:31	0.001	0.001	0.004	0	0	
11/10/2017 14:32	0	0.001	0.004	0	0	
11/10/2017 14:33	0	0.001	0.004	0	0	
11/10/2017 14:34	0	0.001	0.004	0	0	
11/10/2017 14:35	0	0.001	0.004	0	0	17
11/10/2017 14:36	0	0.001	0.004	0	0	

11/10/2017 14:37	0	0.001	0.004	0	0	
11/10/2017 14:38	0	0.001	0.004	0	0	
11/10/2017 14:39	0	0.001	0.004	0	0	
11/10/2017 14:40	0	0.001	0.004	0	0	18
11/10/2017 14:41	0	0.002	0.004	0	0	
11/10/2017 14:42	0	0.001	0.004	0	0	
11/10/2017 14:43	0	0.001	0.004	0	0	
11/10/2017 14:44	0	0.002	0.004	0	0	
11/10/2017 14:45	0	0.002	0.004	0	0	15
11/10/2017 14:46	0	0.002	0.004	0	0	
11/10/2017 14:47	0	0.001	0.004	0	0	
11/10/2017 14:48	0	0.002	0.004	0	0	
11/10/2017 14:49	0	0.002	0.004	0	0	
11/10/2017 14:50	0	0.002	0.004	0	0	15
11/10/2017 14:51	0.001	0.002	0.004	0	0	
11/10/2017 14:52	0.001	0.002	0.004	0	0	
11/10/2017 14:53	0.001	0.002	0.004	0	0	
11/10/2017 14:54	0.001	0.001	0.004	0	0	
11/10/2017 14:55	0.001	0.002	0.004	0	0	17
11/10/2017 14:56	0.001	0.002	0.004	0	0	
11/10/2017 14:57	0.001	0.002	0.004	0	0	
11/10/2017 14:58	0.001	0.002	0.004	0	0	
11/10/2017 14:59	0.001	0.002	0.004	0	0	
11/10/2017 15:00	0.001	0.002	0.004	0	0	18
11/10/2017 15:01	0.001	0.002	0.004	0	0	
11/10/2017 15:02	0.001	0.002	0.004	0	0	
11/10/2017 15:03	0.001	0.002	0.004	0	0	
11/10/2017 15:04	0.001	0.002	0.004	0	0	
11/10/2017 15:05	0.001	0.002	0.004	0	0	17
11/10/2017 15:06	0.001	0.002	0.004	0	0	
11/10/2017 15:07	0.001	0.001	0.004	0	0	
11/10/2017 15:08	0.001	0.001	0.004	0	0	
11/10/2017 15:09	0.001	0.002	0.004	0	0	
11/10/2017 15:10	0.001	0.001	0.004	0	0	14
11/10/2017 15:11	0.001	0.002	0.004	0	0	
11/10/2017 15:12	0.001	0.002	0.004	0	0	
11/10/2017 15:13	0.001	0.002	0.004	0	0	
11/10/2017 15:14	0.001	0.002	0.004	0	0	
11/10/2017 15:15	0.001	0.001	0.004	0	0	16
11/10/2017 15:16	0.001	0.002	0.004	0	0	
11/10/2017 15:17	0.001	0.002	0.004	0	0	
11/10/2017 15:18	0.001	0.002	0.004	0	0	
11/10/2017 15:19	0.001	0.002	0.004	0	0	
11/10/2017 15:20	0.001	0.002	0.004	0	0	19
11/10/2017 15:21	0.001	0.002	0.004	0	0	
11/10/2017 15:22	0.001	0.001	0.004	0	0	
11/10/2017 15:23	0.001	0.002	0.004	0	0	
11/10/2017 15:24	0.001	0.002	0.004	0	0	
11/10/2017 15:25	0.001	0.002	0.004	0	0	20
11/10/2017 15:26	0.001	0.002	0.004	0	0	
11/10/2017 15:27	0.001	0.002	0.004	0	0	
11/10/2017 15:28	0.001	0.002	0.004	0	0	
11/10/2017 15:29	0.001	0.002	0.004	0	0	
11/10/2017 15:30	0.001	0.003	0.004	0	0	20

11/10/2017 15:31	0.001	0.002	0.004	0	0	
11/10/2017 15:32	0.001	0.002	0.004	0	0	
11/10/2017 15:33	0.001	0.001	0.004	0	0	
11/10/2017 15:34	0.001	0.002	0.004	0	0	
11/10/2017 15:35	0.001	0.001	0.004	0	0	17
11/10/2017 15:36	0.001	0.001	0.004	0	0	
11/10/2017 15:37	0.001	0.002	0.004	0	0	
11/10/2017 15:38	0.001	0.001	0.004	0	0	
11/10/2017 15:39	0.001	0.002	0.004	0	0	
11/10/2017 15:40	0.001	0.002	0.004	0	0	12
11/10/2017 15:41	0.001	0.002	0.004	0	0	
11/10/2017 15:42	0.001	0.002	0.004	0	0	
11/10/2017 15:43	0.001	0.001	0.004	0	0	
11/10/2017 15:44	0.001	0.001	0.004	0	0	
11/10/2017 15:45	0.001	0.002	0.004	0	0	9
11/10/2017 15:46	0.001	0.001	0.004	0	0	
11/10/2017 15:47	0.001	0.001	0.004	0	0	
11/10/2017 15:48	0.001	0.001	0.004	0	0	
11/10/2017 15:49	0.001	0.001	0.004	0	0	
11/10/2017 15:50	0.001	0.001	0.004	0	0	12
11/10/2017 15:51	0.001	0.001	0.004	0	0	
11/10/2017 15:52	0.001	0.001	0.004	0	0	
11/10/2017 15:53	0.001	0.002	0.004	0	0	
11/10/2017 15:54	0.001	0.002	0.004	0	0	
11/10/2017 15:55	0.001	0.002	0.004	0	0	13
11/10/2017 15:56	0.001	0.001	0.004	0	0	
11/10/2017 15:57	0	0.002	0.004	0	0	
11/10/2017 15:58	0	0.001	0.004	0	0	
11/10/2017 15:59	0	0.001	0.004	0	0	
11/10/2017 16:00	0	0.001	0.004	0	0	12
11/10/2017 16:01	0	0.002	0.004	0	0	
11/10/2017 16:02	0.001	0.002	0.004	0	0	
11/10/2017 16:03	0.001	0.001	0.004	0	0	
11/10/2017 16:04	0.001	0.002	0.004	0	0	
11/10/2017 16:05	0.001	0.001	0.004	0	0	15
11/10/2017 16:06	0.001	0.001	0.004	0	0	
11/10/2017 16:07	0.001	0.001	0.004	0	0	
11/10/2017 16:08	0.001	0.001	0.004	0	0	
11/10/2017 16:09	0.001	0.001	0.004	0	0	
11/10/2017 16:10	0.001	0.001	0.004	0	0	5
11/10/2017 16:11	0.001	0.001	0.004	0	0	
11/10/2017 16:12	0	0.001	0.004	0	0	
11/10/2017 16:13	0	0.001	0.004	0	0	
11/10/2017 16:14	0	0.001	0.004	0	0	
11/10/2017 16:15	0	0.001	0.004	0	0	
11/10/2017 16:15						16
11/10/2017 16:16	0	0.002	0.004	0	0	
11/10/2017 16:17	0	0.001	0.004	0	0	
11/10/2017 16:18	0	0.001	0.004	0	0	
11/10/2017 16:19	0	0.001	0.004	0	0	
11/10/2017 16:20	0	0	0.004	0	0	13
11/10/2017 16:21	0	0.001	0.004	0	0	
11/10/2017 16:22	0	0.001	0.004	0	0	
11/10/2017 16:23	0	0.001	0.004	0	0	

11/10/2017 16:24	0	0.002	0.004	0	0	
11/10/2017 16:25	0	0.001	0.004	0	0	10
11/10/2017 16:26	0	0.001	0.004	0	0	
11/10/2017 16:27	0	0	0.004	0	0	
11/10/2017 16:28	0	0	0.004	0	0	
11/10/2017 16:29	0	0.001	0.004	0	0	
11/10/2017 16:30	0	0.001	0.004	0	0	12
11/10/2017 16:31	0	0.001	0.004	0	0	
11/10/2017 16:32	0	0.001	0.004	0	0	
11/10/2017 16:33	0	0.001	0.004	0	0	
11/10/2017 16:34	0	0.001	0.004	0	0	
11/10/2017 16:35	0	0.001	0.004	0	0	11
11/10/2017 16:36	0	0.002	0.004	0	0	
11/10/2017 16:37	0	0.001	0.004	0	0	
11/10/2017 16:38	0	0.002	0.004	0	0	
11/10/2017 16:39	0	0.001	0.004	0	0	
11/10/2017 16:40	0	0.001	0.004	0	0	11
11/10/2017 16:41	0	0.001	0.004	0	0	
11/10/2017 16:42	0	0.001	0.004	0	0	
11/10/2017 16:43	0	0.001	0.004	0	0	
11/10/2017 16:44	0	0.001	0.004	0	0	
11/10/2017 16:45	0	0.001	0.004	0	0	11
11/10/2017 16:46	0	0.001	0.004	0	0	
11/10/2017 16:47	0	0.001	0.004	0	0	
11/10/2017 16:48	0	0.001	0.004	0	0	
11/10/2017 16:49	0	0.001	0.004	0	0	
11/10/2017 16:50	0	0.001	0.004	0	0	11
11/10/2017 16:51	0	0.001	0.004	0	0	
11/10/2017 16:52	0	0.001	0.004	0	0	
11/10/2017 16:53	0	0.002	0.004	0	0	
11/10/2017 16:54	0	0.002	0.004	0	0	
11/10/2017 16:55	0	0.002	0.004	0	0	12
11/10/2017 16:56	0	0.001	0.004	0	0	
11/10/2017 16:57	0	0.001	0.004	0	0	
11/10/2017 16:58	0	0.001	0.004	0	0	
11/10/2017 16:59	0	0.001	0.004	0	0	
11/10/2017 17:00	0	0	0.004	0	0	9
11/10/2017 17:01	0	0.001	0.004	0	0	
11/10/2017 17:02	0	0.001	0.004	0	0	
11/10/2017 17:03	0	0	0.004	0	0	
11/10/2017 17:04	0	0.002	0.004	0	0	
11/10/2017 17:05	0	0.002	0.004	0	0	5
11/10/2017 17:06	0	0.002	0.004	0	0	
11/10/2017 17:07	0	0.002	0.004	0	0	
11/10/2017 17:08	0	0.002	0.004	0	0	
11/10/2017 17:09	0	0.001	0.004	0	0	
11/13/2017 13:26	0	0.003	0.005	0	0	
11/13/2017 13:27	0	0.003	0.005	0	0	
11/13/2017 13:28	0	0.003	0.005	0	0	
11/13/2017 13:29	0	0.002	0.005	0	0	
11/13/2017 13:30	0	0.002	0.005	0	0	17
11/13/2017 13:31	0	0.002	0.005	0	0	
11/13/2017 13:32	0	0.002	0.005	0	0	
11/13/2017 13:33	0	0.001	0.005	0	0	

11/13/2017 13:34	0	0.002	0.005	0	0	
11/13/2017 13:35	0	0.002	0.005	0	0	17
11/13/2017 13:36	0	0.001	0.005	0	0	
11/13/2017 13:37	0	0.001	0.005	0	0	
11/13/2017 13:38	0	0.002	0.005	0	0	
11/13/2017 13:39	0	0.002	0.005	0	0	
11/13/2017 13:40	0.001	0.002	0.005	0	0	16
11/13/2017 13:41	0.001	0.001	0.005	0	0	
11/13/2017 13:42	0.001	0.002	0.005	0	0	
11/13/2017 13:43	0.001	0.002	0.005	0	0	
11/13/2017 13:44	0.001	0.002	0.005	0	0	
11/13/2017 13:45	0.001	0.002	0.005	0	0	19
11/13/2017 13:46	0.001	0.002	0.005	0	0	
11/13/2017 13:47	0.001	0.002	0.005	0	0	
11/13/2017 13:48	0.001	0.002	0.005	0	0	
11/13/2017 13:49	0.001	0.003	0.005	0	0	
11/13/2017 13:50	0.001	0.002	0.005	0	0	18
11/13/2017 13:51	0.001	0.001	0.005	0	0	
11/13/2017 13:52	0.001	0.002	0.005	0	0	
11/13/2017 13:53	0.001	0.002	0.005	0	0	
11/13/2017 13:54	0.001	0.001	0.005	0	0	
11/13/2017 13:55	0.001	0.001	0.005	0	0	14
11/13/2017 13:56	0.001	0.002	0.005	0	0	
11/13/2017 13:57	0.001	0.002	0.005	0	0	
11/13/2017 13:58	0.001	0.002	0.005	0	0	
11/13/2017 13:59	0.001	0.002	0.005	0	0	
11/13/2017 14:00	0.001	0.002	0.005	0	0	14
11/13/2017 14:01	0.001	0.002	0.005	0	0	
11/13/2017 14:02	0.001	0.003	0.005	0	0	
11/13/2017 14:03	0.001	0.002	0.005	0	0	
11/13/2017 14:04	0.001	0.002	0.005	0	0	
11/13/2017 14:05	0.001	0.002	0.005	0	0	13
11/13/2017 14:06	0.001	0.002	0.005	0	0	
11/13/2017 14:07	0.001	0.001	0.005	0	0	
11/13/2017 14:08	0.001	0.003	0.005	0	0	
11/13/2017 14:09	0.001	0.002	0.005	0	0	
11/13/2017 14:10	0.001	0.002	0.005	0	0	15
11/13/2017 14:11	0.001	0.002	0.005	0	0	
11/13/2017 14:12	0.001	0.002	0.005	0	0	
11/13/2017 14:13	0.001	0.002	0.005	0	0	
11/13/2017 14:14	0.001	0.002	0.005	0	0	
11/13/2017 14:15	0.001	0.002	0.005	0	0	13
11/13/2017 14:16	0.001	0.001	0.005	0	0	
11/13/2017 14:17	0.001	0.001	0.005	0	0	
11/13/2017 14:18	0.001	0.002	0.005	0	0	
11/13/2017 14:19	0.001	0.002	0.005	0	0	
11/13/2017 14:20	0.001	0.001	0.005	0	0	14
11/13/2017 14:21	0.001	0.001	0.005	0	0	
11/13/2017 14:22	0.001	0.001	0.005	0	0	
11/13/2017 14:23	0.001	0.002	0.005	0	0	
11/13/2017 14:24	0.001	0.002	0.005	0	0	
11/13/2017 14:25	0.001	0.002	0.005	0	0	19
11/13/2017 14:26	0.001	0.002	0.005	0	0	
11/13/2017 14:27	0.001	0.002	0.005	0	0	

11/13/2017 14:28	0.001	0.002	0.005	0	0	
11/13/2017 14:29	0.001	0.002	0.005	0	0	
11/13/2017 14:30	0.001	0.001	0.005	0	0	16
11/13/2017 14:31	0.001	0.002	0.005	0	0	
11/13/2017 14:32	0.001	0.002	0.005	0	0	
11/13/2017 14:33	0.001	0.001	0.005	0	0	
11/13/2017 14:34	0.001	0.001	0.005	0	0	
11/13/2017 14:35	0.001	0.001	0.005	0	0	17
11/13/2017 14:36	0.001	0.001	0.005	0	0	
11/13/2017 14:37	0.001	0.001	0.005	0	0	
11/13/2017 14:38	0.001	0.001	0.005	0	0	
11/13/2017 14:39	0.001	0	0.005	0	0	
11/13/2017 14:40	0	0.001	0.005	0	0	17
11/13/2017 14:41	0	0.002	0.005	0	0	
11/13/2017 14:42	0	0.002	0.005	0	0	
11/13/2017 14:43	0	0.002	0.005	0	0	
11/13/2017 14:44	0	0.002	0.005	0	0	
11/13/2017 14:45	0	0.002	0.005	0	0	17
11/13/2017 14:46	0	0.002	0.005	0	0	
11/13/2017 14:47	0	0.002	0.005	0	0	
11/13/2017 14:48	0	0.002	0.005	0	0	
11/13/2017 14:49	0	0.003	0.005	0	0	
11/13/2017 14:50	0.001	0.002	0.005	0	0	14
11/13/2017 14:51	0.001	0.002	0.005	0	0	
11/13/2017 14:52	0.001	0.002	0.005	0	0	
11/13/2017 14:53	0.001	0.003	0.005	0	0	
11/13/2017 14:54	0.001	0.003	0.005	0	0	
11/13/2017 14:55	0.001	0.002	0.005	0	0	15
11/13/2017 14:56	0.001	0.002	0.005	0	0	
11/13/2017 14:57	0.001	0.002	0.005	0	0	
11/13/2017 14:58	0.001	0.002	0.005	0	0	
11/13/2017 14:59	0.001	0.002	0.005	0	0	
11/13/2017 15:00	0.001	0.004	0.005	0	0	18
11/13/2017 15:01	0.001	0.002	0.005	0	0	
11/13/2017 15:02	0.001	0.003	0.005	0	0	
11/13/2017 15:03	0.001	0.002	0.005	0	0	
11/13/2017 15:04	0.001	0.002	0.005	0	0	
11/13/2017 15:05	0.001	0.001	0.005	0	0	20
11/13/2017 15:06	0.001	0.002	0.005	0	0	
11/13/2017 15:07	0.001	0.002	0.005	0	0	
11/13/2017 15:08	0.001	0.003	0.005	0	0	
11/13/2017 15:09	0.001	0.003	0.005	0	0	
11/13/2017 15:10	0.001	0.002	0.005	0	0	18
11/13/2017 15:11	0.001	0.004	0.005	0	0	
11/13/2017 15:12	0.001	0.002	0.005	0	0	
11/13/2017 15:13	0.001	0.002	0.005	0	0	
11/13/2017 15:14	0.001	0.002	0.005	0	0	
11/13/2017 15:15	0.001	0.002	0.005	0	0	18
11/13/2017 15:16	0.001	0.002	0.005	0	0	
11/13/2017 15:17	0.001	0.001	0.005	0	0	
11/13/2017 15:18	0.001	0.001	0.005	0	0	
11/13/2017 15:19	0.001	0.002	0.005	0	0	
11/13/2017 15:20	0.001	0.002	0.005	0	0	21
11/13/2017 15:21	0.001	0.004	0.005	0	0	

11/13/2017 15:22	0.001	0.002	0.005	0	0	
11/13/2017 15:23	0.001	0.002	0.005	0	0	
11/13/2017 15:24	0.001	0.002	0.005	0	0	
11/13/2017 15:25	0.001	0.003	0.005	0	0	16
11/13/2017 15:26	0.001	0.002	0.005	0	0	
11/13/2017 15:27	0.001	0.003	0.005	0	0	
11/13/2017 15:28	0.001	0.002	0.005	0	0	
11/13/2017 15:29	0.001	0.002	0.005	0	0	
11/13/2017 15:30	0.001	0.002	0.005	0	0	14
11/13/2017 15:31	0.001	0.002	0.005	0	0	
11/13/2017 15:32	0.001	0.003	0.005	0	0	
11/13/2017 15:33	0.001	0.002	0.005	0	0	
11/13/2017 15:34	0.001	0.003	0.005	0	0	
11/13/2017 15:35	0.001	0.002	0.005	0	0	13
11/13/2017 15:36	0.001	0.001	0.005	0	0	
11/13/2017 15:37	0.001	0.002	0.005	0	0	
11/13/2017 15:38	0.001	0.003	0.005	0	0	
11/13/2017 15:39	0.001	0.002	0.005	0	0	
11/13/2017 15:40	0.001	0.002	0.005	0	0	14
11/13/2017 15:41	0.001	0.001	0.005	0	0	
11/13/2017 15:42	0.001	0.002	0.005	0	0	
11/13/2017 15:43	0.001	0.002	0.005	0	0	
11/13/2017 15:44	0.001	0.002	0.005	0	0	
11/13/2017 15:45	0.001	0.001	0.005	0	0	13
11/13/2017 15:46	0.001	0.002	0.005	0	0	
11/13/2017 15:47	0.001	0.002	0.005	0	0	
11/13/2017 15:48	0.001	0.002	0.005	0	0	
11/13/2017 15:49	0.001	0.001	0.005	0	0	
11/13/2017 15:50	0.001	0.001	0.005	0	0	18
11/13/2017 15:51	0.001	0.002	0.005	0	0	
11/13/2017 15:52	0.001	0.002	0.005	0	0	
11/13/2017 15:53	0.001	0.001	0.005	0	0	
11/13/2017 15:54	0.001	0.001	0.005	0	0	
11/13/2017 15:55	0.001	0.002	0.005	0	0	14
11/13/2017 15:56	0.001	0.002	0.005	0	0	
11/13/2017 15:57	0.001	0.001	0.005	0	0	
11/13/2017 15:58	0.001	0.001	0.005	0	0	
11/13/2017 15:59	0.001	0.002	0.005	0	0	
11/13/2017 16:00	0.001	0.002	0.005	0	0	4
11/13/2017 16:01	0.001	0.003	0.005	0	0	
11/13/2017 16:02	0.001	0.003	0.005	0	0	
11/13/2017 16:03	0.001	0.002	0.005	0	0	
11/13/2017 16:04	0.001	0.002	0.005	0	0	
11/13/2017 16:05	0.001	0.003	0.005	0	0	5
11/13/2017 16:06	0.001	0.001	0.005	0	0	
11/13/2017 16:07	0.001	0.002	0.005	0	0	
11/13/2017 16:08	0.001	0.002	0.005	0	0	
11/13/2017 16:09	0.001	0.001	0.005	0	0	
11/13/2017 16:10	0.001	0.002	0.005	0	0	6
11/13/2017 16:11	0.001	0.002	0.005	0	0	
11/13/2017 16:12	0.001	0.002	0.005	0	0	
11/13/2017 16:13	0.001	0.002	0.005	0	0	
11/13/2017 16:14	0.001	0.002	0.005	0	0	
11/13/2017 16:15	0.001	0.002	0.005	0	0	4

11/13/2017 16:16	0.001	0.002	0.005	0	0	
11/13/2017 16:17	0.001	0.002	0.005	0	0	
11/13/2017 16:18	0.001	0.001	0.005	0	0	
11/13/2017 16:19	0.001	0.001	0.005	0	0	
11/13/2017 16:20	0.001	0.002	0.005	0	0	5
11/13/2017 16:21	0.001	0.001	0.005	0	0	
11/13/2017 16:22	0.001	0.002	0.005	0	0	
11/13/2017 16:23	0.001	0.001	0.005	0	0	
11/13/2017 16:24	0.001	0.001	0.005	0	0	
11/13/2017 16:25	0.001	0.001	0.005	0	0	3
11/13/2017 16:26	0.001	0.002	0.005	0	0	
11/13/2017 16:27	0.001	0.001	0.005	0	0	
11/13/2017 16:28	0.001	0.001	0.005	0	0	
11/13/2017 16:29	0.001	0.002	0.005	0	0	
11/13/2017 16:30	0.001	0.001	0.005	0	0	10
11/13/2017 16:31	0.001	0.002	0.005	0	0	
11/13/2017 16:32	0.001	0.001	0.005	0	0	
11/13/2017 16:33	0.001	0.002	0.005	0	0	
11/13/2017 16:34	0.001	0.002	0.005	0	0	
11/13/2017 16:35	0.001	0.001	0.005	0	0	9
11/13/2017 16:36	0.001	0.001	0.005	0	0	
11/13/2017 16:37	0.001	0.001	0.005	0	0	
11/13/2017 16:38	0.001	0.003	0.005	0	0	
11/13/2017 16:39	0.001	0.002	0.005	0	0	
11/13/2017 16:40	0.001	0.002	0.005	0	0	13
11/13/2017 16:41	0.001	0.002	0.005	0	0	
11/13/2017 16:42	0.001	0.001	0.005	0	0	
11/13/2017 16:43	0.001	0.001	0.005	0	0	
11/13/2017 16:44	0.001	0.001	0.005	0	0	
11/13/2017 16:45	0.001	0.001	0.005	0	0	12
11/13/2017 16:46	0.001	0.001	0.005	0	0	
11/13/2017 16:47	0.001	0.002	0.005	0	0	
11/13/2017 16:48	0.001	0.001	0.005	0	0	
11/13/2017 16:49	0.001	0.002	0.005	0	0	
11/13/2017 16:50	0.001	0.002	0.005	0	0	15
11/13/2017 16:51	0.001	0.002	0.005	0	0	
11/13/2017 16:52	0.001	0.002	0.005	0	0	
11/13/2017 16:53	0.001	0.001	0.005	0	0	
11/13/2017 16:54	0.001	0.002	0.005	0	0	
11/13/2017 16:55	0.001	0.003	0.005	0	0	14
11/13/2017 16:56	0.001	0.002	0.005	0	0	
11/13/2017 16:57	0.001	0.001	0.005	0	0	
11/13/2017 16:58	0.001	0.001	0.005	0	0	
11/13/2017 16:59	0.001	0.001	0.005	0	0	
11/13/2017 17:00	0.001	0.002	0.005	0	0	14
11/13/2017 17:01	0.001	0.004	0.005	0	0	
11/13/2017 17:02	0.001	0.002	0.005	0	0	
11/13/2017 17:03	0.001	0.004	0.005	0	0	
11/13/2017 17:04	0.001	0.002	0.005	0	0	
11/13/2017 17:05	0.001	0.002	0.005	0	0	14
11/13/2017 17:06	0.001	0.001	0.005	0	0	
11/13/2017 17:07	0.001	0.002	0.005	0	0	
11/13/2017 17:08	0.001	0.003	0.005	0	0	
11/13/2017 17:09	0.001	0.001	0.005	0	0	

11/13/2017 17:10	0.001	0.002	0.005	0	0	12
11/13/2017 17:11	0.001	0.002	0.005	0	0	
11/13/2017 17:12	0.001	0.001	0.005	0	0	
11/13/2017 17:13	0.001	0.001	0.005	0	0	
11/13/2017 17:14	0.001	0.001	0.005	0	0	
11/13/2017 17:15	0.001	0.001	0.005	0	0	15
11/13/2017 17:16	0.001	0.002	0.005	0	0	
11/13/2017 17:17	0.001	0.004	0.005	0	0	
11/13/2017 17:18	0.001	0.002	0.005	0	0	
11/13/2017 17:19	0.001	0.002	0.005	0	0	
11/13/2017 17:20	0.001	0.001	0.005	0	0	12
11/13/2017 17:21	0.001	0.001	0.005	0	0	
11/13/2017 17:22	0.001	0.001	0.005	0	0	
11/13/2017 17:23	0.001	0.001	0.005	0	0	
11/13/2017 17:24	0.001	0.001	0.005	0	0	
11/13/2017 17:25	0.001	0.001	0.005	0	0	13
11/13/2017 17:26	0.001	0.001	0.005	0	0	
11/13/2017 17:27	0.001	0.001	0.005	0	0	
11/13/2017 17:28	0.001	0.001	0.005	0	0	
11/13/2017 17:29	0.001	0.001	0.005	0	0	
11/13/2017 17:30	0.001	0.002	0.005	0	0	11
11/13/2017 17:31	0.001	0.001	0.005	0	0	
11/13/2017 17:32	0.001	0.001	0.005	0	0	
11/13/2017 17:33	0.001	0.001	0.005	0	0	
11/13/2017 17:34	0.001	0.001	0.005	0	0	
11/13/2017 17:35	0.001	0.002	0.005	0	0	12
11/13/2017 17:36	0.001	0.002	0.005	0	0	
11/13/2017 17:37	0.001	0.001	0.005	0	0	
11/13/2017 17:38	0.001	0.001	0.005	0	0	
11/13/2017 17:39	0.001	0.001	0.005	0	0	
11/13/2017 17:40	0.001	0.001	0.005	0	0	15
11/13/2017 17:41	0.001	0.001	0.005	0	0	
11/13/2017 17:42	0.001	0.001	0.005	0	0	
11/13/2017 17:43	0.001	0.001	0.005	0	0	
11/13/2017 17:44	0.001	0.001	0.005	0	0	
11/13/2017 17:45	0.001	0.001	0.005	0	0	15
11/13/2017 17:46	0.001	0.001	0.005	0	0	
11/13/2017 17:47	0.001	0.001	0.005	0	0	
11/13/2017 17:48	0.001	0.002	0.005	0	0	
11/13/2017 17:49	0.001	0.002	0.005	0	0	
11/13/2017 17:50	0.001	0.002	0.005	0	0	16
11/13/2017 17:51	0.001	0.003	0.005	0	0	
11/13/2017 17:52	0.001	0.001	0.005	0	0	
11/13/2017 17:53	0.001	0.001	0.005	0	0	
11/13/2017 17:54	0.001	0.001	0.005	0	0	
11/13/2017 17:55	0.001	0.001	0.005	0	0	13
11/13/2017 17:56	0.001	0.001	0.005	0	0	
11/13/2017 17:57	0.001	0.001	0.005	0	0	
11/13/2017 17:58	0.001	0.001	0.005	0	0	
11/13/2017 17:59	0.001	0.001	0.005	0	0	
11/13/2017 18:00	0.001	0.001	0.005	0	0	12
11/13/2017 18:01	0.001	0.002	0.005	0	0	
11/13/2017 18:02	0.001	0.002	0.005	0	0	
11/13/2017 18:03	0.001	0.002	0.005	0	0	

11/13/2017 18:04	0.001	0.002	0.005	0	0	
11/13/2017 18:05	0.001	0.001	0.005	0	0	14
11/13/2017 18:06	0.001	0.002	0.005	0	0	
11/13/2017 18:07	0.001	0.002	0.005	0	0	
11/13/2017 18:08	0.001	0.001	0.005	0	0	
11/13/2017 18:09	0.001	0.001	0.005	0	0	
11/13/2017 18:10	0.001	0.001	0.005	0	0	13
11/13/2017 18:11	0.001	0.001	0.005	0	0	
11/13/2017 18:12	0.001	0.002	0.005	0	0	
11/13/2017 18:13	0.001	0.002	0.005	0	0	
11/13/2017 18:14	0.001	0.001	0.005	0	0	
11/13/2017 18:15	0.001	0.001	0.005	0	0	8
11/13/2017 18:16	0.001	0.002	0.005	0	0	
11/13/2017 18:17	0.001	0.002	0.005	0	0	
11/13/2017 18:18	0	0.001	0.005	0	0	
11/13/2017 18:19	0	0.001	0.005	0	0	
11/13/2017 18:20	0	0.001	0.005	0	0	9
11/13/2017 18:21	0	0.001	0.005	0	0	
11/13/2017 18:22	0	0.001	0.005	0	0	
11/13/2017 18:23	0	0.002	0.005	0	0	
11/13/2017 18:24	0	0.002	0.005	0	0	
11/13/2017 18:25	0	0.002	0.005	0	0	8
11/13/2017 18:26	0.001	0.002	0.005	0	0	
11/13/2017 18:27	0.001	0.002	0.005	0	0	
11/13/2017 18:28	0.001	0.002	0.005	0	0	
11/13/2017 18:29	0.001	0.001	0.005	0	0	
11/13/2017 18:30	0.001	0.002	0.005	0	0	8
11/13/2017 18:31	0.001	0.001	0.005	0	0	
11/13/2017 18:32	0.001	0.002	0.005	0	0	
11/13/2017 18:33	0.001	0.002	0.005	0	0	
11/13/2017 18:34	0.001	0.001	0.005	0	0	
11/13/2017 18:35	0.001	0.002	0.005	0	0	10
11/13/2017 18:36	0.001	0.001	0.005	0	0	
11/13/2017 18:37	0.001	0.001	0.005	0	0	
11/13/2017 18:38	0.001	0.001	0.005	0	0	
11/13/2017 18:39	0.001	0.001	0.005	0	0	
11/13/2017 18:40	0.001	0.001	0.005	0	0	9
11/13/2017 18:41	0.001	0.002	0.005	0	0	
11/13/2017 18:42	0.001	0.002	0.005	0	0	
11/13/2017 18:43	0.001	0.001	0.005	0	0	
11/13/2017 18:44	0.001	0.002	0.005	0	0	
11/13/2017 18:45	0.001	0.002	0.005	0	0	7
11/13/2017 18:46	0.001	0.001	0.005	0	0	
11/13/2017 18:47	0.001	0.001	0.005	0	0	
11/13/2017 18:48	0.001	0.002	0.005	0	0	
11/13/2017 18:49	0.001	0.002	0.005	0	0	
11/13/2017 18:50	0.001	0.002	0.005	0	0	5
11/13/2017 18:51	0.001	0.001	0.005	0	0	
11/13/2017 18:52	0.001	0.001	0.005	0	0	
11/13/2017 18:53	0.001	0.004	0.005	0	0	
11/13/2017 18:54	0.001	0.002	0.005	0	0	
11/13/2017 18:55	0.001	0.002	0.005	0	0	11
11/13/2017 18:56	0.001	0.002	0.005	0	0	
11/13/2017 18:57	0.001	0.002	0.005	0	0	

11/13/2017 18:58	0.001	0.001	0.005	0	0	
11/13/2017 18:59	0.001	0.002	0.005	0	0	
11/13/2017 19:00	0.001	0.002	0.005	0	0	14
11/13/2017 19:01	0.001	0.002	0.005	0	0	
11/13/2017 19:02	0.001	0.002	0.005	0	0	
11/13/2017 19:03	0.001	0.002	0.005	0	0	
11/13/2017 19:04	0.001	0.001	0.005	0	0	
11/13/2017 19:05	0.001	0.002	0.005	0	0	13
11/13/2017 19:06	0.001	0.002	0.005	0	0	
11/13/2017 19:07	0.001	0.002	0.005	0	0	
11/13/2017 19:08	0.001	0.002	0.005	0	0	
11/13/2017 19:09	0.001	0.001	0.005	0	0	
11/13/2017 19:10	0.001	0.001	0.005	0	0	12
11/13/2017 19:11	0.001	0.002	0.005	0	0	
11/13/2017 19:12	0.001	0.001	0.005	0	0	
11/13/2017 19:13	0.001	0.001	0.005	0	0	
11/13/2017 19:14	0.001	0.001	0.005	0	0	
11/13/2017 19:15	0.001	0.002	0.005	0	0	8
11/13/2017 19:16	0.001	0.002	0.005	0	0	
11/13/2017 19:17	0.001	0.001	0.005	0	0	
11/13/2017 19:18	0.001	0.002	0.005	0	0	
11/13/2017 19:19	0.001	0.002	0.005	0	0	
11/13/2017 19:20	0.001	0.001	0.005	0	0	19
11/13/2017 19:21	0.001	0.002	0.005	0	0	
11/13/2017 19:22	0.001	0.001	0.005	0	0	
11/13/2017 19:23	0.001	0.001	0.005	0	0	
11/13/2017 19:24	0.001	0.001	0.005	0	0	
11/13/2017 19:25	0.001	0.001	0.005	0	0	20
11/13/2017 19:26	0	0.002	0.005	0	0	
11/13/2017 19:27	0	0.001	0.005	0	0	
11/13/2017 19:28	0	0.002	0.005	0	0	
11/13/2017 19:29	0	0.001	0.005	0	0	
11/13/2017 19:30	0	0.001	0.005	0	0	17
11/13/2017 19:31	0	0.001	0.005	0	0	
11/13/2017 19:32	0	0.002	0.005	0	0	
11/13/2017 19:33	0	0.002	0.005	0	0	
11/13/2017 19:34	0.001	0.002	0.005	0	0	
11/13/2017 19:35	0.001	0.001	0.005	0	0	15
11/13/2017 19:36	0.001	0.001	0.005	0	0	
11/13/2017 19:37	0.001	0.001	0.005	0	0	
11/13/2017 19:38	0.001	0.001	0.005	0	0	
11/13/2017 19:39	0.001	0.001	0.005	0	0	
11/13/2017 19:40	0.001	0.002	0.005	0	0	13
11/13/2017 19:41	0.001	0.001	0.005	0	0	
11/13/2017 19:42	0.001	0.001	0.005	0	0	
11/13/2017 19:43	0.001	0.001	0.005	0	0	
11/13/2017 19:44	0	0.001	0.005	0	0	
11/13/2017 19:45	0	0.001	0.005	0	0	15
11/13/2017 19:46	0	0.001	0.005	0	0	
11/13/2017 19:47	0	0.001	0.005	0	0	
11/13/2017 19:48	0	0.001	0.005	0	0	
11/13/2017 19:49	0	0.001	0.005	0	0	
11/13/2017 19:50	0	0.001	0.005	0	0	19
11/13/2017 19:51	0	0.001	0.005	0	0	

11/13/2017 19:52	0	0.001	0.005	0	0	
11/13/2017 19:53	0	0.001	0.005	0	0	
11/13/2017 19:54	0	0.001	0.005	0	0	
11/13/2017 19:55	0	0.001	0.005	0	0	18
11/13/2017 19:56	0	0.001	0.005	0	0	
11/13/2017 19:57	0	0.001	0.005	0	0	
11/13/2017 19:58	0	0	0.005	0	0.001	
11/13/2017 19:59	0	0.001	0.005	0	0.001	
11/13/2017 20:00	0	0.001	0.005	0	0.001	18
11/13/2017 20:01	0	0.001	0.005	0	0.001	
11/13/2017 20:02	0	0.001	0.005	0	0.001	
11/13/2017 20:03	0	0	0.005	0	0.001	
11/13/2017 20:04	0	0	0.005	0	0.001	
11/13/2017 20:05	0	0.001	0.005	0	0.001	9
11/13/2017 20:06	0	0.001	0.005	0	0.001	
11/13/2017 20:07	0	0	0.005	0	0.001	
11/13/2017 20:08	0	0.001	0.005	0	0.001	
11/13/2017 20:09	0	0	0.005	0	0.001	
11/13/2017 20:10	0	0	0.005	0	0.001	5
11/13/2017 20:11	0	0.001	0.005	0	0.001	
11/13/2017 20:12	0	0.001	0.005	0	0.001	
11/13/2017 20:13	0	0	0.005	0	0.001	
11/13/2017 20:14	0	0.002	0.005	0	0.001	
11/13/2017 20:15	0	0.001	0.005	0	0.001	13
11/13/2017 20:16	0	0.001	0.005	0	0.001	
11/13/2017 20:17	0	0.001	0.005	0	0.001	
11/13/2017 20:18	0	0	0.005	0	0.001	
11/13/2017 20:19	0	0.001	0.005	0	0.001	
11/13/2017 20:20	0	0.001	0.005	0	0.001	9
11/13/2017 20:21	0	0.001	0.005	0	0.001	
11/13/2017 20:22	0	0.001	0.005	0	0.001	
11/13/2017 20:23	0	0.001	0.005	0	0.001	
11/13/2017 20:24	0	0.001	0.005	0	0.001	
11/13/2017 20:25	0	0.001	0.005	0	0.001	12
11/13/2017 20:26	0	0	0.005	0	0.001	
11/13/2017 20:27	0	0	0.005	0	0.001	
11/13/2017 20:28	0	0.001	0.005	0	0.001	
11/13/2017 20:29	0	0.001	0.005	0	0.001	
11/13/2017 20:30	0	0.001	0.005	0	0.001	9
11/13/2017 20:31	0	0.001	0.005	0	0.001	
11/13/2017 20:32	0	0.001	0.005	0	0.001	
11/13/2017 20:33	0	0.001	0.005	0	0.001	
11/13/2017 20:34	0	0.001	0.005	0	0.001	
11/13/2017 20:35	0	0.001	0.005	0	0.001	12
11/13/2017 20:36	0	0.001	0.005	0	0.001	
11/13/2017 20:37	0	0.001	0.005	0	0.001	
11/13/2017 20:38	0	0	0.005	0	0.001	
11/13/2017 20:39	0	0	0.005	0	0.001	
11/13/2017 20:40	0	0	0.005	0	0.001	12
11/13/2017 20:41	0	0.001	0.005	0	0.001	
11/13/2017 20:42	0	0.001	0.005	0	0.001	
11/13/2017 20:43	0	0.001	0.005	0	0.001	
11/13/2017 20:44	0	0.001	0.005	0	0.001	
11/13/2017 20:45	0	0	0.005	0	0.001	13

11/13/2017 20:46	0	0.001	0.005	0	0.001	
11/13/2017 20:47	0	0	0.005	0	0.001	
11/13/2017 20:48	0	0.002	0.005	0	0.001	
11/13/2017 20:49	0	0.001	0.005	0	0.001	
11/13/2017 20:50	0	0.002	0.005	0	0.001	15
11/13/2017 20:51	0	0.001	0.005	0	0.001	
11/13/2017 20:52	0	0.002	0.005	0	0.001	
11/13/2017 20:53	0	0.001	0.005	0	0.001	
11/13/2017 20:54	0	0.001	0.005	0	0.001	
11/13/2017 20:55	0	0.002	0.005	0	0.001	12
11/13/2017 20:56	0	0.001	0.005	0	0.001	
11/13/2017 20:57	0	0.001	0.005	0	0.001	
11/13/2017 20:58	0	0.002	0.005	0	0.001	
11/13/2017 20:59	0	0.001	0.005	0	0.001	
11/13/2017 21:00	0	0.002	0.005	0	0.001	13
11/13/2017 21:01	0	0.002	0.005	0	0.001	
11/13/2017 21:02	0	0.001	0.005	0	0.001	
11/13/2017 21:03	0.001	0.001	0.005	0	0.001	
11/13/2017 21:04	0.001	0.002	0.005	0	0.001	
11/13/2017 21:05	0.001	0.001	0.005	0	0.001	12
11/13/2017 21:06	0.001	0.001	0.005	0	0.001	
11/13/2017 21:07	0	0.001	0.005	0	0.001	
11/13/2017 21:08	0	0.001	0.005	0	0.001	
11/14/2017 15:21	0	0.007	0.009	0	0	
11/14/2017 15:22	0	0.006	0.009	0	0	
11/14/2017 15:23	0	0.005	0.009	0	0	
11/14/2017 15:24	0	0.005	0.009	0	0	
11/14/2017 15:25	0	0.007	0.009	0	0	11
11/14/2017 15:26	0	0.004	0.009	0	0	
11/14/2017 15:27	0	0.004	0.009	0	0	
11/14/2017 15:28	0	0.004	0.009	0	0	
11/14/2017 15:29	0	0.004	0.009	0	0	
11/14/2017 15:30	0	0.004	0.009	0	0	11
11/14/2017 15:31	0	0.005	0.009	0	0	
11/14/2017 15:32	0	0.004	0.009	0	0	
11/14/2017 15:33	0	0.004	0.009	0	0	
11/14/2017 15:34	0	0.003	0.009	0	0	
11/14/2017 15:35	0.004	0.003	0.009	0	0	16
11/14/2017 15:36	0.004	0.004	0.009	0	0	
11/14/2017 15:37	0.003	0.003	0.009	0	0	
11/14/2017 15:38	0.003	0.003	0.009	0	0	
11/14/2017 15:39	0.003	0.004	0.009	0	0	
11/14/2017 15:40	0.003	0.002	0.009	0	0	15
11/14/2017 15:41	0.003	0.004	0.009	0	0	
11/14/2017 15:42	0.003	0.004	0.009	0	0	
11/14/2017 15:43	0.003	0.004	0.009	0	0	
11/14/2017 15:44	0.003	0.003	0.009	0	0	
11/14/2017 15:45	0.003	0.004	0.009	0	0	20
11/14/2017 15:46	0.002	0.004	0.009	0	0	
11/14/2017 15:47	0.002	0.002	0.009	0	0	
11/14/2017 15:48	0.002	0.004	0.009	0	0	
11/14/2017 15:49	0.002	0.004	0.009	0	0	
11/14/2017 15:50	0.002	0.003	0.009	0	0	16
11/14/2017 15:51	0.002	0.004	0.009	0	0	

11/14/2017 15:52	0.002	0.002	0.009	0	0	
11/14/2017 15:53	0.002	0.003	0.009	0	0	
11/14/2017 15:54	0.002	0.003	0.009	0	0	
11/14/2017 15:55	0.002	0.004	0.009	0	0	18
11/14/2017 15:56	0.002	0.004	0.009	0	0	
11/14/2017 15:57	0.002	0.004	0.009	0	0	
11/14/2017 15:58	0.002	0.003	0.009	0	0	
11/14/2017 15:59	0.002	0.003	0.009	0	0	
11/14/2017 16:00	0.002	0.003	0.009	0	0	20
11/14/2017 16:01	0.002	0.004	0.009	0	0	
11/14/2017 16:02	0.002	0.003	0.009	0	0	
11/14/2017 16:03	0.002	0.003	0.009	0	0	
11/14/2017 16:04	0.002	0.003	0.009	0	0	
11/14/2017 16:05	0.002	0.004	0.009	0	0	7
11/14/2017 16:06	0.002	0.004	0.009	0	0	
11/14/2017 16:07	0.002	0.002	0.009	0	0	
11/14/2017 16:08	0.002	0.002	0.009	0	0	
11/14/2017 16:09	0.002	0.004	0.009	0	0	
11/14/2017 16:10	0.002	0.005	0.009	0	0	12
11/14/2017 16:11	0.002	0.004	0.009	0	0	
11/14/2017 16:12	0.003	0.004	0.009	0	0	
11/14/2017 16:13	0.003	0.004	0.009	0	0	
11/14/2017 16:14	0.003	0.004	0.009	0	0	
11/14/2017 16:15	0.003	0.004	0.009	0	0	6
11/14/2017 16:16	0.003	0.005	0.009	0	0	
11/14/2017 16:17	0.003	0.004	0.009	0	0	
11/14/2017 16:18	0.003	0.004	0.009	0	0	
11/14/2017 16:19	0.003	0.004	0.009	0	0	
11/14/2017 16:20	0.003	0.004	0.009	0	0	5
11/14/2017 16:21	0.003	0.004	0.009	0	0	
11/14/2017 16:22	0.003	0.004	0.009	0	0	
11/14/2017 16:23	0.003	0.004	0.009	0	0	
11/14/2017 16:24	0.003	0.004	0.009	0	0	
11/14/2017 16:25	0.003	0.004	0.009	0	0	0
11/14/2017 16:26	0.003	0.004	0.009	0	0	
11/14/2017 16:27	0.003	0.004	0.009	0	0	
11/14/2017 16:28	0.003	0.004	0.009	0	0	
11/14/2017 16:29	0.003	0.003	0.009	0	0	
11/14/2017 16:30	0.003	0.004	0.009	0	0	5
11/14/2017 16:31	0.003	0.002	0.009	0	0	
11/14/2017 16:32	0.003	0.003	0.009	0	0	
11/14/2017 16:33	0.003	0.004	0.009	0	0	
11/14/2017 16:34	0.003	0.004	0.009	0	0	
11/14/2017 16:35	0.003	0.004	0.009	0	0	13
11/14/2017 16:36	0.003	0.003	0.009	0	0	
11/14/2017 16:37	0.003	0.004	0.009	0	0	
11/14/2017 16:38	0.003	0.004	0.009	0	0	
11/14/2017 16:39	0.003	0.004	0.009	0	0	
11/14/2017 16:40	0.003	0.004	0.009	0	0	13
11/14/2017 16:41	0.003	0.004	0.009	0	0	
11/14/2017 16:42	0.003	0.004	0.009	0	0	
11/14/2017 16:43	0.003	0.004	0.009	0	0	
11/14/2017 16:44	0.003	0.003	0.009	0	0	
11/14/2017 16:45	0.003	0.004	0.009	0	0	6

11/14/2017 16:46	0.003	0.003	0.009	0	0	
11/14/2017 16:47	0.003	0.002	0.009	0	0	
11/14/2017 16:48	0.003	0.002	0.009	0	0	
11/14/2017 16:49	0.003	0.002	0.009	0	0	
11/14/2017 16:50	0.003	0.002	0.009	0	0	4
11/14/2017 16:51	0.003	0.002	0.009	0	0	
11/14/2017 16:52	0.002	0.002	0.009	0	0	
11/14/2017 16:53	0.002	0.002	0.009	0	0	
11/14/2017 16:54	0.002	0.004	0.009	0	0	
11/14/2017 16:55	0.002	0.003	0.009	0	0	2
11/14/2017 16:56	0.002	0.004	0.009	0	0	
11/14/2017 16:57	0.002	0.002	0.009	0	0	
11/14/2017 16:58	0.002	0.004	0.009	0	0	
11/14/2017 16:59	0.002	0.004	0.009	0	0	
11/14/2017 17:00	0.002	0.004	0.009	0	0	7
11/14/2017 17:01	0.002	0.003	0.009	0	0	
11/14/2017 17:02	0.002	0.004	0.009	0	0	
11/14/2017 17:03	0.002	0.003	0.009	0	0	
11/14/2017 17:04	0.002	0.003	0.009	0	0	
11/14/2017 17:05	0.002	0.003	0.009	0	0	5
11/14/2017 17:06	0.002	0.004	0.009	0	0	
11/14/2017 17:07	0.002	0.004	0.009	0	0	
11/14/2017 17:08	0.002	0.004	0.009	0	0	
11/14/2017 17:09	0.002	0.004	0.009	0	0	
11/14/2017 17:10	0.002	0.004	0.009	0	0	0
11/14/2017 17:11	0.002	0.003	0.009	0	0	
11/14/2017 17:12	0.002	0.002	0.009	0	0	
11/14/2017 17:13	0.002	0.002	0.009	0	0	
11/14/2017 17:14	0.002	0.002	0.009	0	0	
11/14/2017 17:15	0.002	0.004	0.009	0	0	2
11/14/2017 17:16	0.002	0.002	0.009	0	0	
11/14/2017 17:17	0.002	0.004	0.009	0	0	
11/14/2017 17:18	0.002	0.004	0.009	0	0	
11/14/2017 17:19	0.002	0.004	0.009	0	0	
11/14/2017 17:20	0.002	0.004	0.009	0	0	4
11/14/2017 17:21	0.002	0.004	0.009	0	0	
11/14/2017 17:22	0.002	0.004	0.009	0	0	
11/14/2017 17:23	0.002	0.004	0.009	0	0	
11/14/2017 17:24	0.002	0.004	0.009	0	0	
11/14/2017 17:25	0.002	0.004	0.009	0	0	6
11/14/2017 17:26	0.002	0.004	0.009	0	0	
11/14/2017 17:27	0.002	0.003	0.009	0	0	
11/14/2017 17:28	0.002	0.003	0.009	0	0	
11/14/2017 17:29	0.003	0.003	0.009	0	0	
11/14/2017 17:30	0.003	0.004	0.009	0	0	9
11/14/2017 17:31	0.003	0.004	0.009	0	0	
11/14/2017 17:32	0.003	0.004	0.009	0	0	
11/14/2017 17:33	0.003	0.003	0.009	0	0	
11/14/2017 17:34	0.003	0.004	0.009	0	0	
11/14/2017 17:35	0.002	0.004	0.009	0	0	
11/14/2017 17:35						9
11/14/2017 17:36	0.002	0.002	0.009	0	0	
11/14/2017 17:37	0.002	0.002	0.009	0	0	
11/14/2017 17:38	0.002	0.004	0.009	0	0	

11/14/2017 17:39	0.002	0.004	0.009	0	0	
11/14/2017 17:40	0.002	0.004	0.009	0	0	10
11/14/2017 17:41	0.002	0.003	0.009	0	0	
11/14/2017 17:42	0.002	0.002	0.009	0	0	
11/14/2017 17:43	0.002	0.004	0.009	0	0	
11/14/2017 17:44	0.002	0.004	0.009	0	0	
11/14/2017 17:45	0.002	0.001	0.009	0	0	16
11/14/2017 17:46	0.002	0.004	0.009	0	0	
11/14/2017 17:47	0.002	0.004	0.009	0	0	
11/14/2017 17:48	0.002	0.003	0.009	0	0	
11/14/2017 17:49	0.002	0.004	0.009	0	0	
11/14/2017 17:50	0.002	0.003	0.009	0	0	15
11/14/2017 17:51	0.002	0.002	0.009	0	0	
11/14/2017 17:52	0.002	0.002	0.009	0	0	
11/14/2017 17:53	0.002	0.003	0.009	0	0	
11/14/2017 17:54	0.002	0.002	0.009	0	0	
11/14/2017 17:55	0.002	0.002	0.009	0	0	11
11/14/2017 17:56	0.002	0.003	0.009	0	0	
11/14/2017 17:57	0.002	0.002	0.009	0	0	
11/14/2017 17:58	0.002	0.002	0.009	0	0	
11/14/2017 17:59	0.002	0.002	0.009	0	0.001	
11/14/2017 18:00	0.001	0.002	0.009	0	0.001	10
11/14/2017 18:01	0.001	0.002	0.009	0	0.001	
11/14/2017 18:02	0.001	0.002	0.009	0	0.001	
11/14/2017 18:03	0.001	0.002	0.009	0	0.001	
11/14/2017 18:04	0.001	0.004	0.009	0	0.001	
11/14/2017 18:05	0.001	0.003	0.009	0	0.001	9
11/14/2017 18:06	0.001	0.004	0.009	0	0.001	
11/14/2017 18:07	0.001	0.002	0.009	0	0.001	
11/14/2017 18:08	0.001	0.002	0.009	0	0.001	
11/14/2017 18:09	0.001	0.002	0.009	0	0.001	
11/14/2017 18:10	0.001	0.001	0.009	0	0.001	9
11/14/2017 18:11	0.001	0.002	0.009	0	0.001	
11/14/2017 18:12	0.001	0.001	0.009	0	0.001	
11/14/2017 18:13	0.001	0.001	0.009	0	0.001	
11/14/2017 18:14	0.001	0.003	0.009	0	0.001	
11/14/2017 18:15	0.001	0.002	0.009	0	0.001	12
11/14/2017 18:16	0.001	0.002	0.009	0	0.001	
11/14/2017 18:17	0.001	0.002	0.009	0	0.001	
11/14/2017 18:18	0.001	0.002	0.009	0	0.001	
11/14/2017 18:19	0.001	0.002	0.009	0	0.001	
11/14/2017 18:20	0.001	0.003	0.009	0	0.001	12
11/14/2017 18:21	0.001	0.003	0.009	0	0.001	
11/14/2017 18:22	0.001	0.002	0.009	0	0.001	
11/14/2017 18:23	0.001	0.002	0.009	0	0.001	
11/14/2017 18:24	0.001	0.004	0.009	0	0.001	
11/14/2017 18:25	0.001	0.002	0.009	0	0.001	
11/14/2017 18:25						8
11/14/2017 18:26	0.001	0.002	0.009	0	0.001	
11/14/2017 18:27	0.001	0.002	0.009	0	0.001	
11/14/2017 18:28	0.001	0.003	0.009	0	0.001	
11/14/2017 18:29	0.001	0.003	0.009	0	0.001	
11/14/2017 18:30	0.001	0.002	0.009	0	0.001	9
11/14/2017 18:31	0.001	0.002	0.009	0	0.001	

11/14/2017 18:32	0.001	0.002	0.009	0	0.001	
11/14/2017 18:33	0.002	0.004	0.009	0	0.001	
11/14/2017 18:34	0.002	0.002	0.009	0	0.001	
11/14/2017 18:35	0.002	0.004	0.009	0	0.001	7
11/14/2017 18:36	0.002	0.004	0.009	0	0.001	
11/14/2017 18:37	0.002	0.003	0.009	0	0.001	
11/14/2017 18:38	0.002	0.004	0.009	0	0.001	
11/14/2017 18:39	0.002	0.003	0.009	0	0.001	
11/14/2017 18:40	0.002	0.003	0.009	0	0.001	9
11/14/2017 18:41	0.002	0.004	0.009	0	0.001	
11/14/2017 18:42	0.002	0.002	0.009	0	0.001	
11/14/2017 18:43	0.002	0.002	0.009	0	0.001	
11/14/2017 18:44	0.002	0.003	0.009	0	0.001	
11/14/2017 18:45	0.002	0.004	0.009	0	0.001	14
11/14/2017 18:46	0.002	0.004	0.009	0	0.001	
11/14/2017 18:47	0.002	0.004	0.009	0	0.001	
11/14/2017 18:48	0.002	0.003	0.009	0	0.001	
11/14/2017 18:49	0.002	0.002	0.009	0	0.001	
11/14/2017 18:50	0.002	0.003	0.009	0	0.001	15
11/14/2017 18:51	0.002	0.004	0.009	0	0.001	
11/14/2017 18:52	0.002	0.004	0.009	0	0.001	
11/14/2017 18:53	0.002	0.003	0.009	0	0.001	
11/14/2017 18:54	0.002	0.002	0.009	0	0.001	
11/14/2017 18:55	0.002	0.002	0.009	0	0.001	13
11/14/2017 18:56	0.002	0.004	0.009	0	0.001	
11/14/2017 18:57	0.002	0.004	0.009	0	0.001	
11/14/2017 18:58	0.002	0.004	0.009	0	0.001	
11/14/2017 18:59	0.002	0.003	0.009	0	0.001	
11/14/2017 19:00	0.002	0.004	0.009	0	0.001	10
11/14/2017 19:01	0.002	0.003	0.009	0	0.001	
11/14/2017 19:02	0.002	0.002	0.009	0	0.001	
11/14/2017 19:03	0.002	0.004	0.009	0	0.001	
11/14/2017 19:04	0.002	0.004	0.009	0	0.001	
11/14/2017 19:05	0.002	0.004	0.009	0	0.001	12
11/14/2017 19:06	0.002	0.002	0.009	0	0.001	
11/14/2017 19:07	0.002	0.003	0.009	0	0.001	
11/14/2017 19:08	0.002	0.003	0.009	0	0.001	
11/14/2017 19:09	0.002	0.003	0.009	0	0.001	
11/14/2017 19:10	0.002	0.003	0.009	0	0.001	11
11/14/2017 19:11	0.002	0.003	0.009	0	0.001	
11/14/2017 19:12	0.002	0.004	0.009	0	0.001	
11/14/2017 19:13	0.002	0.002	0.009	0	0.001	
11/14/2017 19:14	0.002	0.002	0.009	0	0.001	
11/14/2017 19:15	0.002	0.004	0.009	0	0.001	14
11/14/2017 19:16	0.002	0.004	0.009	0	0.001	
11/14/2017 19:17	0.002	0.003	0.009	0	0.001	
11/14/2017 19:18	0.002	0.003	0.009	0	0.001	
11/14/2017 19:19	0.002	0.003	0.009	0	0.001	
11/14/2017 19:20	0.002	0.004	0.009	0	0.001	
11/14/2017 19:20						14
11/14/2017 19:21	0.002	0.002	0.009	0	0.001	
11/14/2017 19:22	0.002	0.002	0.009	0	0.001	
11/14/2017 19:23	0.002	0.004	0.009	0	0.001	
11/14/2017 19:24	0.002	0.004	0.009	0	0.001	

11/14/2017 19:25	0.002	0.004	0.009	0	0.001	12
11/14/2017 19:26	0.002	0.004	0.009	0	0.001	
11/14/2017 19:27	0.002	0.004	0.009	0	0.001	
11/14/2017 19:28	0.002	0.003	0.009	0	0.001	
11/14/2017 19:29	0.002	0.004	0.009	0	0.001	
11/14/2017 19:30	0.003	0.004	0.009	0	0.001	10
11/14/2017 19:31	0.003	0.004	0.009	0	0.001	
11/14/2017 19:32	0.003	0.004	0.009	0	0.001	
11/14/2017 19:33	0.003	0.004	0.009	0	0.001	
11/14/2017 19:34	0.003	0.003	0.009	0	0.001	
11/14/2017 19:35	0.003	0.003	0.009	0	0.001	10
11/14/2017 19:36	0.003	0.002	0.009	0	0.001	
11/14/2017 19:37	0.003	0.004	0.009	0	0.001	
11/14/2017 19:38	0.003	0.004	0.009	0	0.001	
11/14/2017 19:39	0.003	0.002	0.009	0	0.001	
11/14/2017 19:40	0.003	0.004	0.009	0	0.001	9
11/14/2017 19:41	0.003	0.004	0.009	0	0.001	
11/14/2017 19:42	0.003	0.004	0.009	0	0.001	
11/14/2017 19:43	0.003	0.004	0.009	0	0.001	
11/14/2017 19:44	0.003	0.004	0.009	0	0.001	
11/14/2017 19:45	0.003	0.004	0.009	0	0.001	8
11/14/2017 19:46	0.003	0.004	0.009	0	0.001	
11/14/2017 19:47	0.003	0.003	0.009	0	0.001	
11/14/2017 19:48	0.003	0.004	0.009	0	0.001	
11/14/2017 19:49	0.003	0.002	0.009	0	0.001	
11/14/2017 19:50	0.003	0.001	0.009	0	0.001	15
11/14/2017 19:51	0.002	0.003	0.009	0	0.001	
11/14/2017 19:52	0.002	0.002	0.009	0	0.001	
11/14/2017 19:53	0.002	0.002	0.009	0	0.001	
11/14/2017 19:54	0.002	0.002	0.009	0	0.001	
11/14/2017 19:55	0.002	0.002	0.009	0	0.001	18
11/14/2017 19:56	0.002	0.002	0.009	0	0.001	
11/14/2017 19:57	0.002	0.002	0.009	0	0.001	
11/14/2017 19:58	0.002	0.002	0.009	0	0.001	
11/14/2017 19:59	0.002	0.001	0.009	0	0.001	
11/14/2017 20:00	0.002	0.002	0.009	0	0.001	13
11/14/2017 20:01	0.001	0.002	0.009	0	0.001	
11/14/2017 20:02	0.001	0.003	0.009	0	0.001	
11/14/2017 20:03	0.001	0.002	0.009	0	0.001	
11/14/2017 20:04	0.001	0.002	0.009	0	0.001	
11/14/2017 20:05	0.001	0.002	0.009	0	0.001	14
11/14/2017 20:06	0.001	0.002	0.009	0	0.001	
11/14/2017 20:07	0.001	0.002	0.009	0	0.001	
11/14/2017 20:08	0.001	0.002	0.009	0	0.001	
11/14/2017 20:09	0.001	0.002	0.009	0	0.001	
11/14/2017 20:10	0.001	0.002	0.009	0	0.001	14
11/14/2017 20:11	0.001	0.002	0.009	0	0.001	
11/14/2017 20:12	0.001	0.002	0.009	0	0.001	
11/14/2017 20:13	0.001	0.002	0.009	0	0.001	
11/14/2017 20:14	0.001	0.002	0.009	0	0.001	
11/14/2017 20:15	0.001	0.001	0.009	0	0.001	7
11/14/2017 20:16	0.001	0.002	0.009	0	0.001	
11/14/2017 20:17	0.001	0.002	0.009	0	0.001	
11/14/2017 20:18	0.001	0.003	0.009	0	0.001	

11/14/2017 20:19	0.001	0.002	0.009	0	0.001	
11/14/2017 20:20	0.001	0.002	0.009	0	0.001	11
11/14/2017 20:21	0.001	0.002	0.009	0	0.001	
11/14/2017 20:22	0.001	0.002	0.009	0	0.001	
11/14/2017 20:23	0.001	0.002	0.009	0	0.001	
11/14/2017 20:24	0.001	0.002	0.009	0	0.001	
11/14/2017 20:25	0.001	0.003	0.009	0	0.001	10
11/14/2017 20:26	0.001	0.002	0.009	0	0.001	
11/14/2017 20:27	0.001	0.003	0.009	0	0.001	
11/14/2017 20:28	0.001	0.002	0.009	0	0.001	
11/14/2017 20:29	0.001	0.002	0.009	0	0.001	
11/14/2017 20:30	0.001	0.003	0.009	0	0.001	12
11/14/2017 20:31	0.001	0.002	0.009	0	0.001	
11/14/2017 20:32	0.001	0.003	0.009	0	0.001	
11/14/2017 20:33	0.001	0.002	0.009	0	0.001	
11/14/2017 20:34	0.001	0.003	0.009	0	0.001	
11/14/2017 20:35	0.002	0.003	0.009	0	0.001	5
11/14/2017 20:36	0.002	0.003	0.009	0	0.001	
11/14/2017 20:37	0.002	0.002	0.009	0	0.001	
11/14/2017 20:38	0.002	0.002	0.009	0	0.001	
11/14/2017 20:39	0.001	0.002	0.009	0	0.001	
11/14/2017 20:40	0.001	0.003	0.009	0	0.001	10
11/14/2017 20:41	0.001	0.001	0.009	0	0.001	
11/14/2017 20:42	0.001	0.002	0.009	0	0.001	
11/14/2017 20:43	0.001	0.001	0.009	0	0.001	
11/14/2017 20:44	0.001	0.002	0.009	0	0.001	
11/14/2017 20:45	0.001	0.002	0.009	0	0.001	11
11/14/2017 20:46	0.001	0.003	0.009	0	0.001	
11/14/2017 20:47	0.001	0.002	0.009	0	0.001	
11/14/2017 20:48	0.001	0.002	0.009	0	0.001	
11/14/2017 20:49	0.001	0.002	0.009	0	0.001	
11/14/2017 20:50	0.001	0.002	0.009	0	0.001	12
11/14/2017 20:51	0.001	0.002	0.009	0	0.001	
11/14/2017 20:52	0.001	0.002	0.009	0	0.001	
11/14/2017 20:53	0.001	0.003	0.009	0	0.001	
11/14/2017 20:54	0.001	0.002	0.009	0	0.001	
11/14/2017 20:55	0.001	0.001	0.009	0	0.001	14
11/14/2017 20:56	0.001	0.002	0.009	0	0.001	
11/14/2017 20:57	0.001	0.002	0.009	0	0.001	
11/14/2017 20:58	0.001	0.002	0.009	0	0.001	
11/14/2017 20:59	0.001	0.001	0.009	0	0.001	
11/14/2017 21:00	0.001	0.002	0.009	0	0.001	17
11/14/2017 21:01	0.001	0.002	0.009	0	0.001	
11/14/2017 21:02	0.001	0.001	0.009	0	0.001	
11/14/2017 21:03	0.001	0.001	0.009	0	0.001	
11/14/2017 21:04	0.001	0.002	0.009	0	0.001	
11/14/2017 21:05	0.001	0.002	0.009	0	0.001	18
11/14/2017 21:06	0.001	0.004	0.009	0	0.001	
11/14/2017 21:07	0.001	0.002	0.009	0	0.001	
11/14/2017 21:08	0.001	0.004	0.009	0	0.001	
11/14/2017 21:09	0.001	0.002	0.009	0	0.001	
11/14/2017 21:10	0.001	0.001	0.009	0	0.001	11
11/14/2017 21:11	0.001	0.002	0.009	0	0.001	
11/14/2017 21:12	0.001	0.002	0.009	0	0.001	

11/14/2017 21:13	0.001	0.001	0.009	0	0.001	
11/14/2017 21:14	0.001	0.001	0.009	0	0.001	
11/14/2017 21:15	0.001	0.002	0.009	0	0.001	12
11/14/2017 21:16	0.001	0.001	0.009	0	0.001	
11/14/2017 21:17	0.001	0.001	0.009	0	0.001	
11/14/2017 21:18	0.001	0.001	0.009	0	0.001	
11/14/2017 21:19	0.001	0.002	0.009	0	0.001	
11/14/2017 21:20	0.001	0.001	0.009	0	0.001	11
11/14/2017 21:21	0.001	0.002	0.009	0	0.001	
11/14/2017 21:22	0.001	0.001	0.009	0	0.001	
11/14/2017 21:23	0.001	0.003	0.009	0	0.001	
11/14/2017 21:24	0.001	0.002	0.009	0	0.001	
11/14/2017 21:25	0.001	0.002	0.009	0	0.001	8
11/14/2017 21:26	0.001	0.001	0.009	0	0.001	
11/14/2017 21:27	0.001	0.003	0.009	0	0.001	
11/14/2017 21:28	0.001	0.002	0.009	0	0.001	
11/14/2017 21:29	0.001	0.001	0.009	0	0.001	
11/14/2017 21:30	0.001	0.001	0.009	0	0.001	12
11/14/2017 21:31	0.001	0.002	0.009	0	0.001	
11/14/2017 21:32	0.001	0.003	0.009	0	0.001	
11/14/2017 21:33	0.001	0.003	0.009	0	0.001	
11/14/2017 21:34	0.001	0.003	0.009	0	0.001	
11/15/2017 13:17	0	0.005	0.005	0	0	
11/15/2017 13:18	0	0.004	0.006	0	0	
11/15/2017 13:19	0	0.004	0.006	0	0	
11/15/2017 13:20	0	0.004	0.006	0	0	4
11/15/2017 13:21	0	0.004	0.006	0	0	
11/15/2017 13:22	0	0.003	0.006	0	0	
11/15/2017 13:23	0	0.003	0.006	0	0	
11/15/2017 13:24	0	0.004	0.006	0	0	
11/15/2017 13:25	0	0.004	0.006	0	0	8
11/15/2017 13:26	0	0.005	0.006	0	0	
11/15/2017 13:27	0	0.004	0.006	0	0	
11/15/2017 13:28	0	0.004	0.006	0	0	
11/15/2017 13:29	0	0.003	0.006	0	0	
11/15/2017 13:30	0	0.003	0.006	0	0	15
11/15/2017 13:31	0.003	0.003	0.006	0	0	
11/15/2017 13:32	0.003	0.003	0.006	0	0	
11/15/2017 13:33	0.003	0.004	0.006	0	0	
11/15/2017 13:34	0.003	0.004	0.006	0	0	
11/15/2017 13:35	0.003	0.004	0.006	0	0	9
11/15/2017 13:36	0.003	0.004	0.006	0	0	
11/15/2017 13:37	0.003	0.004	0.006	0	0	
11/15/2017 13:38	0.003	0.003	0.006	0	0	
11/15/2017 13:39	0.003	0.004	0.006	0	0	
11/15/2017 13:40	0.003	0.003	0.006	0	0	13
11/15/2017 13:41	0.003	0.003	0.006	0	0	
11/15/2017 13:42	0.003	0.004	0.006	0	0	
11/15/2017 13:43	0.002	0.002	0.006	0	0	
11/15/2017 13:44	0.002	0.004	0.006	0	0	
11/15/2017 13:45	0.002	0.003	0.006	0	0	20
11/15/2017 13:46	0.002	0.004	0.006	0	0	
11/15/2017 13:47	0.002	0.002	0.006	0	0	
11/15/2017 13:48	0.002	0.003	0.006	0	0	

11/15/2017 13:49	0.002	0.002	0.006	0	0	
11/15/2017 13:50	0.002	0.002	0.006	0	0	18
11/15/2017 13:51	0.002	0.002	0.006	0	0	
11/15/2017 13:52	0.002	0.002	0.006	0	0	
11/15/2017 13:53	0.002	0.002	0.006	0	0	
11/15/2017 13:54	0.002	0.001	0.006	0	0	
11/15/2017 13:55	0.002	0.002	0.006	0	0	16
11/15/2017 13:56	0.001	0.001	0.006	0	0	
11/15/2017 13:57	0.001	0.002	0.006	0	0	
11/15/2017 13:58	0.001	0.001	0.006	0	0	
11/15/2017 13:59	0.001	0.002	0.006	0	0	
11/15/2017 14:00	0.001	0.002	0.006	0	0	11
11/15/2017 14:01	0.001	0.002	0.006	0	0	
11/15/2017 14:02	0.001	0.002	0.006	0	0	
11/15/2017 14:03	0.001	0.002	0.006	0	0	
11/15/2017 14:04	0.001	0.002	0.006	0	0	
11/15/2017 14:05	0.001	0.002	0.006	0	0	11
11/15/2017 14:06	0.001	0.002	0.006	0	0	
11/15/2017 14:07	0.001	0.003	0.006	0	0	
11/15/2017 14:08	0.001	0.004	0.006	0	0	
11/15/2017 14:09	0.001	0.003	0.006	0	0	
11/15/2017 14:10	0.001	0.003	0.006	0	0	14
11/15/2017 14:11	0.001	0.002	0.006	0	0	
11/15/2017 14:12	0.001	0.002	0.006	0	0	
11/15/2017 14:13	0.001	0.002	0.006	0	0	
11/15/2017 14:14	0.002	0.004	0.006	0	0	
11/15/2017 14:15	0.002	0.002	0.006	0	0	16
11/15/2017 14:16	0.002	0.002	0.006	0	0	
11/15/2017 14:17	0.002	0.002	0.006	0	0	
11/15/2017 14:18	0.002	0.002	0.006	0	0	
11/15/2017 14:19	0.002	0.002	0.006	0	0	
11/15/2017 14:20	0.002	0.001	0.006	0	0	22
11/15/2017 14:21	0.002	0.001	0.006	0	0	
11/15/2017 14:22	0.002	0.001	0.006	0	0	
11/15/2017 14:23	0.002	0.002	0.006	0	0	
11/15/2017 14:24	0.001	0.001	0.006	0	0	
11/15/2017 14:25	0.001	0.002	0.006	0	0	20
11/15/2017 14:26	0.001	0.001	0.006	0	0	
11/15/2017 14:27	0.001	0.001	0.006	0	0	
11/15/2017 14:28	0.001	0.002	0.006	0	0	
11/15/2017 14:29	0.001	0.002	0.006	0	0	
11/15/2017 14:30	0.001	0.001	0.006	0	0	19
11/15/2017 14:31	0.001	0.002	0.006	0	0	
11/15/2017 14:32	0.001	0.002	0.006	0	0	
11/15/2017 14:33	0.001	0.003	0.006	0	0	
11/15/2017 14:34	0.001	0.002	0.006	0	0	
11/15/2017 14:35	0.001	0.001	0.006	0	0	26
11/15/2017 14:36	0.001	0.001	0.006	0	0	
11/15/2017 14:37	0.001	0	0.006	0	0	
11/15/2017 14:38	0.001	0.001	0.006	0	0	
11/15/2017 14:39	0.001	0.003	0.006	0	0	
11/15/2017 14:40	0.001	0.002	0.006	0	0	33
11/15/2017 14:41	0.001	0.001	0.006	0	0	
11/15/2017 14:42	0.001	0.001	0.006	0	0	

11/15/2017 14:43	0.001	0.002	0.006	0	0	
11/15/2017 14:44	0.001	0.003	0.006	0	0	
11/15/2017 14:45	0.001	0.002	0.006	0	0	27
11/15/2017 14:46	0.001	0.003	0.006	0	0	
11/15/2017 14:47	0.001	0.001	0.006	0	0	
11/15/2017 14:48	0.001	0.001	0.006	0	0	
11/15/2017 14:49	0.001	0.003	0.006	0	0	
11/15/2017 14:50	0.001	0.001	0.006	0	0	23
11/15/2017 14:51	0.001	0.003	0.006	0	0	
11/15/2017 14:52	0.001	0.001	0.006	0	0	
11/15/2017 14:53	0.001	0.001	0.006	0	0	
11/15/2017 14:54	0.001	0.003	0.006	0	0	
11/15/2017 14:55	0.001	0.002	0.006	0	0	25
11/15/2017 14:56	0.001	0.001	0.006	0	0	
11/15/2017 14:57	0.001	0.003	0.006	0	0	
11/15/2017 14:58	0.001	0.003	0.006	0	0	
11/15/2017 14:59	0.001	0.002	0.006	0	0	
11/15/2017 15:00	0.001	0.001	0.006	0	0	25
11/15/2017 15:01	0.001	0.003	0.006	0	0	
11/15/2017 15:02	0.001	0.001	0.006	0	0	
11/15/2017 15:03	0.001	0.001	0.006	0	0	
11/15/2017 15:04	0.001	0	0.006	0	0	
11/15/2017 15:05	0.001	0	0.006	0	0	28
11/15/2017 15:06	0.001	0.001	0.006	0	0	
11/15/2017 15:07	0.001	0.002	0.006	0	0	
11/15/2017 15:08	0.001	0.002	0.006	0	0	
11/15/2017 15:09	0.001	0.003	0.006	0	0	
11/15/2017 15:10	0.001	0.001	0.006	0	0	24
11/15/2017 15:11	0.001	0.002	0.006	0	0	
11/15/2017 15:12	0.001	0.001	0.006	0	0	
11/15/2017 15:13	0.001	0.002	0.006	0	0	
11/15/2017 15:14	0.001	0.001	0.006	0	0	
11/15/2017 15:15	0.001	0.003	0.006	0	0	33
11/15/2017 15:16	0.001	0.001	0.006	0	0	
11/15/2017 15:17	0.001	0.002	0.006	0	0	
11/15/2017 15:18	0.001	0	0.006	0	0	
11/15/2017 15:19	0.001	0.001	0.006	0	0	
11/15/2017 15:20	0.001	0.001	0.006	0	0	30
11/15/2017 15:21	0.001	0.001	0.006	0	0	
11/15/2017 15:22	0	0.001	0.006	0	0	
11/15/2017 15:23	0	0.001	0.006	0	0	
11/15/2017 15:24	0	0	0.006	0	0	
11/15/2017 15:25	0	0.001	0.006	0	0	32
11/15/2017 15:26	0	0.001	0.006	0	0	
11/15/2017 15:27	0	0.001	0.006	0	0	
11/15/2017 15:28	0	0.001	0.006	0	0	
11/15/2017 15:29	0	0	0.006	0	0	
11/15/2017 15:30	0	0.001	0.006	0	0	32
11/15/2017 15:31	0	0.001	0.006	0	0	
11/15/2017 15:32	0	0.001	0.006	0	0	
11/15/2017 15:33	0	0.003	0.006	0	0	
11/15/2017 15:34	0	0	0.006	0	0	
11/15/2017 15:35	0	0.001	0.006	0	0	17
11/15/2017 15:36	0	0.002	0.006	0	0	

11/15/2017 15:37	0	0	0.006	0	0	
11/15/2017 15:38	0	0.001	0.006	0	0	
11/15/2017 15:39	0	0.001	0.006	0	0	
11/15/2017 15:40	0	0.001	0.006	0	0	0
11/15/2017 15:41	0	0.001	0.006	0	0	
11/15/2017 15:42	0	0.001	0.006	0	0	
11/15/2017 15:43	0	0	0.006	0	0	
11/15/2017 15:44	0	0	0.006	0	0	
11/15/2017 15:45	0	0	0.006	0	0	12
11/15/2017 15:46	0	0	0.006	0	0	
11/15/2017 15:47	0	0	0.006	0	0	
11/15/2017 15:48	0	0.001	0.006	0	0	
11/15/2017 15:49	0	0.001	0.006	0	0	
11/15/2017 15:50	0	0	0.006	0	0	-4
11/15/2017 15:51	0	0	0.006	0	0	
11/15/2017 15:52	0	0	0.006	0	0	
11/15/2017 15:53	0	0	0.006	0	0	
11/15/2017 15:54	0	0	0.006	0	0	
11/15/2017 15:55	0	0.001	0.006	0	0	-7
11/15/2017 15:56	0	0	0.006	0	0	
11/15/2017 15:57	0	0.001	0.006	0	0	
11/15/2017 15:58	0	0	0.006	0	0	
11/15/2017 15:59	0	0	0.006	0	0	
11/15/2017 16:00	0	0	0.006	0	0	-5
11/15/2017 16:01	0	0	0.006	0	0	
11/15/2017 16:02	0	0	0.006	0	0	
11/15/2017 16:03	0	0	0.006	0	0	
11/15/2017 16:04	0	0	0.006	0	0	
11/15/2017 16:05	0	0	0.006	0	0	-8
11/15/2017 16:06	0	0	0.006	0	0	
11/15/2017 16:07	0	0	0.006	0	0	
11/15/2017 16:08	0	0	0.006	0	0	
11/15/2017 16:09	0	0	0.006	0	0	
11/15/2017 16:10	0	0	0.006	0	0	-13
11/15/2017 16:11	0	0	0.006	0	0	
11/15/2017 16:12	0	0	0.006	0	0	
11/15/2017 16:13	0	0	0.006	0	0	
11/15/2017 16:14	0	0	0.006	0	0	
11/15/2017 16:15	0	0	0.006	0	0	-5
11/15/2017 16:16	0	0	0.006	0	0	
11/15/2017 16:17	0	0	0.006	0	0	
11/15/2017 16:18	0	0.001	0.006	0	0	
11/15/2017 16:19	0	0.001	0.006	0	0	
11/15/2017 16:20	0	0	0.006	0	0	3
11/15/2017 16:21	0	0	0.006	0	0	
11/15/2017 16:22	0	0	0.006	0	0	
11/15/2017 16:23	0	0	0.006	0	0	
11/15/2017 16:24	0	0	0.006	0	0	
11/15/2017 16:25	0	0	0.006	0	0	-4
11/15/2017 16:26	0	0	0.006	0	0	
11/15/2017 16:27	0	0	0.006	0	0	
11/15/2017 16:28	0	0	0.006	0	0	
11/15/2017 16:29	0	0	0.006	0	0	
11/15/2017 16:30	0	0	0.006	0	0	6

11/15/2017 16:31	0	0	0.006	0	0	
11/15/2017 16:32	0	0	0.006	0	0	
11/15/2017 16:33	0	0	0.006	0	0	
11/15/2017 16:34	0	0	0.006	0	0	
11/15/2017 16:35	0	0	0.006	0	0	10
11/15/2017 16:36	0	0	0.006	0	0	
11/15/2017 16:37	0	0	0.006	0	0	
11/15/2017 16:38	0	0	0.006	0	0	
11/15/2017 16:39	0	0	0.006	0	0	
11/15/2017 16:40	0	0	0.006	0	0	4
11/15/2017 16:41	0	0	0.006	0	0	
11/15/2017 16:42	0	0	0.006	0	0	
11/15/2017 16:43	0	0	0.006	0	0	
11/15/2017 16:44	0	0	0.006	0	0	
11/15/2017 16:45	0	0	0.006	0	0	
11/15/2017 16:45						5
11/15/2017 16:46	0	0	0.006	0	0	
11/15/2017 16:47	0	0	0.006	0	0	
11/15/2017 16:48	0	0	0.006	0	0	
11/15/2017 16:49	0	0	0.006	0	0	
11/15/2017 16:50	0	0	0.006	0	0	14
11/15/2017 16:51	0	0	0.006	0	0	
11/15/2017 16:52	0	0	0.006	0	0	
11/15/2017 16:53	0	0	0.006	0	0	
11/15/2017 16:54	0	0	0.006	0	0	
11/15/2017 16:55	0	0	0.006	0	0	13
11/15/2017 16:56	0	0	0.006	0	0	
11/15/2017 16:57	0	0.001	0.006	0	0	
11/15/2017 16:58	0	0	0.006	0	0	
11/15/2017 16:59	0	0	0.006	0	0	
11/15/2017 17:00	0	0	0.006	0	0	18
11/15/2017 17:01	0	0.001	0.006	0	0	
11/15/2017 17:02	0	0	0.006	0	0	
11/15/2017 17:03	0	0	0.006	0	0	
11/15/2017 17:04	0	0	0.006	0	0	
11/15/2017 17:05	0	0	0.006	0	0	8
11/15/2017 17:06	0	0	0.006	0	0	
11/15/2017 17:07	0	0	0.006	0	0	
11/15/2017 17:08	0	0	0.006	0	0	
11/15/2017 17:09	0	0	0.006	0	0	
11/15/2017 17:10	0	0.001	0.006	0	0	16
11/15/2017 17:11	0	0.001	0.006	0	0	
11/15/2017 17:12	0	0	0.006	0	0	
11/15/2017 17:13	0	0	0.006	0	0	
11/15/2017 17:14	0	0	0.006	0	0	
11/15/2017 17:15	0	0	0.006	0	0	11
11/15/2017 17:16	0	0	0.006	0	0	
11/15/2017 17:17	0	0	0.006	0	0	
11/15/2017 17:18	0	0	0.006	0	0	
11/15/2017 17:19	0	0	0.006	0	0	
11/15/2017 17:20	0	0	0.006	0	0	16
11/15/2017 17:21	0	0	0.006	0	0	
11/15/2017 17:22	0	0	0.006	0	0	
11/15/2017 17:23	0	0	0.006	0	0	

11/15/2017 17:24	0	0	0.006	0	0	
11/15/2017 17:25	0	0	0.006	0	0	11
11/15/2017 17:26	0	0	0.006	0	0	
11/15/2017 17:27	0	0	0.006	0	0	
11/15/2017 17:28	0	0	0.006	0	0	
11/15/2017 17:29	0	0	0.006	0	0	
11/15/2017 17:30	0	0	0.006	0	0	18
11/15/2017 17:31	0	0	0.006	0	0	
11/15/2017 17:32	0	0	0.006	0	0	
11/15/2017 17:33	0	0	0.006	0	0	
11/15/2017 17:34	0	0	0.006	0	0	
11/15/2017 17:35	0	0	0.006	0	0	19
11/15/2017 17:36	0	0	0.006	0	0	
11/15/2017 17:37	0	0	0.006	0	0	
11/15/2017 17:38	0	0	0.006	0	0	
11/15/2017 17:39	0	0	0.006	0	0	
11/15/2017 17:40	0	0	0.006	0	0	24
11/15/2017 17:41	0	0	0.006	0	0	
11/15/2017 17:42	0	0	0.006	0	0	
11/15/2017 17:43	0	0	0.006	0	0	
11/15/2017 17:44	0	0	0.006	0	0	
11/15/2017 17:45	0	0	0.006	0	0	25
11/15/2017 17:46	0	0	0.006	0	0	
11/15/2017 17:47	0	0	0.006	0	0	
11/15/2017 17:48	0	0	0.006	0	0	
11/15/2017 17:49	0	0	0.006	0	0	
11/15/2017 17:50	0	0	0.006	0	0	24
11/15/2017 17:51	0	0	0.006	0	0	
11/15/2017 17:52	0	0	0.006	0	0	
11/15/2017 17:53	0	0	0.006	0	0	
11/15/2017 17:54	0	0	0.006	0	0	
11/15/2017 17:55	0	0.001	0.006	0	0	25
11/15/2017 17:56	0	0	0.006	0	0	
11/15/2017 17:57	0	0	0.006	0	0	
11/15/2017 17:58	0	0	0.006	0	0	
11/15/2017 17:59	0	0	0.006	0	0	
11/15/2017 18:00	0	0.001	0.006	0	0	20
11/15/2017 18:01	0	0.001	0.006	0	0	
11/15/2017 18:02	0	0	0.006	0	0	
11/15/2017 18:03	0	0	0.006	0	0	
11/15/2017 18:04	0	0.001	0.006	0	0	
11/15/2017 18:05	0	0	0.006	0	0	18
11/15/2017 18:06	0	0	0.006	0	0	
11/15/2017 18:07	0	0.001	0.006	0	0	
11/15/2017 18:08	0	0	0.006	0	0	
11/15/2017 18:09	0	0	0.006	0	0	
11/15/2017 18:10	0	0	0.006	0	0	18
11/15/2017 18:11	0	0	0.006	0	0	
11/15/2017 18:12	0	0.001	0.006	0	0	
11/15/2017 18:13	0	0	0.006	0	0	
11/15/2017 18:14	0	0	0.006	0	0	
11/15/2017 18:15	0	0	0.006	0	0	12
11/15/2017 18:16	0	0.001	0.006	0	0	
11/15/2017 18:17	0	0	0.006	0	0	

11/15/2017 18:18	0	0	0.006	0	0	
11/15/2017 18:19	0	0	0.006	0	0	
11/15/2017 18:20	0	0	0.006	0	0	24
11/15/2017 18:21	0	0	0.006	0	0	
11/15/2017 18:22	0	0.001	0.006	0	0	
11/15/2017 18:23	0	0	0.006	0	0	
11/15/2017 18:24	0	0	0.006	0	0	
11/15/2017 18:25	0	0	0.006	0	0	24
11/15/2017 18:26	0	0	0.006	0	0	
11/15/2017 18:27	0	0.001	0.006	0	0	
11/15/2017 18:28	0	0	0.006	0	0	
11/15/2017 18:29	0	0	0.006	0	0	
11/15/2017 18:30	0	0	0.006	0	0	15
11/15/2017 18:31	0	0	0.006	0	0	
11/15/2017 18:32	0	0	0.006	0	0	
11/15/2017 18:33	0	0	0.006	0	0	
11/15/2017 18:34	0	0	0.006	0	0	
11/15/2017 18:35	0	0	0.006	0	0	14
11/15/2017 18:36	0	0.001	0.006	0	0	
11/15/2017 18:37	0	0.001	0.006	0	0	
11/15/2017 18:38	0	0.001	0.006	0	0	
11/15/2017 18:39	0	0	0.006	0	0	
11/15/2017 18:40	0	0	0.006	0	0	34
11/15/2017 18:41	0	0.001	0.006	0	0	
11/15/2017 18:42	0	0	0.006	0	0	
11/15/2017 18:43	0	0	0.006	0	0	
11/15/2017 18:44	0	0	0.006	0	0	
11/15/2017 18:45	0	0	0.006	0	0	25
11/15/2017 18:46	0	0.001	0.006	0	0	
11/15/2017 18:47	0	0.001	0.006	0	0	
11/15/2017 18:48	0	0	0.006	0	0	
11/15/2017 18:49	0	0.001	0.006	0	0	
11/15/2017 18:50	0	0	0.006	0	0	42
11/15/2017 18:51	0	0	0.006	0	0	
11/15/2017 18:52	0	0.001	0.006	0	0	
11/15/2017 18:53	0	0	0.006	0	0	
11/15/2017 18:54	0	0	0.006	0	0	
11/15/2017 18:55	0	0.001	0.006	0	0	26
11/15/2017 18:56	0	0.001	0.006	0	0	
11/15/2017 18:57	0	0	0.006	0	0	
11/15/2017 18:58	0	0	0.006	0	0	
11/15/2017 18:59	0	0.001	0.006	0	0	
11/15/2017 19:00	0	0	0.006	0	0	11
11/15/2017 19:01	0	0.001	0.006	0	0	
11/15/2017 19:02	0	0.001	0.006	0	0	
11/15/2017 19:03	0	0	0.006	0	0	
11/15/2017 19:04	0	0.001	0.006	0	0	
11/15/2017 19:05	0	0.001	0.006	0	0	19
11/15/2017 19:06	0	0.001	0.006	0	0	
11/15/2017 19:07	0	0	0.006	0	0	
11/15/2017 19:08	0	0.001	0.006	0	0	
11/15/2017 19:09	0	0.001	0.006	0	0	
11/15/2017 19:10	0	0.001	0.006	0	0	5
11/15/2017 19:11	0	0.001	0.006	0	0	

11/15/2017 19:12	0	0	0.006	0	0	
11/15/2017 19:13	0	0.001	0.006	0	0	
11/15/2017 19:14	0	0.001	0.006	0	0	
11/15/2017 19:15	0	0.001	0.006	0	0	7
11/15/2017 19:16	0	0	0.006	0	0	
11/15/2017 19:17	0	0.001	0.006	0	0	
11/15/2017 19:18	0	0.001	0.006	0	0	
11/15/2017 19:19	0	0.001	0.006	0	0	
11/15/2017 19:20	0	0.001	0.006	0	0	0
11/15/2017 19:21	0	0.001	0.006	0	0	
11/15/2017 19:22	0	0	0.006	0	0	
11/15/2017 19:23	0	0.001	0.006	0	0	
11/15/2017 19:24	0	0.001	0.006	0	0	
11/15/2017 19:25	0	0.001	0.006	0	0	-1
11/15/2017 19:26	0	0	0.006	0	0	
11/15/2017 19:27	0	0.001	0.006	0	0	
11/15/2017 19:28	0	0.001	0.006	0	0	
11/15/2017 19:29	0	0.002	0.006	0	0	
11/15/2017 19:30	0	0.001	0.006	0	0	15
11/15/2017 19:31	0	0.001	0.006	0	0	
11/15/2017 19:32	0	0	0.006	0	0	
11/15/2017 19:33	0	0.001	0.006	0	0	
11/15/2017 19:34	0	0.001	0.006	0	0	
11/15/2017 19:35	0	0	0.006	0	0	16
11/15/2017 19:36	0	0.001	0.006	0	0	
11/15/2017 19:37	0	0	0.006	0	0	
11/15/2017 19:38	0	0	0.006	0	0	
11/15/2017 19:39	0	0.001	0.006	0	0	
11/15/2017 19:40	0	0.001	0.006	0	0	12
11/15/2017 19:41	0	0.001	0.006	0	0	
11/15/2017 19:42	0	0.001	0.006	0	0	
11/15/2017 19:43	0	0	0.006	0	0	
11/15/2017 19:44	0	0.001	0.006	0	0	
11/15/2017 19:45	0	0.001	0.006	0	0	14
11/15/2017 19:46	0	0.001	0.006	0	0	
11/15/2017 19:47	0	0.001	0.006	0	0	
11/15/2017 19:48	0	0.001	0.006	0	0	
11/15/2017 19:49	0	0	0.006	0	0	
11/15/2017 19:50	0	0.001	0.006	0	0	18
11/15/2017 19:51	0	0.001	0.006	0	0	
11/15/2017 19:52	0	0.001	0.006	0	0	
11/15/2017 19:53	0	0	0.006	0	0	
11/15/2017 19:54	0	0.001	0.006	0	0	
11/15/2017 19:55	0	0.001	0.006	0	0	11
11/15/2017 19:56	0	0.001	0.006	0	0	
11/15/2017 19:57	0	0	0.006	0	0	
11/15/2017 19:58	0	0.001	0.006	0	0	
11/15/2017 19:59	0	0.001	0.006	0	0	
11/15/2017 20:00	0	0	0.006	0	0	21
11/15/2017 20:01	0	0.001	0.006	0	0	
11/15/2017 20:02	0	0.001	0.006	0	0	
11/15/2017 20:03	0	0.001	0.006	0	0	
11/15/2017 20:04	0	0	0.006	0	0	
11/15/2017 20:05	0	0.001	0.006	0	0	21

11/15/2017 20:06	0	0.001	0.006	0	0	
11/15/2017 20:07	0	0.001	0.006	0	0	
11/15/2017 20:08	0	0.001	0.006	0	0	
11/15/2017 20:09	0	0.001	0.006	0	0	
11/15/2017 20:10	0	0.001	0.006	0	0	16
11/15/2017 20:11	0	0.001	0.006	0	0	
11/15/2017 20:12	0	0.001	0.006	0	0	
11/15/2017 20:13	0	0.002	0.006	0	0	
11/15/2017 20:14	0	0.001	0.006	0	0	
11/15/2017 20:15	0	0.001	0.006	0	0	13
11/15/2017 20:16	0	0.002	0.006	0	0	
11/15/2017 20:17	0	0.002	0.006	0	0	
11/15/2017 20:18	0	0.001	0.006	0	0	
11/15/2017 20:19	0	0.001	0.006	0	0	
11/15/2017 20:20	0	0.001	0.006	0	0	19
11/15/2017 20:21	0	0.002	0.006	0	0	
11/15/2017 20:22	0	0.002	0.006	0	0	
11/15/2017 20:23	0	0.002	0.006	0	0	
11/15/2017 20:24	0	0.002	0.006	0	0	
11/15/2017 20:25	0	0.001	0.006	0	0	27
11/15/2017 20:26	0	0.001	0.006	0	0	
11/15/2017 20:27	0	0.001	0.006	0	0	
11/15/2017 20:34	0.001	0.003	0.006	0	0	
11/15/2017 20:35	0.001	0.002	0.006	0	0	-1
11/15/2017 20:36	0.001	0.001	0.006	0	0	
11/15/2017 20:37	0.001	0.002	0.006	0	0	
11/15/2017 20:38	0.001	0.002	0.006	0	0	
11/15/2017 20:39	0.001	0.002	0.006	0	0	
11/15/2017 20:40	0.001	0.002	0.006	0	0	0
11/15/2017 20:41	0.001	0.001	0.006	0	0	
11/15/2017 20:42	0.001	0.001	0.006	0	0	
11/15/2017 20:43	0.001	0.002	0.006	0	0	
11/15/2017 20:44	0.001	0.002	0.006	0	0	
11/15/2017 20:45	0.001	0.002	0.006	0	0	0
11/15/2017 20:46	0.001	0.002	0.006	0	0	
11/15/2017 20:47	0.001	0.002	0.006	0	0	
11/15/2017 20:48	0.001	0.002	0.006	0	0	
11/15/2017 20:49	0.001	0.002	0.006	0	0	
11/15/2017 20:50	0.001	0.002	0.006	0	0	7
11/15/2017 20:51	0.001	0.002	0.006	0	0	
11/15/2017 20:52	0.001	0.002	0.006	0	0	
11/15/2017 20:53	0.001	0.002	0.006	0	0	
11/15/2017 20:54	0.001	0.002	0.006	0	0	
11/15/2017 20:55	0.001	0.002	0.006	0	0	2
11/15/2017 20:56	0.001	0.002	0.006	0	0	
11/15/2017 20:57	0.001	0.002	0.006	0	0	
11/15/2017 20:58	0.001	0.001	0.006	0	0	
11/15/2017 20:59	0.001	0.002	0.006	0	0	
11/15/2017 21:00	0.001	0.001	0.006	0	0	-6
11/15/2017 21:01	0.001	0.002	0.006	0	0	
11/15/2017 21:02	0.001	0.002	0.006	0	0	
11/15/2017 21:03	0.001	0.002	0.006	0	0	
11/15/2017 21:04	0.001	0.002	0.006	0	0	
11/15/2017 21:05	0.001	0.002	0.006	0	0	0

11/15/2017 21:06	0.001	0.001	0.006	0	0	
11/15/2017 21:07	0.001	0.002	0.006	0	0	
11/15/2017 21:08	0.001	0.002	0.006	0	0	
11/15/2017 21:09	0.001	0.002	0.006	0	0	
11/15/2017 21:10	0.001	0.002	0.006	0	0	0
11/15/2017 21:11	0.001	0.002	0.006	0	0	
11/15/2017 21:12	0.001	0.001	0.006	0	0	
11/15/2017 21:13	0.001	0.002	0.006	0	0	
11/15/2017 21:14	0.001	0.002	0.006	0	0	
11/15/2017 21:15	0.001	0.001	0.006	0	0	-1
11/15/2017 21:16	0.001	0.001	0.006	0	0	
11/15/2017 21:17	0.001	0.001	0.006	0	0	
11/15/2017 21:18	0.001	0.001	0.006	0	0	
11/15/2017 21:19	0.001	0.002	0.006	0	0	
11/15/2017 21:20	0.001	0.002	0.006	0	0	2
11/15/2017 21:21	0.001	0.002	0.006	0	0	
11/15/2017 21:22	0.001	0.002	0.006	0	0	
11/15/2017 21:23	0.001	0.001	0.006	0	0	
11/15/2017 21:24	0.001	0.001	0.006	0	0	
11/15/2017 21:25	0.001	0.002	0.006	0	0	11
11/15/2017 21:26	0.001	0.002	0.006	0	0	
11/15/2017 21:27	0.001	0.001	0.006	0	0	
11/15/2017 21:28	0.001	0.002	0.006	0	0	
11/15/2017 21:29	0.001	0.001	0.006	0	0	
11/15/2017 21:30	0.001	0.002	0.006	0	0	4
11/15/2017 21:31	0.001	0.002	0.006	0	0	
11/15/2017 21:32	0.001	0.002	0.006	0	0	
11/15/2017 21:33	0.001	0.002	0.006	0	0	
11/15/2017 21:34	0.001	0.002	0.006	0	0	
11/15/2017 21:35	0.001	0.002	0.006	0	0	7
11/16/2017 15:48	0	0.007	0.007	0	0	
11/16/2017 15:49	0	0.005	0.007	0	0	
11/16/2017 15:50	0	0.005	0.007	0	0	
11/16/2017 15:51	0	0.005	0.007	0	0	
11/16/2017 15:52	0	0.005	0.007	0	0	
11/16/2017 15:53	0	0.003	0.007	0	0	
11/16/2017 15:54	0	0.004	0.007	0	0	
11/16/2017 15:55	0	0.004	0.007	0	0	4
11/16/2017 15:56	0	0.003	0.007	0	0	
11/16/2017 15:57	0	0.004	0.007	0	0	
11/16/2017 15:58	0	0.004	0.007	0	0	
11/16/2017 15:59	0	0.004	0.007	0	0	
11/16/2017 16:00	0	0.003	0.007	0	0	2
11/16/2017 16:01	0	0.004	0.007	0	0	
11/16/2017 16:02	0.003	0.004	0.007	0	0	
11/16/2017 16:03	0.003	0.005	0.007	0	0	
11/16/2017 16:04	0.003	0.003	0.007	0	0	
11/16/2017 16:05	0.003	0.003	0.007	0	0	
11/16/2017 16:05						7
11/16/2017 16:06	0.003	0.003	0.007	0	0	
11/16/2017 16:07	0.003	0.003	0.007	0	0	
11/16/2017 16:08	0.003	0.003	0.007	0	0	
11/16/2017 16:09	0.003	0.003	0.007	0	0	
11/16/2017 16:10	0.003	0.003	0.007	0	0	9

11/16/2017 16:11	0.003	0.003	0.007	0	0	
11/16/2017 16:12	0.003	0.003	0.007	0	0	
11/16/2017 16:13	0.003	0.003	0.007	0	0	
11/16/2017 16:14	0.003	0.003	0.007	0	0	
11/16/2017 16:15	0.003	0.001	0.007	0	0	12
11/16/2017 16:16	0.003	0.003	0.007	0	0	
11/16/2017 16:17	0.002	0.003	0.007	0	0	
11/16/2017 16:18	0.002	0.003	0.007	0	0	
11/16/2017 16:19	0.002	0.003	0.007	0	0	
11/16/2017 16:20	0.002	0.003	0.007	0	0	9
11/16/2017 16:21	0.002	0.002	0.007	0	0	
11/16/2017 16:22	0.002	0.003	0.007	0	0	
11/16/2017 16:23	0.002	0.003	0.007	0	0	
11/16/2017 16:24	0.002	0.004	0.007	0	0	
11/16/2017 16:25	0.002	0.004	0.007	0	0	9
11/16/2017 16:26	0.002	0.004	0.007	0	0	
11/16/2017 16:27	0.002	0.004	0.007	0	0	
11/16/2017 16:28	0.002	0.003	0.007	0	0	
11/16/2017 16:29	0.002	0.003	0.007	0	0	
11/16/2017 16:30	0.002	0.004	0.007	0	0	14
11/16/2017 16:31	0.002	0.003	0.007	0	0	
11/16/2017 16:32	0.002	0.004	0.007	0	0	
11/16/2017 16:33	0.002	0.003	0.007	0	0	
11/16/2017 16:34	0.002	0.003	0.007	0	0	
11/16/2017 16:35	0.002	0.003	0.007	0	0	11
11/16/2017 16:36	0.002	0.003	0.007	0	0	
11/16/2017 16:37	0.003	0.003	0.007	0	0	
11/16/2017 16:38	0.002	0.005	0.007	0	0	
11/16/2017 16:39	0.002	0.003	0.007	0	0	
11/16/2017 16:40	0.002	0.005	0.007	0	0	9
11/16/2017 16:41	0.003	0.003	0.007	0	0	
11/16/2017 16:42	0.003	0.003	0.007	0	0	
11/16/2017 16:43	0.003	0.003	0.007	0	0	
11/16/2017 16:44	0.002	0.002	0.007	0	0	
11/16/2017 16:45	0.002	0.003	0.007	0	0	9
11/16/2017 16:46	0.002	0.001	0.007	0	0	
11/16/2017 16:47	0.002	0.001	0.007	0	0	
11/16/2017 16:48	0.002	0.001	0.007	0	0	
11/16/2017 16:49	0.002	0.002	0.007	0	0	
11/16/2017 16:50	0.002	0.003	0.007	0	0	9
11/16/2017 16:51	0.002	0.002	0.007	0	0	
11/16/2017 16:52	0.002	0.001	0.007	0	0	
11/16/2017 16:53	0.002	0.002	0.007	0	0	
11/16/2017 16:54	0.001	0.003	0.007	0	0	
11/16/2017 16:55	0.001	0.003	0.007	0	0	13
11/16/2017 16:56	0.001	0.003	0.007	0	0	
11/16/2017 16:57	0.001	0.003	0.007	0	0	
11/16/2017 16:58	0.001	0.003	0.007	0	0	
11/16/2017 16:59	0.001	0.002	0.007	0	0	
11/16/2017 17:00	0.001	0.003	0.007	0	0	10
11/16/2017 17:01	0.001	0.003	0.007	0	0	
11/16/2017 17:02	0.001	0.003	0.007	0	0	
11/16/2017 17:03	0.001	0.001	0.007	0	0	
11/16/2017 17:04	0.001	0.003	0.007	0	0	

11/16/2017 17:05	0.001	0.002	0.007	0	0	9
11/16/2017 17:08	0.002	0.003	0.007	0	0	
11/16/2017 17:09	0.002	0.003	0.007	0	0	
11/16/2017 17:10	0.002	0.002	0.007	0	0	
11/16/2017 17:10						9
11/16/2017 17:11	0.002	0.002	0.007	0	0	
11/16/2017 17:12	0.002	0.003	0.007	0	0	
11/16/2017 17:13	0.002	0.003	0.007	0	0	
11/16/2017 17:14	0.002	0.003	0.007	0	0	
11/16/2017 17:15	0.002	0.003	0.007	0	0	8
11/16/2017 17:16	0.002	0.003	0.007	0	0	
11/16/2017 17:17	0.002	0.003	0.007	0	0	
11/16/2017 17:18	0.002	0.001	0.007	0	0	
11/16/2017 17:19	0.002	0.003	0.007	0	0	
11/16/2017 17:20	0.002	0.003	0.007	0	0	7
11/16/2017 17:21	0.002	0.003	0.007	0	0	
11/16/2017 17:22	0.002	0.003	0.007	0	0	
11/16/2017 17:23	0.002	0.003	0.007	0	0	
11/16/2017 17:24	0.002	0.003	0.007	0	0	
11/16/2017 17:25	0.002	0.002	0.007	0	0	8
11/16/2017 17:26	0.002	0.003	0.007	0	0	
11/16/2017 17:27	0.002	0.003	0.007	0	0	
11/16/2017 17:28	0.002	0.002	0.007	0	0	
11/16/2017 17:29	0.002	0.003	0.007	0	0	
11/16/2017 17:30	0.002	0.002	0.007	0	0	11
11/16/2017 17:31	0.002	0.003	0.007	0	0	
11/16/2017 17:32	0.002	0.003	0.007	0	0	
11/16/2017 17:33	0.002	0.003	0.007	0	0	
11/16/2017 17:34	0.002	0.003	0.007	0	0	
11/16/2017 17:35	0.002	0.003	0.007	0	0	11
11/16/2017 17:36	0.002	0.002	0.007	0	0	
11/16/2017 17:37	0.002	0.002	0.007	0	0	
11/16/2017 17:38	0.002	0.002	0.007	0	0	
11/16/2017 17:39	0.002	0.002	0.007	0	0	
11/16/2017 17:40	0.002	0.002	0.007	0	0	13
11/16/2017 17:41	0.002	0.002	0.007	0	0	
11/16/2017 17:42	0.001	0.003	0.007	0	0	
11/16/2017 17:43	0.001	0.001	0.007	0	0	
11/16/2017 17:44	0.001	0.001	0.007	0	0	
11/16/2017 17:45	0.001	0.003	0.007	0	0	
11/16/2017 17:45						12
11/16/2017 17:46	0.001	0.001	0.007	0	0	
11/16/2017 17:47	0.001	0.002	0.007	0	0	
11/16/2017 17:48	0.001	0.003	0.007	0	0	
11/16/2017 17:49	0.001	0.003	0.007	0	0	
11/16/2017 17:50	0.001	0.003	0.007	0	0	11
11/16/2017 17:51	0.001	0.002	0.007	0	0	
11/16/2017 17:52	0.001	0.002	0.007	0	0	
11/16/2017 17:53	0.001	0.002	0.007	0	0	
11/16/2017 17:54	0.001	0.001	0.007	0	0	
11/16/2017 17:55	0.001	0.003	0.007	0	0	11
11/16/2017 17:56	0.001	0.003	0.007	0	0	
11/16/2017 17:57	0.001	0.003	0.007	0	0	
11/16/2017 17:58	0.001	0.002	0.007	0	0	

11/16/2017 17:59	0.001	0.003	0.007	0	0	
11/16/2017 18:00	0.001	0.003	0.007	0	0	10
11/16/2017 18:01	0.001	0.003	0.007	0	0	
11/16/2017 18:02	0.001	0.001	0.007	0	0	
11/16/2017 18:03	0.001	0.002	0.007	0	0	
11/16/2017 18:04	0.001	0.001	0.007	0	0	
11/16/2017 18:05	0.001	0.003	0.007	0	0	13
11/16/2017 18:06	0.001	0.003	0.007	0	0	
11/16/2017 18:07	0.001	0.003	0.007	0	0	
11/16/2017 18:08	0.001	0.001	0.007	0	0	
11/16/2017 18:09	0.001	0.003	0.007	0	0	
11/16/2017 18:10	0.001	0.003	0.007	0	0	12
11/16/2017 18:11	0.001	0.003	0.007	0	0	
11/16/2017 18:12	0.001	0.003	0.007	0	0	
11/16/2017 18:13	0.001	0.003	0.007	0	0	
11/16/2017 18:14	0.001	0.001	0.007	0	0	
11/16/2017 18:15	0.001	0.001	0.007	0	0	8
11/16/2017 18:16	0.001	0	0.007	0	0	
11/16/2017 18:17	0.001	0.001	0.007	0	0	
11/16/2017 18:18	0.001	0.001	0.007	0	0	
11/16/2017 18:19	0.001	0.001	0.007	0	0	
11/16/2017 18:20	0.001	0.002	0.007	0	0	8
11/16/2017 18:21	0.001	0.002	0.007	0	0	
11/16/2017 18:22	0.001	0.001	0.007	0	0	
11/16/2017 18:23	0.001	0.001	0.007	0	0	
11/16/2017 18:24	0	0.001	0.007	0	0	
11/16/2017 18:25	0	0.001	0.007	0	0	6
11/16/2017 18:26	0	0.001	0.007	0	0	
11/16/2017 18:27	0	0.001	0.007	0	0	
11/16/2017 18:28	0	0.001	0.007	0	0	
11/16/2017 18:29	0	0.001	0.007	0	0	
11/16/2017 18:30	0	0.001	0.007	0	0	6
11/16/2017 18:31	0	0.001	0.007	0	0	
11/16/2017 18:32	0	0.001	0.007	0	0	
11/16/2017 18:33	0	0.001	0.007	0	0	
11/16/2017 18:34	0	0.001	0.007	0	0	
11/16/2017 18:35	0	0	0.007	0	0	10
11/16/2017 18:36	0	0.002	0.007	0	0	
11/16/2017 18:37	0	0.001	0.007	0	0	
11/16/2017 18:38	0	0.001	0.007	0	0	
11/16/2017 18:39	0	0.001	0.007	0	0	
11/16/2017 18:40	0	0.001	0.007	0	0	13
11/16/2017 18:41	0	0.001	0.007	0	0	
11/16/2017 18:42	0	0.001	0.007	0	0	
11/16/2017 18:43	0	0.001	0.007	0	0	
11/16/2017 18:44	0	0	0.007	0	0	
11/16/2017 18:45	0	0.001	0.007	0	0	18
11/16/2017 18:46	0	0	0.007	0	0	
11/16/2017 18:47	0	0.001	0.007	0	0	
11/16/2017 18:48	0	0.001	0.007	0	0	
11/16/2017 18:49	0	0.001	0.007	0	0	
11/16/2017 18:50	0	0.001	0.007	0	0	17
11/16/2017 18:51	0	0.002	0.007	0	0	
11/16/2017 18:52	0	0.002	0.007	0	0	

11/16/2017 18:53	0	0.002	0.007	0	0	
11/16/2017 18:54	0	0.002	0.007	0	0	
11/16/2017 18:55	0	0.002	0.007	0	0	17
11/16/2017 18:56	0	0.002	0.007	0	0	
11/16/2017 18:57	0	0.002	0.007	0	0	
11/16/2017 18:58	0	0.002	0.007	0	0	
11/16/2017 18:59	0	0.001	0.007	0	0	
11/16/2017 19:00	0	0.001	0.007	0	0	15
11/16/2017 19:01	0.001	0.001	0.007	0	0	
11/16/2017 19:02	0.001	0.002	0.007	0	0	
11/16/2017 19:03	0.001	0.001	0.007	0	0	
11/16/2017 19:04	0.001	0.002	0.007	0	0	
11/16/2017 19:05	0.001	0.002	0.007	0	0	14
11/16/2017 19:06	0.001	0.001	0.007	0	0	
11/16/2017 19:07	0.001	0.001	0.007	0	0	
11/16/2017 19:08	0.001	0.001	0.007	0	0	
11/16/2017 19:09	0.001	0.001	0.007	0	0	
11/16/2017 19:10	0.001	0	0.007	0	0	10
11/16/2017 19:11	0.001	0.001	0.007	0	0	
11/16/2017 19:12	0	0.001	0.007	0	0	
11/16/2017 19:13	0	0.001	0.007	0	0	
11/16/2017 19:14	0	0.001	0.007	0	0	
11/16/2017 19:15	0	0.001	0.007	0	0	9
11/16/2017 19:16	0	0	0.007	0	0	
11/16/2017 19:17	0	0	0.007	0	0	
11/16/2017 19:18	0	0.001	0.007	0	0	
11/16/2017 19:19	0	0.001	0.007	0	0	
11/16/2017 19:20	0	0.001	0.007	0	0	10
11/16/2017 19:21	0	0.001	0.007	0	0	
11/16/2017 19:22	0	0.001	0.007	0	0	
11/16/2017 19:23	0	0.001	0.007	0	0	
11/16/2017 19:24	0	0.001	0.007	0	0	
11/16/2017 19:25	0	0.001	0.007	0	0	12
11/16/2017 19:26	0	0	0.007	0	0	
11/16/2017 19:27	0	0.001	0.007	0	0	
11/16/2017 19:28	0	0.001	0.007	0	0	
11/16/2017 19:29	0	0.001	0.007	0	0	
11/16/2017 19:30	0	0.001	0.007	0	0	11
11/16/2017 19:31	0	0.001	0.007	0	0	
11/16/2017 19:32	0	0.001	0.007	0	0	
11/16/2017 19:33	0	0.001	0.007	0	0	
11/16/2017 19:34	0	0.001	0.007	0	0	
11/16/2017 19:35	0	0	0.007	0	0	12
11/16/2017 19:36	0	0	0.007	0	0	
11/16/2017 19:37	0	0.001	0.007	0	0	
11/16/2017 19:38	0	0.001	0.007	0	0	
11/16/2017 19:39	0	0	0.007	0	0	
11/16/2017 19:40	0	0.001	0.007	0	0	13
11/16/2017 19:41	0	0.001	0.007	0	0	
11/16/2017 19:42	0	0	0.007	0	0	
11/16/2017 19:43	0	0.001	0.007	0	0	
11/16/2017 19:44	0	0	0.007	0	0	
11/16/2017 19:45	0	0	0.007	0	0	12
11/16/2017 19:46	0	0	0.007	0	0	

11/16/2017 19:47	0	0.001	0.007	0	0	
11/16/2017 19:48	0	0	0.007	0	0	
11/16/2017 19:49	0	0.001	0.007	0	0	
11/16/2017 19:50	0	0.001	0.007	0	0	6
11/16/2017 19:51	0	0	0.007	0	0	
11/16/2017 19:52	0	0.001	0.007	0	0	
11/16/2017 19:53	0	0.001	0.007	0	0	
11/16/2017 19:54	0	0.001	0.007	0	0	
11/16/2017 19:55	0	0	0.007	0	0	1
11/16/2017 19:56	0	0.001	0.007	0	0	
11/16/2017 19:57	0	0.001	0.007	0	0	
11/16/2017 19:58	0	0.001	0.007	0	0	
11/16/2017 19:59	0	0.001	0.007	0	0	
11/16/2017 20:00	0	0.001	0.007	0	0	4
11/16/2017 20:01	0	0.001	0.007	0	0	
11/16/2017 20:02	0	0	0.007	0	0	
11/16/2017 20:03	0	0.001	0.007	0	0	
11/16/2017 20:04	0	0.001	0.007	0	0	
11/16/2017 20:05	0	0.001	0.007	0	0	3
11/16/2017 20:06	0	0.001	0.007	0	0	
11/16/2017 20:07	0	0.001	0.007	0	0	
11/16/2017 20:08	0	0.001	0.007	0	0	
11/16/2017 20:09	0	0.002	0.007	0	0	
11/16/2017 20:10	0	0.001	0.007	0	0	3
11/16/2017 20:11	0	0.001	0.007	0	0	
11/16/2017 20:12	0	0	0.007	0	0	
11/16/2017 20:13	0	0.001	0.007	0	0	
11/16/2017 20:14	0	0.001	0.007	0	0	
11/16/2017 20:15	0	0.001	0.007	0	0	5
11/16/2017 20:16	0	0	0.007	0	0	
11/16/2017 20:17	0	0.001	0.007	0	0	
11/16/2017 20:18	0	0.001	0.007	0	0	
11/16/2017 20:19	0	0.001	0.007	0	0	
11/16/2017 20:20	0	0.001	0.007	0	0	8
11/16/2017 20:21	0	0.001	0.007	0	0	
11/16/2017 20:22	0	0.002	0.007	0	0	
11/16/2017 20:23	0	0.001	0.007	0	0	
11/16/2017 20:24	0	0.002	0.007	0	0	
11/16/2017 20:25	0	0	0.007	0	0	9
11/16/2017 20:26	0	0.001	0.007	0	0	
11/16/2017 20:27	0	0.002	0.007	0	0	
11/16/2017 20:28	0	0.001	0.007	0	0	
11/16/2017 20:29	0	0.001	0.007	0	0	
11/16/2017 20:30	0	0.001	0.007	0	0	11
11/16/2017 20:31	0	0.002	0.007	0	0	
11/16/2017 20:32	0	0.002	0.007	0	0	
11/16/2017 20:33	0	0.002	0.007	0	0	
11/16/2017 20:34	0	0.001	0.007	0	0	
11/16/2017 20:35	0	0.001	0.007	0	0	13
11/16/2017 20:36	0	0.001	0.007	0	0	
11/16/2017 20:37	0	0.001	0.007	0	0	
11/16/2017 20:38	0	0.001	0.007	0	0	
11/16/2017 20:39	0	0	0.007	0	0	
11/16/2017 20:40	0	0	0.007	0	0	11

11/16/2017 20:41	0	0.001	0.007	0	0	
11/16/2017 20:42	0	0.001	0.007	0	0	
11/16/2017 20:43	0	0.001	0.007	0	0	
11/16/2017 20:44	0	0.001	0.007	0	0	
11/16/2017 20:45	0	0.002	0.007	0	0	10
11/16/2017 20:46	0	0.001	0.007	0	0	
11/16/2017 20:47	0	0.001	0.007	0	0	
11/16/2017 20:48	0	0.001	0.007	0	0	
11/16/2017 20:49	0	0.001	0.007	0	0	
11/16/2017 20:50	0	0.001	0.007	0	0	9
11/16/2017 20:51	0	0.001	0.007	0	0	
11/16/2017 20:52	0	0.001	0.007	0	0	
11/16/2017 20:53	0	0.001	0.007	0	0	
11/16/2017 20:54	0	0.002	0.007	0	0	
11/16/2017 20:55	0	0.002	0.007	0	0	8
11/16/2017 20:56	0	0.001	0.007	0	0	
11/16/2017 20:57	0	0.001	0.007	0	0	
11/16/2017 20:58	0	0.001	0.007	0	0	
11/16/2017 20:59	0	0.001	0.007	0	0	
11/16/2017 21:00	0	0.001	0.007	0	0	6
11/16/2017 21:01	0	0.001	0.007	0	0	
11/16/2017 21:02	0	0.001	0.007	0	0	
11/16/2017 21:03	0	0.001	0.007	0	0	
11/16/2017 21:04	0	0.002	0.007	0	0	
11/16/2017 21:05	0	0.001	0.007	0	0	8
11/16/2017 21:06	0	0.002	0.007	0	0	
11/16/2017 21:07	0	0.001	0.007	0	0	
11/16/2017 21:08	0	0.001	0.007	0	0	
11/16/2017 21:09	0	0.001	0.007	0	0	
11/16/2017 21:10	0	0.001	0.007	0	0	3
11/16/2017 21:11	0	0	0.007	0	0	
11/16/2017 21:12	0	0.001	0.007	0	0	
11/16/2017 21:13	0	0.002	0.007	0	0	
11/16/2017 21:14	0	0.001	0.007	0	0	
11/16/2017 21:15	0	0.002	0.007	0	0	6
11/16/2017 21:16	0	0.001	0.007	0	0	
11/16/2017 21:17	0	0.002	0.007	0	0	
11/16/2017 21:18	0	0.001	0.007	0	0	
11/16/2017 21:19	0	0.001	0.007	0	0	
11/16/2017 21:25	0	0.001	0.007	0	0	
11/16/2017 21:26	0	0.001	0.007	0	0	
11/16/2017 21:27	0	0.001	0.007	0	0	
11/16/2017 21:28	0	0.002	0.007	0	0	
11/16/2017 21:29	0	0.002	0.007	0	0	
11/16/2017 21:30	0	0.002	0.007	0	0	-5
11/16/2017 21:31	0	0.002	0.007	0	0	
11/16/2017 21:32	0	0.002	0.007	0	0	
11/16/2017 21:33	0	0.001	0.007	0	0	
11/16/2017 21:34	0	0.001	0.007	0	0	
11/16/2017 21:35	0	0.002	0.007	0	0	-4
11/16/2017 21:36	0	0.002	0.007	0	0	
11/16/2017 21:37	0	0.002	0.007	0	0	
11/16/2017 21:38	0	0.002	0.007	0	0	
11/16/2017 21:39	0	0.002	0.007	0	0	

11/16/2017 21:40	0	0.002	0.007	0	0	-4
11/16/2017 21:41	0	0.002	0.007	0	0	
11/16/2017 21:42	0.001	0.001	0.007	0	0	
11/16/2017 21:43	0.001	0.001	0.007	0	0	
11/16/2017 21:44	0.001	0.001	0.007	0	0	
11/16/2017 21:45	0.001	0.001	0.007	0	0	-8
11/16/2017 21:46	0.001	0.001	0.007	0	0	
11/16/2017 21:47	0.001	0.001	0.007	0	0	

Timestamp (UTC)	Batt. Volta	Current (m	Location	Mass Conc.	PM1 (mg/n	PM2.5 (mg	PM4 (mg/n	PM10 (mg/	VOC (ppm)	VOC (Peak)	VOC (Low)	VOC (STEL)	VOC (TWA)	Altitude	Total TWA (mg/m³)
Device	Thiamis-10	Thiamis-10	Thiamis-10	DustTrak R	DustTrak R	DustTrak R	DustTrak R	DustTrak R	RAE RS232	RAE RS232	RAE RS232	RAE RS232	RAE RS232	Thiamis-10	DustTrak RS232(C)
5/7/2018 13:56	11.4	256.1													
5/7/2018 13:56			40.2460239;-74.5781038												
5/7/2018 14:00	11.4	163													
5/7/2018 14:00	11.4	173.1	40.245938599999995;-74.5783613												
5/7/2018 14:05	11.4	101.2													
5/7/2018 14:10	11.4	103.2													
5/7/2018 14:13	11.4	173.1													
5/7/2018 14:13			40.246002499999996;-74.5779934												
5/7/2018 14:15	11.4	145.8													
5/7/2018 14:19				0.079	0.044	0.046	0.049	0.059							
5/7/2018 14:20	11.4	150.8		0.121	0.047	0.048	0.051	0.066							
5/7/2018 14:21				0.104	0.044	0.046	0.05	0.068							
5/7/2018 14:22				0.095	0.043	0.045	0.048	0.064							
5/7/2018 14:23				0.081	0.041	0.042	0.045	0.059	83.775	83.884	0	0	0.497		
5/7/2018 14:24				0.092	0.044	0.045	0.049	0.066	85.881	85.947	0	0	0.67		
5/7/2018 14:25	11.4	103.2		0.128	0.047	0.048	0.052	0.072	85.171	87.678	0	0	0.845		
5/7/2018 14:26				0.186	0.057	0.058	0.063	0.09	85.157	87.678	0	0	1.02		
5/7/2018 14:27				0.19	0.055	0.057	0.061	0.085	86.386	87.678	0	0	1.195		
5/7/2018 14:28				0.168	0.056	0.058	0.061	0.084	86.412	87.678	0	0	1.373		
5/7/2018 14:29				0.089	0.044	0.045	0.048	0.063	84.606	87.678	0	0	1.551		
5/7/2018 14:30	11.4	111.3		0.098	0.046	0.048	0.051	0.064	84.523	87.678	0	0	1.727		
5/7/2018 14:31	11.3	154.9													
5/7/2018 14:32				0.143	0.052	0.053	0.055	0.067							
5/7/2018 14:35	12.8	145.8													
5/7/2018 14:35			40.2460729;-74.57801959999999												
5/7/2018 14:36									3.731	87.678	0	75.787	2.529		
5/7/2018 14:37				1.07	0.105	0.107	0.115	0.207	3.03	87.678	0	70.718	2.537		
5/7/2018 14:38				0.081	0.026	0.027	0.028	0.035	1.333	87.678	0	65.419	2.541		
5/7/2018 14:39				0.048	0.023	0.024	0.025	0.034	0.652	87.678	0	59.996	2.545		
5/7/2018 14:40	12.6	137.7		0.095	0.029	0.029	0.031	0.044	0.879	87.678	0	54.532	2.549		
5/7/2018 14:40			40.24604;-74.57854												-5
5/7/2018 14:41				0.114	0.031	0.032	0.035	0.055	0	87.678	0	48.993	2.551		
5/7/2018 14:42				0.064	0.027	0.027	0.029	0.04	0.429	87.678	0	43.428	2.552		
5/7/2018 14:43				0.045	0.022	0.022	0.023	0.028	0.721	87.678	0	37.742	2.553		
5/7/2018 14:44				0.048	0.017	0.017	0.018	0.023	0	87.678	0	32.121	2.554		
5/7/2018 14:45	12.5	121.5		0.068	0.021	0.022	0.023	0.033	0.036	87.678	0	26.489	2.555		
5/7/2018 14:46				0.097	0.026	0.026	0.028	0.048	0.573	87.678	0	20.883	2.555		
5/7/2018 14:47				0.047	0.018	0.019	0.02	0.027	0	87.678	0	15.252	2.555		
5/7/2018 14:48				0.043		0.018	0.019	0.024	0	87.678	0	9.71	2.555		
5/7/2018 14:49				0.065	0.021	0.021	0.022	0.033	0	87.678	0	4.232	2.555		
5/7/2018 14:50	12.5	117.4		0.034	0.015	0.016	0.017	0.02	0.197	87.678	0	1.187	2.555		
5/7/2018 14:51				0.067	0.025	0.026	0.028	0.041	0	87.678	0	0.819	2.555		
5/7/2018 14:52				0.061	0.019	0.02	0.021	0.029	0	87.678	0	0.56	2.555		
5/7/2018 14:53				0.078	0.03	0.032	0.034	0.048	51.519						

5/8/2018 15:47	12.9	143.7		
5/8/2018 15:47			40.7527998;-73.4864259	
5/8/2018 15:50	12.8	155.9		
5/8/2018 15:50	12.8	132.6		
5/8/2018 15:50			40.7528469;-73.486344	
5/8/2018 15:55	12.9	94.1		
5/8/2018 16:00	12.8	96.2		
5/8/2018 16:05	12.8	96.2		
5/8/2018 16:10	12.7	98.2		
5/8/2018 16:12				0.025
5/8/2018 16:13				0.034
5/8/2018 16:14				0.027
5/8/2018 16:15	12.6	98.2		0.013
5/8/2018 16:16				0.001
5/8/2018 16:17				-0.003
5/8/2018 16:18				-0.004
5/8/2018 16:19				-0.003
5/8/2018 16:20	12.6	98.2		-0.006
5/8/2018 16:20			40.7528942;-73.48644159999999	
5/8/2018 16:21				-0.005
5/8/2018 16:22				-0.007
5/8/2018 16:23				-0.007
5/8/2018 16:24				-0.008
5/8/2018 16:25	12.6	100.2		-0.008
5/8/2018 16:26				-0.007
5/8/2018 16:27				-0.008
5/8/2018 16:28				-0.009
5/8/2018 16:29				-0.01
5/8/2018 16:30	12.6	100.2		-0.006
5/8/2018 16:31				-0.007
5/8/2018 16:32				-0.006
5/8/2018 16:33				-0.009
5/8/2018 16:34				-0.01
5/8/2018 16:35	12.5	99.2		-0.01
5/8/2018 16:36				-0.009
5/8/2018 16:37				-0.005
5/8/2018 16:38				-0.008
5/8/2018 16:39				-0.005
5/8/2018 16:40	12.5	98.2		-0.006
5/8/2018 16:41				-0.008
5/8/2018 16:42				-0.006
5/8/2018 16:43				-0.008
5/8/2018 16:44				-0.009
5/8/2018 16:45	12.5	98.2		-0.007
5/8/2018 16:46				-0.008
5/8/2018 16:47				-0.01

5/8/2018 16:48				-0.01
5/8/2018 16:49				-0.009
5/8/2018 16:50	12.5	98.2		-0.011
5/8/2018 16:51				-0.01
5/8/2018 16:52				-0.01
5/8/2018 16:53				-0.008
5/8/2018 16:54				-0.007
5/8/2018 16:55	12.5	99.2		-0.008
5/8/2018 16:55			40.75279270000001;-73.4863853	
5/8/2018 16:56				-0.007
5/8/2018 16:57				-0.004
5/8/2018 16:58				-0.005
5/8/2018 16:59				-0.007
5/8/2018 17:00	12.5	98.2		-0.006
5/8/2018 17:01				-0.004
5/8/2018 17:02				-0.004
5/8/2018 17:03				-0.008
5/8/2018 17:04				-0.008
5/8/2018 17:05	12.5	97.2		-0.009
5/8/2018 17:06				-0.009
5/8/2018 17:07				-0.009
5/8/2018 17:08				-0.01
5/8/2018 17:09				-0.011
5/8/2018 17:10	12.5	99.2		-0.009
5/8/2018 17:11				-0.009
5/8/2018 17:12				-0.009
5/8/2018 17:13				-0.01
5/8/2018 17:14				-0.009
5/8/2018 17:15	12.5	100.2		-0.011
5/8/2018 17:16				-0.009
5/8/2018 17:17				-0.011
5/8/2018 17:18				-0.01
5/8/2018 17:19				-0.008
5/8/2018 17:20	12.5	98.2		-0.008
5/8/2018 17:21				-0.009
5/8/2018 17:22				-0.009
5/8/2018 17:23				-0.008
5/8/2018 17:24				-0.009
5/8/2018 17:25	12.5	98.2		-0.007
5/8/2018 17:26				-0.002
5/8/2018 17:27				-0.002
5/8/2018 17:28				-0.007
5/8/2018 17:29				-0.008
5/8/2018 17:30	12.5	98.2		-0.009
5/8/2018 17:30			40.7526367;-73.4864687	
5/8/2018 17:31				-0.008

5/8/2018 17:32			-0.009	
5/8/2018 17:33			-0.012	
5/8/2018 17:34			-0.012	
5/8/2018 17:35	12.5	97.2	-0.01	
5/8/2018 17:36			-0.012	
5/8/2018 17:37			-0.01	
5/8/2018 17:38			-0.01	
5/8/2018 17:39			-0.011	
5/8/2018 17:40	12.5	98.2	-0.012	
5/8/2018 17:41			-0.008	
5/8/2018 17:42			-0.008	
5/8/2018 17:43			-0.007	
5/8/2018 17:44			-0.006	
5/8/2018 17:45	12.5	100.2	-0.001	
5/8/2018 17:46			-0.008	
5/8/2018 17:47			-0.01	
5/8/2018 17:48			-0.011	
5/8/2018 17:49			-0.01	
5/8/2018 17:50	12.5	100.2	-0.011	
5/8/2018 17:51			-0.012	
5/8/2018 17:52			-0.012	
5/8/2018 17:53			-0.013	
5/8/2018 17:54			-0.012	
5/8/2018 17:55	12.5	98.2	-0.011	
5/8/2018 17:56			-0.011	
5/8/2018 17:57			-0.012	
5/8/2018 17:58			-0.013	
5/8/2018 17:59			-0.014	
5/8/2018 18:00	12.4	99.2	-0.014	
5/8/2018 18:01			-0.012	
5/8/2018 18:02			-0.012	
5/8/2018 18:03			-0.012	
5/8/2018 18:04			-0.012	
5/8/2018 18:05	12.4	98.2	-0.011	
5/8/2018 18:05			40.752885299999996;-73.4863111	
5/8/2018 18:06			-0.013	
5/8/2018 18:07			-0.009	
5/8/2018 18:08			-0.009	
5/8/2018 18:09			-0.01	
5/8/2018 18:10	12.4	97.2	-0.01	
5/8/2018 18:11			-0.011	
5/8/2018 18:12			-0.01	
5/8/2018 18:13			-0.011	
5/8/2018 18:14			-0.012	
5/8/2018 18:15	12.4	99.2	-0.012	
5/8/2018 18:16			-0.013	

5/8/2018 18:17				-0.014
5/8/2018 18:18				-0.014
5/8/2018 18:19				-0.014
5/8/2018 18:20	12.5	100.2		-0.013
5/8/2018 18:21				-0.011
5/8/2018 18:22				-0.01
5/8/2018 18:23				-0.01
5/8/2018 18:24				-0.009
5/8/2018 18:25	12.4	99.2		-0.01
5/8/2018 18:26				-0.011
5/8/2018 18:27				-0.011
5/8/2018 18:28				-0.012
5/8/2018 18:29				-0.013
5/8/2018 18:30	12.4	99.2		-0.013
5/8/2018 18:31				-0.013
5/8/2018 18:32				-0.011
5/8/2018 18:33				-0.01
5/8/2018 18:34				-0.01
5/8/2018 18:35	12.4	100.2		-0.012
5/8/2018 18:36				-0.012
5/8/2018 18:37				-0.012
5/8/2018 18:38				-0.012
5/8/2018 18:39				-0.01
5/8/2018 18:40	12.4	98.2		-0.01
5/8/2018 18:40			40.752902899999995;-73.4863245	
5/8/2018 18:41				-0.009
5/8/2018 18:42				-0.01
5/8/2018 18:43				-0.01
5/8/2018 18:44				-0.011
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5/9/2018 12:45	12.3	111.3	40.75297;-73.48647		3
5/9/2018 12:50	12.3	113.4	40.75296;-73.48647		6
5/9/2018 12:55	12.2	111.3	40.75299;-73.48649		9
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5/9/2018 13:05	12.3	119.4	40.75297;-73.48644		7
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5/9/2018 13:25	12.2	113.4	40.75292;-73.48644		3
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5/9/2018 13:35	12.3	123.5	40.75292;-73.48644		0
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5/9/2018 14:15	12.2	123.5	40.75293;-73.48659		-3
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5/9/2018 14:35	12.2	118.4	40.75297;-73.4865		10
5/9/2018 14:40	12.2	122.5	40.75292;-73.48648		17
5/9/2018 14:45	12.2	112.4	40.75292;-73.4865		17
5/9/2018 14:50	12.2	117.4	40.75292;-73.48654		8
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5/9/2018 15:05	12.2	114.4	40.75292;-73.48651		11
5/9/2018 15:10	12.2	122.5	40.75293;-73.48655		9

5/9/2018 15:15	12.2	113.4	40.75292;-73.48654	18
5/9/2018 15:20	12.2	117.4	40.75291;-73.48652	30
5/9/2018 15:25	12.2	116.4	40.75292;-73.48654	33
5/9/2018 15:30	12.2	119.4	40.75291;-73.48649	33
5/9/2018 15:35	12.2	114.4	40.75298;-73.48654	29
5/9/2018 15:40	12.2	112.4	40.75296;-73.48654	34
5/9/2018 15:45	12.2	115.4	40.75296;-73.48654	33
5/9/2018 15:50	12.2	116.4	40.75295;-73.48653	25
5/9/2018 15:55	12.2	113.4	40.75294;-73.48652	17
5/9/2018 16:00	12.2	119.4	40.75297;-73.48652	14
5/9/2018 16:05	12.2	114.4	40.75291;-73.4865	12
5/9/2018 16:10	12.2	114.4	40.7529;-73.48649	-2
5/9/2018 16:15	12.2	133.6	40.75293;-73.48646	-5
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5/9/2018 16:35	12.2	112.4	40.75294;-73.48649	11
5/9/2018 16:40	12.2	125.5	40.75296;-73.4865	12
5/9/2018 16:45	12.2	117.4	40.75298;-73.48649	3
5/9/2018 16:50	12.2	114.4	40.75298;-73.48652	4
5/9/2018 16:55	12.2	117.4	40.753;-73.48654	6
5/9/2018 17:00	12.2	117.4	40.75302;-73.48651	-3
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5/9/2018 17:10	12.1	119.4	40.75302;-73.48652	-1
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5/9/2018 18:15	12.1	112.4	40.75287;-73.48651	14
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5/9/2018 18:55	12.1	122.5	40.75291;-73.48644	32
5/9/2018 19:00	12.1	115.4	40.75293;-73.48645	31

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5/9/2018 19:25	12.1	129.6	40.75297;-73.48653	11
5/9/2018 19:30	12.1	118.4	40.75297;-73.48649	9
5/9/2018 19:35	12.1	120.5	40.75297;-73.4865	14
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5/9/2018 19:45	12.1	117.4	40.75296;-73.48651	-3
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5/9/2018 19:55	12.1	118.4	40.75298;-73.4865	-6
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5/10/2018 14:05	11.9	117.4	40.75296;-73.48656	14
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5/10/2018 14:55	11.9	114.4	40.75293;-73.48656	19
5/10/2018 15:00	11.9	120.5	40.75299;-73.48653	5
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5/10/2018 15:10	11.9	126.5	40.75292;-73.48654	14
5/10/2018 15:15	11.9	113.4	40.75296;-73.48656	14

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5/10/2018 15:30	11.9	115.4	40.75294;-73.48656	26
5/10/2018 15:35	11.9	121.5	40.75294;-73.48655	24
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5/10/2018 15:45	11.9	120.5	40.75293;-73.48653	27
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5/10/2018 16:05	11.9	120.5	40.75294;-73.4865	15
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5/10/2018 17:05	11.8	115.4	40.75295;-73.48655	-3
5/10/2018 17:10	11.8	119.4	40.75297;-73.48649	-6
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5/10/2018 17:25	11.8	115.4	40.75295;-73.48653	3
5/10/2018 17:30	11.8	115.4	40.75296;-73.48653	4
5/10/2018 17:35	11.8	112.4	40.75293;-73.48653	3
5/10/2018 17:40	11.8	117.4	40.75295;-73.48656	6
5/10/2018 17:45	11.8	115.4	40.75292;-73.48652	16
5/10/2018 17:50	11.8	124.5	40.75293;-73.4865	16
5/10/2018 17:55	11.8	115.4	40.75289;-73.48654	19
5/10/2018 18:00	11.8	121.5	40.75288;-73.48653	21
5/10/2018 18:05	11.8	114.4	40.75287;-73.48651	12
5/10/2018 18:10	11.8	118.4	40.75287;-73.48653	16
5/10/2018 18:15	11.8	128.6	40.75286;-73.48655	22
5/10/2018 18:20	11.8	126.5	40.75285;-73.48652	15
5/10/2018 18:25	11.8	128.6	40.75288;-73.48655	18
5/10/2018 18:30	11.8	125.5	40.75285;-73.48649	17
5/10/2018 18:35	11.8	114.4	40.75282;-73.48647	8
5/10/2018 18:40	11.8	116.4	40.75285;-73.48653	4
5/10/2018 18:45	11.8	113.4	40.75283;-73.48651	4
5/10/2018 18:50	11.8	125.5	40.75284;-73.4865	13
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5/10/2018 19:05	11.7	119.4	40.75286;-73.48654	9

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5/10/2018 19:20	11.7	115.4	40.75297;-73.4865		15
5/10/2018 19:25	11.7	113.4	40.75298;-73.4865		18
5/10/2018 19:30	11.7	120.5	40.75299;-73.48648		11
5/10/2018 19:35	11.7	121.5	40.753;-73.4865		11
5/10/2018 19:40	11.7	130.6	40.753;-73.4865		9
5/10/2018 19:45	11.7	118.4	40.75299;-73.4865		6
5/10/2018 19:50	11.7	116.4	40.75299;-73.48649		7
5/10/2018 19:55	11.7	113.4	40.75303;-73.48647		5
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5/11/2018 12:29	11.7	137.7			
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5/11/2018 12:36				-0.052	
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5/11/2018 12:38				-0.054	
5/11/2018 12:39				-0.054	
5/11/2018 12:40	11.7	118.4	40.753;-73	-0.053	15
5/11/2018 12:41				-0.051	
5/11/2018 12:42				-0.051	
5/11/2018 12:43				-0.053	
5/11/2018 12:44				-0.053	
5/11/2018 12:45	11.7	115.4	40.75299;-	-0.054	7
5/11/2018 12:46				-0.054	
5/11/2018 12:47				-0.054	
5/11/2018 12:48				-0.053	
5/11/2018 12:49				-0.054	
5/11/2018 12:50	11.7	117.4	40.75296;-	-0.054	11
5/11/2018 12:51				-0.053	
5/11/2018 12:52				-0.03	
5/11/2018 12:53				0.089	
5/11/2018 12:54				0.097	
5/11/2018 12:55	11.7	116.4	40.75296;-	0.03	7
5/11/2018 12:56				-0.008	
5/11/2018 12:57				-0.034	
5/11/2018 12:58				-0.042	
5/11/2018 12:59				-0.049	
5/11/2018 13:00	11.7	119.4	40.75294;-	-0.052	5
5/11/2018 13:01				-0.049	
5/11/2018 13:02				-0.053	
5/11/2018 13:03				-0.054	
5/11/2018 13:04				-0.055	

5/11/2018 13:05	11.7	118.4	40.75297;-	-0.056							-2
5/11/2018 13:06				-0.055							
5/11/2018 13:07				-0.031							
5/11/2018 13:08				0.04							
5/11/2018 13:09				0.298							
5/11/2018 13:10	11.7	132.6	40.75298;-	0.368							1
5/11/2018 13:11				0.368							
5/11/2018 13:12				0.368							
5/11/2018 13:13				0.368							
5/11/2018 13:15	11.7	123.5	40.75324;-	0.001							0
5/11/2018 13:16				0.001							
5/11/2018 13:17				-0.002							
5/11/2018 13:18				-0.001							
5/11/2018 13:19				-0.002							
5/11/2018 13:20	11.7	122.5	40.75322;-	-0.002							-1
5/11/2018 13:21				-0.003							
5/11/2018 13:22				-0.003							
5/11/2018 13:23				-0.003							
5/11/2018 13:24				-0.003							
5/11/2018 13:25	11.7	122.5	40.75321;-	-0.003							-4
5/11/2018 13:26				-0.004							
5/11/2018 13:27				-0.003							
5/11/2018 13:28				-0.004							
5/11/2018 13:29				-0.003							
5/11/2018 13:30	11.7	130.6	40.7532;-7	-0.004							9
5/11/2018 13:31				-0.002							
5/11/2018 13:32				-0.002							
5/11/2018 13:33				0							
5/11/2018 13:34				0.006							
5/11/2018 13:35	11.6	130.6	40.75321;-	0.001	0.088	0.287	0	0.208	0.018	9	
5/11/2018 13:36				0.006	0.077	0.287	0	0.202	0.019		
5/11/2018 13:37				0.001	0.079	0.287	0	0.194	0.019		
5/11/2018 13:38				0.001	0.106	0.287	0	0.186	0.019		
5/11/2018 13:39				0	0.169	0.287	0	0.18	0.019		
5/11/2018 13:40	11.6	118.4	40.75322;-	-0.002	0.196	0.287	0	0.177	0.019	7	
5/11/2018 13:41				-0.004	0.206	0.287	0	0.175	0.02		
5/11/2018 13:42				-0.005	0.251	0.287	0	0.174	0.02		
5/11/2018 13:43				-0.002	0.241	0.287	0	0.175	0.021		
5/11/2018 13:44				-0.004	0.231	0.287	0	0.176	0.021		
5/11/2018 13:45	11.6	124.5	40.75323;-	-0.003	0.174	0.287	0	0.176	0.022	-1	
5/11/2018 13:46				-0.002	0.199	0.287	0	0.172	0.022		
5/11/2018 13:47				-0.004	0.25	0.287	0	0.17	0.023		
5/11/2018 13:48				-0.005	0.27	0.287	0	0.169	0.023		
5/11/2018 13:49				-0.005	0.274	0.287	0	0.176	0.024		
5/11/2018 13:50	11.6	119.4	40.75321;-	-0.002	0.311	0.311	0	0.188	0.024	3	
5/11/2018 13:51				0.005	0.337	0.338	0	0.203	0.025		

5/11/2018 13:52				0	0.335	0.355	0	0.22	0.026		
5/11/2018 13:53				-0.001	0.355	0.357	0	0.237	0.026		
5/11/2018 13:54				-0.003	0.367	0.378	0	0.254	0.027		
5/11/2018 13:55	11.6	129.6	40.75318;-	-0.004	0.37	0.384	0	0.267	0.028	-1	
5/11/2018 13:56				-0.005	0.377	0.388	0	0.279	0.029		
5/11/2018 13:57				-0.005	0.399	0.404	0	0.29	0.029		
5/11/2018 13:58				-0.005	0.397	0.405	0	0.301	0.03		
5/11/2018 13:59				-0.007	0.426	0.43	0	0.311	0.031		
5/11/2018 14:00	11.6	124.5	40.75315;-	-0.007	0.441	0.441	0	0.324	0.032	5	
5/11/2018 14:01				-0.007	0.438	0.452	0	0.342	0.033		
5/11/2018 14:02				-0.007	0.4	0.457	0	0.358	0.034		
5/11/2018 14:03				-0.007	0.447	0.457	0	0.37	0.035		
5/11/2018 14:04				-0.007	0.459	0.467	0	0.382	0.036		
5/11/2018 14:05	11.6	124.5	40.7532;-7	-0.007	0.424	0.467	0	0.394	0.037	2	
5/11/2018 14:06				-0.007	0.461	0.468	0	0.403	0.037		
5/11/2018 14:07				-0.007	0.474	0.474	0	0.411	0.038		
5/11/2018 14:08				-0.007	0.442	0.477	0	0.419	0.039		
5/11/2018 14:09				-0.007	0.444	0.477	0	0.425	0.04		
5/11/2018 14:10	11.5	120.5	40.75322;-	-0.007	0.46	0.477	0	0.429	0.041	-2	
5/11/2018 14:11				-0.007	0.466	0.483	0	0.435	0.042		
5/11/2018 14:12				-0.007	0.455	0.484	0	0.441	0.043		
5/11/2018 14:13				-0.008	0.48	0.488	0	0.445	0.044		
5/11/2018 14:14				-0.007	0.506	0.506	0	0.451	0.045		
5/11/2018 14:15	11.5	118.4	40.75318;-	-0.007	0.487	0.509	0	0.455	0.046	6	
5/11/2018 14:16				-0.007	0.468	0.509	0	0.458	0.047		
5/11/2018 14:17				-0.006	0.473	0.509	0	0.46	0.048		
5/11/2018 14:18				-0.005	0.505	0.509	0	0.463	0.049		
5/11/2018 14:19				-0.005	0.5	0.517	0	0.467	0.05		
5/11/2018 14:20	11.5	119.4	40.75321;-	-0.004	0.506	0.517	0	0.47	0.051	8	
5/11/2018 14:21				-0.004	0.5	0.517	0	0.473	0.052		
5/11/2018 14:22				-0.003	0.512	0.517	0	0.476	0.053		
5/11/2018 14:23				-0.004	0.548	0.556	0	0.48	0.054		
5/11/2018 14:24				-0.005	0.514	0.557	0	0.486	0.056		
5/11/2018 14:25	11.5	135.6	40.75323;-	-0.006	0.498	0.557	0	0.491	0.057	-12	
5/11/2018 14:26				-0.007	0.515	0.557	0	0.494	0.058		
5/11/2018 14:27				-0.008	0.541	0.557	0	0.497	0.059		
5/11/2018 14:28				-0.008	0.555	0.559	0	0.501	0.06		
5/11/2018 14:29				-0.008	0.551	0.581	0	0.506	0.061		
5/11/2018 14:30	11.5	127.5	40.7532;-7	-0.009	0.565	0.581	0	0.511	0.062	-1	
5/11/2018 14:31				-0.009	0.516	0.581	0	0.517	0.063		
5/11/2018 14:32				-0.008	0.525	0.581	0	0.52	0.064		
5/11/2018 14:33				-0.007	0.518	0.581	0	0.523	0.066		
5/11/2018 14:34				-0.006	0.485	0.581	0	0.523	0.067		
5/11/2018 14:35	11.5	120.5	40.75317;-	-0.008	0.488	0.581	0	0.522	0.068	5	
5/11/2018 14:36				-0.009	0.502	0.581	0	0.522	0.069		
5/11/2018 14:37				-0.008	0.484	0.581	0	0.521	0.07		

5/11/2018 14:38				-0.008	0.471	0.581	0	0.519	0.071		
5/11/2018 14:39				-0.008	0.49	0.581	0	0.515	0.072		
5/11/2018 14:40	11.5	126.5	40.75315;-	-0.008	0.474	0.581	0	0.513	0.073	5	
5/11/2018 14:41				-0.009	0.523	0.581	0	0.513	0.074		
5/11/2018 14:42				-0.008	0.503	0.581	0	0.513	0.075		
5/11/2018 14:43				-0.009	0.515	0.581	0	0.511	0.076		
5/11/2018 14:44				-0.009	0.538	0.581	0	0.509	0.077		
5/11/2018 14:45	11.5	121.5	40.75314;-	-0.009	0.554	0.581	0	0.507	0.078	11	
5/11/2018 14:46				-0.009	0.571	0.581	0	0.506	0.079		
5/11/2018 14:47				-0.009	0.56	0.581	0	0.509	0.08		
5/11/2018 14:48				-0.008	0.504	0.581	0	0.512	0.082		
5/11/2018 14:49				-0.009	0.518	0.581	0	0.512	0.083		
5/11/2018 14:50	11.5	119.4	40.75315;-	-0.009	0.529	0.581	0	0.515	0.084	12	
5/11/2018 14:51				-0.008	0.531	0.581	0	0.519	0.085		
5/11/2018 14:52				-0.008	0.523	0.581	0	0.521	0.086		
5/11/2018 14:53				-0.008	0.489	0.581	0	0.523	0.087		
5/11/2018 14:54				-0.008	0.518	0.581	0	0.524	0.088		
5/11/2018 14:55	11.5	126.5	40.75316;-	-0.008	0.519	0.581	0	0.525	0.089	12	
5/11/2018 14:56				-0.008	0.505	0.581	0	0.527	0.09		
5/11/2018 14:57				-0.009	0.529	0.581	0	0.525	0.091		
5/11/2018 14:58				-0.008	0.511	0.581	0	0.526	0.092		
5/11/2018 14:59				-0.005	0.286	0.581	0	0.526	0.093		
5/11/2018 15:00	11.5	119.4	40.75318;-	0.002	0.351	0.581	0	0.51	0.094	14	
5/11/2018 15:01				0	0.406	0.581	0	0.497	0.095		
5/11/2018 15:02				-0.001	0.438	0.581	0	0.487	0.096		
5/11/2018 15:03				-0.004	0.466	0.581	0	0.479	0.096		
5/11/2018 15:04				-0.005	0.488	0.581	0	0.475	0.097		
5/11/2018 15:05	11.5	119.4	40.75319;-	-0.006	0.475	0.581	0	0.472	0.098	17	
5/11/2018 15:06				-0.007	0.476	0.581	0	0.467	0.099		
5/11/2018 15:07				-0.007	0.481	0.581	0	0.464	0.1		
5/11/2018 15:08				-0.008	0.499	0.581	0	0.463	0.101		
5/11/2018 15:09				-0.007	0.47	0.581	0	0.462	0.102		
5/11/2018 15:10	11.5	129.6	40.75319;-	-0.009	0.518	0.581	0	0.46	0.103	17	
5/11/2018 15:11				-0.009	0.498	0.581	0	0.459	0.105		
5/11/2018 15:12				-0.009	0.49	0.581	0	0.46	0.106		
5/11/2018 15:13				-0.009	0.487	0.581	0	0.458	0.107		
5/11/2018 15:14				-0.008	0.42	0.581	0	0.455	0.108		
5/11/2018 15:15	11.5	120.5	40.75317;-	-0.008	0.411	0.581	0	0.463	0.108	20	
5/11/2018 15:16				-0.009	0.459	0.581	0	0.468	0.109		
5/11/2018 15:17				-0.008	0.458	0.581	0	0.471	0.11		
5/11/2018 15:18				-0.009	0.482	0.581	0	0.473	0.111		
5/14/2018 12:26	11.6	133.6									
5/14/2018 12:26			40.752950899999995;-73.4863388								
5/14/2018 12:27					0.103	0.15	0	0	0		
5/14/2018 12:28					0.104	0.152	0	0	0		
5/14/2018 12:29					0.139	0.152	0	0	0		

5/14/2018 12:30	11.4	127.5	40.75305;-73.48653		0.078	0.167	0	0	0	21
5/14/2018 12:31					0.097	0.178	0	0	0	
5/14/2018 12:32				-0.007	0.2	0.201	0	0	0	
5/14/2018 12:33				-0.012	0.247	0.247	0	0	0.001	
5/14/2018 12:34				-0.018	0.28	0.28	0	0	0.001	
5/14/2018 12:35	11.4	121.5	40.75303;-	-0.024	0.307	0.307	0	0	0.002	8
5/14/2018 12:36				-0.028	0.327	0.328	0	0	0.003	
5/14/2018 12:37				-0.031	0.338	0.339	0	0	0.003	
5/14/2018 12:38				-0.032	0.316	0.339	0	0	0.004	
5/14/2018 12:39				-0.033	0.339	0.339	0	0	0.005	
5/14/2018 12:40	11.4	136.6		-0.035	0.359	0.359	0	0	0.005	
5/14/2018 12:40			40.75301;-73.48644							7
5/14/2018 12:41				-0.023	0.244	0.361	0	0	0.006	
5/14/2018 12:42				-0.022	0.268	0.361	0	0.224	0.007	
5/14/2018 12:43				-0.026	0.289	0.361	0	0.236	0.007	
5/14/2018 12:44				-0.03	0.315	0.361	0	0.249	0.008	
5/14/2018 12:45	11.4	120.5		-0.033	0.332	0.361	0	0.262	0.008	
5/14/2018 12:45			40.75299;-73.48637							-16
5/14/2018 12:46				-0.035	0.353	0.361	0	0.279	0.009	
5/14/2018 12:47				-0.037	0.367	0.367	0	0.295	0.01	
5/14/2018 12:48				-0.037	0.374	0.376	0	0.306	0.01	
5/14/2018 12:49				-0.038	0.385	0.385	0	0.316	0.011	
5/14/2018 12:50	11.4	125.5	40.75298;-	-0.039	0.398	0.398	0	0.323	0.012	3
5/14/2018 12:51				-0.037	0.395	0.406	0	0.33	0.013	
5/14/2018 12:52				-0.039	0.396	0.406	0	0.335	0.014	
5/14/2018 12:53				-0.04	0.405	0.407	0	0.339	0.014	
5/14/2018 12:54				-0.041	0.418	0.418	0	0.345	0.015	
5/14/2018 12:55	11.4	130.6	40.75301;-	-0.041	0.433	0.434	0	0.35	0.016	3
5/14/2018 12:56				-0.042	0.43	0.434	0	0.355	0.017	
5/14/2018 12:57				-0.042	0.442	0.442	0	0.365	0.018	
5/14/2018 12:58				-0.038	0.436	0.45	0	0.377	0.019	
5/14/2018 12:59				-0.037	0.408	0.45	0	0.388	0.02	
5/14/2018 13:00	11.4	122.5	40.75298;-	-0.036	0.406	0.45	0	0.394	0.021	-3
5/14/2018 13:01				-0.039	0.407	0.45	0	0.4	0.021	
5/14/2018 13:02				-0.04	0.415	0.45	0	0.404	0.022	
5/14/2018 13:03				-0.04	0.428	0.45	0	0.407	0.023	
5/14/2018 13:04				-0.041	0.442	0.45	0	0.41	0.024	
5/14/2018 13:05	11.4	120.5		-0.041	0.447	0.453	0	0.414	0.025	
5/14/2018 13:05			40.753;-73.48647							-5
5/14/2018 13:06				-0.038	0.435	0.453	0	0.418	0.026	
5/14/2018 13:07				-0.04	0.436	0.453	0	0.421	0.027	
5/14/2018 13:08				-0.038	0.429	0.453	0	0.424	0.028	
5/14/2018 13:09				-0.036	0.404	0.453	0	0.426	0.029	
5/14/2018 13:10	11.4	119.4	40.75301;-	-0.036	0.388	0.453	0	0.426	0.029	-8
5/14/2018 13:11				-0.034	0.369	0.453	0	0.423	0.03	
5/14/2018 13:12				-0.036	0.367	0.453	0	0.42	0.031	

5/14/2018 13:13				-0.036	0.38	0.453	0	0.415	0.032			
5/14/2018 13:14				-0.037	0.39	0.453	0	0.411	0.033			
5/14/2018 13:15	11.4	114.4	40.753;-73	-0.039	0.389	0.453	0	0.41	0.033	-8		
5/14/2018 13:16				-0.035	0.373	0.453	0	0.409	0.034			
5/14/2018 13:17				-0.034	0.295	0.453	0	0.408	0.035			
5/14/2018 13:18				-0.037	0.359	0.453	0	0.402	0.036			
5/14/2018 13:19				-0.039	0.39	0.453	0	0.397	0.036			
5/14/2018 13:20	11.4	123.5	40.75298;-	-0.039	0.404	0.453	0	0.393	0.037	-4		
5/14/2018 13:21				-0.038	0.4	0.453	0	0.39	0.038			
5/14/2018 13:22				-0.04	0.429	0.453	0	0.387	0.039			
5/14/2018 13:23				-0.039	0.441	0.453	0	0.386	0.04			
5/14/2018 13:24				-0.035	0.381	0.453	0	0.386	0.041			
5/14/2018 13:25	11.4	129.6	40.753;-73	-0.037	0.392	0.453	0	0.385	0.042	-4		
5/14/2018 13:26				-0.038	0.409	0.453	0	0.385	0.042			
5/14/2018 13:27				-0.039	0.434	0.453	0	0.386	0.043			
5/14/2018 13:28				-0.04	0.46	0.46	0	0.39	0.044			
5/14/2018 13:29				-0.041	0.473	0.476	0	0.395	0.045			
5/14/2018 13:30	11.4	144.7	40.75298;-	-0.041	0.47	0.476	0	0.401	0.046	-1		
5/14/2018 13:31				-0.04	0.486	0.488	0	0.406	0.047			
5/14/2018 13:32				-0.038	0.481	0.489	0	0.412	0.048			
5/14/2018 13:33				-0.038	0.479	0.489	0	0.422	0.049			
5/14/2018 13:34				-0.041	0.489	0.49	0	0.431	0.05			
5/14/2018 13:35	11.4	129.6		-0.041	0.505	0.508	0	0.438	0.051			
5/14/2018 13:35			40.75299;-73.48653							0		
5/14/2018 13:36				-0.042	0.527	0.527	0	0.445	0.052			
5/14/2018 13:37				-0.042	0.534	0.534	0	0.453	0.053			
5/14/2018 13:38				-0.042	0.543	0.551	0	0.461	0.054			
5/14/2018 13:39				-0.041	0.51	0.551	0	0.468	0.055			
5/14/2018 13:40	11.4	129.6	40.75298;-	-0.04	0.493	0.551	0	0.476	0.056	0		
5/14/2018 13:41				-0.04	0.479	0.551	0	0.483	0.057			
5/14/2018 13:42				-0.041	0.492	0.551	0	0.488	0.058			
5/14/2018 13:43				-0.042	0.507	0.551	0	0.492	0.059			
5/14/2018 13:44				-0.042	0.519	0.551	0	0.496	0.06			
5/14/2018 13:45	11.3	124.5	40.75299;-	-0.043	0.542	0.551	0	0.499	0.062	0		
5/14/2018 13:46				-0.041	0.53	0.551	0	0.503	0.063			
5/14/2018 13:47				-0.04	0.537	0.551	0	0.506	0.064			
5/14/2018 13:48				-0.042	0.546	0.551	0	0.51	0.065			
5/14/2018 13:49				-0.039	0.548	0.557	0	0.514	0.066			
5/14/2018 13:50	11.3	119.4	40.75297;-	-0.04	0.538	0.557	0	0.518	0.067	0		
5/14/2018 13:51				-0.042	0.54	0.557	0	0.52	0.068			
5/14/2018 13:52				-0.04	0.527	0.557	0	0.522	0.069			
5/14/2018 13:53				-0.035	0.416	0.557	0	0.523	0.071			
5/14/2018 13:54				-0.036	0.42	0.557	0	0.517	0.071			
5/14/2018 13:55	11.3	120.5	40.75297;-	-0.034	0.357	0.557	0	0.51	0.072	0		
5/14/2018 13:56				-0.033	0.363	0.557	0	0.502	0.073			
5/14/2018 13:57				-0.035	0.328	0.557	0	0.494	0.074			

5/14/2018 13:58				-0.037	0.384	0.557	0	0.485	0.075	
5/14/2018 13:59				-0.037	0.308	0.557	0	0.475	0.075	
5/14/2018 14:00	11.3	120.5	40.75297;-	-0.035	0.328	0.557	0	0.464	0.076	0
5/14/2018 14:01				-0.034	0.283	0.557	0	0.45	0.077	
5/14/2018 14:02				-0.035	0.344	0.557	0	0.436	0.077	
5/14/2018 14:03				-0.037	0.317	0.557	0	0.422	0.078	
5/14/2018 14:04				-0.036	0.39	0.557	0	0.409	0.079	
5/14/2018 14:05	11.3	122.5	40.75296;-	-0.037	0.431	0.557	0	0.396	0.08	4
5/14/2018 14:06				-0.039	0.446	0.557	0	0.388	0.08	
5/14/2018 14:07				-0.038	0.421	0.557	0	0.381	0.081	
5/14/2018 14:08				-0.038	0.335	0.557	0	0.374	0.082	
5/14/2018 14:09				-0.037	0.39	0.557	0	0.369	0.083	
5/14/2018 14:10	11.3	119.4	40.75294;-	-0.039	0.409	0.557	0	0.366	0.084	8
5/14/2018 14:11				-0.041	0.458	0.557	0	0.368	0.085	
5/14/2018 14:12				-0.042	0.494	0.557	0	0.373	0.086	
5/14/2018 14:13				-0.042	0.525	0.557	0	0.382	0.087	
5/14/2018 14:14				-0.042	0.553	0.557	0	0.392	0.088	
5/14/2018 14:15	11.3	119.4	40.75294;-	-0.039	0.539	0.557	0	0.405	0.089	7
5/14/2018 14:16				-0.039	0.538	0.557	0	0.419	0.09	
5/14/2018 14:17				-0.038	0.527	0.557	0	0.434	0.091	
5/14/2018 14:18				-0.041	0.547	0.557	0	0.448	0.092	
5/14/2018 14:19				-0.042	0.583	0.583	0	0.461	0.093	
5/14/2018 14:20	11.3	119.4	40.75294;-	-0.043	0.588	0.593	0	0.475	0.094	14
5/14/2018 14:21				-0.042	0.587	0.594	0	0.486	0.096	
5/14/2018 14:22				-0.04	0.591	0.594	0	0.496	0.097	
5/14/2018 14:23				-0.041	0.602	0.603	0	0.507	0.098	
5/14/2018 14:24				-0.043	0.611	0.623	0	0.521	0.099	
5/14/2018 14:25	11.3	124.5	40.75298;-	-0.042	0.614	0.623	0	0.537	0.101	7
5/14/2018 14:26				-0.038	0.609	0.632	0	0.551	0.102	
5/14/2018 14:27				-0.034	0.482	0.632	0	0.563	0.103	
5/14/2018 14:28				-0.035	0.453	0.632	0	0.566	0.104	
5/14/2018 14:29				-0.035	0.397	0.632	0	0.564	0.105	
5/14/2018 14:30	11.3	121.5	40.75296;-	-0.033	0.427	0.632	0	0.558	0.106	6
5/14/2018 14:31				-0.036	0.454	0.632	0	0.55	0.107	
5/14/2018 14:32				-0.036	0.47	0.632	0	0.545	0.108	
5/14/2018 14:33				-0.038	0.493	0.632	0	0.539	0.109	
5/14/2018 14:34				-0.038	0.509	0.632	0	0.535	0.11	
5/14/2018 14:35	11.3	122.5	40.7529;-7	-0.041	0.55	0.632	0	0.531	0.111	12
5/14/2018 14:36				-0.041	0.578	0.632	0	0.527	0.112	
5/14/2018 14:37				-0.039	0.545	0.632	0	0.526	0.113	
5/14/2018 14:38				-0.035	0.363	0.632	0	0.523	0.114	
5/14/2018 14:39				-0.035	0.353	0.632	0	0.511	0.115	
5/14/2018 14:40	11.3	137.7	40.75293;-	-0.034	0.318	0.632	0	0.496	0.116	7
5/14/2018 14:41				-0.034	0.301	0.632	0	0.477	0.117	
5/14/2018 14:42				-0.037	0.405	0.632	0	0.456	0.117	
5/14/2018 14:43				-0.04	0.478	0.632	0	0.445	0.118	

5/14/2018 14:44				-0.042	0.527	0.632	0	0.444	0.119		
5/14/2018 14:45	11.3	130.6	40.75296;-	-0.042	0.565	0.632	0	0.447	0.12	8	
5/14/2018 14:46				-0.043	0.562	0.632	0	0.456	0.121		
5/14/2018 14:47				-0.043	0.593	0.632	0	0.463	0.123		
5/14/2018 14:48				-0.043	0.618	0.632	0	0.473	0.124		
5/14/2018 14:49				-0.041	0.613	0.632	0	0.481	0.125		
5/14/2018 14:50	11.3	120.5	40.75298;-	-0.042	0.625	0.632	0	0.489	0.126	4	
5/14/2018 14:51				-0.042	0.628	0.652	0	0.494	0.128		
5/14/2018 14:52				-0.036	0.54	0.652	0	0.498	0.129		
5/14/2018 14:53				-0.037	0.572	0.652	0	0.5	0.13		
5/14/2018 14:54				-0.041	0.582	0.652	0	0.51	0.131		
5/14/2018 14:55	11.3	120.5	40.75296;-	-0.041	0.611	0.652	0	0.522	0.132	5	
5/14/2018 14:56				-0.043	0.628	0.652	0	0.54	0.134		
5/14/2018 14:57				-0.044	0.642	0.652	0	0.561	0.135		
5/14/2018 14:58				-0.044	0.666	0.666	0	0.579	0.136		
5/14/2018 14:59				-0.045	0.692	0.692	0	0.592	0.138		
5/14/2018 15:00	11.3	123.5	40.75295;-	-0.04	0.624	0.709	0	0.603	0.139	9	
5/14/2018 15:01				-0.038	0.562	0.709	0	0.611	0.14		
5/14/2018 15:02				-0.039	0.535	0.709	0	0.612	0.142		
5/14/2018 15:03				-0.04	0.542	0.709	0	0.61	0.143		
5/14/2018 15:04				-0.04	0.528	0.709	0	0.605	0.144		
5/14/2018 15:05	11.2	122.5	40.75297;-	-0.041	0.518	0.709	0	0.601	0.145	11	
5/14/2018 15:06				-0.039	0.49	0.709	0	0.595	0.146		
5/14/2018 15:07				-0.041	0.559	0.709	0	0.587	0.147		
5/14/2018 15:08				-0.042	0.585	0.709	0	0.584	0.148		
5/14/2018 15:09				-0.041	0.58	0.709	0	0.586	0.15		
5/14/2018 15:10	11.2	120.5	40.75297;-	-0.039	0.523	0.709	0	0.586	0.151	17	
5/14/2018 15:11				-0.04	0.484	0.709	0	0.583	0.152		
5/14/2018 15:12				-0.038	0.539	0.709	0	0.576	0.153		
5/14/2018 15:13				-0.038	0.487	0.709	0	0.569	0.154		
5/14/2018 15:14				-0.04	0.515	0.709	0	0.558	0.155		
5/14/2018 15:15	11.2	134.6	40.75301;-	-0.039	0.508	0.709	0	0.547	0.156	13	
5/14/2018 15:16				-0.038	0.487	0.709	0	0.536	0.157		
5/14/2018 15:17				-0.036	0.424	0.709	0	0.529	0.158		
5/14/2018 15:18				-0.039	0.465	0.709	0	0.523	0.159		
5/14/2018 15:19				-0.04	0.48	0.709	0	0.517	0.16		
5/14/2018 15:20	11.2	120.5	40.75302;-	-0.038	0.437	0.709	0	0.512	0.161	19	
5/14/2018 15:21				-0.039	0.472	0.709	0	0.508	0.162		
5/14/2018 15:22				-0.035	0.456	0.709	0	0.504	0.163		
5/14/2018 15:23				-0.039	0.467	0.709	0	0.499	0.164		
5/14/2018 15:24				-0.04	0.501	0.709	0	0.491	0.165		
5/14/2018 15:25	11.2	121.5		-0.042	0.537	0.709	0	0.485	0.166		
5/14/2018 15:25			40.75301;-73.4866								14
5/14/2018 15:26				-0.042	0.549	0.709	0	0.482	0.167		
5/14/2018 15:27				-0.035	0.461	0.709	0	0.484	0.168		
5/14/2018 15:28				-0.036	0.437	0.709	0	0.482	0.169		

5/14/2018 15:29				-0.035	0.407	0.709	0	0.478	0.17		
5/14/2018 15:30	11.2	123.5	40.75303;-	-0.037	0.433	0.709	0	0.475	0.171	16	
5/14/2018 15:31				-0.038	0.444	0.709	0	0.469	0.172		
5/14/2018 15:32				-0.034	0.416	0.709	0	0.467	0.173		
5/14/2018 15:33				-0.037	0.412	0.709	0	0.466	0.174		
5/14/2018 15:34				-0.04	0.458	0.709	0	0.462	0.175		
5/14/2018 15:35	11.2	121.5	40.75297;-	-0.041	0.48	0.709	0	0.46	0.175	9	
5/14/2018 15:36				-0.041	0.497	0.709	0	0.462	0.176		
5/14/2018 15:37				-0.036	0.441	0.709	0	0.463	0.177		
5/14/2018 15:38				-0.035	0.413	0.709	0	0.463	0.178		
5/14/2018 15:39				-0.036	0.389	0.709	0	0.46	0.179		
5/14/2018 15:40	11.2	133.6	40.75302;-	-0.04	0.422	0.709	0	0.454	0.18	8	
5/14/2018 15:41				-0.04	0.442	0.709	0	0.446	0.181		
5/14/2018 15:42				-0.041	0.438	0.709	0	0.439	0.182		
5/14/2018 15:43				-0.036	0.405	0.709	0	0.436	0.183		
5/14/2018 15:44				-0.039	0.424	0.709	0	0.434	0.184		
5/14/2018 15:45	11.2	123.5		-0.04	0.444	0.709	0	0.432	0.185		
5/14/2018 15:45			40.75307;-73.48666								18
5/14/2018 15:46				-0.04	0.465	0.709	0	0.433	0.185		
5/14/2018 15:47				-0.037	0.418	0.709	0	0.434	0.186		
5/14/2018 15:48				-0.036	0.408	0.709	0	0.434	0.187		
5/14/2018 15:49				-0.039	0.407	0.709	0	0.435	0.188		
5/14/2018 15:50	11.2	137.7	40.75305;-	-0.039	0.394	0.709	0	0.432	0.189	19	
5/14/2018 15:51				-0.04	0.413	0.709	0	0.427	0.19		
5/14/2018 15:52				-0.041	0.435	0.709	0	0.423	0.191		
5/14/2018 15:53				-0.042	0.451	0.709	0	0.42	0.192		
5/14/2018 15:54				-0.04	0.452	0.709	0	0.422	0.193		
5/14/2018 15:55	11.2	121.5	40.75301;-	-0.038	0.423	0.709	0	0.425	0.193	5	
5/14/2018 15:56				-0.037	0.393	0.709	0	0.426	0.194		
5/14/2018 15:57				-0.041	0.377	0.709	0	0.424	0.195		
5/14/2018 15:58				-0.043	0.381	0.709	0	0.42	0.196		
5/14/2018 15:59				-0.041	0.365	0.709	0	0.416	0.197		
5/14/2018 16:00	11.2	122.5	40.75298;-	-0.04	0.316	0.709	0	0.414	0.198	0	
5/14/2018 16:01				-0.041	0.343	0.709	0	0.408	0.198		
5/14/2018 16:02				-0.041	0.339	0.709	0	0.399	0.199		
5/14/2018 16:03				-0.042	0.345	0.709	0	0.393	0.2		
5/14/2018 16:04				-0.042	0.334	0.709	0	0.387	0.2		
5/14/2018 16:05	11.2	121.5	40.75299;-	-0.044	0.35	0.709	0	0.383	0.201	3	
5/14/2018 16:06				-0.044	0.336	0.709	0	0.378	0.202		
5/14/2018 16:07				-0.044	0.338	0.709	0	0.374	0.202		
5/14/2018 16:08				-0.044	0.361	0.709	0	0.37	0.203		
5/14/2018 16:09				-0.043	0.343	0.709	0	0.364	0.204		
5/14/2018 16:10	11.2	124.5	40.75298;-	-0.043	0.325	0.709	0	0.358	0.205	8	
5/14/2018 16:11				-0.042	0.33	0.709	0	0.352	0.205		
5/14/2018 16:12				-0.042	0.317	0.709	0	0.347	0.206		
5/14/2018 16:13				-0.043	0.337	0.709	0	0.344	0.207		

5/14/2018 16:14				-0.044	0.354	0.709	0	0.34	0.207		
5/14/2018 16:15	11.1	122.5	40.75302;-	-0.041	0.33	0.709	0	0.338	0.208	16	
5/14/2018 16:16				-0.043	0.342	0.709	0	0.337	0.209		
5/14/2018 16:17				-0.043	0.354	0.709	0	0.337	0.209		
5/14/2018 16:18				-0.042	0.34	0.709	0	0.338	0.21		
5/14/2018 16:19				-0.042	0.344	0.709	0	0.339	0.211		
5/14/2018 16:20	11.1	122.5	40.75302;-	-0.042	0.333	0.709	0	0.339	0.212	8	
5/14/2018 16:21				-0.043	0.329	0.709	0	0.339	0.212		
5/14/2018 16:22				-0.043	0.328	0.709	0	0.337	0.213		
5/14/2018 16:23				-0.042	0.332	0.709	0	0.336	0.214		
5/14/2018 16:24				-0.04	0.307	0.709	0	0.335	0.214		
5/14/2018 16:25	11.1	121.5	40.75298;-	-0.042	0.312	0.709	0	0.333	0.215	-2	
5/14/2018 16:26				-0.041	0.308	0.709	0	0.33	0.216		
5/14/2018 16:27				-0.043	0.302	0.709	0	0.329	0.216		
5/14/2018 16:28				-0.042	0.298	0.709	0	0.327	0.217		
5/14/2018 16:29				-0.044	0.303	0.709	0	0.326	0.218		
5/14/2018 16:30	11.1	129.6	40.75299;-	-0.044	0.346	0.709	0	0.323	0.218	-8	
5/14/2018 16:31				-0.046	0.373	0.709	0	0.323	0.219		
5/14/2018 16:32				-0.043	0.344	0.709	0	0.325	0.22		
5/14/2018 16:33				-0.043	0.329	0.709	0	0.326	0.22		
5/14/2018 16:34				-0.044	0.324	0.709	0	0.325	0.221		
5/14/2018 16:35	11.1	126.5	40.75292;-	-0.044	0.341	0.709	0	0.323	0.222	-2	
5/14/2018 16:36				-0.04	0.31	0.709	0	0.323	0.222		
5/14/2018 16:37				-0.041	0.3	0.709	0	0.322	0.223		
5/14/2018 16:38				-0.042	0.296	0.709	0	0.32	0.224		
5/14/2018 16:39				-0.044	0.325	0.709	0	0.318	0.224		
5/14/2018 16:40	11.1	121.5	40.75296;-	-0.044	0.335	0.709	0	0.317	0.225	-2	
5/14/2018 16:41				-0.042	0.341	0.709	0	0.32	0.226		
5/14/2018 16:42				-0.041	0.318	0.709	0	0.322	0.226		
5/14/2018 16:43				-0.041	0.296	0.709	0	0.324	0.227		
5/14/2018 16:44				-0.043	0.347	0.709	0	0.324	0.228		
5/14/2018 16:45	11.1	135.6	40.75296;-	-0.045	0.366	0.709	0	0.324	0.228	-5	
5/14/2018 16:46				-0.046	0.389	0.709	0	0.327	0.229		
5/14/2018 16:47				-0.047	0.414	0.709	0	0.328	0.23		
5/14/2018 16:48				-0.044	0.386	0.709	0	0.332	0.231		
5/14/2018 16:49				-0.044	0.379	0.709	0	0.336	0.232		
5/14/2018 16:50	11.1	139.7	40.75298;-	-0.044	0.398	0.709	0	0.34	0.232	-8	
5/14/2018 16:51				-0.045	0.408	0.709	0	0.343	0.233		
5/14/2018 16:52				-0.043	0.389	0.709	0	0.35	0.234		
5/14/2018 16:53				-0.043	0.352	0.709	0	0.355	0.235		
5/14/2018 16:54				-0.044	0.361	0.709	0	0.36	0.236		
5/14/2018 16:55	11.1	121.5	40.75297;-	-0.042	0.274	0.709	0	0.364	0.236	-5	
5/14/2018 16:56				-0.038	0.306	0.709	0	0.363	0.237		
5/14/2018 16:57				-0.042	0.312	0.709	0	0.36	0.238		
5/14/2018 16:58				-0.044	0.344	0.709	0	0.359	0.238		
5/14/2018 16:59				-0.042	0.344	0.709	0	0.361	0.239		

5/14/2018 17:00	11.1	136.6	40.75295;-	-0.043	0.36	0.709	0	0.362	0.24	-1
5/14/2018 17:01				-0.046	0.384	0.709	0	0.361	0.24	
5/14/2018 17:02				-0.042	0.354	0.709	0	0.36	0.241	
5/14/2018 17:03				-0.041	0.327	0.709	0	0.358	0.242	
5/14/2018 17:04				-0.04	0.339	0.709	0	0.355	0.243	
5/14/2018 17:05	11.1	121.5	40.75293;-	-0.04	0.337	0.709	0	0.353	0.243	1
5/14/2018 17:06				-0.039	0.333	0.709	0	0.35	0.244	
5/14/2018 17:07				-0.04	0.334	0.709	0	0.345	0.245	
5/14/2018 17:08				-0.038	0.323	0.709	0	0.341	0.245	
5/14/2018 17:09				-0.04	0.339	0.709	0	0.337	0.246	
5/14/2018 17:10	11.1	122.5	40.75294;-	-0.041	0.344	0.709	0	0.335	0.247	2
5/14/2018 17:11				-0.041	0.341	0.709	0	0.336	0.248	
5/14/2018 17:12				-0.039	0.322	0.709	0	0.339	0.248	
5/14/2018 17:13				-0.037	0.321	0.709	0	0.34	0.249	
5/14/2018 17:14				-0.039	0.325	0.709	0	0.339	0.25	
5/14/2018 17:15	11.1	128.6	40.75295;-	-0.04	0.328	0.709	0	0.338	0.25	3
5/14/2018 17:16				-0.038	0.332	0.709	0	0.337	0.251	
5/14/2018 17:17				-0.038	0.308	0.709	0	0.334	0.252	
5/14/2018 17:18				-0.039	0.321	0.709	0	0.33	0.252	
5/14/2018 17:19				-0.041	0.333	0.709	0	0.328	0.253	
5/14/2018 17:20	11	122.5	40.7529;-7	-0.043	0.363	0.709	0	0.327	0.254	5
5/14/2018 17:21				-0.041	0.347	0.709	0	0.328	0.254	
5/14/2018 17:22				-0.042	0.349	0.709	0	0.329	0.255	
5/14/2018 17:23				-0.044	0.39	0.709	0	0.331	0.256	
5/14/2018 17:24				-0.043	0.391	0.709	0	0.335	0.257	
5/14/2018 17:25	11	126.5		-0.04	0.367	0.709	0	0.339	0.257	
5/14/2018 17:25			40.75291;-73.4865							7
5/14/2018 17:26				-0.042	0.33	0.709	0	0.341	0.258	
5/14/2018 17:27				-0.037	0.323	0.709	0	0.341	0.259	
5/14/2018 17:28				-0.04	0.339	0.709	0	0.341	0.26	
5/14/2018 17:29				-0.04	0.338	0.709	0	0.342	0.26	
5/14/2018 17:30	11	121.5	40.75293;-	-0.039	0.307	0.709	0	0.343	0.261	5
5/14/2018 17:31				-0.039	0.292	0.709	0	0.342	0.262	
5/14/2018 17:32				-0.041	0.317	0.709	0	0.341	0.262	
5/14/2018 17:33				-0.042	0.324	0.709	0	0.34	0.263	
5/14/2018 17:34				-0.045	0.359	0.709	0	0.34	0.264	
5/14/2018 17:35	11	121.5	40.75292;-	-0.044	0.368	0.709	0	0.342	0.264	10
5/14/2018 17:36				-0.042	0.355	0.709	0	0.343	0.265	
5/14/2018 17:37				-0.044	0.357	0.709	0	0.343	0.266	
5/14/2018 17:38				-0.04	0.319	0.709	0	0.343	0.267	
5/14/2018 17:39				-0.038	0.326	0.709	0	0.341	0.267	
5/14/2018 17:40	11	123.5	40.75291;-	-0.038	0.296	0.709	0	0.337	0.268	13
5/14/2018 17:41				-0.037	0.298	0.709	0	0.332	0.269	
5/14/2018 17:42				-0.037	0.294	0.709	0	0.328	0.269	
5/14/2018 17:43				-0.039	0.3	0.709	0	0.327	0.27	
5/14/2018 17:44				-0.039	0.298	0.709	0	0.325	0.27	

5/14/2018 17:45	11	132.6	40.7529;-7	-0.038	0.298	0.709	0	0.322	0.271	16
5/14/2018 17:46				-0.039	0.286	0.709	0	0.322	0.272	
5/14/2018 17:47				-0.038	0.289	0.709	0	0.322	0.272	
5/14/2018 17:48				-0.04	0.298	0.709	0	0.32	0.273	
5/14/2018 17:49				-0.038	0.285	0.709	0	0.318	0.274	
5/14/2018 17:50	11	137.7	40.75292;-	-0.038	0.297	0.709	0	0.315	0.274	11
5/14/2018 17:51				-0.039	0.305	0.709	0	0.31	0.275	
5/14/2018 17:52				-0.038	0.301	0.709	0	0.306	0.275	
5/14/2018 17:53				-0.041	0.322	0.709	0	0.302	0.276	
5/14/2018 17:54				-0.042	0.332	0.709	0	0.3	0.277	
5/14/2018 17:55	11	127.5	40.75292;-	-0.04	0.326	0.709	0	0.3	0.277	14
5/14/2018 17:56				-0.04	0.314	0.709	0	0.302	0.278	
5/14/2018 17:57				-0.041	0.327	0.709	0	0.304	0.279	
5/14/2018 17:58				-0.039	0.308	0.709	0	0.306	0.279	
5/14/2018 17:59				-0.038	0.295	0.709	0	0.307	0.28	
5/14/2018 18:00	11	128.6	40.75293;-	-0.037	0.294	0.709	0	0.307	0.281	11
5/14/2018 18:01				-0.04	0.314	0.709	0	0.306	0.281	
5/14/2018 18:02				-0.037	0.319	0.709	0	0.306	0.282	
5/14/2018 18:03				-0.035	0.305	0.709	0	0.308	0.283	
5/14/2018 18:04				-0.035	0.288	0.709	0	0.31	0.283	
5/14/2018 18:05	11	143.7		-0.033	0.289	0.709	0	0.31	0.284	
5/14/2018 18:05			40.75292;-73.48651							13
5/14/2018 18:06				-0.034	0.283	0.709	0	0.309	0.284	
5/14/2018 18:07				-0.03	0.259	0.709	0	0.308	0.285	
5/14/2018 18:08				-0.031	0.167	0.709	0	0.304	0.286	
5/14/2018 18:09				-0.028	0.231	0.709	0	0.297	0.286	
5/14/2018 18:10	11	127.5	40.7529;-7	-0.03	0.255	0.709	0	0.289	0.286	14
5/14/2018 18:11				-0.033	0.266	0.709	0	0.283	0.287	
5/14/2018 18:12				-0.035	0.271	0.709	0	0.278	0.287	
5/14/2018 18:13				-0.037	0.167	0.709	0	0.274	0.288	
5/14/2018 18:14				-0.021	0.163	0.709	0	0.27	0.289	
5/14/2018 18:15	11	132.6	40.7529;-7	-0.018	0.125	0.709	0	0.261	0.289	13
5/14/2018 18:16				-0.024	0.126	0.709	0	0.251	0.289	
5/14/2018 18:17				-0.027	0.12	0.709	0	0.24	0.289	
5/14/2018 18:18				-0.027	0.116	0.709	0	0.226	0.29	
5/14/2018 18:19				-0.027	0.11	0.709	0	0.213	0.29	
5/14/2018 18:20	10.9	122.5	40.75291;-	-0.025	0.107	0.709	0	0.201	0.29	19
5/14/2018 18:21				-0.027	0.106	0.709	0	0.19	0.29	
5/14/2018 18:22				-0.028	0.102	0.709	0	0.178	0.291	
5/14/2018 18:23				-0.028	0.101	0.709	0	0.169	0.291	
5/14/2018 18:24				-0.03	0.095	0.709	0	0.161	0.291	
5/14/2018 18:25	11	127.5	40.75291;-	-0.032	0.14	0.709	0	0.154	0.291	15
5/14/2018 18:26				-0.037	0.162	0.709	0	0.146	0.291	
5/14/2018 18:27				-0.038	0.185	0.709	0	0.14	0.292	
5/14/2018 18:28				-0.037	0.186	0.709	0	0.134	0.292	
5/14/2018 18:29				-0.038	0.209	0.709	0	0.129	0.293	

5/14/2018 18:30	10.9	129.6	40.75293;-	-0.038	0.224	0.709	0	0.131	0.293	25
5/14/2018 18:31				-0.037	0.215	0.709	0	0.136	0.293	
5/14/2018 18:32				-0.038	0.208	0.709	0	0.143	0.294	
5/14/2018 18:33				-0.037	0.221	0.709	0	0.149	0.294	
5/14/2018 18:34				-0.041	0.239	0.709	0	0.156	0.295	
5/14/2018 18:35	10.9	122.5	40.75297;-	-0.041	0.239	0.709	0	0.164	0.295	15
5/14/2018 18:36				-0.041	0.227	0.709	0	0.172	0.296	
5/14/2018 18:37				-0.04	0.243	0.709	0	0.181	0.296	
5/14/2018 18:38				-0.037	0.232	0.709	0	0.19	0.297	
5/14/2018 18:39				-0.039	0.25	0.709	0	0.199	0.297	
5/14/2018 18:40	10.9	122.5	40.75294;-	-0.039	0.228	0.709	0	0.209	0.298	20
5/14/2018 18:41				-0.036	0.226	0.709	0	0.216	0.298	
5/14/2018 18:42				-0.035	0.223	0.709	0	0.221	0.299	
5/14/2018 18:43				-0.037	0.236	0.709	0	0.224	0.299	
5/14/2018 18:44				-0.04	0.255	0.709	0	0.227	0.3	
5/14/2018 18:45	10.9	125.5	40.75298;-	-0.041	0.268	0.709	0	0.23	0.3	14
5/14/2018 18:46				-0.041	0.288	0.709	0	0.233	0.301	
5/14/2018 18:47				-0.038	0.248	0.709	0	0.237	0.301	
5/14/2018 18:48				-0.037	0.265	0.709	0	0.24	0.302	
5/14/2018 18:49				-0.039	0.269	0.709	0	0.243	0.302	
5/14/2018 18:50	10.9	137.7	40.75299;-	-0.041	0.279	0.709	0	0.246	0.303	13
5/14/2018 18:51				-0.041	0.279	0.709	0	0.248	0.304	
5/14/2018 18:52				-0.037	0.25	0.709	0	0.251	0.304	
5/14/2018 18:53				-0.036	0.243	0.709	0	0.253	0.305	
5/14/2018 18:54				-0.037	0.253	0.709	0	0.254	0.305	
5/14/2018 18:55	10.9	134.6	40.75303;-	-0.038	0.259	0.709	0	0.254	0.306	5
5/14/2018 18:56				-0.037	0.238	0.709	0	0.255	0.306	
5/14/2018 18:57				-0.034	0.243	0.709	0	0.256	0.307	
5/14/2018 18:58				-0.035	0.242	0.709	0	0.257	0.307	
5/14/2018 18:59				-0.034	0.242	0.709	0	0.257	0.308	
5/14/2018 19:00	10.9	125.5	40.75299;-	-0.037	0.262	0.709	0	0.257	0.308	5
5/14/2018 19:01				-0.039	0.296	0.709	0	0.256	0.309	
5/14/2018 19:02				-0.039	0.271	0.709	0	0.256	0.309	
5/14/2018 19:03				-0.036	0.27	0.709	0	0.257	0.31	
5/14/2018 19:04				-0.037	0.279	0.709	0	0.258	0.31	
5/14/2018 19:05	10.9	129.6	40.75296;-	-0.038	0.284	0.709	0	0.258	0.311	0
5/14/2018 19:06				-0.036	0.273	0.709	0	0.258	0.312	
5/14/2018 19:07				-0.036	0.258	0.709	0	0.258	0.312	
5/14/2018 19:08				-0.036	0.276	0.709	0	0.258	0.313	
5/14/2018 19:09				-0.039	0.305	0.709	0	0.26	0.313	
5/14/2018 19:10	10.8	124.5	40.75298;-	-0.042	0.334	0.709	0	0.263	0.314	-4
5/14/2018 19:11				-0.038	0.312	0.709	0	0.267	0.315	
5/14/2018 19:12				-0.036	0.261	0.709	0	0.272	0.315	
5/14/2018 19:13				-0.034	0.275	0.709	0	0.275	0.316	
5/14/2018 19:14				-0.038	0.306	0.709	0	0.276	0.316	
5/14/2018 19:15	10.8	126.5	40.75298;-	-0.041	0.321	0.709	0	0.28	0.317	-3

5/14/2018 19:16				-0.041	0.336	0.709	0	0.284	0.318			
5/14/2018 19:17				-0.038	0.283	0.709	0	0.288	0.318			
5/14/2018 19:18				-0.036	0.273	0.709	0	0.29	0.319			
5/14/2018 19:19				-0.038	0.295	0.709	0	0.29	0.32			
5/14/2018 19:20	10.8	129.6	40.75298;-	-0.039	0.312	0.709	0	0.291	0.32	12		
5/14/2018 19:21				-0.036	0.279	0.709	0	0.293	0.321			
5/14/2018 19:22				-0.036	0.27	0.709	0	0.294	0.321			
5/14/2018 19:22	10.8	164										
5/14/2018 19:22			40.7527948;-73.4863953									
5/14/2018 19:23				-0.035	0.27	0.709	0	0.295	0.322		0.004	
5/14/2018 19:24				-0.038	0.299	0.709	0	0.295	0.323		0	
5/14/2018 19:25	10.8	107.3	40.75299;-	-0.04	0.32	0.709	0	0.295	0.323	6	0	
5/14/2018 19:26				-0.037	0.31	0.709	0	0.294	0.324		0	
5/14/2018 19:27				-0.036	0.296	0.709	0	0.294	0.324		0	
5/14/2018 19:28				-0.038	0.312	0.709	0	0.295	0.325		0	
5/14/2018 19:29				-0.041	0.333	0.709	0	0.297	0.326		0	
5/14/2018 19:30	10.8	107.3	40.75299;-	-0.042	0.353	0.709	0	0.3	0.326	6	0	
5/14/2018 19:31				-0.042	0.363	0.709	0	0.302	0.327		0	
5/14/2018 19:32				-0.042	0.368	0.709	0	0.303	0.328		0	
5/14/2018 19:33				-0.041	0.338	0.709	0	0.307	0.329		0	
5/14/2018 19:34				-0.038	0.307	0.709	0	0.312	0.329		0	
5/14/2018 19:35	10.8	107.3		-0.04	0.322	0.709	0	0.314	0.33		0	
5/14/2018 19:35			40.75299;-73.4865							6		
5/14/2018 19:36				-0.037	0.279	0.709	0	0.315	0.331		0	
5/14/2018 19:37				-0.037	0.296	0.709	0	0.315	0.331		0	
5/14/2018 19:38				-0.04	0.31	0.709	0	0.316	0.332		0	
5/14/2018 19:39				-0.037	0.29	0.709	0	0.319	0.333		0.001	
5/14/2018 19:40	10.8	107.3	40.75299;-	-0.039	0.295	0.709	0	0.319	0.333	6	0.001	
5/14/2018 19:41				-0.037	0.295	0.709	0	0.318	0.334		0.001	
5/14/2018 19:42				-0.037	0.287	0.709	0	0.317	0.334		0.001	
5/14/2018 19:43				-0.038	0.298	0.709	0	0.316	0.335		0.002	
5/14/2018 19:44				-0.037	0.289	0.709	0	0.316	0.336		0.002	
5/14/2018 19:45	10.8	107.3	40.75299;-	-0.034	0.274	0.709	0	0.313	0.336	6	0.002	
5/14/2018 19:46				-0.034	0.264	0.709	0	0.308	0.337		0.002	
5/14/2018 19:47				-0.031	0.259	0.709	0	0.302	0.337		0.002	
5/14/2018 19:48				-0.032	0.266	0.709	0	0.296	0.338		0.002	
5/14/2018 19:49				-0.032	0.26	0.709	0	0.289	0.338		0.002	
5/14/2018 19:50	10.8	108.3	40.75299;-	-0.03	0.258	0.709	0	0.285	0.339	6	0.002	
5/14/2018 19:51				-0.031	0.251	0.709	0	0.281	0.339		0.002	
5/14/2018 19:52				-0.032	0.267	0.709	0	0.278	0.34		0.002	
5/14/2018 19:53				-0.034	0.28	0.709	0	0.276	0.341		0.002	
5/14/2018 19:54				-0.035	0.297	0.709	0	0.274	0.341		0.002	
5/14/2018 19:55	10.8	108.3		-0.036	0.312	0.709	0	0.273	0.342		0.002	
5/14/2018 19:55			40.75299;-73.4865							6		
5/14/2018 19:56				-0.035	0.315	0.709	0	0.274	0.342		0.002	
5/14/2018 19:57				-0.034	0.314	0.709	0	0.276	0.343		0.002	

5/14/2018 19:58				-0.032	0.305	0.709	0	0.278	0.344		0.003
5/14/2018 19:59				-0.027	0.225	0.709	0	0.279	0.344		0.003
5/14/2018 20:00	10.8	106.3	40.75299;-	-0.027	0.168	0.709	0	0.275	0.345	6	0.003
5/15/2018 12:31	10.9	158.9									
5/15/2018 12:31			40.752722999999996;-73.4866353								
5/15/2018 12:32					0	3.57	0	0	0.006		
5/15/2018 12:33					0	3.57	0	0	0.006		
5/15/2018 12:34					0	3.57	0	0	0.006		
5/15/2018 12:35	10.8	122.5	40.753;-73.48646		0	3.57	0	0	0.006	3	
5/15/2018 12:36					0	3.57	0	0	0.006		
5/15/2018 12:37					0	3.57	0	0	0.006		
5/15/2018 12:38				-0.047	0	3.57	0	0	0.006		0
5/15/2018 12:39				-0.058	0	3.57	0	0	0.006		0
5/15/2018 12:40	10.8	125.5	40.753;-73	-0.064	0	3.57	0	0	0.006	6	0
5/15/2018 12:41				-0.059	0	3.57	0	0	0.006		0
5/15/2018 12:42				-0.059	0	3.57	0	0	0.006		0
5/15/2018 12:43				-0.063	0	3.57	0	0	0.006		0
5/15/2018 12:44				-0.065	0	3.57	0	0	0.006		0
5/15/2018 12:45	10.8	123.5		-0.065	0	3.57	0	0.217	0.006		0
5/15/2018 12:45			40.75299;-73.48647							3	
5/15/2018 12:46				-0.069	0	3.57	0	0.157	0.006		0
5/15/2018 12:47				-0.069	0	3.57	0	0.005	0.006		0
5/15/2018 12:48				-0.07	0	3.57	0	0	0.006		0
5/15/2018 12:49				-0.072	0	3.57	0	0	0.006		0
5/15/2018 12:50	10.7	122.5	40.75297;-	-0.073	0	3.57	0	0	0.006	0	0
5/15/2018 12:51				-0.074	0	3.57	0	0	0.006		0
5/15/2018 12:52				-0.078	0	3.57	0	0	0.006		0
5/15/2018 12:53				-0.08	0	3.57	0	0	0.006		0.002
5/15/2018 12:54				-0.084	0	3.57	0	0	0.006		0.002
5/15/2018 12:55	10.7	123.5	40.75298;-	-0.08	0	3.57	0	0	0.006	-3	0.003
5/15/2018 12:56				-0.082	0	3.57	0	0	0.006		0.003
5/15/2018 12:57				-0.083	0	3.57	0	0	0.006		0.003
5/15/2018 12:58				-0.087	0	3.57	0	0	0.006		0.003
5/15/2018 12:59				-0.087	0	3.57	0	0	0.006		0.003
5/15/2018 13:00	10.7	122.5	40.75296;-	-0.09	0	3.57	0	0	0.006	0	0.003
5/15/2018 13:01				-0.089	0	3.57	0	0	0.006		0.004
5/15/2018 13:02				-0.087	0	3.57	0	0	0.006		0.004
5/15/2018 13:03				-0.087	0	3.57	0	0	0.006		0.004
5/15/2018 13:04				-0.093	0	3.57	0	0	0.006		0.004
5/15/2018 13:05	10.7	125.5		-0.095	0	3.57	0	0	0.006		0.004
5/15/2018 13:05			40.75299;-73.48649							0	
5/15/2018 13:06				-0.087	0	3.57	0	0	0.006		0.005
5/15/2018 13:07				-0.087	0	3.57	0	0	0.006		0.005
5/15/2018 13:08				-0.089	0	3.57	0	0	0.006		0.005
5/15/2018 13:09				-0.094	0	3.57	0	0	0.006		0.005
5/15/2018 13:10	10.7	123.5	40.75297;-	-0.092	0	3.57	0	0	0.006	-7	0.005

5/15/2018 13:11				-0.09	0	3.57	0	0	0.006		0.005
5/15/2018 13:12				-0.091	0	3.57	0	0	0.006		0.006
5/15/2018 13:13				-0.085	0	3.57	0	0	0.006		0.006
5/15/2018 13:14				-0.084	0	3.57	0	0	0.006		0.006
5/15/2018 13:15	10.7	130.6	40.75299;-	-0.088	0	3.57	0	0	0.006	-5	0.006
5/15/2018 13:16				-0.092	0	3.57	0	0	0.006		0.006
5/15/2018 13:17				-0.091	0	3.57	0	0	0.006		0.007
5/15/2018 13:18				-0.091	0	3.57	0	0	0.006		0.007
5/15/2018 13:19				-0.084	0	3.57	0	0	0.006		0.007
5/15/2018 13:20	10.6	125.5	40.75299;-	-0.084	0	3.57	0	0	0.006	-3	0.007
5/15/2018 13:21				-0.09	0	3.57	0	0	0.006		0.007
5/15/2018 13:22				-0.094	0	3.57	0	0	0.006		0.007
5/15/2018 13:23				-0.092	0	3.57	0	0	0.006		0.008
5/15/2018 13:24				-0.084	0	3.57	0	0	0.006		0.008
5/15/2018 13:25	10.6	130.6	40.75299;-	-0.085	0	3.57	0	0	0.006	0	0.008
5/15/2018 13:26				-0.085	0	3.57	0	0	0.006		0.008
5/15/2018 13:27				-0.088	0	3.57	0	0	0.006		0.008
5/15/2018 13:28				-0.085	0	3.57	0	0	0.006		0.009
5/15/2018 13:29				-0.083	0	3.57	0	0	0.006		0.009
5/15/2018 13:30	10.6	125.5	40.75299;-	-0.086	0	3.57	0	0	0.006	2	0.009
5/15/2018 13:31				-0.083	0	3.57	0	0	0.006		0.009
5/15/2018 13:32				-0.084	0	3.57	0	0	0.006		0.009
5/15/2018 13:33				-0.084	0	3.57	0	0	0.006		0.009
5/15/2018 13:34				-0.091	0	3.57	0	0	0.006		0.01
5/15/2018 13:35	10.6	124.5	40.75292;-	-0.084	0	3.57	0	0	0.006	3	0.01
5/15/2018 13:36				-0.083	0	3.57	0	0	0.006		0.01
5/15/2018 13:37				-0.09	0	3.57	0	0	0.006		0.01
5/15/2018 13:38				-0.09	0	3.57	0	0	0.006		0.01
5/15/2018 13:39				-0.088	0	3.57	0	0	0.006		0.01
5/15/2018 13:40	10.6	125.5	40.75298;-	-0.082	0	3.57	0	0	0.006	12	0.011
5/15/2018 13:41				-0.082	0	3.57	0	0	0.006		0.011
5/15/2018 13:42				-0.082	0	3.57	0	0	0.006		0.011
5/15/2018 13:43				-0.088	0	3.57	0	0	0.006		0.011
5/15/2018 13:44				-0.086	0	3.57	0	0	0.006		0.011
5/15/2018 13:45	10.5	123.5	40.75296;-	-0.084	0	3.57	0	0	0.006	10	0.011
5/15/2018 13:46				-0.084	0	3.57	0	0	0.006		0.012
5/15/2018 13:47				-0.089	0	3.57	0	0	0.006		0.012
5/15/2018 13:48				-0.088	0	3.57	0	0	0.006		0.012
5/15/2018 13:49				-0.086	0	3.57	0	0	0.006		0.012
5/15/2018 13:50	10.5	128.6	40.75291;-	-0.077	0	3.57	0	0	0.006	10	0.012
5/15/2018 13:51				-0.077	0	3.57	0	0	0.006		0.013
5/15/2018 13:52				-0.08	0	3.57	0	0	0.006		0.013
5/15/2018 13:53				-0.077	0	3.57	0	0	0.006		0.013
5/15/2018 13:54				-0.079	0	3.57	0	0	0.006		0.013
5/15/2018 13:55	10.5	135.6	40.75295;-	-0.08	0	3.57	0	0	0.006	2	0.013
5/15/2018 13:56				-0.079	0	3.57	0	0	0.006		0.013

5/15/2018 13:57				-0.078	0	3.57	0	0	0.006		0.013
5/15/2018 13:58				-0.081	0	3.57	0	0	0.006		0.014
5/15/2018 13:59				-0.078	0	3.57	0	0	0.006		0.014
5/15/2018 14:00	10.5	135.6	40.75307;-	-0.075	0	3.57	0	0	0.006	-15	0.014
5/15/2018 14:01				-0.075	0	3.57	0	0	0.006		0.014
5/15/2018 14:02				-0.076	0	3.57	0	0	0.006		0.014
5/15/2018 14:03				-0.078	0	3.57	0	0	0.006		0.014
5/15/2018 14:04				-0.083	0	3.57	0	0	0.006		0.015
5/15/2018 14:05	10.5	146.8	40.75301;-	-0.08	0	3.57	0	0	0.006	3	0.015
5/15/2018 14:06				-0.079	0	3.57	0	0	0.006		0.015
5/15/2018 14:07				-0.076	0	3.57	0	0	0.006		0.015
5/15/2018 14:08				-0.076	0	3.57	0	0	0.006		0.015
5/15/2018 14:09				-0.079	0	3.57	0	0	0.006		0.015
5/15/2018 14:10	10.4	126.5	40.75296;-	-0.078	0	3.57	0	0	0.006	8	0.016
5/15/2018 14:11				-0.078	0	3.57	0	0	0.006		0.016
5/15/2018 14:12				-0.076	0	3.57	0	0	0.006		0.016
5/15/2018 14:13				-0.075	0	3.57	0	0	0.006		0.016
5/15/2018 14:14				-0.075	0	3.57	0	0	0.006		0.016
5/15/2018 14:15	10.4	124.5	40.75295;-	-0.078	0	3.57	0	0	0.006	9	0.016
5/15/2018 14:16				-0.084	0	3.57	0	0	0.006		0.017
5/15/2018 14:17				-0.082	0	3.57	0	0	0.006		0.017
5/15/2018 14:18				-0.075	0	3.57	0	0	0.006		0.017
5/15/2018 14:19				-0.077	0	3.57	0	0	0.006		0.017
5/15/2018 14:20	10.4	129.6	40.75293;-	-0.081	0	3.57	0	0	0.006	-1	0.017
5/15/2018 14:21				-0.08	0	3.57	0	0	0.006		0.017
5/15/2018 14:22				-0.078	0	3.57	0	0	0.006		0.018
5/15/2018 14:23				-0.08	0	3.57	0	0	0.006		0.018
5/15/2018 14:24				-0.081	0	3.57	0	0	0.006		0.018
5/15/2018 14:25	10.4	133.6	40.75298;-	-0.08	0	3.57	0	0	0.006	0	0.018
5/15/2018 14:26				-0.08	0	3.57	0	0	0.006		0.018
5/15/2018 14:27				-0.085	0	3.57	0	0	0.006		0.018
5/15/2018 14:28				-0.085	0	3.57	0	0	0.006		0.019
5/15/2018 14:29				-0.091	0	3.57	0	0	0.006		0.019
5/15/2018 14:30	10.4	126.5	40.753;-73	-0.088	0	3.57	0	0	0.006	-1	0.019
5/15/2018 14:31				-0.084	0	3.57	0	0	0.006		0.019
5/15/2018 14:32				-0.086	0	3.57	0	0	0.006		0.019
5/15/2018 14:33				-0.085	0	3.57	0	0	0.006		0.019
5/15/2018 14:34				-0.083	0	3.57	0	0	0.006		0.02
5/15/2018 14:35	10.3	130.6	40.75297;-	-0.086	0	3.57	0	0	0.006	5	0.02
5/15/2018 14:36				-0.087	0	3.57	0	0	0.006		0.02
5/15/2018 14:37				-0.086	0	3.57	0	0	0.006		0.02
5/15/2018 14:38				-0.087	0	3.57	0	0	0.006		0.02
5/15/2018 14:39				-0.089	0	3.57	0	0	0.006		0.02
5/15/2018 14:40	10.3	131.6	40.75298;-	-0.088	0	3.57	0	0	0.006	2	0.021
5/15/2018 14:41				-0.087	0	3.57	0	0	0.006		0.021
5/15/2018 14:42				-0.086	0	3.57	0	0	0.006		0.021

5/15/2018 14:43				-0.085	0	3.57	0	0	0.006		0.021
5/15/2018 14:44				-0.084	0	3.57	0	0	0.006		0.021
5/15/2018 14:45	10.2	145.8	40.75298;-	-0.087	0	3.57	0	0	0.006	2	0.022
5/15/2018 14:46				-0.087	0	3.57	0	0	0.006		0.022
5/15/2018 14:47				-0.082							0.022
5/15/2018 14:48				-0.081							0.022
5/15/2018 14:49				-0.087	0.046	3.57	0	0	0.006		0.022
5/15/2018 14:50	10.4	128.6	40.75297;-	-0.091	0.05	3.57	0	0.003	0.006	7	0.022
5/15/2018 14:51				-0.09	0.057	3.57	0	0.006	0.006		0.023
5/15/2018 14:52				-0.092	0.06	3.57	0	0.01	0.007		0.023
5/15/2018 14:53				-0.094	0.076	3.57	0	0.014	0.007		0.023
5/15/2018 14:54				-0.094	0.085	3.57	0	0.019	0.007		0.023
5/15/2018 14:55	10.4	128.6	40.75298;-	-0.094	0.077	3.57	0	0.024	0.007	13	0.023
5/15/2018 14:56				-0.09	0.074	3.57	0	0.03	0.007		0.024
5/15/2018 14:57				-0.095	0.087	3.57	0	0.034	0.007		0.024
5/15/2018 14:58				-0.095	0.085	3.57	0	0.04	0.008		0.024
5/15/2018 14:59				-0.092	0.083	3.57	0	0.046	0.008		0.024
5/15/2018 15:00	10.3	135.6	40.753;-73	-0.088	0.082	3.57	0	0.052	0.008	4	0.024
5/15/2018 15:01				-0.09	0.083	3.57	0	0.057	0.008		0.025
5/15/2018 15:02				-0.091	0.088	3.57	0	0.062	0.008		0.025
5/15/2018 15:03				-0.092	0.09	3.57	0	0.068	0.008		0.025
5/15/2018 15:04				-0.092	0.091	3.57	0	0.073	0.009		0.025
5/15/2018 15:05	10.3	127.5	40.75296;-	-0.094	0.106	3.57	0	0.077	0.009	14	0.025
5/15/2018 15:06				-0.091	0.096	3.57	0	0.08	0.009		0.025
5/15/2018 15:07				-0.095	0.11	3.57	0	0.083	0.009		0.026
5/15/2018 15:08				-0.099	0.117	3.57	0	0.085	0.009		0.026
5/15/2018 15:09				-0.095	0.115	3.57	0	0.088	0.01		0.026
5/15/2018 15:10	10.3	127.5	40.75294;-	-0.095	0.124	3.57	0	0.091	0.01	22	0.026
5/15/2018 15:11				-0.096	0.14	3.57	0	0.093	0.01		0.026
5/15/2018 15:12				-0.094	0.117	3.57	0	0.096	0.01		0.027
5/15/2018 15:13				-0.093	0.115	3.57	0	0.099	0.011		0.027
5/15/2018 15:14				-0.094	0.126	3.57	0	0.101	0.011		0.027
5/15/2018 15:15	9.8	144.7		-0.1	0.136	3.57	0	0.103	0.011		0.027
5/15/2018 15:15			40.75296;-73.48655							23	
5/15/2018 15:16				-0.095	0.139	3.57	0	0.107	0.011		0.027
5/15/2018 15:17				-0.095	0.136	3.57	0	0.111	0.012		0.028
5/15/2018 15:18				-0.101	0.152	3.57	0	0.114	0.012		0.028
5/15/2018 15:19				-0.096	0.148	3.57	0	0.118	0.012		0.028
5/15/2018 15:20	9.5	140.7	40.75297;-	-0.096	0.166	3.57	0	0.122	0.013	12	0.028
5/15/2018 15:21				-0.097	0.158	3.57	0	0.126	0.013		0.028
5/15/2018 15:22				-0.099	0.176	3.57	0	0.13	0.013		0.029
5/15/2018 15:23				-0.097	0.17	3.57	0	0.135	0.014		0.029
5/15/2018 15:24				-0.097	0.154	3.57	0	0.138	0.014		0.029
5/15/2018 15:25	9.2	149.8	40.75297;-	-0.096	0.149	3.57	0	0.142	0.014	15	0.029
5/15/2018 15:26				-0.099	0.169	3.57	0	0.144	0.015		0.029
5/15/2018 15:27				-0.096	0.169	3.57	0	0.147	0.015		0.03

5/15/2018 15:28				-0.1	0.186	3.57	0	0.15	0.015		0.03
5/15/2018 15:29				-0.099	0.187	3.57	0	0.154	0.016		0.03
5/15/2018 15:30	9	141.7	40.75295;-	-0.1	0.183	3.57	0	0.158	0.016	11	0.03
5/15/2018 15:31				-0.101	0.184	3.57	0	0.161	0.016		0.03
5/15/2018 15:32				-0.095	0.181	3.57	0	0.165	0.017		0.031
5/15/2018 15:33				-0.094	0.14	3.57	0	0.168	0.017		0.031
5/15/2018 15:34				-0.094	0.159	3.57	0	0.168	0.018		0.031
5/15/2018 15:35	8.8	146.8	40.75293;-	-0.094	0.173	3.57	0	0.169	0.018	0	0.031
5/15/2018 15:36				-0.1	0.206	3.57	0	0.169	0.018		0.031
5/15/2018 15:37				-0.097	0.183	3.57	0	0.171	0.019		0.032
5/15/2018 15:38				-0.094	0.174	3.57	0	0.172	0.019		0.032
5/15/2018 15:39				-0.095	0.183	3.57	0	0.172	0.019		0.032
5/15/2018 15:40	8.5	149.8	40.75295;-	-0.097	0.183	3.57	0	0.173	0.02	3	0.032
5/15/2018 15:41				-0.1	0.217	3.57	0	0.175	0.02		0.032
5/15/2018 15:42				-0.097	0.184	3.57	0	0.178	0.021		0.033
5/15/2018 15:43				-0.097	0.178	3.57	0	0.18	0.021		0.033
5/15/2018 15:44				-0.102	0.195	3.57	0	0.18	0.021		0.033
5/15/2018 15:45	8.2	148.8	40.75293;-	-0.097	0.192	3.57	0	0.181	0.022	7	0.033
5/15/2018 15:46				-0.097	0.184	3.57	0	0.182	0.022		0.033
5/15/2018 15:47				-0.096	0.183	3.57	0	0.182	0.023		0.034
5/15/2018 15:48				-0.097	0.182	3.57	0	0.182	0.023		0.034
5/15/2018 15:49				-0.098	0.186	3.57	0	0.184	0.023		0.034
5/15/2018 15:50	7.9	152.8	40.75292;-	-0.097	0.192	3.57	0	0.186	0.024	-2	0.034
5/15/2018 15:51				-0.099	0.217	3.57	0	0.188	0.024		0.034
5/15/2018 15:52				-0.102	0.08	3.57	0	0.188	0.025		
5/15/2018 15:53					0.065	3.57	0	0.184	0.025		
5/15/2018 15:54				-0.002	0.13	3.57	0	0.178	0.025		0
5/15/2018 15:55	7.7	177.1	40.75296;-	-0.004	0.157	3.57	0	0.174	0.025	0	0
5/15/2018 15:56				-0.002	0.181	3.57	0	0.172	0.026		0
5/15/2018 15:57				-0.004	0.133	3.57	0	0.169	0.026		0
5/15/2018 15:58				-0.004	0.173	3.57	0	0.167	0.026		0
5/15/2018 15:59				-0.003	0.168	3.57	0	0.165	0.027		0
5/15/2018 16:00	7.4	171.1	40.75298;-	-0.003	0.188	3.57	0	0.164	0.027	0	0
5/15/2018 16:01				-0.006	0.204	3.57	0	0.163	0.027		0
5/15/2018 16:02				-0.005	0.203	3.57	0	0.163	0.028		0
5/15/2018 16:03				-0.004	0.204	3.57	0	0.165	0.028		0
5/15/2018 16:04				-0.006	0.226	3.57	0	0.166	0.029		0
5/15/2018 16:05	7.2	173.1	40.75296;-	-0.005	0.203	3.57	0	0.168	0.029	-6	0
5/15/2018 16:06				-0.004	0.208	3.57	0	0.169	0.029		0
5/15/2018 16:07				-0.004	0.2	3.57	0	0.169	0.03		0
5/15/2018 16:07	7	221.7									
5/15/2018 16:08			40.7526449;-73.4864221		0.207	3.57	0	0.175	0.03		
5/15/2018 16:09					0.202	3.57	0	0.184	0.031		
5/15/2018 16:10	7	174.1	40.75295;-	-0.003	0.209	3.57	0	0.189	0.031	-7	0
5/15/2018 16:11				-0.006	0.212	3.57	0	0.192	0.032		0
5/15/2018 16:12				-0.005	0.216	3.57	0	0.195	0.032		0

5/15/2018 16:13				-0.006	0.215	3.57	0	0.198	0.032		0
5/15/2018 16:14				-0.006	0.216	3.57	0	0.202	0.033		0
5/15/2018 16:15	6.9	144.7	40.75295;-	-0.004	0.217	3.57	0	0.205	0.033	-7	0
5/15/2018 16:16				-0.004	0.216	3.57	0	0.207	0.034		0
5/15/2018 16:17				-0.002	0.202	3.57	0	0.208	0.034		0
5/15/2018 16:18				-0.003	0.199	3.57	0	0.208	0.035		0
5/15/2018 16:19				-0.002	0.202	3.57	0	0.208	0.035		0
5/15/2018 16:20	6.7	150.8	40.75295;-	-0.003	0.204	3.57	0	0.207	0.035	-7	0
5/15/2018 16:21				-0.003	0.201	3.57	0	0.206	0.036		0
5/15/2018 16:22				-0.003	0.19	3.57	0	0.206	0.036		0
5/15/2018 16:23				-0.004	0.19	3.57	0	0.204	0.037		0
5/15/2018 16:24				-0.004	0.204	3.57	0	0.203	0.037		0
5/15/2018 16:25	6.5	160.9	40.75295;-	-0.007	0.197	3.57	0	0.203	0.037	-7	0
5/15/2018 16:26				-0.006	0.214	3.57	0	0.203	0.038		0
5/15/2018 16:27				-0.004	0.201	3.57	0	0.203	0.038		0
5/15/2018 16:28				-0.004	0.201	3.57	0	0.202	0.039		0
5/15/2018 16:29				-0.006	0.203	3.57	0	0.201	0.039		0
5/15/2018 16:30	6.2	165	40.75295;-	-0.005	0.213	3.57	0	0.2	0.04	-7	0
5/15/2018 16:31				-0.003	0.203	3.57	0	0.199	0.04		0
5/15/2018 16:32				-0.003	0.202	3.57	0	0.199	0.04		0
5/15/2018 16:33				-0.005	0.207	3.57	0	0.199	0.041		0
5/15/2018 16:34				-0.008	0.232	3.57	0	0.199	0.041		0
5/15/2018 16:35	6.1	167	40.75295;-	-0.01	0.258	3.57	0	0.201	0.042	-7	0
5/15/2018 16:36				-0.01	0.242	3.57	0	0.204	0.042		0
5/15/2018 16:37				-0.006	0.227	3.57	0	0.208	0.043		0
5/15/2018 16:38				-0.006	0.234	3.57	0	0.21	0.043		0
5/15/2018 16:39				-0.004	0.22	3.57	0	0.213	0.044		0
5/15/2018 16:40	6	168	40.75295;-	-0.004	0.206	3.57	0	0.215	0.044	-7	0
5/15/2018 16:41				-0.004	0.198	3.57	0	0.215	0.045		0
5/15/2018 16:42				-0.006	0.211	3.57	0	0.215	0.045		0
5/15/2018 16:43				-0.006	0.214	3.57	0	0.216	0.046		0
5/15/2018 16:44				-0.007	0.217	3.57	0	0.217	0.046		0
5/15/2018 16:45	5.9	171.1	40.75295;-	-0.007	0.225	3.57	0	0.218	0.046	-7	0
5/15/2018 16:46				-0.005	0.223	3.57	0	0.219	0.047		0
5/15/2018 16:47				-0.006	0.212	3.57	0	0.22	0.047		0
5/15/2018 16:48				-0.004	0.198	3.57	0	0.221	0.048		0
5/15/2018 16:49				-0.004	0.205	3.57	0	0.221	0.048		0
5/15/2018 16:50	5.8	172.1	40.75295;-	-0.006	0.196	3.57	0	0.22	0.049	-7	0
5/15/2018 16:51				-0.006	0.203	3.57	0	0.217	0.049		0
5/15/2018 16:52				-0.005	0.204	3.57	0	0.213	0.049		0
5/15/2018 16:53				-0.005	0.206	3.57	0	0.212	0.05		0
5/15/2018 16:54				-0.003	0.204	3.57	0	0.21	0.05		0
5/15/2018 16:55	6	172.1	40.75295;-	-0.007	0.203	3.57	0	0.208	0.051	-7	0
5/15/2018 16:56				-0.006	0.204	3.57	0	0.208	0.051		0
5/15/2018 16:57				-0.006	0.206	3.57	0	0.208	0.052		0
5/15/2018 16:58				-0.006	0.21	3.57	0	0.208	0.052		0

5/15/2018 16:59				-0.007	0.211	3.57	0	0.208	0.052		0
5/15/2018 17:00	6	169	40.75295;-	-0.006	0.209	3.57	0	0.207	0.053	-7	0
5/15/2018 17:01				-0.006	0.207	3.57	0	0.206	0.053		0
5/15/2018 17:02				-0.007	0.208	3.57	0	0.205	0.054		0
5/15/2018 17:03				-0.007	0.218	3.57	0	0.205	0.054		0
5/15/2018 17:04				-0.008	0.205	3.57	0	0.205	0.055		0
5/15/2018 17:05	6	172.1	40.75295;-	-0.009	0.217	3.57	0	0.205	0.055	-7	0.001
5/15/2018 17:06				-0.008	0.22	3.57	0	0.206	0.055		0.001
5/15/2018 17:07				-0.006	0.224	3.57	0	0.207	0.056		0.001
5/15/2018 17:08				-0.006	0.202	3.57	0	0.208	0.056		0.001
5/15/2018 17:09				-0.008	0.211	3.57	0	0.209	0.057		0.001
5/15/2018 17:10	5.9	172.1	40.75295;-	-0.007	0.216	3.57	0	0.209	0.057	-7	0.001
5/15/2018 17:11				-0.007	0.21	3.57	0	0.21	0.058		0.001
5/15/2018 17:12				-0.006	0.213	3.57	0	0.21	0.058		0.001
5/15/2018 17:13				-0.006	0.202	3.57	0	0.21	0.059		0.001
5/15/2018 17:14				-0.004	0.19	3.57	0	0.21	0.059		0.001
5/15/2018 17:15	5.9	172.1	40.75295;-	-0.005	0.197	3.57	0	0.209	0.059	-7	0.001
5/15/2018 17:16				-0.006	0.197	3.57	0	0.208	0.06		0.001
5/15/2018 17:17				-0.005	0.193	3.57	0	0.208	0.06		0.001
5/15/2018 17:18				-0.005	0.191	3.57	0	0.207	0.061		0.001
5/15/2018 17:19				-0.006	0.196	3.57	0	0.206	0.061		0.001
5/15/2018 17:20	5.8	171.1	40.75295;-	-0.005	0.178	3.57	0	0.205	0.061	-7	0.001
5/15/2018 17:21				-0.006	0.191	3.57	0	0.203	0.062		0.001
5/15/2018 17:22				-0.005	0.184	3.57	0	0.2	0.062		0.001
5/15/2018 17:23				-0.006	0.193	3.57	0	0.198	0.063		0.001
5/15/2018 17:24				-0.006	0.196	3.57	0	0.197	0.063		0.001
5/15/2018 17:25	5.6	175.1	40.75295;-	-0.004	0.172	3.57	0	0.195	0.063	-7	0.001
5/15/2018 17:26				-0.006	0.181	3.57	0	0.191	0.064		0.001
5/15/2018 17:27				-0.006	0.191	3.57	0	0.19	0.064		0.001
5/15/2018 17:28				-0.005	0.202	3.57	0	0.188	0.064		0.001
5/15/2018 17:29				-0.006	0.203	3.57	0	0.187	0.065		0.001
5/15/2018 17:30	5.5	175.1	40.75295;-	-0.006	0.191	3.57	0	0.187	0.065	-7	0.001
5/15/2018 17:31				-0.005	0.187	3.57	0	0.187	0.066		0.001
5/15/2018 17:32				-0.006	0.192	3.57	0	0.187	0.066		0.001
5/15/2018 17:33				-0.007	0.194	3.57	0	0.187	0.067		0.001
5/15/2018 17:34				-0.008	0.207	3.57	0	0.187	0.067		0.001
5/15/2018 17:35	5.4	175.1	40.75295;-	-0.007	0.223	3.57	0	0.188	0.067	-7	0.001
5/15/2018 17:36				-0.006	0.208	3.57	0	0.19	0.068		0.001
5/15/2018 17:37				-0.007	0.211	3.57	0	0.191	0.068		0.001
5/15/2018 17:38				-0.007	0.221	3.57	0	0.193	0.069		0.001
5/15/2018 17:39				-0.007							0.001
5/15/2018 17:40	5.4	177.1	40.75295;-	-0.006						-7	0.001
5/15/2018 17:41				-0.007							0.001
5/15/2018 17:42				-0.007							0.001
5/15/2018 17:43				-0.007							0.001
5/15/2018 17:44				-0.008							0.001

5/15/2018 17:45	5.4	176.1	40.75295;-	-0.007		-7	0.001
5/15/2018 17:46				-0.006			0.001
5/15/2018 17:47				-0.007			0.001
5/15/2018 17:48				-0.006			0.001
5/15/2018 17:49				-0.006			0.001
5/15/2018 17:50	5.4	176.1	40.75295;-	-0.004		-7	0.001
5/15/2018 17:51				-0.004			0.001
5/15/2018 17:52				-0.003			0.001
5/15/2018 17:53				-0.003			0.001
5/15/2018 17:54				-0.005			0.001
5/15/2018 17:55	5.3	179.2	40.75295;-	-0.004		-7	0.001
5/15/2018 17:56				-0.003			0.001
5/15/2018 17:57				-0.004			0.001
5/15/2018 17:58				-0.004			0.001
5/15/2018 17:59				-0.003			0.001
5/15/2018 18:00	5.2	180.2	40.75295;-	-0.003		-7	0.001
5/15/2018 18:01				-0.003			0.001
5/15/2018 18:02				-0.003			0.001
5/15/2018 18:03				-0.003			0.001
5/15/2018 18:04				-0.004			0.001
5/15/2018 18:05	5.2	182.2	40.75295;-	-0.004		-7	0.001
5/15/2018 18:06				-0.004			0.001
5/15/2018 18:07				-0.004			0.001
5/15/2018 18:08				-0.003			0.001
5/15/2018 18:09				-0.003			0.001
5/15/2018 18:10	5.1	217.6	40.75295;-	-0.003		-7	0.001
5/15/2018 18:11				-0.004			0.001
5/15/2018 18:12				-0.004			0.001
5/15/2018 18:13				-0.002			0.001
5/15/2018 18:14				-0.003			0.001
5/15/2018 18:15	5.1	179.2	40.75295;-	-0.003		-7	0.001
5/15/2018 18:16				-0.003			0.001
5/15/2018 18:17				-0.003			0.001
5/15/2018 18:18				-0.003			0.001
5/15/2018 18:19				-0.003			0.001
5/15/2018 18:20	5.1	183.2	40.75295;-	-0.004		-7	0.001
5/15/2018 18:21				-0.003			0.001
5/15/2018 18:22				-0.003			0.001
5/15/2018 18:23				-0.003			0.001
5/15/2018 18:24				-0.003			0.001
5/15/2018 18:25	5.1	185.2	40.75295;-	-0.005		-7	0.001
5/15/2018 18:26				-0.004			0.001
5/15/2018 18:27				-0.004			0.001
5/15/2018 18:28				-0.003			0.001
5/15/2018 18:29				-0.004			0.001
5/15/2018 18:30	5	184.2	40.75295;-	-0.005		-7	0.001

5/15/2018 18:31				-0.003		0.001
5/15/2018 18:32				-0.003		0.001
5/15/2018 18:33				-0.004		0.001
5/15/2018 18:34				-0.004		0.001
5/15/2018 18:35	5	184.2	40.75295;-	-0.004	-7	0.001
5/15/2018 18:36				-0.004		0.001
5/15/2018 18:37				-0.003		0.001
5/15/2018 18:38				-0.003		0.001
5/15/2018 18:39				-0.003		0.001
5/15/2018 18:40	5	182.2	40.75295;-	-0.004	-7	0.001
5/15/2018 18:41				-0.003		0.001
5/15/2018 18:42				-0.003		0.001
5/15/2018 18:43				-0.003		0.001
5/15/2018 18:44				-0.003		0.001
5/15/2018 18:45	5	184.2	40.75295;-	-0.003	-7	0.001
5/15/2018 18:46				-0.004		0.001
5/15/2018 18:47				-0.003		0.001
5/15/2018 18:48				-0.001		0.001
5/15/2018 18:49				-0.002		0.001
5/15/2018 18:50	4.9	183.2	40.75295;-	-0.004	-7	0.001
5/15/2018 18:51				-0.003		0.001
5/15/2018 18:52				-0.003		0.001
5/15/2018 18:53				-0.003		0.001
5/15/2018 18:54				-0.003		0.001
5/15/2018 18:55	4.9	182.2	40.75295;-	-0.004	-7	0.001
5/15/2018 18:56				-0.003		0.001
5/15/2018 18:57				-0.003		0.001
5/15/2018 18:58				-0.003		0.001
5/15/2018 18:59				0		0.001
5/15/2018 19:00	4.8	183.2	40.75295;-	-0.002	-7	0.001
5/15/2018 19:01				-0.002		0.001
5/15/2018 19:02				-0.003		0.001
5/15/2018 19:03				-0.002		0.001
5/15/2018 19:04				-0.004		0.001
5/15/2018 19:05	4.8	183.2	40.75295;-	-0.004	-7	0.001
5/15/2018 19:06				-0.003		0.001
5/15/2018 19:07				-0.004		0.001
5/15/2018 19:08				-0.003		0.001
5/15/2018 19:09				-0.004		0.001
5/15/2018 19:10	4.8	186.2		-0.003		0.001
5/15/2018 19:10			40.75295;-73.48649		-7	
5/15/2018 19:11				-0.003		0.001
5/15/2018 19:12				-0.002		0.001
5/15/2018 19:13				-0.003		0.001
5/15/2018 19:14				-0.003		0.001
5/15/2018 19:15	4.8	182.2	40.75295;-	-0.004	-7	0.001

5/15/2018 19:16			-0.004			0.001
5/15/2018 19:17			-0.003			0.001
5/15/2018 19:18			-0.003			0.001
5/15/2018 19:19			-0.004			0.001
5/15/2018 19:20	4.8	182.2 40.75295;-	-0.003		-7	0.001
5/15/2018 19:21			-0.002			0.001
5/15/2018 19:22			-0.002			0.001
5/15/2018 19:23			-0.002			0.001
5/15/2018 19:24			0			0.001
5/15/2018 19:25	4.8	183.2 40.75295;-	-0.002		-7	0.001
5/15/2018 19:26			-0.002			0.001
5/15/2018 19:27			-0.001			0.001
5/15/2018 19:28			-0.002			0.001
5/15/2018 19:29			-0.001			0.001
5/15/2018 19:30	4.7	185.2 40.75295;-	-0.001		-7	0.001
5/15/2018 19:31			-0.002			0.001
5/15/2018 19:32			-0.002			0.001
5/15/2018 19:33			-0.003			0.001
5/15/2018 19:34			-0.002			0.001
5/15/2018 19:35	4.7	184.2 40.75295;-	-0.001		-7	0.001
5/15/2018 19:36			-0.001			0.001
5/15/2018 19:37			-0.001			0.001
5/15/2018 19:38			0			0.001
5/15/2018 19:39			-0.001			0.001
5/15/2018 19:40	4.7	188.3 40.75295;-	-0.001		-7	0.001
5/15/2018 19:41			0			0.001
5/15/2018 19:42			-0.001			0.001
5/15/2018 19:43			-0.001			0.001
5/15/2018 19:44			-0.001			0.001
5/15/2018 19:45	4.7	189.3 40.75295;-	-0.002		-7	0.001
5/15/2018 19:46			-0.002			0.001
5/15/2018 19:47			-0.002			0.001
5/15/2018 19:48			-0.003			0.001
5/15/2018 19:49			-0.001			0.001
5/15/2018 19:50	4.7	188.3 40.75295;-	0		-7	0.001
5/15/2018 19:51			0			0.001
5/15/2018 19:52			0			0.001
5/15/2018 19:53			0			0.001
5/15/2018 19:54			0			0.001
5/15/2018 19:55	4.7	189.3 40.75295;-	0		-7	0.001
5/15/2018 19:56			0			0.001
5/15/2018 19:57			0			0.001
5/15/2018 19:58			0			0.001
5/15/2018 19:59			0			0.001
5/15/2018 20:00	4.7	188.3 40.75295;-	0		-7	0.001
5/15/2018 20:01			0			0.001

5/15/2018 20:02				0								0.001
5/15/2018 20:03				0								0.001
5/15/2018 20:04				0								0.001
5/15/2018 20:05	4.6	183.2	40.75295;-	0							-7	0.001
5/15/2018 20:06				0								0.001
5/16/2018 12:21	12.5	136.6										
5/16/2018 12:21			40.7529379;-73.4863514									
5/16/2018 12:22					0.001	0.02	0	0	0			
5/16/2018 12:23					0.041	0.041	0	0	0			
5/16/2018 12:24					0.079	0.079	0	0	0			
5/16/2018 12:25	12.5	117.4	40.75301;-73.48652		0.136	0.136	0	0	0	8		
5/16/2018 12:26					0.164	0.168	0	0	0			
5/16/2018 12:27					0.194	0.194	0	0	0			
5/16/2018 12:28					0.196	0.219	0	0	0.001			
5/16/2018 12:29					0.247	0.251	0	0	0.001			
5/16/2018 12:30	12.5	115.4	40.75303;-	-0.003	0.263	0.268	0	0	0.001	13		0
5/16/2018 12:31				-0.01	0.288	0.288	0	0	0.002			0
5/16/2018 12:32				-0.011	0.312	0.312	0	0	0.003			0
5/16/2018 12:33				-0.013	0.328	0.328	0	0	0.003			0
5/16/2018 12:34				-0.015	0.304	0.329	0	0	0.004			0
5/16/2018 12:35	12.5	111.3	40.753;-73	-0.014	0.326	0.329	0	0	0.005	18		0
5/16/2018 12:36				-0.012	0.336	0.341	0	0	0.005			0
5/16/2018 12:37				-0.013	0.327	0.341	0	0.203	0.006			0
5/16/2018 12:38				-0.014	0.351	0.351	0	0.224	0.007			0
5/16/2018 12:39				-0.012	0.345	0.351	0	0.245	0.007			0
5/16/2018 12:40	12.4	113.4	40.75299;-	-0.012	0.342	0.351	0	0.264	0.008	3		0
5/16/2018 12:41				-0.012	0.336	0.351	0	0.279	0.009			0
5/16/2018 12:42				-0.011	0.295	0.351	0	0.291	0.009			0
5/16/2018 12:43				-0.012	0.29	0.351	0	0.299	0.01			0
5/16/2018 12:44				-0.012	0.304	0.351	0	0.306	0.011			0
5/16/2018 12:45	12.4	114.4		-0.012	0.321	0.351	0	0.311	0.011			0
5/16/2018 12:45			40.75299;-73.48649							4		
5/16/2018 12:46				-0.014	0.066	0.351	0	0.315	0.012			0
5/16/2018 12:47				-0.007	0.151	0.351	0	0.313	0.012			0
5/16/2018 12:48				-0.008	0.181	0.351	0	0.3	0.013			0
5/16/2018 12:49				-0.011	0.218	0.351	0	0.29	0.013			0
5/16/2018 12:50	12.4	112.4	40.753;-73	-0.012	0.223	0.351	0	0.283	0.013	-3		0
5/16/2018 12:51				-0.013	0.248	0.351	0	0.277	0.014			0
5/16/2018 12:52				-0.013	0.271	0.351	0	0.271	0.014			0
5/16/2018 12:53				-0.011	0.277	0.351	0	0.267	0.015			0.001
5/16/2018 12:54				-0.009	0.285	0.351	0	0.263	0.015			0.001
5/16/2018 12:55	12.4	122.5	40.75301;-	-0.011	0.268	0.351	0	0.259	0.016	-6		0.001
5/16/2018 12:56				-0.011	0.276	0.351	0	0.255	0.017			0.001
5/16/2018 12:57				-0.012	0.282	0.351	0	0.25	0.017			0.001
5/16/2018 12:58				-0.011	0.278	0.351	0	0.249	0.018			0.001
5/16/2018 12:59				-0.013	0.285	0.351	0	0.247	0.018			0.001

5/16/2018 13:00	12.4	124.5	40.75303;-	-0.011	0.267	0.351	0	0.246	0.019	-24	0.001
5/16/2018 13:01				-0.013	0.286	0.351	0	0.244	0.02		0.001
5/16/2018 13:02				-0.013	0.308	0.351	0	0.246	0.02		0.001
5/16/2018 13:03				-0.014	0.286	0.351	0	0.258	0.021		0.001
5/16/2018 13:04				-0.014	0.285	0.351	0	0.267	0.021		0.001
5/16/2018 13:05	12.4	118.4	40.75301;-	-0.014	0.298	0.351	0	0.272	0.022	-12	0.001
5/16/2018 13:06				-0.016	0.311	0.351	0	0.276	0.022		0.001
5/16/2018 13:07				-0.015	0.328	0.351	0	0.281	0.023		0.001
5/16/2018 13:08				-0.014	0.339	0.351	0	0.285	0.024		0.001
5/16/2018 13:09				-0.015	0.332	0.351	0	0.289	0.024		0.001
5/16/2018 13:10	12.4	116.4	40.75302;-	-0.015	0.342	0.351	0	0.292	0.025	-2	0.001
5/16/2018 13:11				-0.016	0.345	0.351	0	0.296	0.026		0.001
5/16/2018 13:12				-0.016	0.323	0.353	0	0.301	0.027		0.001
5/16/2018 13:13				-0.016	0.343	0.353	0	0.305	0.027		0.001
5/16/2018 13:14				-0.014	0.36	0.36	0	0.309	0.028		0.001
5/16/2018 13:15	12.4	113.4	40.75301;-	-0.013	0.355	0.363	0	0.314	0.029	-1	0.001
5/16/2018 13:16				-0.013	0.313	0.363	0	0.318	0.029		0.001
5/16/2018 13:17				-0.014	0.309	0.363	0	0.323	0.03		0.001
5/16/2018 13:18				-0.015	0.314	0.363	0	0.323	0.031		0.001
5/16/2018 13:19				-0.014	0.285	0.363	0	0.325	0.031		0.001
5/16/2018 13:20	12.4	129.6	40.75301;-	-0.015	0.295	0.363	0	0.326	0.032	5	0.001
5/16/2018 13:21				-0.014	0.301	0.363	0	0.326	0.033		0.001
5/16/2018 13:22				-0.013	0.29	0.363	0	0.325	0.033		0.001
5/16/2018 13:23				-0.013	0.28	0.363	0	0.323	0.034		0.001
5/16/2018 13:24				-0.013	0.306	0.363	0	0.32	0.035		0.001
5/16/2018 13:25	12.3	113.4	40.75301;-	-0.013	0.302	0.363	0	0.318	0.035	1	0.001
5/16/2018 13:26				-0.013	0.303	0.363	0	0.316	0.036		0.001
5/16/2018 13:27				-0.011	0.284	0.363	0	0.314	0.036		0.001
5/16/2018 13:28				-0.013	0.284	0.363	0	0.311	0.037		0.001
5/16/2018 13:29				-0.014	0.297	0.363	0	0.306	0.038		0.001
5/16/2018 13:30	12.3	113.4	40.75301;-	-0.013	0.298	0.363	0	0.303	0.038	3	0.001
5/16/2018 13:31				-0.013	0.268	0.363	0	0.299	0.039		0.001
5/16/2018 13:32				-0.015	0.296	0.363	0	0.295	0.039		0.002
5/16/2018 13:33				-0.015	0.309	0.363	0	0.293	0.04		0.002
5/16/2018 13:34				-0.015	0.313	0.363	0	0.293	0.041		0.002
5/16/2018 13:35	12.3	117.4	40.75298;-	-0.015	0.303	0.363	0	0.293	0.041	0	0.002
5/16/2018 13:36				-0.015	0.291	0.363	0	0.294	0.042		0.002
5/16/2018 13:37				-0.014	0.299	0.363	0	0.294	0.043		0.002
5/16/2018 13:38				-0.014	0.305	0.363	0	0.294	0.043		0.002
5/16/2018 13:39				-0.015	0.322	0.363	0	0.295	0.044		0.002
5/16/2018 13:40	12.3	113.4	40.75303;-	-0.014	0.302	0.363	0	0.296	0.044	5	0.002
5/16/2018 13:41				-0.016	0.325	0.363	0	0.297	0.045		0.002
5/16/2018 13:42				-0.013	0.292	0.363	0	0.297	0.046		0.002
5/16/2018 13:43				-0.014	0.286	0.363	0	0.299	0.046		0.002
5/16/2018 13:44				-0.016	0.299	0.363	0	0.299	0.047		0.002
5/16/2018 13:45	12.3	116.4	40.753;-73	-0.015	0.319	0.363	0	0.299	0.048	6	0.002

5/16/2018 13:46				-0.015	0.313	0.363	0	0.3	0.048		0.002
5/16/2018 13:47				-0.017	0.303	0.363	0	0.302	0.049		0.002
5/16/2018 13:48				-0.016	0.299	0.363	0	0.304	0.049		0.002
5/16/2018 13:49				-0.014	0.294	0.363	0	0.304	0.05		0.002
5/16/2018 13:50	12.3	114.4	40.753;-73	-0.013	0.283	0.363	0	0.304	0.051	-2	0.002
5/16/2018 13:51				-0.015	0.308	0.363	0	0.303	0.051		0.002
5/16/2018 13:52				-0.016	0.302	0.363	0	0.303	0.052		0.002
5/16/2018 13:53				-0.016	0.312	0.363	0	0.304	0.053		0.002
5/16/2018 13:54				-0.015	0.315	0.363	0	0.304	0.053		0.002
5/16/2018 13:55	12.3	137.7	40.753;-73	-0.014	0.301	0.363	0	0.304	0.054	0	0.002
5/16/2018 13:56				-0.015	0.299	0.363	0	0.303	0.055		0.002
5/16/2018 13:57				-0.015	0.275	0.363	0	0.302	0.055		0.002
5/16/2018 13:58				-0.012	0.277	0.363	0	0.301	0.056		0.002
5/16/2018 13:59				-0.014	0.283	0.363	0	0.301	0.056		0.002
5/16/2018 14:00	12.3	113.4	40.75298;-	-0.015	0.286	0.363	0	0.3	0.057	7	0.002
5/16/2018 14:01				-0.011	0.308	0.363	0	0.298	0.058		0.002
5/16/2018 14:02				-0.014	0.321	0.363	0	0.298	0.058		0.002
5/16/2018 14:03				-0.014	0.319	0.363	0	0.298	0.059		0.002
5/16/2018 14:04				-0.012	0.324	0.363	0	0.299	0.059		0.002
5/16/2018 14:05	12.3	115.4	40.75296;-	-0.011	0.339	0.363	0	0.299	0.06	8	0.002
5/16/2018 14:06				-0.013	0.338	0.363	0	0.302	0.061		0.002
5/16/2018 14:07				-0.016	0.336	0.363	0	0.304	0.062		0.003
5/16/2018 14:08				-0.016	0.348	0.363	0	0.307	0.062		0.003
5/16/2018 14:09				-0.014	0.336	0.363	0	0.309	0.063		0.003
5/16/2018 14:10	12.3	115.4	40.75294;-	-0.012	0.333	0.363	0	0.31	0.064	1	0.003
5/16/2018 14:11				-0.014	0.308	0.363	0	0.312	0.064		0.003
5/16/2018 14:12				-0.013	0.294	0.363	0	0.313	0.065		0.003
5/16/2018 14:13				-0.014	0.281	0.363	0	0.313	0.066		0.003
5/16/2018 14:14				-0.013	0.293	0.363	0	0.314	0.066		0.003
5/16/2018 14:15	12.3	116.4	40.75296;-	-0.013	0.291	0.363	0	0.314	0.067	4	0.003
5/16/2018 14:16				-0.013	0.302	0.363	0	0.314	0.067		0.003
5/16/2018 14:17				-0.014	0.309	0.363	0	0.314	0.068		0.003
5/16/2018 14:18				-0.013	0.304	0.363	0	0.314	0.069		0.003
5/16/2018 14:19				-0.014	0.308	0.363	0	0.312	0.069		0.003
5/16/2018 14:20	12.3	116.4	40.75294;-	-0.014	0.317	0.363	0	0.312	0.07	7	0.003
5/16/2018 14:21				-0.016	0.326	0.363	0	0.311	0.071		0.003
5/16/2018 14:22				-0.015	0.301	0.363	0	0.31	0.071		0.003
5/16/2018 14:23				-0.014	0.292	0.363	0	0.309	0.072		0.003
5/16/2018 14:24				-0.014	0.303	0.363	0	0.306	0.073		0.003
5/16/2018 14:25	12.3	114.4	40.75294;-	-0.014	0.29	0.363	0	0.304	0.073	10	0.003
5/16/2018 14:26				-0.014	0.303	0.363	0	0.302	0.074		0.003
5/16/2018 14:27				-0.016	0.283	0.363	0	0.3	0.074		0.003
5/16/2018 14:28				-0.015	0.293	0.363	0	0.301	0.075		0.003
5/16/2018 14:29				-0.017	0.304	0.363	0	0.3	0.076		0.003
5/16/2018 14:30	12.3	128.6	40.75296;-	-0.017	0.318	0.363	0	0.301	0.076	10	0.003
5/16/2018 14:31				-0.018	0.316	0.363	0	0.303	0.077		0.003

5/16/2018 14:32				-0.019	0.334	0.363	0	0.303	0.077		0.003
5/16/2018 14:33				-0.019	0.336	0.363	0	0.305	0.078		0.003
5/16/2018 14:34				-0.02	0.338	0.363	0	0.307	0.079		0.003
5/16/2018 14:35	12.2	123.5	40.75295;-	-0.019	0.343	0.363	0	0.309	0.08	16	0.003
5/16/2018 14:36				-0.019	0.347	0.363	0	0.311	0.08		0.003
5/16/2018 14:37				-0.016	0.316	0.363	0	0.313	0.081		0.003
5/16/2018 14:38				-0.017	0.296	0.363	0	0.314	0.082		0.003
5/16/2018 14:39				-0.018	0.305	0.363	0	0.314	0.082		0.003
5/16/2018 14:40	12.2	114.4	40.75298;-	-0.018	0.324	0.363	0	0.314	0.083	10	0.003
5/16/2018 14:41				-0.017	0.324	0.363	0	0.315	0.084		0.004
5/16/2018 14:42				-0.018	0.32	0.363	0	0.317	0.084		0.004
5/16/2018 14:43				-0.018	0.327	0.363	0	0.319	0.085		0.004
5/16/2018 14:44				-0.018	0.322	0.363	0	0.322	0.086		0.004
5/16/2018 14:45	12.2	113.4	40.75298;-	-0.017	0.212	0.363	0	0.323	0.086	7	0.004
5/16/2018 14:46				-0.015	0.242	0.363	0	0.321	0.087		0.004
5/16/2018 14:47				-0.014	0.263	0.363	0	0.315	0.087		0.004
5/16/2018 14:48				-0.015	0.263	0.363	0	0.31	0.088		0.004
5/16/2018 14:49				-0.014	0.242	0.363	0	0.305	0.088		0.004
5/16/2018 14:50	12.2	123.5	40.75298;-	-0.011	0.248	0.363	0	0.3	0.089	10	0.004
5/16/2018 14:51				-0.014	0.263	0.363	0	0.293	0.089		0.004
5/16/2018 14:52				-0.016	0.278	0.363	0	0.287	0.09		0.004
5/16/2018 14:53				-0.016	0.297	0.363	0	0.283	0.091		0.004
5/16/2018 14:54				-0.015	0.285	0.363	0	0.282	0.091		0.004
5/16/2018 14:55	12.2	114.4	40.75298;-	-0.016	0.283	0.363	0	0.281	0.092	10	0.004
5/16/2018 14:56				-0.017	0.297	0.363	0	0.279	0.092		0.004
5/16/2018 14:57				-0.017	0.297	0.363	0	0.276	0.093		0.004
5/16/2018 14:58				-0.016	0.296	0.363	0	0.275	0.094		0.004
5/16/2018 14:59				-0.016	0.294	0.363	0	0.273	0.094		0.004
5/16/2018 15:00	12.2	113.4	40.75299;-	-0.017	0.314	0.363	0	0.272	0.095	15	0.004
5/16/2018 15:01				-0.017	0.296	0.363	0	0.274	0.095		0.004
5/16/2018 15:02				-0.018	0.316	0.363	0	0.28	0.096		0.004
5/16/2018 15:03				-0.018	0.31	0.363	0	0.284	0.097		0.004
5/16/2018 15:04				-0.018	0.32	0.363	0	0.287	0.097		0.004
5/16/2018 15:05	12.2	114.4	40.75298;-	-0.018	0.319	0.363	0	0.291	0.098	19	0.004
5/16/2018 15:06				-0.019	0.331	0.363	0	0.296	0.099		0.004
5/16/2018 15:07				-0.019	0.335	0.363	0	0.301	0.099		0.004
5/16/2018 15:08				-0.019	0.314	0.363	0	0.305	0.1		0.004
5/16/2018 15:09				-0.019	0.321	0.363	0	0.307	0.101		0.004
5/16/2018 15:10	12.2	112.4	40.75296;-	-0.019	0.332	0.363	0	0.309	0.101	23	0.004
5/16/2018 15:11				-0.017	0.335	0.363	0	0.313	0.102		0.005
5/16/2018 15:12				-0.013	0.312	0.363	0	0.316	0.103		0.005
5/16/2018 15:13				-0.015	0.328	0.363	0	0.316	0.103		0.005
5/16/2018 15:14				-0.014	0.306	0.363	0	0.318	0.104		0.005
5/16/2018 15:15	12.2	124.5	40.75296;-	-0.012	0.312	0.363	0	0.319	0.105	25	0.005
5/16/2018 15:16				-0.013	0.304	0.363	0	0.319	0.105		0.005
5/16/2018 15:17				-0.011	0.297	0.363	0	0.319	0.106		0.005

5/16/2018 15:18				-0.01	0.288	0.363	0	0.318	0.107		0.005
5/16/2018 15:19				-0.012	0.286	0.363	0	0.316	0.107		0.005
5/16/2018 15:20	12.2	116.4	40.75297;-	-0.011	0.279	0.363	0	0.314	0.108	19	0.005
5/16/2018 15:21				-0.012	0.275	0.363	0	0.312	0.109		0.005
5/16/2018 15:22				-0.012	0.281	0.363	0	0.309	0.109		0.005
5/16/2018 15:23				-0.013	0.275	0.363	0	0.305	0.11		0.005
5/16/2018 15:24				-0.014	0.278	0.363	0	0.301	0.11		0.005
5/16/2018 15:25	12.2	114.4	40.75296;-	-0.012	0.25	0.363	0	0.298	0.111	25	0.005
5/16/2018 15:26				-0.014	0.248	0.363	0	0.293	0.111		0.005
5/16/2018 15:27				-0.015	0.258	0.363	0	0.288	0.112		0.005
5/16/2018 15:28				-0.012	0.236	0.363	0	0.284	0.112		0.005
5/16/2018 15:29				-0.013	0.236	0.363	0	0.279	0.113		0.005
5/16/2018 15:30	12.2	114.4	40.75296;-	-0.013	0.243	0.363	0	0.274	0.113	17	0.005
5/16/2018 15:31				-0.014	0.253	0.363	0	0.269	0.114		0.005
5/16/2018 15:32				-0.014	0.26	0.363	0	0.265	0.114		0.005
5/16/2018 15:33				-0.015	0.266	0.363	0	0.262	0.115		0.005
5/16/2018 15:34				-0.015	0.271	0.363	0	0.261	0.115		0.005
5/16/2018 15:35	12.2	113.4	40.75297;-	-0.016	0.279	0.363	0	0.259	0.116	14	0.005
5/16/2018 15:36				-0.014	0.274	0.363	0	0.259	0.117		0.005
5/16/2018 15:37				-0.014	0.277	0.363	0	0.259	0.117		0.005
5/16/2018 15:38				-0.014	0.278	0.363	0	0.259	0.118		0.005
5/16/2018 15:39				-0.014	0.284	0.363	0	0.259	0.118		0.005
5/16/2018 15:40	12.2	116.4	40.75297;-	-0.012	0.285	0.363	0	0.26	0.119	12	0.005
5/16/2018 15:41				-0.014	0.287	0.363	0	0.262	0.12		0.005
5/16/2018 15:42				-0.015	0.289	0.363	0	0.264	0.12		0.005
5/16/2018 15:43				-0.012	0.28	0.363	0	0.267	0.121		0.005
5/16/2018 15:44				-0.008	0.261	0.363	0	0.269	0.121		0.005
5/16/2018 15:45	12.2	113.4	40.75298;-	-0.011	0.261	0.363	0	0.271	0.122	7	0.005
5/16/2018 15:46				-0.007	0.248	0.363	0	0.273	0.122		0.005
5/16/2018 15:47				-0.011	0.253	0.363	0	0.273	0.123		0.005
5/16/2018 15:48				-0.012	0.259	0.363	0	0.273	0.123		0.005
5/16/2018 15:49				-0.013	0.263	0.363	0	0.272	0.124		0.005
5/16/2018 15:50	12.2	114.4	40.75294;-	-0.011	0.244	0.363	0	0.272	0.125	4	0.005
5/16/2018 15:51				-0.013	0.256	0.363	0	0.27	0.125		0.005
5/16/2018 15:52				-0.01	0.248	0.363	0	0.269	0.126		0.006
5/16/2018 15:53				-0.01	0.241	0.363	0	0.267	0.126		0.006
5/16/2018 15:54				-0.011	0.237	0.363	0	0.264	0.127		0.006
5/16/2018 15:55	12.1	115.4	40.75298;-	-0.012	0.237	0.363	0	0.261	0.127	-3	0.006
5/16/2018 15:56				-0.012	0.244	0.363	0	0.258	0.128		0.006
5/16/2018 15:57				-0.008	0.235	0.363	0	0.255	0.128		0.006
5/16/2018 15:58				-0.012	0.239	0.363	0	0.252	0.129		0.006
5/16/2018 15:59				-0.013	0.243	0.363	0	0.249	0.129		0.006
5/16/2018 16:00	12.1	119.4	40.75293;-	-0.013	0.237	0.363	0	0.247	0.13	-13	0.006
5/16/2018 16:01				-0.013	0.239	0.363	0	0.245	0.13		0.006
5/16/2018 16:02				-0.015	0.251	0.363	0	0.244	0.131		0.006
5/16/2018 16:03				-0.016	0.255	0.363	0	0.244	0.131		0.006

5/16/2018 16:04			-0.016	0.262	0.363	0	0.244	0.132		0.006
5/16/2018 16:05	12.1	114.4 40.75297;-	-0.015	0.251	0.363	0	0.244	0.132	-10	0.006
5/16/2018 16:06			-0.017	0.256	0.363	0	0.243	0.133		0.006
5/16/2018 16:07			-0.017	0.25	0.363	0	0.243	0.133		0.006
5/16/2018 16:08			-0.017	0.259	0.363	0	0.244	0.134		0.006
5/16/2018 16:09			-0.015	0.234	0.363	0	0.245	0.134		0.006
5/16/2018 16:10	12.1	116.4 40.75298;-	-0.016	0.234	0.363	0	0.245	0.135	1	0.006
5/16/2018 16:11			-0.014	0.23	0.363	0	0.245	0.135		0.006
5/16/2018 16:12			-0.015	0.231	0.363	0	0.244	0.136		0.006
5/16/2018 16:13			-0.009	0.198	0.363	0	0.244	0.136		0.006
5/16/2018 16:14			-0.009	0.17	0.363	0	0.242	0.137		0.006
5/16/2018 16:15	12.1	115.4 40.75298;-	-0.013	0.188	0.363	0	0.238	0.137	2	0.006
5/16/2018 16:16			-0.012	0.182	0.363	0	0.234	0.137		0.006
5/16/2018 16:17			-0.011	0.173	0.363	0	0.231	0.138		0.006
5/16/2018 16:18			-0.014	0.187	0.363	0	0.226	0.138		0.006
5/16/2018 16:19			-0.015	0.136	0.363	0	0.221	0.139		0.006
5/16/2018 16:20	12.1	124.5 40.75299;-	-0.012	0.14	0.363	0	0.217	0.139	-1	0.006
5/16/2018 16:21			-0.013	0.16	0.363	0	0.208	0.139		0.006
5/16/2018 16:22			-0.014	0.167	0.363	0	0.201	0.14		0.006
5/16/2018 16:23			-0.015	0.181	0.363	0	0.195	0.14		0.006
5/16/2018 16:24			-0.016	0.189	0.363	0	0.19	0.14		0.006
5/16/2018 16:25	12.1	126.5 40.75301;-	-0.017	0.199	0.363	0	0.186	0.141	-6	0.006
5/16/2018 16:26			-0.017	0.206	0.363	0	0.183	0.141		0.006
5/16/2018 16:27			-0.016	0.205	0.363	0	0.182	0.141		0.006
5/16/2018 16:28			-0.017	0.204	0.363	0	0.18	0.142		0.006
5/16/2018 16:29			-0.018	0.209	0.363	0	0.179	0.142		0.007
5/16/2018 16:30	12.1	124.5 40.75301;-	-0.019	0.216	0.363	0	0.181	0.143	-8	0.007
5/16/2018 16:31			-0.019	0.211	0.363	0	0.183	0.143		0.007
5/16/2018 16:32			-0.018	0.216	0.363	0	0.185	0.144		0.007
5/16/2018 16:33			-0.018	0.219	0.363	0	0.188	0.144		0.007
5/16/2018 16:34			-0.019	0.218	0.363	0	0.19	0.145		0.007
5/16/2018 16:35	12.1	119.4 40.75299;-	-0.019	0.221	0.363	0	0.192	0.145	-8	0.007
5/16/2018 16:36			-0.018	0.208	0.363	0	0.199	0.145		0.007
5/16/2018 16:37			-0.013	0.188	0.363	0	0.203	0.146		0.007
5/16/2018 16:38			-0.016	0.192	0.363	0	0.205	0.146		0.007
5/16/2018 16:39			-0.016	0.198	0.363	0	0.206	0.147		0.007
5/16/2018 16:40	12.1	115.4 40.75285;-	-0.016	0.205	0.363	0	0.206	0.147	19	0.007
5/16/2018 16:41			-0.017	0.206	0.363	0	0.207	0.147		0.007
5/16/2018 16:42			-0.013	0.192	0.363	0	0.206	0.148		0.007
5/16/2018 16:43			-0.017	0.194	0.363	0	0.206	0.148		0.007
5/16/2018 16:44			-0.015	0.196	0.363	0	0.205	0.149		0.007
5/16/2018 16:45	12.1	114.4 40.75287;-	-0.016	0.195	0.363	0	0.204	0.149	11	0.007
5/16/2018 16:46			-0.017	0.201	0.363	0	0.203	0.15		0.007
5/16/2018 16:47			-0.017	0.2	0.363	0	0.202	0.15		0.007
5/16/2018 16:48			-0.018	0.207	0.363	0	0.201	0.15		0.007
5/16/2018 16:49			-0.017	0.2	0.363	0	0.2	0.151		0.007

5/16/2018 16:50	12.1	122.5	40.75297;-	-0.016	0.203	0.363	0	0.2	0.151	0	0.007
5/16/2018 16:51				-0.015	0.189	0.363	0	0.198	0.152		0.007
5/16/2018 16:52				-0.015	0.19	0.363	0	0.197	0.152		0.007
5/16/2018 16:53				-0.017	0.198	0.363	0	0.197	0.152		0.007
5/16/2018 16:54				-0.012	0.18	0.363	0	0.197	0.153		0.007
5/16/2018 16:55	12.1	125.5	40.75297;-	-0.015	0.189	0.363	0	0.197	0.153	0	0.007
5/16/2018 16:56				-0.017	0.191	0.363	0	0.196	0.154		0.007
5/16/2018 16:57				-0.016	0.197	0.363	0	0.195	0.154		0.007
5/16/2018 16:58				-0.015	0.194	0.363	0	0.195	0.154		0.007
5/16/2018 16:59				-0.017	0.199	0.363	0	0.195	0.155		0.007
5/16/2018 17:00	12.1	120.5	40.75298;-	-0.016	0.2	0.363	0	0.195	0.155	1	0.008
5/16/2018 17:01				-0.012	0.175	0.363	0	0.196	0.156		0.008
5/16/2018 17:02				-0.014	0.179	0.363	0	0.195	0.156		0.008
5/16/2018 17:03				-0.015	0.182	0.363	0	0.193	0.156		0.008
5/16/2018 17:04				-0.016	0.189	0.363	0	0.192	0.157		0.008
5/16/2018 17:05	12.1	119.4	40.75299;-	-0.016	0.192	0.363	0	0.19	0.157	1	0.008
5/16/2018 17:06				-0.017	0.197	0.363	0	0.189	0.158		0.008
5/16/2018 17:07				-0.017	0.197	0.363	0	0.189	0.158		0.008
5/16/2018 17:08				-0.015	0.199	0.363	0	0.189	0.158		0.008
5/16/2018 17:09				-0.018	0.202	0.363	0	0.189	0.159		0.008
5/16/2018 17:10	12	115.4	40.75294;-	-0.017	0.205	0.363	0	0.19	0.159	10	0.008
5/16/2018 17:11				-0.016	0.197	0.363	0	0.191	0.16		0.008
5/16/2018 17:12				-0.017	0.206	0.363	0	0.192	0.16		0.008
5/16/2018 17:13				-0.015	0.203	0.363	0	0.193	0.16		0.008
5/16/2018 17:14				-0.015	0.196	0.363	0	0.193	0.161		0.008
5/16/2018 17:15	12	117.4	40.75294;-	-0.016	0.202	0.363	0	0.194	0.161	12	0.008
5/16/2018 17:16				-0.015	0.198	0.363	0	0.194	0.162		0.008
5/16/2018 17:17				-0.012	0.182	0.363	0	0.194	0.162		0.008
5/16/2018 17:18				-0.016	0.188	0.363	0	0.195	0.163		0.008
5/16/2018 17:19				-0.015	0.189	0.363	0	0.195	0.163		0.008
5/16/2018 17:20	12	119.4	40.75294;-	-0.016	0.194	0.363	0	0.195	0.163	15	0.008
5/16/2018 17:21				-0.013	0.183	0.363	0	0.196	0.164		0.008
5/16/2018 17:22				-0.014	0.181	0.363	0	0.195	0.164		0.008
5/16/2018 17:23				-0.012	0.157	0.363	0	0.194	0.164		0.008
5/16/2018 17:24				-0.013	0.165	0.363	0	0.191	0.165		0.008
5/16/2018 17:25	12	115.4	40.75294;-	-0.014	0.164	0.363	0	0.189	0.165	15	0.008
5/16/2018 17:26				-0.015	0.169	0.363	0	0.186	0.165		0.008
5/16/2018 17:27				-0.016	0.177	0.363	0	0.184	0.166		0.008
5/16/2018 17:28				-0.017	0.187	0.363	0	0.182	0.166		0.008
5/16/2018 17:29				-0.017	0.19	0.363	0	0.181	0.167		0.008
5/16/2018 17:30	12	116.4	40.75293;-	-0.014	0.172	0.363	0	0.18	0.167	17	0.008
5/16/2018 17:31				-0.016	0.182	0.363	0	0.178	0.167		0.008
5/16/2018 17:32				-0.017	0.185	0.363	0	0.177	0.168		0.008
5/16/2018 17:33				-0.017	0.179	0.363	0	0.177	0.168		0.008
5/16/2018 17:34				-0.016	0.186	0.363	0	0.177	0.168		0.009
5/16/2018 17:35	12	124.5	40.75294;-	-0.016	0.187	0.363	0	0.177	0.169	16	0.009

5/16/2018 17:36			-0.017	0.19	0.363	0	0.176	0.169		0.009
5/16/2018 17:37			-0.018	0.192	0.363	0	0.176	0.17		0.009
5/16/2018 17:38			-0.018	0.196	0.363	0	0.177	0.17		0.009
5/16/2018 17:39			-0.018	0.197	0.363	0	0.18	0.17		0.009
5/16/2018 17:40	12	127.5 40.75296;-	-0.017	0.19	0.363	0	0.182	0.171	9	0.009
5/16/2018 17:41			-0.017	0.191	0.363	0	0.184	0.171		0.009
5/16/2018 17:42			-0.018	0.179	0.363	0	0.186	0.172		0.009
5/16/2018 17:43			-0.017	0.19	0.363	0	0.186	0.172		0.009
5/16/2018 17:44			-0.018	0.192	0.363	0	0.187	0.172		0.009
5/16/2018 17:45	12	119.4 40.75294;-	-0.019	0.193	0.363	0	0.187	0.173	14	0.009
5/16/2018 17:46			-0.019	0.191	0.363	0	0.187	0.173		0.009
5/16/2018 17:47			-0.016	0.166	0.363	0	0.188	0.174		0.009
5/16/2018 17:48			-0.017	0.174	0.363	0	0.188	0.174		0.009
5/16/2018 17:49			-0.017	0.186	0.363	0	0.187	0.174		0.009
5/16/2018 17:50	12	118.4 40.75294;-	-0.013	0.132	0.363	0	0.187	0.175	21	0.009
5/16/2018 17:51			-0.013	0.143	0.363	0	0.185	0.175		0.009
5/16/2018 17:52			-0.015	0.156	0.363	0	0.182	0.175		0.009
5/16/2018 17:53			-0.013	0.134	0.363	0	0.179	0.176		0.009
5/16/2018 17:54			-0.015	0.143	0.363	0	0.175	0.176		0.009
5/16/2018 17:55	12	118.4 40.75294;-	-0.014	0.137	0.363	0	0.171	0.176	22	0.009
5/16/2018 17:56			-0.014	0.134	0.363	0	0.167	0.176		0.009
5/16/2018 17:57			-0.015	0.141	0.363	0	0.164	0.177		0.009
5/16/2018 17:58			-0.017	0.146	0.363	0	0.161	0.177		0.009
5/16/2018 17:59			-0.016	0.15	0.363	0	0.158	0.177		0.009
5/16/2018 18:00	12	120.5 40.75295;-	-0.017	0.149	0.363	0	0.155	0.178	20	0.009
5/16/2018 18:01			-0.017	0.154	0.363	0	0.152	0.178		0.009
5/16/2018 18:02			-0.017	0.152	0.363	0	0.149	0.178		0.009
5/16/2018 18:03			-0.018	0.158	0.363	0	0.148	0.179		0.009
5/16/2018 18:04			-0.018	0.165	0.363	0	0.147	0.179		0.009
5/16/2018 18:05	12	116.4 40.75294;-	-0.019	0.166	0.363	0	0.146	0.179	19	0.01
5/16/2018 18:06			-0.015	0.133	0.363	0	0.146	0.18		0.01
5/16/2018 18:07			-0.014	0.107	0.363	0	0.147	0.18		0.01
5/16/2018 18:08			-0.016	0.123	0.363	0	0.145	0.18		0.01
5/16/2018 18:09			-0.017	0.131	0.363	0	0.143	0.18		0.01
5/16/2018 18:10	12	115.4 40.75295;-	-0.015	0.115	0.363	0	0.142	0.181	25	0.01
5/16/2018 18:11			-0.015	0.117	0.363	0	0.142	0.181		0.01
5/16/2018 18:12			-0.015	0.11	0.363	0	0.141	0.181		0.01
5/16/2018 18:13			-0.016	0.108	0.363	0	0.139	0.181		0.01
5/16/2018 18:14			-0.015	0.101	0.363	0	0.137	0.182		0.01
5/16/2018 18:15	12	123.5 40.75296;-	-0.016	0.111	0.363	0	0.134	0.182	18	0.01
5/16/2018 18:16			-0.015	0.097	0.363	0	0.131	0.182		0.01
5/16/2018 18:17			-0.015	0.111	0.363	0	0.128	0.182		0.01
5/16/2018 18:18			-0.016	0.108	0.363	0	0.125	0.183		0.01
5/16/2018 18:19			-0.015	0.114	0.363	0	0.121	0.183		0.01
5/16/2018 18:20	12	115.4 40.75296;-	-0.015	0.117	0.363	0	0.118	0.183	26	0.01
5/16/2018 18:21			-0.016	0.114	0.363	0	0.114	0.183		0.01

5/16/2018 18:22				-0.017	0.128	0.363	0	0.112	0.183		0.01
5/16/2018 18:23				-0.017	0.135	0.363	0	0.113	0.184		0.01
5/16/2018 18:24				-0.017	0.137	0.363	0	0.113	0.184		0.01
5/16/2018 18:25	12	116.4	40.75298;-	-0.017	0.136	0.363	0	0.114	0.184	31	0.01
5/16/2018 18:26				-0.016	0.109	0.363	0	0.114	0.184		0.01
5/16/2018 18:27				-0.016	0.11	0.363	0	0.115	0.185		0.01
5/16/2018 18:28				-0.016	0.116	0.363	0	0.114	0.185		0.01
5/16/2018 18:29				-0.017	0.116	0.363	0	0.115	0.185		0.01
5/16/2018 18:30	12	120.5	40.75297;-	-0.018	0.128	0.363	0	0.115	0.185	33	0.01
5/16/2018 18:31				-0.016	0.105	0.363	0	0.116	0.186		0.01
5/16/2018 18:32				-0.017	0.115	0.363	0	0.117	0.186		0.01
5/16/2018 18:33				-0.018	0.128	0.363	0	0.118	0.186		0.01
5/16/2018 18:34				-0.018	0.134	0.363	0	0.119	0.186		0.01
5/16/2018 18:35	12	121.5	40.75303;-	-0.017	0.122	0.363	0	0.12	0.187	19	0.01
5/16/2018 18:36				-0.016	0.094	0.363	0	0.121	0.187		0.01
5/16/2018 18:37				-0.015	0.106	0.363	0	0.121	0.187		0.011
5/16/2018 18:38				-0.016	0.109	0.363	0	0.119	0.187		0.011
5/16/2018 18:39				-0.017	0.104	0.363	0	0.118	0.188		0.011
5/16/2018 18:40	11.9	113.4	40.75299;-	-0.016	0.068	0.363	0	0.116	0.188	16	0.011
5/16/2018 18:41				-0.015	0.084	0.363	0	0.113	0.188		0.011
5/16/2018 18:42				-0.016	0.096	0.363	0	0.11	0.188		0.011
5/16/2018 18:43				-0.017	0.09	0.363	0	0.108	0.188		0.011
5/16/2018 18:44				-0.016	0.092	0.363	0	0.107	0.189		0.011
5/16/2018 18:45	11.9	117.4	40.75298;-	-0.017	0.103	0.363	0	0.105	0.189	11	0.011
5/16/2018 18:46				-0.017	0.095	0.363	0	0.104	0.189		0.011
5/16/2018 18:47				-0.017	0.101	0.363	0	0.103	0.189		0.011
5/16/2018 18:48				-0.018	0.107	0.363	0	0.102	0.189		0.011
5/16/2018 18:49				-0.018	0.108	0.363	0	0.101	0.19		0.011
5/16/2018 18:50	11.9	118.4	40.75299;-	-0.018	0.114	0.363	0	0.099	0.19	12	0.011
5/16/2018 18:51				-0.019	0.113	0.363	0	0.098	0.19		0.011
5/16/2018 18:52				-0.019	0.097	0.363	0	0.098	0.19		0.011
5/16/2018 18:53				-0.018	0.092	0.363	0	0.099	0.191		0.011
5/16/2018 18:54				-0.018	0.095	0.363	0	0.098	0.191		0.011
5/16/2018 18:55	11.9	115.4	40.753;-73	-0.017	0.093	0.363	0	0.097	0.191	17	0.011
5/16/2018 18:56				-0.017	0.094	0.363	0	0.098	0.191		0.011
5/16/2018 18:57				-0.017	0.093	0.363	0	0.099	0.191		0.011
5/16/2018 18:58				-0.018	0.098	0.363	0	0.099	0.191		0.011
5/16/2018 18:59				-0.018	0.098	0.363	0	0.099	0.192		0.011
5/16/2018 19:00	11.9	118.4	40.753;-73	-0.018	0.085	0.363	0	0.099	0.192	13	0.011
5/16/2018 19:01				-0.018	0.084	0.363	0	0.099	0.192		0.011
5/16/2018 19:02				-0.019	0.095	0.363	0	0.098	0.192		0.011
5/16/2018 19:03				-0.018	0.092	0.363	0	0.097	0.192		0.011
5/16/2018 19:04				-0.018	0.099	0.363	0	0.097	0.193		0.011
5/16/2018 19:05	11.9	133.6	40.75301;-	-0.018	0.089	0.363	0	0.096	0.193	5	0.011
5/16/2018 19:06				-0.018	0.092	0.363	0	0.095	0.193		0.012
5/16/2018 19:07				-0.018	0.076	0.363	0	0.093	0.193		0.012

5/16/2018 19:08				-0.019	0.082	0.363	0	0.092	0.193		0.012
5/16/2018 19:09				-0.019	0.091	0.363	0	0.091	0.194		0.012
5/16/2018 19:10	11.9	122.5	40.753;-73	-0.02	0.09	0.363	0	0.09	0.194	2	0.012
5/16/2018 19:11				-0.02	0.086	0.363	0	0.09	0.194		0.012
5/16/2018 19:12				-0.02	0.089	0.363	0	0.089	0.194		0.012
5/16/2018 19:13				-0.019	0.082	0.363	0	0.089	0.194		0.012
5/16/2018 19:14				-0.02	0.084	0.363	0	0.088	0.194		0.012
5/16/2018 19:15	11.9	125.5	40.75303;-	-0.02	0.092	0.363	0	0.087	0.195	-2	0.012
5/16/2018 19:16				-0.021	0.093	0.363	0	0.087	0.195		0.012
5/16/2018 19:17				-0.02	0.082	0.363	0	0.087	0.195		0.012
5/16/2018 19:18				-0.021	0.095	0.363	0	0.087	0.195		0.012
5/16/2018 19:19				-0.02	0.089	0.363	0	0.086	0.195		0.012
5/16/2018 19:20	11.9	125.5	40.753;-73	-0.02	0.08	0.363	0	0.086	0.196	9	0.012
5/16/2018 19:21				-0.02	0.077	0.363	0	0.085	0.196		0.012
5/16/2018 19:22				-0.02	0.079	0.363	0	0.084	0.196		0.012
5/16/2018 19:23				-0.021	0.08	0.363	0	0.083	0.196		0.012
5/16/2018 19:24				-0.021	0.085	0.363	0	0.083	0.196		0.012
5/16/2018 19:25	11.9	120.5	40.75302;-	-0.021	0.084	0.363	0	0.083	0.196	6	0.012
5/16/2018 19:26				-0.021	0.094	0.363	0	0.083	0.197		0.012
5/16/2018 19:27				-0.022	0.095	0.363	0	0.083	0.197		0.012
5/16/2018 19:28				-0.021	0.093	0.363	0	0.084	0.197		0.012
5/16/2018 19:29				-0.022	0.096	0.363	0	0.084	0.197		0.012
5/16/2018 19:30	11.9	116.4	40.753;-73	-0.022	0.105	0.363	0	0.085	0.197	16	0.012
5/16/2018 19:31				-0.021	0.082	0.363	0	0.086	0.198		0.013
5/16/2018 19:32				-0.021	0.092	0.363	0	0.086	0.198		0.013
5/16/2018 19:33				-0.021	0.093	0.363	0	0.086	0.198		0.013
5/16/2018 19:34				-0.022	0.099	0.363	0	0.086	0.198		0.013
5/16/2018 19:35	11.9	117.4	40.75301;-	-0.021	0.101	0.363	0	0.087	0.198	7	0.013
5/16/2018 19:36				-0.021	0.08	0.363	0	0.088	0.198		0.013
5/16/2018 19:37				-0.02	0.084	0.363	0	0.089	0.199		0.013
5/16/2018 19:38				-0.021	0.072	0.363	0	0.09	0.199		0.013
5/16/2018 19:39				-0.021	0.075	0.363	0	0.09	0.199		0.013
5/16/2018 19:40	11.9	116.4	40.75303;-	-0.02	0.076	0.363	0	0.09	0.199	9	0.013
5/16/2018 19:41				-0.021	0.078	0.363	0	0.089	0.199		0.013
5/16/2018 19:42				-0.022	0.088	0.363	0	0.088	0.199		0.013
5/16/2018 19:43				-0.022	0.093	0.363	0	0.087	0.2		0.013
5/16/2018 19:44				-0.021	0.088	0.363	0	0.087	0.2		0.013
5/16/2018 19:45	11.9	121.5		-0.022	0.079	0.363	0	0.087	0.2		0.013
5/16/2018 19:45			40.75297;-73.48647							9	
5/16/2018 19:46				-0.021	0.081	0.363	0	0.086	0.2		0.013
5/16/2018 19:47				-0.022	0.083	0.363	0	0.085	0.2		0.013
5/16/2018 19:48				-0.021	0.073	0.363	0	0.085	0.201		0.013
5/16/2018 19:49				-0.021	0.077	0.363	0	0.084	0.201		0.013
5/16/2018 19:50	11.9	118.4		-0.021	0.076	0.363	0	0.082	0.201		0.013
5/16/2018 19:50			40.75303;-73.4865							0	
5/16/2018 19:51				-0.021	0.081	0.363	0	0.081	0.201		0.013

5/16/2018 19:52				-0.021	0.081	0.363	0	0.081	0.201		0.013
5/16/2018 19:53				-0.02	0.079	0.363	0	0.08	0.201		0.013
5/16/2018 19:54				-0.022	0.087	0.363	0	0.08	0.202		0.013
5/16/2018 19:55	11.9	116.4	40.753;-73	-0.022	0.091	0.363	0	0.08	0.202	0	0.014
5/16/2018 19:56				-0.022	0.093	0.363	0	0.081	0.202		0.014
5/16/2018 19:57				-0.022	0.087	0.363	0	0.082	0.202		0.014
5/16/2018 19:58				-0.02	0.079	0.363	0	0.083	0.202		0.014
5/16/2018 19:59				-0.022	0.092	0.363	0	0.082	0.202		0.014
5/16/2018 20:00	11.9	119.4	40.75301;-	-0.021	0.08	0.363	0	0.082	0.203	-1	0.014
5/16/2018 20:01				-0.021	0.081	0.363	0	0.081	0.203		0.014
5/16/2018 20:02				-0.021	0.083	0.363	0	0.081	0.203		0.014
5/16/2018 20:03				-0.021	0.08	0.363	0	0.081	0.203		0.014
5/16/2018 20:04				-0.021	0.078	0.363	0	0.081	0.203		0.014
5/16/2018 20:05	11.9	138.7	40.75304;-	-0.021	0.082	0.363	0	0.081	0.203	-9	0.014
5/16/2018 20:06				-0.021	0.085	0.363	0	0.081	0.204		0.014
5/16/2018 20:07				-0.021	0.088	0.363	0	0.081	0.204		0.014
5/16/2018 20:08				-0.021	0.082	0.363	0	0.082	0.204		0.014
5/16/2018 20:09				-0.021	0.09	0.363	0	0.082	0.204		0.014
5/16/2018 20:10	11.9	134.6	40.75304;-	-0.022	0.093	0.363	0	0.082	0.204	-6	0.014
5/16/2018 20:11				-0.021	0.093	0.363	0	0.083	0.204		0.014
5/16/2018 20:12				-0.019	0.075	0.363	0	0.083	0.205		0.014
5/16/2018 20:13				-0.019	0.072	0.363	0	0.083	0.205		0.014
5/16/2018 20:14				-0.021	0.081	0.363	0	0.082	0.205		0.014
5/16/2018 20:15	11.8	120.5	40.75303;-	-0.022	0.089	0.363	0	0.082	0.205	-4	0.014
5/16/2018 20:16				-0.022	0.095	0.363	0	0.082	0.205		0.014
5/16/2018 20:17				-0.022	0.095	0.363	0	0.083	0.206		0.014
5/16/2018 20:18				-0.022	0.099	0.363	0	0.084	0.206		0.015
5/16/2018 20:19				-0.021	0.088	0.363	0	0.085	0.206		0.015
5/16/2018 20:20	11.8	119.4	40.75303;-	-0.019	0.087	0.363	0	0.086	0.206	-3	0.015
5/16/2018 20:21				-0.021	0.087	0.363	0	0.087	0.206		0.015
5/16/2018 20:22				-0.021	0.085	0.363	0	0.087	0.206		0.015
5/16/2018 20:23				-0.021	0.087	0.363	0	0.087	0.207		0.015
5/16/2018 20:24				-0.021	0.093	0.363	0	0.087	0.207		0.015
5/16/2018 20:25	11.8	115.4	40.75301;-	-0.021	0.086	0.363	0	0.087	0.207	3	0.015
5/16/2018 20:26				-0.021	0.094	0.363	0	0.087	0.207		0.015
5/16/2018 20:27				-0.022	0.1	0.363	0	0.087	0.207		0.015
5/16/2018 20:28				-0.022	0.098	0.363	0	0.087	0.208		0.015
5/16/2018 20:29				-0.021	0.038	0.363	0	0.089	0.208		0.015
5/16/2018 20:30	11.8	117.4	40.753;-73	-0.02	0.057	0.363	0	0.089	0.208	11	0.015
5/16/2018 20:31				-0.019	0.024	0.363	0	0.086	0.208		0.015
5/16/2018 20:32				-0.019	0.039	0.363	0	0.082	0.208		0.015
5/16/2018 20:33				-0.02	0.049	0.363	0	0.078	0.208		0.015
5/16/2018 20:34				-0.02	0.052	0.363	0	0.075	0.208		0.015
5/16/2018 20:35	11.8	121.5	40.75299;-	-0.019	0.048	0.363	0	0.072	0.208	9	0.015
5/16/2018 20:36				-0.02	0.051	0.363	0	0.069	0.208		0.015
5/16/2018 20:37				-0.02	0.062	0.363	0	0.067	0.209		0.015

5/16/2018 20:38				-0.02	0.062	0.363	0	0.065	0.209		0.015
5/16/2018 20:39				-0.02	0.059	0.363	0	0.063	0.209		0.015
5/16/2018 20:40	11.8	118.4	40.75298;-	-0.02	0.066	0.363	0	0.062	0.209	15	0.015
5/16/2018 20:41				-0.021	0.072	0.363	0	0.06	0.209		0.015
5/16/2018 20:42				-0.021	0.078	0.363	0	0.059	0.209		0.015
5/16/2018 20:43				-0.021	0.081	0.363	0	0.057	0.209		0.015
5/16/2018 20:44				-0.022	0.087	0.363	0	0.056	0.21		0.015
5/16/2018 20:45	11.8	126.5	40.75298;-	-0.022	0.093	0.363	0	0.057	0.21	12	0.015
5/16/2018 20:46				-0.022	0.096	0.363	0	0.06	0.21		0.015
5/16/2018 20:47				-0.023	0.099	0.363	0	0.064	0.21		0.015
5/16/2018 20:48				-0.023	0.102	0.363	0	0.068	0.21		0.015
5/16/2018 20:49				-0.023	0.099	0.363	0	0.072	0.211		0.015
5/16/2018 20:50	11.8	129.6	40.75294;-	-0.021	0.092	0.363	0	0.075	0.211	20	0.015
5/16/2018 20:51				-0.02	0.078	0.363	0	0.078	0.211		0.015
5/16/2018 20:52				-0.019	0.076	0.363	0	0.081	0.211		0.015
5/16/2018 20:53				-0.02	0.083	0.363	0	0.082	0.211		0.015
5/16/2018 20:54				-0.02	0.087	0.363	0	0.083	0.211		0.015
5/16/2018 20:55	11.8	117.4	40.75296;-	-0.021	0.092	0.363	0	0.085	0.212	21	0.015
5/16/2018 20:56				-0.021	0.095	0.363	0	0.086	0.212		0.015
5/16/2018 20:57				-0.021	0.091	0.363	0	0.088	0.212		0.015
5/16/2018 20:58				-0.021	0.093	0.363	0	0.088	0.212		0.015
5/16/2018 20:59				-0.02	0.092	0.363	0	0.089	0.212		0.015
5/17/2018 13:38	11.9	132.6									
5/17/2018 13:39			40.752882899999996;-73.4863702								
5/17/2018 13:40	11.9	129.6	40.75294;-73.4866							10	
5/17/2018 13:41					0.221	11.705	0	0	0.014		
5/17/2018 13:42					0	11.705	0	0	0.015		
5/17/2018 13:43				-0.005	0	11.705	0	0	0.015		0
5/17/2018 13:44				-0.008	0	11.705	0	0	0.015		0
5/17/2018 13:45	11.8	120.5	40.75302;-	-0.01	0	11.705	0	0	0.015	6	0
5/17/2018 13:46				-0.008	0	11.705	0	0	0.015		0
5/17/2018 13:47				-0.009	0	11.705	0	0	0.015		0
5/17/2018 13:48				-0.011	0	11.705	0	0	0.015		0
5/17/2018 13:49				-0.013	0	11.705	0	0	0.015		0
5/17/2018 13:50	11.8	117.4	40.75303;-	-0.015	0	11.705	0	0	0.015	0	0
5/17/2018 13:51				-0.016	0	11.705	0	0	0.015		0
5/17/2018 13:52				-0.017	0	11.705	0	0	0.015		0
5/17/2018 13:53				-0.018	0	11.705	0	0	0.015		0
5/17/2018 13:54				-0.019	0	11.705	0	0.51	0.015		0
5/17/2018 13:55	11.8	120.5	40.75303;-	-0.019	0	11.705	0	0.132	0.015	-2	0
5/17/2018 13:56				-0.019	0	11.705	0	0.044	0.015		0
5/17/2018 13:57				-0.019	0	11.705	0	0	0.015		0
5/17/2018 13:58				-0.02	0	11.705	0	0	0.015		0
5/17/2018 13:59				-0.021	0	11.705	0	0	0.015		0
5/17/2018 14:00	11.8	116.4	40.75298;-	-0.021	0	11.705	0	0	0.015	1	0.001
5/17/2018 14:01				-0.021	0	11.705	0	0	0.015		0.001

5/17/2018 14:02				-0.021	0	11.705	0	0	0.015		0.001
5/17/2018 14:03				-0.021	0	11.705	0	0	0.015		0.001
5/17/2018 14:04				-0.017	0	11.705	0	0	0.015		0.001
5/17/2018 14:05	11.8	117.4	40.75299;-	-0.014	0	11.705	0	0	0.015	8	0.001
5/17/2018 14:06				-0.016	0	11.705	0	0	0.015		0.001
5/17/2018 14:07				-0.018	0	11.705	0	0	0.015		0.001
5/17/2018 14:08				-0.018	0	11.705	0	0	0.015		0.001
5/17/2018 14:09				-0.019	0	11.705	0	0	0.015		0.001
5/17/2018 14:10	11.7	115.4	40.75298;-	-0.021	0	11.705	0	0	0.015	10	0.001
5/17/2018 14:11				-0.021	0	11.705	0	0	0.015		0.001
5/17/2018 14:12				-0.022	0	11.705	0	0	0.015		0.001
5/17/2018 14:13				-0.019	0	11.705	0	0	0.015		0.001
5/17/2018 14:14				-0.018	0	11.705	0	0	0.015		0.001
5/17/2018 14:15	11.7	120.5	40.75297;-	-0.019	0	11.705	0	0	0.015	7	0.001
5/17/2018 14:16				-0.02	0	11.705	0	0	0.015		0.001
5/17/2018 14:17				-0.02	0	11.705	0	0	0.015		0.001
5/17/2018 14:18				-0.021	0	11.705	0	0	0.015		0.001
5/17/2018 14:19				-0.022	0	11.705	0	0	0.015		0.001
5/17/2018 14:20	11.7	118.4	40.75294;-	-0.023	0	11.705	0	0	0.015	8	0.001
5/17/2018 14:21				-0.023	0	11.705	0	0	0.015		0.001
5/17/2018 14:22				-0.023	0	11.705	0	0	0.015		0.001
5/17/2018 14:23				-0.023	0	11.705	0	0	0.015		0.001
5/17/2018 14:24				-0.024	0	11.705	0	0	0.015		0.001
5/17/2018 14:25	11.7	118.4	40.75296;-	-0.024	0	11.705	0	0	0.015	8	0.002
5/17/2018 14:26				-0.023	0	11.705	0	0	0.015		0.002
5/17/2018 14:27				-0.023	0	11.705	0	0	0.015		0.002
5/17/2018 14:28				-0.023	0	11.705	0	0	0.015		0.002
5/17/2018 14:29				-0.023	0	11.705	0	0	0.015		0.002
5/17/2018 14:30	11.7	117.4	40.75299;-	-0.023	0	11.705	0	0	0.015	1	0.002
5/17/2018 14:31				-0.022	0	11.705	0	0	0.015		0.002
5/17/2018 14:32				-0.022	0	11.705	0	0	0.015		0.002
5/17/2018 14:33				-0.022	0	11.705	0	0	0.015		0.002
5/17/2018 14:34				-0.022	0	11.705	0	0	0.015		0.002
5/17/2018 14:35	11.7	122.5	40.753;-73	-0.022	0	11.705	0	0	0.015	4	0.002
5/17/2018 14:36				-0.022	0	11.705	0	0	0.015		0.002
5/17/2018 14:37				-0.023	0	11.705	0	0	0.015		0.002
5/17/2018 14:38				-0.023	0	11.705	0	0	0.015		0.002
5/17/2018 14:39				-0.023	0	11.705	0	0	0.015		0.002
5/17/2018 14:40	11.7	124.5	40.75304;-	-0.023	0	11.705	0	0	0.015	-16	0.002
5/17/2018 14:41				-0.023	0	11.705	0	0	0.015		0.002
5/17/2018 14:42				-0.023	0	11.705	0	0	0.015		0.002
5/17/2018 14:43				-0.023	0	11.705	0	0	0.015		0.002
5/17/2018 14:44				-0.023	0	11.705	0	0	0.015		0.002
5/17/2018 14:45	11.7	128.6	40.75301;-	-0.023	0	11.705	0	0	0.015	0	0.002
5/17/2018 14:46				-0.023	0	11.705	0	0	0.015		0.002
5/17/2018 14:47				-0.021	0	11.705	0	0	0.015		0.003

5/17/2018 14:48			-0.021	0	11.705	0	0	0.015		0.003
5/17/2018 14:49			-0.02	0	11.705	0	0	0.015		0.003
5/17/2018 14:50	11.7	116.4 40.75299;-	-0.019	0	11.705	0	0	0.015	11	0.003
5/17/2018 14:51			-0.019	0	11.705	0	0	0.015		0.003
5/17/2018 14:52			-0.02	0	11.705	0	0	0.015		0.003
5/17/2018 14:53			-0.021	0	11.705	0	0	0.015		0.003
5/17/2018 14:54			-0.021	0	11.705	0	0	0.015		0.003
5/17/2018 14:55	11.7	118.4 40.75303;-	-0.021	0	11.705	0	0	0.015	-3	0.003
5/17/2018 14:56			-0.022	0	11.705	0	0	0.015		0.003
5/17/2018 14:57			-0.022	0	11.705	0	0	0.015		0.003
5/17/2018 14:58			-0.02	0	11.705	0	0	0.015		0.003
5/17/2018 14:59			-0.02	0	11.705	0	0	0.015		0.003
5/17/2018 15:00	11.7	130.6 40.75295;-	-0.02	0	11.705	0	0	0.015	27	0.003
5/17/2018 15:01			-0.018	0	11.705	0	0	0.015		0.003
5/17/2018 15:02			-0.018	0	11.705	0	0	0.015		0.003
5/17/2018 15:03			-0.018	0	11.705	0	0	0.015		0.003
5/17/2018 15:04			-0.02	0	11.705	0	0	0.015		0.003
5/17/2018 15:05	11.7	135.6 40.75292;-	-0.021	0	11.705	0	0	0.015	30	0.003
5/17/2018 15:06			-0.021	0	11.705	0	0	0.015		0.003
5/17/2018 15:07			-0.021	0	11.705	0	0	0.015		0.003
5/17/2018 15:08			-0.02	0	11.705	0	0	0.015		0.003
5/17/2018 15:09			-0.02	0	11.705	0	0	0.015		0.003
5/17/2018 15:10	11.7	119.4 40.75293;-	-0.018	0	11.705	0	0	0.015	27	0.003
5/17/2018 15:11			-0.018	0	11.705	0	0	0.015		0.003
5/17/2018 15:12			-0.018	0	11.705	0	0	0.015		0.003
5/17/2018 15:13			-0.019	0	11.705	0	0	0.015		0.004
5/17/2018 15:14			-0.021	0	11.705	0	0	0.015		0.004
5/17/2018 15:15	11.7	122.5 40.75294;-	-0.021	0	11.705	0	0	0.015	20	0.004
5/17/2018 15:16			-0.019	0	11.705	0	0	0.015		0.004
5/17/2018 15:17			-0.021	0	11.705	0	0	0.015		0.004
5/17/2018 15:18			-0.022	0	11.705	0	0	0.015		0.004
5/17/2018 15:19			-0.022	0	11.705	0	0	0.015		0.004
5/17/2018 15:20	11.7	128.6 40.75294;-	-0.022	0	11.705	0	0	0.015	46	0.004
5/17/2018 15:21			-0.021	0	11.705	0	0	0.015		0.004
5/17/2018 15:22			-0.02	0	11.705	0	0	0.015		0.004
5/17/2018 15:23			-0.02	0	11.705	0	0	0.015		0.004
5/17/2018 15:24			-0.021	0	11.705	0	0	0.015		0.004
5/17/2018 15:25	11.7	121.5 40.75294;-	-0.019	0	11.705	0	0	0.015	20	0.004
5/17/2018 15:26			-0.02	0	11.705	0	0	0.015		0.004
5/17/2018 15:27			-0.021	0	11.705	0	0	0.015		0.004
5/17/2018 15:28			-0.021	0	11.705	0	0	0.015		0.004
5/17/2018 15:29			-0.022	0	11.705	0	0	0.015		0.004
5/17/2018 15:30	11.7	118.4 40.75295;-	-0.02	0	11.705	0	0	0.015	8	0.004
5/17/2018 15:31			-0.02	0	11.705	0	0	0.015		0.004
5/17/2018 15:32			-0.02	0	11.705	0	0	0.015		0.004
5/17/2018 15:33			-0.021	0	11.705	0	0	0.015		0.004

5/17/2018 15:34				-0.021	0	11.705	0	0	0.015		0.004
5/17/2018 15:35	11.7	124.5	40.75296;-	-0.021	0	11.705	0	0	0.015	26	0.004
5/17/2018 15:36				-0.021	0	11.705	0	0	0.015		0.004
5/17/2018 15:37				-0.021	0	11.705	0	0	0.015		0.005
5/17/2018 15:38				-0.02	0	11.705	0	0	0.015		0.005
5/17/2018 15:39				-0.017	0	11.705	0	0	0.015		0.005
5/17/2018 15:40	11.7	123.5	40.75298;-	-0.018	0	11.705	0	0	0.015	25	0.005
5/17/2018 15:41				-0.017	0	11.705	0	0	0.015		0.005
5/17/2018 15:42				-0.017	0	11.705	0	0	0.015		0.005
5/17/2018 15:43				-0.018	0	11.705	0	0	0.015		0.005
5/17/2018 15:44				-0.019	0	11.705	0	0	0.015		0.005
5/17/2018 15:45	11.7	116.4	40.75291;-	-0.019	0	11.705	0	0	0.015	0	0.005
5/17/2018 15:46				-0.02	0	11.705	0	0	0.015		0.005
5/17/2018 15:47				-0.019	0	11.705	0	0	0.015		0.005
5/17/2018 15:48				-0.02	0	11.705	0	0	0.015		0.005
5/17/2018 15:49				-0.02	0	11.705	0	0	0.015		0.005
5/17/2018 15:50	11.6	121.5	40.75284;-	-0.019	0	11.705	0	0	0.015	0	0.005
5/17/2018 15:51				-0.02	0	11.705	0	0	0.015		0.005
5/17/2018 15:52				-0.021	0	11.705	0	0	0.015		0.005
5/17/2018 15:53				-0.02	0	11.705	0	0	0.015		0.005
5/17/2018 15:54				-0.019	0	11.705	0	0	0.015		0.005
5/17/2018 15:55	11.7	122.5	40.75287;-	-0.019	0	11.705	0	0	0.015	1	0.005
5/17/2018 15:56				-0.02	0	11.705	0	0	0.015		0.005
5/17/2018 15:57				-0.02	0	11.705	0	0	0.015		0.005
5/17/2018 15:58				-0.02	0	11.705	0	0	0.015		0.005
5/17/2018 15:59				-0.021	0	11.705	0	0	0.015		0.005
5/17/2018 16:00	11.7	117.4	40.7529;-7	-0.022	0	11.705	0	0	0.015	8	0.005
5/17/2018 16:01				-0.022	0	11.705	0	0	0.015		0.005
5/17/2018 16:02				-0.022	0	11.705	0	0	0.015		0.005
5/17/2018 16:03				-0.022	0	11.705	0	0	0.015		0.006
5/17/2018 16:04				-0.023	0	11.705	0	0	0.015		0.006
5/17/2018 16:05	11.6	116.4	40.75289;-	-0.023	0	11.705	0	0	0.015	15	0.006
5/17/2018 16:06				-0.024	0	11.705	0	0	0.015		0.006
5/17/2018 16:07				-0.024	0	11.705	0	0	0.015		0.006
5/17/2018 16:08				-0.023	0	11.705	0	0	0.015		0.006
5/17/2018 16:09				-0.023	0	11.705	0	0	0.015		0.006
5/17/2018 16:10	11.6	122.5	40.75286;-	-0.023	0	11.705	0	0	0.015	18	0.006
5/17/2018 16:11				-0.024	0	11.705	0	0	0.015		0.006
5/17/2018 16:12				-0.024	0	11.705	0	0	0.015		0.006
5/17/2018 16:13				-0.024	0	11.705	0	0	0.015		0.006
5/17/2018 16:14				-0.025	0	11.705	0	0	0.015		0.006
5/17/2018 16:15	11.6	117.4	40.75288;-	-0.024	0	11.705	0	0	0.015	2	0.006
5/17/2018 16:16				-0.025	0	11.705	0	0	0.015		0.006
5/17/2018 16:17				-0.024	0	11.705	0	0	0.015		0.006
5/17/2018 16:18				-0.022	0	11.705	0	0	0.015		0.006
5/17/2018 16:19				-0.022	0	11.705	0	0	0.015		0.006

5/17/2018 16:20	11.6	116.4	40.75289;-	-0.023	0	11.705	0	0	0.015	3	0.006
5/17/2018 16:21				-0.023	0	11.705	0	0	0.015		0.006
5/17/2018 16:22				-0.023	0	11.705	0	0	0.015		0.006
5/17/2018 16:23				-0.022	0	11.705	0	0	0.015		0.006
5/17/2018 16:24				-0.022	0	11.705	0	0	0.015		0.006
5/17/2018 16:25	11.6	121.5	40.75287;-	-0.022	0	11.705	0	0	0.015	0	0.007
5/17/2018 16:26				-0.023	0	11.705	0	0	0.015		0.007
5/17/2018 16:27				-0.023	0	11.705	0	0	0.015		0.007
5/17/2018 16:28				-0.023	0	11.705	0	0	0.015		0.007
5/17/2018 16:29				-0.023	0	11.705	0	0	0.015		0.007
5/17/2018 16:30	11.6	130.6	40.75293;-	-0.022	0	11.705	0	0	0.015	-5	0.007
5/17/2018 16:31				-0.022	0	11.705	0	0	0.015		0.007
5/17/2018 16:32				-0.022	0	11.705	0	0	0.015		0.007
5/17/2018 16:33				-0.023	0	11.705	0	0	0.015		0.007
5/17/2018 16:34				-0.023	0	11.705	0	0	0.015		0.007
5/17/2018 16:35	11.6	131.6	40.75294;-	-0.021	0	11.705	0	0	0.015	-3	0.007
5/17/2018 16:36				-0.02	0	11.705	0	0	0.015		0.007
5/17/2018 16:37				-0.021	0	11.705	0	0	0.015		0.007
5/17/2018 16:38				-0.022	0	11.705	0	0	0.015		0.007
5/17/2018 16:39				-0.024	0	11.705	0	0	0.015		0.007
5/17/2018 16:40	11.6	129.6	40.75292;-	-0.024	0	11.705	0	0	0.015	0	0.007
5/17/2018 16:41				-0.024	0	11.705	0	0	0.015		0.007
5/17/2018 16:42				-0.024	0	11.705	0	0	0.015		0.007
5/17/2018 16:43				-0.024	0	11.705	0	0	0.015		0.007
5/17/2018 16:44				-0.025	0	11.705	0	0	0.015		0.007
5/17/2018 16:45	11.6	119.4	40.75291;-	-0.025	0	11.705	0	0	0.015	1	0.007
5/17/2018 16:46				-0.023	0	11.705	0	0	0.015		0.007
5/17/2018 16:47				-0.021	0	11.705	0	0	0.015		0.008
5/17/2018 16:48				-0.021	0	11.705	0	0	0.015		0.008
5/17/2018 16:49				-0.022	0	11.705	0	0	0.015		0.008
5/17/2018 16:50	11.6	118.4	40.75289;-	-0.022	0	11.705	0	0	0.015	3	0.008
5/17/2018 16:51				-0.022	0	11.705	0	0	0.015		0.008
5/17/2018 16:52				-0.019	0	11.705	0	0	0.015		0.008
5/17/2018 16:53				-0.017	0	11.705	0	0	0.015		0.008
5/17/2018 16:54				-0.018	0	11.705	0	0	0.015		0.008
5/17/2018 16:55	11.6	125.5	40.75286;-	-0.019	0	11.705	0	0	0.015	5	0.008
5/17/2018 16:56				-0.022	0	11.705	0	0	0.015		0.008
5/17/2018 16:57				-0.022	0	11.705	0	0	0.015		0.008
5/17/2018 16:58				-0.021	0	11.705	0	0	0.015		0.008
5/17/2018 16:59				-0.02	0	11.705	0	0	0.015		0.008
5/17/2018 17:00	11.6	129.6	40.75289;-	-0.021	0	11.705	0	0	0.015	0	0.008
5/17/2018 17:01				-0.021	0	11.705	0	0	0.015		0.008
5/17/2018 17:02				-0.021	0	11.705	0	0	0.015		0.008
5/17/2018 17:03				-0.021	0	11.705	0	0	0.015		0.008
5/17/2018 17:04				-0.022	0	11.705	0	0	0.015		0.008
5/17/2018 17:05	11.6	118.4	40.75292;-	-0.021	0	11.705	0	0	0.015	1	0.008

5/17/2018 17:06				-0.022	0	11.705	0	0	0.015		0.008
5/17/2018 17:07				-0.022	0	11.705	0	0	0.015		0.008
5/17/2018 17:08				-0.022	0	11.705	0	0	0.015		0.008
5/17/2018 17:09				-0.023	0	11.705	0	0	0.015		0.008
5/17/2018 17:10	11.6	117.4	40.75292;-	-0.02	0	11.705	0	0	0.015	0	0.008
5/17/2018 17:11				-0.02	0	11.705	0	0	0.015		0.009
5/17/2018 17:12				-0.02	0	11.705	0	0	0.015		0.009
5/17/2018 17:13				-0.021	0	11.705	0	0	0.015		0.009
5/17/2018 17:14				-0.022	0	11.705	0	0	0.015		0.009
5/17/2018 17:15	11.6	139.7	40.75291;-	-0.022	0	11.705	0	0	0.015	9	0.009
5/17/2018 17:16				-0.023	0	11.705	0	0	0.015		0.009
5/17/2018 17:17				-0.023	0	11.705	0	0	0.015		0.009
5/17/2018 17:18				-0.024	0	11.705	0	0	0.015		0.009
5/17/2018 17:19				-0.023	0	11.705	0	0	0.015		0.009
5/17/2018 17:20	11.6	118.4	40.75285;-	-0.022	0	11.705	0	0	0.015	14	0.009
5/17/2018 17:21				-0.022	0	11.705	0	0	0.015		0.009
5/17/2018 17:22				-0.022	0	11.705	0	0	0.015		0.009
5/17/2018 17:23				-0.022	0	11.705	0	0	0.015		0.009
5/17/2018 17:24				-0.022	0	11.705	0	0	0.015		0.009
5/17/2018 17:25	11.6	123.5	40.75282;-	-0.021	0	11.705	0	0	0.015	23	0.009
5/17/2018 17:26				-0.021	0	11.705	0	0	0.015		0.009
5/17/2018 17:27				-0.021	0	11.705	0	0	0.015		0.009
5/17/2018 17:28				-0.022	0	11.705	0	0	0.015		0.009
5/17/2018 17:29				-0.022	0	11.705	0	0	0.015		0.009
5/17/2018 17:30	11.6	131.6	40.75283;-	-0.023	0	11.705	0	0	0.015	13	0.009
5/17/2018 17:31				-0.023	0	11.705	0	0	0.015		0.009
5/17/2018 17:32				-0.024	0	11.705	0	0	0.015		0.009
5/17/2018 17:33				-0.023	0	11.705	0	0	0.015		0.01
5/17/2018 17:34				-0.024	0	11.705	0	0	0.015		0.01
5/17/2018 17:35	11.5	119.4	40.75284;-	-0.018	0	11.705	0	0	0.015	15	0.01
5/17/2018 17:36				-0.02	0	11.705	0	0	0.015		0.01
5/17/2018 17:37				-0.022	0	11.705	0	0	0.015		0.01
5/17/2018 17:38				-0.023	0	11.705	0	0	0.015		0.01
5/17/2018 17:39				-0.024	0	11.705	0	0	0.015		0.01
5/17/2018 17:40	11.5	119.4	40.75283;-	-0.022	0	11.705	0	0	0.015	17	0.01
5/17/2018 17:41				-0.024	0	11.705	0	0	0.015		0.01
5/17/2018 17:42				-0.022	0	11.705	0	0	0.015		0.01
5/17/2018 17:43				-0.021	0	11.705	0	0	0.015		0.01
5/17/2018 17:44				-0.022	0	11.705	0	0	0.015		0.01
5/17/2018 17:45	11.5	118.4	40.75284;-	-0.022	0	11.705	0	0	0.015	16	0.01
5/17/2018 17:46				-0.021	0	11.705	0	0	0.015		0.01
5/17/2018 17:47				-0.021	0	11.705	0	0	0.015		0.01
5/17/2018 17:48				-0.023	0	11.705	0	0	0.015		0.01
5/17/2018 17:49				-0.022	0	11.705	0	0	0.015		0.01
5/17/2018 17:50	11.5	121.5	40.75284;-	-0.024	0	11.705	0	0	0.015	12	0.01
5/17/2018 17:51				-0.022	0	11.705	0	0	0.015		0.01

5/17/2018 17:52				-0.022	0	11.705	0	0	0.015		0.01
5/17/2018 17:53				-0.023	0	11.705	0	0	0.015		0.01
5/17/2018 17:54				-0.023	0	11.705	0	0	0.015		0.01
5/17/2018 17:55	11.5	120.5	40.75282;-	-0.024	0	11.705	0	0	0.015	15	0.01
5/17/2018 17:56				-0.024	0	11.705	0	0	0.015		0.011
5/17/2018 17:57				-0.024	0	11.705	0	0	0.015		0.011
5/17/2018 17:58				-0.025	0	11.705	0	0	0.015		0.011
5/17/2018 17:59				-0.023	0	11.705	0	0	0.015		0.011
5/17/2018 18:00	11.5	123.5	40.75282;-	-0.023	0	11.705	0	0	0.015	14	0.011
5/17/2018 18:01				-0.023	0	11.705	0	0	0.015		0.011
5/17/2018 18:02				-0.024	0	11.705	0	0	0.015		0.011
5/17/2018 18:03				-0.024	0	11.705	0	0	0.015		0.011
5/17/2018 18:04				-0.023	0	11.705	0	0	0.015		0.011
5/17/2018 18:05	11.5	118.4	40.75283;-	-0.023	0	11.705	0	0	0.015	19	0.011
5/17/2018 18:06				-0.023	0	11.705	0	0	0.015		0.011
5/17/2018 18:07				-0.023	0	11.705	0	0	0.015		0.011
5/17/2018 18:08				-0.023	0	11.705	0	0	0.015		0.011
5/17/2018 18:09				-0.023	0	11.705	0	0	0.015		0.011
5/17/2018 18:10	11.5	124.5	40.75284;-	-0.023	0	11.705	0	0	0.015	18	0.011
5/17/2018 18:11				-0.024	0	11.705	0	0	0.015		0.011
5/17/2018 18:12				-0.024	0	11.705	0	0	0.015		0.011
5/17/2018 18:13				-0.025	0	11.705	0	0	0.015		0.011
5/17/2018 18:14				-0.024	0	11.705	0	0	0.015		0.011
5/17/2018 18:15	11.5	128.6	40.75285;-	-0.025	0	11.705	0	0	0.015	15	0.011
5/17/2018 18:16				-0.024	0	11.705	0	0	0.015		0.011
5/17/2018 18:17				-0.024	0	11.705	0	0	0.015		0.012
5/17/2018 18:18				-0.026	0	11.705	0	0	0.015		0.012
5/17/2018 18:19				-0.025	0	11.705	0	0	0.015		0.012
5/17/2018 18:20	11.5	136.6	40.75285;-	-0.025	0	11.705	0	0	0.015	21	0.012
5/17/2018 18:21				-0.025	0	11.705	0	0	0.015		0.012
5/17/2018 18:22				-0.026	0	11.705	0	0	0.015		0.012
5/17/2018 18:23				-0.026	0	11.705	0	0	0.015		0.012
5/17/2018 18:24				-0.026	0	11.705	0	0	0.015		0.012
5/17/2018 18:25	11.5	122.5	40.75285;-	-0.025	0	11.705	0	0	0.015	24	0.012
5/17/2018 18:26				-0.025	0	11.705	0	0	0.015		0.012
5/17/2018 18:27				-0.025	0	11.705	0	0	0.015		0.012
5/17/2018 18:28				-0.025	0	11.705	0	0	0.015		0.012
5/17/2018 18:29				-0.025	0	11.705	0	0	0.015		0.012
5/17/2018 18:30	11.5	125.5		-0.026	0	11.705	0	0	0.015		0.012
5/17/2018 18:30			40.75286;-73.48652							30	
5/17/2018 18:31				-0.026	0	11.705	0	0	0.015		0.012
5/17/2018 18:32				-0.026	0	11.705	0	0	0.015		0.012
5/17/2018 18:33				-0.025	0	11.705	0	0	0.015		0.012
5/17/2018 18:34				-0.025	0	11.705	0	0	0.015		0.012
5/17/2018 18:35	11.5	124.5	40.75291;-	-0.024	0	11.705	0	0	0.015	16	0.012
5/17/2018 18:36				-0.024	0	11.705	0	0	0.015		0.012

5/17/2018 18:37				-0.025	0	11.705	0	0	0.015		0.013
5/17/2018 18:38				-0.025	0	11.705	0	0	0.015		0.013
5/17/2018 18:39				-0.025	0	11.705	0	0	0.015		0.013
5/17/2018 18:40	11.5	119.4	40.75293;-	-0.025	0	11.705	0	0	0.015	17	0.013
5/17/2018 18:41				-0.025	0	11.705	0	0	0.015		0.013
5/17/2018 18:42				-0.024	0	11.705	0	0	0.015		0.013
5/17/2018 18:43				-0.024	0	11.705	0	0	0.015		0.013
5/17/2018 18:44				-0.023	0	11.705	0	0	0.015		0.013
5/17/2018 18:45	11.5	131.6	40.75285;-	-0.022	0	11.705	0	0	0.015	13	0.013
5/17/2018 18:46				-0.023	0	11.705	0	0	0.015		0.013
5/17/2018 18:47				-0.023	0	11.705	0	0	0.015		0.013
5/17/2018 18:48				-0.024	0	11.705	0	0	0.015		0.013
5/17/2018 18:49				-0.024	0	11.705	0	0	0.015		0.013
5/17/2018 18:50	11.4	118.4	40.75288;-	-0.024	0	11.705	0	0	0.015	20	0.013
5/17/2018 18:51				-0.023	0	11.705	0	0	0.015		0.013
5/17/2018 18:52				-0.024	0	11.705	0	0	0.015		0.013
5/17/2018 18:53				-0.024	0	11.705	0	0	0.015		0.013
5/17/2018 18:54				-0.025	0	11.705	0	0	0.015		0.013
5/17/2018 18:55	11.5	134.6	40.75288;-	-0.025	0	11.705	0	0	0.015	2	0.013
5/17/2018 18:56				-0.025	0	11.705	0	0	0.015		0.013
5/17/2018 18:57				-0.025	0	11.705	0	0	0.015		0.013
5/17/2018 18:58				-0.025	0	11.705	0	0	0.015		0.014
5/17/2018 18:59				-0.025	0	11.705	0	0	0.015		0.014
5/17/2018 19:00	11.5	117.4	40.75289;-	-0.025	0	11.705	0	0	0.015	3	0.014
5/17/2018 19:01				-0.025	0	11.705	0	0	0.015		0.014
5/17/2018 19:02				-0.025	0	11.705	0	0	0.015		0.014
5/17/2018 19:03				-0.025	0	11.705	0	0	0.015		0.014
5/17/2018 19:04				-0.025	0	11.705	0	0	0.015		0.014
5/17/2018 19:05	11.5	120.5	40.75288;-	-0.024	0	11.705	0	0	0.015	-1	0.014
5/17/2018 19:06				-0.024	0	11.705	0	0	0.015		0.014
5/17/2018 19:07				-0.024	0	11.705	0	0	0.015		0.014
5/17/2018 19:08				-0.025	0	11.705	0	0	0.015		0.014
5/17/2018 19:09				-0.025	0	11.705	0	0	0.015		0.014
5/17/2018 19:10	11.4	119.4	40.7529;-7	-0.025	0	11.705	0	0	0.015	4	0.014
5/17/2018 19:11				-0.025	0	11.705	0	0	0.015		0.014
5/17/2018 19:12				-0.025	0	11.705	0	0	0.015		0.014
5/17/2018 19:13				-0.025	0	11.705	0	0	0.015		0.014
5/17/2018 19:14				-0.024	0	11.705	0	0	0.015		0.014
5/17/2018 19:15	11.4	120.5	40.7529;-7	-0.023	0	11.705	0	0	0.015	0	0.014
5/17/2018 19:16				-0.024	0	11.705	0	0	0.015		0.014
5/17/2018 19:17				-0.024	0	11.705	0	0	0.015		0.014
5/17/2018 19:18				-0.023	0	11.705	0	0	0.015		0.015
5/17/2018 19:19				-0.024	0	11.705	0	0	0.015		0.015
5/17/2018 19:20	11.4	118.4	40.75291;-	-0.023	0	11.705	0	0	0.015	-1	0.015
5/17/2018 19:21				-0.023	0	11.705	0	0	0.015		0.015
5/17/2018 19:22				-0.022	0	11.705	0	0	0.015		0.015

5/17/2018 19:23				-0.022	0	11.705	0	0	0.015		0.015
5/17/2018 19:24				-0.023	0	11.705	0	0	0.015		0.015
5/17/2018 19:25	11.4	119.4	40.7529;-7	-0.023	0	11.705	0	0	0.015	13	0.015
5/17/2018 19:26				-0.024	0	11.705	0	0	0.015		0.015
5/17/2018 19:27				-0.024	0	11.705	0	0	0.015		0.015
5/17/2018 19:28				-0.025	0	11.705	0	0	0.015		0.015
5/17/2018 19:29				-0.025	0	11.705	0	0	0.015		0.015
5/17/2018 19:30	11.4	129.6	40.75292;-	-0.025	0	11.705	0	0	0.015	18	0.015
5/17/2018 19:31				-0.025	0	11.705	0	0	0.015		0.015
5/17/2018 19:32				-0.026	0	11.705	0	0	0.015		0.015
5/17/2018 19:33				-0.025	0	11.705	0	0	0.015		0.015
5/17/2018 19:34				-0.025	0	11.705	0	0	0.015		0.015
5/17/2018 19:35	11.4	129.6	40.75293;-	-0.025	0	11.705	0	0	0.015	-11	0.015
5/17/2018 19:36				-0.025	0	11.705	0	0	0.015		0.015
5/17/2018 19:37				-0.024	0	11.705	0	0	0.015		0.015
5/17/2018 19:38				-0.024	0	11.705	0	0	0.015		0.015
5/17/2018 19:39				-0.024	0	11.705	0	0	0.015		0.016
5/17/2018 19:40	11.4	117.4	40.75292;-	-0.024	0	11.705	0	0	0.015	-6	0.016
5/17/2018 19:41				-0.025	0	11.705	0	0	0.015		0.016
5/17/2018 19:42				-0.025	0	11.705	0	0	0.015		0.016
5/17/2018 19:43				-0.025	0	11.705	0	0	0.015		0.016
5/17/2018 19:44				-0.026	0	11.705	0	0	0.015		0.016
5/17/2018 19:45	11.4	128.6	40.7529;-7	-0.026	0	11.705	0	0	0.015	6	0.016
5/17/2018 19:46				-0.025	0	11.705	0	0	0.015		0.016
5/17/2018 19:47				-0.025	0	11.705	0	0	0.015		0.016
5/17/2018 19:48				-0.025	0	11.705	0	0	0.015		0.016
5/17/2018 19:49				-0.025	0	11.705	0	0	0.015		0.016
5/17/2018 19:50	11.4	121.5	40.75291;-	-0.026	0	11.705	0	0	0.015	8	0.016
5/17/2018 19:51				-0.026	0	11.705	0	0	0.015		0.016
5/17/2018 19:52				-0.026	0	11.705	0	0	0.015		0.016
5/17/2018 19:53				-0.025	0	11.705	0	0	0.015		0.016
5/17/2018 19:54				-0.024	0	11.705	0	0	0.015		0.016
5/17/2018 19:55	11.4	122.5	40.75289;-	-0.025	0	11.705	0	0	0.015	18	0.016
5/17/2018 19:56				-0.026	0	11.705	0	0	0.015		0.016
5/17/2018 19:57				-0.026	0	11.705	0	0	0.015		0.016
5/17/2018 19:58				-0.026	0	11.705	0	0	0.015		0.016
5/17/2018 19:59				-0.026	0	11.705	0	0	0.015		0.017
5/17/2018 20:00	11.4	122.5	40.75292;-	-0.025	0	11.705	0	0	0.015	0	0.017
5/17/2018 20:01				-0.025	0	11.705	0	0	0.015		0.017
5/17/2018 20:02				-0.024	0	11.705	0	0	0.015		0.017
5/17/2018 20:03				-0.025	0	11.705	0	0	0.015		0.017
5/17/2018 20:04				-0.024	0	11.705	0	0	0.015		0.017
5/17/2018 20:05	11.4	124.5	40.75292;-	-0.023	0	11.705	0	0	0.015	1	0.017
5/17/2018 20:06				-0.024	0	11.705	0	0	0.015		0.017
5/17/2018 20:07				-0.024	0	11.705	0	0	0.015		0.017
5/17/2018 20:08				-0.024	0	11.705	0	0	0.015		0.017

5/17/2018 20:09				-0.024	0	11.705	0	0	0.015		0.017
5/17/2018 20:10	11.4	124.5		-0.025	0	11.705	0	0	0.015		0.017
5/17/2018 20:10			40.75293;-73.48656							1	
5/17/2018 20:11				-0.025	0	11.705	0	0	0.015		0.017
5/17/2018 20:12				-0.025	0	11.705	0	0	0.015		0.017
5/17/2018 20:13				-0.025	0	11.705	0	0	0.015		0.017
5/17/2018 20:14				-0.025	0	11.705	0	0	0.015		0.017
5/17/2018 20:15	11.4	120.5		-0.024	0	11.705	0	0	0.015		0.017
5/17/2018 20:15			40.75292;-73.48658							2	
5/17/2018 20:16				-0.025	0	11.705	0	0	0.015		0.017
5/17/2018 20:17				-0.025	0	11.705	0	0	0.015		0.017
5/17/2018 20:18				-0.025	0	11.705	0	0	0.015		0.017
5/17/2018 20:19				-0.025	0	11.705	0	0	0.015		0.018
5/17/2018 20:20	11.4	126.5		-0.026	0	11.705	0	0	0.015		0.018
5/17/2018 20:20			40.7529;-73.4866							6	
5/17/2018 20:21				-0.026	0	11.705	0	0	0.015		0.018
5/17/2018 20:22				-0.024	0	11.705	0	0	0.015		0.018
5/17/2018 20:23				-0.025	0	11.705	0	0	0.015		0.018
5/17/2018 20:24				-0.026	0	11.705	0	0	0.015		0.018
5/17/2018 20:25	11.3	122.5		-0.025	0	11.705	0	0	0.015		0.018
5/17/2018 20:25			40.75288;-73.48656							7	
5/17/2018 20:26				-0.026	0	11.705	0	0	0.015		0.018
5/17/2018 20:27				-0.026	0	11.705	0	0	0.015		0.018
5/17/2018 20:28				-0.025	0	11.705	0	0	0.015		0.018
5/17/2018 20:29				-0.024	0	11.705	0	0	0.015		0.018
5/17/2018 20:30	11.3	133.6	40.75289;-	-0.023	0	11.705	0	0	0.015	7	0.018
5/17/2018 20:31				-0.023	0	11.705	0	0	0.015		0.018
5/17/2018 20:32				-0.022	0	11.705	0	0	0.015		0.018
5/17/2018 20:33				-0.021	0	11.705	0	0	0.015		0.018
5/17/2018 20:34				-0.022	0	11.705	0	0	0.015		0.018
5/17/2018 20:35	11.3	120.5	40.75289;-	-0.022	0	11.705	0	0	0.015	7	0.018
5/17/2018 20:36				-0.022	0	11.705	0	0	0.015		0.018
5/17/2018 20:37				-0.023	0	11.705	0	0	0.015		0.018
5/17/2018 20:38				-0.023	0	11.705	0	0	0.015		0.018
5/17/2018 20:39				-0.024	0	11.705	0	0	0.015		0.018
5/17/2018 20:40	11.3	123.5		-0.024	0	11.705	0	0	0.015		0.019
5/17/2018 20:40			40.75289;-73.48655							9	
5/17/2018 20:41				-0.025	0	11.705	0	0	0.015		0.019
5/17/2018 20:42				-0.023	0	11.705	0	0	0.015		0.019
5/17/2018 20:43				-0.023	0	11.705	0	0	0.015		0.019
5/17/2018 20:44				-0.023	0	11.705	0	0	0.015		0.019
5/17/2018 20:45	11.3	119.4	40.75289;-	-0.023	0	11.705	0	0	0.015	10	0.019
5/17/2018 20:46				-0.024	0	11.705	0	0	0.015		0.019
5/17/2018 20:47				-0.023	0	11.705	0	0	0.015		0.019
5/17/2018 20:48				-0.023	0	11.705	0	0	0.015		0.019
5/17/2018 20:49				-0.023	0	11.705	0	0	0.015		0.019

5/17/2018 20:50	11.3	121.5	40.75289;-	-0.024		0	11.705	0	0	0.015	15	0.019
5/17/2018 20:51				-0.024		0	11.705	0	0	0.015		0.019
5/17/2018 20:52				-0.024		0	11.705	0	0	0.015		0.019
5/17/2018 20:53				-0.024		0	11.705	0	0	0.015		0.019
5/17/2018 20:54				-0.023		0	11.705	0	0	0.015		0.019
5/17/2018 20:55	11.3	131.6	40.75285;-	-0.021		0	11.705	0	0	0.015	23	0.019
5/17/2018 20:56				-0.021		0	11.705	0	0	0.015		0.019
5/17/2018 20:57				-0.02		0	11.705	0	0	0.015		0.019
5/17/2018 20:58				-0.021		0	11.705	0	0	0.015		0.019
5/17/2018 20:59				-0.021		0	11.705	0	0	0.015		0.019
5/17/2018 21:00	11.3	121.5	40.75288;-	-0.023		0	11.705	0	0	0.015	14	0.019
5/17/2018 21:01				-0.023		0	11.705	0	0	0.015		0.019
5/17/2018 21:02				-0.023		0	11.705	0	0	0.015		0.02
5/17/2018 21:03				-0.023		0	11.705	0	0	0.015		0.02
5/17/2018 21:04				-0.023		0	11.705	0	0	0.015		0.02
5/17/2018 21:05	11.3	121.5	40.75289;-	-0.024		0	11.705	0	0	0.015	18	0.02
5/17/2018 21:06				-0.022		0	11.705	0	0	0.015		0.02
5/17/2018 21:07				-0.023		0	11.705	0	0	0.015		0.02
5/17/2018 21:08				-0.023		0	11.705	0	0	0.015		0.02
5/17/2018 21:09				-0.022		0	11.705	0	0	0.015		0.02
5/17/2018 21:10	11.2	120.5	40.7529;-7	-0.022		0	11.705	0	0	0.015	18	0.02
5/17/2018 21:11				-0.022		0	11.705	0	0	0.015		0.02
5/17/2018 21:12				-0.024		0	11.705	0	0	0.015		0.02
5/17/2018 21:13				-0.024		0	11.705	0	0	0.015		0.02
5/17/2018 21:14				-0.024		0	11.705	0	0	0.015		0.02
5/17/2018 21:15	11.3	120.5	40.75288;-	-0.025		0	11.705	0	0	0.015	20	0.02
5/18/2018 12:21	11.4	138.7										
5/18/2018 12:21			40.752761299999996;-73.4865847									
5/18/2018 12:22						0.029	0.036	0	0	0		
5/18/2018 12:23						0.072	0.072	0	0	0		
5/18/2018 12:24						0.105	0.105	0	0	0		
5/18/2018 12:25	11.3	119.4	40.75295;-	-0.011		0.103	0.108	0	0	0	3	0
5/18/2018 12:26				-0.013		0.103	0.121	0	0	0		0
5/18/2018 12:27				-0.012		0.105	0.121	0	0	0		0
5/18/2018 12:28				-0.014		0.113	0.133	0	0	0.001		0
5/18/2018 12:29				-0.013		0.095	0.133	0	0	0.001		0
5/18/2018 12:30	11.3	118.4	40.75293;-	-0.015		0.114	0.133	0	0	0.001	14	0
5/18/2018 12:31				-0.016		0.135	0.14	0	0	0.001		0
5/18/2018 12:32				-0.016		0.124	0.14	0	0	0.001		0
5/18/2018 12:33				-0.015		0.115	0.14	0	0	0.002		0
5/18/2018 12:34				-0.014		0.067	0.14	0	0	0.002		0
5/18/2018 12:35	11.3	118.4	40.7529;-7	-0.012		0.076	0.14	0	0.085	0.002	15	0
5/18/2018 12:36				-0.013		0.089	0.14	0	0.09	0.002		0
5/18/2018 12:37				-0.014		0.098	0.14	0	0.095	0.003		0
5/18/2018 12:38				-0.013		0.093	0.14	0	0.1	0.003		0
5/18/2018 12:39				-0.015		0.102	0.14	0	0.102	0.003		0

5/18/2018 12:40	11.3	118.4	40.75293;-	-0.015	0.102	0.14	0	0.103	0.003	8	0
5/18/2018 12:41				-0.015	0.101	0.14	0	0.104	0.003		0
5/18/2018 12:42				-0.016	0.112	0.14	0	0.103	0.004		0
5/18/2018 12:43				-0.014	0.119	0.14	0	0.104	0.004		0.001
5/18/2018 12:44				-0.015	0.112	0.14	0	0.104	0.004		0.001
5/18/2018 12:45	11.2	119.4	40.75292;-	-0.016	0.11	0.14	0	0.105	0.004	1	0.001
5/18/2018 12:46				-0.016	0.122	0.14	0	0.105	0.004		0.001
5/18/2018 12:47				-0.014	0.11	0.14	0	0.104	0.005		0.001
5/18/2018 12:48				-0.014	0.118	0.14	0	0.104	0.005		0.001
5/18/2018 12:49				-0.014	0.116	0.14	0	0.103	0.005		0.001
5/18/2018 12:50	11.2	119.4	40.75292;-	-0.015	0.118	0.14	0	0.103	0.005	-1	0.001
5/18/2018 12:51				-0.014	0.112	0.14	0	0.106	0.006		0.001
5/18/2018 12:52				-0.014	0.108	0.14	0	0.108	0.006		0.001
5/18/2018 12:53				-0.014	0.108	0.14	0	0.109	0.006		0.001
5/18/2018 12:54				-0.014	0.114	0.14	0	0.11	0.006		0.001
5/18/2018 12:55	11.2	121.5	40.75292;-	-0.015	0.122	0.14	0	0.111	0.007	0	0.001
5/18/2018 12:56				-0.014	0.107	0.14	0	0.112	0.007		0.001
5/18/2018 12:57				-0.015	0.12	0.14	0	0.112	0.007		0.001
5/18/2018 12:58				-0.013	0.126	0.14	0	0.113	0.007		0.001
5/18/2018 12:59				0.001	0.123	0.14	0	0.113	0.008		0.001
5/18/2018 13:00	11.2	124.5	40.7529;-7	-0.007	0.116	0.14	0	0.114	0.008	-1	0.001
5/18/2018 13:01				-0.008	0.129	0.14	0	0.114	0.008		0.001
5/18/2018 13:02				-0.006	0.131	0.14	0	0.114	0.008		0.001
5/18/2018 13:03				-0.01	0.129	0.14	0	0.115	0.009		0.001
5/18/2018 13:04				-0.013	0.129	0.14	0	0.117	0.009		0.001
5/18/2018 13:05	11.2	135.6	40.75283;-	-0.015	0.138	0.14	0	0.118	0.009	-2	0.001
5/18/2018 13:06				-0.014	0.134	0.14	0	0.119	0.009		0.001
5/18/2018 13:07				-0.013	0.118	0.14	0	0.12	0.01		0.001
5/18/2018 13:08				-0.014	0.121	0.14	0	0.121	0.01		0.001
5/18/2018 13:09				-0.014	0.125	0.14	0	0.122	0.01		0.001
5/18/2018 13:10	11.2	130.6	40.75286;-	-0.014	0.125	0.14	0	0.123	0.01	2	0.001
5/18/2018 13:11				-0.014	0.131	0.14	0	0.123	0.011		0.001
5/18/2018 13:12				-0.014	0.132	0.14	0	0.124	0.011		0.001
5/18/2018 13:13				-0.014	0.125	0.14	0	0.125	0.011		0.001
5/18/2018 13:14				-0.014	0.121	0.14	0	0.126	0.011		0.001
5/18/2018 13:15	11.2	131.6	40.75287;-	-0.014	0.129	0.14	0	0.126	0.012	7	0.001
5/18/2018 13:16				-0.015	0.13	0.14	0	0.126	0.012		0.001
5/18/2018 13:17				-0.013	0.132	0.14	0	0.126	0.012		0.001
5/18/2018 13:18				-0.012	0.138	0.14	0	0.126	0.013		0.001
5/18/2018 13:19				-0.014	0.146	0.146	0	0.127	0.013		0.001
5/18/2018 13:20	11.2	130.6	40.75292;-	-0.012	0.15	0.154	0	0.127	0.013	-2	0.001
5/18/2018 13:21				-0.014	0.138	0.154	0	0.129	0.013		0.001
5/18/2018 13:22				-0.015	0.136	0.154	0	0.129	0.014		0.001
5/18/2018 13:23				-0.016	0.144	0.154	0	0.13	0.014		0.002
5/18/2018 13:24				-0.015	0.14	0.154	0	0.132	0.014		0.002
5/18/2018 13:25	11.1	122.5		-0.016	0.146	0.154	0	0.133	0.015		0.002

5/18/2018 13:25			40.7529;-73.48654						2	
5/18/2018 13:26			-0.017	0.153	0.158	0	0.134	0.015		0.002
5/18/2018 13:27			-0.016	0.161	0.161	0	0.136	0.015		0.002
5/18/2018 13:28			-0.016	0.169	0.169	0	0.138	0.016		0.002
5/18/2018 13:29			-0.016	0.167	0.173	0	0.14	0.016		0.002
5/18/2018 13:30	11.1	121.5	-0.015	0.151	0.173	0	0.143	0.016		0.002
5/18/2018 13:30			40.7529;-73.48657						10	
5/18/2018 13:31			-0.016	0.152	0.173	0	0.145	0.017		0.002
5/18/2018 13:32			-0.015	0.14	0.173	0	0.147	0.017		0.002
5/18/2018 13:33			-0.016	0.144	0.173	0	0.148	0.017		0.002
5/18/2018 13:34			-0.015	0.155	0.173	0	0.149	0.017		0.002
5/18/2018 13:35	11.1	121.5	-0.015	0.159	0.173	0	0.15	0.018		0.002
5/18/2018 13:35			40.75293;-73.48657						10	
5/18/2018 13:36			-0.012	0.165	0.173	0	0.15	0.018		0.002
5/18/2018 13:37			-0.015	0.172	0.173	0	0.151	0.018		0.002
5/18/2018 13:38			-0.016	0.169	0.175	0	0.153	0.019		0.002
5/18/2018 13:39			-0.016	0.166	0.176	0	0.155	0.019		0.002
5/18/2018 13:40	11.1	121.5	-0.017	0.162	0.176	0	0.157	0.02		0.002
5/18/2018 13:40			40.75292;-73.48661						10	
5/18/2018 13:41			-0.017	0.169	0.176	0	0.158	0.02		0.002
5/18/2018 13:42			-0.018	0.172	0.176	0	0.159	0.02		0.002
5/18/2018 13:43			-0.018	0.18	0.18	0	0.16	0.021		0.002
5/18/2018 13:44			-0.019	0.185	0.19	0	0.161	0.021		0.002
5/18/2018 13:45	11.1	121.5	-0.019	0.192	0.193	0	0.162	0.021		0.002
5/18/2018 13:45			40.75293;-73.48662						8	
5/18/2018 13:46			-0.02	0.201	0.201	0	0.164	0.022		0.002
5/18/2018 13:47			-0.019	0.185	0.206	0	0.167	0.022		0.002
5/18/2018 13:48			-0.018	0.18	0.206	0	0.17	0.023		0.002
5/18/2018 13:49			-0.016	0.172	0.206	0	0.173	0.023		0.002
5/18/2018 13:50	11.1	136.6	-0.017	0.174	0.206	0	0.174	0.023		0.002
5/18/2018 13:50			40.75291;-73.48663						11	
5/18/2018 13:51			-0.018	0.18	0.206	0	0.175	0.024		0.002
5/18/2018 13:52			-0.019	0.184	0.206	0	0.177	0.024		0.002
5/18/2018 13:53			-0.018	0.179	0.206	0	0.177	0.024		0.002
5/18/2018 13:54			-0.018	0.186	0.206	0	0.178	0.025		0.003
5/18/2018 13:55	11.1	147.8	-0.018	0.19	0.206	0	0.179	0.025		0.003
5/18/2018 13:55			40.75291;-73.48662						11	
5/18/2018 13:56			-0.017	0.185	0.206	0	0.181	0.026		0.003
5/18/2018 13:57			-0.017	0.185	0.206	0	0.182	0.026		0.003
5/18/2018 13:58			-0.017	0.178	0.206	0	0.183	0.026		0.003
5/18/2018 13:59			-0.016	0.181	0.206	0	0.183	0.027		0.003
5/18/2018 14:00	11.1	124.5	-0.017	0.18	0.206	0	0.183	0.027		0.003
5/18/2018 14:00			40.75289;-73.48658						12	
5/18/2018 14:01			-0.018	0.181	0.206	0	0.182	0.027		0.003
5/18/2018 14:02			-0.017	0.184	0.206	0	0.181	0.028		0.003
5/18/2018 14:03			-0.005	0.187	0.206	0	0.181	0.028		0.003

5/18/2018 14:04				-0.012	0.181	0.206	0	0.181	0.029		0.003
5/18/2018 14:05	11.1	131.6		-0.016	0.184	0.206	0	0.182	0.029		0.003
5/18/2018 14:05			40.75287;-73.48656							15	
5/18/2018 14:06				-0.016	0.179	0.206	0	0.183	0.029		0.003
5/18/2018 14:07				-0.015	0.15	0.206	0	0.183	0.03		0.003
5/18/2018 14:08				-0.017	0.158	0.206	0	0.182	0.03		0.003
5/18/2018 14:09				-0.017	0.169	0.206	0	0.18	0.03		0.003
5/18/2018 14:10	11	121.5		-0.017	0.16	0.206	0	0.179	0.031		0.003
5/18/2018 14:10			40.75286;-73.48658							18	
5/18/2018 14:11				-0.018	0.168	0.206	0	0.177	0.031		0.003
5/18/2018 14:12				-0.02	0.176	0.206	0	0.175	0.031		0.003
5/18/2018 14:13				-0.019	0.192	0.206	0	0.175	0.032		0.003
5/18/2018 14:14				-0.019	0.187	0.206	0	0.175	0.032		0.003
5/18/2018 14:15	11	121.5		-0.018	0.182	0.206	0	0.175	0.033		0.003
5/18/2018 14:15			40.75287;-73.48659							21	
5/18/2018 14:16				-0.019	0.188	0.206	0	0.175	0.033		0.003
5/18/2018 14:17				-0.019	0.183	0.206	0	0.176	0.033		0.003
5/18/2018 14:18				-0.019	0.181	0.206	0	0.175	0.034		0.003
5/18/2018 14:19				-0.019	0.184	0.206	0	0.175	0.034		0.003
5/18/2018 14:20	11	137.7		-0.02	0.187	0.206	0	0.175	0.034		0.003
5/18/2018 14:20			40.75283;-73.48656							21	
5/18/2018 14:21				-0.021	0.199	0.206	0	0.175	0.035		0.003
5/18/2018 14:22				-0.02	0.207	0.213	0	0.176	0.035		0.003
5/18/2018 14:23				-0.02	0.21	0.213	0	0.179	0.036		0.004
5/18/2018 14:24				-0.019	0.21	0.213	0	0.183	0.036		0.004
5/18/2018 14:25	11	122.5	40.75285;-	-0.019	0.199	0.213	0	0.185	0.037	23	0.004
5/18/2018 14:26				-0.02	0.204	0.213	0	0.188	0.037		0.004
5/18/2018 14:27				-0.02	0.205	0.213	0	0.191	0.037		0.004
5/18/2018 14:28				-0.02	0.203	0.213	0	0.193	0.038		0.004
5/18/2018 14:29				-0.019	0.204	0.213	0	0.194	0.038		0.004
5/18/2018 14:30	11	123.5	40.75285;-	-0.018	0.19	0.213	0	0.195	0.039	23	0.004
5/18/2018 14:31				-0.019	0.191	0.213	0	0.196	0.039		0.004
5/18/2018 14:32				-0.019	0.19	0.213	0	0.196	0.039		0.004
5/18/2018 14:33				-0.019	0.185	0.213	0	0.196	0.04		0.004
5/18/2018 14:34				-0.02	0.192	0.213	0	0.197	0.04		0.004
5/18/2018 14:35	10.9	135.6	40.75289;-	-0.02	0.201	0.213	0	0.197	0.041	20	0.004
5/18/2018 14:36				-0.02	0.198	0.213	0	0.198	0.041		0.004
5/18/2018 14:37				-0.02	0.197	0.213	0	0.198	0.041		0.004
5/18/2018 14:38				-0.02	0.201	0.213	0	0.198	0.042		0.004
5/18/2018 14:39				-0.021	0.205	0.213	0	0.197	0.042		0.004
5/18/2018 14:40	10.9	126.5	40.75285;-	-0.021	0.215	0.215	0	0.197	0.043	23	0.004
5/18/2018 14:41				-0.02	0.213	0.218	0	0.197	0.043		0.004
5/18/2018 14:42				-0.02	0.215	0.218	0	0.198	0.044		0.004
5/18/2018 14:43				-0.019	0.209	0.218	0	0.199	0.044		0.004
5/18/2018 14:44				-0.02	0.202	0.218	0	0.199	0.044		0.004
5/18/2018 14:45	10.9	126.5	40.75287;-	-0.021	0.206	0.218	0	0.199	0.045	29	0.004

5/18/2018 14:46				-0.02	0.214	0.218	0	0.2	0.045		0.004
5/18/2018 14:47				-0.021	0.214	0.223	0	0.201	0.046		0.004
5/18/2018 14:48				-0.021	0.213	0.223	0	0.203	0.046		0.004
5/18/2018 14:49				-0.021	0.219	0.223	0	0.205	0.047		0.005
5/18/2018 14:50	10.9	123.5	40.75289;-	-0.021	0.224	0.23	0	0.206	0.047	20	0.005
5/18/2018 14:51				-0.02	0.212	0.23	0	0.209	0.048		0.005
5/18/2018 14:52				-0.019	0.206	0.23	0	0.21	0.048		0.005
5/18/2018 14:53				-0.02	0.188	0.23	0	0.21	0.048		0.005
5/18/2018 14:54				-0.019	0.195	0.23	0	0.21	0.049		0.005
5/18/2018 14:55	10.9	123.5	40.7529;-7	-0.02	0.193	0.23	0	0.209	0.049	20	0.005
5/18/2018 14:56				-0.02	0.203	0.23	0	0.208	0.05		0.005
5/18/2018 14:57				-0.02	0.19	0.23	0	0.207	0.05		0.005
5/18/2018 14:58				-0.019	0.194	0.23	0	0.205	0.05		0.005
5/18/2018 14:59				-0.02	0.199	0.23	0	0.204	0.051		0.005
5/18/2018 15:00	10.8	129.6	40.7529;-7	-0.02	0.194	0.23	0	0.203	0.051	24	0.005
5/18/2018 15:01				-0.02	0.192	0.23	0	0.202	0.052		0.005
5/18/2018 15:02				-0.02	0.197	0.23	0	0.201	0.052		0.005
5/18/2018 15:03				-0.02	0.198	0.23	0	0.2	0.052		0.005
5/18/2018 15:04				-0.02	0.19	0.23	0	0.198	0.053		0.005
5/18/2018 15:05	10.8	124.5	40.7529;-7	-0.015	0.191	0.23	0	0.197	0.053	30	0.005
5/18/2018 15:06				-0.012	0.193	0.23	0	0.195	0.054		0.005
5/18/2018 15:07				-0.019	0.17	0.23	0	0.193	0.054		0.005
5/18/2018 15:08				-0.019	0.172	0.23	0	0.191	0.054		0.005
5/18/2018 15:09				-0.018	0.178	0.23	0	0.19	0.055		0.005
5/18/2018 15:10	10.8	122.5	40.75291;-	-0.02	0.184	0.23	0	0.189	0.055	24	0.005
5/18/2018 15:11				-0.019	0.185	0.23	0	0.188	0.056		0.005
5/18/2018 15:12				-0.02	0.182	0.23	0	0.187	0.056		0.005
5/18/2018 15:13				-0.02	0.187	0.23	0	0.186	0.056		0.005
5/18/2018 15:14				-0.02	0.182	0.23	0	0.186	0.057		0.005
5/18/2018 15:15	10.8	126.5	40.75291;-	-0.02	0.179	0.23	0	0.185	0.057	21	0.006
5/18/2018 15:16				-0.02	0.181	0.23	0	0.184	0.057		0.006
5/18/2018 15:17				-0.021	0.183	0.23	0	0.183	0.058		0.006
5/18/2018 15:18				-0.021	0.191	0.23	0	0.183	0.058		0.006
5/18/2018 15:19				-0.02	0.19	0.23	0	0.182	0.059		0.006
5/18/2018 15:20	10.8	123.5	40.75291;-	-0.02	0.194	0.23	0	0.182	0.059	30	0.006
5/18/2018 15:21				-0.021	0.196	0.23	0	0.182	0.059		0.006
5/18/2018 15:22				-0.02	0.192	0.23	0	0.182	0.06		0.006
5/18/2018 15:23				-0.02	0.192	0.23	0	0.183	0.06		0.006
5/18/2018 15:24				-0.019	0.191	0.23	0	0.184	0.061		0.006
5/18/2018 15:25	10.7	135.6		-0.02	0.178	0.23	0	0.185	0.061		0.006
5/18/2018 15:25			40.75289;-73.48654							36	
5/18/2018 15:26				-0.02	0.182	0.23	0	0.185	0.061		0.006
5/18/2018 15:27				-0.02	0.175	0.23	0	0.185	0.062		0.006
5/18/2018 15:28				-0.018	0.172	0.23	0	0.185	0.062		0.006
5/18/2018 15:29				-0.02	0.165	0.23	0	0.184	0.062		0.006
5/18/2018 15:30	10.7	136.6	40.7529;-7	-0.019	0.165	0.23	0	0.184	0.063	30	0.006

5/18/2018 15:31				-0.021	0.175	0.23	0	0.183	0.063		0.006
5/18/2018 15:32				-0.02	0.171	0.23	0	0.182	0.063		0.006
5/18/2018 15:33				-0.018	0.172	0.23	0	0.181	0.064		0.006
5/18/2018 15:34				-0.02	0.171	0.23	0	0.181	0.064		0.006
5/18/2018 15:35	10.7	134.6	40.75292;-	-0.02	0.165	0.23	0	0.18	0.065	21	0.006
5/18/2018 15:36				-0.02	0.165	0.23	0	0.178	0.065		0.006
5/18/2018 15:37				-0.021	0.166	0.23	0	0.176	0.065		0.006
5/18/2018 15:38				-0.02	0.172	0.23	0	0.174	0.066		0.006
5/18/2018 15:39				-0.02	0.18	0.23	0	0.172	0.066		0.006
5/18/2018 15:40	10.6	130.6	40.7529;-7	-0.02	0.165	0.23	0	0.172	0.066	9	0.007
5/18/2018 15:41				-0.018	0.165	0.23	0	0.171	0.067		0.007
5/18/2018 15:42				-0.02	0.169	0.23	0	0.17	0.067		0.007
5/18/2018 15:43				-0.02	0.171	0.23	0	0.169	0.067		0.007
5/18/2018 15:44				-0.02	0.173	0.23	0	0.168	0.068		0.007
5/18/2018 15:45	10.6	129.6	40.75292;-	-0.02	0.175	0.23	0	0.169	0.068	-2	0.007
5/18/2018 15:46				-0.02	0.176	0.23	0	0.169	0.068		0.007
5/18/2018 15:47				-0.02	0.17	0.23	0	0.169	0.069		0.007
5/18/2018 15:48				-0.02	0.175	0.23	0	0.169	0.069		0.007
5/18/2018 15:49				-0.021	0.175	0.23	0	0.169	0.07		0.007
5/18/2018 15:50	10.5	128.6	40.75288;-	-0.02	0.176	0.23	0	0.169	0.07	-2	0.007
5/18/2018 15:51				-0.021	0.179	0.23	0	0.17	0.07		0.007
5/18/2018 15:52				-0.021	0.179	0.23	0	0.17	0.071		0.007
5/18/2018 15:53				-0.02	0.182	0.23	0	0.171	0.071		0.007
5/18/2018 15:54				-0.022	0.186	0.23	0	0.172	0.071		0.007
5/18/2018 15:55	10.5	140.7	40.75287;-	-0.022	0.195	0.23	0	0.172	0.072	0	0.007
5/18/2018 15:56				-0.021	0.193	0.23	0	0.174	0.072		0.007
5/18/2018 15:57				-0.021	0.187	0.23	0	0.176	0.073		0.007
5/18/2018 15:58				-0.021	0.188	0.23	0	0.178	0.073		0.007
5/18/2018 15:59				-0.021	0.193	0.23	0	0.179	0.073		0.007
5/18/2018 16:00	10.4	142.7	40.75291;-	-0.021	0.191	0.23	0	0.18	0.074	2	0.007
5/18/2018 16:01				-0.017	0.145	0.23	0	0.181	0.074		0.007
5/18/2018 16:02				-0.019	0.16	0.23	0	0.181	0.074		0.007
5/18/2018 16:03				-0.02	0.175	0.23	0	0.179	0.075		0.007
5/18/2018 16:04				-0.021	0.187	0.23	0	0.179	0.075		0.007
5/18/2018 16:05	10.3	132.6	40.75291;-	-0.021	0.186	0.23	0	0.179	0.076	1	0.008
5/18/2018 16:06				-0.019	0.183	0.23	0	0.18	0.076		0.008
5/18/2018 16:07				-0.021	0.18	0.23	0	0.181	0.076		0.008
5/18/2018 16:08				-0.021	0.189	0.23	0	0.181	0.077		0.008
5/18/2018 16:09				-0.021	0.187	0.23	0	0.181	0.077		0.008
5/18/2018 16:10	10.3	128.6	40.75286;-	-0.021	0.186	0.23	0	0.182	0.077	-3	0.008
5/18/2018 16:11				-0.021	0.18	0.23	0	0.181	0.078		0.008
5/18/2018 16:12				-0.02	0.182	0.23	0	0.18	0.078		0.008
5/18/2018 16:13				-0.02	0.176	0.23	0	0.18	0.079		0.008
5/18/2018 16:14				-0.02	0.179	0.23	0	0.179	0.079		0.008
5/18/2018 16:15	10.2	128.6	40.75291;-	-0.021	0.181	0.23	0	0.178	0.079	-4	0.008
5/18/2018 16:16				-0.021	0.178	0.23	0	0.177	0.08		0.008

5/18/2018 16:17				-0.02	0.177	0.23	0	0.178	0.08		0.008
5/18/2018 16:18				-0.02	0.18	0.23	0	0.18	0.08		0.008
5/18/2018 16:19				-0.02	0.176	0.23	0	0.181	0.081		0.008
5/18/2018 16:20	10.2	127.5	40.75288;-	-0.019	0.171	0.23	0	0.181	0.081	-8	0.008
5/18/2018 16:21				-0.019	0.163	0.23	0	0.18	0.082		0.008
5/18/2018 16:22				-0.019	0.163	0.23	0	0.179	0.082		0.008
5/18/2018 16:23				-0.016	0.102	0.23	0	0.178	0.082		0.008
5/18/2018 16:24				-0.013	0.089	0.23	0	0.174	0.082		0.008
5/18/2018 16:25	10.1	128.6	40.75288;-	-0.018	0.107	0.23	0	0.167	0.083	6	0.008
5/18/2018 16:26				-0.02	0.123	0.23	0	0.162	0.083		0.008
5/18/2018 16:27				-0.02	0.122	0.23	0	0.158	0.083		0.008
5/18/2018 16:28				-0.02	0.133	0.23	0	0.154	0.083		0.008
5/18/2018 16:29				-0.02	0.139	0.23	0	0.15	0.084		0.008
5/18/2018 16:30	10.1	139.7	40.75291;-	-0.021	0.15	0.23	0	0.148	0.084	2	0.008
5/18/2018 16:31				-0.021	0.15	0.23	0	0.145	0.084		0.009
5/18/2018 16:32				-0.02	0.157	0.23	0	0.144	0.085		0.009
5/18/2018 16:33				-0.02	0.159	0.23	0	0.142	0.085		0.009
5/18/2018 16:34				-0.02	0.161	0.23	0	0.141	0.085		0.009
5/18/2018 16:35	10	147.8	40.75291;-	-0.021	0.163	0.23	0	0.139	0.086	-3	0.009
5/18/2018 16:36				-0.02	0.156	0.23	0	0.138	0.086		0.009
5/18/2018 16:37				-0.02	0.155	0.23	0	0.137	0.086		0.009
5/18/2018 16:38				-0.02	0.159	0.23	0	0.137	0.087		0.009
5/18/2018 16:39				-0.02	0.161	0.23	0	0.139	0.087		0.009
5/18/2018 16:40	10	132.6	40.75292;-	-0.02	0.159	0.23	0	0.144	0.087	-6	0.009
5/18/2018 16:41				-0.021	0.161	0.23	0	0.148	0.088		0.009
5/18/2018 16:42				-0.021	0.167	0.23	0	0.151	0.088		0.009
5/18/2018 16:43				-0.02	0.172	0.23	0	0.153	0.088		0.009
5/18/2018 16:44				-0.021	0.182	0.23	0	0.156	0.089		0.009
5/18/2018 16:45	10	129.6	40.75294;-	-0.021	0.179	0.23	0	0.159	0.089	-13	0.009
5/18/2018 16:46				-0.025	0.183	0.23	0	0.161	0.089		0.009
5/18/2018 16:47				-0.028	0.18	0.23	0	0.163	0.09		0.009
5/18/2018 16:48				-0.028	0.176	0.23	0	0.165	0.09		0.009
5/18/2018 16:49				-0.028	0.155	0.23	0	0.167	0.09		0.009
5/18/2018 16:50	10	181.2	40.75292;-	-0.028	0.166	0.23	0	0.167	0.091	-4	0.009
5/18/2018 16:51				-0.028	0.171	0.23	0	0.167	0.091		0.009
5/18/2018 16:52				-0.028	0.172	0.23	0	0.168	0.091		0.009
5/18/2018 16:53				-0.028	0.172	0.23	0	0.169	0.092		0.01
5/18/2018 16:54				-0.028	0.171	0.23	0	0.17	0.092		0.01
5/18/2018 16:55	9.9	188.3	40.7529;-7	-0.024	0.167	0.23	0	0.171	0.093	3	0.01
5/18/2018 16:56				-0.027	0.164	0.23	0	0.171	0.093		0.01
5/18/2018 16:57				-0.028	0.167	0.23	0	0.172	0.093		0.01
5/18/2018 16:58				-0.028	0.179	0.23	0	0.172	0.094		0.01
5/18/2018 16:59				-0.028	0.168	0.23	0	0.172	0.094		0.01
5/18/2018 17:00	9.9	195.4	40.75293;-	-0.027	0.171	0.23	0	0.172	0.094	-1	0.01
5/18/2018 17:01				-0.027	0.166	0.23	0	0.171	0.095		0.01
5/18/2018 17:02				-0.027	0.168	0.23	0	0.17	0.095		0.01

5/18/2018 17:03				-0.027	0.165	0.23	0	0.169	0.095		0.01
5/18/2018 17:04				-0.027	0.173	0.23	0	0.168	0.096		0.01
5/18/2018 17:05	9.9	190.3	40.75293;-	-0.027	0.177	0.23	0	0.168	0.096	-3	0.01
5/18/2018 17:06				-0.027	0.177	0.23	0	0.169	0.096		0.01
5/18/2018 17:07				-0.027	0.162	0.23	0	0.169	0.097		0.01
5/18/2018 17:08				-0.027	0.164	0.23	0	0.169	0.097		0.01
5/18/2018 17:09				-0.027	0.167	0.23	0	0.169	0.097		0.01
5/18/2018 17:10	9.9	190.3	40.7529;-7	-0.027	0.168	0.23	0	0.168	0.098	3	0.01
5/18/2018 17:11				-0.027	0.17	0.23	0	0.168	0.098		0.01
5/18/2018 17:12				-0.027	0.166	0.23	0	0.168	0.098		0.01
5/18/2018 17:13				-0.027	0.163	0.23	0	0.168	0.099		0.01
5/18/2018 17:14				-0.027	0.163	0.23	0	0.167	0.099		0.01
5/18/2018 17:15	9.8	184.2	40.75289;-	-0.027	0.155	0.23	0	0.167	0.1	4	0.01
5/18/2018 17:16				-0.027	0.16	0.23	0	0.166	0.1		0.01
5/18/2018 17:17				-0.027	0.152	0.23	0	0.165	0.1		0.01
5/18/2018 17:18				-0.027	0.157	0.23	0	0.164	0.1		0.01
5/18/2018 17:19				-0.027	0.154	0.23	0	0.164	0.101		0.01
5/18/2018 17:20	9.8	189.3	40.75286;-	-0.027	0.154	0.23	0	0.163	0.101	12	0.01
5/18/2018 17:21				-0.027	0.155	0.23	0	0.161	0.101		0.01
5/18/2018 17:22				-0.027	0.158	0.23	0	0.16	0.102		0.01
5/18/2018 17:23				-0.027	0.151	0.23	0	0.159	0.102		0.01
5/18/2018 17:24				-0.027	0.158	0.23	0	0.158	0.102		0.01
5/18/2018 17:25	9.8	190.3	40.75287;-	-0.027	0.152	0.23	0	0.157	0.103	14	0.01
5/18/2018 17:26				-0.027	0.159	0.23	0	0.157	0.103		0.01
5/18/2018 17:27				-0.027	0.159	0.23	0	0.156	0.103		0.01
5/18/2018 17:28				-0.027	0.159	0.23	0	0.155	0.104		0.01
5/18/2018 17:29				-0.027	0.15	0.23	0	0.155	0.104		0.01
5/18/2018 17:30	9.8	167	40.75284;-	-0.027	0.151	0.23	0	0.155	0.104	18	0.01
5/18/2018 17:31				-0.027	0.151	0.23	0	0.154	0.105		0.01
5/18/2018 17:32				-0.027	0.148	0.23	0	0.154	0.105		0.01
5/18/2018 17:33				-0.027	0.143	0.23	0	0.153	0.105		0.01
5/18/2018 17:34				-0.027	0.151	0.23	0	0.153	0.106		0.01
5/18/2018 17:35	9.7	189.3	40.75282;-	-0.027	0.16	0.23	0	0.152	0.106	22	0.01
5/18/2018 17:36				-0.027	0.159	0.23	0	0.153	0.106		0.01
5/18/2018 17:37				-0.027	0.168	0.23	0	0.153	0.107		0.01
5/18/2018 17:38				-0.027	0.156	0.23	0	0.153	0.107		0.01
5/18/2018 17:39				-0.027	0.166	0.23	0	0.154	0.107		0.01
5/18/2018 17:40	9.7	197.4	40.75283;-	-0.027	0.163	0.23	0	0.154	0.108	20	0.01
5/18/2018 17:41				-0.027	0.165	0.23	0	0.155	0.108		0.01
5/18/2018 17:42				-0.027	0.166	0.23	0	0.156	0.108		0.01
5/18/2018 17:43				-0.027	0.162	0.23	0	0.156	0.109		0.01
5/18/2018 17:44				-0.027	0.168	0.23	0	0.156	0.109		0.01
5/18/2018 17:45	9.6	198.4	40.75284;-	-0.027	0.172	0.23	0	0.157	0.109	19	0.01
5/18/2018 17:46				-0.027	0.161	0.23	0	0.158	0.11		0.01
5/18/2018 17:47				-0.027	0.159	0.23	0	0.159	0.11		0.01
5/18/2018 17:48				-0.027	0.16	0.23	0	0.16	0.11		0.01

5/18/2018 17:49				-0.027	0.161	0.23	0	0.161	0.111		0.01
5/18/2018 17:50	9.5	190.3	40.75285;-	-0.027	0.152	0.23	0	0.162	0.111	16	0.01
5/18/2018 17:51				-0.027	0.149	0.23	0	0.162	0.111		0.01
5/18/2018 17:52				-0.027	0.155	0.23	0	0.162	0.112		0.01
5/18/2018 17:53				-0.027	0.164	0.23	0	0.161	0.112		0.01
5/18/2018 17:54				-0.027	0.167	0.23	0	0.161	0.112		0.01
5/18/2018 17:55	9.5	190.3	40.75286;-	-0.027	0.159	0.23	0	0.161	0.113	9	0.01
5/18/2018 17:56				-0.027	0.162	0.23	0	0.161	0.113		0.01
5/18/2018 17:57				-0.027	0.167	0.23	0	0.161	0.113		0.01
5/18/2018 17:58				-0.027	0.161	0.23	0	0.161	0.114		0.01
5/18/2018 17:59				-0.027	0.169	0.23	0	0.161	0.114		0.01
5/18/2018 18:00	9.4	189.3	40.75288;-	-0.027	0.168	0.23	0	0.161	0.114	12	0.01
5/18/2018 18:01				-0.027	0.162	0.23	0	0.161	0.115		0.01
5/18/2018 18:02				-0.027	0.165	0.23	0	0.161	0.115		0.01
5/18/2018 18:03				-0.027	0.153	0.23	0	0.161	0.115		0.01
5/18/2018 18:04				-0.027	0.155	0.23	0	0.161	0.116		0.01
5/18/2018 18:05	9.3	192.3	40.75288;-	-0.027	0.163	0.23	0	0.16	0.116	12	0.01
5/18/2018 18:06				-0.027	0.155	0.23	0	0.16	0.116		0.01
5/18/2018 18:07				-0.027	0.161	0.23	0	0.161	0.117		0.01
5/18/2018 18:08				-0.027	0.142	0.23	0	0.162	0.117		0.01
5/18/2018 18:09				-0.027	0.142	0.23	0	0.161	0.117		0.01
5/18/2018 18:10	9.2	195.4	40.75286;-	-0.027	0.148	0.23	0	0.16	0.118	20	0.01
5/18/2018 18:11				-0.027							
5/23/2018 12:29	13.2	124.5									
5/23/2018 12:29			40.246001799999995;-74.57819810000001								
5/23/2018 12:30	13.2	92.1									
5/23/2018 12:35	13.1	127.5									
5/23/2018 12:40	13	112.4									
5/23/2018 12:45	13	111.3									
5/23/2018 12:50	13	122.5									

Attachment 8
Investigative Derived Waste and
Nassau County Sanitary Sewer Discharge Approval

EDWARD P. MANGANO
COUNTY EXECUTIVE

SHILA SHAH-GAVNOUDIAS, P.E.
COMMISSIONER

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
1194 PROSPECT AVENUE
WESTBURY, NEW YORK 11590-2723

October 11, 2017

Mr. Douglas Smolensky
EMAGIN, Inc.
20 Irving Drive
Woodbury, New York 11797

Re: Northrop Grumman Systems Corporation
Well Development Water – Bethpage
Approval for Discharge to Sanitary Sewer System

Dear Mr. Smolensky,

The Industrial Pretreatment Unit has reviewed the request made in your correspondence dated October 10, 2017, for approval to discharge approximately 40,000 gallons of groundwater to the Nassau County sewer system from the development of monitoring wells to be installed in Bethpage.

Conditional approval is granted through December 31, 2017, for a maximum discharge rate not to exceed 200 gpm, at the location stated in your correspondence, the Northrop Grumman Systems Corporation site in Bethpage.

Discharge volumes must be logged and a summary provided to the County. Additionally, effluent samples will be analyzed for volatile organic compounds (VOCs), using EPA Method 624, prior to each discharge from the tanks and the results provided to the County. Please note that discharged water must have a total volatile organics level not to exceed 1 part per million (ppm). All other pertinent conditions of the County's Sewer Ordinance, No. 266-1985, must also be adhered to. All reports and data are to be sent to the following address:

Nassau County Department of Public Works
Industrial Pretreatment Unit
1194 Prospect Avenue
Westbury, New York 11590-2723
Attention: Pasquale Assalone, P.E.

The County reserves the right to cancel this conditional approval at any time.

In accordance with Departmental requirements, a disposal fee of $250.00 is being assessed and will invoiced separately.

Should you have any questions or comments concerning the above, please contact me at (516) 571-6889.

Very truly yours,

Richard Cotugno
Superintendent of Sewage Plants
Unit Head, Environmental Operations

c: NCDPW - Pasquale Assalone

e-Hardcopy 2.0
Automated Report

Technical Report for

HSW Engineering

Long Island GW Sampling, Long Island, NY

1AS301101.063

SGS Accutest Job Number: JC56981

Sampling Date: 12/07/17

Report to:

RPoff@HSWEng.com
DSmolensky@Emagin-Inc.com

ATTN: Distribution3

Total number of pages in report: 25

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)

Sections: 1 2 3 4

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Sample Summary

HSW Engineering

Job No: JC56981

Long Island GW Sampling, Long Island, NY
Project No: 1AS301101.063

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC56981-1	12/07/17	14:20	CT	12/08/17	AQ	Water	TANK 254639
JC56981-2	12/07/17	15:00	CT	12/08/17	SO	Soil	ROLLOFFS SOIL SAMPLE

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: JC56981
Account: HSW Engineering
Project: Long Island GW Sampling, Long Island, NY
Collected: 12/07/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC56981-1	**TANK 254639**					
1,1-Dichloroethane [a]		0.94 J	1.0	0.32	ug/l	EPA 624
Toluene [a]		0.24 J	1.0	0.24	ug/l	EPA 624
Trichloroethene [a]		0.93 J	1.0	0.24	ug/l	EPA 624
JC56981-2	**ROLLOFFS SOIL SAMPLE**					
Total TIC, Volatile		282 J			ug/kg	
bis(2-Ethylhexyl)phthalate		112	89	10	ug/kg	SW846 8270D
Total TIC, Semi-Volatile		600 J			ug/kg	
Calcium		27.0	10		mg/l	SW846 6010C
Iron		0.51	0.50		mg/l	SW846 6010C
Manganese		0.22	0.075		mg/l	SW846 6010C
Zinc		0.15	0.10		mg/l	SW846 6010C

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	TANK 254639		
Lab Sample ID:	JC56981-1	**Date Sampled:**	12/07/17
Matrix:	AQ - Water	**Date Received:**	12/08/17
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	N266499.D	1	12/08/17 22:43	CSF	n/a	n/a	VN11229
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL/TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
107-02-8	Acrolein	ND	10	6.2	ug/l	
107-13-1	Acrylonitrile	ND	10	1.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.41	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.19	ug/l	
75-25-2	Bromoform	ND	1.0	0.44	ug/l	
74-83-9	Bromomethane	ND	1.0	0.74	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.9	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.59	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.63	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
98-82-8	Cumene	ND	1.0	0.24	ug/l	
110-82-7	Cyclohexane	ND	2.0	0.44	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.30	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.27	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.6	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.21	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.67	ug/l	
75-34-3	1,1-Dichloroethane	0.94	1.0	0.32	ug/l	J
107-06-2	1,2-Dichloroethane	ND	1.0	0.32	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.57	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	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	0.36	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.36	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:	TANK 254639		
Lab Sample ID:	JC56981-1	**Date Sampled:**	12/07/17
Matrix:	AQ - Water	**Date Received:**	12/08/17
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

VOA PPL/TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.59	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.9	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.8	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.55	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.0	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.31	ug/l	
100-42-5	Styrene	ND	2.0	0.45	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.82	ug/l	
108-88-3	Toluene	0.24	1.0	0.24	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.36	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.35	ug/l	
79-01-6	Trichloroethene	0.93	1.0	0.24	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.89	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.43	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	113%		76-122%
2037-26-5	Toluene-D8 (SUR)	97%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	102%		80-120%
1868-53-7	Dibromofluoromethane (S)	112%		80-120%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.

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:	ROLLOFFS SOIL SAMPLE		
Lab Sample ID:	JC56981-2	**Date Sampled:**	12/07/17
Matrix:	SO - Soil	**Date Received:**	12/08/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	73.6
Project:	Long Island GW Sampling, Long Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	I217517.D	1	12/12/17 16:50	PS	12/08/17 21:00	n/a	VI8737
Run #2							

	Initial Weight
Run #1	5.3 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	13	8.2	ug/kg	
71-43-2	Benzene	ND	0.64	0.14	ug/kg	
74-97-5	Bromochloromethane	ND	6.4	0.56	ug/kg	
75-27-4	Bromodichloromethane	ND	2.6	0.31	ug/kg	
75-25-2	Bromoform	ND	6.4	0.40	ug/kg	
74-83-9	Bromomethane	ND	6.4	0.90	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	6.7	ug/kg	
75-15-0	Carbon disulfide	ND	2.6	0.78	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.6	0.83	ug/kg	
108-90-7	Chlorobenzene	ND	2.6	0.37	ug/kg	
75-00-3	Chloroethane	ND	6.4	1.2	ug/kg	
67-66-3	Chloroform	ND	2.6	0.41	ug/kg	
74-87-3	Chloromethane [b]	ND	6.4	1.3	ug/kg	
110-82-7	Cyclohexane	ND	2.6	0.44	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.6	0.86	ug/kg	
124-48-1	Dibromochloromethane	ND	2.6	0.49	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.3	0.31	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.3	0.66	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.3	0.37	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.3	0.61	ug/kg	
75-71-8	Dichlorodifluoromethane [b]	ND	6.4	0.78	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.3	0.33	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.23	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.3	0.91	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.3	0.52	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.3	0.75	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.6	0.51	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.6	0.49	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.6	0.30	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.37	ug/kg	
76-13-1	Freon 113	ND	6.4	0.86	ug/kg	
591-78-6	2-Hexanone	ND	6.4	3.6	ug/kg	

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:	ROLLOFFS SOIL SAMPLE		
Lab Sample ID:	JC56981-2	**Date Sampled:**	12/07/17
Matrix:	SO - Soil	**Date Received:**	12/08/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	73.6
Project:	Long Island GW Sampling, Long Island, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.6	0.32	ug/kg	
79-20-9	Methyl Acetate	ND	6.4	3.2	ug/kg	
108-87-2	Methylcyclohexane	ND	2.6	0.70	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.55	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.4	2.3	ug/kg	
75-09-2	Methylene chloride	ND	6.4	3.2	ug/kg	
100-42-5	Styrene [b]	ND	2.6	0.64	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.6	0.33	ug/kg	
127-18-4	Tetrachloroethene	ND	2.6	0.82	ug/kg	
108-88-3	Toluene	ND	1.3	0.70	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	6.4	1.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.4	1.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.6	0.74	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.6	0.54	ug/kg	
79-01-6	Trichloroethene	ND	1.3	0.70	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.4	0.62	ug/kg	
75-01-4	Vinyl chloride	ND	2.6	0.98	ug/kg	
	m,p-Xylene	ND	1.3	0.70	ug/kg	
95-47-6	o-Xylene	ND	1.3	0.32	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.32	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		72-129%
17060-07-0	1,2-Dichloroethane-D4	100%		73-132%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	102%		77-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Naphthalene, decahydro-isomer	16.62	12	ug/kg	J
	unknown	16.81	12	ug/kg	J
	unknown	17.10	13	ug/kg	J
	unknown	17.19	14	ug/kg	J
89-82-7	Pulegone	17.24	30	ug/kg	JN
	Naphthalene, decahydro-methyl-isomer	17.45	23	ug/kg	J
	Naphthalene, decahydro-methyl-isomer	17.51	17	ug/kg	J
	alkane	17.57	22	ug/kg	J
	Naphthalene, decahydro-methyl-isomer	17.66	19	ug/kg	J
	unknown	17.78	14	ug/kg	J

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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:	ROLLOFFS SOIL SAMPLE		
Lab Sample ID:	JC56981-2	**Date Sampled:**	12/07/17
Matrix:	SO - Soil	**Date Received:**	12/08/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	73.6
Project:	Long Island GW Sampling, Long Island, NY		

VOA TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	17.92	28	ug/kg	J
	cycloalkane	18.15	12	ug/kg	J
	alkane	18.19	17	ug/kg	J
	alkane	18.40	35	ug/kg	J
	unknown	18.53	14	ug/kg	J
	Total TIC, Volatile		282	ug/kg	J

(a) Sample was not collected per 5035A specifications. Sample preserved from intact soil by laboratory.
(b) Associated CCV outside of control limits low.

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:	ROLLOFFS SOIL SAMPLE		
Lab Sample ID:	JC56981-2	**Date Sampled:**	12/07/17
Matrix:	SO - Soil	**Date Received:**	12/08/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	73.6
Project:	Long Island GW Sampling, Long Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2P75688.D	1	12/13/17 01:36	SB	12/11/17 10:00	OP8580	E2P3338
Run #2							

	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	89	22	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	220	27	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	220	38	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	220	79	ug/kg	
51-28-5	2,4-Dinitrophenol [a]	ND	220	170	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	220	47	ug/kg	
95-48-7	2-Methylphenol	ND	89	28	ug/kg	
	3&4-Methylphenol	ND	89	36	ug/kg	
88-75-5	2-Nitrophenol	ND	220	29	ug/kg	
100-02-7	4-Nitrophenol	ND	440	120	ug/kg	
87-86-5	Pentachlorophenol	ND	180	42	ug/kg	
108-95-2	Phenol	ND	89	23	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	220	29	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	220	33	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	220	26	ug/kg	
83-32-9	Acenaphthene	ND	44	15	ug/kg	
208-96-8	Acenaphthylene	ND	44	22	ug/kg	
98-86-2	Acetophenone	ND	220	9.5	ug/kg	
120-12-7	Anthracene	ND	44	27	ug/kg	
1912-24-9	Atrazine	ND	89	19	ug/kg	
56-55-3	Benzo(a)anthracene	ND	44	13	ug/kg	
50-32-8	Benzo(a)pyrene	ND	44	20	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	44	20	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	44	22	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	44	21	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	89	17	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	89	11	ug/kg	
92-52-4	1,1'-Biphenyl	ND	89	6.1	ug/kg	
100-52-7	Benzaldehyde [b]	ND	220	11	ug/kg	
91-58-7	2-Chloronaphthalene	ND	89	11	ug/kg	
106-47-8	4-Chloroaniline	ND	220	16	ug/kg	
86-74-8	Carbazole	ND	89	6.4	ug/kg	

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:	ROLLOFFS SOIL SAMPLE		
Lab Sample ID:	JC56981-2	**Date Sampled:**	12/07/17
Matrix:	SO - Soil	**Date Received:**	12/08/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	73.6
Project:	Long Island GW Sampling, Long Island, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	89	17	ug/kg	
218-01-9	Chrysene	ND	44	14	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	89	9.5	ug/kg	
111-44-4	bis(2-Chloroethyl)ether [b]	ND	89	19	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	89	16	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	89	14	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	44	14	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	44	22	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	89	37	ug/kg	
123-91-1	1,4-Dioxane [b]	ND	44	29	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	44	20	ug/kg	
132-64-9	Dibenzofuran	ND	89	18	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	89	7.2	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	89	11	ug/kg	
84-66-2	Diethyl phthalate	ND	89	9.4	ug/kg	
131-11-3	Dimethyl phthalate	ND	89	7.9	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	112	89	10	ug/kg	
206-44-0	Fluoranthene	ND	44	20	ug/kg	
86-73-7	Fluorene	ND	44	20	ug/kg	
118-74-1	Hexachlorobenzene	ND	89	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	44	18	ug/kg	
77-47-4	Hexachlorocyclopentadiene [a]	ND	440	18	ug/kg	
67-72-1	Hexachloroethane	ND	220	22	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	44	21	ug/kg	
78-59-1	Isophorone	ND	89	9.5	ug/kg	
91-57-6	2-Methylnaphthalene	ND	44	10	ug/kg	
88-74-4	2-Nitroaniline [b]	ND	220	10	ug/kg	
99-09-2	3-Nitroaniline	ND	220	11	ug/kg	
100-01-6	4-Nitroaniline	ND	220	11	ug/kg	
91-20-3	Naphthalene	ND	44	12	ug/kg	
98-95-3	Nitrobenzene [b]	ND	89	17	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine [b]	ND	89	13	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	220	16	ug/kg	
85-01-8	Phenanthrene	ND	44	15	ug/kg	
129-00-0	Pyrene	ND	44	14	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	220	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	54%		23-115%

ND = Not detected MDL = Method Detection Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ROLLOFFS SOIL SAMPLE		
Lab Sample ID:	JC56981-2	**Date Sampled:**	12/07/17
Matrix:	SO - Soil	**Date Received:**	12/08/17
Method:	SW846 8270D SW846 3546	**Percent Solids:**	73.6
Project:	Long Island GW Sampling, Long Island, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	68%		27-114%
118-79-6	2,4,6-Tribromophenol	58%		19-152%
4165-60-0	Nitrobenzene-d5	88%		26-134%
321-60-8	2-Fluorobiphenyl	69%		39-124%
1718-51-0	Terphenyl-d14	81%		36-134%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	1.97	1100	ug/kg	J
	system artifact	2.21	260	ug/kg	J
	system artifact	2.86	1100	ug/kg	J
	system artifact/aldol-condensation	3.29	6200	ug/kg	J
	alkane	6.11	210	ug/kg	J
	alkane	6.25	390	ug/kg	J
	Total TIC, Semi-Volatile		600	ug/kg	J

(a) Associated CCV outside of control limits low.
(b) 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:	ROLLOFFS SOIL SAMPLE		
Lab Sample ID:	JC56981-2	**Date Sampled:**	12/07/17
Matrix:	SO - Soil	**Date Received:**	12/08/17
Method:	SW846 8081B SW846 3546	**Percent Solids:**	73.6
Project:	Long Island GW Sampling, Long Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G53245.D	1	12/12/17 07:21	CP	12/11/17 10:15	OP8547	G6G1561
Run #2							

	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.85	0.70	ug/kg	
319-84-6	alpha-BHC	ND	0.85	0.69	ug/kg	
319-85-7	beta-BHC	ND	0.85	0.77	ug/kg	
319-86-8	delta-BHC	ND	0.85	0.82	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.85	0.63	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.85	0.69	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.85	0.39	ug/kg	
60-57-1	Dieldrin	ND	0.85	0.59	ug/kg	
72-54-8	4,4'-DDD	ND	0.85	0.78	ug/kg	
72-55-9	4,4'-DDE	ND	0.85	0.75	ug/kg	
50-29-3	4,4'-DDT	ND	0.85	0.76	ug/kg	
72-20-8	Endrin	ND	0.85	0.66	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.85	0.67	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.85	0.48	ug/kg	
959-98-8	Endosulfan-I	ND	0.85	0.49	ug/kg	
33213-65-9	Endosulfan-II	ND	0.85	0.53	ug/kg	
76-44-8	Heptachlor	ND	0.85	0.74	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.85	0.60	ug/kg	
72-43-5	Methoxychlor	ND	1.7	0.68	ug/kg	
53494-70-5	Endrin ketone	ND	0.85	0.62	ug/kg	
8001-35-2	Toxaphene	ND	21	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%		25-135%
877-09-8	Tetrachloro-m-xylene	76%		25-135%
2051-24-3	Decachlorobiphenyl	84%		10-156%
2051-24-3	Decachlorobiphenyl	73%		10-156%

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:	ROLLOFFS SOIL SAMPLE		
Lab Sample ID:	JC56981-2	**Date Sampled:**	12/07/17
Matrix:	SO - Soil	**Date Received:**	12/08/17
Method:	SW846 8082A SW846 3546	**Percent Solids:**	73.6
Project:	Long Island GW Sampling, Long Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G157409.D	1	12/11/17 13:30	MH	12/09/17 08:00	OP8530	G2G4207
Run #2							

	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	43	17	ug/kg	
11104-28-2	Aroclor 1221	ND	43	17	ug/kg	
11141-16-5	Aroclor 1232	ND	43	11	ug/kg	
53469-21-9	Aroclor 1242	ND	43	6.8	ug/kg	
12672-29-6	Aroclor 1248	ND	43	25	ug/kg	
11097-69-1	Aroclor 1254	ND	43	11	ug/kg	
11096-82-5	Aroclor 1260	ND	43	14	ug/kg	
11100-14-4	Aroclor 1268	ND	43	6.4	ug/kg	
37324-23-5	Aroclor 1262	ND	43	3.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	104%		24-152%
877-09-8	Tetrachloro-m-xylene	97%		24-152%
2051-24-3	Decachlorobiphenyl	85%		10-166%
2051-24-3	Decachlorobiphenyl	70%		10-166%

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: ROLLOFFS SOIL SAMPLE
Lab Sample ID: JC56981-2
Matrix: SO - Soil
Project: Long Island GW Sampling, Long Island, NY

Date Sampled: 12/07/17
Date Received: 12/08/17
Percent Solids: 73.6

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 1.0			1.0	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Antimony	< 0.50			0.50	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Arsenic	< 1.0	D004	5.0	1.0	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Barium	< 1.0	D005	100	1.0	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Beryllium	< 0.025			0.025	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Cadmium	< 0.025	D006	1.0	0.025	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Calcium	27.0			10	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Chromium	< 0.050	D007	5.0	0.050	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Cobalt	< 0.25			0.25	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Copper	< 0.50			0.50	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Iron	0.51			0.50	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Lead	< 0.50	D008	5.0	0.50	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Magnesium	< 10			10	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Manganese	0.22			0.075	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Mercury	< 0.00020	D009	0.20	0.00020	mg/l	1	12/12/17	12/12/17	JA	SW846 7470A [1]	SW846 7470A [3]
Nickel	< 0.050			0.050	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Potassium	< 10			10	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Selenium	< 0.50	D010	1.0	0.50	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Silver	< 0.050	D011	5.0	0.050	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Thallium	< 0.50			0.50	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Vanadium	< 0.25			0.25	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]
Zinc	0.15			0.10	mg/l	5	12/12/17	12/13/17	ND	SW846 6010C [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA43378
(2) Instrument QC Batch: MA43386
(3) Prep QC Batch: MP4702
(4) Prep QC Batch: MP4707

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 7/1/11)

Report of Analysis

Client Sample ID:	ROLLOFFS SOIL SAMPLE		
Lab Sample ID:	JC56981-2	**Date Sampled:**	12/07/17
Matrix:	SO - Soil	**Date Received:**	12/08/17
		Percent Solids:	73.6
Project:	Long Island GW Sampling, Long Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Paint Filter Test [a]	< 0.50	0.50	ml/100g	1	12/12/17 11:00	RI	SW846 9095/9095B
Solids, Percent	73.6		%	1	12/11/17 11:00	PN	SM2540 G-97

(a) Free liquid present.

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 (WW) (SLL)

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

FED-EX Tracking #: | Bottle Order Control #: JC56981
SGS Accutest Quote #: | SGS Accutest Job #:

Client / Reporting Information

Company Name: EMAGIN
Street Address: 15711 Mapledale Blvd Suite B
City: Tampa State: FL Zip: 33624
Project Contact: Rich Poff rpoff@emagin.com
Phone #: 813-968-7722 Fax #:
Sampler(s) Name(s): Chad Thompsen 321-947-5448

Project Information

Project Name: Long Island GW Sampling
Street:
City: Long Island State: NY
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

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	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Using EPA Method 624 VOCs	V8260 TCLP	B8270 TCLP	P8081 TCLP	H8151 TCLP	TCLP M	P8082 PCB11	RCRA CLAS	TAL Metals	LAB USE ONLY
*1 1	Tank 254639	—	12-07-17	1420	CMT	W	3	X								X									C6
*2 2	Rollotts Soil Sample	—	12-07-17	1500	↓	SO	4					X			X		X	X	X	X	X	X	X	X	HSTI H3TY V420 14H4 49101

INITIAL ASSESSMENT 3A 12/8
LABEL VERIFICATION

Turnaround Time (Business days)

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

Approved By (SGS Accutest PM): / Date:

*1 Tammy McCloskey (SGS) 732-329-0200 EXT 1218

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULL T1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] 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

*2 TAL metals are being run and TCLP metals are contigent Contact Project Manager. (SGS)
Soil analysis TAT per Rich Poff email to Tammy McCloskey
Sample inventory is verified upon receipt in the Laboratory 12/8/17

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	12-08-17 (1105)	1	2	12-8-17 (1850)	2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by:	Date Time:	Received By:	Custody Seals: [ ] Intact [ ] Not Intact	Preserved where applicable: [ ]	On Ice: 4 Cooler Temp: 2.6 BP
5		5			

2x d5g encore

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

SGS Accutest Sample Receipt Summary

Job Number: JC56981 **Client:** EMAGIN **Project:** Long Island GW Sampling

Date / Time Received: 12/8/2017 6:52:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (2.6);

Cooler Temps (Corrected) °C: Cooler 1: (3.5);

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:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 216017 pH 12+: 208717 Other: (Specify)

Comments -2 Per email from PM, analysis on COC is incorrect. Analysis needed is
VOV8260TCL20+
SVOCAB8270TCL20+
Pest/PCBXPPTCL11
Paint Filter
TCLP TAL Metals

VOA Lab to LL prep for 8260 from intact volume.

SM089-02
Rev. Date 12/1/16

Responded to by: Tammy McCloskey

Response Date: 12/11/17

Proceed as noted

JC56981: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

HSW Engineering

Job No: JC56981

Long Island GW Sampling, Long Island, NY
Project No: 1AS301101.063

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC56981-1	Collected: 07-DEC-17 14:20 By: CT		Received: 08-DEC-17		By: AS	
TANK 254639						
JC56981-1	EPA 624	08-DEC-17 22:43	CSF			V624PPTCL20
JC56981-2	Collected: 07-DEC-17 15:00 By: CT		Received: 08-DEC-17		By: AS	
ROLLOFFS SOIL SAMPLE						
JC56981-2	SM2540 G-97	11-DEC-17 11:00	PN			SOL104
JC56981-2	SW846 8082A	11-DEC-17 13:30	MH	09-DEC-17	CC	P8082PCB11AO
JC56981-2	SW846 8081B	12-DEC-17 07:21	CP	11-DEC-17	MA	P8081PESTTCL
JC56981-2	SW846 9095/9095B	12-DEC-17 11:00	RI			PNTFIL
JC56981-2	SW846 7470A	12-DEC-17 13:21	JA	12-DEC-17	JPM	EHG
JC56981-2	SW846 8260C	12-DEC-17 16:50	PS			V8260TCL20+
JC56981-2	SW846 8270D	13-DEC-17 01:36	SB	11-DEC-17	FN	AB8270TCL20+
JC56981-2	SW846 6010C	13-DEC-17 14:02	ND	12-DEC-17	BP	EAG,EAL,EAS,EBA,EBE,ECA, ECD,ECO,ECR,ECU,EFE,EK,EMG, EMN,ENI,EPB,ESB,ESE,ETL, EVA,EZN

SGS Accutest Internal Chain of Custody

Job Number: JC56981
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY
Received: 12/08/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC56981-1.1	Secured Storage	Payal Rana	12/08/17 20:35	Retrieve from Storage
JC56981-1.1	Payal Rana	GCMSN	12/08/17 20:36	Load on Instrument
JC56981-1.1	GCMSN	Chelsea San Filippo	12/11/17 11:52	Unload from Instrument
JC56981-1.1	Chelsea San Filippo	Secured Storage	12/11/17 11:52	Return to Storage
JC56981-2.1	Secured Storage	Jennifer Voitovitch	12/08/17 23:48	Retrieve from Storage
JC56981-2.1	Jennifer Voitovitch	Secured Staging Area	12/08/17 23:48	Return to Storage
JC56981-2.1	Secured Staging Area	Sauvelson Auguste	12/09/17 06:25	Retrieve from Storage
JC56981-2.1	Sauvelson Auguste	Secured Storage	12/09/17 10:08	Return to Storage
JC56981-2.1	Secured Storage	Sahara Feliciano	12/10/17 09:56	Retrieve from Storage
JC56981-2.1	Sahara Feliciano	Secured Staging Area	12/10/17 09:56	Return to Storage
JC56981-2.1	Secured Staging Area	Jessica Adametz	12/10/17 14:22	Retrieve from Storage
JC56981-2.1	Jessica Adametz	Secured Storage	12/10/17 14:59	Return to Storage
JC56981-2.1	Secured Storage	Sahara Feliciano	12/10/17 15:36	Retrieve from Storage
JC56981-2.1	Sahara Feliciano	Secured Staging Area	12/10/17 15:36	Return to Storage
JC56981-2.1	Secured Staging Area	Sauvelson Auguste	12/11/17 04:43	Retrieve from Storage
JC56981-2.1	Sauvelson Auguste	Meilly Arbelo	12/11/17 08:22	Custody Transfer
JC56981-2.1	Secured Storage	Dwayne Johnson	12/11/17 13:15	Retrieve from Storage
Analyst unavailable for custody transfer.				
JC56981-2.1	Dwayne Johnson	Secured Staging Area	12/11/17 13:15	Return to Storage
JC56981-2.1	Secured Staging Area	Minhaj Hashmi	12/11/17 14:06	Retrieve from Storage
JC56981-2.1	Minhaj Hashmi	Secured Storage	12/11/17 14:29	Return to Storage
JC56981-2.1	Secured Storage	Jennifer Voitovitch	12/11/17 21:23	Retrieve from Storage
JC56981-2.1	Jennifer Voitovitch	Secured Staging Area	12/11/17 21:23	Return to Storage
JC56981-2.1	Secured Staging Area	James Patrick McIlvaine	12/12/17 08:28	Retrieve from Storage
JC56981-2.1	James Patrick McIlvaine	Secured Storage	12/12/17 16:41	Return to Storage
JC56981-2.1.1	Sauvelson Auguste	Organics Prep	12/09/17 06:29	Extract from JC56981-2.1
JC56981-2.1.1	Organics Prep	Sauvelson Auguste	12/09/17 14:34	Extract from JC56981-2.1
JC56981-2.1.1	Sauvelson Auguste	Extract Storage	12/09/17 14:34	Return to Storage
JC56981-2.1.1	Extract Storage	Michael Harris	12/11/17 11:03	Retrieve from Storage
JC56981-2.1.1	Michael Harris	GC2G	12/11/17 11:03	Load on Instrument
JC56981-2.1.2	Sauvelson Auguste	Organics Prep	12/11/17 04:50	Extract from JC56981-2.1
JC56981-2.1.2	Organics Prep	Finley Nyaata	12/11/17 15:27	Extract from JC56981-2.1
JC56981-2.1.2	Finley Nyaata	Extract Storage	12/11/17 15:27	Return to Storage
JC56981-2.1.2	Extract Storage	Kristi Schollenberger	12/12/17 12:46	Retrieve from Storage
JC56981-2.1.2	Kristi Schollenberger	GCMS2P	12/12/17 12:46	Load on Instrument
JC56981-2.1.2	GCMS2P	Kristi Schollenberger	12/13/17 12:34	Unload from Instrument
JC56981-2.1.2	Kristi Schollenberger	Extract Freezer	12/13/17 12:34	Return to Storage
JC56981-2.1.3	Meilly Arbelo	Organics Prep	12/11/17 08:25	Extract from JC56981-2.1
JC56981-2.1.3	Organics Prep	Meilly Arbelo	12/11/17 17:09	Extract from JC56981-2.1
JC56981-2.1.3	Meilly Arbelo	Extract Storage	12/11/17 17:09	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC56981
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY
Received: 12/08/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC56981-2.1.3	Extract Storage	Christine Phillips	12/12/17 05:19	Retrieve from Storage
JC56981-2.1.3	Christine Phillips	GC6G	12/12/17 05:19	Load on Instrument
JC56981-2.1.4	Minhaj Hashmi	TCLP	12/11/17 14:28	Leachate from JC56981-2.1
JC56981-2.2	Secured Storage	Sahara Feliciano	12/09/17 08:07	Retrieve from Storage
JC56981-2.2	Sahara Feliciano	Secured Staging Area	12/09/17 08:07	Return to Storage
JC56981-2.2	Secured Staging Area	Bhooma Patel	12/09/17 10:00	Retrieve from Storage
JC56981-2.2	Bhooma Patel	Secured Storage	12/09/17 10:08	Return to Storage
JC56981-2.2	Secured Storage	Sahara Feliciano	12/10/17 15:18	Retrieve from Storage
JC56981-2.2	Sahara Feliciano	Secured Staging Area	12/10/17 15:18	Return to Storage
JC56981-2.2	Secured Staging Area	Priti Nayak	12/11/17 07:43	Retrieve from Storage
JC56981-2.2	Priti Nayak	Secured Storage	12/11/17 08:53	Return to Storage
JC56981-2.2	Secured Storage	Martin Serwatka	12/11/17 13:16	Retrieve from Storage
JC56981-2.2	Secured Storage	Jennifer Voitovitch	12/11/17 21:56	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC56981-2.2	Jennifer Voitovitch	Secured Staging Area	12/11/17 21:56	Return to Storage
JC56981-2.2	Secured Staging Area	Rie Iwasaki	12/12/17 08:18	Retrieve from Storage
JC56981-2.2	Rie Iwasaki	Secured Storage	12/12/17 16:49	Return to Storage
JC56981-2.2.1	Bhooma Patel	Metals Digestion	12/09/17 10:06	Digestate from JC56981-2.2
JC56981-2.2.1	Metals Digestion	Bhooma Patel	12/09/17 10:07	Digestate from JC56981-2.2
JC56981-2.2.1	Bhooma Patel	Metals Digestate Storage	12/09/17 10:07	Return to Storage
JC56981-2.3	Secured Storage	Joshua Reitan	12/08/17 21:21	Retrieve from Storage
JC56981-2.3	Joshua Reitan	Secured Storage	12/08/17 21:21	Return to Storage
JC56981-2.3	Secured Storage	Dwayne Johnson	12/11/17 13:15	Retrieve from Storage
JC56981-2.3	Dwayne Johnson	Secured Staging Area	12/11/17 13:15	Return to Storage
JC56981-2.3	Secured Staging Area	Minhaj Hashmi	12/11/17 14:06	Retrieve from Storage
JC56981-2.3	Minhaj Hashmi	Secured Storage	12/11/17 14:29	Return to Storage
JC56981-2.3.1	Minhaj Hashmi	TCLP	12/11/17 14:28	Leachate from JC56981-2.3
JC56981-2.3.1	TCLP	Brian Miller	12/12/17 06:32	Leachate from JC56981-2.3
JC56981-2.3.1	Brian Miller	Secured Storage	12/12/17 06:32	Return to Storage
JC56981-2.3.2	TCLP	Brian Miller	12/12/17 06:32	Leachate from JC56981-2.3
JC56981-2.3.2	Brian Miller	Secured Storage	12/12/17 06:32	Return to Storage
JC56981-2.4	Secured Storage	Jennifer Voitovitch	12/08/17 23:58	Retrieve from Storage
JC56981-2.4	Jennifer Voitovitch	Secured Staging Area	12/08/17 23:59	Return to Storage
JC56981-2.4	Secured Staging Area	Minhaj Hashmi	12/09/17 10:23	Retrieve from Storage
JC56981-2.4	Minhaj Hashmi	Secured Storage	12/09/17 15:31	Return to Storage
JC56981-2.4	Secured Storage	Dwayne Johnson	12/11/17 13:15	Retrieve from Storage
JC56981-2.4	Dwayne Johnson	Secured Staging Area	12/11/17 13:15	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC56981
Account: HSWFLTAM HSW Engineering
Project: Long Island GW Sampling, Long Island, NY
Received: 12/08/17

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC56981-2.4	Secured Staging Area	Minhaj Hashmi	12/11/17 14:06	Retrieve from Storage
JC56981-2.4	Minhaj Hashmi	Secured Storage	12/11/17 14:29	Return to Storage
JC56981-2.4.1	Minhaj Hashmi	TCLP	12/09/17 14:28	Leachate from JC56981-2.4
JC56981-2.4.1	TCLP	Brian Miller	12/12/17 10:17	Leachate from JC56981-2.4
JC56981-2.4.1	Brian Miller	Secured Storage	12/12/17 10:17	Return to Storage
JC56981-2.4.1	Secured Storage	Bhooma Patel	12/12/17 11:52	Retrieve from Storage
JC56981-2.4.1	Bhooma Patel	Secured Storage	12/12/17 11:55	Return to Storage
JC56981-2.4.2	Minhaj Hashmi	TCLP	12/11/17 14:28	Leachate from JC56981-2.4
JC56981-2.4.2	TCLP	Brian Miller	12/12/17 10:17	Leachate from JC56981-2.4
JC56981-2.4.2	Brian Miller	Secured Storage	12/12/17 10:17	Return to Storage
JC56981-2.4.3	Bhooma Patel	Metals Digestion	12/12/17 11:54	Digestate from JC56981-2.4.1
JC56981-2.4.3	Metals Digestion	Bhooma Patel	12/12/17 11:55	Digestate from JC56981-2.4.1
JC56981-2.4.3	Bhooma Patel	Metals Digestate Storage	12/12/17 11:55	Return to Storage
JC56981-2.5	Secured Storage	Dwayne Johnson	12/11/17 13:15	Retrieve from Storage
JC56981-2.5	Dwayne Johnson	Secured Staging Area	12/11/17 13:15	Return to Storage
JC56981-2.5	Secured Staging Area	Minhaj Hashmi	12/11/17 14:06	Retrieve from Storage
JC56981-2.5	Minhaj Hashmi	Secured Storage	12/11/17 14:29	Return to Storage
JC56981-2.5.1	Minhaj Hashmi	TCLP	12/11/17 14:28	Leachate from JC56981-2.5
JC56981-2.6	Secured Storage	Joshua Reitan	12/08/17 21:21	Retrieve from Storage
JC56981-2.6	Joshua Reitan	Secured Storage	12/08/17 21:21	Return to Storage
JC56981-2.7	Secured Storage	Joshua Reitan	12/08/17 21:21	Retrieve from Storage
JC56981-2.7	Joshua Reitan	Secured Storage	12/08/17 21:21	Return to Storage
JC56981-2.7	Secured Storage	Prashant Shukla	12/12/17 14:22	Retrieve from Storage
JC56981-2.7	Prashant Shukla	GCMSI	12/12/17 14:22	Load on Instrument
JC56981-2.7	GCMSI	Prashant Shukla	12/13/17 09:36	Unload from Instrument
JC56981-2.7	Prashant Shukla		12/13/17 09:37	Depleted
JC56981-2.8	Secured Storage	Joshua Reitan	12/08/17 21:21	Retrieve from Storage
JC56981-2.8	Joshua Reitan	Secured Storage	12/08/17 21:21	Return to Storage

March 13, 2018

Mr. Richard Cotugno
Nassau County Department of Public Works
1194 Prospect Avenue
Westbury, NY 11590-2723

Re: Well Development Water Discharge, Northrop Grumman Systems Corporation, Bethpage, NY

Dear Mr. Cotugno:

Environmental Management & Global Innovations, Inc. (EMAGIN), on behalf of Northrop Grumman Systems Corporation, is submitting this letter report regarding the discharge of well development water to the Nassau County Sewer System. The discharge was conducted in accordance with the requirements described in your October 11, 2017 discharge approval letter.

The original request for approval to discharge to the County Sanitary Sewer System (October 10, 2017), stated that development water from four newly installed monitoring wells (up to 40,000 gallons) would be discharged at an agreed upon access location. The approval granted access through December 31, 2017. During October and November 2017, two of the four wells were installed and developed. Approximately 6,000 gallons of development water was temporarily stored in a 10,000-gallon holding tank at the access location prior to the actual discharge. Water quality samples were collected from the holding tank and then analyzed for volatile organic compounds (VOCs), using EPA Method 624; the analytical results are attached. Once confirmed that total VOCs did not exceed 1 part per million (ppm), the discharge was scheduled.

On December 11, 2017, SGS North America, Inc. (the drilling contractor), overseen by an EMAGIN field representative, discharged the contents of the holding tank at the sewer access. The 6,000 gallons in the tank were steadily pumped over a period of 4 hours and 20 minutes, yielding an average discharge rate of 23 gallons per minute.

As noted above, only two of the planned four wells were installed last fall. Due to colder weather, holiday schedules, and requests by local residents, installation of the remaining two wells was postponed until mid-April 2018. With this revised schedule in mind, EMAGIN requests that the discharge approval be reopened and extended through June 2018 to allow the discharge of development water from the two wells included in the original approval but yet to be installed. All conditions and requirements adhered to in December 2017 will be followed.

Should you have any questions, please call me at (516) 224-4009 or email at dsmolensky@emagin-inc.com. Please direct all correspondence to me at the following address:

Doug Smolensky
EMAGIN, Inc.
20 Irving Drive

Woodbury, NY 11797

Sincerely,
EMAGIN, Inc.

Douglas A. Smolensky
Principal Hydrogeologist

Attachment
Laboratory Report

cc: Pat Assalone, NCDPW
Joel Balmat, EMAGIN
Fred Weber, Northrop Grumman Systems Corporation

LAURA CURRAN
COUNTY EXECUTIVE

KENNETH G. ARNOLD, P.E.
COMMISSIONER

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
1194 PROSPECT AVENUE
WESTBURY, NEW YORK 11590-2723

March 15, 2018

Mr. Douglas Smolensky
EMAGIN, Inc.
20 Irving Drive
Woodbury, New York 11797

Re: Northrop Grumman Systems Corporation
Well Development Water – Bethpage
Approval for Discharge to Sanitary Sewer System

Dear Mr. Smolensky,

The Industrial Pretreatment Unit has reviewed the request made in your correspondence dated March 13, 2018, for an extension of the previous approval (through December 31, 2017) to discharge groundwater to the Nassau County sewer system from the development of monitoring wells installed in Bethpage because of exigencies that hampered the completion of the work.

Conditional approval is granted through June 30, 2018, noting that the conditions stated in the previous approval correspondence (dated October 11, 2017) are still applicable.

The County reserves the right to cancel this conditional approval at any time.

Should you have any questions or comments concerning the above, please contact me at (516) 571-6889.

Very truly yours,

Richard Cotugno

Richard Cotugno
Superintendent of Sewage Plants
Unit Head, Environmental Operations

c: NCDPW - Pasquale Assalone

Sample Summary

HSW Engineering

Job No: JC66591

Long Island GW Sampling, Long Island, NY
Project No: 1AS301101.063

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC66591-1	05/22/18	10:00	CMT	05/22/18	AQ	Ground Water	TANK 251598

Report of Analysis

Client Sample ID:	TANK 251598		
Lab Sample ID:	JC66591-1	**Date Sampled:**	05/22/18
Matrix:	AQ - Ground Water	**Date Received:**	05/22/18
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	T231446.D	1	05/24/18 12:15	CSF	n/a	n/a	VT9520
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL/TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.5	ug/l	
107-02-8	Acrolein	ND	10	6.2	ug/l	
107-13-1	Acrylonitrile	ND	10	1.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.41	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.19	ug/l	
75-25-2	Bromoform	ND	1.0	0.44	ug/l	
74-83-9	Bromomethane	ND	1.0	0.74	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.9	ug/l	
75-15-0	Carbon disulfide [b]	ND	1.0	0.59	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.63	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
98-82-8	Cumene	ND	1.0	0.24	ug/l	
110-82-7	Cyclohexane	ND	2.0	0.44	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.30	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.27	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.6	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.21	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane [c]	ND	2.0	0.67	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.32	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.32	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.57	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	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	0.36	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.36	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:	TANK 251598		
Lab Sample ID:	JC66591-1	**Date Sampled:**	05/22/18
Matrix:	AQ - Ground Water	**Date Received:**	05/22/18
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Long Island GW Sampling, Long Island, NY		

VOA PPL/TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.59	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.9	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.8	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.55	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.0	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.31	ug/l	
100-42-5	Styrene	ND	2.0	0.45	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.82	ug/l	
108-88-3	Toluene	ND	1.0	0.24	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.36	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.35	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.89	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
	m,p-Xylene	ND	1.0	0.43	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	102%		76-122%
2037-26-5	Toluene-D8 (SUR)	104%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	99%		80-120%
1868-53-7	Dibromofluoromethane (S)	102%		80-120%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) This compound in BS is outside in house QC limits bias high.
(c) 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

SGS

GW

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX 732-329-3499
www.sgs.com/ehsusa

FED-EX Tracking #:
SGS Quote #:
Bottle Order Control #: PD - 051613-61
SGS Job #: JC66591

Client / Reporting Information

Company Name: EMAGIN
Street Address: 15711 Manlecale Blvd Suite B
City: Tampa State: FL Zip: 33624
Project Contact: Rich Poff E-mail: rpoff@hswmgt.com; Doug Smensky: dsmolosky@emagin-inc.com
Phone #: 813-968-7722 Fax #:
Sampler(s) Name(s): Chad Thompson Phone #: 321-947-5448

Project Information

Project Name: Long Island Sampling
Street:
City: Long Island State: NY
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

VOCs by EPA Method 624

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

Lab 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	LAB USE ONLY
1	Tank 251598	-	05.22.18	1000	CMT	GW	3	X								V518

Turnaround Time (Business days)

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

Emergency & Rush T/A data available via LabLink

Approved by (SGS Project Manager)/Date: *

Tammy McMaster (SGS) 732-329-0200 Ext. 1218

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
- [ ] 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

Contact Rich Poff (EMAGIN) with any questions: 904-614-3889
Contact for Turn-around Time *

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: 05-22-18 1140	Received By: 1 Chris Lau
Relinquished by: 2 Chris Lau	Date Time: 5/22/18 16:40	Received By: 2
Relinquished by: 3	Date Time:	Received By: 3
Relinquished by: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5

Custody Seal # 0729260 Intact Not Intact Preserved where applicable On Ice Cooler Temp. 2.2 °C IR

INITIAL ASESSMENT JA Dm

LABEL VERIFICATION

Form:SM088-03C (revised 2/12/18)

http://www.sgs.com/en/terms-and-conditions.

SGS Sample Receipt Summary

Job Number: JC66591 **Client:** HSW ENGINEERING **Project:** LONG ISLAND GW SAMPLING, LONG ISLAND,

Date / Time Received: 5/22/2018 4:40:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (2.2);

Cooler Temps (Corrected) °C: Cooler 1: (2.2);

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:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 216017 pH 12+: 208717 Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JC66591: Chain of Custody
Page 2 of 2

Sample Summary

HSW Engineering

Job No: JC66357

Long Island GW Sampling, Long Island, NY
Project No: 1AS301101.063

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC66357-1	05/17/18	11:50	CMT	05/17/18	SO	Soil	ROLLOFF SOIL SAMPLE
JC66357-1A	05/17/18	11:50	CMT	05/17/18	SO	Soil	ROLLOFF SOIL SAMPLE

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Client Sample ID: ROLLOFF SOIL SAMPLE
Lab Sample ID: JC66357-1
Matrix: SO - Soil
Method: SW846 8260C SW846 5035
Project: Long Island GW Sampling, Long Island, NY

Date Sampled: 05/17/18
Date Received: 05/17/18
Percent Solids: 79.8

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1C156879.D	1	05/19/18 14:55	PS	05/18/18 08:00	n/a	V1C6920
Run #2							

	Initial Weight
Run #1	4.4 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	14	9.1	ug/kg	
71-43-2	Benzene	ND	0.71	0.15	ug/kg	
74-97-5	Bromochloromethane	ND	7.1	0.62	ug/kg	
75-27-4	Bromodichloromethane	ND	2.8	0.35	ug/kg	
75-25-2	Bromoform	ND	7.1	0.44	ug/kg	
74-83-9	Bromomethane	ND	7.1	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	14	7.4	ug/kg	
75-15-0	Carbon disulfide	ND	2.8	0.87	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.8	0.92	ug/kg	
108-90-7	Chlorobenzene	ND	2.8	0.41	ug/kg	
75-00-3	Chloroethane	ND	7.1	1.3	ug/kg	
67-66-3	Chloroform	ND	2.8	0.46	ug/kg	
74-87-3	Chloromethane	ND	7.1	1.4	ug/kg	
110-82-7	Cyclohexane	ND	2.8	0.49	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.8	0.96	ug/kg	
124-48-1	Dibromochloromethane	ND	2.8	0.54	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.4	0.35	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.4	0.73	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.4	0.41	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.4	0.68	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	7.1	0.87	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.4	0.37	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.4	0.26	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.4	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.4	0.57	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.4	0.83	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.8	0.57	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.8	0.55	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.8	0.34	ug/kg	
100-41-4	Ethylbenzene	ND	1.4	0.41	ug/kg	
76-13-1	Freon 113	ND	7.1	0.96	ug/kg	
591-78-6	2-Hexanone	ND	7.1	4.0	ug/kg	

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:	ROLLOFF SOIL SAMPLE		
Lab Sample ID:	JC66357-1	**Date Sampled:**	05/17/18
Matrix:	SO - Soil	**Date Received:**	05/17/18
Method:	SW846 8260C SW846 5035	**Percent Solids:**	79.8
Project:	Long Island GW Sampling, Long Island, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.8	0.35	ug/kg	
79-20-9	Methyl Acetate	ND	7.1	3.6	ug/kg	
108-87-2	Methylcyclohexane	ND	2.8	0.78	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.4	0.61	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	7.1	2.6	ug/kg	
75-09-2	Methylene chloride	ND	7.1	3.6	ug/kg	
100-42-5	Styrene	ND	2.8	0.71	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.8	0.36	ug/kg	
127-18-4	Tetrachloroethene	ND	2.8	0.91	ug/kg	
108-88-3	Toluene	ND	1.4	0.78	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	7.1	1.4	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	7.1	1.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.8	0.83	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.8	0.60	ug/kg	
79-01-6	Trichloroethene	ND	1.4	0.78	ug/kg	
75-69-4	Trichlorofluoromethane	ND	7.1	0.68	ug/kg	
75-01-4	Vinyl chloride	ND	2.8	1.1	ug/kg	
	m,p-Xylene	ND	1.4	0.78	ug/kg	
95-47-6	o-Xylene	ND	1.4	0.36	ug/kg	
1330-20-7	Xylene (total)	ND	1.4	0.36	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		75-127%
17060-07-0	1,2-Dichloroethane-D4	103%		75-130%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	97%		79-127%

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: ROLLOFF SOIL SAMPLE
Lab Sample ID: JC66357-1
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Long Island GW Sampling, Long Island, NY

Date Sampled: 05/17/18
Date Received: 05/17/18
Percent Solids: 79.8

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2M104235.D	1	05/21/18 18:23	JB	05/21/18 08:45	OP12121	E2M4633
Run #2							

	Initial Weight	Final Volume
Run #1	31.1 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	81	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	200	25	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	200	34	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	200	72	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	200	150	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	200	43	ug/kg	
95-48-7	2-Methylphenol	ND	81	26	ug/kg	
	3&4-Methylphenol	ND	81	33	ug/kg	
88-75-5	2-Nitrophenol	ND	200	27	ug/kg	
100-02-7	4-Nitrophenol	ND	400	110	ug/kg	
87-86-5	Pentachlorophenol	ND	160	38	ug/kg	
108-95-2	Phenol	ND	81	21	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	27	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	200	30	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	200	24	ug/kg	
83-32-9	Acenaphthene	ND	40	14	ug/kg	
208-96-8	Acenaphthylene	ND	40	20	ug/kg	
98-86-2	Acetophenone	ND	200	8.7	ug/kg	
120-12-7	Anthracene	ND	40	25	ug/kg	
1912-24-9	Atrazine	ND	81	17	ug/kg	
56-55-3	Benzo(a)anthracene	ND	40	11	ug/kg	
50-32-8	Benzo(a)pyrene	ND	40	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	40	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	40	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	40	19	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	81	16	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	81	9.8	ug/kg	
92-52-4	1,1'-Biphenyl	ND	81	5.5	ug/kg	
100-52-7	Benzaldehyde	ND	200	10	ug/kg	
91-58-7	2-Chloronaphthalene	ND	81	9.6	ug/kg	
106-47-8	4-Chloroaniline	ND	200	15	ug/kg	
86-74-8	Carbazole	ND	81	5.8	ug/kg	

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: ROLLOFF SOIL SAMPLE
Lab Sample ID: JC66357-1
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Long Island GW Sampling, Long Island, NY

Date Sampled: 05/17/18
Date Received: 05/17/18
Percent Solids: 79.8

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	81	16	ug/kg	
218-01-9	Chrysene	ND	40	13	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	81	8.6	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	81	17	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	81	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	81	13	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	40	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	40	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	81	34	ug/kg	
123-91-1	1,4-Dioxane	ND	40	27	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	40	18	ug/kg	
132-64-9	Dibenzofuran	ND	81	16	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	81	6.6	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	81	10	ug/kg	
84-66-2	Diethyl phthalate	ND	81	8.6	ug/kg	
131-11-3	Dimethyl phthalate	ND	81	7.2	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	81	9.4	ug/kg	
206-44-0	Fluoranthene	ND	40	18	ug/kg	
86-73-7	Fluorene	ND	40	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	81	10	ug/kg	
87-68-3	Hexachlorobutadiene	ND	40	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	400	16	ug/kg	
67-72-1	Hexachloroethane	ND	200	20	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	40	19	ug/kg	
78-59-1	Isophorone	ND	81	8.6	ug/kg	
91-57-6	2-Methylnaphthalene	ND	40	9.1	ug/kg	
88-74-4	2-Nitroaniline	ND	200	9.5	ug/kg	
99-09-2	3-Nitroaniline	ND	200	10	ug/kg	
100-01-6	4-Nitroaniline	ND	200	10	ug/kg	
91-20-3	Naphthalene	ND	40	11	ug/kg	
98-95-3	Nitrobenzene	ND	81	16	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	81	12	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	200	15	ug/kg	
85-01-8	Phenanthrene	ND	40	14	ug/kg	
129-00-0	Pyrene	ND	40	13	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	75%		23-115%

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:	ROLLOFF SOIL SAMPLE		
Lab Sample ID:	JC66357-1	**Date Sampled:**	05/17/18
Matrix:	SO - Soil	**Date Received:**	05/17/18
Method:	SW846 8270D SW846 3546	**Percent Solids:**	79.8
Project:	Long Island GW Sampling, Long Island, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	73%		27-114%
118-79-6	2,4,6-Tribromophenol	72%		19-152%
4165-60-0	Nitrobenzene-d5	74%		26-134%
321-60-8	2-Fluorobiphenyl	76%		39-124%
1718-51-0	Terphenyl-d14	82%		36-134%

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: ROLLOFF SOIL SAMPLE
Lab Sample ID: JC66357-1
Matrix: SO - Soil
Method: SW846 8081B SW846 3546
Project: Long Island GW Sampling, Long Island, NY

Date Sampled: 05/17/18
Date Received: 05/17/18
Percent Solids: 79.8

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G15259.D	1	05/22/18 21:19	MH	05/19/18 05:00	OP12125	G8G498
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.80	0.66	ug/kg	
319-84-6	alpha-BHC	ND	0.80	0.65	ug/kg	
319-85-7	beta-BHC	ND	0.80	0.73	ug/kg	
319-86-8	delta-BHC	ND	0.80	0.77	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.80	0.59	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.80	0.65	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.80	0.36	ug/kg	
60-57-1	Dieldrin	ND	0.80	0.55	ug/kg	
72-54-8	4,4'-DDD	ND	0.80	0.74	ug/kg	
72-55-9	4,4'-DDE	ND	0.80	0.70	ug/kg	
50-29-3	4,4'-DDT	ND	0.80	0.71	ug/kg	
72-20-8	Endrin	ND	0.80	0.62	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.80	0.63	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.80	0.46	ug/kg	
959-98-8	Endosulfan-I	ND	0.80	0.46	ug/kg	
33213-65-9	Endosulfan-II	ND	0.80	0.50	ug/kg	
76-44-8	Heptachlor	ND	0.80	0.69	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.80	0.56	ug/kg	
72-43-5	Methoxychlor	ND	1.6	0.64	ug/kg	
53494-70-5	Endrin ketone	ND	0.80	0.58	ug/kg	
8001-35-2	Toxaphene	ND	20	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		25-135%
877-09-8	Tetrachloro-m-xylene	79%		25-135%
2051-24-3	Decachlorobiphenyl	72%		10-156%
2051-24-3	Decachlorobiphenyl	68%		10-156%

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:	ROLLOFF SOIL SAMPLE		
Lab Sample ID:	JC66357-1	**Date Sampled:**	05/17/18
Matrix:	SO - Soil	**Date Received:**	05/17/18
Method:	SW846 8082A SW846 3546	**Percent Solids:**	79.8
Project:	Long Island GW Sampling, Long Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G163878.D	1	05/20/18 11:54	EAL	05/19/18 05:00	OP12124	G2G4338
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	40	16	ug/kg	
11104-28-2	Aroclor 1221	ND	40	16	ug/kg	
11141-16-5	Aroclor 1232	ND	40	11	ug/kg	
53469-21-9	Aroclor 1242	ND	40	6.4	ug/kg	
12672-29-6	Aroclor 1248	ND	40	24	ug/kg	
11097-69-1	Aroclor 1254	ND	40	9.9	ug/kg	
11096-82-5	Aroclor 1260	ND	40	13	ug/kg	
11100-14-4	Aroclor 1268	ND	40	6.0	ug/kg	
37324-23-5	Aroclor 1262	ND	40	3.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	82%		24-152%
877-09-8	Tetrachloro-m-xylene	79%		24-152%
2051-24-3	Decachlorobiphenyl	76%		10-166%
2051-24-3	Decachlorobiphenyl	73%		10-166%

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: ROLLOFF SOIL SAMPLE
Lab Sample ID: JC66357-1
Matrix: SO - Soil
Project: Long Island GW Sampling, Long Island, NY

Date Sampled: 05/17/18
Date Received: 05/17/18
Percent Solids: 79.8

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	307	60	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Antimony	< 2.4	2.4	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Arsenic	< 2.4	2.4	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Barium	< 24	24	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Beryllium	< 0.24	0.24	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Cadmium	< 0.60	0.60	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Calcium	< 600	600	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Chromium	< 1.2	1.2	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Cobalt	< 6.0	6.0	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Copper	< 3.0	3.0	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Iron	1100	60	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Lead	< 2.4	2.4	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Magnesium	< 600	600	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Manganese	8.6	1.8	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Mercury	< 0.038	0.038	mg/kg	1	05/18/18	05/18/18	JA	SW846 7471B [1]	SW846 7471B [3]
Nickel	< 4.8	4.8	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Potassium	< 1200	1200	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Selenium	< 2.4	2.4	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Silver	< 0.60	0.60	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Sodium	< 1200	1200	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Thallium	< 1.2	1.2	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Vanadium	< 6.0	6.0	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]
Zinc	< 6.0	6.0	mg/kg	1	05/19/18	05/21/18	EAL	SW846 6010C [2]	SW846 3050B [4]

(1) Instrument QC Batch: MA44439
(2) Instrument QC Batch: MA44470
(3) Prep QC Batch: MP7227
(4) Prep QC Batch: MP7239

RL = Reporting Limit

Report of Analysis

Client Sample ID:	ROLLOFF SOIL SAMPLE		
Lab Sample ID:	JC66357-1	**Date Sampled:**	05/17/18
Matrix:	SO - Soil	**Date Received:**	05/17/18
		Percent Solids:	79.8
Project:	Long Island GW Sampling, Long Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Paint Filter Test [a]	< 0.50	0.50	ml/100g	1	05/22/18 16:30	RI	SW846 9095/9095B
Solids, Percent	79.8		%	1	05/21/18 22:50	JV	SM2540 G-97

(a) No free liquids.

RL = Reporting Limit

Report of Analysis

Client Sample ID: ROLLOFF SOIL SAMPLE
Lab Sample ID: JC66357-1A
Matrix: SO - Soil
Project: Long Island GW Sampling, Long Island, NY

Date Sampled: 05/17/18
Date Received: 05/17/18
Percent Solids: 79.8

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 1.0			1.0	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Antimony	< 0.50			0.50	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Arsenic	< 0.50	D004	5.0	0.50	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Barium	< 1.0	D005	100	1.0	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Beryllium	< 0.025			0.025	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Cadmium	< 0.025	D006	1.0	0.025	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Calcium	< 10			10	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Chromium	< 0.050	D007	5.0	0.050	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Cobalt	< 0.25			0.25	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Copper	< 0.050			0.050	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Iron	< 0.50			0.50	mg/l	5	05/19/18	05/23/18	ND	SW846 6010C [3]	SW846 3010A [4]
Lead	< 0.50	D008	5.0	0.50	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Magnesium	< 10			10	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Manganese	0.16			0.075	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Mercury	< 0.00020	D009	0.20	0.00020	mg/l	1	05/21/18	05/21/18	DP	SW846 7470A [1]	SW846 7470A [5]
Nickel	< 0.050			0.050	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Potassium	< 10			10	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Selenium	< 0.50	D010	1.0	0.50	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Silver	< 0.050	D011	5.0	0.050	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Thallium	< 0.50			0.50	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Vanadium	< 0.25			0.25	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]
Zinc	0.10			0.10	mg/l	5	05/19/18	05/22/18	ND	SW846 6010C [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA44455
(2) Instrument QC Batch: MA44480
(3) Instrument QC Batch: MA44491
(4) Prep QC Batch: MP7247
(5) Prep QC Batch: MP7264

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 7/1/11)

SGS

SL

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX 732-329-3499
www.sgs.com/ehsusa

PAGE 1 OF 1

FED-EX Tracking #:
Bottle Order Control #: PO-05312-181
SGS Quote #:
SGS Job #: JC66357

Client / Reporting Information

Company Name: EMAGIN
Street Address: 15711 Mapledale Blvd, Suite B
City: Tampa State: FL Zip: 33624
Project Contact: Rich Poff E-mail: rpoff@hsweng.com; Doug Smolensky dsmolensky@emagin-inc.com
Phone #: 813-968-7722 Fax #:
Sampler(s) Name(s): Chad Thompson Phone #: 321-947-5448

Project Information

Project Name: Long Island Sampling
Street:
City: Long Island State: NY
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (If different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analyses (see TEST CODE sheet)

Lab 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	Total VOCs by 8260B	Total SVOCs by 8270C	Total PCBs by 8082	Total pesticides (Analyte by analyte by vendor)	Paint filter by 9095	TAL metals list by 6010B	TCLP TAL metals	LAB USE ONLY
1	Rolloff Soil Sample	-	05-17-18	1150	CMT	SO	4					X			X	X	X	X	X	X	X	X	C20 14M3 49114

INITIAL ASESSMENT 3B (A)
LABEL VERIFICATION

Turnaround Time (Business days)

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

Emergency & Rush T/A data available via LabLink

Approved by (SGS Project Manager)/Date: 5 DAY TAT
Tammy McDonough (SGS) 732-329-0200 Ext. 1218

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
- [ ] 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

Contact Rich Poff
rpoff@hsweng.com
904-614-3889 with questions
03 Sg Encores
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:	Date Time:	Received By:
1	EMAGIN CMT	05-17-18 (1320)	
2			5/17/18 1707
3			
4			
5			

Custody Seal #: 081298
Intact / Not intact
Preserved where applicable
On Ice
Cooler Temp: 3.7 = EP

Form:SM088-03C (revised 2/12/18)

http://www.sgs.com/en/terms-and-conditions

SGS Sample Receipt Summary

Job Number: JC66357 **Client:** HSW ENGINEERING **Project:** LONG ISLAND GW SAMPLING, LONG ISLAND,

Date / Time Received: 5/17/2018 5:03:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.7);

Cooler Temps (Corrected) °C: Cooler 1: (3.7);

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:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 216017 pH 12+: 208717 Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JC66357: Chain of Custody
Page 2 of 2

June 6, 2018

Mr. Richard Cotugno
Nassau County Department of Public Works
1194 Prospect Avenue
Westbury, NY 11590-2723

Re: Well Development Water Discharge, Northrop Grumman Systems Corporation, Bethpage, NY

Dear Mr. Cotugno:

Environmental Management & Global Innovations, Inc. (EMAGIN), on behalf of Northrop Grumman Systems Corporation, is submitting this letter report regarding the discharge of well development water to the Nassau County Sewer System. The discharge was conducted in accordance with the requirements described in your October 11, 2017 and March 15, 2018 discharge approval letters.

During May 2018, the last two of the four planned monitoring wells were installed and developed. Approximately 5,500 gallons of development water was temporarily stored in a 20,000-gallon holding tank at the access location prior to the actual discharge. Water quality samples were collected from the holding tank and then analyzed for volatile organic compounds (VOCs), using EPA Method 624; the analytical results are attached. Once confirmed that total VOCs did not exceed 1 part per million (ppm), the discharge was scheduled.

On May 28, 2018, SGS North America, Inc. (the drilling contractor), overseen by an EMAGIN field representative, discharged the contents of the holding tank at the sewer access. The 5,500 gallons in the tank were steadily pumped over a period of 68 minutes, yielding an average discharge rate of 81 gallons per minute.

Should you have any questions, please call me at (516) 224-4009 or email at dsmolensky@emagin-inc.com. Please direct all correspondence to me at the following address:

Doug Smolensky
EMAGIN, Inc.
20 Irving Drive
Woodbury, NY 11797

Sincerely,
EMAGIN, Inc.

Douglas A. Smolensky
Principal Hydrogeologist

Attachment
Laboratory Report

cc: Pat Assalone, NCDPW
Joel Balmat, EMAGIN
Fred Weber, Northrop Grumman Systems Corporation

Attachment 9
Data Usability Summary Report

DATA USABILITY SUMMARY REPORT (DUSR)

Phase I Supplemental Characterization/ Deep Park Investigation

Laboratory Data Deliverables JC57987 and JC67175
SGS North America, Inc.
Dayton, New Jersey

Laboratory Data Deliverable SL4878
Katahdin Analytical Services
Scarborough, Maine

Prepared by:

HSW Engineering, Inc.
15711 Mapledale Blvd, Suite B
Tampa, Florida 33624

Data Validator: Cindy Lee Westergard, Senior Scientist

Report Date: July 3, 2018

1.0 Introduction

This Data Usability Summary Report (DUSR) is a summary of the review and validation of environmental analytical data for laboratory data deliverables **JC57987** (December 2017 sampling event) and **JC67175** (May 2018 sampling event), produced by SGS North America, Inc., Dayton, New Jersey (SGS), and laboratory data deliverable **SL4878**, produced by Katahdin Analytical Services, Scarborough, Maine (KAS). Each of the three sets of analytical deliverables comprised Category B analytical deliverables, as defined by New York State Department of Environmental Conservation (NYSDEC) document *DER-10 / Technical Guidance for Site Investigation and Remediation, May 3, 2010* (DER-10). The deliverables also conformed to Stage 4 (Level IV) reporting, as defined by the U.S. Environmental Protection Agency (USEPA) in the document titled *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (EPA 540-R-08-005).

The analytical data were validated in accordance with specifications given in the *Northrop Grumman Systems Corporation Quality Assurance Project Plan, Operable Units 2 and 3, June 2016* (QAPP), with reference to the *National Functional Guidelines for Organic Superfund Methods Data Review, January 2017 (EPA-540-R-2017-002)* (NFG). Electronic data deliverables (EDD) in the NYSDEC EQuIS format also was provided. Validation was limited to Stage 2b deliverables included in the analytical data packages (i.e., method and instrument quality control [QC] data); field data were not reviewed.

Validation qualifiers were those defined in Table 1 of the NFG and are summarized as follows. Definitions of key terms and acronyms used in this DVR can be found in the documents cited above or in the laboratory data package.

Data Qualifier	Definition
U	The sample was analyzed for the analyte, but the analyte was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analyte has been “tentatively identified” or is “presumptively present”. The associated numerical value is the estimated concentration in the sample.
UJ	The sample was analyzed for the analyte, but the analyte was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

The validation findings and effects, if any, on the quality of the analytical data are summarized in the following paragraphs.

2.0 General Information

Analytical data for the following aqueous samples were included in laboratory data deliverables JC57987, JC67175, and SL4878. All samples were analyzed by SGS for volatile organic compounds (VOCs) by U.S. EPA Method 8260C (51 analytes of interest in total). Three samples and the equipment blank also were analyzed by KAS for 1,4-dioxane by EPA Method 8270D SIM.

Data Deliverable	Client Sample ID	SGS Sample ID	KAS Sample ID	Date Collected	Time Collected	Date Received
JC57975 (December 2017 event)	MW-300	JC57987-1	--	12/21/2017	16:20	12/22/2017
	MW-301	JC57987-2	--	12/21/2017	15:40	12/22/2017
	DUP	JC57987-3	--	12/21/2017	0:00	12/22/2017
	TB 12-21-17	JC57987-4	--	12/21/2017	16:20	12/22/2017
	EB 12-21-2017	JC57987-5	--	12/21/2017	11:30	12/22/2017
JC67175 and SL4878 (May 2018 event)	MW-207A-1R	JC67175-1	SL4878-1	5/31/2018	14:05	6/1/2018
	MW-207B-1R	JC67175-2	SL4878-2	5/31/2018	14:00	6/1/2018
	DUP-1	JC67175-3	SL4878-3	5/31/2018	--	6/1/2018
	Trip Blank	JC67175-4	--	5/31/2018	14:05	6/1/2018
	Equipment Blank / EB053118DC1	JC67175-5	SL4878-4	5/31/2018	11:00	6/1/2018

2.1 Sample Delivery and Condition Upon Receipt

The samples were received by both laboratories at acceptable temperatures (received at ≤2.0 ˚C by SGS and ≤5.5 ˚C by KAS). The chain-of-custody (COC) forms and sample receipt checklists were reviewed, with no issues noted.

Qualification: None required.

2.2 Case Narrative and Data Deliverable Completeness

The laboratory data packages were reviewed for completeness, with no missing components or issues of concern identified. In the case narratives, the laboratory noted several analytical issues, all of which were of a routine nature and are addressed in subsequent sections of this DUSR.

Qualification: None required.

2.3 Holding Times

All samples were prepared and analyzed for target VOCs within the 14-day holding time for preserved aqueous samples. The four samples analyzed for 1,4-dioxane were extracted within the seven-day holding time and the extracts analyzed within the 40-day holding time.

Qualification: None required.

2.4 Field Quality Control (QC) Samples

2.4.1 Field-Generated Blanks

An equipment blank and trip blank were submitted for analysis in association with each of the two sampling events. No target VOCs were detected in any of these four blanks, and no 1,4-dioxane was detected in the equipment blank collected during the May 2018 sampling event.

Qualification: None required.

2.4.2 Field Duplicates

Field duplicates were collected at locations MW-300 and MW-207B-1R during the December 2017 and May 2018 sampling events, respectively. The results for target VOCs detected in each of these primary sample-field duplicate pairs met validation acceptance criteria for cumulative precision; i.e., for each paired result, the relative percent difference (%RPD) was ≤ 30% or, at low levels, the absolute difference in results |S-D| did not exceed the magnitude of the method reporting limit (MRL). Likewise, the detections of 1,4-dioxane reported for samples MW-207B-1R (1.3 micrograms per liter, or ug/L) and the field duplicate (1.2 ug/L) met validation acceptance criteria for cumulative precision.

Qualification: None required.

3.0 Analytical Data

3.1 Volatile Organic Compounds (EPA Method 8260C)

3.1.1 Method QC Data

Method Blank

No target VOCs were detected in any of the laboratory method blanks reported in the two laboratory data deliverables.

Qualification: None required.

Laboratory Control Sample / Laboratory Control Sample Duplicate (LCS/LCSD)

With three exceptions, the recoveries of all target VOCs reported for the LCSs (one in data deliverable JC57987 and three in data deliverable JC67175) were within the laboratory's acceptance limits given in the laboratory data package. Elevated recoveries were reported for bromodichloromethane (123% vs. 120%), bromoform (139% vs. 129%), and dibromochloromethane (127% vs. 123%) for the LCS reported in data deliverable JC57987. It is possible that these elevated recoveries reflect laboratory background conditions / low-level contamination; regardless, none of these analytes was detected in any of the samples collected during the December 2017 sampling event.

Qualification: None required.

Matrix Spike / Matrix Spike Duplicates (MS/MSD)

Additional volumes of samples MW-301 and MW-207A-1R were used for MS/MSD analyses. With minor exceptions, the recovery data for the MS/MSD analyses performed with these two samples were acceptable in terms of both analytical accuracy and analytical precision. The following recoveries reported for the MS/MSD analyses of sample MW-301 were not within the laboratory's acceptance limits.

Analyte	MS %R	MSD %R	Lower Control Limit	Upper Control Limit	%RPD	%RPD Control Limit
Chloroethane	151	145	57	141	4	14
Chloromethane	165	158	43	141	4	16
Dichlorodifluoromethane	174	175	31	159	1	16
Trichlorofluoromethane	169	163	57	149	4	14
Vinyl chloride	158	157	43	146	0	15

Qualification: As none of these five analytes was detected in any of the three samples collected during the December 2017 event and the nature of the analytical bias was in the positive direction, no qualification of the sample data was necessary.

Surrogates

All surrogate recoveries reported in both laboratory data deliverables were within laboratory acceptance limits for all samples.

Qualification: None required.

3.1.2 Instrument QC Data

Instrument Tuning Data
All instrument tunes met all tuning acceptance criteria.

Qualification: None required.

Initial Calibration (ICAL)
The ICALs (one reported in JC57987 and three reported in JC67175) met validation acceptance criteria in terms of relative standard deviations (%RSDs) and response factors for all target VOCs.

Qualification: None required.

Initial Calibration Verification (ICVs)
With one exception, the ICVs met validation acceptance criteria in terms of percent differences (%Ds), relative to the ICAL, and response factors. While, for data deliverable JC57987, the %D for tetrachloroethene reported for the ICV (-81.8%) exceeded the control limits of ±20%, an ICV analyzed subsequently on this same instrument and prior to the analysis of project samples yielded a %D (-27.1%) that was much closer to the control limit. As the opening CCV analyzed in association with all three project samples met the acceptance criteria for %D (-1.4%), qualification of sample data for tetrachloroethene (all detections, at or slightly above the MRL of 1.0 ug/L) was deemed unwarranted. ICVs reported in data deliverable JC67175 were within acceptance limits for %D and response factors.

Qualification: None required.

Continuing Calibration Verifications (ICVs / CCVs)
The %Ds reported for several target VOCs in several CCVs reported in both analytical data deliverables were not within the acceptance range of ±20 %D. In all such instances, the %Ds were negative which, due to the way in which this laboratory calculates these values, is indicative of increasing sensitivity, relative to the ICAL. As none of these analytes was detected in any of the samples, qualification of the sample data was not warranted.

Qualification: None required.

Internal Standards
The responses of all internal standards were acceptable in terms of area counts (i.e., within -50% and +100% of the associated CCV) and relative retention times (± 30 seconds of the associated CCV).

Qualification: None required.

Analyte Quantitation
The reconstructed ion chromatograms and instrument quantitation reports for samples collected during each of the two events were reviewed. No errors in identification, quantitation, or transcription were noted. No dilutions were required. Detections that were less than the MRLs had been properly coded by the laboratory with J qualifiers; these were retained as final, interpretive qualifiers.

Qualification: None required.

3.2 1,4-Dioxane (EPA Method 8270D SIM)

3.2.1 Method QC Data

Method Blank

1,4-Dioxane was not detected in the laboratory method blank.

Qualification: None required.

Laboratory Control Sample / Laboratory Control Sample Duplicate (LCS/LCSD)

The recovery of 1,4-dioxane in the analysis of the LCS (59.5%) was within laboratory acceptance limits (26-106%).

Qualification: None required.

Matrix Spike / Matrix Spike Duplicates (MS/MSD)

Additional volumes of sample MW-207A-1R were used for MS/MSD analyses. The recoveries of 1,4-dioxane (45.2% / 49.4%) were within laboratory acceptance limits (26-106%).

Qualification: None required.

Surrogates

Surrogate recoveries reported for the four samples were within laboratory acceptance limits (30-115%).

Qualification: None required.

3.2.2 Instrument QC Data

Instrument Tuning Data

Each of the two instrument tunes met all tuning acceptance criteria.

Qualification: None required.

Initial Calibration (ICAL)

The ICAL, performed on May 22, 2018, was acceptable in terms of both response factors and percent relative standard deviation (%RSD) for each of the six standards comprising the calibration curve.

Qualification: None required.

Initial Calibration Verification (ICVs)

The ICV (second-source standard) was acceptable in terms of response factor and percent difference (%D), relative to the ICAL.

Qualification: None required.

Continuing Calibration Verifications (CCVs)

The opening CCV was acceptable in terms of response factor and %D, relative to the ICAL.

Qualification: None required.

Internal Standards

The responses of the internal standard were acceptable in terms of area counts (i.e., within -50% and +100% of the associated CCV) and relative retention times (± 30 seconds of the associated CCV).

Qualification: None required.

Analyte Quantitation

The reconstructed ion chromatograms and instrument quantitation reports were reviewed. No errors in identification, quantitation, or transcription were noted. No dilutions were required.

Qualification: None required.

4.0 DATA USABILITY and PARCC EVALUATION

Of 309 discrete analytes reported for the six environmental samples collected in December 2017 and May 2018, none was qualified as a result of the validation. Fifteen of the 32 detections, or about 4.9% of the entire, two-event dataset, were coded by the laboratory with J flags as they were less than the MRLs (quantitation limits). An evaluation of the analytical data with respect to the precision, accuracy, representativeness, comparability, and completeness (PARCC) parameters is as follows.

Precision - Precision is measured through field duplicate samples (cumulative precision), split samples, and laboratory duplicate samples (analytical precision). No results were qualified due to diminishment or loss of precision.

Accuracy - Matrix spike samples, surrogate recoveries, internal standard recoveries, laboratory control samples, and calibration criteria are indicators of the accuracy of the data. No results were qualified due to diminishment or loss of analytical accuracy.

Representativeness - Holding times, sample preservation, and blank analyses are indicators of the representativeness of the analytical data. Field duplicates also can provide insight into the representativeness of discrete samples of specific sampling locations. For these sampling events, none of the analytical data required qualification for holding time or sample preparation deviations, and none of the analytical data required qualification based on field or laboratory blanks. Field duplicate data also met data validation acceptance criteria.

Comparability – Comparability of data with prior or subsequent datasets is not compromised provided that sampling procedures and analytical methods do not change over time. In addition, a major component of comparability is the use of standard reference materials for calibration and quality control. Because standard analytical methods and reporting procedures, as well as second-source standards, were used by the laboratory, the comparability criteria for the analytical data were met.

Completeness – Data classified as qualitative or less than fully quantitative are otherwise usable for project purposes. As no data were rejected, completeness in terms of usable data is 100%.

5.0 Final Validation Qualifiers

No validation qualifiers were required. Laboratory qualifiers of J applied to detections of VOCs that were less than the MRLs should be retained, to indicate that these concentrations are estimates; these results are otherwise fully usable, as are all other results addressed by this DUSR.